

1.991 - 1.256 sec : 0.00 %
 1.256 - 0.792 sec : 0.00 %
 0.792 - 0.500 sec : 0.00 %

 Subcatchment Runoff Summary

Subcatchment	Total Precip mm	Total Runon mm	Total Evap mm	Total Infil mm	Imperv Runoff mm	Perv Runoff mm	Total Runoff mm	Total Runoff 10^6 ltr	Peak Runoff CMS	Runoff Coeff
A1	133.10	0.00	0.00	53.21	0.00	80.25	80.25	0.53	0.29	0.603
A2	133.10	0.00	0.00	54.39	0.00	78.80	78.80	2.41	0.69	0.592

 Node Depth Summary

Node	Type	Average Depth Meters	Maximum Depth Meters	Maximum HGL Meters	Time of Max Occurrence days hr:min	Reported Max Depth Meters
J1	JUNCTION	0.00	0.00	185.76	0 00:00	0.00
J2	JUNCTION	0.00	0.00	182.50	0 00:00	0.00
Clark_Street	OUTFALL	0.00	0.00	185.75	0 00:00	0.00
Hwy26	OUTFALL	0.00	0.00	182.49	0 00:00	0.00

 Node Inflow Summary

Maximum Lateral Inflow	Maximum Total Inflow	Time of Max Occurrence	Lateral Inflow Volume	Total Inflow Volume	Flow Balance Error
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Node	Type	CMS	CMS	days hr:min	10^6 ltr	10^6 ltr	Percent
J1	JUNCTION	0.289	0.289	0 11:54	0.526	0.526	0.000
J2	JUNCTION	0.689	0.689	0 12:00	2.41	2.41	0.000
Clark_Street	OUTFALL	0.000	0.289	0 11:54	0	0.526	0.000
Hwy26	OUTFALL	0.000	0.689	0 12:00	0	2.41	0.000

Node Surcharge Summary

Surcharging occurs when water rises above the top of the highest conduit.

Node	Type	Hours Surcharged	Max. Height Above Crown Meters	Min. Depth Below Rim Meters
J1	JUNCTION	48.00	0.000	0.237
J2	JUNCTION	48.00	0.000	1.000

Node Flooding Summary

No nodes were flooded.

Outfall Loading Summary

Outfall Node	Flow Freq Pcnt	Avg Flow CMS	Max Flow CMS	Total Volume 10^6 ltr
Clark_Street	27.24	0.011	0.289	0.526
Hwy26	28.51	0.049	0.689	2.412

System 27.88 0.060 0.929 2.937

Link Flow Summary

Link	Type	Maximum Flow CMS	Time of Max Occurrence days hr:min	Maximum Veloc m/sec	Max/ Full Flow	Max/ Full Depth
C1	DUMMY	0.689	0 12:00			
C11	DUMMY	0.289	0 11:54			

Flow Classification Summary

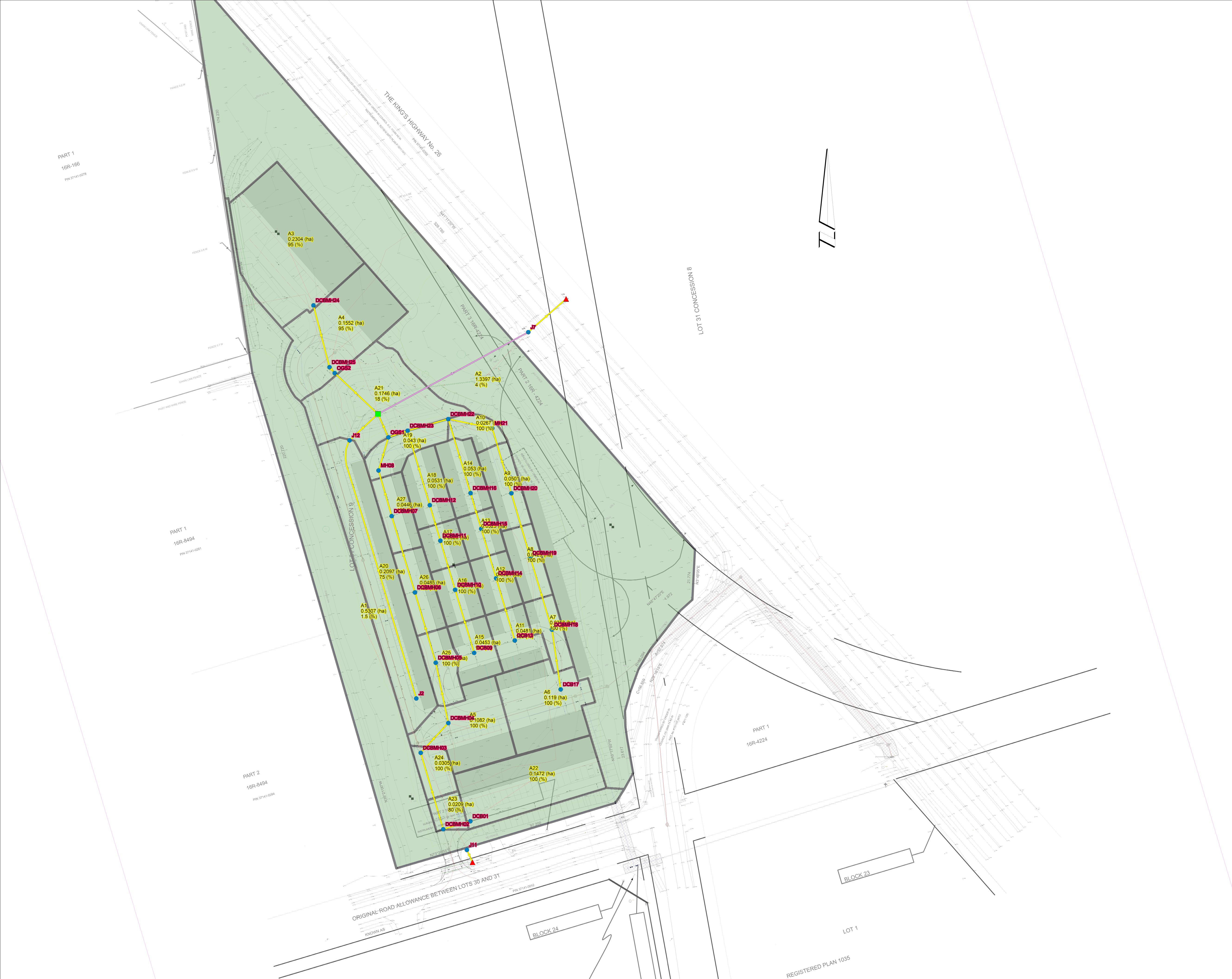
	Adjusted /Actual Length	Fraction of Time in Flow Class							
		Up Dry	Down Dry	Sub Crit	Sup Crit	Up Crit	Down Crit	Norm Ltd	Inlet Ctrl
Conduit									

Conduit Surcharge Summary

No conduits were surcharged.

Analysis begun on: Wed Dec 13 12:47:02 2023
Analysis ended on: Wed Dec 13 12:47:02 2023
Total elapsed time: < 1 sec

Appendix F – Post Development PCSWMM Information



● Junctions

▲ Outfalls

■ Storages

— Conduits

— Outlets

■ Subcatchments

■ ACAD-2021-185 PLANBASE DXF

Legend

N

100 m

Project Name: Lot 31 Clark Street
Project No.: 2021-185
Location: Town of The Blue Mountains
Created By: CC
Checked By: CC
Date Created: 31-Jan-19
Date Modified: 13-Dec-23



Outlet to Highway 26

Outlet Type	Elevation (m)	Head (m)	δ h (m)	h (m)	P (m)	H (m)	Outlet from Pond				Storm Event SCS	Max WSEL	Storm Event Chicago	Max WSEL
							Orifice m³/s	Trap. Weir m³/s	Overflow Weir m³/s	Total m³/s				
Orifice	184.00	0.00	0.00				0.000			0.000				
Orifice	184.05	0.05	0.01				0.001			0.001				
Orifice	184.10	0.10	0.06				0.003			0.003				
Orifice	184.15	0.15	0.11				0.004			0.004				
Orifice	184.20	0.20	0.16				0.005			0.005				
Orifice	184.25	0.25	0.21				0.006			0.006				
Orifice	184.30	0.30	0.26				0.006			0.006				
Orifice	184.35	0.35	0.31				0.007			0.007				
Orifice	184.40	0.40	0.36				0.007			0.007				
Orifice	184.45	0.45	0.41				0.008			0.008				
Orifice	184.50	0.50	0.46				0.008			0.008				
Orifice	184.55	0.55	0.51				0.009			0.009				
Orifice	184.60	0.60	0.56				0.009			0.009				
Orifice	184.65	0.65	0.61				0.010			0.010				
Orifice	184.70	0.70	0.66				0.010			0.010				
Orifice	184.75	0.75	0.71				0.010			0.010			25 mm	184.78
Orifice + Trap. W	184.80	0.80	0.76	0.00	0.80		0.011	0.000		0.011				
Orifice + Trap. W	184.85	0.85	0.81	0.05	0.80		0.011	0.008		0.019				
Orifice + Trap. W	184.90	0.90	0.86	0.10	0.80		0.011	0.024		0.035			2 yr	184.90
Orifice + Trap. W	184.95	0.95	0.91	0.15	0.80		0.012	0.043		0.055				
Orifice + Trap. W	185.00	1.00	0.96	0.20	0.80		0.012	0.067		0.079			5 yr	185.00
Orifice + Trap. W	185.05	1.05	1.01	0.25	0.80		0.012	0.093		0.105	2 yr	185.03	10 yr	185.06
Orifice + Trap. W	185.10	1.10	1.06	0.30	0.80		0.013	0.122		0.135				
Orifice + Trap. W	185.15	1.15	1.11	0.35	0.80		0.013	0.154		0.167	5 yr	185.18	25 yr	185.14
Orifice + Trap. W	185.20	1.20	1.16	0.40	0.80		0.013	0.188		0.202	Timmins	185.22	50 yr	185.2
Orifice + Trap. W	185.25	1.25	1.21	0.45	0.80		0.014	0.225		0.238	10 yr	185.27	100 yr	185.25
Orifice + Trap. W	185.30	1.30	1.26	0.50	0.80		0.014	0.263		0.277				
Orifice + Trap. W	185.35	1.35	1.31	0.55	0.80		0.014	0.303		0.318	25 yr	185.37		
Orifice + Trap. W	185.40	1.40	1.36	0.60	0.80		0.014	0.346		0.360				
Orifice + Trap. W	185.45	1.45	1.41	0.65	0.80		0.015	0.390		0.405	50 yr	185.44		
Orifice + Trap. W	185.50	1.50	1.46	0.70	0.80		0.015	0.436		0.451	100 yr	185.5		
Orifice + Trap. W	185.55	1.55	1.51	0.75	0.80		0.015	0.483		0.498				
Orifice + Trap. W	185.60	1.60	1.56	0.80	0.80		0.015	0.532		0.548				
Orifice + Trap. W	185.65	1.65	1.61	0.85	0.80		0.016	0.583		0.599				
Orifice + Trap. W	185.70	1.70	1.66	0.90	0.80		0.016	0.635		0.651				
Orifice + Trap. W	185.75	1.75	1.71	0.95	0.80		0.016	0.689		0.705				
Orifice + Trap. W	185.80	1.80	1.76	1.00	0.80		0.016	0.744		0.760				
Orifice + Trap. W	185.85	1.85	1.81	1.05	0.80		0.017	0.800		0.817				
Orifice + Trap. W	185.90	1.90	1.86	1.10	0.80		0.017	0.858		0.875				

Orifice

Q = Cd* A_o * $\sqrt{2g*\delta h}$

Q = Peak Runoff (m³/s)

Cd = Constant (0.63 orifice, 0.8 for orifice tube)

A_o = Cross sectional Area of Orifice (m²)

g = gravity, 9.8 m/s²

δ h = change in elevation between middle of the discharge pipe and the water surface (m)

Cd

0.63

Orifice Dia. (m)

