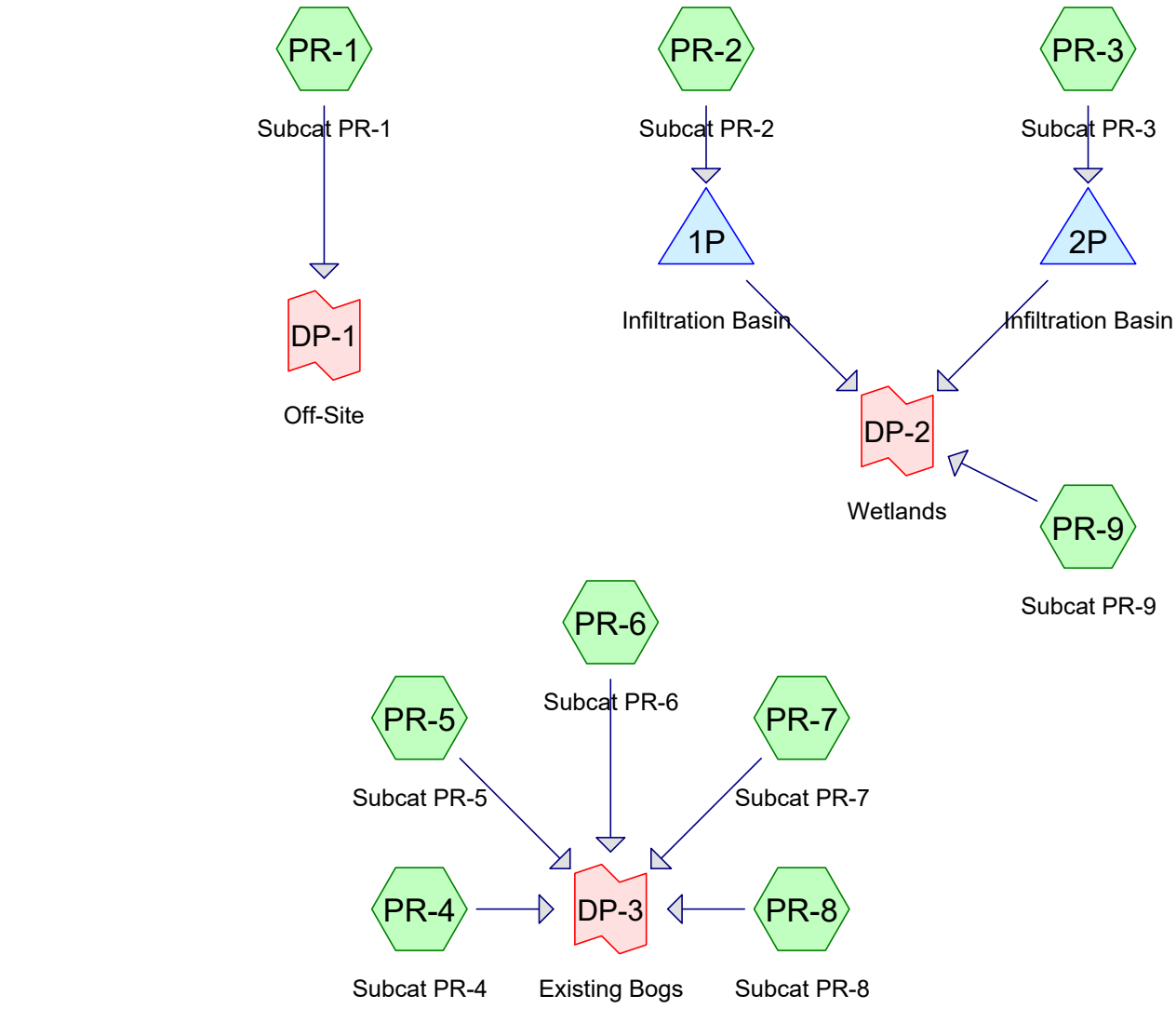

Routing Diagram for PR-Drainage - REV
Prepared by VHB, Printed 1/20/2023

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-Year	Type III 24-hr		Default	24.00	1	3.44	2
2	10-Year	Type III 24-hr		Default	24.00	1	5.04	2
3	25-Year	Type III 24-hr		Default	24.00	1	6.04	2
4	100-Year	Type III 24-hr		Default	24.00	1	7.58	2

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 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 PR-1: Subcat PR-1 Runoff Area=2.345 ac 0.00% Impervious Runoff Depth=0.00"
Flow Length=357' Tc=14.4 min CN=30 Runoff=0.00 cfs 0.000 af

Subcatchment PR-2: Subcat PR-2 Runoff Area=7.291 ac 0.01% Impervious Runoff Depth=0.00"
Flow Length=610' Tc=19.0 min CN=33 Runoff=0.00 cfs 0.000 af

Subcatchment PR-3: Subcat PR-3 Runoff Area=1.002 ac 0.00% Impervious Runoff Depth=0.00"
Flow Length=450' Tc=17.3 min CN=38 Runoff=0.00 cfs 0.000 af

Subcatchment PR-4: Subcat PR-4 Runoff Area=0.721 ac 0.00% Impervious Runoff Depth=0.00"
Flow Length=202' Tc=10.6 min CN=30 Runoff=0.00 cfs 0.000 af

Subcatchment PR-5: Subcat PR-5 Runoff Area=1.367 ac 1.76% Impervious Runoff Depth=0.00"
Flow Length=222' Tc=12.8 min UI Adjusted CN=35 Runoff=0.00 cfs 0.000 af

Subcatchment PR-6: Subcat PR-6 Runoff Area=4.441 ac 0.00% Impervious Runoff Depth=0.00"
Flow Length=433' Tc=22.0 min CN=36 Runoff=0.00 cfs 0.000 af

Subcatchment PR-7: Subcat PR-7 Runoff Area=1.939 ac 0.00% Impervious Runoff Depth=0.00"
Flow Length=199' Tc=17.1 min CN=34 Runoff=0.00 cfs 0.000 af

Subcatchment PR-8: Subcat PR-8 Runoff Area=2.485 ac 0.00% Impervious Runoff Depth=0.00"
Flow Length=153' Tc=8.4 min CN=33 Runoff=0.00 cfs 0.000 af

Subcatchment PR-9: Subcat PR-9 Runoff Area=0.143 ac 0.00% Impervious Runoff Depth=0.09"
Flow Length=230' Tc=11.5 min CN=46 Runoff=0.00 cfs 0.001 af

Pond 1P: Infiltration Basin Peak Elev=21.50' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Pond 2P: Infiltration Basin Peak Elev=24.00' Storage=0 cf Inflow=0.00 cfs 0.000 af
Discarded=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

Link DP-1: Off-Site Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link DP-2: Wetlands Inflow=0.00 cfs 0.001 af
Primary=0.00 cfs 0.001 af

