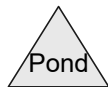
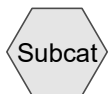
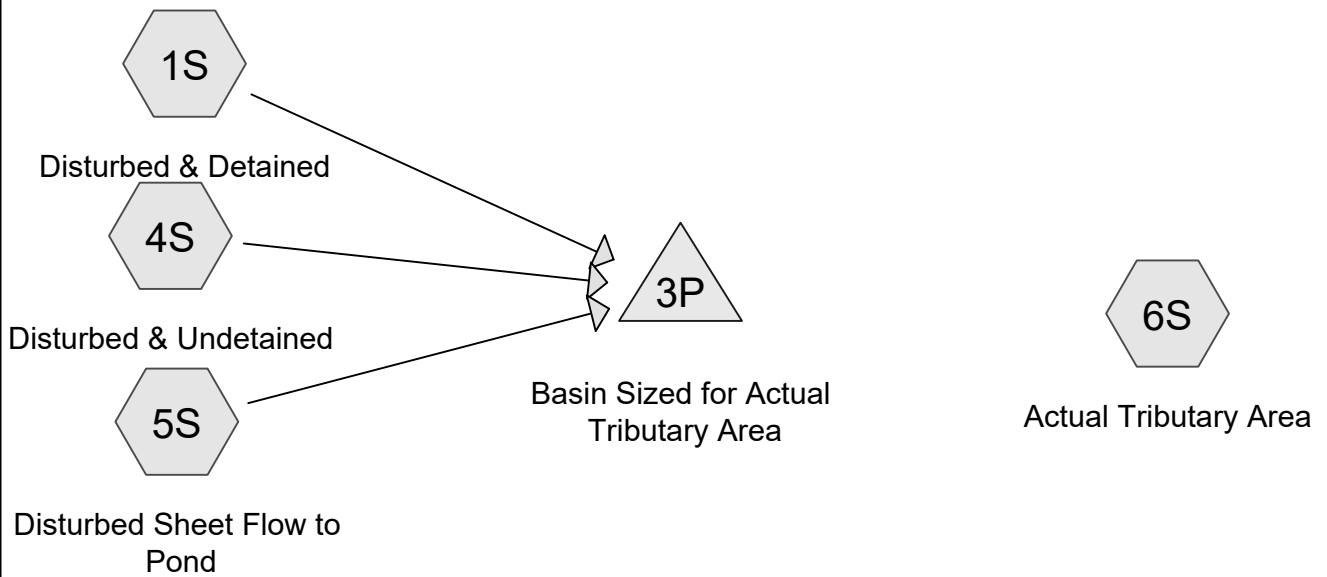


Theoretical HydroCAD Report



828.00-IL for Disturbed

Prepared by Pinnacle Engineering Group

Printed 5/5/2023

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Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	19 100-yr, 24 hr	Huff B75 0-10sm	3Q	Scale	24.00	1	8.57	2

828.00-IL for Disturbed

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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
7.599	74	>75% Grass cover, Good, HSG C (1S, 4S, 5S, 6S)
16.175	98	Paved parking, HSG C (1S, 6S)
0.901	98	Water Surface, 0% imp, HSG C (5S)
24.675	91	TOTAL AREA

Summary for Subcatchment 1S: Disturbed & Detained

Runoff = 7.20 cfs @ 15.03 hrs, Volume= 6.200 af, Depth= 7.85"
 Routed to Pond 3P : Basin Sized for Actual Tributary Area

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-458.00 hrs, dt= 0.05 hrs
 Huff B75 0-10sm 3Q scaled to 24.00 hrs 19 100-yr, 24 hr Rainfall=8.57", Smoothing=Off

Area (ac)	CN	Description
8.085	98	Paved parking, HSG C
1.394	74	>75% Grass cover, Good, HSG C
9.479	94	Weighted Average
1.394		14.71% Pervious Area
8.085		85.29% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	74	0.0417	0.15		Sheet Flow, Grass: Dense n= 0.240 P2= 3.34"
8.2	74	Total, Increased to minimum Tc = 10.0 min			

Hydrograph for Subcatchment 1S: Disturbed & Detained

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	260.00	8.57	7.85	0.00
5.00	1.00	0.51	1.73	265.00	8.57	7.85	0.00
10.00	2.26	1.64	2.75	270.00	8.57	7.85	0.00
15.00	5.23	4.53	7.20	275.00	8.57	7.85	0.00
20.00	7.98	7.26	2.74	280.00	8.57	7.85	0.00
25.00	8.57	7.85	0.00	285.00	8.57	7.85	0.00
30.00	8.57	7.85	0.00	290.00	8.57	7.85	0.00
35.00	8.57	7.85	0.00	295.00	8.57	7.85	0.00
40.00	8.57	7.85	0.00	300.00	8.57	7.85	0.00
45.00	8.57	7.85	0.00	305.00	8.57	7.85	0.00
50.00	8.57	7.85	0.00	310.00	8.57	7.85	0.00
55.00	8.57	7.85	0.00	315.00	8.57	7.85	0.00
60.00	8.57	7.85	0.00	320.00	8.57	7.85	0.00
65.00	8.57	7.85	0.00	325.00	8.57	7.85	0.00
70.00	8.57	7.85	0.00	330.00	8.57	7.85	0.00
75.00	8.57	7.85	0.00	335.00	8.57	7.85	0.00
80.00	8.57	7.85	0.00	340.00	8.57	7.85	0.00
85.00	8.57	7.85	0.00	345.00	8.57	7.85	0.00
90.00	8.57	7.85	0.00	350.00	8.57	7.85	0.00
95.00	8.57	7.85	0.00	355.00	8.57	7.85	0.00
100.00	8.57	7.85	0.00	360.00	8.57	7.85	0.00
105.00	8.57	7.85	0.00	365.00	8.57	7.85	0.00
110.00	8.57	7.85	0.00	370.00	8.57	7.85	0.00
115.00	8.57	7.85	0.00	375.00	8.57	7.85	0.00
120.00	8.57	7.85	0.00	380.00	8.57	7.85	0.00
125.00	8.57	7.85	0.00	385.00	8.57	7.85	0.00
130.00	8.57	7.85	0.00	390.00	8.57	7.85	0.00
135.00	8.57	7.85	0.00	395.00	8.57	7.85	0.00
140.00	8.57	7.85	0.00	400.00	8.57	7.85	0.00
145.00	8.57	7.85	0.00	405.00	8.57	7.85	0.00
150.00	8.57	7.85	0.00	410.00	8.57	7.85	0.00
155.00	8.57	7.85	0.00	415.00	8.57	7.85	0.00
160.00	8.57	7.85	0.00	420.00	8.57	7.85	0.00
165.00	8.57	7.85	0.00	425.00	8.57	7.85	0.00
170.00	8.57	7.85	0.00	430.00	8.57	7.85	0.00
175.00	8.57	7.85	0.00	435.00	8.57	7.85	0.00
180.00	8.57	7.85	0.00	440.00	8.57	7.85	0.00
185.00	8.57	7.85	0.00	445.00	8.57	7.85	0.00
190.00	8.57	7.85	0.00	450.00	8.57	7.85	0.00
195.00	8.57	7.85	0.00	455.00	8.57	7.85	0.00
200.00	8.57	7.85	0.00				
205.00	8.57	7.85	0.00				
210.00	8.57	7.85	0.00				
215.00	8.57	7.85	0.00				
220.00	8.57	7.85	0.00				
225.00	8.57	7.85	0.00				
230.00	8.57	7.85	0.00				
235.00	8.57	7.85	0.00				
240.00	8.57	7.85	0.00				
245.00	8.57	7.85	0.00				
250.00	8.57	7.85	0.00				
255.00	8.57	7.85	0.00				