0.075

Trapezoidal Weir

Q = 1.86bh^{3/2}

Q = Peak Runoff (m³/s)

b = width of weir bottom (m)

h = distance from weir opening to top of water surface (m)

b

0.40

Broad Crested

Q = C x (2g)^{1/2} x (2/3x L x H^{3/2} + 8/15 (Tan A) x H^{5/2})

Q = discharge over weir in cu.m /s

C = 0.86

g = gravity, 9.8 m/s²

H = height of flow over weir (depth of flow over weir)

L = Width of weir normal to flow

A = Angle of the weir channel banks

Slope (H:V)

Angle Degrees

3:1

71.56

4:1

75.96

5:1

78.69

6:1

80.54

10:1

84.29

20:1

87.14

C

0.86

L

6

A (degrees)

75.96

A (radians)

1.32572988

(Vol. III - Hydrologic Analysis and Flow Control BMP's, 2001, trapezoidal broad crested weir (emergency overflow spillway)

2130 x 860 mm CSP Arch - Flood Bypass Pipe

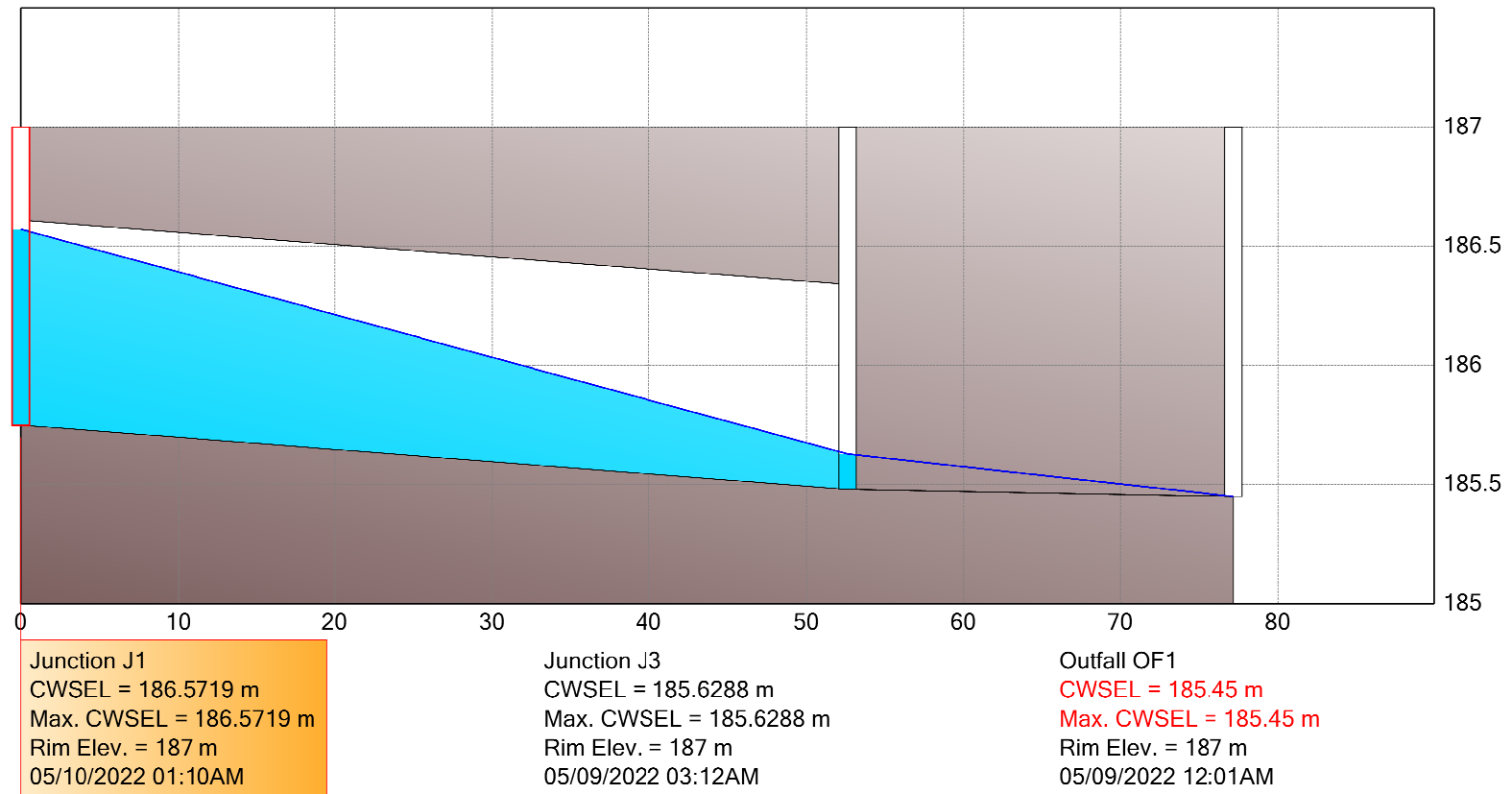
Flow = 4.64 cms

— HGL

Peak values

Conduit C4
Flow = 4.643 m³/s
Length = 52.604 m
Depth = 0.86 m
Velocity = 7.405 m/s
Slope = 0.00513 m/m

Conduit C7
Flow = 4.657 m³/s
Length = 24.579 m
Depth = 0 m
Velocity = 0 m/s
Slope = 0.00122 m/m



Post Development - 4 hr Chicago 25 mm Storm Event - PCSWMM Output

EPA STORM WATER MANAGEMENT MODEL - VERSION 5.2 (Build 5.2.4)

Element Count

Number of rain gages 14
Number of subcatchments ... 27
Number of nodes 34
Number of links 32
Number of pollutants 0
Number of land uses 0

Raingage Summary

Name	Data Source	Data Type	Recording Interval
25mm	25mm	INTENSITY	10 min.
Chicago_4h_100Yr	Chicago_4h_100Yr	INTENSITY	5 min.
Chicago_4h_10Yr	Chicago_4h_10Yr	INTENSITY	5 min.
Chicago_4h_25Yr	Chicago_4h_25Yr	INTENSITY	5 min.
Chicago_4h_2Yr	Chicago_4h_2Yr	INTENSITY	5 min.
Chicago_4h_50Yr	Chicago_4h_50Yr	INTENSITY	5 min.
Chicago_4h_5yr	Chicago_4h_5yr	INTENSITY	5 min.
SCS_Type_II_108.79mm_25Yr	SCS_Type_II_108.79mm_25Yr	INTENSITY	6 min.
SCS_Type_II_121.11mm_50Yr	SCS_Type_II_121.11mm_50Yr	INTENSITY	6 min.
SCS_Type_II_133.1mm_100yr	SCS_Type_II_133.1mm_100yr	INTENSITY	6 min.
SCS_Type_II_59.84mm_2Yr	SCS_Type_II_59.84mm_2Yr	INTENSITY	6 min.
SCS_Type_II_79.64mm_5Yr	SCS_Type_II_79.64mm_5Yr	INTENSITY	6 min.
SCS_Type_II_92.51mm_10Yr	SCS_Type_II_92.51mm_10Yr	INTENSITY	6 min.
Timmins_Storm_(0-25)	Timmins_Storm_(0-25)	INTENSITY	60 min.

Subcatchment Summary

Name	Area	Width	%Imperv	%Slope	Rain Gage	Outlet
A1	0.53	401.59	1.50	2.0000	SCS_Type_II_133.1mm_100yr	J11
A10	0.03	16.08	100.00	1.0000	SCS_Type_II_133.1mm_100yr	DCBMH22
A11	0.05	35.13	100.00	1.0000	SCS_Type_II_133.1mm_100yr	DCB13
A12	0.04	28.62	100.00	1.0000	SCS_Type_II_133.1mm_100yr	DCBMH14
A13	0.03	23.40	100.00	1.0000	SCS_Type_II_133.1mm_100yr	DCBMH15
A14	0.05	28.33	100.00	1.0000	SCS_Type_II_133.1mm_100yr	DCBMH16
A15	0.05	26.70	100.00	1.0000	SCS_Type_II_133.1mm_100yr	DCB09
A16	0.04	27.53	100.00	1.0000	SCS_Type_II_133.1mm_100yr	DCBMH10
A17	0.03	24.00	100.00	1.0000	SCS_Type_II_133.1mm_100yr	DCBMH11
A18	0.05	27.08	100.00	1.0000	SCS_Type_II_133.1mm_100yr	DCBMH12
A19	0.04	24.40	100.00	1.0000	SCS_Type_II_133.1mm_100yr	DCBMH23
A2	1.34	190.64	4.00	1.0000	SCS_Type_II_133.1mm_100yr	J7
A20	0.21	136.66	75.00	1.0000	SCS_Type_II_133.1mm_100yr	J2
A21	0.17	25.46	18.00	2.0000	SCS_Type_II_133.1mm_100yr	SWMF
A22	0.15	20.00	100.00	1.0000	SCS_Type_II_133.1mm_100yr	DCB01
A23	0.02	16.00	80.00	2.0000	SCS_Type_II_133.1mm_100yr	DCBMH02
A24	0.03	12.00	100.00	2.0000	SCS_Type_II_133.1mm_100yr	DCBMH03
A25	0.04	10.00	100.00	1.0000	SCS_Type_II_133.1mm_100yr	DCBMH05
A26	0.05	10.00	100.00	1.0000	SCS_Type_II_133.1mm_100yr	DCBMH06
A27	0.04	10.00	100.00	1.0000	SCS_Type_II_133.1mm_100yr	DCBMH07
A3	0.23	39.72	95.00	1.0000	SCS_Type_II_133.1mm_100yr	DCBMH24
A4	0.16	51.73	95.00	1.0000	SCS_Type_II_133.1mm_100yr	DCBMH25
A5	0.11	43.98	100.00	1.0000	SCS_Type_II_133.1mm_100yr	DCBMH04
A6	0.12	40.62	100.00	1.0000	SCS_Type_II_133.1mm_100yr	DCB17
A7	0.04	19.00	100.00	1.0000	SCS_Type_II_133.1mm_100yr	DCBMH18
A8	0.04	24.30	100.00	1.0000	SCS_Type_II_133.1mm_100yr	DCBMH19
A9	0.05	15.48	100.00	1.0000	SCS_Type_II_133.1mm_100yr	DCBMH20

Node Summary

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
DCB01	JUNCTION	185.43	1.41	0.0	
DCB09	JUNCTION	185.35	1.41	0.0	
DCB13	JUNCTION	185.43	1.43	0.0	
DCB17	JUNCTION	185.54	1.68	0.0	

DCBMH02	JUNCTION	185.39	1.17	0.0
DCBMH03	JUNCTION	185.29	1.56	0.0
DCBMH04	JUNCTION	185.24	1.40	0.0
DCBMH05	JUNCTION	185.09	1.64	0.0
DCBMH06	JUNCTION	184.84	1.88	0.0
DCBMH07	JUNCTION	184.74	2.00	0.0
DCBMH10	JUNCTION	185.21	1.24	0.0
DCBMH11	JUNCTION	185.02	1.23	0.0
DCBMH12	JUNCTION	184.87	1.25	0.0
DCBMH14	JUNCTION	185.30	1.24	0.0
DCBMH15	JUNCTION	185.19	1.11	0.0
DCBMH16	JUNCTION	185.03	1.09	0.0
DCBMH18	JUNCTION	185.41	1.35	0.0
DCBMH19	JUNCTION	185.17	1.55	0.0
DCBMH20	JUNCTION	185.03	1.61	0.0
DCBMH22	JUNCTION	184.79	1.15	0.0
DCBMH23	JUNCTION	184.62	1.29	0.0
DCBMH24	JUNCTION	184.96	1.20	0.0
DCBMH25	JUNCTION	184.74	1.22	0.0
J11	JUNCTION	185.76	0.24	0.0
J12	JUNCTION	186.00	0.40	0.0
J2	JUNCTION	186.50	0.41	0.0
J7	JUNCTION	182.52	2.08	0.0
MH08	JUNCTION	184.68	2.20	0.0
MH21	JUNCTION	184.89	1.68	0.0
OGS1	JUNCTION	184.48	1.42	0.0
OGS2	JUNCTION	184.58	1.44	0.0
Clark_Street	UTFALL	185.75	0.00	0.0
HWY26	UTFALL	182.51	1.52	0.0
SWMF	STORAGE	184.00	1.90	0.0