Link DP-3: Existing Bogs Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Total Runoff Area = 21.734 ac Runoff Volume = 0.001 af Average Runoff Depth = 0.00"
99.88% Pervious = 21.709 ac 0.12% Impervious = 0.025 ac

Summary for Subcatchment PR-1: Subcat PR-1

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= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.44"

Area (ac)	CN	Description
0.878	30	Woods, Good, HSG A
1.467	30	Meadow, non-grazed, HSG A
2.345	30	Weighted Average
2.345		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	50	0.0400	0.11		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
6.6	293	0.0400	0.74		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
0.3	14	0.0430	0.77		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
14.4	357	Total			

Summary for Subcatchment PR-2: Subcat PR-2

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= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.44"

	Area (ac)	CN	Description
	0.482	76	Gravel roads, HSG A
	4.753	30	Meadow, non-grazed, HSG A
*	0.001	98	Concrete pads, HSG A
	2.055	30	Woods, Good, HSG A
	7.291	33	Weighted Average
	7.290		99.99% Pervious Area
	0.001		0.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.9	50	0.1200	0.17		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
14.1	560	0.0320	0.66		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
19.0	610	Total			

Summary for Subcatchment PR-3: Subcat PR-3

Runoff = 0.00 cfs @ 23.99 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.44"

	Area (ac)	CN	Description
	0.167	76	Gravel roads, HSG A
	0.418	30	Meadow, non-grazed, HSG A
*	0.417	30	Woods/Meadow, Good, HSG A
	1.002	38	Weighted Average
	1.002		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	50	0.0300	0.18		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.44"
12.7	400	0.0200	0.52		**Shallow Concentrated Flow,** Kv= 3.7 fps
17.3	450	Total			

Summary for Subcatchment PR-4: Subcat PR-4

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= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.44"

Area (ac)	CN	Description
0.622	30	Meadow, non-grazed, HSG A
0.099	30	Woods, Good, HSG A
0.721	30	Weighted Average
0.721		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	50	0.0400	0.11		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
3.1	152	0.0492	0.82		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
10.6	202	Total			

Summary for Subcatchment PR-5: Subcat PR-5

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= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.44"

Area (ac)	CN	Adj	Description
0.141	76		Gravel roads, HSG A
0.904	30		Meadow, non-grazed, HSG A
0.298	30		Woods, Good, HSG A
0.024	98		Unconnected pavement, HSG A
1.367	36	35	Weighted Average, UI Adjusted
1.343			98.24% Pervious Area
0.024			1.76% Impervious Area
0.024			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	50	0.0300	0.10		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
4.3	172	0.0319	0.66		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
12.8	222	Total			

Summary for Subcatchment PR-6: Subcat PR-6

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= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.44"

Area (ac)	CN	Description
0.559	76	Gravel roads, HSG A
3.877	30	Meadow, non-grazed, HSG A
0.005	30	Woods, Good, HSG A
4.441	36	Weighted Average
4.441		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	50	0.1840	0.90		**Sheet Flow, Dirt** Fallow n= 0.050 P2= 3.44"
0.1	22	0.0450	3.42		**Shallow Concentrated Flow, Dirt** Unpaved Kv= 16.1 fps
21.0	361	0.0060	0.29		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
22.0	433	Total			

Summary for Subcatchment PR-7: Subcat PR-7

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= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.44"

Area (ac)	CN	Description
0.028	72	Dirt roads, HSG A
0.157	76	Gravel roads, HSG A
1.505	30	Meadow, non-grazed, HSG A
0.249	30	Woods, Good, HSG A
1.939	34	Weighted Average
1.939		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.5	50	0.0140	0.07		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
5.2	122	0.0110	0.39		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
0.4	27	0.0040	1.02		**Shallow Concentrated Flow, Gravel** Unpaved Kv= 16.1 fps
17.1	199	Total			

Summary for Subcatchment PR-8: Subcat PR-8

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= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.44"

Area (ac)	CN	Description
0.186	76	Gravel roads, HSG A
1.745	30	Meadow, non-grazed, HSG A
0.554	30	Woods, Good, HSG A
2.485	33	Weighted Average
2.485		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.5	38	0.4870	1.26		**Sheet Flow, Dirt** Fallow n= 0.050 P2= 3.44"
3.5	12	0.0160	0.06		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
4.4	103	0.0110	0.39		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
8.4	153	Total			

Summary for Subcatchment PR-9: Subcat PR-9

Runoff = 0.00 cfs @ 14.69 hrs, Volume= 0.001 af, Depth= 0.09"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.44"

Area (ac)	CN	Description
0.029	72	Dirt roads, HSG A
0.002	89	Dirt roads, HSG D
0.014	98	Water Surface, 0% imp, HSG A
0.098	30	Woods, Good, HSG A
0.143	46	Weighted Average
0.143		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.9	50	0.0500	0.12		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
4.6	180	0.0306	0.65		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
11.5	230	Total			

Summary for Pond 1P: Infiltration Basin

Inflow Area = 7.291 ac, 0.01% Impervious, Inflow Depth = 0.00" for 2-Year event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 21.50' @ 0.00 hrs Surf.Area= 2,420 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	21.50'	4,414 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
21.50	2,420	0	0
22.00	2,850	1,318	1,318
22.90	4,031	3,096	4,414

Device	Routing	Invert	Outlet Devices
#1	Discarded	21.50'	**2.410 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 17.30'
#2	Primary	20.60'	**6.0" Round Culvert** L= 41.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 20.60' / 20.40' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Device 2	22.30'	**48.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Primary	22.80'	**10.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) 1.3' Crest Height

Discarded OutFlow Max=0.00 cfs @ 0.00 hrs HW=21.50' (Free Discharge)
└**1=Exfiltration** (Passes 0.00 cfs of 0.14 cfs potential flow)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=21.50' (Free Discharge)
└**2=Culvert** (Passes 0.00 cfs of 0.56 cfs potential flow)
└**3=Orifice/Grate** (Controls 0.00 cfs)
└**4=Sharp-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 2P: Infiltration Basin

Inflow Area = 1.002 ac, 0.00% Impervious, Inflow Depth = 0.00" for 2-Year event
Inflow = 0.00 cfs @ 23.99 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 24.03 hrs, Volume= 0.000 af, Atten= 0%, Lag= 2.0 min
Discarded = 0.00 cfs @ 24.03 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs / 2
Peak Elev= 24.00' @ 24.03 hrs Surf.Area= 519 sf Storage= 0 cf

Plug-Flow detention time= 3.9 min calculated for 0.000 af (100% of inflow)
Center-of-Mass det. time= 3.9 min (1,355.7 - 1,351.8)

Volume	Invert	Avail.Storage	Storage Description
#1	24.00'	1,140 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
24.00	519	0	0
25.00	993	756	756
25.30	1,565	384	1,140

