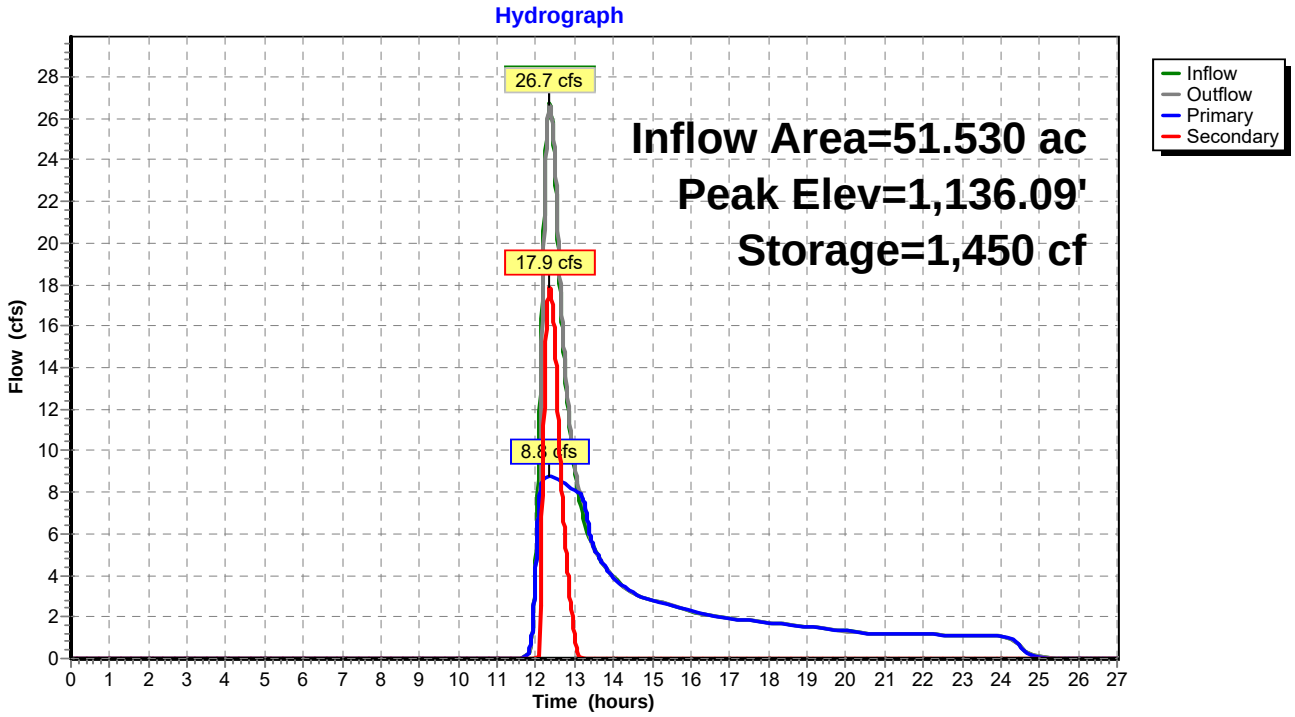
Pond RB3: CULVERT



Summary for Pond RB5: CULVERT

Inflow Area = 10.500 ac, 0.00% Impervious, Inflow Depth = 0.94" for 10-yr event
Inflow = 7.8 cfs @ 12.28 hrs, Volume= 0.827 af
Outflow = 6.9 cfs @ 12.38 hrs, Volume= 0.827 af, Atten= 12%, Lag= 6.2 min
Primary = 6.9 cfs @ 12.38 hrs, Volume= 0.827 af
Routed to Reach RB4 : WETLAND
Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Reach RB4 : WETLAND

Routing by Dyn-Stor-Ind method, Time Span= 0.00-27.00 hrs, dt= 0.01 hrs
Peak Elev= 1,139.23' @ 12.38 hrs Surf.Area= 2,148 sf Storage= 1,332 cf

Plug-Flow detention time= 1.2 min calculated for 0.827 af (100% of inflow)
Center-of-Mass det. time= 1.2 min (889.8 - 888.6)

Volume	Invert	Avail.Storage	Storage Description
#1	1,137.25'	3,832 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

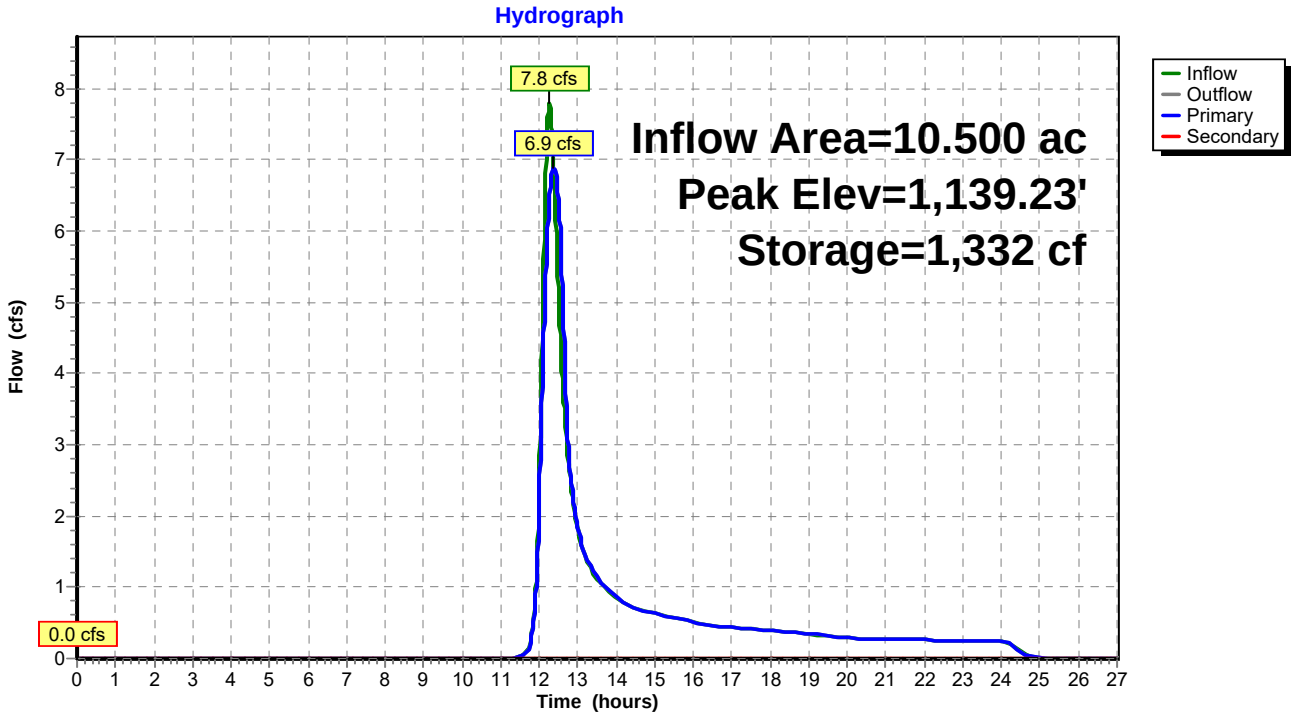
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,137.25	0	0	0
1,138.00	202	76	76
1,139.00	1,465	834	909
1,140.00	4,380	2,923	3,832

Device	Routing	Invert	Outlet Devices
#1	Primary	1,137.25'	**15.0" Round Culvert** L= 24.6' Square-edged headwall, Ke= 0.500 Inlet / Outlet Invert= 1,137.25' / 1,136.50' S= 0.0305 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Secondary	1,139.75'	**24.0' long + 10.0 '/' SideZ x 24.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=6.9 cfs @ 12.38 hrs HW=1,139.23' TW=1,137.42' (Dynamic Tailwater)
1=Culvert (Inlet Controls 6.9 cfs @ 5.61 fps)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=1,137.25' TW=1,137.20' (Dynamic Tailwater)
2=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

Pond RB5: CULVERT



Summary for Pond RC3: EX. DOUGLAS DRIVE CULVERT

Inflow Area = 90.790 ac, 0.14% Impervious, Inflow Depth = 0.79" for 10-yr event
Inflow = 40.0 cfs @ 12.48 hrs, Volume= 6.001 af
Outflow = 39.9 cfs @ 12.49 hrs, Volume= 6.001 af, Atten= 0%, Lag= 0.6 min
Primary = 6.5 cfs @ 12.49 hrs, Volume= 3.804 af
Routed to Reach RC2 : WETLAND STREAM
Secondary = 33.5 cfs @ 12.49 hrs, Volume= 2.197 af
Routed to Reach RC2 : WETLAND STREAM

Routing by Dyn-Stor-Ind method, Time Span= 0.00-27.00 hrs, dt= 0.01 hrs
Peak Elev= 1,112.80' @ 12.49 hrs Surf.Area= 7,337 sf Storage= 7,183 cf

Plug-Flow detention time= 6.5 min calculated for 5.999 af (100% of inflow)
Center-of-Mass det. time= 6.5 min (919.5 - 913.0)

Volume	Invert	Avail.Storage	Storage Description
#1	1,110.25'	53,341 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

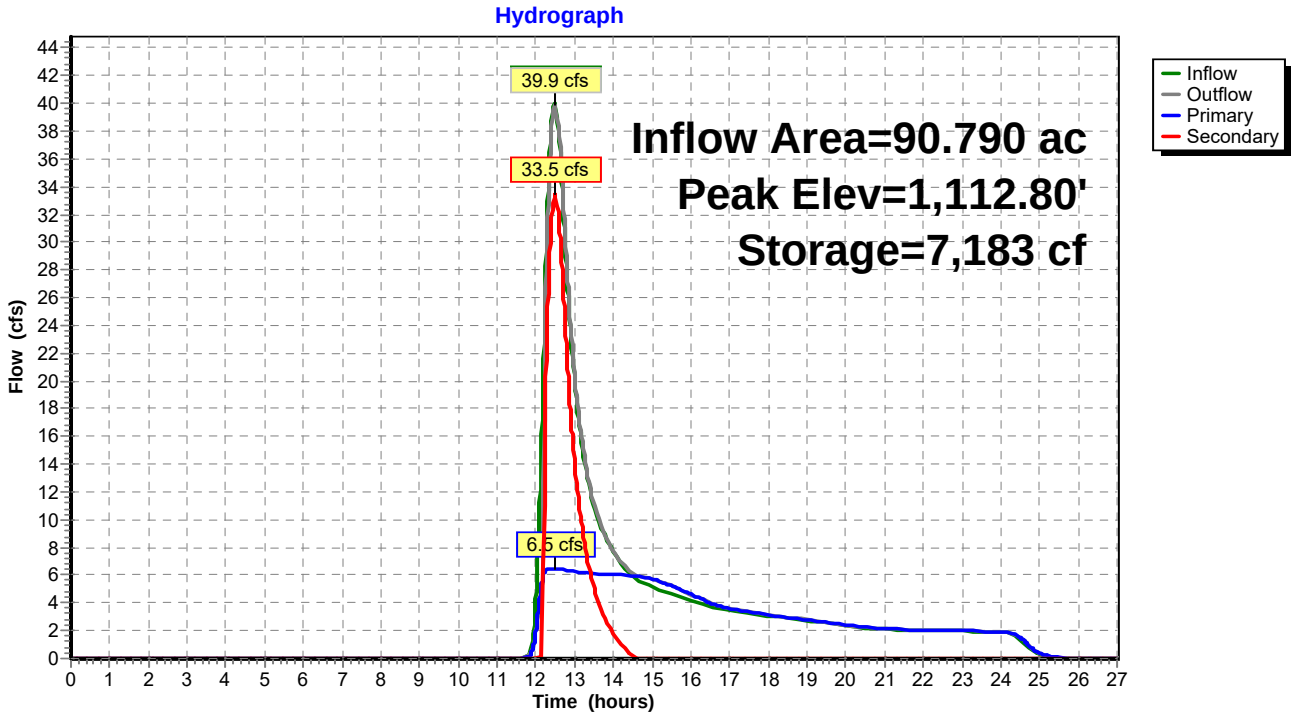
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,110.25	0	0	0
1,112.00	3,350	2,931	2,931
1,114.00	13,370	16,720	19,651
1,116.00	20,320	33,690	53,341

Device	Routing	Invert	Outlet Devices
#1	Primary	1,110.25'	**15.0" Round Culvert** L= 38.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 1,110.25' / 1,108.10' S= 0.0566 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf
#2	Secondary	1,112.50'	**75.0' long + 10.0 '/' SideZ x 20.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=6.5 cfs @ 12.49 hrs HW=1,112.80' TW=1,110.33' (Dynamic Tailwater)
1=Culvert (Inlet Controls 6.5 cfs @ 5.27 fps)

Secondary OutFlow Max=33.5 cfs @ 12.49 hrs HW=1,112.80' TW=1,110.33' (Dynamic Tailwater)
2=Broad-Crested Rectangular Weir (Weir Controls 33.5 cfs @ 1.45 fps)

Pond RC3: EX. DOUGLAS DRIVE CULVERT



Summary for Pond RD2: CULVERT 60+03

Inflow Area = 3.280 ac, 0.00% Impervious, Inflow Depth = 0.42" for 10-yr event
Inflow = 0.6 cfs @ 12.44 hrs, Volume= 0.114 af
Outflow = 0.5 cfs @ 12.59 hrs, Volume= 0.114 af, Atten= 9%, Lag= 8.5 min
Primary = 0.5 cfs @ 12.59 hrs, Volume= 0.114 af
Routed to Reach OUT-D : WETLANDS COMPLEX
Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Reach OUT-D : WETLANDS COMPLEX

Routing by Dyn-Stor-Ind method, Time Span= 0.00-27.00 hrs, dt= 0.01 hrs
Peak Elev= 1,145.87' @ 12.59 hrs Surf.Area= 117 sf Storage= 126 cf

Plug-Flow detention time= 1.5 min calculated for 0.114 af (100% of inflow)
Center-of-Mass det. time= 1.5 min (951.3 - 949.8)

Volume	Invert	Avail.Storage	Storage Description
#1	1,144.00'	7,010 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

