	Area (sf)	CN	Description
	10,774	70	Woods, Good, HSG C
	3,063	98	Paved parking & roofs
*	22,121	74	grassland, good
	35,958	75	Weighted Average
	32,895		Pervious Area
	3,063		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	49	0.1224	0.09		**Sheet Flow, SHT** Woods: Dense underbrush n= 0.800 P2= 4.00"
1.5	19	0.1579	0.21		**Sheet Flow, SHT** Grass: Dense n= 0.240 P2= 4.00"
0.5	239	0.0200	7.46	44.74	**Channel Flow, OCF** Area= 6.0 sf Perim= 8.7' r= 0.69' n= 0.022 Earth, clean & straight
11.2	307	Total			

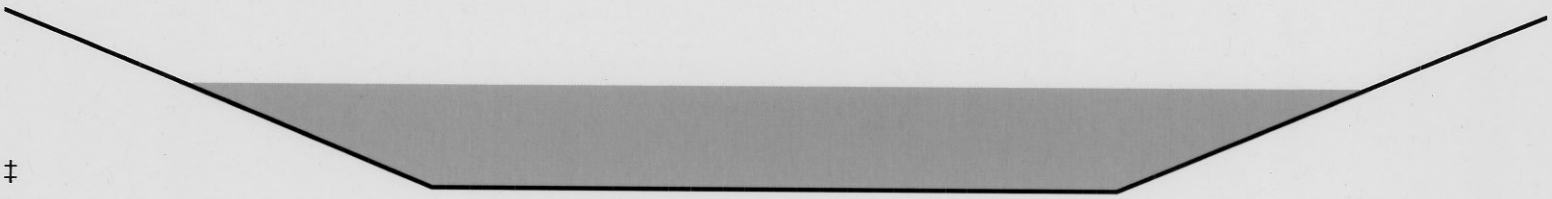
Summary for Reach CHNL1: Conveyance

Inflow = 3.18 cfs @ 11.97 hrs, Volume= 0.152 af
Outflow = 3.19 cfs @ 11.97 hrs, Volume= 0.152 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Muskingum-Cunge method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Reference Flow= 3.65 cfs Estimated Depth= 0.43' Velocity= 2.76 fps
m= 1.451, c= 4.00 fps, dt= 0.6 min, dx= 50.0' / 1 = 50.0', K= 0.2 min, X= 0.451
Max. Velocity= 4.09 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 4.00 fps, Avg. Travel Time= 0.2 min

Peak Storage= 40 cf @ 11.97 hrs, Average Depth at Peak Storage= 0.29'
Bank-Full Depth= 0.50', Capacity at Bank-Full= 4.86 cfs

2.00' x 0.50' deep channel, n= 0.060
Side Slope Z-value= 2.5 '/' Top Width= 4.50'
Length= 50.0' Slope= 0.0600 '/'
Inlet Invert= 1,920.00', Outlet Invert= 1,917.00'



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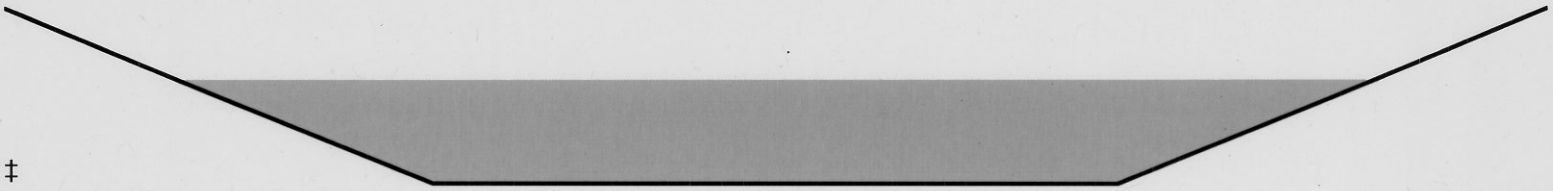
Summary for Reach CHNL2: Conveyance

Inflow Area = 0.150 ac, 40.48% Impervious, Inflow Depth > 16.39" for Q10 event
Inflow = 4.25 cfs @ 11.98 hrs, Volume= 0.204 af
Outflow = 4.25 cfs @ 11.98 hrs, Volume= 0.204 af, Atten= 0%, Lag= 0.4 min