Summary for Subcatchment 4S: Disturbed & Undetained

Runoff = 0.98 cfs @ 15.93 hrs, Volume= 0.691 af, Depth= 5.44"
 Routed to Pond 3P : Basin Sized for Actual Tributary Area

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-458.00 hrs, dt= 0.05 hrs
 Huff B75 0-10sm 3Q scaled to 24.00 hrs 19 100-yr, 24 hr Rainfall=8.57", Smoothing=Off

Area (ac)	CN	Description
1.524	74	>75% Grass cover, Good, HSG C
1.524		100.00% Pervious Area

Hydrograph for Subcatchment 4S: Disturbed & Undetained

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	260.00	8.57	5.44	0.00
5.00	1.00	0.02	0.05	265.00	8.57	5.44	0.00
10.00	2.26	0.48	0.28	270.00	8.57	5.44	0.00
15.00	5.23	2.55	0.95	275.00	8.57	5.44	0.00
20.00	7.98	4.91	0.33	280.00	8.57	5.44	0.00
25.00	8.57	5.44	0.00	285.00	8.57	5.44	0.00
30.00	8.57	5.44	0.00	290.00	8.57	5.44	0.00
35.00	8.57	5.44	0.00	295.00	8.57	5.44	0.00
40.00	8.57	5.44	0.00	300.00	8.57	5.44	0.00
45.00	8.57	5.44	0.00	305.00	8.57	5.44	0.00
50.00	8.57	5.44	0.00	310.00	8.57	5.44	0.00
55.00	8.57	5.44	0.00	315.00	8.57	5.44	0.00
60.00	8.57	5.44	0.00	320.00	8.57	5.44	0.00
65.00	8.57	5.44	0.00	325.00	8.57	5.44	0.00
70.00	8.57	5.44	0.00	330.00	8.57	5.44	0.00
75.00	8.57	5.44	0.00	335.00	8.57	5.44	0.00
80.00	8.57	5.44	0.00	340.00	8.57	5.44	0.00
85.00	8.57	5.44	0.00	345.00	8.57	5.44	0.00
90.00	8.57	5.44	0.00	350.00	8.57	5.44	0.00
95.00	8.57	5.44	0.00	355.00	8.57	5.44	0.00
100.00	8.57	5.44	0.00	360.00	8.57	5.44	0.00
105.00	8.57	5.44	0.00	365.00	8.57	5.44	0.00
110.00	8.57	5.44	0.00	370.00	8.57	5.44	0.00
115.00	8.57	5.44	0.00	375.00	8.57	5.44	0.00
120.00	8.57	5.44	0.00	380.00	8.57	5.44	0.00
125.00	8.57	5.44	0.00	385.00	8.57	5.44	0.00
130.00	8.57	5.44	0.00	390.00	8.57	5.44	0.00
135.00	8.57	5.44	0.00	395.00	8.57	5.44	0.00
140.00	8.57	5.44	0.00	400.00	8.57	5.44	0.00
145.00	8.57	5.44	0.00	405.00	8.57	5.44	0.00
150.00	8.57	5.44	0.00	410.00	8.57	5.44	0.00
155.00	8.57	5.44	0.00	415.00	8.57	5.44	0.00
160.00	8.57	5.44	0.00	420.00	8.57	5.44	0.00
165.00	8.57	5.44	0.00	425.00	8.57	5.44	0.00
170.00	8.57	5.44	0.00	430.00	8.57	5.44	0.00
175.00	8.57	5.44	0.00	435.00	8.57	5.44	0.00
180.00	8.57	5.44	0.00	440.00	8.57	5.44	0.00
185.00	8.57	5.44	0.00	445.00	8.57	5.44	0.00
190.00	8.57	5.44	0.00	450.00	8.57	5.44	0.00
195.00	8.57	5.44	0.00	455.00	8.57	5.44	0.00
200.00	8.57	5.44	0.00				
205.00	8.57	5.44	0.00				
210.00	8.57	5.44	0.00				
215.00	8.57	5.44	0.00				
220.00	8.57	5.44	0.00				
225.00	8.57	5.44	0.00				
230.00	8.57	5.44	0.00				
235.00	8.57	5.44	0.00				
240.00	8.57	5.44	0.00				
245.00	8.57	5.44	0.00				
250.00	8.57	5.44	0.00				
255.00	8.57	5.44	0.00				

Summary for Subcatchment 5S: Disturbed Sheet Flow to Pond

Runoff = 1.51 cfs @ 15.95 hrs, Volume= 1.164 af, Depth= 6.64"
 Routed to Pond 3P : Basin Sized for Actual Tributary Area

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-458.00 hrs, dt= 0.05 hrs
 Huff B75 0-10sm 3Q scaled to 24.00 hrs 19 100-yr, 24 hr Rainfall=8.57", Smoothing=Off

Area (ac)	CN	Description
1.201	74	>75% Grass cover, Good, HSG C
0.901	98	Water Surface, 0% imp, HSG C
2.102	84	Weighted Average
2.102		100.00% Pervious Area

Hydrograph for Subcatchment 5S: Disturbed Sheet Flow to Pond

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	260.00	8.57	6.64	0.00
5.00	1.00	0.15	0.21	265.00	8.57	6.64	0.00
10.00	2.26	0.93	0.55	270.00	8.57	6.64	0.00
15.00	5.23	3.48	1.49	275.00	8.57	6.64	0.00
20.00	7.98	6.08	0.49	280.00	8.57	6.64	0.00
25.00	8.57	6.64	0.00	285.00	8.57	6.64	0.00
30.00	8.57	6.64	0.00	290.00	8.57	6.64	0.00
35.00	8.57	6.64	0.00	295.00	8.57	6.64	0.00
40.00	8.57	6.64	0.00	300.00	8.57	6.64	0.00
45.00	8.57	6.64	0.00	305.00	8.57	6.64	0.00
50.00	8.57	6.64	0.00	310.00	8.57	6.64	0.00
55.00	8.57	6.64	0.00	315.00	8.57	6.64	0.00
60.00	8.57	6.64	0.00	320.00	8.57	6.64	0.00
65.00	8.57	6.64	0.00	325.00	8.57	6.64	0.00
70.00	8.57	6.64	0.00	330.00	8.57	6.64	0.00
75.00	8.57	6.64	0.00	335.00	8.57	6.64	0.00
80.00	8.57	6.64	0.00	340.00	8.57	6.64	0.00
85.00	8.57	6.64	0.00	345.00	8.57	6.64	0.00
90.00	8.57	6.64	0.00	350.00	8.57	6.64	0.00
95.00	8.57	6.64	0.00	355.00	8.57	6.64	0.00
100.00	8.57	6.64	0.00	360.00	8.57	6.64	0.00
105.00	8.57	6.64	0.00	365.00	8.57	6.64	0.00
110.00	8.57	6.64	0.00	370.00	8.57	6.64	0.00
115.00	8.57	6.64	0.00	375.00	8.57	6.64	0.00
120.00	8.57	6.64	0.00	380.00	8.57	6.64	0.00
125.00	8.57	6.64	0.00	385.00	8.57	6.64	0.00
130.00	8.57	6.64	0.00	390.00	8.57	6.64	0.00
135.00	8.57	6.64	0.00	395.00	8.57	6.64	0.00
140.00	8.57	6.64	0.00	400.00	8.57	6.64	0.00
145.00	8.57	6.64	0.00	405.00	8.57	6.64	0.00
150.00	8.57	6.64	0.00	410.00	8.57	6.64	0.00
155.00	8.57	6.64	0.00	415.00	8.57	6.64	0.00
160.00	8.57	6.64	0.00	420.00	8.57	6.64	0.00
165.00	8.57	6.64	0.00	425.00	8.57	6.64	0.00
170.00	8.57	6.64	0.00	430.00	8.57	6.64	0.00
175.00	8.57	6.64	0.00	435.00	8.57	6.64	0.00
180.00	8.57	6.64	0.00	440.00	8.57	6.64	0.00
185.00	8.57	6.64	0.00	445.00	8.57	6.64	0.00
190.00	8.57	6.64	0.00	450.00	8.57	6.64	0.00
195.00	8.57	6.64	0.00	455.00	8.57	6.64	0.00
200.00	8.57	6.64	0.00				
205.00	8.57	6.64	0.00				
210.00	8.57	6.64	0.00				
215.00	8.57	6.64	0.00				
220.00	8.57	6.64	0.00				
225.00	8.57	6.64	0.00				
230.00	8.57	6.64	0.00				
235.00	8.57	6.64	0.00				
240.00	8.57	6.64	0.00				
245.00	8.57	6.64	0.00				
250.00	8.57	6.64	0.00				
255.00	8.57	6.64	0.00				