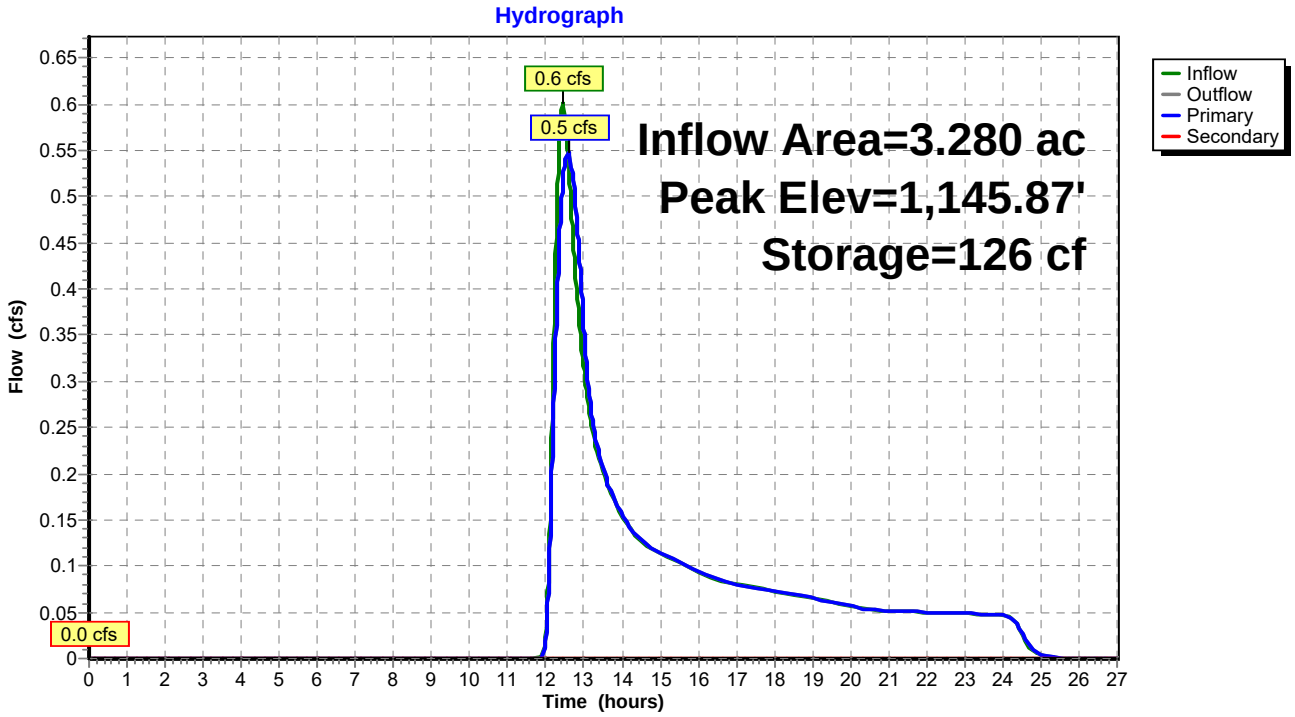
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,144.00	18	0	0
1,146.00	124	142	142
1,148.00	1,666	1,790	1,932
1,149.00	8,490	5,078	7,010

Device	Routing	Invert	Outlet Devices
#1	Primary	1,144.00'	**4.0" Round Culvert** L= 38.6' Ke= 0.500 Inlet / Outlet Invert= 1,144.00' / 1,142.19' S= 0.0469 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.09 sf
#2	Secondary	1,148.50'	**25.0' long + 10.0 '/' SideZ x 24.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=0.5 cfs @ 12.59 hrs HW=1,145.87' TW=0.00' (Dynamic Tailwater)
↑—**1=Culvert** (Inlet Controls 0.5 cfs @ 6.28 fps)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=1,144.00' TW=0.00' (Dynamic Tailwater)
↑—**2=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)

Pond RD2: CULVERT 60+03



Summary for Pond RD3: CULVERT 58+16

Inflow Area = 4.950 ac, 0.00% Impervious, Inflow Depth = 0.31" for 10-yr event
Inflow = 0.5 cfs @ 12.74 hrs, Volume= 0.130 af
Outflow = 0.3 cfs @ 13.17 hrs, Volume= 0.130 af, Atten= 26%, Lag= 25.4 min
Primary = 0.3 cfs @ 13.17 hrs, Volume= 0.130 af
Routed to Reach OUT-D : WETLANDS COMPLEX
Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Reach OUT-D : WETLANDS COMPLEX

Routing by Dyn-Stor-Ind method, Time Span= 0.00-27.00 hrs, dt= 0.01 hrs
Peak Elev= 1,147.20' @ 13.17 hrs Surf.Area= 940 sf Storage= 379 cf

Plug-Flow detention time= 8.4 min calculated for 0.130 af (100% of inflow)
Center-of-Mass det. time= 8.4 min (991.3 - 982.9)

Volume	Invert	Avail.Storage	Storage Description
#1	1,146.36'	21,303 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

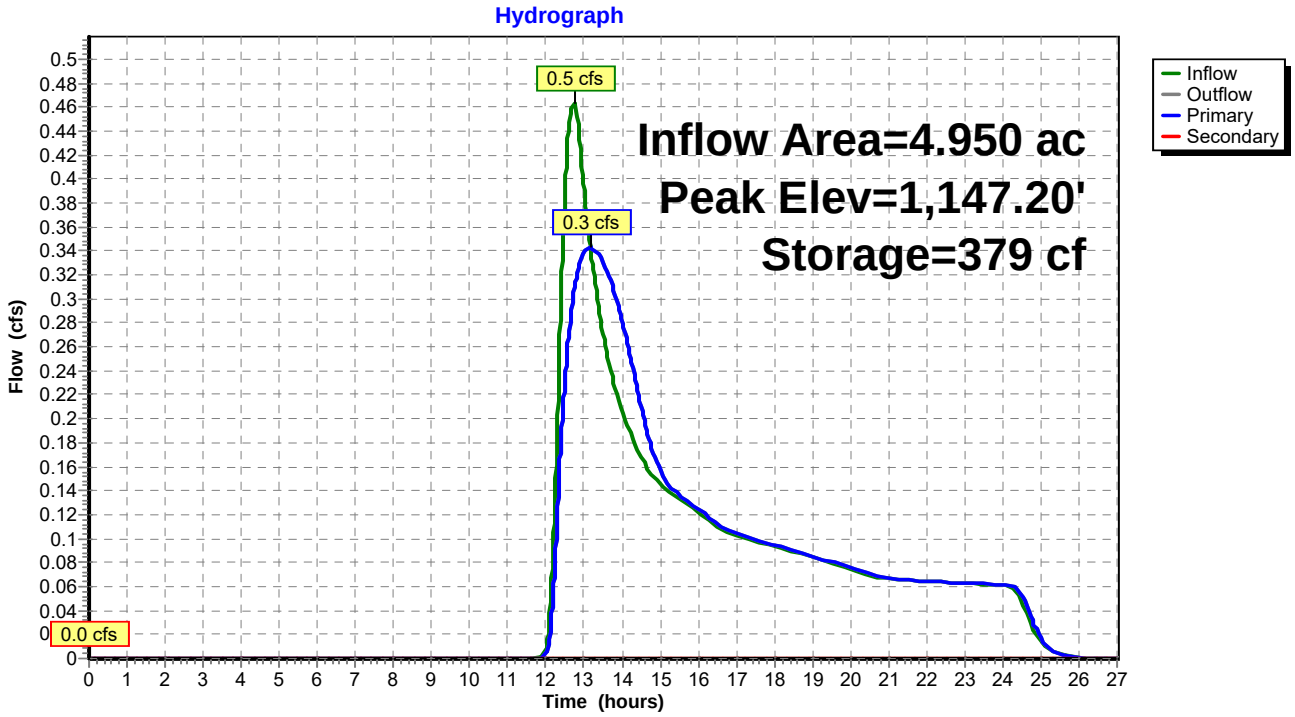
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,146.36	0	0	0
1,147.00	687	220	220
1,148.00	1,982	1,335	1,554
1,149.00	8,490	5,236	6,790
1,150.00	20,535	14,513	21,303

Device	Routing	Invert	Outlet Devices
#1	Primary	1,146.36'	**4.0" Round Culvert** L= 31.0' Ke= 0.500 Inlet / Outlet Invert= 1,146.36' / 1,143.44' S= 0.0942 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.09 sf
#2	Secondary	1,149.25'	**24.0' long + 10.0 '/' SideZ x 24.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=0.3 cfs @ 13.17 hrs HW=1,147.20' TW=0.00' (Dynamic Tailwater)
1=Culvert (Inlet Controls 0.3 cfs @ 3.94 fps)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=1,146.36' TW=0.00' (Dynamic Tailwater)
2=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

Pond RD3: CULVERT 58+16



Summary for Pond RD4: CULVERT 56+06

Inflow Area = 1.760 ac, 0.00% Impervious, Inflow Depth = 0.31" for 10-yr event
Inflow = 0.2 cfs @ 12.53 hrs, Volume= 0.046 af
Outflow = 0.1 cfs @ 13.01 hrs, Volume= 0.046 af, Atten= 35%, Lag= 29.0 min
Primary = 0.1 cfs @ 13.01 hrs, Volume= 0.046 af
Routed to Reach OUT-D : WETLANDS COMPLEX
Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Reach OUT-D : WETLANDS COMPLEX

Routing by Dyn-Stor-Ind method, Time Span= 0.00-27.00 hrs, dt= 0.01 hrs
Peak Elev= 1,149.18' @ 13.01 hrs Surf.Area= 1,709 sf Storage= 219 cf

Plug-Flow detention time= 25.7 min calculated for 0.046 af (100% of inflow)
Center-of-Mass det. time= 25.6 min (998.4 - 972.7)

Volume	Invert	Avail.Storage	Storage Description
#1	1,148.92'	3,896 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

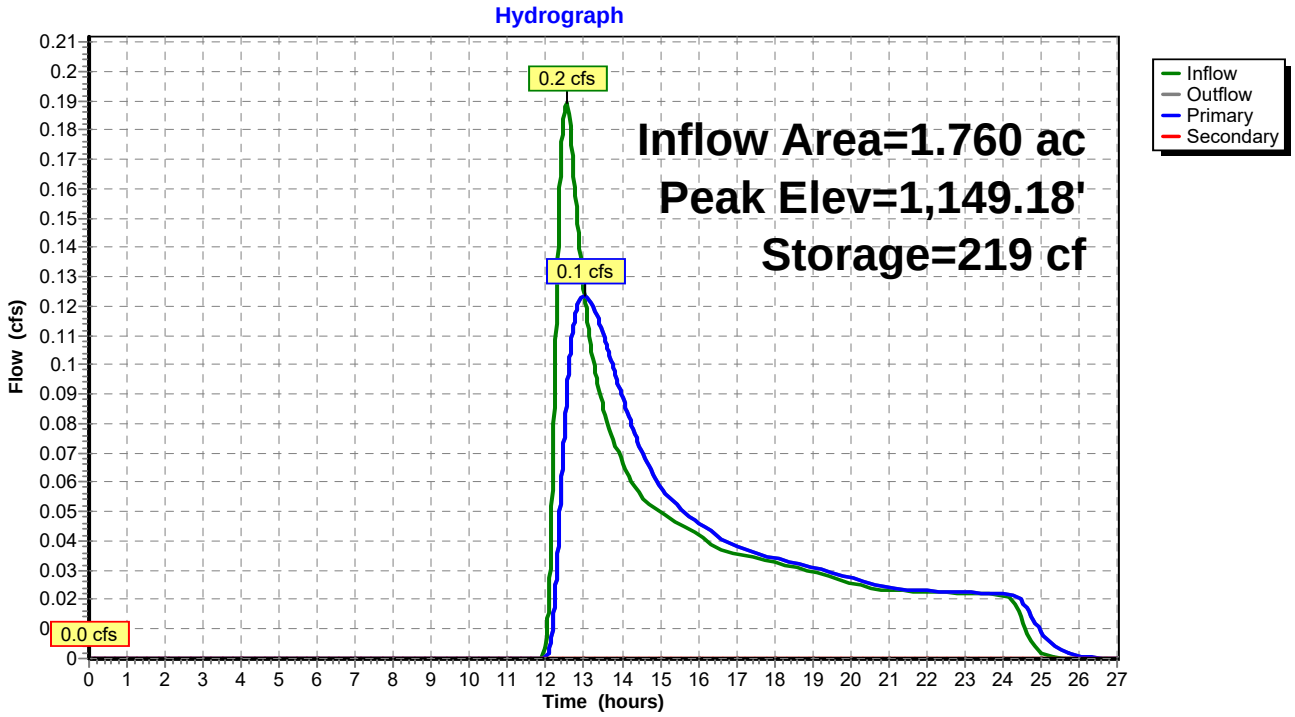
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,148.92	0	0	0
1,150.00	7,215	3,896	3,896

Device	Routing	Invert	Outlet Devices
#1	Primary	1,148.92'	**4.0" Round Culvert** L= 34.8' Square-edged headwall, Ke= 0.500 Inlet / Outlet Invert= 1,148.92' / 1,148.17' S= 0.0216 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.09 sf
#2	Secondary	1,151.50'	**24.0' long + 10.0 '/' SideZ x 24.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=0.1 cfs @ 13.01 hrs HW=1,149.18' TW=0.00' (Dynamic Tailwater)
1=Culvert (Inlet Controls 0.1 cfs @ 1.72 fps)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=1,148.92' TW=0.00' (Dynamic Tailwater)
2=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

Pond RD4: CULVERT 56+06



Summary for Pond RD6: CULVERT 53+68

Inflow Area = 5.120 ac, 0.00% Impervious, Inflow Depth = 0.42" for 10-yr event
Inflow = 0.9 cfs @ 12.50 hrs, Volume= 0.177 af
Outflow = 0.4 cfs @ 13.16 hrs, Volume= 0.177 af, Atten= 50%, Lag= 39.7 min
Primary = 0.4 cfs @ 13.16 hrs, Volume= 0.177 af
Routed to Reach OUT-D : WETLANDS COMPLEX
Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Reach OUT-D : WETLANDS COMPLEX

Routing by Dyn-Stor-Ind method, Time Span= 0.00-27.00 hrs, dt= 0.01 hrs
Peak Elev= 1,150.45' @ 13.16 hrs Surf.Area= 4,038 sf Storage= 905 cf

Plug-Flow detention time= 11.3 min calculated for 0.177 af (100% of inflow)
Center-of-Mass det. time= 11.3 min (964.6 - 953.3)