Routing by Dyn-Muskingum-Cunge method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Reference Flow= 4.71 cfs Estimated Depth= 0.43' Velocity= 3.56 fps
m= 1.451, c= 5.16 fps, dt= 0.6 min, dx= 100.0' / 1 = 100.0', K= 0.3 min, X= 0.485
Max. Velocity= 5.36 fps, Min. Travel Time= 0.3 min
Avg. Velocity = 5.16 fps, Avg. Travel Time= 0.3 min

Peak Storage= 82 cf @ 11.98 hrs, Average Depth at Peak Storage= 0.30'
Bank-Full Depth= 0.50', Capacity at Bank-Full= 6.28 cfs

2.00' x 0.50' deep channel, n= 0.060
Side Slope Z-value= 2.5 '/' Top Width= 4.50'
Length= 100.0' Slope= 0.1000 '/'
Inlet Invert= 1,917.00', Outlet Invert= 1,907.00'



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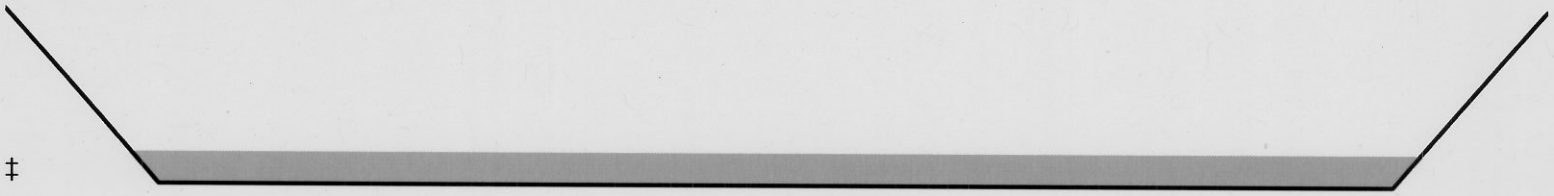
Summary for Reach CHNL3: Conveyance

Inflow Area = 6.790 ac, 32.04% Impervious, Inflow Depth > 0.71" for Q10 event
Inflow = 2.56 cfs @ 12.12 hrs, Volume= 0.405 af
Outflow = 2.56 cfs @ 12.12 hrs, Volume= 0.405 af, Atten= 0%, Lag= 0.1 min

Routing by Dyn-Muskingum-Cunge method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Reference Flow= 8.27 cfs Estimated Depth= 0.42' Velocity= 4.44 fps
m= 1.571, c= 6.98 fps, dt= 0.6 min, dx= 48.0' / 1 = 48.0', K= 0.1 min, X= 0.484
Max. Velocity= 7.01 fps, Min. Travel Time= 0.1 min
Avg. Velocity = 6.98 fps, Avg. Travel Time= 0.1 min

Peak Storage= 18 cf @ 12.12 hrs, Average Depth at Peak Storage= 0.09'
Bank-Full Depth= 0.50', Capacity at Bank-Full= 11.03 cfs

4.00' x 0.50' deep channel, n= 0.070
Side Slope Z-value= 1.0 '/' Top Width= 5.00'
Length= 48.0' Slope= 0.1719 '/' (50 Elevation Intervals)
Inlet Invert= 1,901.50', Outlet Invert= 1,893.25'



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Summary for Pond CBP31: DS

Inflow Area = 5.464 ac, 34.10% Impervious, Inflow Depth = 0.00" for Q10 event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 1,908.00' @ 0.00 hrs
Flood Elev= 1,917.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	1,908.00'	**15.0" x 147.0' long Culvert @1917** Ke= 0.900 Outlet Invert= 1,903.50' S= 0.0306 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=1,908.00' TW=1,903.50' (Dynamic Tailwater)
└**1=Culvert @1917** (Controls 0.00 cfs)

Summary for Pond CBP32: DS

Inflow Area = 5.464 ac, 34.10% Impervious, Inflow Depth = 0.00" for Q10 event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 1,905.26' @ 12.08 hrs
Flood Elev= 1,910.25'