Device	Routing	Invert	Outlet Devices
#1	Discarded	24.00'	**2.410 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 17.30'
#2	Primary	21.50'	**6.0" Round Culvert** L= 50.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 21.50' / 21.00' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Device 2	24.30'	**48.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Primary	24.80'	**10.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) 1.3' Crest Height

Discarded OutFlow Max=0.03 cfs @ 24.03 hrs HW=24.00' (Free Discharge)
└**1=Exfiltration** (Controls 0.03 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=24.00' (Free Discharge)
├**2=Culvert** (Passes 0.00 cfs of 1.07 cfs potential flow)
│ └**3=Orifice/Grate** (Controls 0.00 cfs)
└**4=Sharp-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Link DP-1: Off-Site

Inflow Area = 2.345 ac, 0.00% Impervious, Inflow Depth = 0.00" for 2-Year event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP-2: Wetlands

Inflow Area = 8.436 ac, 0.01% Impervious, Inflow Depth = 0.00" for 2-Year event
Inflow = 0.00 cfs @ 14.69 hrs, Volume= 0.001 af
Primary = 0.00 cfs @ 14.69 hrs, Volume= 0.001 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP-3: Existing Bogs

Inflow Area = 10.953 ac, 0.22% Impervious, Inflow Depth = 0.00" for 2-Year event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 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 PR-1: Subcat PR-1 Runoff Area=2.345 ac 0.00% Impervious Runoff Depth=0.01"
Flow Length=357' Tc=14.4 min CN=30 Runoff=0.00 cfs 0.001 af

Subcatchment PR-2: Subcat PR-2 Runoff Area=7.291 ac 0.01% Impervious Runoff Depth=0.05"
Flow Length=610' Tc=19.0 min CN=33 Runoff=0.04 cfs 0.027 af

Subcatchment PR-3: Subcat PR-3 Runoff Area=1.002 ac 0.00% Impervious Runoff Depth=0.17"
Flow Length=450' Tc=17.3 min CN=38 Runoff=0.02 cfs 0.015 af

Subcatchment PR-4: Subcat PR-4 Runoff Area=0.721 ac 0.00% Impervious Runoff Depth=0.01"
Flow Length=202' Tc=10.6 min CN=30 Runoff=0.00 cfs 0.000 af

Subcatchment PR-5: Subcat PR-5 Runoff Area=1.367 ac 1.76% Impervious Runoff Depth=0.09"
Flow Length=222' Tc=12.8 min UI Adjusted CN=35 Runoff=0.02 cfs 0.010 af

Subcatchment PR-6: Subcat PR-6 Runoff Area=4.441 ac 0.00% Impervious Runoff Depth=0.11"
Flow Length=433' Tc=22.0 min CN=36 Runoff=0.07 cfs 0.042 af

Subcatchment PR-7: Subcat PR-7 Runoff Area=1.939 ac 0.00% Impervious Runoff Depth=0.07"
Flow Length=199' Tc=17.1 min CN=34 Runoff=0.02 cfs 0.011 af

Subcatchment PR-8: Subcat PR-8 Runoff Area=2.485 ac 0.00% Impervious Runoff Depth=0.05"
Flow Length=153' Tc=8.4 min CN=33 Runoff=0.01 cfs 0.009 af

Subcatchment PR-9: Subcat PR-9 Runoff Area=0.143 ac 0.00% Impervious Runoff Depth=0.50"
Flow Length=230' Tc=11.5 min CN=46 Runoff=0.03 cfs 0.006 af

Pond 1P: Infiltration Basin Peak Elev=21.50' Storage=10 cf Inflow=0.04 cfs 0.027 af
Discarded=0.04 cfs 0.027 af Primary=0.00 cfs 0.000 af Outflow=0.04 cfs 0.027 af

Pond 2P: Infiltration Basin Peak Elev=24.01' Storage=6 cf Inflow=0.02 cfs 0.015 af
Discarded=0.02 cfs 0.015 af Primary=0.00 cfs 0.000 af Outflow=0.02 cfs 0.015 af

Link DP-1: Off-Site

Inflow=0.00 cfs 0.001 af
Primary=0.00 cfs 0.001 af

Link DP-2: Wetlands

Inflow=0.03 cfs 0.006 af
Primary=0.03 cfs 0.006 af

Link DP-3: Existing Bogs

Inflow=0.11 cfs 0.073 af
Primary=0.11 cfs 0.073 af

Total Runoff Area = 21.734 ac Runoff Volume = 0.122 af Average Runoff Depth = 0.07"
99.88% Pervious = 21.709 ac 0.12% Impervious = 0.025 ac

Summary for Subcatchment PR-1: Subcat PR-1

Runoff = 0.00 cfs @ 23.77 hrs, Volume= 0.001 af, Depth= 0.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.04"

Area (ac)	CN	Description
0.878	30	Woods, Good, HSG A
1.467	30	Meadow, non-grazed, HSG A
2.345	30	Weighted Average
2.345		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	50	0.0400	0.11		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
6.6	293	0.0400	0.74		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
0.3	14	0.0430	0.77		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
14.4	357	Total			

Summary for Subcatchment PR-2: Subcat PR-2

Runoff = 0.04 cfs @ 17.01 hrs, Volume= 0.027 af, Depth= 0.05"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.04"

	Area (ac)	CN	Description
	0.482	76	Gravel roads, HSG A
	4.753	30	Meadow, non-grazed, HSG A
*	0.001	98	Concrete pads, HSG A
	2.055	30	Woods, Good, HSG A
	7.291	33	Weighted Average
	7.290		99.99% Pervious Area
	0.001		0.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.9	50	0.1200	0.17		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
14.1	560	0.0320	0.66		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
19.0	610	Total			

Summary for Subcatchment PR-3: Subcat PR-3

Runoff = 0.02 cfs @ 13.82 hrs, Volume= 0.015 af, Depth= 0.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.04"

	Area (ac)	CN	Description
	0.167	76	Gravel roads, HSG A
	0.418	30	Meadow, non-grazed, HSG A
*	0.417	30	Woods/Meadow, Good, HSG A
	1.002	38	Weighted Average
	1.002		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	50	0.0300	0.18		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.44"
12.7	400	0.0200	0.52		**Shallow Concentrated Flow,** Kv= 3.7 fps
17.3	450	Total			

Summary for Subcatchment PR-4: Subcat PR-4

Runoff = 0.00 cfs @ 23.74 hrs, Volume= 0.000 af, Depth= 0.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.04"

Area (ac)	CN	Description
0.622	30	Meadow, non-grazed, HSG A
0.099	30	Woods, Good, HSG A
0.721	30	Weighted Average
0.721		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	50	0.0400	0.11		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
3.1	152	0.0492	0.82		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
10.6	202	Total			