Summary for Subcatchment 6S: Actual Tributary Area

Runoff = 8.67 cfs @ 16.00 hrs, Volume= 7.219 af, Depth= 7.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-458.00 hrs, dt= 0.05 hrs
 Huff B75 0-10sm 3Q scaled to 24.00 hrs 19 100-yr, 24 hr Rainfall=8.57", Smoothing=Off

Area (ac)	CN	Description
8.090	98	Paved parking, HSG C
3.480	74	>75% Grass cover, Good, HSG C
11.570	91	Weighted Average
3.480		30.08% Pervious Area
8.090		69.92% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	74	0.0417	0.15		Sheet Flow, Grass: Dense n= 0.240 P2= 3.34"
8.2	74	Total, Increased to minimum Tc = 10.0 min			

Hydrograph for Subcatchment 6S: Actual Tributary Area

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	260.00	8.57	7.49	0.00
5.00	1.00	0.36	1.77	265.00	8.57	7.49	0.00
10.00	2.26	1.39	3.16	270.00	8.57	7.49	0.00
15.00	5.23	4.21	8.66	275.00	8.57	7.49	0.00
20.00	7.98	6.90	3.33	280.00	8.57	7.49	0.00
25.00	8.57	7.49	0.00	285.00	8.57	7.49	0.00
30.00	8.57	7.49	0.00	290.00	8.57	7.49	0.00
35.00	8.57	7.49	0.00	295.00	8.57	7.49	0.00
40.00	8.57	7.49	0.00	300.00	8.57	7.49	0.00
45.00	8.57	7.49	0.00	305.00	8.57	7.49	0.00
50.00	8.57	7.49	0.00	310.00	8.57	7.49	0.00
55.00	8.57	7.49	0.00	315.00	8.57	7.49	0.00
60.00	8.57	7.49	0.00	320.00	8.57	7.49	0.00
65.00	8.57	7.49	0.00	325.00	8.57	7.49	0.00
70.00	8.57	7.49	0.00	330.00	8.57	7.49	0.00
75.00	8.57	7.49	0.00	335.00	8.57	7.49	0.00
80.00	8.57	7.49	0.00	340.00	8.57	7.49	0.00
85.00	8.57	7.49	0.00	345.00	8.57	7.49	0.00
90.00	8.57	7.49	0.00	350.00	8.57	7.49	0.00
95.00	8.57	7.49	0.00	355.00	8.57	7.49	0.00
100.00	8.57	7.49	0.00	360.00	8.57	7.49	0.00
105.00	8.57	7.49	0.00	365.00	8.57	7.49	0.00
110.00	8.57	7.49	0.00	370.00	8.57	7.49	0.00
115.00	8.57	7.49	0.00	375.00	8.57	7.49	0.00
120.00	8.57	7.49	0.00	380.00	8.57	7.49	0.00
125.00	8.57	7.49	0.00	385.00	8.57	7.49	0.00
130.00	8.57	7.49	0.00	390.00	8.57	7.49	0.00
135.00	8.57	7.49	0.00	395.00	8.57	7.49	0.00
140.00	8.57	7.49	0.00	400.00	8.57	7.49	0.00
145.00	8.57	7.49	0.00	405.00	8.57	7.49	0.00
150.00	8.57	7.49	0.00	410.00	8.57	7.49	0.00
155.00	8.57	7.49	0.00	415.00	8.57	7.49	0.00
160.00	8.57	7.49	0.00	420.00	8.57	7.49	0.00
165.00	8.57	7.49	0.00	425.00	8.57	7.49	0.00
170.00	8.57	7.49	0.00	430.00	8.57	7.49	0.00
175.00	8.57	7.49	0.00	435.00	8.57	7.49	0.00
180.00	8.57	7.49	0.00	440.00	8.57	7.49	0.00
185.00	8.57	7.49	0.00	445.00	8.57	7.49	0.00
190.00	8.57	7.49	0.00	450.00	8.57	7.49	0.00
195.00	8.57	7.49	0.00	455.00	8.57	7.49	0.00
200.00	8.57	7.49	0.00				
205.00	8.57	7.49	0.00				
210.00	8.57	7.49	0.00				
215.00	8.57	7.49	0.00				
220.00	8.57	7.49	0.00				
225.00	8.57	7.49	0.00				
230.00	8.57	7.49	0.00				
235.00	8.57	7.49	0.00				
240.00	8.57	7.49	0.00				
245.00	8.57	7.49	0.00				
250.00	8.57	7.49	0.00				
255.00	8.57	7.49	0.00				

Summary for Pond 3P: Basin Sized for Actual Tributary Area

Inflow Area = 13.105 ac, 61.69% Impervious, Inflow Depth = 7.38" for 19 100-yr, 24 hr event
 Inflow = 9.68 cfs @ 15.95 hrs, Volume= 8.054 af
 Outflow = 1.29 cfs @ 24.02 hrs, Volume= 8.054 af, Atten= 87%, Lag= 484.1 min
 Primary = 1.29 cfs @ 24.02 hrs, Volume= 8.054 af

Routing by Stor-Ind method, Time Span= 0.00-458.00 hrs, dt= 0.05 hrs
 Peak Elev= 764.78' @ 24.02 hrs Surf.Area= 1.506 ac Storage= 6.298 af

Plug-Flow detention time= 2,118.1 min calculated for 8.054 af (100% of inflow)
 Center-of-Mass det. time= 2,118.4 min (2,958.7 - 840.3)

Volume	Invert	Avail.Storage	Storage Description
#1	759.60'	6.781 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
759.60	0.957	0.000	0.000
760.00	0.995	0.390	0.390
761.00	1.092	1.044	1.434
762.00	1.191	1.142	2.576
763.00	1.292	1.242	3.817
764.00	1.395	1.344	5.161
765.00	1.537	1.466	6.627
765.10	1.548	0.154	6.781

Device	Routing	Invert	Outlet Devices
#1	Primary	758.15'	4.4" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.29 cfs @ 24.02 hrs HW=764.78' (Free Discharge)
 ↑1=Orifice/Grate (Orifice Controls 1.29 cfs @ 12.23 fps)

Hydrograph for Pond 3P: Basin Sized for Actual Tributary Area

Time (hours)	Inflow (cfs)	Storage (acre-feet)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.000	759.60	0.00
10.00	3.58	1.041	760.63	0.77
20.00	3.56	6.073	764.63	1.28
30.00	0.00	5.684	764.37	1.25
40.00	0.00	4.683	763.65	1.17
50.00	0.00	3.747	762.95	1.09
60.00	0.00	2.879	762.25	1.01
70.00	0.00	2.084	761.58	0.92
80.00	0.00	1.366	760.94	0.82
90.00	0.00	0.730	760.34	0.72
100.00	0.00	0.179	759.79	0.61
110.00	0.00	0.000	759.60	0.00
120.00	0.00	0.000	759.60	0.00
130.00	0.00	0.000	759.60	0.00
140.00	0.00	0.000	759.60	0.00
150.00	0.00	0.000	759.60	0.00
160.00	0.00	0.000	759.60	0.00
170.00	0.00	0.000	759.60	0.00
180.00	0.00	0.000	759.60	0.00
190.00	0.00	0.000	759.60	0.00
200.00	0.00	0.000	759.60	0.00
210.00	0.00	0.000	759.60	0.00
220.00	0.00	0.000	759.60	0.00
230.00	0.00	0.000	759.60	0.00
240.00	0.00	0.000	759.60	0.00
250.00	0.00	0.000	759.60	0.00
260.00	0.00	0.000	759.60	0.00
270.00	0.00	0.000	759.60	0.00
280.00	0.00	0.000	759.60	0.00
290.00	0.00	0.000	759.60	0.00
300.00	0.00	0.000	759.60	0.00
310.00	0.00	0.000	759.60	0.00
320.00	0.00	0.000	759.60	0.00
330.00	0.00	0.000	759.60	0.00
340.00	0.00	0.000	759.60	0.00
350.00	0.00	0.000	759.60	0.00
360.00	0.00	0.000	759.60	0.00
370.00	0.00	0.000	759.60	0.00
380.00	0.00	0.000	759.60	0.00
390.00	0.00	0.000	759.60	0.00
400.00	0.00	0.000	759.60	0.00
410.00	0.00	0.000	759.60	0.00
420.00	0.00	0.000	759.60	0.00
430.00	0.00	0.000	759.60	0.00
440.00	0.00	0.000	759.60	0.00
450.00	0.00	0.000	759.60	0.00

Stage-Discharge for Pond 3P: Basin Sized for Actual Tributary Area

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
759.60	0.00	762.20	1.00	764.80	1.29
759.65	0.58	762.25	1.01	764.85	1.30
759.70	0.59	762.30	1.01	764.90	1.30
759.75	0.61	762.35	1.02	764.95	1.31
759.80	0.62	762.40	1.03	765.00	1.31
759.85	0.63	762.45	1.03	765.05	1.32
759.90	0.64	762.50	1.04	765.10	1.32
759.95	0.65	762.55	1.04		
760.00	0.66	762.60	1.05		
760.05	0.67	762.65	1.06		
760.10	0.68	762.70	1.06		
760.15	0.69	762.75	1.07		
760.20	0.69	762.80	1.07		
760.25	0.70	762.85	1.08		
760.30	0.71	762.90	1.09		
760.35	0.72	762.95	1.09		
760.40	0.73	763.00	1.10		
760.45	0.74	763.05	1.10		
760.50	0.75	763.10	1.11		
760.55	0.76	763.15	1.12		
760.60	0.77	763.20	1.12		
760.65	0.77	763.25	1.13		
760.70	0.78	763.30	1.13		
760.75	0.79	763.35	1.14		
760.80	0.80	763.40	1.14		
760.85	0.81	763.45	1.15		
760.90	0.81	763.50	1.16		
760.95	0.82	763.55	1.16		
761.00	0.83	763.60	1.17		
761.05	0.84	763.65	1.17		
761.10	0.85	763.70	1.18		
761.15	0.85	763.75	1.18		
761.20	0.86	763.80	1.19		
761.25	0.87	763.85	1.19		
761.30	0.88	763.90	1.20		
761.35	0.88	763.95	1.20		
761.40	0.89	764.00	1.21		
761.45	0.90	764.05	1.22		
761.50	0.90	764.10	1.22		
761.55	0.91	764.15	1.23		
761.60	0.92	764.20	1.23		
761.65	0.93	764.25	1.24		
761.70	0.93	764.30	1.24		
761.75	0.94	764.35	1.25		
761.80	0.95	764.40	1.25		
761.85	0.95	764.45	1.26		
761.90	0.96	764.50	1.26		
761.95	0.97	764.55	1.27		
762.00	0.97	764.60	1.27		
762.05	0.98	764.65	1.28		
762.10	0.99	764.70	1.28		
762.15	0.99	764.75	1.29		

Stage-Area-Storage for Pond 3P: Basin Sized for Actual Tributary Area

Elevation (feet)	Surface (acres)	Storage (acre-feet)	Elevation (feet)	Surface (acres)	Storage (acre-feet)
759.60	0.957	0.000	764.80	1.509	6.322
759.70	0.967	0.096	764.90	1.523	6.474
759.80	0.976	0.193	765.00	1.537	6.627
759.90	0.986	0.291	765.10	1.548	6.781
760.00	0.995	0.390			
760.10	1.005	0.490			
760.20	1.015	0.591			
760.30	1.024	0.693			
760.40	1.034	0.796			
760.50	1.044	0.900			
760.60	1.053	1.005			
760.70	1.063	1.111			
760.80	1.073	1.218			
760.90	1.082	1.325			
761.00	1.092	1.434			
761.10	1.102	1.544			
761.20	1.112	1.654			
761.30	1.122	1.766			
761.40	1.132	1.879			
761.50	1.142	1.992			
761.60	1.151	2.107			
761.70	1.161	2.223			
761.80	1.171	2.339			
761.90	1.181	2.457			
762.00	1.191	2.576			
762.10	1.201	2.695			
762.20	1.211	2.816			
762.30	1.221	2.937			
762.40	1.231	3.060			
762.50	1.242	3.184			
762.60	1.252	3.308			
762.70	1.262	3.434			
762.80	1.272	3.561			
762.90	1.282	3.688			
763.00	1.292	3.817			
763.10	1.302	3.947			
763.20	1.313	4.078			
763.30	1.323	4.209			
763.40	1.333	4.342			
763.50	1.344	4.476			
763.60	1.354	4.611			
763.70	1.364	4.747			
763.80	1.374	4.884			
763.90	1.385	5.022			
764.00	1.395	5.161			
764.10	1.409	5.301			
764.20	1.423	5.442			
764.30	1.438	5.585			
764.40	1.452	5.730			
764.50	1.466	5.876			
764.60	1.480	6.023			
764.70	1.494	6.172			

828.00-IL for Disturbed

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Multi-Event Tables

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Events for Subcatchment 1S: Disturbed & Detained

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
19 100-yr, 24 hr	8.57	7.20	6.200	7.85

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Multi-Event Tables

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Events for Subcatchment 4S: Disturbed & Undetained

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
19 100-yr, 24 hr	8.57	0.98	0.691	5.44

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Multi-Event Tables

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Events for Subcatchment 5S: Disturbed Sheet Flow to Pond

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
19 100-yr, 24 hr	8.57	1.51	1.164	6.64

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Multi-Event Tables

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Events for Subcatchment 6S: Actual Tributary Area

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
19 100-yr, 24 hr	8.57	8.67	7.219	7.49

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Multi-Event Tables

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Events for Pond 3P: Basin Sized for Actual Tributary Area

Event	Inflow (cfs)	Primary (cfs)	Elevation (feet)	Storage (acre-feet)
19 100-yr, 24 hr	9.68	1.29	764.78	6.298



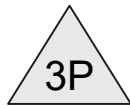
Disturbed & Detained



Disturbed & Undetained



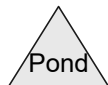
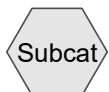
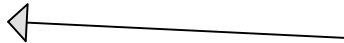
Disturbed Sheet Flow to Pond



Basin Sized for Actual Tributary Area



Actual Tributary Area



828.00-IL for Disturbed

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Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	19 100-yr, 24 hr	Huff B75 0-10sm	3Q	Scale	24.00	1	8.57	2

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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
7.599	74	>75% Grass cover, Good, HSG C (1S, 4S, 5S, 6S)
16.175	98	Paved parking, HSG C (1S, 6S)
0.901	98	Water Surface, 0% imp, HSG C (5S)
24.675	91	TOTAL AREA

Summary for Subcatchment 1S: Disturbed & Detained

Runoff = 7.20 cfs @ 15.03 hrs, Volume= 6.200 af, Depth= 7.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-458.00 hrs, dt= 0.05 hrs
 Huff B75 0-10sm 3Q scaled to 24.00 hrs 19 100-yr, 24 hr Rainfall=8.57", Smoothing=Off

Area (ac)	CN	Description
8.085	98	Paved parking, HSG C
1.394	74	>75% Grass cover, Good, HSG C
9.479	94	Weighted Average
1.394		14.71% Pervious Area
8.085		85.29% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	74	0.0417	0.15		Sheet Flow, Grass: Dense n= 0.240 P2= 3.34"
8.2	74	Total, Increased to minimum Tc = 10.0 min			

Hydrograph for Subcatchment 1S: Disturbed & Detained

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	260.00	8.57	7.85	0.00
5.00	1.00	0.51	1.73	265.00	8.57	7.85	0.00
10.00	2.26	1.64	2.75	270.00	8.57	7.85	0.00
15.00	5.23	4.53	7.20	275.00	8.57	7.85	0.00
20.00	7.98	7.26	2.74	280.00	8.57	7.85	0.00
25.00	8.57	7.85	0.00	285.00	8.57	7.85	0.00
30.00	8.57	7.85	0.00	290.00	8.57	7.85	0.00
35.00	8.57	7.85	0.00	295.00	8.57	7.85	0.00
40.00	8.57	7.85	0.00	300.00	8.57	7.85	0.00
45.00	8.57	7.85	0.00	305.00	8.57	7.85	0.00
50.00	8.57	7.85	0.00	310.00	8.57	7.85	0.00
55.00	8.57	7.85	0.00	315.00	8.57	7.85	0.00
60.00	8.57	7.85	0.00	320.00	8.57	7.85	0.00
65.00	8.57	7.85	0.00	325.00	8.57	7.85	0.00
70.00	8.57	7.85	0.00	330.00	8.57	7.85	0.00
75.00	8.57	7.85	0.00	335.00	8.57	7.85	0.00
80.00	8.57	7.85	0.00	340.00	8.57	7.85	0.00
85.00	8.57	7.85	0.00	345.00	8.57	7.85	0.00
90.00	8.57	7.85	0.00	350.00	8.57	7.85	0.00
95.00	8.57	7.85	0.00	355.00	8.57	7.85	0.00
100.00	8.57	7.85	0.00	360.00	8.57	7.85	0.00
105.00	8.57	7.85	0.00	365.00	8.57	7.85	0.00
110.00	8.57	7.85	0.00	370.00	8.57	7.85	0.00
115.00	8.57	7.85	0.00	375.00	8.57	7.85	0.00
120.00	8.57	7.85	0.00	380.00	8.57	7.85	0.00
125.00	8.57	7.85	0.00	385.00	8.57	7.85	0.00
130.00	8.57	7.85	0.00	390.00	8.57	7.85	0.00
135.00	8.57	7.85	0.00	395.00	8.57	7.85	0.00
140.00	8.57	7.85	0.00	400.00	8.57	7.85	0.00
145.00	8.57	7.85	0.00	405.00	8.57	7.85	0.00
150.00	8.57	7.85	0.00	410.00	8.57	7.85	0.00
155.00	8.57	7.85	0.00	415.00	8.57	7.85	0.00
160.00	8.57	7.85	0.00	420.00	8.57	7.85	0.00
165.00	8.57	7.85	0.00	425.00	8.57	7.85	0.00
170.00	8.57	7.85	0.00	430.00	8.57	7.85	0.00
175.00	8.57	7.85	0.00	435.00	8.57	7.85	0.00
180.00	8.57	7.85	0.00	440.00	8.57	7.85	0.00
185.00	8.57	7.85	0.00	445.00	8.57	7.85	0.00
190.00	8.57	7.85	0.00	450.00	8.57	7.85	0.00
195.00	8.57	7.85	0.00	455.00	8.57	7.85	0.00
200.00	8.57	7.85	0.00				
205.00	8.57	7.85	0.00				
210.00	8.57	7.85	0.00				
215.00	8.57	7.85	0.00				
220.00	8.57	7.85	0.00				
225.00	8.57	7.85	0.00				
230.00	8.57	7.85	0.00				
235.00	8.57	7.85	0.00				
240.00	8.57	7.85	0.00				
245.00	8.57	7.85	0.00				
250.00	8.57	7.85	0.00				
255.00	8.57	7.85	0.00				

Summary for Subcatchment 4S: Disturbed & Undetained

Runoff = 0.98 cfs @ 15.93 hrs, Volume= 0.691 af, Depth= 5.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-458.00 hrs, dt= 0.05 hrs
 Huff B75 0-10sm 3Q scaled to 24.00 hrs 19 100-yr, 24 hr Rainfall=8.57", Smoothing=Off

Area (ac)	CN	Description
1.524	74	>75% Grass cover, Good, HSG C
1.524		100.00% Pervious Area

Hydrograph for Subcatchment 4S: Disturbed & Undetained

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	260.00	8.57	5.44	0.00
5.00	1.00	0.02	0.05	265.00	8.57	5.44	0.00
10.00	2.26	0.48	0.28	270.00	8.57	5.44	0.00
15.00	5.23	2.55	0.95	275.00	8.57	5.44	0.00
20.00	7.98	4.91	0.33	280.00	8.57	5.44	0.00
25.00	8.57	5.44	0.00	285.00	8.57	5.44	0.00
30.00	8.57	5.44	0.00	290.00	8.57	5.44	0.00
35.00	8.57	5.44	0.00	295.00	8.57	5.44	0.00
40.00	8.57	5.44	0.00	300.00	8.57	5.44	0.00
45.00	8.57	5.44	0.00	305.00	8.57	5.44	0.00
50.00	8.57	5.44	0.00	310.00	8.57	5.44	0.00
55.00	8.57	5.44	0.00	315.00	8.57	5.44	0.00
60.00	8.57	5.44	0.00	320.00	8.57	5.44	0.00
65.00	8.57	5.44	0.00	325.00	8.57	5.44	0.00
70.00	8.57	5.44	0.00	330.00	8.57	5.44	0.00
75.00	8.57	5.44	0.00	335.00	8.57	5.44	0.00
80.00	8.57	5.44	0.00	340.00	8.57	5.44	0.00
85.00	8.57	5.44	0.00	345.00	8.57	5.44	0.00
90.00	8.57	5.44	0.00	350.00	8.57	5.44	0.00
95.00	8.57	5.44	0.00	355.00	8.57	5.44	0.00
100.00	8.57	5.44	0.00	360.00	8.57	5.44	0.00
105.00	8.57	5.44	0.00	365.00	8.57	5.44	0.00
110.00	8.57	5.44	0.00	370.00	8.57	5.44	0.00
115.00	8.57	5.44	0.00	375.00	8.57	5.44	0.00
120.00	8.57	5.44	0.00	380.00	8.57	5.44	0.00
125.00	8.57	5.44	0.00	385.00	8.57	5.44	0.00
130.00	8.57	5.44	0.00	390.00	8.57	5.44	0.00
135.00	8.57	5.44	0.00	395.00	8.57	5.44	0.00
140.00	8.57	5.44	0.00	400.00	8.57	5.44	0.00
145.00	8.57	5.44	0.00	405.00	8.57	5.44	0.00
150.00	8.57	5.44	0.00	410.00	8.57	5.44	0.00
155.00	8.57	5.44	0.00	415.00	8.57	5.44	0.00
160.00	8.57	5.44	0.00	420.00	8.57	5.44	0.00
165.00	8.57	5.44	0.00	425.00	8.57	5.44	0.00
170.00	8.57	5.44	0.00	430.00	8.57	5.44	0.00
175.00	8.57	5.44	0.00	435.00	8.57	5.44	0.00
180.00	8.57	5.44	0.00	440.00	8.57	5.44	0.00
185.00	8.57	5.44	0.00	445.00	8.57	5.44	0.00
190.00	8.57	5.44	0.00	450.00	8.57	5.44	0.00
195.00	8.57	5.44	0.00	455.00	8.57	5.44	0.00
200.00	8.57	5.44	0.00				
205.00	8.57	5.44	0.00				
210.00	8.57	5.44	0.00				
215.00	8.57	5.44	0.00				
220.00	8.57	5.44	0.00				
225.00	8.57	5.44	0.00				
230.00	8.57	5.44	0.00				
235.00	8.57	5.44	0.00				
240.00	8.57	5.44	0.00				
245.00	8.57	5.44	0.00				
250.00	8.57	5.44	0.00				
255.00	8.57	5.44	0.00				

Summary for Subcatchment 5S: Disturbed Sheet Flow to Pond

Runoff = 1.51 cfs @ 15.95 hrs, Volume= 1.164 af, Depth= 6.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-458.00 hrs, dt= 0.05 hrs
 Huff B75 0-10sm 3Q scaled to 24.00 hrs 19 100-yr, 24 hr Rainfall=8.57", Smoothing=Off

Area (ac)	CN	Description
1.201	74	>75% Grass cover, Good, HSG C
0.901	98	Water Surface, 0% imp, HSG C
2.102	84	Weighted Average
2.102		100.00% Pervious Area

Hydrograph for Subcatchment 5S: Disturbed Sheet Flow to Pond

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	260.00	8.57	6.64	0.00
5.00	1.00	0.15	0.21	265.00	8.57	6.64	0.00
10.00	2.26	0.93	0.55	270.00	8.57	6.64	0.00
15.00	5.23	3.48	1.49	275.00	8.57	6.64	0.00
20.00	7.98	6.08	0.49	280.00	8.57	6.64	0.00
25.00	8.57	6.64	0.00	285.00	8.57	6.64	0.00
30.00	8.57	6.64	0.00	290.00	8.57	6.64	0.00
35.00	8.57	6.64	0.00	295.00	8.57	6.64	0.00
40.00	8.57	6.64	0.00	300.00	8.57	6.64	0.00
45.00	8.57	6.64	0.00	305.00	8.57	6.64	0.00
50.00	8.57	6.64	0.00	310.00	8.57	6.64	0.00
55.00	8.57	6.64	0.00	315.00	8.57	6.64	0.00
60.00	8.57	6.64	0.00	320.00	8.57	6.64	0.00
65.00	8.57	6.64	0.00	325.00	8.57	6.64	0.00
70.00	8.57	6.64	0.00	330.00	8.57	6.64	0.00
75.00	8.57	6.64	0.00	335.00	8.57	6.64	0.00
80.00	8.57	6.64	0.00	340.00	8.57	6.64	0.00
85.00	8.57	6.64	0.00	345.00	8.57	6.64	0.00
90.00	8.57	6.64	0.00	350.00	8.57	6.64	0.00
95.00	8.57	6.64	0.00	355.00	8.57	6.64	0.00
100.00	8.57	6.64	0.00	360.00	8.57	6.64	0.00
105.00	8.57	6.64	0.00	365.00	8.57	6.64	0.00
110.00	8.57	6.64	0.00	370.00	8.57	6.64	0.00
115.00	8.57	6.64	0.00	375.00	8.57	6.64	0.00
120.00	8.57	6.64	0.00	380.00	8.57	6.64	0.00
125.00	8.57	6.64	0.00	385.00	8.57	6.64	0.00
130.00	8.57	6.64	0.00	390.00	8.57	6.64	0.00
135.00	8.57	6.64	0.00	395.00	8.57	6.64	0.00
140.00	8.57	6.64	0.00	400.00	8.57	6.64	0.00
145.00	8.57	6.64	0.00	405.00	8.57	6.64	0.00
150.00	8.57	6.64	0.00	410.00	8.57	6.64	0.00
155.00	8.57	6.64	0.00	415.00	8.57	6.64	0.00
160.00	8.57	6.64	0.00	420.00	8.57	6.64	0.00
165.00	8.57	6.64	0.00	425.00	8.57	6.64	0.00
170.00	8.57	6.64	0.00	430.00	8.57	6.64	0.00
175.00	8.57	6.64	0.00	435.00	8.57	6.64	0.00
180.00	8.57	6.64	0.00	440.00	8.57	6.64	0.00
185.00	8.57	6.64	0.00	445.00	8.57	6.64	0.00
190.00	8.57	6.64	0.00	450.00	8.57	6.64	0.00
195.00	8.57	6.64	0.00	455.00	8.57	6.64	0.00
200.00	8.57	6.64	0.00				
205.00	8.57	6.64	0.00				
210.00	8.57	6.64	0.00				
215.00	8.57	6.64	0.00				
220.00	8.57	6.64	0.00				
225.00	8.57	6.64	0.00				
230.00	8.57	6.64	0.00				
235.00	8.57	6.64	0.00				
240.00	8.57	6.64	0.00				
245.00	8.57	6.64	0.00				
250.00	8.57	6.64	0.00				
255.00	8.57	6.64	0.00				

Summary for Subcatchment 6S: Actual Tributary Area

Runoff = 8.67 cfs @ 16.00 hrs, Volume= 7.219 af, Depth= 7.49"
 Routed to Pond 3P : Basin Sized for Actual Tributary Area

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-458.00 hrs, dt= 0.05 hrs
 Huff B75 0-10sm 3Q scaled to 24.00 hrs 19 100-yr, 24 hr Rainfall=8.57", Smoothing=Off

Area (ac)	CN	Description
8.090	98	Paved parking, HSG C
3.480	74	>75% Grass cover, Good, HSG C
11.570	91	Weighted Average
3.480		30.08% Pervious Area
8.090		69.92% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	74	0.0417	0.15		Sheet Flow, Grass: Dense n= 0.240 P2= 3.34"
8.2	74	Total, Increased to minimum Tc = 10.0 min			

Hydrograph for Subcatchment 6S: Actual Tributary Area

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)	Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00	260.00	8.57	7.49	0.00
5.00	1.00	0.36	1.77	265.00	8.57	7.49	0.00
10.00	2.26	1.39	3.16	270.00	8.57	7.49	0.00
15.00	5.23	4.21	8.66	275.00	8.57	7.49	0.00
20.00	7.98	6.90	3.33	280.00	8.57	7.49	0.00
25.00	8.57	7.49	0.00	285.00	8.57	7.49	0.00
30.00	8.57	7.49	0.00	290.00	8.57	7.49	0.00
35.00	8.57	7.49	0.00	295.00	8.57	7.49	0.00
40.00	8.57	7.49	0.00	300.00	8.57	7.49	0.00
45.00	8.57	7.49	0.00	305.00	8.57	7.49	0.00
50.00	8.57	7.49	0.00	310.00	8.57	7.49	0.00
55.00	8.57	7.49	0.00	315.00	8.57	7.49	0.00
60.00	8.57	7.49	0.00	320.00	8.57	7.49	0.00
65.00	8.57	7.49	0.00	325.00	8.57	7.49	0.00
70.00	8.57	7.49	0.00	330.00	8.57	7.49	0.00
75.00	8.57	7.49	0.00	335.00	8.57	7.49	0.00
80.00	8.57	7.49	0.00	340.00	8.57	7.49	0.00
85.00	8.57	7.49	0.00	345.00	8.57	7.49	0.00
90.00	8.57	7.49	0.00	350.00	8.57	7.49	0.00
95.00	8.57	7.49	0.00	355.00	8.57	7.49	0.00
100.00	8.57	7.49	0.00	360.00	8.57	7.49	0.00
105.00	8.57	7.49	0.00	365.00	8.57	7.49	0.00
110.00	8.57	7.49	0.00	370.00	8.57	7.49	0.00
115.00	8.57	7.49	0.00	375.00	8.57	7.49	0.00
120.00	8.57	7.49	0.00	380.00	8.57	7.49	0.00
125.00	8.57	7.49	0.00	385.00	8.57	7.49	0.00
130.00	8.57	7.49	0.00	390.00	8.57	7.49	0.00
135.00	8.57	7.49	0.00	395.00	8.57	7.49	0.00
140.00	8.57	7.49	0.00	400.00	8.57	7.49	0.00
145.00	8.57	7.49	0.00	405.00	8.57	7.49	0.00
150.00	8.57	7.49	0.00	410.00	8.57	7.49	0.00
155.00	8.57	7.49	0.00	415.00	8.57	7.49	0.00
160.00	8.57	7.49	0.00	420.00	8.57	7.49	0.00
165.00	8.57	7.49	0.00	425.00	8.57	7.49	0.00
170.00	8.57	7.49	0.00	430.00	8.57	7.49	0.00
175.00	8.57	7.49	0.00	435.00	8.57	7.49	0.00
180.00	8.57	7.49	0.00	440.00	8.57	7.49	0.00
185.00	8.57	7.49	0.00	445.00	8.57	7.49	0.00
190.00	8.57	7.49	0.00	450.00	8.57	7.49	0.00
195.00	8.57	7.49	0.00	455.00	8.57	7.49	0.00
200.00	8.57	7.49	0.00				
205.00	8.57	7.49	0.00				
210.00	8.57	7.49	0.00				
215.00	8.57	7.49	0.00				
220.00	8.57	7.49	0.00				
225.00	8.57	7.49	0.00				
230.00	8.57	7.49	0.00				
235.00	8.57	7.49	0.00				
240.00	8.57	7.49	0.00				
245.00	8.57	7.49	0.00				
250.00	8.57	7.49	0.00				
255.00	8.57	7.49	0.00				

Summary for Pond 3P: Basin Sized for Actual Tributary Area

Inflow Area = 11.570 ac, 69.92% Impervious, Inflow Depth = 7.49" for 19 100-yr, 24 hr event
 Inflow = 8.67 cfs @ 16.00 hrs, Volume= 7.219 af
 Outflow = 1.24 cfs @ 24.07 hrs, Volume= 7.219 af, Atten= 86%, Lag= 484.4 min
 Primary = 1.24 cfs @ 24.07 hrs, Volume= 7.219 af

Routing by Stor-Ind method, Time Span= 0.00-458.00 hrs, dt= 0.05 hrs
 Peak Elev= 764.27' @ 24.07 hrs Surf.Area= 1.433 ac Storage= 5.542 af

Plug-Flow detention time= 1,942.2 min calculated for 7.219 af (100% of inflow)
 Center-of-Mass det. time= 1,942.5 min (2,787.0 - 844.5)

Volume	Invert	Avail.Storage	Storage Description
#1	759.60'	6.781 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
759.60	0.957	0.000	0.000
760.00	0.995	0.390	0.390
761.00	1.092	1.044	1.434
762.00	1.191	1.142	2.576
763.00	1.292	1.242	3.817
764.00	1.395	1.344	5.161
765.00	1.537	1.466	6.627
765.10	1.548	0.154	6.781

Device	Routing	Invert	Outlet Devices
#1	Primary	758.15'	4.4" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.24 cfs @ 24.07 hrs HW=764.27' (Free Discharge)
 ↑1=Orifice/Grate (Orifice Controls 1.24 cfs @ 11.73 fps)

Hydrograph for Pond 3P: Basin Sized for Actual Tributary Area

Time (hours)	Inflow (cfs)	Storage (acre-feet)	Elevation (feet)	Primary (cfs)
0.00	0.00	0.000	759.60	0.00
10.00	3.16	0.889	760.49	0.75
20.00	3.33	5.363	764.14	1.23
30.00	0.00	4.956	763.85	1.19
40.00	0.00	4.002	763.14	1.11
50.00	0.00	3.115	762.44	1.03
60.00	0.00	2.299	761.77	0.94
70.00	0.00	1.559	761.11	0.85
80.00	0.00	0.899	760.50	0.75
90.00	0.00	0.324	759.93	0.64
100.00	0.00	0.001	759.60	0.01
110.00	0.00	0.000	759.60	0.00
120.00	0.00	0.000	759.60	0.00
130.00	0.00	0.000	759.60	0.00
140.00	0.00	0.000	759.60	0.00
150.00	0.00	0.000	759.60	0.00
160.00	0.00	0.000	759.60	0.00
170.00	0.00	0.000	759.60	0.00
180.00	0.00	0.000	759.60	0.00
190.00	0.00	0.000	759.60	0.00
200.00	0.00	0.000	759.60	0.00
210.00	0.00	0.000	759.60	0.00
220.00	0.00	0.000	759.60	0.00
230.00	0.00	0.000	759.60	0.00
240.00	0.00	0.000	759.60	0.00
250.00	0.00	0.000	759.60	0.00
260.00	0.00	0.000	759.60	0.00
270.00	0.00	0.000	759.60	0.00
280.00	0.00	0.000	759.60	0.00
290.00	0.00	0.000	759.60	0.00
300.00	0.00	0.000	759.60	0.00
310.00	0.00	0.000	759.60	0.00
320.00	0.00	0.000	759.60	0.00
330.00	0.00	0.000	759.60	0.00
340.00	0.00	0.000	759.60	0.00
350.00	0.00	0.000	759.60	0.00
360.00	0.00	0.000	759.60	0.00
370.00	0.00	0.000	759.60	0.00
380.00	0.00	0.000	759.60	0.00
390.00	0.00	0.000	759.60	0.00
400.00	0.00	0.000	759.60	0.00
410.00	0.00	0.000	759.60	0.00
420.00	0.00	0.000	759.60	0.00
430.00	0.00	0.000	759.60	0.00
440.00	0.00	0.000	759.60	0.00
450.00	0.00	0.000	759.60	0.00

Stage-Discharge for Pond 3P: Basin Sized for Actual Tributary Area

Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)	Elevation (feet)	Primary (cfs)
759.60	0.00	762.20	1.00	764.80	1.29
759.65	0.58	762.25	1.01	764.85	1.30
759.70	0.59	762.30	1.01	764.90	1.30
759.75	0.61	762.35	1.02	764.95	1.31
759.80	0.62	762.40	1.03	765.00	1.31
759.85	0.63	762.45	1.03	765.05	1.32
759.90	0.64	762.50	1.04	765.10	1.32
759.95	0.65	762.55	1.04		
760.00	0.66	762.60	1.05		
760.05	0.67	762.65	1.06		
760.10	0.68	762.70	1.06		
760.15	0.69	762.75	1.07		
760.20	0.69	762.80	1.07		
760.25	0.70	762.85	1.08		
760.30	0.71	762.90	1.09		
760.35	0.72	762.95	1.09		
760.40	0.73	763.00	1.10		
760.45	0.74	763.05	1.10		
760.50	0.75	763.10	1.11		
760.55	0.76	763.15	1.12		
760.60	0.77	763.20	1.12		
760.65	0.77	763.25	1.13		
760.70	0.78	763.30	1.13		
760.75	0.79	763.35	1.14		
760.80	0.80	763.40	1.14		
760.85	0.81	763.45	1.15		
760.90	0.81	763.50	1.16		
760.95	0.82	763.55	1.16		
761.00	0.83	763.60	1.17		
761.05	0.84	763.65	1.17		
761.10	0.85	763.70	1.18		
761.15	0.85	763.75	1.18		
761.20	0.86	763.80	1.19		
761.25	0.87	763.85	1.19		
761.30	0.88	763.90	1.20		
761.35	0.88	763.95	1.20		
761.40	0.89	764.00	1.21		
761.45	0.90	764.05	1.22		
761.50	0.90	764.10	1.22		
761.55	0.91	764.15	1.23		
761.60	0.92	764.20	1.23		
761.65	0.93	764.25	1.24		
761.70	0.93	764.30	1.24		
761.75	0.94	764.35	1.25		
761.80	0.95	764.40	1.25		
761.85	0.95	764.45	1.26		
761.90	0.96	764.50	1.26		
761.95	0.97	764.55	1.27		
762.00	0.97	764.60	1.27		
762.05	0.98	764.65	1.28		
762.10	0.99	764.70	1.28		
762.15	0.99	764.75	1.29		

Stage-Area-Storage for Pond 3P: Basin Sized for Actual Tributary Area

Elevation (feet)	Surface (acres)	Storage (acre-feet)	Elevation (feet)	Surface (acres)	Storage (acre-feet)
759.60	0.957	0.000	764.80	1.509	6.322
759.70	0.967	0.096	764.90	1.523	6.474
759.80	0.976	0.193	765.00	1.537	6.627
759.90	0.986	0.291	765.10	1.548	6.781
760.00	0.995	0.390			
760.10	1.005	0.490			
760.20	1.015	0.591			
760.30	1.024	0.693			
760.40	1.034	0.796			
760.50	1.044	0.900			
760.60	1.053	1.005			
760.70	1.063	1.111			
760.80	1.073	1.218			
760.90	1.082	1.325			
761.00	1.092	1.434			
761.10	1.102	1.544			
761.20	1.112	1.654			
761.30	1.122	1.766			
761.40	1.132	1.879			
761.50	1.142	1.992			
761.60	1.151	2.107			
761.70	1.161	2.223			
761.80	1.171	2.339			
761.90	1.181	2.457			
762.00	1.191	2.576			
762.10	1.201	2.695			
762.20	1.211	2.816			
762.30	1.221	2.937			
762.40	1.231	3.060			
762.50	1.242	3.184			
762.60	1.252	3.308			
762.70	1.262	3.434			
762.80	1.272	3.561			
762.90	1.282	3.688			
763.00	1.292	3.817			
763.10	1.302	3.947			
763.20	1.313	4.078			
763.30	1.323	4.209			
763.40	1.333	4.342			
763.50	1.344	4.476			
763.60	1.354	4.611			
763.70	1.364	4.747			
763.80	1.374	4.884			
763.90	1.385	5.022			
764.00	1.395	5.161			
764.10	1.409	5.301			
764.20	1.423	5.442			
764.30	1.438	5.585			
764.40	1.452	5.730			
764.50	1.466	5.876			
764.60	1.480	6.023			
764.70	1.494	6.172			

828.00-IL for Disturbed

Prepared by Pinnacle Engineering Group

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Multi-Event Tables

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Events for Subcatchment 1S: Disturbed & Detained

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
19 100-yr, 24 hr	8.57	7.20	6.200	7.85

828.00-IL for Disturbed

Prepared by Pinnacle Engineering Group

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Multi-Event Tables

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Events for Subcatchment 4S: Disturbed & Undetained

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
19 100-yr, 24 hr	8.57	0.98	0.691	5.44

828.00-IL for Disturbed

Prepared by Pinnacle Engineering Group

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Multi-Event Tables

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Events for Subcatchment 5S: Disturbed Sheet Flow to Pond

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
19 100-yr, 24 hr	8.57	1.51	1.164	6.64

828.00-IL for Disturbed

Prepared by Pinnacle Engineering Group

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Multi-Event Tables

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Events for Subcatchment 6S: Actual Tributary Area

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
19 100-yr, 24 hr	8.57	8.67	7.219	7.49

828.00-IL for Disturbed

Prepared by Pinnacle Engineering Group

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Multi-Event Tables

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Events for Pond 3P: Basin Sized for Actual Tributary Area

Event	Inflow (cfs)	Primary (cfs)	Elevation (feet)	Storage (acre-feet)
19 100-yr, 24 hr	8.67	1.24	764.27	5.542