Device	Routing	Invert	Outlet Devices
#1	Primary	1,903.50'	**15.0" x 64.0' long Culvert** CPP, square edge headwall, Ke= 0.500 Outlet Invert= 1,903.00' S= 0.0078 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=1,903.50' TW=1,903.00' (Dynamic Tailwater)
└─**1=Culvert** (Controls 0.00 cfs)

Summary for Pond CLV 2.7AB: Roadside Ditch

Inflow Area =	9.142 ac, 26.70% Impervious, Inflow Depth > 1.37" for Q10 event			
Inflow =	11.02 cfs @	12.08 hrs, Volume=	1.045 af	
Outflow =	11.02 cfs @	12.08 hrs, Volume=	1.045 af, Atten= 0%, Lag= 0.0 min	
Primary =	3.68 cfs @	12.08 hrs, Volume=	0.845 af	
Secondary =	7.33 cfs @	12.08 hrs, Volume=	0.200 af	

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 1,893.09' @ 12.08 hrs
Flood Elev= 1,895.00'

Device	Routing	Invert	Outlet Devices
#1	Secondary	1,892.70'	**12.0" x 30.0' long Culvert 2.7B** RCP, sq.cut end projecting, Ke= 0.500 Outlet Invert= 1,891.70' S= 0.0333 '/' Cc= 0.900 n= 0.012
#2	Primary	1,891.64'	**12.0" x 30.0' long Culvert 2.7A** RCP, sq.cut end projecting, Ke= 0.500 Outlet Invert= 1,890.64' S= 0.0333 '/' Cc= 0.900 n= 0.012
	Secondary	1,893.00'	**Custom Weir/Orifice, C= 2.62** Head (feet) 0.00 1.00 2.00 Width (feet) 71.30 240.85 370.13

Primary OutFlow Max=3.68 cfs @ 12.08 hrs HW=1,893.09' TW=0.00' (Dynamic Tailwater)
└─**2=Culvert 2.7A** (Inlet Controls 3.68 cfs @ 4.69 fps)

Secondary OutFlow Max=7.33 cfs @ 12.08 hrs HW=1,893.09' TW=0.00' (Dynamic Tailwater)
├─**1=Culvert 2.7B** (Inlet Controls 0.60 cfs @ 2.12 fps)
└─**3=Custom Weir/Orifice** (Weir Controls 6.73 cfs @ 0.96 fps)

Summary for Pond CVS1:

Inflow Area =	0.557 ac, 10.78% Impervious, Inflow Depth > 3.28" for Q10 event			
Inflow =	3.25 cfs @	11.97 hrs, Volume=	0.152 af	
Outflow =	3.25 cfs @	11.97 hrs, Volume=	0.152 af, Atten= 0%, Lag= 0.0 min	
Primary =	0.06 cfs @	11.97 hrs, Volume=	0.000 af	
Secondary =	3.18 cfs @	11.97 hrs, Volume=	0.152 af	

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 1,923.00' @ 11.97 hrs
Flood Elev= 1,923.00'

Device	Routing	Invert	Outlet Devices
#1	Secondary	1,922.00'	**15.0" x 40.0' long Culvert** CPP, mitered to conform to fill, Ke= 0.700 Outlet Invert= 1,920.00' S= 0.0500 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior
#2	Primary	1,923.00'	**Spillover to existing area, C= 2.62** Head (feet) 0.00 1.00 Width (feet) 62.00 111.00

Primary OutFlow Max=0.06 cfs @ 11.97 hrs HW=1,923.00' (Free Discharge)
└─**2=Spillover to existing area** (Weir Controls 0.06 cfs @ 0.22 fps)

Secondary OutFlow Max=3.18 cfs @ 11.97 hrs HW=1,923.00' TW=1,920.29' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 3.18 cfs @ 3.01 fps)