Summary for Subcatchment PR-5: Subcat PR-5

Runoff = 0.02 cfs @ 15.20 hrs, Volume= 0.010 af, Depth= 0.09"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.04"

Area (ac)	CN	Adj	Description
0.141	76		Gravel roads, HSG A
0.904	30		Meadow, non-grazed, HSG A
0.298	30		Woods, Good, HSG A
0.024	98		Unconnected pavement, HSG A
1.367	36	35	Weighted Average, UI Adjusted
1.343			98.24% Pervious Area
0.024			1.76% Impervious Area
0.024			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	50	0.0300	0.10		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
4.3	172	0.0319	0.66		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
12.8	222	Total			

Summary for Subcatchment PR-6: Subcat PR-6

Runoff = 0.07 cfs @ 15.05 hrs, Volume= 0.042 af, Depth= 0.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.04"

Area (ac)	CN	Description
0.559	76	Gravel roads, HSG A
3.877	30	Meadow, non-grazed, HSG A
0.005	30	Woods, Good, HSG A
4.441	36	Weighted Average
4.441		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	50	0.1840	0.90		**Sheet Flow, Dirt** Fallow n= 0.050 P2= 3.44"
0.1	22	0.0450	3.42		**Shallow Concentrated Flow, Dirt** Unpaved Kv= 16.1 fps
21.0	361	0.0060	0.29		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
22.0	433	Total			

Summary for Subcatchment PR-7: Subcat PR-7

Runoff = 0.02 cfs @ 15.59 hrs, Volume= 0.011 af, Depth= 0.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.04"

Area (ac)	CN	Description
0.028	72	Dirt roads, HSG A
0.157	76	Gravel roads, HSG A
1.505	30	Meadow, non-grazed, HSG A
0.249	30	Woods, Good, HSG A
1.939	34	Weighted Average
1.939		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.5	50	0.0140	0.07		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
5.2	122	0.0110	0.39		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
0.4	27	0.0040	1.02		**Shallow Concentrated Flow, Gravel** Unpaved Kv= 16.1 fps
17.1	199	Total			

Summary for Subcatchment PR-8: Subcat PR-8

Runoff = 0.01 cfs @ 16.84 hrs, Volume= 0.009 af, Depth= 0.05"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.04"

Area (ac)	CN	Description
0.186	76	Gravel roads, HSG A
1.745	30	Meadow, non-grazed, HSG A
0.554	30	Woods, Good, HSG A
2.485	33	Weighted Average
2.485		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.5	38	0.4870	1.26		**Sheet Flow, Dirt** Fallow n= 0.050 P2= 3.44"
3.5	12	0.0160	0.06		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
4.4	103	0.0110	0.39		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
8.4	153	Total			

Summary for Subcatchment PR-9: Subcat PR-9

Runoff = 0.03 cfs @ 12.36 hrs, Volume= 0.006 af, Depth= 0.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.04"

Area (ac)	CN	Description
0.029	72	Dirt roads, HSG A
0.002	89	Dirt roads, HSG D
0.014	98	Water Surface, 0% imp, HSG A
0.098	30	Woods, Good, HSG A
0.143	46	Weighted Average
0.143		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.9	50	0.0500	0.12		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
4.6	180	0.0306	0.65		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
11.5	230	Total			

Summary for Pond 1P: Infiltration Basin

Inflow Area = 7.291 ac, 0.01% Impervious, Inflow Depth = 0.05" for 10-Year event
Inflow = 0.04 cfs @ 17.01 hrs, Volume= 0.027 af
Outflow = 0.04 cfs @ 17.08 hrs, Volume= 0.027 af, Atten= 0%, Lag= 3.9 min
Discarded = 0.04 cfs @ 17.08 hrs, Volume= 0.027 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 21.50' @ 17.08 hrs Surf.Area= 2,423 sf Storage= 10 cf

Plug-Flow detention time= 4.2 min calculated for 0.027 af (100% of inflow)
Center-of-Mass det. time= 4.2 min (1,162.3 - 1,158.1)

Volume	Invert	Avail.Storage	Storage Description
#1	21.50'	4,414 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
21.50	2,420	0	0
22.00	2,850	1,318	1,318
22.90	4,031	3,096	4,414

Device	Routing	Invert	Outlet Devices
#1	Discarded	21.50'	**2.410 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 17.30'
#2	Primary	20.60'	**6.0" Round Culvert** L= 41.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 20.60' / 20.40' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Device 2	22.30'	**48.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Primary	22.80'	**10.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) 1.3' Crest Height

Discarded OutFlow Max=0.14 cfs @ 17.08 hrs HW=21.50' (Free Discharge)
└**1=Exfiltration** (Controls 0.14 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=21.50' (Free Discharge)
└**2=Culvert** (Passes 0.00 cfs of 0.56 cfs potential flow)
└**3=Orifice/Grate** (Controls 0.00 cfs)
└**4=Sharp-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 2P: Infiltration Basin

Inflow Area = 1.002 ac, 0.00% Impervious, Inflow Depth = 0.17" for 10-Year event
Inflow = 0.02 cfs @ 13.82 hrs, Volume= 0.015 af
Outflow = 0.02 cfs @ 13.88 hrs, Volume= 0.015 af, Atten= 0%, Lag= 4.0 min
Discarded = 0.02 cfs @ 13.88 hrs, Volume= 0.015 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs / 2
Peak Elev= 24.01' @ 13.88 hrs Surf.Area= 524 sf Storage= 6 cf

Plug-Flow detention time= 3.9 min calculated for 0.015 af (100% of inflow)
Center-of-Mass det. time= 3.9 min (1,037.3 - 1,033.5)

Volume	Invert	Avail.Storage	Storage Description
#1	24.00'	1,140 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
24.00	519	0	0
25.00	993	756	756
25.30	1,565	384	1,140

Device	Routing	Invert	Outlet Devices
#1	Discarded	24.00'	**2.410 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 17.30'
#2	Primary	21.50'	**6.0" Round Culvert** L= 50.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 21.50' / 21.00' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Device 2	24.30'	**48.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Primary	24.80'	**10.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) 1.3' Crest Height

Discarded OutFlow Max=0.03 cfs @ 13.88 hrs HW=24.01' (Free Discharge)
└**1=Exfiltration** (Controls 0.03 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=24.00' (Free Discharge)
└**2=Culvert** (Passes 0.00 cfs of 1.07 cfs potential flow)
└**3=Orifice/Grate** (Controls 0.00 cfs)
└**4=Sharp-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Link DP-1: Off-Site

Inflow Area = 2.345 ac, 0.00% Impervious, Inflow Depth = 0.01" for 10-Year event
Inflow = 0.00 cfs @ 23.77 hrs, Volume= 0.001 af
Primary = 0.00 cfs @ 23.77 hrs, Volume= 0.001 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP-2: Wetlands