Volume	Invert	Avail.Storage	Storage Description
#1	1,149.20'	48,160 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

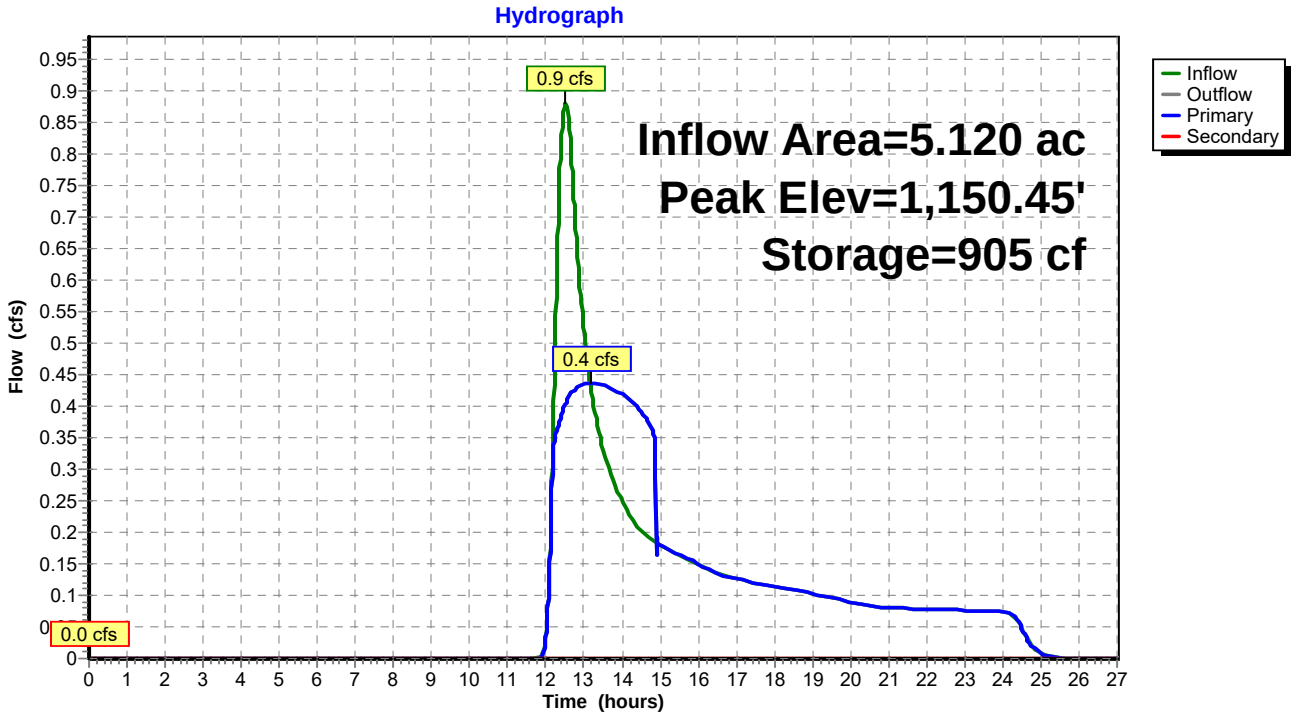
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,149.20	0	0	0
1,150.00	8	3	3
1,151.00	9,045	4,527	4,530
1,152.00	78,215	43,630	48,160

Device	Routing	Invert	Outlet Devices
#1	Primary	1,149.20'	**4.0" Round Culvert** L= 32.1' Square-edged headwall, Ke= 0.500 Inlet / Outlet Invert= 1,149.20' / 1,147.61' S= 0.0495 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.09 sf
#2	Secondary	1,151.70'	**24.0' long + 10.0 '/' SideZ x 24.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=0.4 cfs @ 13.16 hrs HW=1,150.45' TW=0.00' (Dynamic Tailwater)
↑—**1=Culvert** (Inlet Controls 0.4 cfs @ 5.00 fps)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=1,149.20' TW=0.00' (Dynamic Tailwater)
↑—**2=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)

Pond RD6: CULVERT 53+68



Summary for Pond RD8: CULVERT 49+19

Inflow Area = 6.680 ac, 0.00% Impervious, Inflow Depth = 0.38" for 10-yr event
Inflow = 0.8 cfs @ 12.72 hrs, Volume= 0.212 af
Outflow = 0.8 cfs @ 12.79 hrs, Volume= 0.212 af, Atten= 1%, Lag= 4.1 min
Primary = 0.8 cfs @ 12.79 hrs, Volume= 0.212 af
Routed to Reach OUT-D : WETLANDS COMPLEX
Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Reach OUT-D : WETLANDS COMPLEX

Routing by Dyn-Stor-Ind method, Time Span= 0.00-27.00 hrs, dt= 0.01 hrs
Peak Elev= 1,150.82' @ 12.79 hrs Surf.Area= 110 sf Storage= 56 cf

Plug-Flow detention time= 0.5 min calculated for 0.212 af (100% of inflow)
Center-of-Mass det. time= 0.5 min (972.3 - 971.8)

Volume	Invert	Avail.Storage	Storage Description
#1	1,149.81'	8,520 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

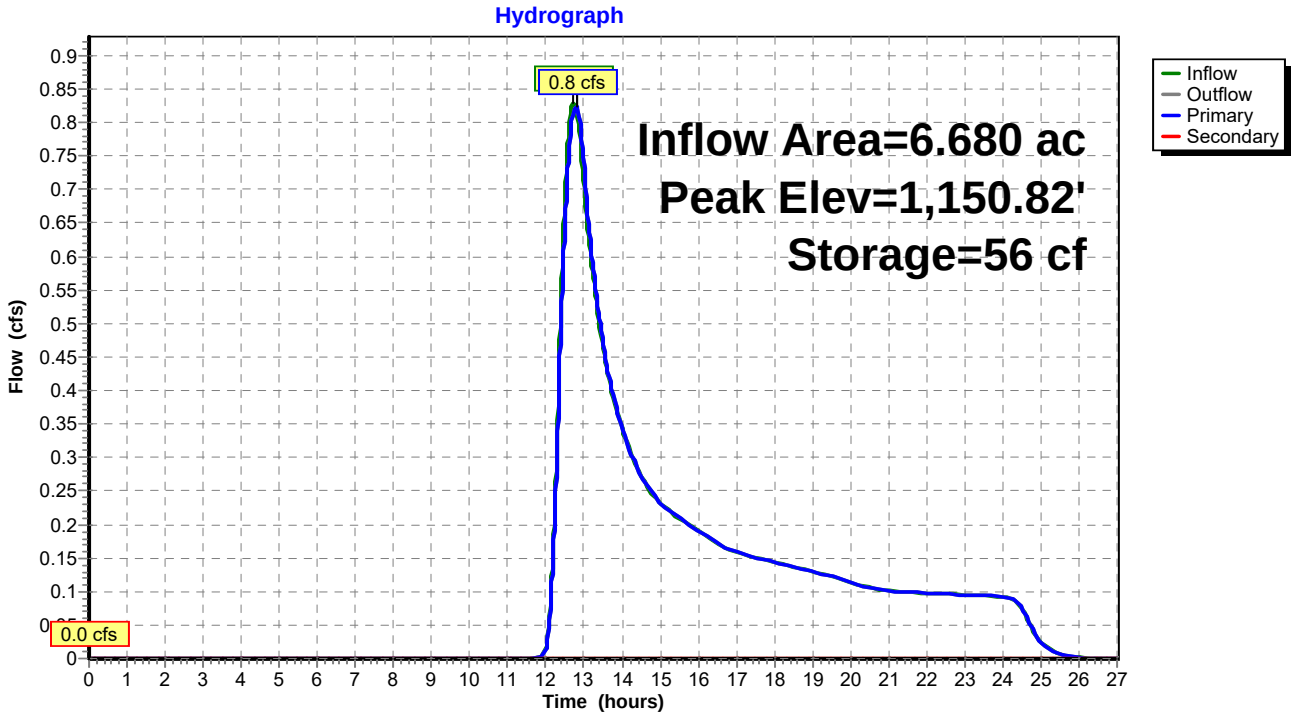
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,149.81	0	0	0
1,151.00	130	77	77
1,152.00	960	545	622
1,153.00	14,835	7,898	8,520

Device	Routing	Invert	Outlet Devices
#1	Primary	1,149.81'	**6.0" Round Culvert** L= 41.7' Square-edged headwall, Ke= 0.500 Inlet / Outlet Invert= 1,149.81' / 1,146.42' S= 0.0813 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.20 sf
#2	Secondary	1,152.50'	**24.0' long + 10.0 '/' SideZ x 24.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=0.8 cfs @ 12.79 hrs HW=1,150.82' TW=0.00' (Dynamic Tailwater)
↑—**1=Culvert** (Inlet Controls 0.8 cfs @ 4.19 fps)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=1,149.81' TW=0.00' (Dynamic Tailwater)
↑—**2=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)

Pond RD8: CULVERT 49+19



Summary for Pond RE4: CULVERT 16+74

Inflow Area = 10.490 ac, 0.86% Impervious, Inflow Depth > 0.31" for 10-yr event
Inflow = 1.0 cfs @ 12.10 hrs, Volume= 0.267 af
Outflow = 0.5 cfs @ 12.98 hrs, Volume= 0.258 af, Atten= 45%, Lag= 53.0 min
Primary = 0.5 cfs @ 12.98 hrs, Volume= 0.258 af
Routed to Reach RE1 : CHANNEL IN WOODS
Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Reach RE1 : CHANNEL IN WOODS

Routing by Dyn-Stor-Ind method, Time Span= 0.00-27.00 hrs, dt= 0.01 hrs
Peak Elev= 1,035.42' @ 12.98 hrs Surf.Area= 4,831 sf Storage= 1,730 cf

Plug-Flow detention time= 73.3 min calculated for 0.257 af (96% of inflow)
Center-of-Mass det. time= 52.9 min (1,037.1 - 984.2)

Volume	Invert	Avail.Storage	Storage Description
#1	1,034.97'	14,012 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

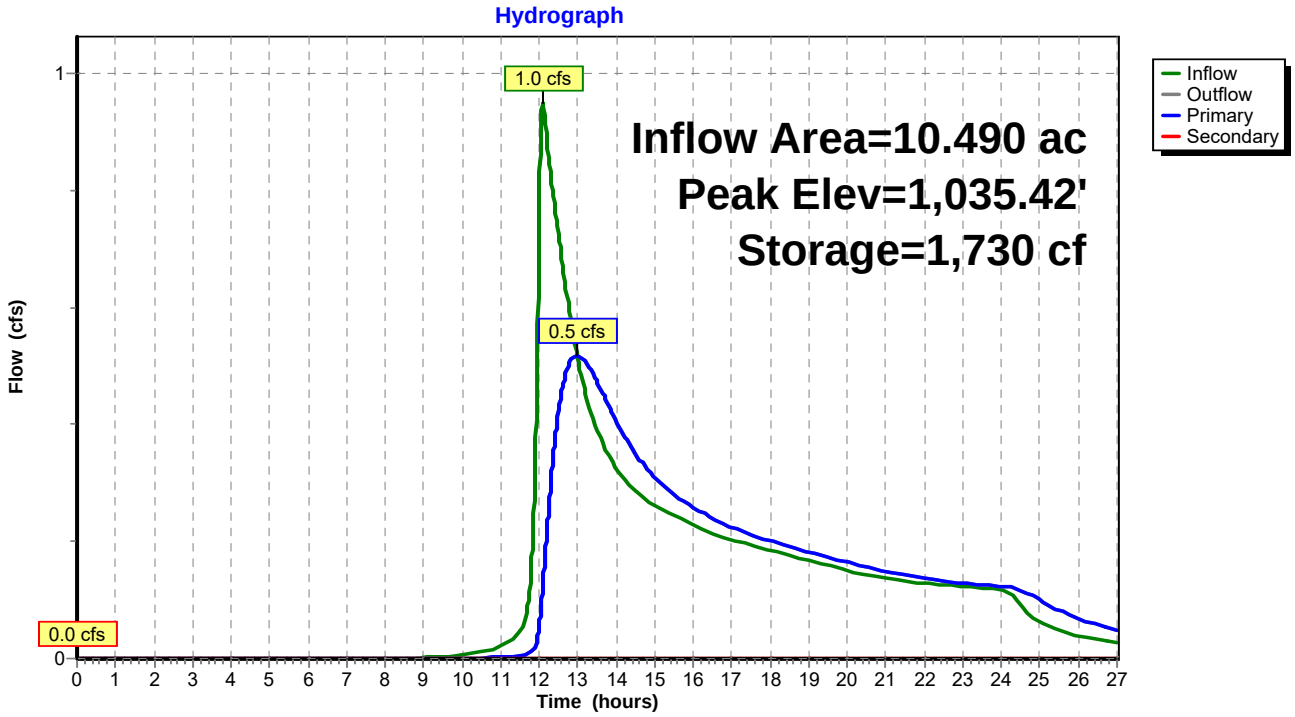
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,034.97	0	0	0
1,035.00	3,225	48	48
1,036.00	7,072	5,149	5,197
1,037.00	10,558	8,815	14,012

Device	Routing	Invert	Outlet Devices
#1	Primary	1,034.97'	**12.0" Round Culvert** L= 40.0' Square-edged headwall, Ke= 0.500 Inlet / Outlet Invert= 1,034.97' / 1,034.43' S= 0.0135 '/' Cc= 0.900 n= 0.025 Corrugated metal, Flow Area= 0.79 sf
#2	Secondary	1,037.50'	**24.0' long + 10.0 '/' SideZ x 24.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=0.5 cfs @ 12.98 hrs HW=1,035.42' TW=1,034.52' (Dynamic Tailwater)
↑—**1=Culvert** (Barrel Controls 0.5 cfs @ 2.24 fps)

Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=1,034.97' TW=1,034.43' (Dynamic Tailwater)
↑—**2=Broad-Crested Rectangular Weir** (Controls 0.0 cfs)

Pond RE4: CULVERT 16+74



Summary for Pond RE7: CULVERT 39+15

Inflow Area = 5.440 ac, 1.65% Impervious, Inflow Depth = 0.18" for 10-yr event
Inflow = 0.2 cfs @ 12.23 hrs, Volume= 0.079 af
Outflow = 0.1 cfs @ 15.10 hrs, Volume= 0.074 af, Atten= 61%, Lag= 172.4 min
Primary = 0.1 cfs @ 15.10 hrs, Volume= 0.074 af
Routed to Reach RE3 : CHANNEL IN WOODS
Secondary = 0.0 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Reach RE3 : CHANNEL IN WOODS