Summary for Pond CVS2: RECESS

Inflow Area = 0.150 ac, 40.48% Impervious, Inflow Depth > 4.19" for Q10 event
Inflow = 1.08 cfs @ 11.97 hrs, Volume= 0.052 af
Outflow = 1.07 cfs @ 11.98 hrs, Volume= 0.052 af, Atten= 1%, Lag= 0.5 min
Primary = 1.07 cfs @ 11.98 hrs, Volume= 0.052 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 1,919.53' @ 11.98 hrs Surf.Area= 114 sf Storage= 27 cf

Plug-Flow detention time= 0.5 min calculated for 0.052 af (100% of inflow)
Center-of-Mass det. time= 0.4 min (799.9 - 799.5)

Volume	Invert	Avail.Storage	Storage Description
#1	1,919.00'	2,119 cf	**Custom Stage Data (Pyramidal)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
1,919.00	8	0	0	8
1,920.00	314	124	124	317
1,921.00	530	417	541	548
1,922.00	783	652	1,194	820
1,923.00	1,076	926	2,119	1,138

Device	Routing	Invert	Outlet Devices
#1	Primary	1,919.00'	**15.0" x 60.0' long Culvert** CPP, mitered to conform to fill, Ke= 0.700 Outlet Invert= 1,917.80' S= 0.0200 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior

Primary OutFlow Max=1.07 cfs @ 11.98 hrs HW=1,919.53' TW=1,917.30' (Dynamic Tailwater)
↑ **Culvert** (Inlet Controls 1.07 cfs @ 2.18 fps)

Summary for Pond DDP4: Dry Detention Pond

Inflow Area = 6.790 ac, 32.04% Impervious, Inflow Depth > 0.63" for Q10 event
Inflow = 10.99 cfs @ 11.98 hrs, Volume= 0.355 af
Outflow = 2.50 cfs @ 12.12 hrs, Volume= 0.317 af, Atten= 77%, Lag= 8.5 min
Primary = 2.50 cfs @ 12.12 hrs, Volume= 0.317 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 1,905.29' @ 12.12 hrs Surf.Area= 4,683 sf Storage= 8,062 cf
Flood Elev= 1,906.00' Surf.Area= 5,464 sf Storage= 11,642 cf

Plug-Flow detention time= 101.7 min calculated for 0.317 af (89% of inflow)
Center-of-Mass det. time= 57.0 min (843.6 - 786.7)

Volume	Invert	Avail.Storage	Storage Description
#1	1,903.00'	28,034 cf	**Custom Stage Data (Pyramidal)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
1,903.00	2,419	0	0	2,419
1,903.50	2,884	1,324	1,324	2,895
1,904.00	3,349	1,557	2,881	3,373
1,905.00	4,376	3,851	6,732	4,430
1,906.00	5,464	4,910	11,642	5,553
1,[illegible].00	5,464	16,392	28,034	6,440

Device	Routing	Invert	Outlet Devices
#1	Primary	1,902.00'	**18.0" x 58.0' long Culvert** CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 1,901.00' S= 0.0172 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior
#2	Device 1	1,903.50'	**0.33' W x 1.67' H Vert. Vertical Slot Outlet** C= 0.600
#3	Device 1	1,905.50'	**20.0" Horiz. Horizontal Orifice Grate** Limited to weir flow C= 0.600

#4	Secondary	1,906.78'	**Weir Over Service Drive, C= 2.99** Head (feet) 0.00 0.25 0.37 1.45 1.95 Width (feet) 0.00 50.00 68.00 118.00 194.50

Primary OutFlow Max=2.50 cfs @ 12.12 hrs HW=1,905.29' TW=1,901.59' (Dynamic Tailwater)
└─**1=Culvert** (Passes 2.50 cfs of 10.71 cfs potential flow)
  ├─**2=Vertical Slot Outlet** (Orifice Controls 2.50 cfs @ 4.53 fps)
  └─**3=Horizontal Orifice Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=1,903.00' TW=1,901.50' (Dynamic Tailwater)
└─**4=Weir Over Service Drive** (Controls 0.00 cfs)

Summary for Pond DV1: Diversion

Use to send 0.599 cfs to forebay during 10-year storm event.