Inflow Area = 8.436 ac, 0.01% Impervious, Inflow Depth = 0.01" for 10-Year event
Inflow = 0.03 cfs @ 12.36 hrs, Volume= 0.006 af
Primary = 0.03 cfs @ 12.36 hrs, Volume= 0.006 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP-3: Existing Bogs

Inflow Area = 10.953 ac, 0.22% Impervious, Inflow Depth = 0.08" for 10-Year event
Inflow = 0.11 cfs @ 15.33 hrs, Volume= 0.073 af
Primary = 0.11 cfs @ 15.33 hrs, Volume= 0.073 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 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 PR-1: Subcat PR-1 Runoff Area=2.345 ac 0.00% Impervious Runoff Depth=0.08"
Flow Length=357' Tc=14.4 min CN=30 Runoff=0.02 cfs 0.015 af

Subcatchment PR-2: Subcat PR-2 Runoff Area=7.291 ac 0.01% Impervious Runoff Depth=0.18"
Flow Length=610' Tc=19.0 min CN=33 Runoff=0.17 cfs 0.107 af

Subcatchment PR-3: Subcat PR-3 Runoff Area=1.002 ac 0.00% Impervious Runoff Depth=0.40"
Flow Length=450' Tc=17.3 min CN=38 Runoff=0.13 cfs 0.034 af

Subcatchment PR-4: Subcat PR-4 Runoff Area=0.721 ac 0.00% Impervious Runoff Depth=0.08"
Flow Length=202' Tc=10.6 min CN=30 Runoff=0.01 cfs 0.005 af

Subcatchment PR-5: Subcat PR-5 Runoff Area=1.367 ac 1.76% Impervious Runoff Depth=0.26"
Flow Length=222' Tc=12.8 min UI Adjusted CN=35 Runoff=0.07 cfs 0.029 af

Subcatchment PR-6: Subcat PR-6 Runoff Area=4.441 ac 0.00% Impervious Runoff Depth=0.30"
Flow Length=433' Tc=22.0 min CN=36 Runoff=0.28 cfs 0.113 af

Subcatchment PR-7: Subcat PR-7 Runoff Area=1.939 ac 0.00% Impervious Runoff Depth=0.22"
Flow Length=199' Tc=17.1 min CN=34 Runoff=0.06 cfs 0.035 af

Subcatchment PR-8: Subcat PR-8 Runoff Area=2.485 ac 0.00% Impervious Runoff Depth=0.18"
Flow Length=153' Tc=8.4 min CN=33 Runoff=0.06 cfs 0.036 af

Subcatchment PR-9: Subcat PR-9 Runoff Area=0.143 ac 0.00% Impervious Runoff Depth=0.88"
Flow Length=230' Tc=11.5 min CN=46 Runoff=0.08 cfs 0.011 af

Pond 1P: Infiltration Basin Peak Elev=21.61' Storage=279 cf Inflow=0.17 cfs 0.107 af
Discarded=0.14 cfs 0.107 af Primary=0.00 cfs 0.000 af Outflow=0.14 cfs 0.107 af

Pond 2P: Infiltration Basin Peak Elev=24.31' Storage=181 cf Inflow=0.13 cfs 0.034 af
Discarded=0.04 cfs 0.030 af Primary=0.03 cfs 0.003 af Outflow=0.07 cfs 0.034 af

Link DP-1: Off-Site Inflow=0.02 cfs 0.015 af
Primary=0.02 cfs 0.015 af

Link DP-2: Wetlands Inflow=0.08 cfs 0.014 af
Primary=0.08 cfs 0.014 af

Link DP-3: Existing Bogs Inflow=0.43 cfs 0.218 af
Primary=0.43 cfs 0.218 af

Total Runoff Area = 21.734 ac Runoff Volume = 0.384 af Average Runoff Depth = 0.21"
99.88% Pervious = 21.709 ac 0.12% Impervious = 0.025 ac

Summary for Subcatchment PR-1: Subcat PR-1

Runoff = 0.02 cfs @ 15.57 hrs, Volume= 0.015 af, Depth= 0.08"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=6.04"

Area (ac)	CN	Description
0.878	30	Woods, Good, HSG A
1.467	30	Meadow, non-grazed, HSG A
2.345	30	Weighted Average
2.345		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	50	0.0400	0.11		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
6.6	293	0.0400	0.74		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
0.3	14	0.0430	0.77		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
14.4	357	Total			

Summary for Subcatchment PR-2: Subcat PR-2

Runoff = 0.17 cfs @ 14.69 hrs, Volume= 0.107 af, Depth= 0.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=6.04"

	Area (ac)	CN	Description
	0.482	76	Gravel roads, HSG A
	4.753	30	Meadow, non-grazed, HSG A
*	0.001	98	Concrete pads, HSG A
	2.055	30	Woods, Good, HSG A
	7.291	33	Weighted Average
	7.290		99.99% Pervious Area
	0.001		0.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.9	50	0.1200	0.17		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
14.1	560	0.0320	0.66		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
19.0	610	Total			

Summary for Subcatchment PR-3: Subcat PR-3

Runoff = 0.13 cfs @ 12.54 hrs, Volume= 0.034 af, Depth= 0.40"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=6.04"

	Area (ac)	CN	Description
	0.167	76	Gravel roads, HSG A
	0.418	30	Meadow, non-grazed, HSG A
*	0.417	30	Woods/Meadow, Good, HSG A
	1.002	38	Weighted Average
	1.002		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	50	0.0300	0.18		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.44"
12.7	400	0.0200	0.52		**Shallow Concentrated Flow,** Kv= 3.7 fps
17.3	450	Total			

Summary for Subcatchment PR-4: Subcat PR-4

Runoff = 0.01 cfs @ 15.52 hrs, Volume= 0.005 af, Depth= 0.08"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=6.04"

Area (ac)	CN	Description
0.622	30	Meadow, non-grazed, HSG A
0.099	30	Woods, Good, HSG A
0.721	30	Weighted Average
0.721		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	50	0.0400	0.11		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
3.1	152	0.0492	0.82		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
10.6	202	Total			

Summary for Subcatchment PR-5: Subcat PR-5

Runoff = 0.07 cfs @ 12.57 hrs, Volume= 0.029 af, Depth= 0.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=6.04"

Area (ac)	CN	Adj	Description
0.141	76		Gravel roads, HSG A
0.904	30		Meadow, non-grazed, HSG A
0.298	30		Woods, Good, HSG A
0.024	98		Unconnected pavement, HSG A
1.367	36	35	Weighted Average, UI Adjusted
1.343			98.24% Pervious Area
0.024			1.76% Impervious Area
0.024			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	50	0.0300	0.10		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
4.3	172	0.0319	0.66		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
12.8	222	Total			

Summary for Subcatchment PR-6: Subcat PR-6

Runoff = 0.28 cfs @ 12.68 hrs, Volume= 0.113 af, Depth= 0.30"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=6.04"