Link Summary

Name	From Node	To Node	Type	Length	%Slope	Roughness
C1	DCBMH24	DCBMH25	CONDUIT	27.3	0.5124	0.0130
C1_2	J7	HWY26	CONDUIT	21.6	0.0464	0.0130
C10	DCBMH23	OGS1	CONDUIT	8.7	0.4584	0.0130
C11	J11	Clark_Street	CONDUIT	5.8	0.1718	0.0100

C13	OGS1	SWMF	CONDUIT	10.9	0.2750	0.0130
C14	DCB13	DCBMH14	CONDUIT	27.8	0.4678	0.0130
C15	DCBMH15	DCBMH16	CONDUIT	15.9	0.5017	0.0130
C16	DCBMH14	DCBMH15	CONDUIT	22.1	0.4970	0.0100
C17	DCBMH16	DCBMH22	CONDUIT	33.1	0.4835	0.0130
C18	DCB09	DCBMH10	CONDUIT	28.2	0.4966	0.0130
C19	DCBMH10	DCBMH11	CONDUIT	21.9	0.5013	0.0130
C2	DCBMH25	OGS2	CONDUIT	3.4	0.2962	0.0130
C20	DCBMH11	DCBMH12	CONDUIT	15.9	0.5038	0.0130
C21	DCBMH12	DCBMH23	CONDUIT	33.2	0.5114	0.0130
C22	DCB01	DCBMH02	CONDUIT	12.1	0.3314	0.0130
C22_1	J2	J12	CONDUIT	115.2	0.4339	0.0300
C22_4	J12	SWMF	CONDUIT	16.6	0.6035	0.0300
C23	DCBMH02	DCBMH03	CONDUIT	34.1	0.2934	0.0130
C24	DCBMH03	DCBMH04	CONDUIT	17.4	0.2881	0.0130
C25	DCBMH04	DCBMH05	CONDUIT	26.4	0.3035	0.0130
C26	DCBMH05	DCBMH06	CONDUIT	31.4	0.3185	0.0130
C27	DCBMH06	DCBMH07	CONDUIT	34.2	0.2927	0.0130
C28	DCBMH07	MH08	CONDUIT	20.3	0.2954	0.0130
C29	MH08	OGS1	CONDUIT	14.8	0.3376	0.0130
C3	OGS2	SWMF	CONDUIT	25.5	0.5103	0.0130
C5	DCB17	DCBMH18	CONDUIT	25.8	0.5033	0.0130
C6	DCBMH18	DCBMH19	CONDUIT	32.0	0.4995	0.0130
C7_1	DCBMH19	DCBMH20	CONDUIT	28.9	0.4850	0.0130
C7_2	DCBMH20	MH21	CONDUIT	29.0	0.4831	0.0130
C8	MH21	DCBMH22	CONDUIT	19.3	0.5194	0.0130
C9	DCBMH22	DCBMH23	CONDUIT	18.1	0.4970	0.0130
C12	SWMF	J7	OUTLET			

Cross Section Summary

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C1	CIRCULAR	0.45	0.16	0.11	0.45	1	0.20
C1_2	RECT_CLOSED	1.52	3.71	0.47	2.44	1	3.71
C10	CIRCULAR	0.60	0.28	0.15	0.60	1	0.42
C11	DUMMY	0.00	0.00	0.00	0.00	1	0.00
C13	CIRCULAR	0.75	0.44	0.19	0.75	1	0.58

C14	CIRCULAR	0.30	0.07	0.07	0.30	1	0.07
C15	CIRCULAR	0.30	0.07	0.07	0.30	1	0.07
C16	CIRCULAR	0.30	0.07	0.07	0.30	1	0.09
C17	CIRCULAR	0.38	0.11	0.09	0.38	1	0.12
C18	CIRCULAR	0.30	0.07	0.07	0.30	1	0.07
C19	CIRCULAR	0.30	0.07	0.07	0.30	1	0.07
C2	CIRCULAR	0.60	0.28	0.15	0.60	1	0.33
C20	CIRCULAR	0.38	0.11	0.09	0.38	1	0.12
C21	CIRCULAR	0.45	0.16	0.11	0.45	1	0.20
C22	CIRCULAR	0.38	0.11	0.09	0.38	1	0.10
C22_1	TRAPEZOIDAL	0.40	0.58	0.21	2.65	1	0.45
C22_4	TRAPEZOIDAL	0.40	0.58	0.21	2.65	1	0.53
C23	CIRCULAR	0.38	0.11	0.09	0.38	1	0.09
C24	CIRCULAR	0.38	0.11	0.09	0.38	1	0.09
C25	CIRCULAR	0.38	0.11	0.09	0.38	1	0.10
C26	CIRCULAR	0.45	0.16	0.11	0.45	1	0.16
C27	CIRCULAR	0.60	0.28	0.15	0.60	1	0.33
C28	CIRCULAR	0.60	0.28	0.15	0.60	1	0.33
C29	CIRCULAR	0.60	0.28	0.15	0.60	1	0.36
C3	CIRCULAR	0.75	0.44	0.19	0.75	1	0.80
C5	CIRCULAR	0.38	0.11	0.09	0.38	1	0.12
C6	CIRCULAR	0.38	0.11	0.09	0.38	1	0.12
C7_1	CIRCULAR	0.45	0.16	0.11	0.45	1	0.20
C7_2	CIRCULAR	0.45	0.16	0.11	0.45	1	0.20
C8	CIRCULAR	0.45	0.16	0.11	0.45	1	0.21
C9	CIRCULAR	0.45	0.16	0.11	0.45	1	0.20

Analysis Options

Flow Units CMS

Process Models:

Rainfall/Runoff YES

RDII NO

Snowmelt NO

Groundwater NO

Flow Routing YES

Ponding Allowed YES

Water Quality NO

Infiltration Method GREEN_AMPT

Flow Routing Method DYNWAVE
 Surcharge Method EXTRAN
 Starting Date 05/09/2022 00:00:00
 Ending Date 05/11/2022 00:00:00
 Antecedent Dry Days 0.0
 Report Time Step 00:01:00
 Wet Time Step 00:05:00
 Dry Time Step 00:05:00
 Routing Time Step 5.00 sec
 Variable Time Step YES
 Maximum Trials 8
 Number of Threads 4
 Head Tolerance 0.001500 m

*****	Volume	Depth
Runoff Quantity Continuity	hectare-m	mm
*****	-----	-----
Total Precipitation	0.499	133.100
Evaporation Loss	0.000	0.000
Infiltration Loss	0.112	29.931
Surface Runoff	0.384	102.452
Final Storage	0.003	0.917
Continuity Error (%)	-0.150	

*****	Volume	Volume
Flow Routing Continuity	hectare-m	10^6 ltr
*****	-----	-----
Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	0.384	3.841
Groundwater Inflow	0.000	0.000
RDII Inflow	0.000	0.000
External Inflow	0.000	0.000
External Outflow	0.384	3.844
Flooding Loss	0.000	0.000
Evaporation Loss	0.000	0.000
Exfiltration Loss	0.000	0.000
Initial Stored Volume	0.000	0.000
Final Stored Volume	0.000	0.000
Continuity Error (%)	-0.084	

Time-Step Critical Elements

Link C2 (62.44%)

Highest Flow Instability Indexes

All links are stable.

Most Frequent Nonconverging Nodes

Node Clark_Street (0.14%)

Node HWY26 (0.14%)

Node DCBMH20 (0.03%)

Node DCBMH07 (0.03%)

Node DCBMH16 (0.03%)

Routing Time Step Summary

Minimum Time Step	:	0.50 sec
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Average Time Step	:	3.49 sec
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Maximum Time Step	:	5.00 sec
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% of Time in Steady State	:	0.00
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Average Iterations per Step	:	2.01
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% of Steps Not Converging	:	0.14
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Time Step Frequencies	:	
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5.000 - 3.155 sec	:	52.07 %
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3.155 - 1.991 sec	:	36.21 %
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1.991 - 1.256 sec	:	7.81 %
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1.256 - 0.792 sec	:	2.77 %
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0.792 - 0.500 sec	:	1.13 %
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Subcatchment Runoff Summary

Subcatchment	Total Precip mm	Total Runon mm	Total Evap mm	Total Infil mm	Imperv Runoff mm	Perv Runoff mm	Total Runoff mm	Total Runoff 10^6 ltr	Peak Runoff CMS	Runoff Coeff
A1	133.10	0.00	0.00	52.46	1.97	78.96	80.93	0.43	0.22	0.608
A10	133.10	0.00	0.00	0.00	131.28	0.00	131.28	0.04	0.01	0.986
A11	133.10	0.00	0.00	0.00	131.25	0.00	131.25	0.06	0.02	0.986
A12	133.10	0.00	0.00	0.00	131.25	0.00	131.25	0.05	0.02	0.986
A13	133.10	0.00	0.00	0.00	131.25	0.00	131.25	0.04	0.02	0.986
A14	133.10	0.00	0.00	0.00	131.31	0.00	131.31	0.07	0.03	0.987
A15	133.10	0.00	0.00	0.00	131.29	0.00	131.29	0.06	0.02	0.986
A16	133.10	0.00	0.00	0.00	131.27	0.00	131.27	0.05	0.02	0.986
A17	133.10	0.00	0.00	0.00	131.25	0.00	131.25	0.04	0.02	0.986
A18	133.10	0.00	0.00	0.00	131.32	0.00	131.32	0.07	0.03	0.987
A19	133.10	0.00	0.00	0.00	131.30	0.00	131.30	0.06	0.02	0.986
A2	133.10	0.00	0.00	54.53	5.24	78.56	78.56	1.05	0.26	0.590
A20	133.10	0.00	0.00	12.34	98.41	21.03	119.44	0.25	0.11	0.897
A21	133.10	0.00	0.00	42.75	23.61	66.51	90.12	0.16	0.06	0.677
A22	133.10	0.00	0.00	0.00	131.49	0.00	131.49	0.19	0.07	0.988
A23	133.10	0.00	0.00	9.86	104.92	16.81	121.73	0.03	0.01	0.915
A24	133.10	0.00	0.00	0.00	131.30	0.00	131.30	0.04	0.02	0.986
A25	133.10	0.00	0.00	0.00	131.46	0.00	131.46	0.05	0.02	0.988
A26	133.10	0.00	0.00	0.00	131.48	0.00	131.48	0.06	0.02	0.988
A27	133.10	0.00	0.00	0.00	131.47	0.00	131.47	0.06	0.02	0.988
A3	133.10	0.00	0.00	2.47	124.91	4.21	129.12	0.30	0.11	0.970
A4	133.10	0.00	0.00	2.47	124.83	4.20	129.03	0.20	0.08	0.969
A5	133.10	0.00	0.00	0.00	131.37	0.00	131.37	0.14	0.05	0.987
A6	133.10	0.00	0.00	0.00	131.40	0.00	131.40	0.16	0.06	0.987
A7	133.10	0.00	0.00	0.00	131.31	0.00	131.31	0.05	0.02	0.987
A8	133.10	0.00	0.00	0.00	131.30	0.00	131.30	0.06	0.02	0.986
A9	133.10	0.00	0.00	0.00	131.42	0.00	131.42	0.07	0.03	0.987