Routing by Dyn-Stor-Ind method, Time Span= 0.00-27.00 hrs, dt= 0.01 hrs
Peak Elev= 1,100.16' @ 15.10 hrs Surf.Area= 6,613 sf Storage= 779 cf

Plug-Flow detention time= 145.1 min calculated for 0.074 af (93% of inflow)
Center-of-Mass det. time= 112.8 min (1,112.6 - 999.8)

Volume	Invert	Avail.Storage	Storage Description
#1	1,100.00'	13,732 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

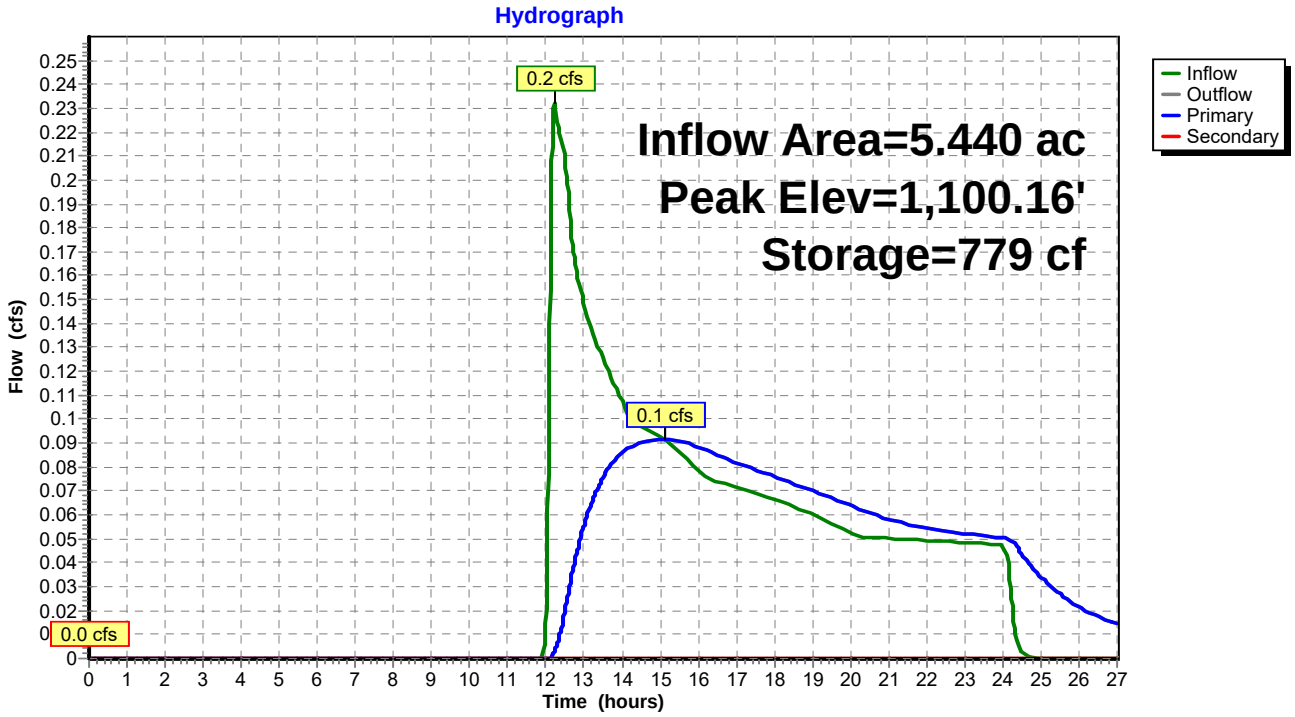
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,100.00	3,392	0	0
1,101.00	24,072	13,732	13,732

Device	Routing	Invert	Outlet Devices
#1	Primary	1,100.00'	**10.0" Round Culvert** L= 31.0' Square-edged headwall, Ke= 0.500 Inlet / Outlet Invert= 1,100.00' / 1,099.77' S= 0.0074 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.55 sf
#2	Secondary	1,101.75'	**24.0' long + 10.0 '/' SideZ x 24.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=0.1 cfs @ 15.10 hrs HW=1,100.16' TW=1,099.83' (Dynamic Tailwater)
1=Culvert (Barrel Controls 0.1 cfs @ 1.96 fps)

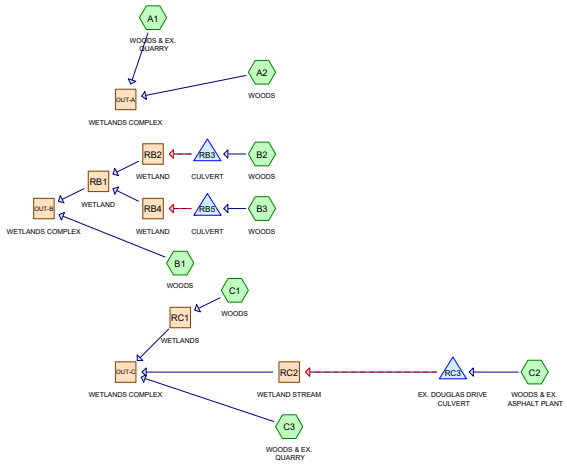
Secondary OutFlow Max=0.0 cfs @ 0.00 hrs HW=1,100.00' TW=1,099.77' (Dynamic Tailwater)
2=Broad-Crested Rectangular Weir (Controls 0.0 cfs)

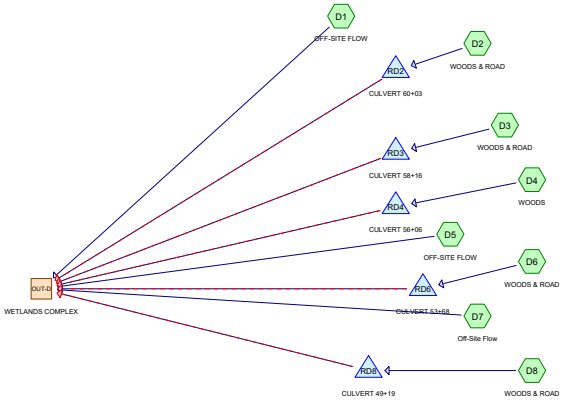
Pond RE7: CULVERT 39+15

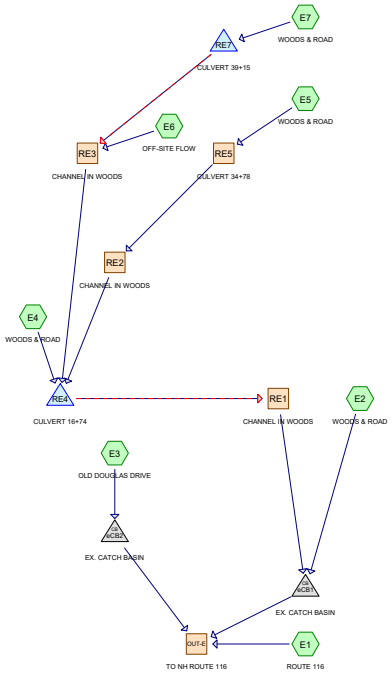


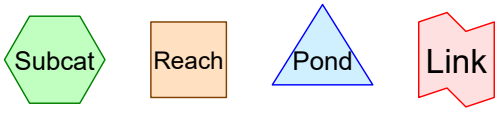
Appendix J.1.iv

2, 10, 25, and 50-Year, 24-Hour Storm Calculation Summaries









Routing Diagram for 1101 PREDEV
Prepared by CMA Engineers, Printed 5/3/2023

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-yr	Type II 24-hr		Default	24.00	1	2.32	2
2	10-yr	Type II 24-hr		Default	24.00	1	3.31	2
3	25-yr	Type II 24-hr		Default	24.00	1	4.06	2
4	50-yr	Type II 24-hr		Default	24.00	1	4.73	2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.850	77	Fallow, bare soil, HSG A (C3)
22.890	86	Fallow, bare soil, HSG B (A1, C2, C3)
5.800	91	Fallow, bare soil, HSG C (C3, D1)
1.270	96	Gravel surface, HSG A (A2, C2, C3, E7)
4.100	96	Gravel surface, HSG B (A1, A2, B2, C2, C3, E3)
6.820	96	Gravel surface, HSG C (A1, A2, B1, B2, B3, C2, C3, D1, D2, D3, D5, D6, D7, D8, E2, E3, E4, E5, E6, E7)
0.010	96	Gravel surface, HSG D (C3)
4.990	30	Meadow, non-grazed, HSG A (A2, B1, C1, C3, D1, D2, E4, E7)
18.620	58	Meadow, non-grazed, HSG B (A1, A2, B2, B3, C2, C3, D1, D2, D6, D8, E1, E3, E7)
31.900	71	Meadow, non-grazed, HSG C (A1, A2, B1, B2, B3, C1, C2, C3, D1, D2, D3, D4, D5, D6, D7, D8, E1, E2, E3, E4, E5, E6, E7)
4.090	78	Meadow, non-grazed, HSG D (B1, C1, C2, C3, D3, D4, E1, E2, E7)
0.200	98	Paved parking, HSG B (E1, E3)
0.820	98	Paved parking, HSG C (E1, E2, E3)
0.130	98	Unconnected roofs, HSG A (C2, E7)
0.150	98	Unconnected roofs, HSG B (A1, C2)
42.690	30	Woods, Good, HSG A (A2, B1, C1, C2, C3, D2, E2, E4, E7)
152.300	55	Woods, Good, HSG B (A1, A2, B1, B2, C2, C3, D1, D3, D4, D6, D8, E2, E3, E4, E7)
270.310	70	Woods, Good, HSG C (A1, A2, B1, B2, B3, C1, C2, C3, D2, D3, D4, D6, E2, E3, E4, E7)
13.650	77	Woods, Good, HSG D (A1, A2, B1, B2, B3, C1, C2, C3, D4)
2.690	58	Woods/grass comb., Good, HSG B (D2)
585.280	**64**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
50.930	HSG A	A2, B1, C1, C2, C3, D1, D2, E2, E4, E7
200.950	HSG B	A1, A2, B1, B2, B3, C2, C3, D1, D2, D3, D4, D6, D8, E1, E2, E3, E4, E7
315.650	HSG C	A1, A2, B1, B2, B3, C1, C2, C3, D1, D2, D3, D4, D5, D6, D7, D8, E1, E2, E3, E4, E5, E6, E7
17.750	HSG D	A1, A2, B1, B2, B3, C1, C2, C3, D3, D4, E1, E2, E7
0.000	Other	
585.280		**TOTAL AREA**

Time span=0.00-27.00 hrs, dt=0.01 hrs, 2701 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment A1: WOODS & EX. QUARRY Runoff Area=89.280 ac 0.07% Impervious Runoff Depth>0.19"
Flow Length=5,225' Tc=85.7 min CN=63 Runoff=3.3 cfs 1.390 af

Subcatchment A2: WOODS Runoff Area=92.770 ac 0.00% Impervious Runoff Depth>0.23"
Flow Length=5,210' Tc=75.7 min CN=65 Runoff=5.2 cfs 1.802 af

Subcatchment B1: WOODS Runoff Area=50.900 ac 0.00% Impervious Runoff Depth=0.02"
Flow Length=3,520' Tc=51.0 min CN=52 Runoff=0.1 cfs 0.098 af

Subcatchment B2: WOODS Runoff Area=51.530 ac 0.00% Impervious Runoff Depth=0.31"
Flow Length=2,695' Tc=35.5 min CN=68 Runoff=7.7 cfs 1.342 af

Subcatchment B3: WOODS Runoff Area=10.500 ac 0.00% Impervious Runoff Depth=0.40"
Flow Length=1,705' Tc=29.8 min CN=71 Runoff=2.7 cfs 0.354 af

Subcatchment C1: WOODS Runoff Area=39.260 ac 0.00% Impervious Runoff Depth=0.21"
Flow Length=2,195' Tc=40.4 min CN=64 Runoff=2.7 cfs 0.685 af

Subcatchment C2: WOODS & EX. Runoff Area=90.790 ac 0.14% Impervious Runoff Depth=0.31"
Flow Length=3,680' Tc=44.4 min CN=68 Runoff=11.7 cfs 2.364 af

Subcatchment C3: WOODS & EX. QUARRY Runoff Area=106.910 ac 0.00% Impervious Runoff Depth=0.31"
Flow Length=4,905' Tc=35.2 min CN=68 Runoff=16.2 cfs 2.784 af

Subcatchment D1: OFF-SITE FLOW Runoff Area=1.750 ac 0.00% Impervious Runoff Depth=0.51"
Flow Length=285' Tc=12.2 min CN=74 Runoff=1.1 cfs 0.074 af

Subcatchment D2: WOODS & ROAD Runoff Area=3.280 ac 0.00% Impervious Runoff Depth=0.11"
Flow Length=735' Tc=37.7 min CN=59 Runoff=0.1 cfs 0.030 af

Subcatchment D3: WOODS & ROAD Runoff Area=4.950 ac 0.00% Impervious Runoff Depth=0.07"
Flow Length=1,020' Tc=51.0 min CN=56 Runoff=0.0 cfs 0.027 af

Subcatchment D4: WOODS Runoff Area=1.760 ac 0.00% Impervious Runoff Depth=0.07"
Flow Length=855' Tc=40.1 min CN=56 Runoff=0.0 cfs 0.010 af

Subcatchment D5: OFF-SITE FLOW Runoff Area=0.100 ac 0.00% Impervious Runoff Depth=1.10"
Tc=6.0 min CN=86 Runoff=0.2 cfs 0.009 af

Subcatchment D6: WOODS & ROAD Runoff Area=5.120 ac 0.00% Impervious Runoff Depth=0.11"
Flow Length=845' Tc=41.5 min CN=59 Runoff=0.1 cfs 0.047 af

Subcatchment D7: Off-Site Flow Runoff Area=1.170 ac 0.00% Impervious Runoff Depth=0.87"
Tc=6.0 min CN=82 Runoff=1.8 cfs 0.085 af

Subcatchment D8: WOODS & ROAD Runoff Area=6.680 ac 0.00% Impervious Runoff Depth=0.09"
Flow Length=1,135' Slope=0.0650 '/' Tc=54.5 min CN=58 Runoff=0.1 cfs 0.052 af

Subcatchment E1: ROUTE 116 Runoff Area=1.320 ac 60.61% Impervious Runoff Depth=1.16"
Tc=6.0 min CN=87 Runoff=2.7 cfs 0.128 af

Subcatchment E2: WOODS & ROAD Runoff Area=15.010 ac 0.80% Impervious Runoff Depth=0.02"
Flow Length=2,320' Tc=28.5 min CN=51 Runoff=0.0 cfs 0.020 af

Subcatchment E3: OLD DOUGLAS DRIVE Runoff Area=1.710 ac 5.85% Impervious Runoff Depth=0.44"
Flow Length=635' Tc=6.0 min CN=72 Runoff=1.2 cfs 0.062 af

Subcatchment E4: WOODS & ROAD Runoff Area=4.130 ac 0.00% Impervious Runoff Depth=0.02"
Flow Length=935' Tc=41.2 min CN=51 Runoff=0.0 cfs 0.005 af

Subcatchment E5: WOODS & ROAD Runoff Area=0.140 ac 0.00% Impervious Runoff Depth=1.04"
Tc=6.0 min CN=85 Runoff=0.3 cfs 0.012 af

Subcatchment E6: OFF-SITE FLOW Runoff Area=0.780 ac 0.00% Impervious Runoff Depth=0.98"
Tc=6.0 min CN=84 Runoff=1.4 cfs 0.064 af

Subcatchment E7: WOODS & ROAD Runoff Area=5.440 ac 1.65% Impervious Runoff Depth=0.02"
Flow Length=540' Tc=16.5 min CN=51 Runoff=0.0 cfs 0.007 af

Reach OUT-A: WETLANDS COMPLEX Inflow=8.4 cfs 3.192 af
Outflow=8.4 cfs 3.192 af

Reach OUT-B: WETLANDS COMPLEX Inflow=8.0 cfs 1.789 af
Outflow=8.0 cfs 1.789 af

Reach OUT-C: WETLANDS COMPLEX Inflow=20.0 cfs 5.824 af
Outflow=20.0 cfs 5.824 af

Reach OUT-D: WETLANDS COMPLEX Inflow=2.8 cfs 0.334 af
Outflow=2.8 cfs 0.334 af

Reach OUT-E: TO NH ROUTE 116 Inflow=3.9 cfs 0.287 af
Outflow=3.9 cfs 0.287 af

Reach RB1: WETLAND Avg. Flow Depth=0.23' Max Vel=1.40 fps Inflow=9.2 cfs 1.695 af
n=0.035 L=1,120.0' S=0.0129 '/' Capacity=184.3 cfs Outflow=8.0 cfs 1.691 af

Reach RB2: WETLAND Avg. Flow Depth=0.21' Max Vel=2.55 fps Inflow=7.4 cfs 1.342 af
n=0.035 L=1,055.0' S=0.0503 '/' Capacity=217.8 cfs Outflow=7.2 cfs 1.341 af

Reach RB4: WETLAND Avg. Flow Depth=0.14' Max Vel=1.65 fps Inflow=2.7 cfs 0.354 af
n=0.035 L=1,600.0' S=0.0358 '/' Capacity=142.7 cfs Outflow=2.0 cfs 0.353 af

Reach RC1: WETLANDS Avg. Flow Depth=0.18' Max Vel=1.02 fps Inflow=2.7 cfs 0.685 af
n=0.035 L=525.0' S=0.0099 '/' Capacity=107.5 cfs Outflow=2.5 cfs 0.685 af

Reach RC2: WETLAND STREAM Avg. Flow Depth=0.19' Max Vel=2.00 fps Inflow=11.6 cfs 2.364 af
n=0.035 L=2,765.0' S=0.0341 '/' Capacity=1,265.4 cfs Outflow=8.0 cfs 2.355 af

Reach RE1: CHANNEL IN WOODS Avg. Flow Depth=0.05' Max Vel=1.14 fps Inflow=0.2 cfs 0.078 af
n=0.035 L=855.0' S=0.0572 '/' Capacity=405.6 cfs Outflow=0.2 cfs 0.077 af

Reach RE2: CHANNEL IN WOODS Avg. Flow Depth=0.03' Max Vel=0.60 fps Inflow=0.3 cfs 0.012 af
n=0.035 L=2,345.0' S=0.0288 '/' Capacity=73.0 cfs Outflow=0.1 cfs 0.012 af

Reach RE3: CHANNEL IN WOODS Avg. Flow Depth=0.09' Max Vel=0.99 fps Inflow=1.4 cfs 0.068 af
n=0.035 L=2,760.0' S=0.0235 '/' Capacity=65.9 cfs Outflow=0.4 cfs 0.066 af

Reach RE5: CULVERT 34+78 Avg. Flow Depth=0.17' Max Vel=2.98 fps Inflow=0.3 cfs 0.012 af
12.0" Round Pipe n=0.013 L=35.8' S=0.0140 '/' Capacity=4.2 cfs Outflow=0.3 cfs 0.012 af

Pond eCB1: EX. CATCH BASIN Peak Elev=982.67' Inflow=0.2 cfs 0.097 af
24.0" Round Culvert n=0.012 L=80.0' S=0.0400 '/' Outflow=0.2 cfs 0.097 af

Pond eCB2: EX. CATCH BASIN Peak Elev=988.77' Inflow=1.2 cfs 0.062 af
24.0" Round Culvert n=0.012 L=70.0' S=0.0036 '/' Outflow=1.2 cfs 0.062 af

Pond RB3: CULVERT Peak Elev=1,135.46' Storage=429 cf Inflow=7.7 cfs 1.342 af
Primary=7.4 cfs 1.342 af Secondary=0.0 cfs 0.000 af Outflow=7.4 cfs 1.342 af

Pond RB5: CULVERT Peak Elev=1,138.08' Storage=97 cf Inflow=2.7 cfs 0.354 af
Primary=2.7 cfs 0.354 af Secondary=0.0 cfs 0.000 af Outflow=2.7 cfs 0.354 af

Pond RC3: EX. DOUGLAS DRIVE CULVERT Peak Elev=1,112.59' Storage=5,781 cf Inflow=11.7 cfs 2.364 af
Primary=6.1 cfs 2.192 af Secondary=5.5 cfs 0.172 af Outflow=11.6 cfs 2.364 af

Pond RD2: CULVERT 60+03 Peak Elev=1,144.17' Storage=4 cf Inflow=0.1 cfs 0.030 af
Primary=0.1 cfs 0.030 af Secondary=0.0 cfs 0.000 af Outflow=0.1 cfs 0.030 af

Pond RD3: CULVERT 58+16 Peak Elev=1,146.49' Storage=9 cf Inflow=0.0 cfs 0.027 af
Primary=0.0 cfs 0.027 af Secondary=0.0 cfs 0.000 af Outflow=0.0 cfs 0.027 af

Pond RD4: CULVERT 56+06 Peak Elev=1,148.99' Storage=17 cf Inflow=0.0 cfs 0.010 af
Primary=0.0 cfs 0.010 af Secondary=0.0 cfs 0.000 af Outflow=0.0 cfs 0.010 af

Pond RD6: CULVERT 53+68 Peak Elev=1,149.42' Storage=0 cf Inflow=0.1 cfs 0.047 af
Primary=0.1 cfs 0.047 af Secondary=0.0 cfs 0.000 af Outflow=0.1 cfs 0.047 af

Pond RD8: CULVERT 49+19 Peak Elev=1,149.98' Storage=2 cf Inflow=0.1 cfs 0.052 af
Primary=0.1 cfs 0.052 af Secondary=0.0 cfs 0.000 af Outflow=0.1 cfs 0.052 af

Pond RE4: CULVERT 16+74 Peak Elev=1,035.23' Storage=883 cf Inflow=0.4 cfs 0.084 af
Primary=0.2 cfs 0.078 af Secondary=0.0 cfs 0.000 af Outflow=0.2 cfs 0.078 af

Pond RE7: CULVERT 39+15 Peak Elev=1,100.05' Storage=187 cf Inflow=0.0 cfs 0.007 af
Primary=0.0 cfs 0.004 af Secondary=0.0 cfs 0.000 af Outflow=0.0 cfs 0.004 af

Total Runoff Area = 585.280 ac Runoff Volume = 11.450 af Average Runoff Depth = 0.23"
99.78% Pervious = 583.980 ac 0.22% Impervious = 1.300 ac

Time span=0.00-27.00 hrs, dt=0.01 hrs, 2701 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment A1: WOODS & EX. QUARRY Runoff Area=89.280 ac 0.07% Impervious Runoff Depth>0.57"
Flow Length=5,225' Tc=85.7 min CN=63 Runoff=15.2 cfs 4.235 af

Subcatchment A2: WOODS Runoff Area=92.770 ac 0.00% Impervious Runoff Depth>0.65"
Flow Length=5,210' Tc=75.7 min CN=65 Runoff=20.9 cfs 5.060 af

Subcatchment B1: WOODS Runoff Area=50.900 ac 0.00% Impervious Runoff Depth=0.20"
Flow Length=3,520' Tc=51.0 min CN=52 Runoff=2.1 cfs 0.850 af

Subcatchment B2: WOODS Runoff Area=51.530 ac 0.00% Impervious Runoff Depth=0.79"
Flow Length=2,695' Tc=35.5 min CN=68 Runoff=26.7 cfs 3.406 af

Subcatchment B3: WOODS Runoff Area=10.500 ac 0.00% Impervious Runoff Depth=0.94"
Flow Length=1,705' Tc=29.8 min CN=71 Runoff=7.8 cfs 0.827 af

Subcatchment C1: WOODS Runoff Area=39.260 ac 0.00% Impervious Runoff Depth=0.61"
Flow Length=2,195' Tc=40.4 min CN=64 Runoff=12.7 cfs 2.000 af

Subcatchment C2: WOODS & EX. Runoff Area=90.790 ac 0.14% Impervious Runoff Depth=0.79"
Flow Length=3,680' Tc=44.4 min CN=68 Runoff=40.0 cfs 6.001 af

Subcatchment C3: WOODS & EX. QUARRY Runoff Area=106.910 ac 0.00% Impervious Runoff Depth=0.79"
Flow Length=4,905' Tc=35.2 min CN=68 Runoff=55.6 cfs 7.066 af

Subcatchment D1: OFF-SITE FLOW Runoff Area=1.750 ac 0.00% Impervious Runoff Depth=1.11"
Flow Length=285' Tc=12.2 min CN=74 Runoff=2.7 cfs 0.162 af

Subcatchment D2: WOODS & ROAD Runoff Area=3.280 ac 0.00% Impervious Runoff Depth=0.42"
Flow Length=735' Tc=37.7 min CN=59 Runoff=0.6 cfs 0.114 af

Subcatchment D3: WOODS & ROAD Runoff Area=4.950 ac 0.00% Impervious Runoff Depth=0.31"
Flow Length=1,020' Tc=51.0 min CN=56 Runoff=0.5 cfs 0.130 af

Subcatchment D4: WOODS Runoff Area=1.760 ac 0.00% Impervious Runoff Depth=0.31"
Flow Length=855' Tc=40.1 min CN=56 Runoff=0.2 cfs 0.046 af

Subcatchment D5: OFF-SITE FLOW Runoff Area=0.100 ac 0.00% Impervious Runoff Depth=1.93"
Tc=6.0 min CN=86 Runoff=0.3 cfs 0.016 af

Subcatchment D6: WOODS & ROAD Runoff Area=5.120 ac 0.00% Impervious Runoff Depth=0.42"
Flow Length=845' Tc=41.5 min CN=59 Runoff=0.9 cfs 0.177 af

Subcatchment D7: Off-Site Flow Runoff Area=1.170 ac 0.00% Impervious Runoff Depth=1.63"
Tc=6.0 min CN=82 Runoff=3.4 cfs 0.159 af

Subcatchment D8: WOODS & ROAD Runoff Area=6.680 ac 0.00% Impervious Runoff Depth=0.38"
Flow Length=1,135' Slope=0.0650 '/' Tc=54.5 min CN=58 Runoff=0.8 cfs 0.212 af

Subcatchment E1: ROUTE 116 Runoff Area=1.320 ac 60.61% Impervious Runoff Depth=2.01"
Tc=6.0 min CN=87 Runoff=4.7 cfs 0.221 af

Subcatchment E2: WOODS & ROAD Runoff Area=15.010 ac 0.80% Impervious Runoff Depth=0.18"
Flow Length=2,320' Tc=28.5 min CN=51 Runoff=0.6 cfs 0.219 af

Subcatchment E3: OLD DOUGLAS DRIVE Runoff Area=1.710 ac 5.85% Impervious Runoff Depth=1.00"
Flow Length=635' Tc=6.0 min CN=72 Runoff=3.0 cfs 0.142 af

Subcatchment E4: WOODS & ROAD Runoff Area=4.130 ac 0.00% Impervious Runoff Depth=0.18"
Flow Length=935' Tc=41.2 min CN=51 Runoff=0.1 cfs 0.060 af

Subcatchment E5: WOODS & ROAD Runoff Area=0.140 ac 0.00% Impervious Runoff Depth=1.85"
Tc=6.0 min CN=85 Runoff=0.5 cfs 0.022 af

Subcatchment E6: OFF-SITE FLOW Runoff Area=0.780 ac 0.00% Impervious Runoff Depth=1.77"
Tc=6.0 min CN=84 Runoff=2.5 cfs 0.115 af

Subcatchment E7: WOODS & ROAD Runoff Area=5.440 ac 1.65% Impervious Runoff Depth=0.18"
Flow Length=540' Tc=16.5 min CN=51 Runoff=0.2 cfs 0.079 af

Reach OUT-A: WETLANDS COMPLEX Inflow=35.8 cfs 9.295 af
Outflow=35.8 cfs 9.295 af

Reach OUT-B: WETLANDS COMPLEX Inflow=30.6 cfs 5.078 af
Outflow=30.6 cfs 5.078 af

Reach OUT-C: WETLANDS COMPLEX Inflow=86.5 cfs 15.056 af
Outflow=86.5 cfs 15.056 af