Area (ac)	CN	Description
0.559	76	Gravel roads, HSG A
3.877	30	Meadow, non-grazed, HSG A
0.005	30	Woods, Good, HSG A
4.441	36	Weighted Average
4.441		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	50	0.1840	0.90		**Sheet Flow, Dirt** Fallow n= 0.050 P2= 3.44"
0.1	22	0.0450	3.42		**Shallow Concentrated Flow, Dirt** Unpaved Kv= 16.1 fps
21.0	361	0.0060	0.29		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
22.0	433	Total			

Summary for Subcatchment PR-7: Subcat PR-7

Runoff = 0.06 cfs @ 13.79 hrs, Volume= 0.035 af, Depth= 0.22"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=6.04"

Area (ac)	CN	Description
0.028	72	Dirt roads, HSG A
0.157	76	Gravel roads, HSG A
1.505	30	Meadow, non-grazed, HSG A
0.249	30	Woods, Good, HSG A
1.939	34	Weighted Average
1.939		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.5	50	0.0140	0.07		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
5.2	122	0.0110	0.39		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
0.4	27	0.0040	1.02		**Shallow Concentrated Flow, Gravel** Unpaved Kv= 16.1 fps
17.1	199	Total			

Summary for Subcatchment PR-8: Subcat PR-8

Runoff = 0.06 cfs @ 13.84 hrs, Volume= 0.036 af, Depth= 0.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=6.04"

Area (ac)	CN	Description
0.186	76	Gravel roads, HSG A
1.745	30	Meadow, non-grazed, HSG A
0.554	30	Woods, Good, HSG A
2.485	33	Weighted Average
2.485		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.5	38	0.4870	1.26		**Sheet Flow, Dirt** Fallow n= 0.050 P2= 3.44"
3.5	12	0.0160	0.06		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
4.4	103	0.0110	0.39		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
8.4	153	Total			

Summary for Subcatchment PR-9: Subcat PR-9

Runoff = 0.08 cfs @ 12.22 hrs, Volume= 0.011 af, Depth= 0.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=6.04"

Area (ac)	CN	Description
0.029	72	Dirt roads, HSG A
0.002	89	Dirt roads, HSG D
0.014	98	Water Surface, 0% imp, HSG A
0.098	30	Woods, Good, HSG A
0.143	46	Weighted Average
0.143		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.9	50	0.0500	0.12		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
4.6	180	0.0306	0.65		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
11.5	230	Total			

Summary for Pond 1P: Infiltration Basin

Inflow Area = 7.291 ac, 0.01% Impervious, Inflow Depth = 0.18" for 25-Year event
Inflow = 0.17 cfs @ 14.69 hrs, Volume= 0.107 af
Outflow = 0.14 cfs @ 16.04 hrs, Volume= 0.107 af, Atten= 16%, Lag= 81.1 min
Discarded = 0.14 cfs @ 16.04 hrs, Volume= 0.107 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 21.61' @ 16.04 hrs Surf.Area= 2,517 sf Storage= 279 cf

Plug-Flow detention time= 14.5 min calculated for 0.107 af (100% of inflow)
Center-of-Mass det. time= 14.5 min (1,065.0 - 1,050.5)

Volume	Invert	Avail.Storage	Storage Description
#1	21.50'	4,414 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
21.50	2,420	0	0
22.00	2,850	1,318	1,318
22.90	4,031	3,096	4,414

Device	Routing	Invert	Outlet Devices
#1	Discarded	21.50'	**2.410 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 17.30'
#2	Primary	20.60'	**6.0" Round Culvert** L= 41.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 20.60' / 20.40' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Device 2	22.30'	**48.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Primary	22.80'	**10.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) 1.3' Crest Height

Discarded OutFlow Max=0.14 cfs @ 16.04 hrs HW=21.61' (Free Discharge)
└**1=Exfiltration** (Controls 0.14 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=21.50' (Free Discharge)
└**2=Culvert** (Passes 0.00 cfs of 0.56 cfs potential flow)
└**3=Orifice/Grate** (Controls 0.00 cfs)
└**4=Sharp-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 2P: Infiltration Basin

Inflow Area = 1.002 ac, 0.00% Impervious, Inflow Depth = 0.40" for 25-Year event
Inflow = 0.13 cfs @ 12.54 hrs, Volume= 0.034 af
Outflow = 0.07 cfs @ 13.17 hrs, Volume= 0.034 af, Atten= 46%, Lag= 38.0 min
Discarded = 0.04 cfs @ 13.17 hrs, Volume= 0.030 af
Primary = 0.03 cfs @ 13.17 hrs, Volume= 0.003 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs / 2
Peak Elev= 24.31' @ 13.17 hrs Surf.Area= 664 sf Storage= 181 cf

Plug-Flow detention time= 46.0 min calculated for 0.034 af (100% of inflow)
Center-of-Mass det. time= 45.9 min (1,024.1 - 978.2)

Volume	Invert	Avail.Storage	Storage Description
#1	24.00'	1,140 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
24.00	519	0	0
25.00	993	756	756
25.30	1,565	384	1,140

Device	Routing	Invert	Outlet Devices
#1	Discarded	24.00'	**2.410 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 17.30'
#2	Primary	21.50'	**6.0" Round Culvert** L= 50.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 21.50' / 21.00' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Device 2	24.30'	**48.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Primary	24.80'	**10.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) 1.3' Crest Height

Discarded OutFlow Max=0.04 cfs @ 13.17 hrs HW=24.31' (Free Discharge)
└**1=Exfiltration** (Controls 0.04 cfs)

Primary OutFlow Max=0.02 cfs @ 13.17 hrs HW=24.31' (Free Discharge)
├**2=Culvert** (Passes 0.02 cfs of 1.13 cfs potential flow)
│ └**3=Orifice/Grate** (Weir Controls 0.02 cfs @ 0.26 fps)
└**4=Sharp-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Link DP-1: Off-Site

Inflow Area = 2.345 ac, 0.00% Impervious, Inflow Depth = 0.08" for 25-Year event
Inflow = 0.02 cfs @ 15.57 hrs, Volume= 0.015 af
Primary = 0.02 cfs @ 15.57 hrs, Volume= 0.015 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP-2: Wetlands

Inflow Area = 8.436 ac, 0.01% Impervious, Inflow Depth = 0.02" for 25-Year event
Inflow = 0.08 cfs @ 12.22 hrs, Volume= 0.014 af
Primary = 0.08 cfs @ 12.22 hrs, Volume= 0.014 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP-3: Existing Bogs