Node Depth Summary

Node	Type	Average Depth Meters	Maximum Depth Meters	Maximum HGL Meters	Time of Max Occurrence days hr:min	Reported Max Depth Meters
DCB01	JUNCTION	0.03	0.65	186.08	0 11:53	0.46
DCB09	JUNCTION	0.01	0.20	185.55	0 12:00	0.20
DCB13	JUNCTION	0.01	0.23	185.66	0 11:55	0.22
DCB17	JUNCTION	0.02	0.19	185.73	0 11:53	0.18
DCBMH02	JUNCTION	0.03	0.65	186.04	0 11:53	0.47
DCBMH03	JUNCTION	0.03	0.59	185.88	0 11:53	0.47
DCBMH04	JUNCTION	0.04	0.53	185.77	0 11:53	0.46
DCBMH05	JUNCTION	0.04	0.49	185.58	0 12:00	0.49
DCBMH06	JUNCTION	0.05	0.69	185.53	0 12:00	0.69
DCBMH07	JUNCTION	0.07	0.78	185.52	0 12:01	0.78
DCBMH10	JUNCTION	0.02	0.33	185.54	0 12:00	0.33
DCBMH11	JUNCTION	0.03	0.50	185.52	0 12:00	0.50
DCBMH12	JUNCTION	0.04	0.65	185.52	0 12:00	0.65
DCBMH14	JUNCTION	0.02	0.35	185.65	0 11:54	0.34
DCBMH15	JUNCTION	0.02	0.63	185.82	0 11:53	0.43
DCBMH16	JUNCTION	0.03	0.70	185.73	0 11:53	0.56
DCBMH18	JUNCTION	0.02	0.22	185.63	0 11:55	0.22
DCBMH19	JUNCTION	0.03	0.44	185.61	0 12:00	0.43
DCBMH20	JUNCTION	0.03	0.56	185.59	0 11:57	0.56
DCBMH22	JUNCTION	0.06	0.76	185.55	0 12:00	0.76
DCBMH23	JUNCTION	0.12	0.89	185.51	0 12:01	0.89
DCBMH24	JUNCTION	0.04	0.55	185.51	0 12:01	0.55
DCBMH25	JUNCTION	0.07	0.76	185.50	0 12:02	0.76
J11	JUNCTION	0.00	0.00	185.76	0 00:00	0.00
J12	JUNCTION	0.03	0.20	186.20	0 11:56	0.20
J2	JUNCTION	0.02	0.23	186.73	0 11:54	0.23
J7	JUNCTION	0.04	0.25	182.77	0 12:01	0.25
MH08	JUNCTION	0.10	0.83	185.51	0 12:02	0.83
MH21	JUNCTION	0.04	0.68	185.57	0 12:00	0.68
OGS1	JUNCTION	0.19	1.02	185.50	0 12:02	1.02
OGS2	JUNCTION	0.13	0.92	185.50	0 12:02	0.92
Clark_Street	OUTFALL	0.00	0.00	185.75	0 00:00	0.00
HWY26	OUTFALL	0.02	0.20	182.71	0 12:01	0.20
SWMF	STORAGE	0.49	1.50	185.50	0 12:03	1.50

Node Inflow Summary

Node	Type	Maximum Lateral Inflow CMS	Maximum Total Inflow CMS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 ltr	Total Inflow Volume 10^6 ltr	Flow Balance Error Percent
DCB01	JUNCTION	0.072	0.072	0 11:54	0.194	0.194	0.004
DCB09	JUNCTION	0.023	0.023	0 11:54	0.0595	0.0595	-0.027
DCB13	JUNCTION	0.024	0.024	0 11:54	0.0632	0.0632	-0.014
DCB17	JUNCTION	0.060	0.060	0 11:54	0.156	0.156	0.007
DCBMH02	JUNCTION	0.011	0.084	0 11:54	0.0255	0.219	-0.010
DCBMH03	JUNCTION	0.015	0.101	0 11:54	0.0401	0.259	-0.019
DCBMH04	JUNCTION	0.055	0.156	0 11:54	0.142	0.402	0.305
DCBMH05	JUNCTION	0.021	0.177	0 11:54	0.0545	0.455	0.088
DCBMH06	JUNCTION	0.024	0.192	0 11:54	0.0638	0.518	-0.337
DCBMH07	JUNCTION	0.022	0.216	0 11:54	0.0587	0.579	-0.024
DCBMH10	JUNCTION	0.021	0.044	0 11:54	0.0549	0.114	0.302
DCBMH11	JUNCTION	0.017	0.059	0 11:53	0.0431	0.157	-0.117
DCBMH12	JUNCTION	0.027	0.085	0 11:53	0.0698	0.227	-0.090
DCBMH14	JUNCTION	0.020	0.045	0 11:53	0.0531	0.116	-0.011
DCBMH15	JUNCTION	0.016	0.058	0 11:52	0.0427	0.159	0.133
DCBMH16	JUNCTION	0.027	0.080	0 11:55	0.0696	0.228	0.013
DCBMH18	JUNCTION	0.018	0.078	0 11:53	0.0464	0.203	0.393
DCBMH19	JUNCTION	0.022	0.100	0 11:54	0.0564	0.258	-0.316
DCBMH20	JUNCTION	0.025	0.118	0 11:54	0.0659	0.325	-0.035
DCBMH22	JUNCTION	0.014	0.210	0 11:54	0.0351	0.589	-0.082
DCBMH23	JUNCTION	0.022	0.309	0 11:54	0.0565	0.873	-0.051
DCBMH24	JUNCTION	0.115	0.115	0 11:54	0.298	0.298	0.082
DCBMH25	JUNCTION	0.078	0.190	0 11:54	0.2	0.498	-0.162
J11	JUNCTION	0.224	0.224	0 11:54	0.43	0.43	0.000
J12	JUNCTION	0.000	0.103	0 11:55	0	0.251	0.179
J2	JUNCTION	0.106	0.106	0 11:54	0.251	0.251	-0.170
J7	JUNCTION	0.256	0.692	0 12:01	1.05	3.41	0.000
MH08	JUNCTION	0.000	0.214	0 11:54	0	0.579	-0.014
MH21	JUNCTION	0.000	0.117	0 11:54	0	0.325	-0.045
OGS1	JUNCTION	0.000	0.522	0 11:54	0	1.45	-0.043

OGS2	JUNCTION	0.000	0.187	0	11:54	0	0.499	-0.119
Clark_Street	OUTFALL	0.000	0.224	0	11:54	0	0.43	0.000
HWY26	OUTFALL	0.000	0.692	0	12:01	0	3.41	0.000
SWMF	STORAGE	0.056	0.850	0	11:54	0.158	2.36	-0.000

Node Surcharge Summary

Surcharging occurs when water rises above the top of the highest conduit.

Node	Type	Hours Surcharged	Max. Height Above Crown Meters	Min. Depth Below Rim Meters
DCB01	JUNCTION	0.05	0.274	0.761
DCBMH02	JUNCTION	0.07	0.272	0.523
DCBMH03	JUNCTION	0.14	0.217	0.968
DCBMH04	JUNCTION	0.15	0.157	0.868
DCBMH05	JUNCTION	0.12	0.044	1.146
DCBMH06	JUNCTION	0.22	0.088	1.192
DCBMH07	JUNCTION	0.38	0.176	1.224
DCBMH10	JUNCTION	0.09	0.033	0.907
DCBMH11	JUNCTION	0.29	0.123	0.727
DCBMH12	JUNCTION	0.42	0.196	0.604
DCBMH14	JUNCTION	0.11	0.054	0.886
DCBMH15	JUNCTION	0.20	0.333	0.477
DCBMH16	JUNCTION	0.31	0.317	0.393
DCBMH20	JUNCTION	0.20	0.113	1.052
DCBMH22	JUNCTION	0.57	0.307	0.388
DCBMH23	JUNCTION	0.61	0.290	0.400
DCBMH24	JUNCTION	0.26	0.099	0.651
DCBMH25	JUNCTION	0.36	0.160	0.460
J11	JUNCTION	48.00	0.000	0.240
MH08	JUNCTION	0.48	0.229	1.371
MH21	JUNCTION	0.41	0.228	1.002
OGS1	JUNCTION	0.58	0.275	0.395
OGS2	JUNCTION	0.37	0.169	0.521

Node Flooding Summary

No nodes were flooded.

Storage Volume Summary

Storage Unit	Average Volume 1000 m ³	Avg Pcnt Full	Evap Pcnt Loss	Exfil Pcnt Loss	Maximum Volume 1000 m ³	Max Pcnt Full	Time of Max Occurrence days hr:min	Maximum Outflow CMS
SWMF	0.177	14.8	0.0	0.0	0.798	66.9	0 12:03	0.450

Outfall Loading Summary

Outfall Node	Flow Freq Pcnt	Avg Flow CMS	Max Flow CMS	Total Volume 10 ⁶ ltr
Clark_Street	63.01	0.009	0.224	0.430
HWY26	91.88	0.039	0.692	3.414
System	77.45	0.048	0.876	3.844

Link Flow Summary

	Maximum Flow	Time of Max Occurrence	Maximum Veloc	Max/ Full	Max/ Full
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Link	Type	CMS	days	hr:min	m/sec	Flow	Depth
C1	CONDUIT	0.112	0	11:54	0.90	0.55	1.00
C1_2	CONDUIT	0.692	0	12:01	1.26	0.19	0.15
C10	CONDUIT	0.310	0	11:54	1.09	0.74	1.00
C11	DUMMY	0.224	0	11:54			
C13	CONDUIT	0.522	0	11:54	1.18	0.89	1.00
C14	CONDUIT	0.024	0	11:53	0.75	0.37	0.88
C15	CONDUIT	0.056	0	11:55	1.10	0.82	1.00
C16	CONDUIT	0.042	0	11:52	0.93	0.47	1.00
C17	CONDUIT	0.080	0	11:55	0.91	0.66	1.00
C18	CONDUIT	0.023	0	11:54	0.66	0.34	0.83
C19	CONDUIT	0.042	0	11:52	1.01	0.61	1.00
C2	CONDUIT	0.187	0	11:54	0.69	0.56	1.00
C20	CONDUIT	0.058	0	11:53	0.92	0.46	1.00
C21	CONDUIT	0.084	0	11:53	0.54	0.41	1.00
C22	CONDUIT	0.074	0	11:54	0.82	0.73	1.00
C22_1	CONDUIT	0.103	0	11:55	0.54	0.23	0.53
C22_4	CONDUIT	0.099	0	11:56	0.72	0.19	0.44
C23	CONDUIT	0.085	0	11:54	0.77	0.90	1.00
C24	CONDUIT	0.101	0	11:54	0.92	1.07	1.00
C25	CONDUIT	0.156	0	11:54	1.46	1.62	1.00
C26	CONDUIT	0.169	0	11:54	1.28	1.05	1.00
C27	CONDUIT	0.194	0	11:54	0.69	0.58	1.00
C28	CONDUIT	0.214	0	11:54	0.76	0.64	1.00
C29	CONDUIT	0.215	0	11:54	0.76	0.60	1.00
C3	CONDUIT	0.185	0	11:54	0.50	0.23	1.00
C5	CONDUIT	0.060	0	11:53	1.01	0.48	0.53
C6	CONDUIT	0.078	0	11:54	1.20	0.63	0.75
C7_1	CONDUIT	0.094	0	11:55	1.02	0.47	0.98
C7_2	CONDUIT	0.117	0	11:54	1.03	0.59	1.00
C8	CONDUIT	0.117	0	11:54	0.74	0.57	1.00
C9	CONDUIT	0.210	0	11:54	1.32	1.05	1.00
C12	DUMMY	0.450	0	12:03			

Flow Classification Summary

Conduit	Adjusted /Actual Length	----- Fraction of Time in Flow Class -----								
		Dry	Up Dry	Down Dry	Sub Crit	Sup Crit	Up Crit	Down Crit	Norm Ltd	Inlet Ctrl
C1	1.00	0.03	0.00	0.00	0.09	0.00	0.00	0.88	0.06	0.00
C1_2	1.00	0.03	0.00	0.00	0.97	0.00	0.00	0.00	0.00	0.00
C10	1.00	0.03	0.00	0.00	0.33	0.00	0.00	0.64	0.01	0.00
C13	1.00	0.03	0.00	0.00	0.39	0.00	0.00	0.58	0.01	0.00
C14	1.00	0.03	0.00	0.00	0.97	0.00	0.00	0.00	0.52	0.00
C15	1.00	0.03	0.00	0.00	0.02	0.00	0.00	0.96	0.00	0.00
C16	1.00	0.03	0.00	0.00	0.97	0.00	0.00	0.00	0.96	0.00
C17	1.00	0.03	0.00	0.00	0.05	0.00	0.00	0.92	0.03	0.00
C18	1.00	0.03	0.00	0.00	0.97	0.00	0.00	0.00	0.96	0.00
C19	1.00	0.03	0.00	0.00	0.02	0.00	0.00	0.95	0.01	0.00
C2	1.00	0.03	0.00	0.00	0.23	0.00	0.00	0.74	0.00	0.00
C20	1.00	0.03	0.00	0.00	0.03	0.00	0.00	0.94	0.01	0.00
C21	1.00	0.03	0.00	0.00	0.28	0.00	0.00	0.69	0.23	0.00
C22	1.00	0.03	0.00	0.00	0.97	0.00	0.00	0.00	0.95	0.00
C22_1	1.00	0.03	0.00	0.00	0.97	0.00	0.00	0.00	0.84	0.00
C22_4	1.00	0.03	0.00	0.00	0.00	0.00	0.00	0.97	0.00	0.00
C23	1.00	0.03	0.00	0.00	0.97	0.00	0.00	0.00	0.68	0.00
C24	1.00	0.03	0.00	0.00	0.97	0.00	0.00	0.00	0.96	0.00
C25	1.00	0.03	0.00	0.00	0.01	0.00	0.00	0.96	0.00	0.00
C26	1.00	0.03	0.00	0.00	0.02	0.00	0.00	0.95	0.01	0.00
C27	1.00	0.03	0.00	0.00	0.97	0.00	0.00	0.00	0.65	0.00
C28	1.00	0.03	0.00	0.00	0.97	0.00	0.00	0.00	0.56	0.00
C29	1.00	0.03	0.00	0.00	0.31	0.00	0.00	0.66	0.02	0.00
C3	1.00	0.03	0.00	0.00	0.40	0.00	0.00	0.57	0.07	0.00
C5	1.00	0.03	0.00	0.00	0.97	0.00	0.00	0.00	0.96	0.00
C6	1.00	0.03	0.00	0.00	0.01	0.00	0.00	0.96	0.01	0.00
C7_1	1.00	0.03	0.00	0.00	0.97	0.00	0.00	0.00	0.95	0.00
C7_2	1.00	0.03	0.00	0.00	0.97	0.00	0.00	0.00	0.14	0.00
C8	1.00	0.03	0.02	0.00	0.95	0.00	0.00	0.00	0.93	0.00
C9	1.00	0.03	0.00	0.00	0.28	0.00	0.00	0.69	0.15	0.00

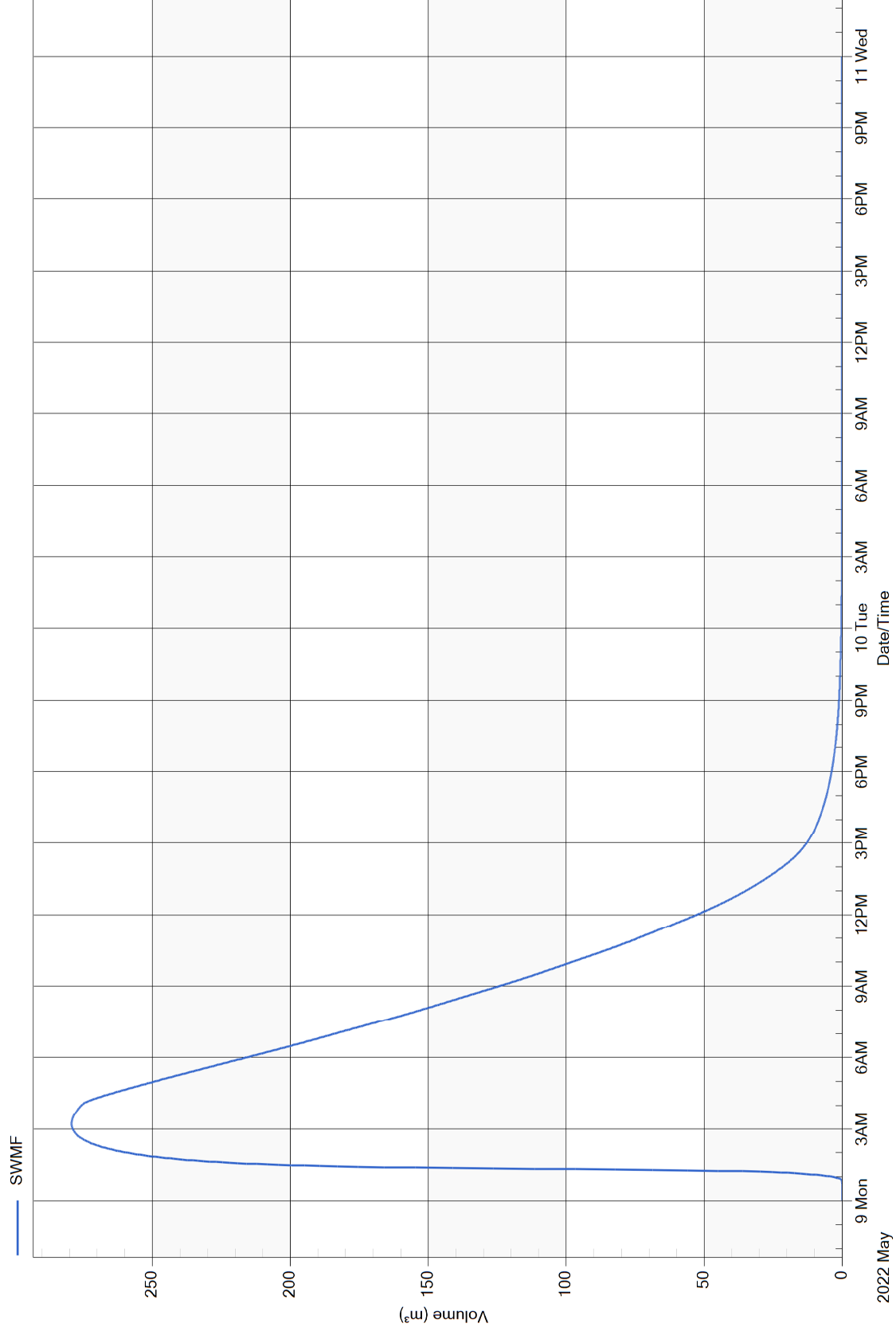
Conduit Surcharge Summary

Conduit	----- Both Ends	Hours Full Upstream	----- Dnstream	Hours Above Full Normal Flow	Hours Capacity Limited
C1	0.26	0.26	0.49	0.01	0.01
C10	0.61	0.61	0.70	0.01	0.01
C13	0.58	0.58	0.64	0.01	0.01
C14	0.01	0.01	0.11	0.01	0.01
C15	0.19	0.19	0.31	0.01	0.01
C16	0.11	0.11	0.20	0.01	0.01
C17	0.32	0.32	0.57	0.01	0.01
C18	0.01	0.01	0.09	0.01	0.01
C19	0.09	0.09	0.29	0.01	0.01
C2	0.36	0.36	0.37	0.01	0.01
C20	0.30	0.30	0.43	0.01	0.01
C21	0.42	0.42	0.79	0.01	0.01
C22	0.05	0.05	0.07	0.01	0.01
C23	0.07	0.07	0.14	0.01	0.01
C24	0.14	0.14	0.15	0.02	0.01
C25	0.11	0.15	0.13	0.19	0.09
C26	0.12	0.12	0.22	0.02	0.01
C27	0.22	0.22	0.38	0.01	0.01
C28	0.38	0.38	0.48	0.01	0.01
C29	0.48	0.48	0.58	0.01	0.01
C3	0.37	0.37	0.64	0.01	0.01
C7_1	0.01	0.01	0.20	0.01	0.01
C7_2	0.20	0.20	0.41	0.01	0.01
C8	0.41	0.41	0.58	0.01	0.01
C9	0.58	0.58	0.79	0.03	0.03

Analysis begun on: Wed Dec 13 10:55:17 2023
 Analysis ended on: Wed Dec 13 10:55:18 2023
 Total elapsed time: 00:00:01

SWMF Drawdown Curve

25 mm Storm Event



Post Development - 5 yr 24hr SCS Type II - PCSWMM Results

EPA STORM WATER MANAGEMENT MODEL - VERSION 5.2 (Build 5.2.4)

Element Count

Number of rain gages 14
Number of subcatchments ... 27
Number of nodes 34
Number of links 32
Number of pollutants 0
Number of land uses 0

Raingage Summary

Name	Data Source	Data Type	Recording Interval
25mm	25mm	INTENSITY	10 min.
Chicago_4h_100Yr	Chicago_4h_100Yr	INTENSITY	5 min.
Chicago_4h_10Yr	Chicago_4h_10Yr	INTENSITY	5 min.
Chicago_4h_25Yr	Chicago_4h_25Yr	INTENSITY	5 min.
Chicago_4h_2Yr	Chicago_4h_2Yr	INTENSITY	5 min.
Chicago_4h_50Yr	Chicago_4h_50Yr	INTENSITY	5 min.
Chicago_4h_5yr	Chicago_4h_5yr	INTENSITY	5 min.
SCS_Type_II_108.79mm_25Yr	SCS_Type_II_108.79mm_25Yr	INTENSITY	6 min.
SCS_Type_II_121.11mm_50Yr	SCS_Type_II_121.11mm_50Yr	INTENSITY	6 min.
SCS_Type_II_133.1mm_100yr	SCS_Type_II_133.1mm_100yr	INTENSITY	6 min.
SCS_Type_II_59.84mm_2Yr	SCS_Type_II_59.84mm_2Yr	INTENSITY	6 min.
SCS_Type_II_79.64mm_5Yr	SCS_Type_II_79.64mm_5Yr	INTENSITY	6 min.
SCS_Type_II_92.51mm_10Yr	SCS_Type_II_92.51mm_10Yr	INTENSITY	6 min.
Timmins_Storm_(0-25)	Timmins_Storm_(0-25)	INTENSITY	60 min.

Subcatchment Summary

Name	Area	Width	%Imperv	%Slope	Rain Gage	Outlet
A1	0.53	401.59	1.50	2.0000	25mm	J11
A10	0.03	16.08	100.00	1.0000	25mm	DCBMH22
A11	0.05	35.13	100.00	1.0000	25mm	DCB13
A12	0.04	28.62	100.00	1.0000	25mm	DCBMH14
A13	0.03	23.40	100.00	1.0000	25mm	DCBMH15
A14	0.05	28.33	100.00	1.0000	25mm	DCBMH16
A15	0.05	26.70	100.00	1.0000	25mm	DCB09
A16	0.04	27.53	100.00	1.0000	25mm	DCBMH10
A17	0.03	24.00	100.00	1.0000	25mm	DCBMH11
A18	0.05	27.08	100.00	1.0000	25mm	DCBMH12
A19	0.04	24.40	100.00	1.0000	25mm	DCBMH23
A2	1.34	190.64	4.00	1.0000	25mm	J7
A20	0.21	136.66	75.00	1.0000	25mm	J2
A21	0.17	25.46	18.00	2.0000	25mm	SWMF
A22	0.15	20.00	100.00	1.0000	25mm	DCB01
A23	0.02	16.00	80.00	2.0000	25mm	DCBMH02
A24	0.03	12.00	100.00	2.0000	25mm	DCBMH03
A25	0.04	10.00	100.00	1.0000	25mm	DCBMH05
A26	0.05	10.00	100.00	1.0000	25mm	DCBMH06
A27	0.04	10.00	100.00	1.0000	25mm	DCBMH07
A3	0.23	39.72	95.00	1.0000	25mm	DCBMH24
A4	0.16	51.73	95.00	1.0000	25mm	DCBMH25
A5	0.11	43.98	100.00	1.0000	25mm	DCBMH04
A6	0.12	40.62	100.00	1.0000	25mm	DCB17
A7	0.04	19.00	100.00	1.0000	25mm	DCBMH18
A8	0.04	24.30	100.00	1.0000	25mm	DCBMH19
A9	0.05	15.48	100.00	1.0000	25mm	DCBMH20

Node Summary

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
DCB01	JUNCTION	185.43	1.41	0.0	
DCB09	JUNCTION	185.35	1.41	0.0	
DCB13	JUNCTION	185.43	1.43	0.0	
DCB17	JUNCTION	185.54	1.68	0.0	

DCBMH02	JUNCTION	185.39	1.17	0.0
DCBMH03	JUNCTION	185.29	1.56	0.0
DCBMH04	JUNCTION	185.24	1.40	0.0
DCBMH05	JUNCTION	185.09	1.64	0.0
DCBMH06	JUNCTION	184.84	1.88	0.0
DCBMH07	JUNCTION	184.74	2.00	0.0
DCBMH10	JUNCTION	185.21	1.24	0.0
DCBMH11	JUNCTION	185.02	1.23	0.0
DCBMH12	JUNCTION	184.87	1.25	0.0
DCBMH14	JUNCTION	185.30	1.24	0.0
DCBMH15	JUNCTION	185.19	1.11	0.0
DCBMH16	JUNCTION	185.03	1.09	0.0
DCBMH18	JUNCTION	185.41	1.35	0.0
DCBMH19	JUNCTION	185.17	1.55	0.0
DCBMH20	JUNCTION	185.03	1.61	0.0
DCBMH22	JUNCTION	184.79	1.15	0.0
DCBMH23	JUNCTION	184.62	1.29	0.0
DCBMH24	JUNCTION	184.96	1.20	0.0
DCBMH25	JUNCTION	184.74	1.22	0.0
J11	JUNCTION	185.76	0.24	0.0
J12	JUNCTION	186.00	0.40	0.0
J2	JUNCTION	186.50	0.41	0.0
J7	JUNCTION	182.52	2.08	0.0
MH08	JUNCTION	184.68	2.20	0.0
MH21	JUNCTION	184.89	1.68	0.0
OGS1	JUNCTION	184.48	1.42	0.0
OGS2	JUNCTION	184.58	1.44	0.0
Clark_Street	UTFALL	185.75	0.00	0.0
HWY26	UTFALL	182.51	1.52	0.0
SWMF	STORAGE	184.00	1.90	0.0

Link Summary

Name	From Node	To Node	Type	Length	%Slope	Roughness
C1	DCBMH24	DCBMH25	CONDUIT	27.3	0.5124	0.0130
C1_2	J7	HWY26	CONDUIT	21.6	0.0464	0.0130
C10	DCBMH23	OGS1	CONDUIT	8.7	0.4584	0.0130
C11	J11	Clark_Street	CONDUIT	5.8	0.1718	0.0100

C13	OGS1	SWMF	CONDUIT	10.9	0.2750	0.0130
C14	DCB13	DCBMH14	CONDUIT	27.8	0.4678	0.0130
C15	DCBMH15	DCBMH16	CONDUIT	15.9	0.5017	0.0130
C16	DCBMH14	DCBMH15	CONDUIT	22.1	0.4970	0.0100
C17	DCBMH16	DCBMH22	CONDUIT	33.1	0.4835	0.0130
C18	DCB09	DCBMH10	CONDUIT	28.2	0.4966	0.0130
C19	DCBMH10	DCBMH11	CONDUIT	21.9	0.5013	0.0130
C2	DCBMH25	OGS2	CONDUIT	3.4	0.2962	0.0130
C20	DCBMH11	DCBMH12	CONDUIT	15.9	0.5038	0.0130
C21	DCBMH12	DCBMH23	CONDUIT	33.2	0.5114	0.0130
C22	DCB01	DCBMH02	CONDUIT	12.1	0.3314	0.0130
C22_1	J2	J12	CONDUIT	115.2	0.4339	0.0300
C22_4	J12	SWMF	CONDUIT	16.6	0.6035	0.0300
C23	DCBMH02	DCBMH03	CONDUIT	34.1	0.2934	0.0130
C24	DCBMH03	DCBMH04	CONDUIT	17.4	0.2881	0.0130
C25	DCBMH04	DCBMH05	CONDUIT	26.4	0.3035	0.0130
C26	DCBMH05	DCBMH06	CONDUIT	31.4	0.3185	0.0130
C27	DCBMH06	DCBMH07	CONDUIT	34.2	0.2927	0.0130
C28	DCBMH07	MH08	CONDUIT	20.3	0.2954	0.0130
C29	MH08	OGS1	CONDUIT	14.8	0.3376	0.0130
C3	OGS2	SWMF	CONDUIT	25.5	0.5103	0.0130
C5	DCB17	DCBMH18	CONDUIT	25.8	0.5033	0.0130
C6	DCBMH18	DCBMH19	CONDUIT	32.0	0.4995	0.0130
C7_1	DCBMH19	DCBMH20	CONDUIT	28.9	0.4850	0.0130
C7_2	DCBMH20	MH21	CONDUIT	29.0	0.4831	0.0130
C8	MH21	DCBMH22	CONDUIT	19.3	0.5194	0.0130
C9	DCBMH22	DCBMH23	CONDUIT	18.1	0.4970	0.0130
C12	SWMF	J7	OUTLET			

Cross Section Summary

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C1	CIRCULAR	0.45	0.16	0.11	0.45	1	0.20
C1_2	RECT_CLOSED	1.52	3.71	0.47	2.44	1	3.71
C10	CIRCULAR	0.60	0.28	0.15	0.60	1	0.42
C11	DUMMY	0.00	0.00	0.00	0.00	1	0.00
C13	CIRCULAR	0.75	0.44	0.19	0.75	1	0.58

C14	CIRCULAR	0.30	0.07	0.07	0.30	1	0.07
C15	CIRCULAR	0.30	0.07	0.07	0.30	1	0.07
C16	CIRCULAR	0.30	0.07	0.07	0.30	1	0.09
C17	CIRCULAR	0.38	0.11	0.09	0.38	1	0.12
C18	CIRCULAR	0.30	0.07	0.07	0.30	1	0.07
C19	CIRCULAR	0.30	0.07	0.07	0.30	1	0.07
C2	CIRCULAR	0.60	0.28	0.15	0.60	1	0.33
C20	CIRCULAR	0.38	0.11	0.09	0.38	1	0.12
C21	CIRCULAR	0.45	0.16	0.11	0.45	1	0.20
C22	CIRCULAR	0.38	0.11	0.09	0.38	1	0.10
C22_1	TRAPEZOIDAL	0.40	0.58	0.21	2.65	1	0.45
C22_4	TRAPEZOIDAL	0.40	0.58	0.21	2.65	1	0.53
C23	CIRCULAR	0.38	0.11	0.09	0.38	1	0.09
C24	CIRCULAR	0.38	0.11	0.09	0.38	1	0.09
C25	CIRCULAR	0.38	0.11	0.09	0.38	1	0.10
C26	CIRCULAR	0.45	0.16	0.11	0.45	1	0.16
C27	CIRCULAR	0.60	0.28	0.15	0.60	1	0.33
C28	CIRCULAR	0.60	0.28	0.15	0.60	1	0.33
C29	CIRCULAR	0.60	0.28	0.15	0.60	1	0.36
C3	CIRCULAR	0.75	0.44	0.19	0.75	1	0.80
C5	CIRCULAR	0.38	0.11	0.09	0.38	1	0.12
C6	CIRCULAR	0.38	0.11	0.09	0.38	1	0.12
C7_1	CIRCULAR	0.45	0.16	0.11	0.45	1	0.20
C7_2	CIRCULAR	0.45	0.16	0.11	0.45	1	0.20
C8	CIRCULAR	0.45	0.16	0.11	0.45	1	0.21
C9	CIRCULAR	0.45	0.16	0.11	0.45	1	0.20

Analysis Options

Flow Units CMS

Process Models:

Rainfall/Runoff YES

RDII NO

Snowmelt NO

Groundwater NO

Flow Routing YES

Ponding Allowed YES

Water Quality NO

Infiltration Method GREEN_AMPT

Flow Routing Method DYNWAVE
 Surcharge Method EXTRAN
 Starting Date 05/09/2022 00:00:00
 Ending Date 05/11/2022 00:00:00
 Antecedent Dry Days 0.0
 Report Time Step 00:01:00
 Wet Time Step 00:05:00
 Dry Time Step 00:05:00
 Routing Time Step 5.00 sec
 Variable Time Step YES
 Maximum Trials 8
 Number of Threads 4
 Head Tolerance 0.001500 m

*****	Volume	Depth
Runoff Quantity Continuity	hectare-m	mm
*****	-----	-----
Total Precipitation	0.094	25.005
Evaporation Loss	0.000	0.000
Infiltration Loss	0.049	13.204
Surface Runoff	0.041	10.997
Final Storage	0.003	0.917
Continuity Error (%)	-0.453	

*****	Volume	Volume
Flow Routing Continuity	hectare-m	10^6 ltr
*****	-----	-----
Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	0.041	0.412
Groundwater Inflow	0.000	0.000
RDII Inflow	0.000	0.000
External Inflow	0.000	0.000
External Outflow	0.041	0.412
Flooding Loss	0.000	0.000
Evaporation Loss	0.000	0.000
Exfiltration Loss	0.000	0.000
Initial Stored Volume	0.000	0.000
Final Stored Volume	0.000	0.000
Continuity Error (%)	-0.017	

Time-Step Critical Elements

Link C2 (13.21%)

Highest Flow Instability Indexes

All links are stable.

Most Frequent Nonconverging Nodes

Convergence obtained at all time steps.

Routing Time Step Summary

Minimum Time Step	:	1.23 sec
Average Time Step	:	4.68 sec
Maximum Time Step	:	5.00 sec
% of Time in Steady State	:	0.00
Average Iterations per Step	:	2.00
% of Steps Not Converging	:	0.00
Time Step Frequencies	:	
5.000 - 3.155 sec	:	90.49 %
3.155 - 1.991 sec	:	6.49 %
1.991 - 1.256 sec	:	2.58 %
1.256 - 0.792 sec	:	0.43 %
0.792 - 0.500 sec	:	0.00 %

Subcatchment Runoff Summary

Subcatchment	Total Precip mm	Total Runon mm	Total Evap mm	Total Infil mm	Imperv Runoff mm	Perv Runoff mm	Total Runoff mm	Total Runoff 10^6 ltr	Peak Runoff CMS	Runoff Coeff
A1	25.01	0.00	0.00	22.62	0.35	2.03	2.38	0.01	0.00	0.095
A10	25.00	0.00	0.00	0.00	23.21	0.00	23.21	0.01	0.00	0.928
A11	25.01	0.00	0.00	0.00	23.19	0.00	23.19	0.01	0.01	0.927
A12	25.00	0.00	0.00	0.00	23.19	0.00	23.19	0.01	0.01	0.927
A13	25.01	0.00	0.00	0.00	23.19	0.00	23.19	0.01	0.01	0.927
A14	25.00	0.00	0.00	0.00	23.22	0.00	23.22	0.01	0.01	0.928
A15	25.01	0.00	0.00	0.00	23.21	0.00	23.21	0.01	0.01	0.928
A16	25.00	0.00	0.00	0.00	23.20	0.00	23.20	0.01	0.01	0.928
A17	25.00	0.00	0.00	0.00	23.19	0.00	23.19	0.01	0.01	0.927
A18	25.01	0.00	0.00	0.00	23.22	0.00	23.22	0.01	0.01	0.929
A19	25.01	0.00	0.00	0.00	23.21	0.00	23.21	0.01	0.01	0.928
A2	25.00	0.00	0.00	24.50	0.92	0.43	0.43	0.01	0.00	0.017
A20	25.01	0.00	0.00	4.74	17.38	1.64	19.01	0.04	0.03	0.760
A21	25.00	0.00	0.00	18.30	4.17	2.24	6.40	0.01	0.01	0.256
A22	25.01	0.00	0.00	0.00	23.23	0.00	23.23	0.03	0.02	0.929
A23	25.00	0.00	0.00	3.78	18.50	1.35	19.85	0.00	0.00	0.794
A24	25.00	0.00	0.00	0.00	23.21	0.00	23.21	0.01	0.00	0.928
A25	25.01	0.00	0.00	0.00	23.25	0.00	23.25	0.01	0.01	0.930
A26	25.00	0.00	0.00	0.00	23.25	0.00	23.25	0.01	0.01	0.930
A27	25.01	0.00	0.00	0.00	23.25	0.00	23.25	0.01	0.01	0.930
A3	25.00	0.00	0.00	0.95	22.08	0.33	22.42	0.05	0.04	0.896
A4	25.00	0.00	0.00	0.94	22.08	0.34	22.42	0.03	0.02	0.897
A5	25.01	0.00	0.00	0.00	23.24	0.00	23.24	0.03	0.02	0.929
A6	25.00	0.00	0.00	0.00	23.25	0.00	23.25	0.03	0.02	0.930
A7	25.00	0.00	0.00	0.00	23.22	0.00	23.22	0.01	0.01	0.928
A8	25.01	0.00	0.00	0.00	23.21	0.00	23.21	0.01	0.01	0.928
A9	25.00	0.00	0.00	0.00	23.25	0.00	23.25	0.01	0.01	0.930

Node Depth Summary

Average Depth	Maximum Depth	Maximum HGL	Time of Max Occurrence	Reported Max Depth
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Node	Type	Meters	Meters	Meters	days	hr:min	Meters
DCB01	JUNCTION	0.01	0.12	185.55	0	01:20	0.12
DCB09	JUNCTION	0.00	0.07	185.42	0	01:20	0.07
DCB13	JUNCTION	0.00	0.07	185.50	0	01:20	0.07
DCB17	JUNCTION	0.00	0.10	185.64	0	01:20	0.10
DCBMH02	JUNCTION	0.01	0.13	185.52	0	01:20	0.13
DCBMH03	JUNCTION	0.01	0.15	185.44	0	01:20	0.15
DCBMH04	JUNCTION	0.01	0.18	185.42	0	01:20	0.18
DCBMH05	JUNCTION	0.01	0.18	185.27	0	01:20	0.17
DCBMH06	JUNCTION	0.01	0.17	185.01	0	01:20	0.17
DCBMH07	JUNCTION	0.01	0.18	184.92	0	01:20	0.18
DCBMH10	JUNCTION	0.00	0.09	185.30	0	01:20	0.09
DCBMH11	JUNCTION	0.01	0.10	185.12	0	01:20	0.10
DCBMH12	JUNCTION	0.01	0.11	184.98	0	01:20	0.11
DCBMH14	JUNCTION	0.00	0.08	185.38	0	01:20	0.08
DCBMH15	JUNCTION	0.01	0.11	185.30	0	01:20	0.11
DCBMH16	JUNCTION	0.01	0.12	185.15	0	01:20	0.12
DCBMH18	JUNCTION	0.01	0.11	185.52	0	01:20	0.11
DCBMH19	JUNCTION	0.01	0.12	185.29	0	01:20	0.12
DCBMH20	JUNCTION	0.01	0.14	185.17	0	01:20	0.14
DCBMH22	JUNCTION	0.01	0.18	184.97	0	01:20	0.18
DCBMH23	JUNCTION	0.02	0.21	184.83	0	01:20	0.21
DCBMH24	JUNCTION	0.01	0.13	185.09	0	01:20	0.13
DCBMH25	JUNCTION	0.01	0.16	184.90	0	01:20	0.16
J11	JUNCTION	0.00	0.00	185.76	0	00:00	0.00
J12	JUNCTION	0.01	0.12	186.12	0	01:22	0.12
J2	JUNCTION	0.01	0.13	186.63	0	01:20	0.13
J7	JUNCTION	0.01	0.03	182.55	0	02:28	0.03
MH08	JUNCTION	0.01	0.17	184.85	0	01:20	0.17
MH21	JUNCTION	0.01	0.13	185.02	0	01:20	0.13
OGS1	JUNCTION	0.04	0.30	184.78	0	03:12	0.30
OGS2	JUNCTION	0.02	0.20	184.78	0	03:13	0.20
Clark_Street	OUTFALL	0.00	0.00	185.75	0	00:00	0.00
HWY26	OUTFALL	0.00	0.01	182.52	0	02:28	0.01
SWMF	STORAGE	0.17	0.78	184.78	0	03:12	0.78

Node Inflow Summary

Node	Type	Maximum Lateral Inflow CMS	Maximum Total Inflow CMS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 ltr	Total Inflow Volume 10^6 ltr	Flow Balance Error Percent
DCB01	JUNCTION	0.022	0.022	0 01:20	0.0342	0.0342	-0.001
DCB09	JUNCTION	0.007	0.007	0 01:20	0.0105	0.0105	-0.021
DCB13	JUNCTION	0.008	0.008	0 01:20	0.0112	0.0112	-0.009
DCB17	JUNCTION	0.019	0.019	0 01:20	0.0277	0.0277	-0.011
DCBMH02	JUNCTION	0.003	0.025	0 01:20	0.00415	0.0383	-0.004
DCBMH03	JUNCTION	0.005	0.030	0 01:20	0.00708	0.0454	0.010
DCBMH04	JUNCTION	0.017	0.047	0 01:20	0.0251	0.0706	-0.010
DCBMH05	JUNCTION	0.007	0.053	0 01:20	0.00963	0.0802	-0.004
DCBMH06	JUNCTION	0.008	0.060	0 01:20	0.0113	0.0915	0.002
DCBMH07	JUNCTION	0.007	0.067	0 01:20	0.0104	0.102	-0.026
DCBMH10	JUNCTION	0.007	0.014	0 01:20	0.00969	0.0202	0.008
DCBMH11	JUNCTION	0.005	0.019	0 01:20	0.0076	0.0278	0.001
DCBMH12	JUNCTION	0.009	0.028	0 01:20	0.0123	0.0401	0.450
DCBMH14	JUNCTION	0.007	0.014	0 01:20	0.00937	0.0205	0.002
DCBMH15	JUNCTION	0.005	0.020	0 01:20	0.00753	0.0281	0.002
DCBMH16	JUNCTION	0.009	0.028	0 01:20	0.0123	0.0404	-0.004
DCBMH18	JUNCTION	0.006	0.025	0 01:20	0.00819	0.0359	0.003
DCBMH19	JUNCTION	0.007	0.031	0 01:20	0.00996	0.0458	0.001
DCBMH20	JUNCTION	0.008	0.039	0 01:20	0.0116	0.0575	-0.003
DCBMH22	JUNCTION	0.004	0.071	0 01:20	0.00619	0.104	0.062
DCBMH23	JUNCTION	0.007	0.106	0 01:20	0.00998	0.154	-0.109
DCBMH24	JUNCTION	0.035	0.035	0 01:20	0.0516	0.0516	-0.010
DCBMH25	JUNCTION	0.025	0.060	0 01:20	0.0348	0.0864	0.005
J11	JUNCTION	0.004	0.004	0 01:30	0.0126	0.0126	0.000
J12	JUNCTION	0.000	0.030	0 01:20	0	0.0402	0.965
J2	JUNCTION	0.030	0.030	0 01:20	0.0399	0.0399	-0.955
J7	JUNCTION	0.001	0.011	0 02:27	0.00577	0.399	-0.000
MH08	JUNCTION	0.000	0.067	0 01:20	0	0.102	0.133
MH21	JUNCTION	0.000	0.039	0 01:20	0	0.0575	0.010
OGS1	JUNCTION	0.000	0.172	0 01:20	0	0.256	0.045
OGS2	JUNCTION	0.000	0.060	0 01:20	0	0.0864	0.369
Clark_Street	OUTFALL	0.000	0.004	0 01:30	0	0.0126	0.000
HWY26	OUTFALL	0.000	0.011	0 02:28	0	0.399	0.000
SWMF	STORAGE	0.006	0.260	0 01:20	0.0112	0.393	-0.173

Node Surcharge Summary

Surcharging occurs when water rises above the top of the highest conduit.

Node	Type	Hours Surcharged	Max. Height Above Crown Meters	Min. Depth Below Rim Meters
J11	JUNCTION	48.00	0.000	0.240

Node Flooding Summary

No nodes were flooded.

Storage Volume Summary

Storage Unit	Average Volume 1000 m ³	Avg Pcnt Full	Evap Pcnt Loss	Exfil Pcnt Loss	Maximum Volume 1000 m ³	Max Pcnt Full	Time of Max Occurrence days hr:min	Maximum Outflow CMS
SWMF	0.053	4.5	0.0	0.0	0.279	23.4	0 03:12	0.011

Outfall Loading Summary

Flow Freq	Avg Flow	Max Flow	Total Volume
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Outfall Node	Pcnt	CMS	CMS	10^6 ltr
Clark_Street	12.58	0.001	0.004	0.013
HWY26	52.83	0.005	0.011	0.399
System	32.70	0.007	0.015	0.412

Link Flow Summary

Link	Type	Maximum Flow CMS	Time of Max Occurrence days hr:min	Maximum Veloc m/sec	Max/ Full Flow	Max/ Full Depth
C1	CONDUIT	0.035	0 01:20	0.96	0.17	0.28
C1_2	CONDUIT	0.011	0 02:28	0.21	0.00	0.01
C10	CONDUIT	0.106	0 01:20	1.23	0.25	0.34
C11	DUMMY	0.004	0 01:30			
C13	CONDUIT	0.172	0 01:20	1.30	0.29	0.42
C14	CONDUIT	0.008	0 01:20	0.56	0.12	0.25
C15	CONDUIT	0.020	0 01:20	0.86	0.28	0.36
C16	CONDUIT	0.014	0 01:20	0.74	0.16	0.32
C17	CONDUIT	0.028	0 01:20	0.91	0.23	0.32
C18	CONDUIT	0.007	0 01:20	0.49	0.11	0.26
C19	CONDUIT	0.014	0 01:20	0.78	0.20	0.30
C2	CONDUIT	0.060	0 01:20	1.02	0.18	0.26
C20	CONDUIT	0.019	0 01:20	0.83	0.16	0.26
C21	CONDUIT	0.028	0 01:20	0.86	0.14	0.27
C22	CONDUIT	0.022	0 01:20	0.68	0.22	0.34
C22_1	CONDUIT	0.030	0 01:20	0.39	0.07	0.31
C22_4	CONDUIT	0.027	0 01:22	0.50	0.05	0.25
C23	CONDUIT	0.025	0 01:20	0.65	0.27	0.38
C24	CONDUIT	0.030	0 01:20	0.63	0.32	0.44
C25	CONDUIT	0.047	0 01:20	0.98	0.48	0.45
C26	CONDUIT	0.053	0 01:20	0.99	0.33	0.37
C27	CONDUIT	0.060	0 01:20	0.87	0.18	0.29
C28	CONDUIT	0.067	0 01:20	0.97	0.20	0.29
C29	CONDUIT	0.067	0 01:21	1.04	0.19	0.28

C3	CONDUIT	0.059	0	01:20	1.06	0.07	0.35
C5	CONDUIT	0.019	0	01:20	0.74	0.15	0.28
C6	CONDUIT	0.025	0	01:20	0.88	0.20	0.30
C7_1	CONDUIT	0.031	0	01:20	0.84	0.16	0.29
C7_2	CONDUIT	0.039	0	01:20	0.99	0.20	0.30
C8	CONDUIT	0.039	0	01:20	0.78	0.19	0.35
C9	CONDUIT	0.071	0	01:20	1.16	0.36	0.41
C12	DUMMY	0.011	0	03:12			

Flow Classification Summary

Conduit	Adjusted /Actual Length	Fraction of Time in Flow Class								
		Up Dry	Up Dry	Down Dry	Sub Crit	Sup Crit	Up Crit	Down Crit	Norm Ltd	Inlet Ctrl
C1	1.00	0.02	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00
C1_2	1.00	0.10	0.00	0.00	0.90	0.00	0.00	0.00	0.00	0.00
C10	1.00	0.02	0.00	0.00	0.11	0.00	0.00	0.87	0.01	0.00
C13	1.00	0.02	0.00	0.00	0.16	0.00	0.00	0.83	0.01	0.00
C14	1.00	0.02	0.00	0.00	0.98	0.00	0.00	0.00	0.12	0.00
C15	1.00	0.02	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00
C16	1.00	0.02	0.01	0.00	0.97	0.00	0.00	0.00	0.98	0.00
C17	1.00	0.02	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00
C18	1.00	0.02	0.01	0.00	0.98	0.00	0.00	0.00	0.98	0.00
C19	1.00	0.02	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00
C2	1.00	0.02	0.00	0.00	0.05	0.00	0.00	0.93	0.00	0.00
C20	1.00	0.02	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00
C21	1.00	0.02	0.00	0.00	0.07	0.00	0.00	0.91	0.07	0.00
C22	1.00	0.02	0.00	0.00	0.98	0.00	0.00	0.00	0.97	0.00
C22_1	1.00	0.02	0.00	0.00	0.98	0.00	0.00	0.00	0.86	0.00
C22_4	1.00	0.02	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00
C23	1.00	0.02	0.00	0.00	0.98	0.00	0.00	0.00	0.29	0.00
C24	1.00	0.02	0.02	0.00	0.96	0.00	0.00	0.00	0.98	0.00
C25	1.00	0.02	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00
C26	1.00	0.02	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00
C27	1.00	0.02	0.00	0.00	0.98	0.00	0.00	0.00	0.31	0.00
C28	1.00	0.02	0.02	0.00	0.97	0.00	0.00	0.00	0.92	0.00

C29	1.00	0.02	0.00	0.00	0.10	0.00	0.00	0.89	0.02	0.00
C3	1.00	0.02	0.00	0.00	0.16	0.00	0.00	0.83	0.04	0.00
C5	1.00	0.02	0.00	0.00	0.98	0.00	0.00	0.00	0.98	0.00
C6	1.00	0.02	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00
C7_1	1.00	0.02	0.00	0.00	0.98	0.00	0.00	0.00	0.98	0.00
C7_2	1.00	0.02	0.00	0.00	0.98	0.00	0.00	0.00	0.13	0.00
C8	1.00	0.02	0.07	0.00	0.92	0.00	0.00	0.00	0.98	0.00
C9	1.00	0.02	0.00	0.00	0.07	0.00	0.00	0.92	0.07	0.00

 Conduit Surcharge Summary

No conduits were surcharged.

Analysis begun on: Wed Dec 13 11:16:46 2023
 Analysis ended on: Wed Dec 13 11:16:47 2023
 Total elapsed time: 00:00:01

Profile 1 DCB17 to Hwy 26 Outlet

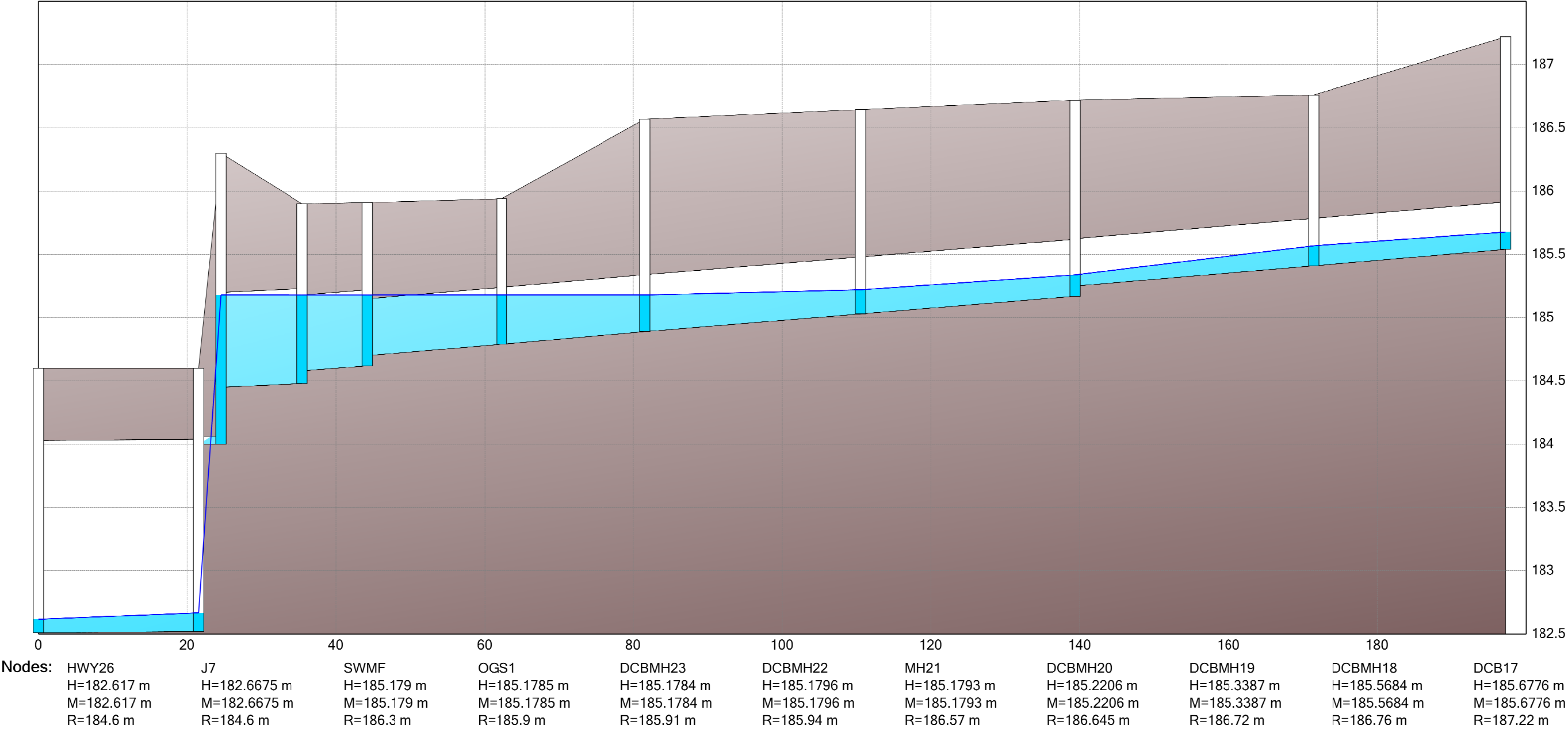
5yr SCS Storm

HGL

Peak values

Links:

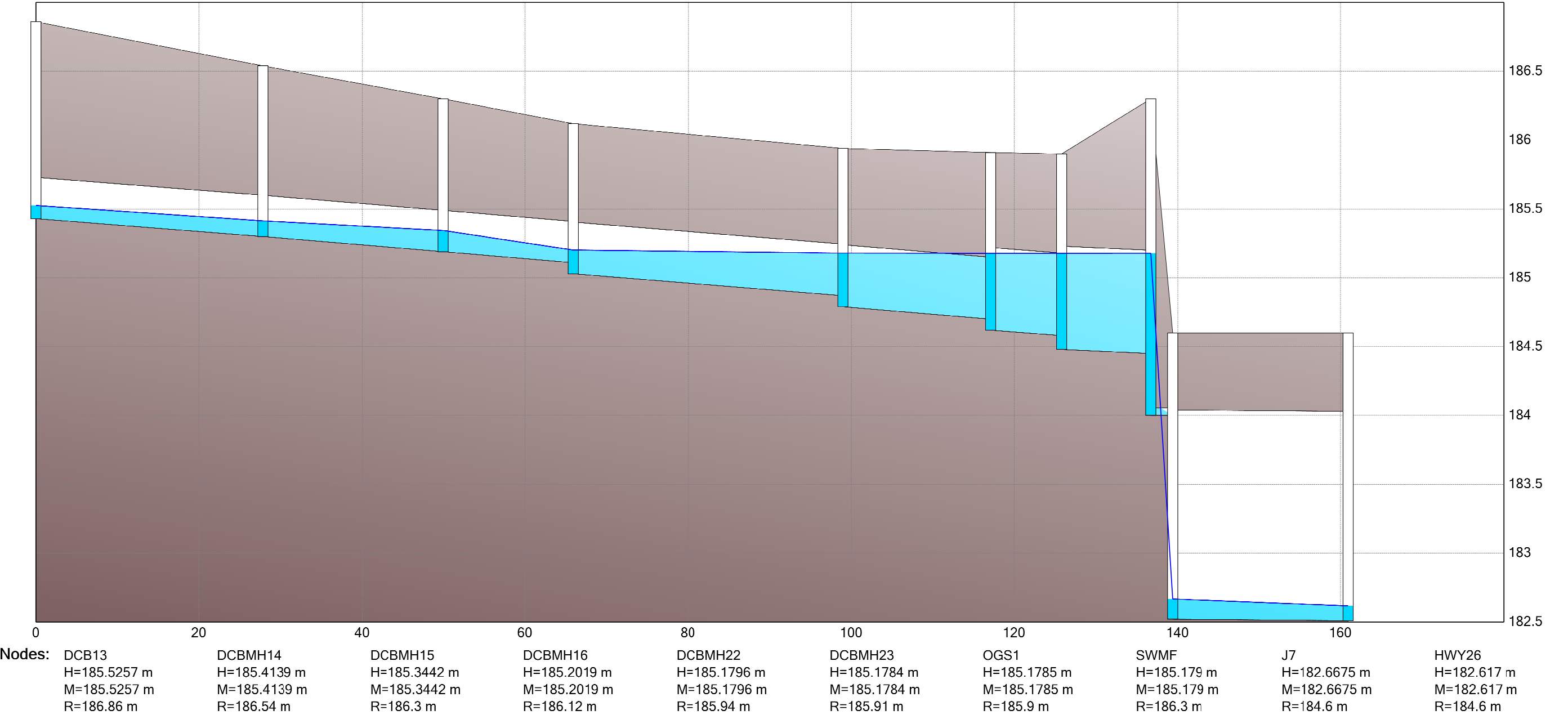
C1_2	C12	C13	C10	C9	C8	C7_2	C7_1	C6	C5
Q=0.268 m³/s	Q=0.187 m³/s	Q=0.296 m³/s	Q=0.187 m³/s	Q=0.131 m³/s	Q=0.073 m³/s	Q=0.073 m³/s	Q=0.059 m³/s	Q=0.046 m³/s	Q=0.036 m³/s
L=21.555 m		L=10.911 m	L=8.727 m	L=18.108 m	L=19.254 m	L=28.98 m	L=28.865 m	L=32.03 m	L=25.828 m
D=1.52 m		D=0.75 m	D=0.6 m	D=0.45 m	D=0.45 m	D=0.45 m	D=0.45 m	D=0.375 m	D=0.375 m
V=0.862 m/s	V=0 m/s	V=1.02 m/s	V=1.202 m/s	V=1.303 m/s	V=0.864 m/s	V=1.124 m/s	V=0.994 m/s	V=1.054 m/s	V=0.883 m/s
S=0.00046 m/m		S=0.00275 m/m	S=0.00458 m/m	S=0.00497 m/m	S=0.00519 m/m	S=0.00483 m/m	S=0.00485 m/m	S=0.005 m/m	S=0.00503 m/m



Profile 2 DCB13 to Hwy 26 Outlet

5yr SCS Storm

— HGL									Peak values
Links:	C14	C16	C15	C17	C9	C10	C13	C12	C1_2
	Q=0.015 m³/s	Q=0.027 m³/s	Q=0.037 m³/s	Q=0.052 m³/s	Q=0.131 m³/s	Q=0.187 m³/s	Q=0.296 m³/s	Q=0.187 m³/s	Q=0.268 m³/s
	L=27.79 m	L=22.135 m	L=15.947 m	L=33.094 m	L=18.108 m	L=8.727 m	L=10.911 m		L=21.555 m
	D=0.3 m	D=0.3 m	D=0.3 m	D=0.375 m	D=0.45 m	D=0.6 m	D=0.75 m		D=1.52 m
	V=0.662 m/s	V=0.878 m/s	V=1.03 m/s	V=1.029 m/s	V=1.303 m/s	V=1.202 m/s	V=1.02 m/s	V=0 m/s	V=0.862 m/s
	S=0.00468 m/m	S=0.00497 m/m	S=0.00502 m/m	S=0.00483 m/m	S=0.00497 m/m	S=0.00458 m/m	S=0.00275 m/m		S=0.00046 m/m



Profile 3 DCB09 to Hwy 26 Outlet

5yr SCS Storm