Inflow Area =	0.868 ac, 26.64% Impervious, Inflow Depth > 5.87" for Q10 event			
Inflow =	8.88 cfs @	11.97 hrs, Volume=	0.424 af	
Outflow =	8.88 cfs @	11.97 hrs, Volume=	0.424 af, Atten= 0%, Lag= 0.0 min	
Primary =	8.29 cfs @	11.97 hrs, Volume=	0.235 af	
Secondary =	0.59 cfs @	11.97 hrs, Volume=	0.189 af	

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 1,907.21' @ 11.97 hrs
Flood Elev= 1,908.00'

Device	Routing	Invert	Outlet Devices
#1	Secondary	1,905.50'	**6.0" x 30.0' long Culvert** CPP, mitered to conform to fill, Ke= 0.700 Outlet Invert= 1,905.00' S= 0.0167 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior
	Device 1	1,906.00'	**5.0" Horiz. Low Flow Horizontal Orifice** Limited to weir flow C= 0.600
	Device 2	1,906.25'	**0.09' W x 0.25' H Vert. Vertical External Orifices X 6.00** C= 0.600
#4	Primary	1,906.50'	**Custom Weir/Orifice, C= 1.99** Head (feet) 0.00 0.50 1.50 Width (feet) 2.00 8.25 17.00

Primary OutFlow Max=8.27 cfs @ 11.97 hrs HW=1,907.21' TW=1,904.74' (Dynamic Tailwater)
└─**4=Custom Weir/Orifice** (Weir Controls 8.27 cfs @ 1.83 fps)

Secondary OutFlow Max=0.59 cfs @ 11.97 hrs HW=1,907.21' TW=1,906.05' (Dynamic Tailwater)
└─**1=Culvert** (Passes 0.59 cfs of 0.84 cfs potential flow)
  └─**2=Low Flow Horizontal Orifice** (Passes 0.59 cfs of 0.71 cfs potential flow)
    └─**3=Vertical External Orifices** (Orifice Controls 0.59 cfs @ 4.40 fps)

Summary for Pond DV2: Diversion 2

Use to send 0.178 cfs to forebay during 10-year storm event.

Inflow Area =	0.458 ac, 17.59% Impervious, Inflow Depth > 3.57" for Q10 event			
Inflow =	2.89 cfs @	11.97 hrs, Volume=	0.136 af	
Outflow =	2.88 cfs @	11.98 hrs, Volume=	0.136 af, Atten= 0%, Lag= 0.3 min	
Primary =	2.71 cfs @	11.98 hrs, Volume=	0.120 af	
Secondary =	0.18 cfs @	11.77 hrs, Volume=	0.016 af	

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 1,906.81' @ 11.98 hrs Surf.Area= 187 sf Storage= 146 cf

Plug-Flow detention time= 3.4 min calculated for 0.136 af (100% of inflow)
Center-of-Mass det. time= 1.9 min (817.1 - 815.2)

Volume	Invert	Avail.Storage	Storage Description
#1	1,905.00'	614 cf	**Custom Stage Data (Pyramidal)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
1,905.00	4	0	0	4
1,906.00	88	37	37	91
1,907.00	215	147	184	227
1,909.00	215	430	614	344

Device	Routing	Invert	Outlet Devices
#1	Secondary	1,904.70'	**6.0" x 20.0' long Culvert** CPP, square edge headwall, Ke= 0.500 Outlet Invert= 1,904.50' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior
#2	Device 1	1,905.00'	**3.2" Horiz. Low Flow Horizontal Orifice** Limited to weir flow C= 0.600
#3	Device 2	1,905.25'	**0.10' W x 0.25' H Vert. Vertical Orifice to treatment X 2.00** C= 0.600
#4	Primary	1,905.50'	**Custom Weir/Orifice, C= 1.99** Head (feet) 0.00 1.00 1.00 1.49 1.50 Width (feet) 0.17 0.17 5.00 5.00 11.50

Primary OutFlow Max=2.71 cfs @ 11.98 hrs HW=1,906.81' TW=1,904.76' (Dynamic Tailwater)
└─**4=Custom Weir/Orifice** (Weir Controls 2.71 cfs @ 1.57 fps)

Secondary OutFlow Max=0.17 cfs @ 11.77 hrs HW=1,906.56' TW=1,906.04' (Dynamic Tailwater)
└─**1=Culvert** (Passes 0.17 cfs of 0.64 cfs potential flow)
└─**2=Low Flow Horizontal Orifice** (Passes 0.17 cfs of 0.19 cfs potential flow)
└─**3=Vertical Orifice to treatment** (Orifice Controls 0.17 cfs @ 3.45 fps)

Summary for Pond FB1: Forebay1

Inflow	=	0.59 cfs @	11.97 hrs, Volume=	0.189 af
Outflow	=	0.46 cfs @	12.09 hrs, Volume=	0.175 af, Atten= 23%, Lag= 6.8 min
Primary	=	0.46 cfs @	12.09 hrs, Volume=	0.175 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 1,906.53' @ 17.21 hrs Surf.Area= 530 sf Storage= 648 cf
Flood Elev= 1,907.00' Surf.Area= 667 sf Storage= 927 cf

Plug-Flow detention time= 55.3 min calculated for 0.175 af (92% of inflow)
Center-of-Mass det. time= 14.8 min (897.2 - 882.5)

Volume	Invert	Avail.Storage	Storage Description
#1	1,904.00'	2,261 cf	**Custom Stage Data (Pyramidal)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
1,904.00	58	0	0	58
1,905.00	190	118	118	197
1,906.00	393	285	403	411
1,907.00	667	524	927	699
1,909.00	667	1,334	2,261	906

Device	Routing	Invert	Outlet Devices
#1	Primary	1,903.50'	**6.0" x 20.0' long Pretreatment Outlet Pipe** CPP, square edge headwall, Ke= 0.500 Outlet Invert= 1,903.30' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior
#2	Device 1	1,904.00'	**4.3" Horiz. Horizontal Internal Orifice** Limited to weir flow C= 0.600
#3	Device 2	1,904.33'	**0.8" Vert. Vertical Baffle Orifices X 4.00 columns** X 7 rows with 3.0" cc spacing C= 0.600
#4	Device 2	1,906.50'	**6.0" Horiz. Orifice/Grate X 0.00** Limited to weir flow C= 0.600

Primary OutFlow Max=0.46 cfs @ 12.09 hrs HW=1,906.15' TW=1,904.58' (Dynamic Tailwater)
└─**1=Pretreatment Outlet Pipe** (Passes 0.46 cfs of 1.12 cfs potential flow)
└─**2=Horizontal Internal Orifice** (Passes 0.46 cfs of 0.61 cfs potential flow)
└─**3=Vertical Baffle Orifices** (Orifice Controls 0.46 cfs @ 4.67 fps)
└─**4=Orifice/Grate** (Controls 0.00 cfs)

Summary for Pond FB2: Forebay 2

Inflow	=	0.18 cfs @	11.77 hrs,	Volume=	0.016 af
Outflow	=	0.04 cfs @	11.81 hrs,	Volume=	0.010 af, Atten= 79%, Lag= 2.2 min
Primary	=	0.04 cfs @	11.81 hrs,	Volume=	0.010 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 1,906.49' @ 12.18 hrs Surf.Area= 387 sf Storage= 384 cf
Flood Elev= 1,907.00' Surf.Area= 519 sf Storage= 616 cf

Plug-Flow detention time= 52.7 min calculated for 0.010 af (65% of inflow)
Center-of-Mass det. time= 22.6 min (682.0 - 659.5)

Volume	Invert	Avail.Storage	Storage Description
#1	1,904.00'	1,654 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
1,904.00	8	0	0
1,905.00	91	50	50
1,906.00	261	176	226
1,907.00	519	390	616
1,909.00	519	1,038	1,654

Device	Routing	Invert	Outlet Devices
#1	Primary	1,903.40'	**6.0" x 78.0' long Pretreatment Outlet Pipe** CPP, square edge headwall, Ke= 0.500 Outlet Invert= 1,903.00' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior
#2	Device 1	1,904.00'	**1.0" Horiz. Horizontal Internal Orifice** C= 0.600
#3	Device 2	1,904.33'	**1.0" Vert. Vertical Baffle Orifices** X 3 rows with 12.0" cc spacing C= 0.600
	Device 2	1,906.50'	**6.0" Horiz. Orifice/Grate X 0.00** Limited to weir flow C= 0.600