Inflow Area = 10.953 ac, 0.22% Impervious, Inflow Depth = 0.24" for 25-Year event
Inflow = 0.43 cfs @ 12.70 hrs, Volume= 0.218 af
Primary = 0.43 cfs @ 12.70 hrs, Volume= 0.218 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 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 PR-1: Subcat PR-1 Runoff Area=2.345 ac 0.00% Impervious Runoff Depth=0.32"
Flow Length=357' Tc=14.4 min CN=30 Runoff=0.14 cfs 0.063 af

Subcatchment PR-2: Subcat PR-2 Runoff Area=7.291 ac 0.01% Impervious Runoff Depth=0.52"
Flow Length=610' Tc=19.0 min CN=33 Runoff=1.19 cfs 0.316 af

Subcatchment PR-3: Subcat PR-3 Runoff Area=1.002 ac 0.00% Impervious Runoff Depth=0.90"
Flow Length=450' Tc=17.3 min CN=38 Runoff=0.44 cfs 0.075 af

Subcatchment PR-4: Subcat PR-4 Runoff Area=0.721 ac 0.00% Impervious Runoff Depth=0.32"
Flow Length=202' Tc=10.6 min CN=30 Runoff=0.04 cfs 0.019 af

Subcatchment PR-5: Subcat PR-5 Runoff Area=1.367 ac 1.76% Impervious Runoff Depth=0.67"
Flow Length=222' Tc=12.8 min UI Adjusted CN=35 Runoff=0.38 cfs 0.076 af

Subcatchment PR-6: Subcat PR-6 Runoff Area=4.441 ac 0.00% Impervious Runoff Depth=0.74"
Flow Length=433' Tc=22.0 min CN=36 Runoff=1.32 cfs 0.275 af

Subcatchment PR-7: Subcat PR-7 Runoff Area=1.939 ac 0.00% Impervious Runoff Depth=0.59"
Flow Length=199' Tc=17.1 min CN=34 Runoff=0.41 cfs 0.096 af

Subcatchment PR-8: Subcat PR-8 Runoff Area=2.485 ac 0.00% Impervious Runoff Depth=0.52"
Flow Length=153' Tc=8.4 min CN=33 Runoff=0.47 cfs 0.108 af

Subcatchment PR-9: Subcat PR-9 Runoff Area=0.143 ac 0.00% Impervious Runoff Depth=1.61"
Flow Length=230' Tc=11.5 min CN=46 Runoff=0.18 cfs 0.019 af

Pond 1P: Infiltration Basin Peak Elev=22.34' Storage=2,373 cf Inflow=1.19 cfs 0.316 af
Discarded=0.22 cfs 0.240 af Primary=0.37 cfs 0.076 af Outflow=0.59 cfs 0.316 af

Pond 2P: Infiltration Basin Peak Elev=24.35' Storage=207 cf Inflow=0.44 cfs 0.075 af
Discarded=0.04 cfs 0.040 af Primary=0.40 cfs 0.036 af Outflow=0.44 cfs 0.075 af

Link DP-1: Off-Site Inflow=0.14 cfs 0.063 af
Primary=0.14 cfs 0.063 af

Link DP-2: Wetlands Inflow=0.53 cfs 0.130 af
Primary=0.53 cfs 0.130 af

Link DP-3: Existing Bogs Inflow=2.57 cfs 0.573 af
Primary=2.57 cfs 0.573 af

Total Runoff Area = 21.734 ac Runoff Volume = 1.047 af Average Runoff Depth = 0.58"
99.88% Pervious = 21.709 ac 0.12% Impervious = 0.025 ac

Summary for Subcatchment PR-1: Subcat PR-1

Runoff = 0.14 cfs @ 12.60 hrs, Volume= 0.063 af, Depth= 0.32"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=7.58"

Area (ac)	CN	Description
0.878	30	Woods, Good, HSG A
1.467	30	Meadow, non-grazed, HSG A
2.345	30	Weighted Average
2.345		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	50	0.0400	0.11		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
6.6	293	0.0400	0.74		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
0.3	14	0.0430	0.77		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
14.4	357	Total			

Summary for Subcatchment PR-2: Subcat PR-2

Runoff = 1.19 cfs @ 12.56 hrs, Volume= 0.316 af, Depth= 0.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=7.58"

	Area (ac)	CN	Description
	0.482	76	Gravel roads, HSG A
	4.753	30	Meadow, non-grazed, HSG A
*	0.001	98	Concrete pads, HSG A
	2.055	30	Woods, Good, HSG A
	7.291	33	Weighted Average
	7.290		99.99% Pervious Area
	0.001		0.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.9	50	0.1200	0.17		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
14.1	560	0.0320	0.66		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
19.0	610	Total			

Summary for Subcatchment PR-3: Subcat PR-3

Runoff = 0.44 cfs @ 12.40 hrs, Volume= 0.075 af, Depth= 0.90"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=7.58"

	Area (ac)	CN	Description
	0.167	76	Gravel roads, HSG A
	0.418	30	Meadow, non-grazed, HSG A
*	0.417	30	Woods/Meadow, Good, HSG A
	1.002	38	Weighted Average
	1.002		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	50	0.0300	0.18		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.44"
12.7	400	0.0200	0.52		**Shallow Concentrated Flow,** Kv= 3.7 fps
17.3	450	Total			

Summary for Subcatchment PR-4: Subcat PR-4

Runoff = 0.04 cfs @ 12.54 hrs, Volume= 0.019 af, Depth= 0.32"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=7.58"

Area (ac)	CN	Description
0.622	30	Meadow, non-grazed, HSG A
0.099	30	Woods, Good, HSG A
0.721	30	Weighted Average
0.721		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	50	0.0400	0.11		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
3.1	152	0.0492	0.82		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
10.6	202	Total			

Summary for Subcatchment PR-5: Subcat PR-5

Runoff = 0.38 cfs @ 12.41 hrs, Volume= 0.076 af, Depth= 0.67"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=7.58"

Area (ac)	CN	Adj	Description
0.141	76		Gravel roads, HSG A
0.904	30		Meadow, non-grazed, HSG A
0.298	30		Woods, Good, HSG A
0.024	98		Unconnected pavement, HSG A
1.367	36	35	Weighted Average, UI Adjusted
1.343			98.24% Pervious Area
0.024			1.76% Impervious Area
0.024			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	50	0.0300	0.10		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
4.3	172	0.0319	0.66		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
12.8	222	Total			

Summary for Subcatchment PR-6: Subcat PR-6

Runoff = 1.32 cfs @ 12.52 hrs, Volume= 0.275 af, Depth= 0.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=7.58"

Area (ac)	CN	Description
0.559	76	Gravel roads, HSG A
3.877	30	Meadow, non-grazed, HSG A
0.005	30	Woods, Good, HSG A
4.441	36	Weighted Average
4.441		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	50	0.1840	0.90		**Sheet Flow, Dirt** Fallow n= 0.050 P2= 3.44"
0.1	22	0.0450	3.42		**Shallow Concentrated Flow, Dirt** Unpaved Kv= 16.1 fps
21.0	361	0.0060	0.29		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
22.0	433	Total			