Reach OUT-D: WETLANDS COMPLEX Inflow=6.0 cfs 1.016 af
Outflow=6.0 cfs 1.016 af

Reach OUT-E: TO NH ROUTE 116 Inflow=7.7 cfs 0.839 af
Outflow=7.7 cfs 0.839 af

Reach RB1: WETLAND Avg. Flow Depth=0.43' Max Vel=2.09 fps Inflow=31.9 cfs 4.232 af
n=0.035 L=1,120.0' S=0.0129 '/' Capacity=184.3 cfs Outflow=29.0 cfs 4.228 af

Reach RB2: WETLAND Avg. Flow Depth=0.37' Max Vel=3.77 fps Inflow=26.7 cfs 3.406 af
n=0.035 L=1,055.0' S=0.0503 '/' Capacity=217.8 cfs Outflow=25.9 cfs 3.406 af

Reach RB4: WETLAND Avg. Flow Depth=0.24' Max Vel=2.34 fps Inflow=6.9 cfs 0.827 af
n=0.035 L=1,600.0' S=0.0358 '/' Capacity=142.7 cfs Outflow=6.3 cfs 0.826 af

Reach RC1: WETLANDS Avg. Flow Depth=0.37' Max Vel=1.66 fps Inflow=12.7 cfs 2.000 af
n=0.035 L=525.0' S=0.0099 '/' Capacity=107.5 cfs Outflow=12.3 cfs 2.000 af

Reach RC2: WETLAND STREAM Avg. Flow Depth=0.37' Max Vel=3.10 fps Inflow=39.9 cfs 6.001 af
n=0.035 L=2,765.0' S=0.0341 '/' Capacity=1,265.4 cfs Outflow=33.3 cfs 5.990 af

Reach RE1: CHANNEL IN WOODS Avg. Flow Depth=0.09' Max Vel=1.58 fps Inflow=0.5 cfs 0.258 af
n=0.035 L=855.0' S=0.0572 '/' Capacity=405.6 cfs Outflow=0.5 cfs 0.256 af

Reach RE2: CHANNEL IN WOODS Avg. Flow Depth=0.05' Max Vel=0.76 fps Inflow=0.5 cfs 0.022 af
n=0.035 L=2,345.0' S=0.0288 '/' Capacity=73.0 cfs Outflow=0.1 cfs 0.021 af

Reach RE3: CHANNEL IN WOODS Avg. Flow Depth=0.13' Max Vel=1.29 fps Inflow=2.5 cfs 0.189 af
n=0.035 L=2,760.0' S=0.0235 '/' Capacity=65.9 cfs Outflow=0.8 cfs 0.185 af

Reach RE5: CULVERT 34+78 Avg. Flow Depth=0.22' Max Vel=3.51 fps Inflow=0.5 cfs 0.022 af
12.0" Round Pipe n=0.013 L=35.8' S=0.0140 '/' Capacity=4.2 cfs Outflow=0.5 cfs 0.022 af

Pond eCB1: EX. CATCH BASIN Peak Elev=982.90' Inflow=1.0 cfs 0.476 af
24.0" Round Culvert n=0.012 L=80.0' S=0.0400 '/' Outflow=1.0 cfs 0.476 af

Pond eCB2: EX. CATCH BASIN Peak Elev=989.09' Inflow=3.0 cfs 0.142 af
24.0" Round Culvert n=0.012 L=70.0' S=0.0036 '/' Outflow=3.0 cfs 0.142 af

Pond RB3: CULVERT Peak Elev=1,136.09' Storage=1,450 cf Inflow=26.7 cfs 3.406 af
Primary=8.8 cfs 2.677 af Secondary=17.9 cfs 0.729 af Outflow=26.7 cfs 3.406 af

Pond RB5: CULVERT Peak Elev=1,139.23' Storage=1,332 cf Inflow=7.8 cfs 0.827 af
Primary=6.9 cfs 0.827 af Secondary=0.0 cfs 0.000 af Outflow=6.9 cfs 0.827 af

Pond RC3: EX. DOUGLAS DRIVE CULVERT Peak Elev=1,112.80' Storage=7,183 cf Inflow=40.0 cfs 6.001 af
Primary=6.5 cfs 3.804 af Secondary=33.5 cfs 2.197 af Outflow=39.9 cfs 6.001 af

Pond RD2: CULVERT 60+03 Peak Elev=1,145.87' Storage=126 cf Inflow=0.6 cfs 0.114 af
Primary=0.5 cfs 0.114 af Secondary=0.0 cfs 0.000 af Outflow=0.5 cfs 0.114 af

Pond RD3: CULVERT 58+16 Peak Elev=1,147.20' Storage=379 cf Inflow=0.5 cfs 0.130 af
Primary=0.3 cfs 0.130 af Secondary=0.0 cfs 0.000 af Outflow=0.3 cfs 0.130 af

Pond RD4: CULVERT 56+06 Peak Elev=1,149.18' Storage=219 cf Inflow=0.2 cfs 0.046 af
Primary=0.1 cfs 0.046 af Secondary=0.0 cfs 0.000 af Outflow=0.1 cfs 0.046 af

Pond RD6: CULVERT 53+68 Peak Elev=1,150.45' Storage=905 cf Inflow=0.9 cfs 0.177 af
Primary=0.4 cfs 0.177 af Secondary=0.0 cfs 0.000 af Outflow=0.4 cfs 0.177 af

Pond RD8: CULVERT 49+19 Peak Elev=1,150.82' Storage=56 cf Inflow=0.8 cfs 0.212 af
Primary=0.8 cfs 0.212 af Secondary=0.0 cfs 0.000 af Outflow=0.8 cfs 0.212 af

Pond RE4: CULVERT 16+74 Peak Elev=1,035.42' Storage=1,730 cf Inflow=1.0 cfs 0.267 af
Primary=0.5 cfs 0.258 af Secondary=0.0 cfs 0.000 af Outflow=0.5 cfs 0.258 af

Pond RE7: CULVERT 39+15 Peak Elev=1,100.16' Storage=779 cf Inflow=0.2 cfs 0.079 af
Primary=0.1 cfs 0.074 af Secondary=0.0 cfs 0.000 af Outflow=0.1 cfs 0.074 af

Total Runoff Area = 585.280 ac Runoff Volume = 31.320 af Average Runoff Depth = 0.64"
99.78% Pervious = 583.980 ac 0.22% Impervious = 1.300 ac

Time span=0.00-27.00 hrs, dt=0.01 hrs, 2701 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment A1: WOODS & EX. QUARRY Runoff Area=89.280 ac 0.07% Impervious Runoff Depth>0.95"
Flow Length=5,225' Tc=85.7 min CN=63 Runoff=28.8 cfs 7.070 af

Subcatchment A2: WOODS Runoff Area=92.770 ac 0.00% Impervious Runoff Depth>1.06"
Flow Length=5,210' Tc=75.7 min CN=65 Runoff=38.0 cfs 8.221 af

Subcatchment B1: WOODS Runoff Area=50.900 ac 0.00% Impervious Runoff Depth=0.43"
Flow Length=3,520' Tc=51.0 min CN=52 Runoff=7.0 cfs 1.816 af

Subcatchment B2: WOODS Runoff Area=51.530 ac 0.00% Impervious Runoff Depth=1.24"
Flow Length=2,695' Tc=35.5 min CN=68 Runoff=45.4 cfs 5.338 af

Subcatchment B3: WOODS Runoff Area=10.500 ac 0.00% Impervious Runoff Depth=1.44"
Flow Length=1,705' Tc=29.8 min CN=71 Runoff=12.5 cfs 1.256 af

Subcatchment C1: WOODS Runoff Area=39.260 ac 0.00% Impervious Runoff Depth=1.01"
Flow Length=2,195' Tc=40.4 min CN=64 Runoff=23.8 cfs 3.292 af

Subcatchment C2: WOODS & EX. Runoff Area=90.790 ac 0.14% Impervious Runoff Depth=1.24"
Flow Length=3,680' Tc=44.4 min CN=68 Runoff=68.0 cfs 9.405 af

Subcatchment C3: WOODS & EX. QUARRY Runoff Area=106.910 ac 0.00% Impervious Runoff Depth=1.24"
Flow Length=4,905' Tc=35.2 min CN=68 Runoff=94.7 cfs 11.075 af

Subcatchment D1: OFF-SITE FLOW Runoff Area=1.750 ac 0.00% Impervious Runoff Depth=1.64"
Flow Length=285' Tc=12.2 min CN=74 Runoff=4.1 cfs 0.239 af

Subcatchment D2: WOODS & ROAD Runoff Area=3.280 ac 0.00% Impervious Runoff Depth=0.74"
Flow Length=735' Tc=37.7 min CN=59 Runoff=1.3 cfs 0.203 af

Subcatchment D3: WOODS & ROAD Runoff Area=4.950 ac 0.00% Impervious Runoff Depth=0.60"
Flow Length=1,020' Tc=51.0 min CN=56 Runoff=1.2 cfs 0.247 af

Subcatchment D4: WOODS Runoff Area=1.760 ac 0.00% Impervious Runoff Depth=0.60"
Flow Length=855' Tc=40.1 min CN=56 Runoff=0.5 cfs 0.088 af

Subcatchment D5: OFF-SITE FLOW Runoff Area=0.100 ac 0.00% Impervious Runoff Depth=2.60"
Tc=6.0 min CN=86 Runoff=0.5 cfs 0.022 af

Subcatchment D6: WOODS & ROAD Runoff Area=5.120 ac 0.00% Impervious Runoff Depth=0.74"
Flow Length=845' Tc=41.5 min CN=59 Runoff=2.0 cfs 0.316 af

Subcatchment D7: Off-Site Flow Runoff Area=1.170 ac 0.00% Impervious Runoff Depth=2.25"
Tc=6.0 min CN=82 Runoff=4.7 cfs 0.220 af

Subcatchment D8: WOODS & ROAD Runoff Area=6.680 ac 0.00% Impervious Runoff Depth=0.69"
Flow Length=1,135' Slope=0.0650 '/' Tc=54.5 min CN=58 Runoff=1.9 cfs 0.385 af

Subcatchment E1: ROUTE 116 Runoff Area=1.320 ac 60.61% Impervious Runoff Depth=2.69"
Tc=6.0 min CN=87 Runoff=6.2 cfs 0.296 af

Subcatchment E2: WOODS & ROAD Runoff Area=15.010 ac 0.80% Impervious Runoff Depth=0.39"
Flow Length=2,320' Tc=28.5 min CN=51 Runoff=2.5 cfs 0.487 af

Subcatchment E3: OLD DOUGLAS DRIVE Runoff Area=1.710 ac 5.85% Impervious Runoff Depth=1.50"
Flow Length=635' Tc=6.0 min CN=72 Runoff=4.6 cfs 0.214 af

Subcatchment E4: WOODS & ROAD Runoff Area=4.130 ac 0.00% Impervious Runoff Depth=0.39"
Flow Length=935' Tc=41.2 min CN=51 Runoff=0.5 cfs 0.134 af

Subcatchment E5: WOODS & ROAD Runoff Area=0.140 ac 0.00% Impervious Runoff Depth=2.51"
Tc=6.0 min CN=85 Runoff=0.6 cfs 0.029 af

Subcatchment E6: OFF-SITE FLOW Runoff Area=0.780 ac 0.00% Impervious Runoff Depth=2.42"
Tc=6.0 min CN=84 Runoff=3.3 cfs 0.158 af

Subcatchment E7: WOODS & ROAD Runoff Area=5.440 ac 1.65% Impervious Runoff Depth=0.39"
Flow Length=540' Tc=16.5 min CN=51 Runoff=1.3 cfs 0.176 af

Reach OUT-A: WETLANDS COMPLEX Inflow=65.8 cfs 15.291 af
Outflow=65.8 cfs 15.291 af

Reach OUT-B: WETLANDS COMPLEX Inflow=56.5 cfs 8.405 af
Outflow=56.5 cfs 8.405 af

Reach OUT-C: WETLANDS COMPLEX Inflow=157.3 cfs 23.760 af
Outflow=157.3 cfs 23.760 af

Reach OUT-D: WETLANDS COMPLEX Inflow=8.8 cfs 1.720 af
Outflow=8.8 cfs 1.720 af

Reach OUT-E: TO NH ROUTE 116 Inflow=10.9 cfs 1.469 af
Outflow=10.9 cfs 1.469 af

Reach RB1: WETLAND Avg. Flow Depth=0.55' Max Vel=2.47 fps Inflow=54.0 cfs 6.593 af
n=0.035 L=1,120.0' S=0.0129 '/' Capacity=184.3 cfs Outflow=50.3 cfs 6.589 af

Reach RB2: WETLAND Avg. Flow Depth=0.48' Max Vel=4.45 fps Inflow=45.4 cfs 5.338 af
n=0.035 L=1,055.0' S=0.0503 '/' Capacity=217.8 cfs Outflow=44.4 cfs 5.338 af

Reach RB4: WETLAND Avg. Flow Depth=0.29' Max Vel=2.69 fps Inflow=11.8 cfs 1.256 af
n=0.035 L=1,600.0' S=0.0358 '/' Capacity=142.7 cfs Outflow=9.8 cfs 1.255 af

Reach RC1: WETLANDS Avg. Flow Depth=0.49' Max Vel=2.02 fps Inflow=23.8 cfs 3.292 af
n=0.035 L=525.0' S=0.0099 '/' Capacity=107.5 cfs Outflow=23.3 cfs 3.292 af

Reach RC2: WETLAND STREAM Avg. Flow Depth=0.49' Max Vel=3.71 fps Inflow=67.9 cfs 9.405 af
n=0.035 L=2,765.0' S=0.0341 '/' Capacity=1,265.4 cfs Outflow=59.9 cfs 9.393 af

Reach RE1: CHANNEL IN WOODS Avg. Flow Depth=0.13' Max Vel=1.97 fps Inflow=1.1 cfs 0.474 af
n=0.035 L=855.0' S=0.0572 '/' Capacity=405.6 cfs Outflow=1.1 cfs 0.472 af

Reach RE2: CHANNEL IN WOODS Avg. Flow Depth=0.06' Max Vel=0.87 fps Inflow=0.6 cfs 0.029 af
n=0.035 L=2,345.0' S=0.0288 '/' Capacity=73.0 cfs Outflow=0.2 cfs 0.029 af

Reach RE3: CHANNEL IN WOODS Avg. Flow Depth=0.16' Max Vel=1.46 fps Inflow=3.3 cfs 0.327 af
n=0.035 L=2,760.0' S=0.0235 '/' Capacity=65.9 cfs Outflow=1.2 cfs 0.322 af

Reach RE5: CULVERT 34+78 Avg. Flow Depth=0.26' Max Vel=3.83 fps Inflow=0.6 cfs 0.029 af
12.0" Round Pipe n=0.013 L=35.8' S=0.0140 '/' Capacity=4.2 cfs Outflow=0.6 cfs 0.029 af

Pond eCB1: EX. CATCH BASIN Peak Elev=983.23' Inflow=3.0 cfs 0.959 af
24.0" Round Culvert n=0.012 L=80.0' S=0.0400 '/' Outflow=3.0 cfs 0.959 af

Pond eCB2: EX. CATCH BASIN Peak Elev=989.31' Inflow=4.6 cfs 0.214 af
24.0" Round Culvert n=0.012 L=70.0' S=0.0036 '/' Outflow=4.6 cfs 0.214 af

Pond RB3: CULVERT Peak Elev=1,136.30' Storage=1,986 cf Inflow=45.4 cfs 5.338 af
Primary=9.2 cfs 3.572 af Secondary=36.2 cfs 1.766 af Outflow=45.4 cfs 5.338 af

Pond RB5: CULVERT Peak Elev=1,139.89' Storage=3,352 cf Inflow=12.5 cfs 1.256 af
Primary=8.4 cfs 1.210 af Secondary=3.4 cfs 0.046 af Outflow=11.8 cfs 1.256 af

Pond RC3: EX. DOUGLAS DRIVE CULVERT Peak Elev=1,112.94' Storage=8,268 cf Inflow=68.0 cfs 9.405 af
Primary=6.7 cfs 4.801 af Secondary=61.2 cfs 4.604 af Outflow=67.9 cfs 9.405 af

Pond RD2: CULVERT 60+03 Peak Elev=1,147.39' Storage=1,063 cf Inflow=1.3 cfs 0.203 af
Primary=0.7 cfs 0.203 af Secondary=0.0 cfs 0.000 af Outflow=0.7 cfs 0.203 af

Pond RD3: CULVERT 58+16 Peak Elev=1,148.14' Storage=1,906 cf Inflow=1.2 cfs 0.247 af
Primary=0.5 cfs 0.247 af Secondary=0.0 cfs 0.000 af Outflow=0.5 cfs 0.247 af

Pond RD4: CULVERT 56+06 Peak Elev=1,149.38' Storage=694 cf Inflow=0.5 cfs 0.088 af
Primary=0.2 cfs 0.088 af Secondary=0.0 cfs 0.000 af Outflow=0.2 cfs 0.088 af

Pond RD6: CULVERT 53+68 Peak Elev=1,150.90' Storage=3,634 cf Inflow=2.0 cfs 0.316 af
Primary=0.5 cfs 0.316 af Secondary=0.0 cfs 0.000 af Outflow=0.5 cfs 0.316 af

Pond RD8: CULVERT 49+19 Peak Elev=1,152.20' Storage=1,090 cf Inflow=1.9 cfs 0.385 af
Primary=1.4 cfs 0.385 af Secondary=0.0 cfs 0.000 af Outflow=1.4 cfs 0.385 af

Pond RE4: CULVERT 16+74 Peak Elev=1,035.64' Storage=2,876 cf Inflow=1.5 cfs 0.485 af
Primary=1.1 cfs 0.474 af Secondary=0.0 cfs 0.000 af Outflow=1.1 cfs 0.474 af

Pond RE7: CULVERT 39+15 Peak Elev=1,100.28' Storage=1,786 cf Inflow=1.3 cfs 0.176 af
Primary=0.3 cfs 0.169 af Secondary=0.0 cfs 0.000 af Outflow=0.3 cfs 0.169 af

Total Runoff Area = 585.280 ac Runoff Volume = 50.688 af Average Runoff Depth = 1.04"
99.78% Pervious = 583.980 ac 0.22% Impervious = 1.300 ac

Time span=0.00-27.00 hrs, dt=0.01 hrs, 2701 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment A1: WOODS & EX. QUARRY Runoff Area=89.280 ac 0.07% Impervious Runoff Depth>1.34"
Flow Length=5,225' Tc=85.7 min CN=63 Runoff=43.3 cfs 9.972 af

Subcatchment A2: WOODS Runoff Area=92.770 ac 0.00% Impervious Runoff Depth>1.48"
Flow Length=5,210' Tc=75.7 min CN=65 Runoff=55.8 cfs 11.414 af

Subcatchment B1: WOODS Runoff Area=50.900 ac 0.00% Impervious Runoff Depth=0.69"
Flow Length=3,520' Tc=51.0 min CN=52 Runoff=13.8 cfs 2.912 af

Subcatchment B2: WOODS Runoff Area=51.530 ac 0.00% Impervious Runoff Depth=1.69"
Flow Length=2,695' Tc=35.5 min CN=68 Runoff=64.0 cfs 7.257 af

Subcatchment B3: WOODS Runoff Area=10.500 ac 0.00% Impervious Runoff Depth=1.91"
Flow Length=1,705' Tc=29.8 min CN=71 Runoff=17.0 cfs 1.675 af

Subcatchment C1: WOODS Runoff Area=39.260 ac 0.00% Impervious Runoff Depth=1.41"
Flow Length=2,195' Tc=40.4 min CN=64 Runoff=35.3 cfs 4.607 af

Subcatchment C2: WOODS & EX. Runoff Area=90.790 ac 0.14% Impervious Runoff Depth=1.69"
Flow Length=3,680' Tc=44.4 min CN=68 Runoff=95.7 cfs 12.785 af

Subcatchment C3: WOODS & EX. QUARRY Runoff Area=106.910 ac 0.00% Impervious Runoff Depth=1.69"
Flow Length=4,905' Tc=35.2 min CN=68 Runoff=133.7 cfs 15.056 af

Subcatchment D1: OFF-SITE FLOW Runoff Area=1.750 ac 0.00% Impervious Runoff Depth=2.15"
Flow Length=285' Tc=12.2 min CN=74 Runoff=5.4 cfs 0.314 af

Subcatchment D2: WOODS & ROAD Runoff Area=3.280 ac 0.00% Impervious Runoff Depth=1.08"
Flow Length=735' Tc=37.7 min CN=59 Runoff=2.2 cfs 0.296 af

Subcatchment D3: WOODS & ROAD Runoff Area=4.950 ac 0.00% Impervious Runoff Depth=0.91"
Flow Length=1,020' Tc=51.0 min CN=56 Runoff=2.0 cfs 0.374 af

Subcatchment D4: WOODS Runoff Area=1.760 ac 0.00% Impervious Runoff Depth=0.91"
Flow Length=855' Tc=40.1 min CN=56 Runoff=0.9 cfs 0.133 af

Subcatchment D5: OFF-SITE FLOW Runoff Area=0.100 ac 0.00% Impervious Runoff Depth=3.22"
Tc=6.0 min CN=86 Runoff=0.6 cfs 0.027 af

Subcatchment D6: WOODS & ROAD Runoff Area=5.120 ac 0.00% Impervious Runoff Depth=1.08"
Flow Length=845' Tc=41.5 min CN=59 Runoff=3.2 cfs 0.463 af

Subcatchment D7: Off-Site Flow Runoff Area=1.170 ac 0.00% Impervious Runoff Depth=2.84"
Tc=6.0 min CN=82 Runoff=5.8 cfs 0.277 af

Subcatchment D8: WOODS & ROAD Runoff Area=6.680 ac 0.00% Impervious Runoff Depth=1.02"
Flow Length=1,135' Slope=0.0650 '/' Tc=54.5 min CN=58 Runoff=3.1 cfs 0.570 af

Subcatchment E1: ROUTE 116 Runoff Area=1.320 ac 60.61% Impervious Runoff Depth=3.31"
Tc=6.0 min CN=87 Runoff=7.5 cfs 0.365 af

Subcatchment E2: WOODS & ROAD Runoff Area=15.010 ac 0.80% Impervious Runoff Depth=0.64"
Flow Length=2,320' Tc=28.5 min CN=51 Runoff=5.3 cfs 0.795 af

Subcatchment E3: OLD DOUGLAS DRIVE Runoff Area=1.710 ac 5.85% Impervious Runoff Depth=1.99"
Flow Length=635' Tc=6.0 min CN=72 Runoff=6.1 cfs 0.284 af

Subcatchment E4: WOODS & ROAD Runoff Area=4.130 ac 0.00% Impervious Runoff Depth=0.64"
Flow Length=935' Tc=41.2 min CN=51 Runoff=1.1 cfs 0.219 af

Subcatchment E5: WOODS & ROAD Runoff Area=0.140 ac 0.00% Impervious Runoff Depth=3.12"
Tc=6.0 min CN=85 Runoff=0.8 cfs 0.036 af

Subcatchment E6: OFF-SITE FLOW Runoff Area=0.780 ac 0.00% Impervious Runoff Depth=3.02"
Tc=6.0 min CN=84 Runoff=4.1 cfs 0.197 af

Subcatchment E7: WOODS & ROAD Runoff Area=5.440 ac 1.65% Impervious Runoff Depth=0.64"
Flow Length=540' Tc=16.5 min CN=51 Runoff=2.8 cfs 0.288 af

Reach OUT-A: WETLANDS COMPLEX Inflow=97.7 cfs 21.387 af
Outflow=97.7 cfs 21.387 af

Reach OUT-B: WETLANDS COMPLEX Inflow=85.2 cfs 11.838 af
Outflow=85.2 cfs 11.838 af

Reach OUT-C: WETLANDS COMPLEX Inflow=230.0 cfs 32.434 af
Outflow=230.0 cfs 32.434 af

Reach OUT-D: WETLANDS COMPLEX Inflow=11.6 cfs 2.452 af
Outflow=11.6 cfs 2.452 af

Reach OUT-E: TO NH ROUTE 116 Inflow=14.1 cfs 2.153 af
Outflow=14.1 cfs 2.153 af

Reach RB1: WETLAND Avg. Flow Depth=0.65' Max Vel=2.77 fps Inflow=77.3 cfs 8.931 af
n=0.035 L=1,120.0' S=0.0129 '/' Capacity=184.3 cfs Outflow=72.8 cfs 8.926 af

Reach RB2: WETLAND Avg. Flow Depth=0.56' Max Vel=4.96 fps Inflow=63.9 cfs 7.257 af
n=0.035 L=1,055.0' S=0.0503 '/' Capacity=217.8 cfs Outflow=62.9 cfs 7.256 af

Reach RB4: WETLAND Avg. Flow Depth=0.35' Max Vel=3.03 fps Inflow=16.9 cfs 1.675 af
n=0.035 L=1,600.0' S=0.0358 '/' Capacity=142.7 cfs Outflow=14.4 cfs 1.674 af

Reach RC1: WETLANDS Avg. Flow Depth=0.59' Max Vel=2.28 fps Inflow=35.3 cfs 4.607 af
n=0.035 L=525.0' S=0.0099 '/' Capacity=107.5 cfs Outflow=34.9 cfs 4.606 af

Reach RC2: WETLAND STREAM Avg. Flow Depth=0.58' Max Vel=4.16 fps Inflow=95.7 cfs 12.785 af
n=0.035 L=2,765.0' S=0.0341 '/' Capacity=1,265.4 cfs Outflow=86.8 cfs 12.772 af

Reach RE1: CHANNEL IN WOODS Avg. Flow Depth=0.16' Max Vel=2.28 fps Inflow=1.7 cfs 0.712 af
n=0.035 L=855.0' S=0.0572 '/' Capacity=405.6 cfs Outflow=1.7 cfs 0.710 af

Reach RE2: CHANNEL IN WOODS Avg. Flow Depth=0.07' Max Vel=0.95 fps Inflow=0.8 cfs 0.036 af
n=0.035 L=2,345.0' S=0.0288 '/' Capacity=73.0 cfs Outflow=0.2 cfs 0.036 af

Reach RE3: CHANNEL IN WOODS Avg. Flow Depth=0.18' Max Vel=1.60 fps Inflow=4.1 cfs 0.476 af
n=0.035 L=2,760.0' S=0.0235 '/' Capacity=65.9 cfs Outflow=1.7 cfs 0.471 af

Reach RE5: CULVERT 34+78 Avg. Flow Depth=0.29' Max Vel=4.06 fps Inflow=0.8 cfs 0.036 af
12.0" Round Pipe n=0.013 L=35.8' S=0.0140 '/' Capacity=4.2 cfs Outflow=0.8 cfs 0.036 af

Pond eCB1: EX. CATCH BASIN Peak Elev=983.58' Inflow=6.1 cfs 1.505 af
24.0" Round Culvert n=0.012 L=80.0' S=0.0400 '/' Outflow=6.1 cfs 1.505 af

Pond eCB2: EX. CATCH BASIN Peak Elev=989.49' Inflow=6.1 cfs 0.284 af
24.0" Round Culvert n=0.012 L=70.0' S=0.0036 '/' Outflow=6.1 cfs 0.284 af

Pond RB3: CULVERT Peak Elev=1,136.47' Storage=2,519 cf Inflow=64.0 cfs 7.257 af
Primary=9.5 cfs 4.347 af Secondary=54.4 cfs 2.910 af Outflow=63.9 cfs 7.257 af

Pond RB5: CULVERT Peak Elev=1,139.99' Storage=3,796 cf Inflow=17.0 cfs 1.675 af
Primary=8.6 cfs 1.490 af Secondary=8.3 cfs 0.185 af Outflow=16.9 cfs 1.675 af

Pond RC3: EX. DOUGLAS DRIVE Peak Elev=1,113.06' Storage=9,258 cf Inflow=95.7 cfs 12.785 af
Primary=6.9 cfs 5.559 af Secondary=88.8 cfs 7.227 af Outflow=95.7 cfs 12.785 af

Pond RD2: CULVERT 60+03 Peak Elev=1,148.30' Storage=2,731 cf Inflow=2.2 cfs 0.296 af
Primary=0.8 cfs 0.296 af Secondary=0.0 cfs 0.000 af Outflow=0.8 cfs 0.296 af

Pond RD3: CULVERT 58+16 Peak Elev=1,148.68' Storage=4,402 cf Inflow=2.0 cfs 0.374 af
Primary=0.6 cfs 0.374 af Secondary=0.0 cfs 0.000 af Outflow=0.6 cfs 0.374 af

Pond RD4: CULVERT 56+06 Peak Elev=1,149.58' Storage=1,435 cf Inflow=0.9 cfs 0.133 af
Primary=0.3 cfs 0.133 af Secondary=0.0 cfs 0.000 af Outflow=0.3 cfs 0.133 af

Pond RD6: CULVERT 53+68 Peak Elev=1,151.18' Storage=7,183 cf Inflow=3.2 cfs 0.463 af
Primary=0.6 cfs 0.463 af Secondary=0.0 cfs 0.000 af Outflow=0.6 cfs 0.463 af

Pond RD8: CULVERT 49+19 Peak Elev=1,152.55' Storage=3,250 cf Inflow=3.1 cfs 0.570 af
Primary=1.5 cfs 0.546 af Secondary=0.7 cfs 0.024 af Outflow=2.2 cfs 0.570 af

Pond RE4: CULVERT 16+74 Peak Elev=1,035.87' Storage=4,300 cf Inflow=2.5 cfs 0.725 af
Primary=1.7 cfs 0.712 af Secondary=0.0 cfs 0.000 af Outflow=1.7 cfs 0.712 af

Pond RE7: CULVERT 39+15 Peak Elev=1,100.42' Storage=3,235 cf Inflow=2.8 cfs 0.288 af
Primary=0.6 cfs 0.280 af Secondary=0.0 cfs 0.000 af Outflow=0.6 cfs 0.280 af

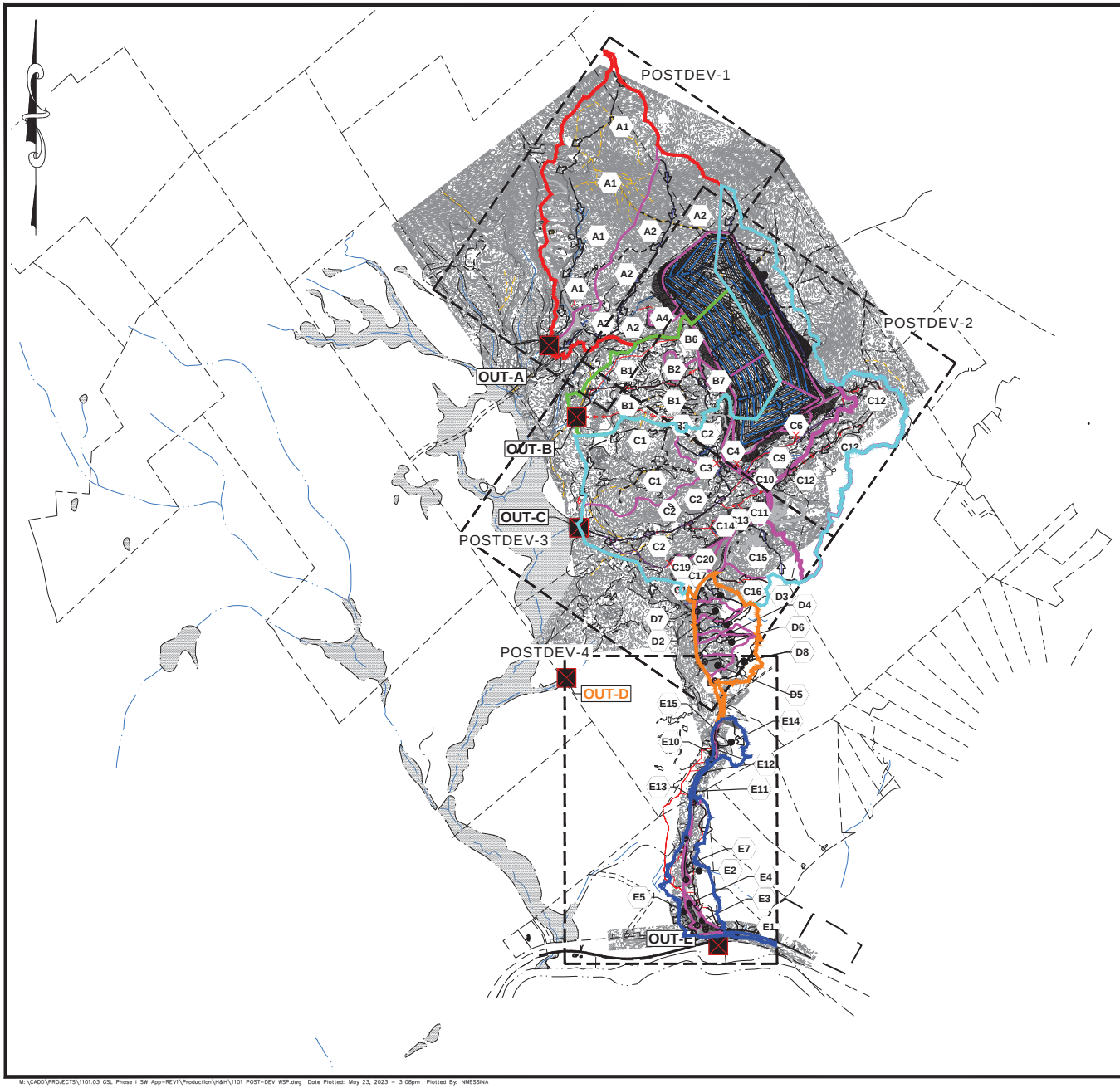
Total Runoff Area = 585.280 ac Runoff Volume = 70.313 af Average Runoff Depth = 1.44"
99.78% Pervious = 583.980 ac 0.22% Impervious = 1.300 ac

Appendix J.2

Post-Development Drainage Analysis

J.2 Pre-Development Drainage Analysis

i. Drainage Diagrams
ii. Pre-Development Color-Coded Soil Plans
iii. 10-year, 24-Hour Storm Calculations (Full Calculations)
iv. 2, 10, 25 and 50 -year, 24-Hour Storm Calculation Summaries



POST-DEVELOPMENT WATERSHED PLAN LEGEND

PROPOSED CONTOUR (2')	1100
PROPOSED CONTOUR (10')	1100
OUTFALL (OUT) A WATERSHED BOUNDARY	
OUTFALL (OUT) B WATERSHED BOUNDARY	
OUTFALL (OUT) C WATERSHED BOUNDARY	
OUTFALL (OUT) D WATERSHED BOUNDARY	
OUTFALL (OUT) E WATERSHED BOUNDARY	
SUBCATCHMENT BOUNDARY	
SUBBASIN ID	C1
SUBBASIN TIME OF CONCENTRATION	C
MODEL REACH	
IMPERVIOUS SURFACE	
OUTFALL	
EXISTING WETLAND	

NOTES:
1. FOR CLARITY Tc FLOW PATHS WITH TIMES LESS THAN OR APPROXIMATELY 6 MINUTES ARE NOT SHOWN.
2. DARK GREY IMPERVIOUS SYMBOLIZES PAVEMENT AND LIGHT GREY SYMBOLIZES GRAVEL SURFACES.

OUT-A

A1 AREA: 89.3 AC.	A2 AREA: 69.4 AC.	A3 AREA: 16.5 AC.	A4 AREA: 1.3 AC.

OUT-B

B1 AREA: 46.2 AC.	B2 AREA: 1.7 AC.	B3 AREA: 0.6 AC.	B4 AREA: 10.4 AC.	B5 AREA: 16.5 AC.	B6 AREA: 3.4 AC.
B7 AREA: 2.9 AC.					

OUT-C

C1 AREA: 39.2 AC.	C2 AREA: 61.7 AC.	C3 AREA: 0.8 AC.	C4 AREA: 1.4 AC.	C5 AREA: 12.5 AC.	C6 AREA: 1.3 AC.
C7 AREA: 23.3 AC.	C8 AREA: 24.8 AC.	C9 AREA: 16.3 AC.	C10 AREA: 2.0 AC.	C11 AREA: 1.9 AC.	C12 AREA: 54.1 AC.
C13 AREA: 1.0 AC.	C14 AREA: 0.9 AC.	C15 AREA: 15.9 AC.	C16 AREA: 6.1 AC.	C17 AREA: 0.2 AC.	C18 AREA: 0.3 AC.
C19 AREA: 1.1 AC.	C20 AREA: 6.0 AC.				

OUT-D

D1 AREA: 1.4 AC.	D2 AREA: 3.3 AC.	D3 AREA: 5.0 AC.	D4 AREA: 1.8 AC.	D5 AREA: 2.4 AC.	D6 AREA: 3.7 AC.
D7 AREA: 4.4 AC.	D8 AREA: 5.7 AC.				

OUT-E

E1 AREA: 1.3 AC.	E2 AREA: 11.1 AC.	E3 AREA: 1.2 AC.	E4 AREA: 1.4 AC.	E5 AREA: 1.8 AC.	E6 AREA: 3.5 AC.
E7 AREA: 0.6 AC.	E8 AREA: 0.5 AC.	E9 AREA: 0.1 AC.	E10 AREA: 0.5 AC.	E11 AREA: 0.6 AC.	E12 AREA: 0.1 AC.
E13 AREA: 0.1 AC.	E14 AREA: 5.4 AC.	E15 AREA: 0.3 AC.			

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cmaengineers.com

by	date	revision	no.

designed by: NJM
drawn by: NJM
approved by: AJS
date: April 2023
project no: 1101
checked by: AJS
scale: 0 750' 1500' Scale: 1" = 750'

Granite State Landfill, LLC.
Dalton, New Hampshire

NHDES Alteration of Terrain
Permit Application

Post-Development Drainage Diagram
Index

drawing no.
POSTDEV-1

sheet: 1 of 5

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no.	revision	date	by

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designed by: NJM
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approved by: AJS
date: April 2023
project no: 1101
checked by: AJS
scale: 0 150' 300' Scale: 1" = 150'

Granite State Landfill, LLC.
Dalton, New Hampshire

NHDES Alteration of Terrain
Permit Application

Post-Development Drainage Diagram

drawing no. POSTDEV-2

sheet: 2 of 5

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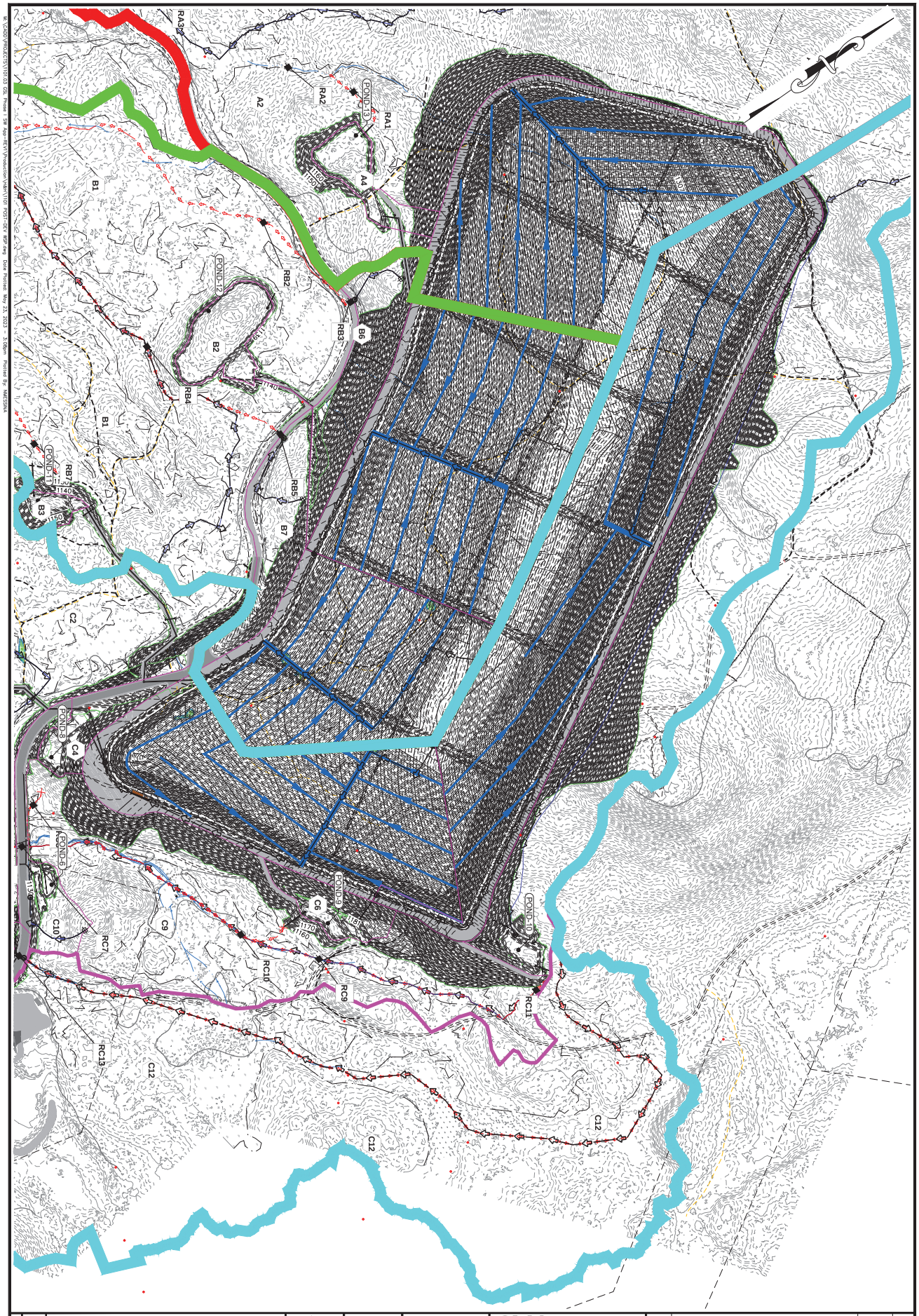

sheet 5 of 5	drawing no. POSTDEV-3	Granite State Landfill, LLC. Dalton, New Hampshire NHDES Alteration of Terrain Permit Application Post-Development Drainage Diagram	date: April 2023 project no: 1101 checked by: AJS scale: 0 150' 300' Scale: 1" = 150'	designed by: NJM drawn by: NJM approved by: AJS	CMA ENGINEERS Civil/Environmental/Structural Portsmouth, NH 603/431-6196 • Manchester, NH 603/627-0708 • Portland, ME 207/541-4223 cmaengineers.com	no.	revision / date / by