Primary OutFlow Max=0.04 cfs @ 11.81 hrs HW=1,906.11' TW=1,904.08' (Dynamic Tailwater)
- **1=Pretreatment Outlet Pipe** (Passes 0.04 cfs of 0.81 cfs potential flow)
  - **2=Horizontal Internal Orifice** (Orifice Controls 0.04 cfs @ 6.85 fps)
    - **3=Vertical Baffle Orifices** (Passes 0.04 cfs of 0.06 cfs potential flow)
    - **4=Orifice/Grate** (Controls 0.00 cfs)

Summary for Pond SF1: Sand Filter 1

.015 cfs min through bed for 40 hr drawdown

Inflow	=	0.49 cfs @	12.08 hrs,	Volume=	0.185 af
Outflow	=	0.08 cfs @	17.64 hrs,	Volume=	0.087 af, Atten= 83%, Lag= 333.2 min
Primary	=	0.00 cfs @	0.00 hrs,	Volume=	0.000 af
Secondary	=	0.08 cfs @	17.64 hrs,	Volume=	0.087 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 1,906.50' @ 17.59 hrs Surf.Area= 1,438 sf Storage= 4,321 cf
Flood Elev= 1,906.50' Surf.Area= 1,438 sf Storage= 4,321 cf

Plug-Flow detention time= 363.4 min calculated for 0.087 af (47% of inflow)
Center-of-Mass det. time= 175.6 min (1,060.7 - 885.1)

Volume	Invert	Avail.Storage	Storage Description
#1	1,898.00'	7,202 cf	**Custom Stage Data (Pyramidal)** Listed below (Recalc) 7,916 cf Overall - 714 cf Embedded = 7,202 cf
	1,898.00'	714 cf	**Filter Bed Volume (Pyramidal)** Listed below (Recalc) Inside #1
		7,916 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
[illegible].00	179	0	0	179
1,902.00	179	716	716	393
1,903.00	393	279	995	617
1,904.00	677	529	1,524	916
1,905.00	1,033	849	2,372	1,290
1,906.00	1,438	1,230	3,602	1,719
1,909.00	1,438	4,314	7,916	2,174

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
1,898.00	179	0	0	179
1,901.99	179	714	714	393

Device	Routing	Invert	Outlet Devices
#1	Primary	1,906.50'	**Spillover into DDP at EL 1906, C= 2.62** Head (feet) 0.00 0.50 3.00 Width (feet) 64.00 80.00 80.00
#2	Secondary	1,898.25'	**8.0" x 103.0' long Culvert** CPP, square edge headwall, Ke= 0.500 Outlet Invert= 1,897.75' S= 0.0049 '/' Cc= 0.900 n= 0.009 Corrugated PE, smooth interior
#3	Device 2	1,898.25'	**1.2" Vert. Vert Orifice in Plpe** C= 0.600

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=1,898.00' TW=1,903.00' (Dynamic Tailwater)
└─**1=Spillover into DDP at EL 1906** (Controls 0.00 cfs)

Secondary OutFlow Max=0.08 cfs @ 17.64 hrs HW=1,906.50' TW=1,901.51' (Dynamic Tailwater)
└─**2=Culvert** (Passes 0.08 cfs of 3.07 cfs potential flow)
└─**3=Vert Orifice in Plpe** (Orifice Controls 0.08 cfs @ 10.76 fps)

Summary for Link 2.7: Totalizer

Inflow Area = 9.142 ac, 26.70% Impervious, Inflow Depth > 1.37" for Q10 event
Inflow = 11.02 cfs @ 12.08 hrs, Volume= 1.045 af
Primary = 11.02 cfs @ 12.08 hrs, Volume= 1.045 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Summary for Link PLOT LIMITS1:

Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Summary for Link PND3: FROM PND3 OCS

Inflow Area = 5.464 ac, 34.10% Impervious, Inflow Depth = 0.00" for Q10 event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Q10 Primary Outflow Imported from PR East Parking 110509 Tiered Area 1of3~Pond PND3.hce