Summary for Subcatchment PR-7: Subcat PR-7

Runoff = 0.41 cfs @ 12.50 hrs, Volume= 0.096 af, Depth= 0.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=7.58"

Area (ac)	CN	Description
0.028	72	Dirt roads, HSG A
0.157	76	Gravel roads, HSG A
1.505	30	Meadow, non-grazed, HSG A
0.249	30	Woods, Good, HSG A
1.939	34	Weighted Average
1.939		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.5	50	0.0140	0.07		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
5.2	122	0.0110	0.39		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
0.4	27	0.0040	1.02		**Shallow Concentrated Flow, Gravel** Unpaved Kv= 16.1 fps
17.1	199	Total			

Summary for Subcatchment PR-8: Subcat PR-8

Runoff = 0.47 cfs @ 12.40 hrs, Volume= 0.108 af, Depth= 0.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=7.58"

Area (ac)	CN	Description
0.186	76	Gravel roads, HSG A
1.745	30	Meadow, non-grazed, HSG A
0.554	30	Woods, Good, HSG A
2.485	33	Weighted Average
2.485		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.5	38	0.4870	1.26		**Sheet Flow, Dirt** Fallow n= 0.050 P2= 3.44"
3.5	12	0.0160	0.06		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
4.4	103	0.0110	0.39		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
8.4	153	Total			

Summary for Subcatchment PR-9: Subcat PR-9

Runoff = 0.18 cfs @ 12.19 hrs, Volume= 0.019 af, Depth= 1.61"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=7.58"

Area (ac)	CN	Description
0.029	72	Dirt roads, HSG A
0.002	89	Dirt roads, HSG D
0.014	98	Water Surface, 0% imp, HSG A
0.098	30	Woods, Good, HSG A
0.143	46	Weighted Average
0.143		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.9	50	0.0500	0.12		**Sheet Flow, Meadow** n= 0.320 P2= 3.44"
4.6	180	0.0306	0.65		**Shallow Concentrated Flow, Meadow** Kv= 3.7 fps
11.5	230	Total			

Summary for Pond 1P: Infiltration Basin

Inflow Area = 7.291 ac, 0.01% Impervious, Inflow Depth = 0.52" for 100-Year event
Inflow = 1.19 cfs @ 12.56 hrs, Volume= 0.316 af
Outflow = 0.59 cfs @ 13.42 hrs, Volume= 0.316 af, Atten= 51%, Lag= 51.9 min
Discarded = 0.22 cfs @ 13.42 hrs, Volume= 0.240 af
Primary = 0.37 cfs @ 13.42 hrs, Volume= 0.076 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 22.34' @ 13.42 hrs Surf.Area= 3,300 sf Storage= 2,373 cf

Plug-Flow detention time= 118.0 min calculated for 0.316 af (100% of inflow)
Center-of-Mass det. time= 118.0 min (1,095.7 - 977.8)

Volume	Invert	Avail.Storage	Storage Description
#1	21.50'	4,414 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
21.50	2,420	0	0
22.00	2,850	1,318	1,318
22.90	4,031	3,096	4,414

Device	Routing	Invert	Outlet Devices
#1	Discarded	21.50'	**2.410 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 17.30'
#2	Primary	20.60'	**6.0" Round Culvert** L= 41.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 20.60' / 20.40' S= 0.0049 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Device 2	22.30'	**48.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Primary	22.80'	**10.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) 1.3' Crest Height

Discarded OutFlow Max=0.22 cfs @ 13.42 hrs HW=22.34' (Free Discharge)
└**1=Exfiltration** (Controls 0.22 cfs)

Primary OutFlow Max=0.37 cfs @ 13.42 hrs HW=22.34' (Free Discharge)
├**2=Culvert** (Passes 0.37 cfs of 0.87 cfs potential flow)
│ └**3=Orifice/Grate** (Weir Controls 0.37 cfs @ 0.68 fps)
└**4=Sharp-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Pond 2P: Infiltration Basin

Inflow Area = 1.002 ac, 0.00% Impervious, Inflow Depth = 0.90" for 100-Year event
Inflow = 0.44 cfs @ 12.40 hrs, Volume= 0.075 af
Outflow = 0.44 cfs @ 12.40 hrs, Volume= 0.075 af, Atten= 0%, Lag= 0.0 min
Discarded = 0.04 cfs @ 12.40 hrs, Volume= 0.040 af
Primary = 0.40 cfs @ 12.40 hrs, Volume= 0.036 af

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs / 2
Peak Elev= 24.35' @ 12.40 hrs Surf.Area= 683 sf Storage= 207 cf

Plug-Flow detention time= 36.8 min calculated for 0.075 af (100% of inflow)
Center-of-Mass det. time= 37.1 min (972.7 - 935.5)

Volume	Invert	Avail.Storage	Storage Description
#1	24.00'	1,140 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
24.00	519	0	0
25.00	993	756	756
25.30	1,565	384	1,140

Device	Routing	Invert	Outlet Devices
#1	Discarded	24.00'	**2.410 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 17.30'
#2	Primary	21.50'	**6.0" Round Culvert** L= 50.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 21.50' / 21.00' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf
#3	Device 2	24.30'	**48.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Primary	24.80'	**10.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) 1.3' Crest Height

Discarded OutFlow Max=0.04 cfs @ 12.40 hrs HW=24.35' (Free Discharge)
└**1=Exfiltration** (Controls 0.04 cfs)

Primary OutFlow Max=0.39 cfs @ 12.40 hrs HW=24.35' (Free Discharge)
├**2=Culvert** (Passes 0.39 cfs of 1.14 cfs potential flow)
│ └**3=Orifice/Grate** (Weir Controls 0.39 cfs @ 0.70 fps)
└**4=Sharp-Crested Rectangular Weir**(Controls 0.00 cfs)

Summary for Link DP-1: Off-Site

Inflow Area = 2.345 ac, 0.00% Impervious, Inflow Depth = 0.32" for 100-Year event
Inflow = 0.14 cfs @ 12.60 hrs, Volume= 0.063 af
Primary = 0.14 cfs @ 12.60 hrs, Volume= 0.063 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP-2: Wetlands

Inflow Area = 8.436 ac, 0.01% Impervious, Inflow Depth = 0.19" for 100-Year event
Inflow = 0.53 cfs @ 12.41 hrs, Volume= 0.130 af
Primary = 0.53 cfs @ 12.41 hrs, Volume= 0.130 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Summary for Link DP-3: Existing Bogs

Inflow Area = 10.953 ac, 0.22% Impervious, Inflow Depth = 0.63" for 100-Year event
Inflow = 2.57 cfs @ 12.48 hrs, Volume= 0.573 af
Primary = 2.57 cfs @ 12.48 hrs, Volume= 0.573 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs