

Network Details

Manhole Schedule

Manhole	Catchment Area (ha)	Size (mm)	Type	CL (m)	IL (m)	Depth To Soffit (m)	Easting (m)	Northing (m)
S3-DIF	0.016	300x300	Unknown	17.044	16.210	0.609	494835.843	106264.024
PP1-Dummy Outfall	0.000	150	Unknown	17.465	16.175	1.065	494831.120	106261.817

Pipe Schedule

Pipe Number	US Manhole	US IL (m)	DS Manhole	DS IL (m)	Shape	Dimension (mm)	Length (m)	Gradient (1:x)	Roughness (mm)	US Depth To Soffit (m)	DS Depth To Soffit (m)
1.000	S3-DIF	16.210	PP1-Dummy Outfall	16.175	Circ	225	5.213	150	0.600	0.609	1.065

Outfall Details

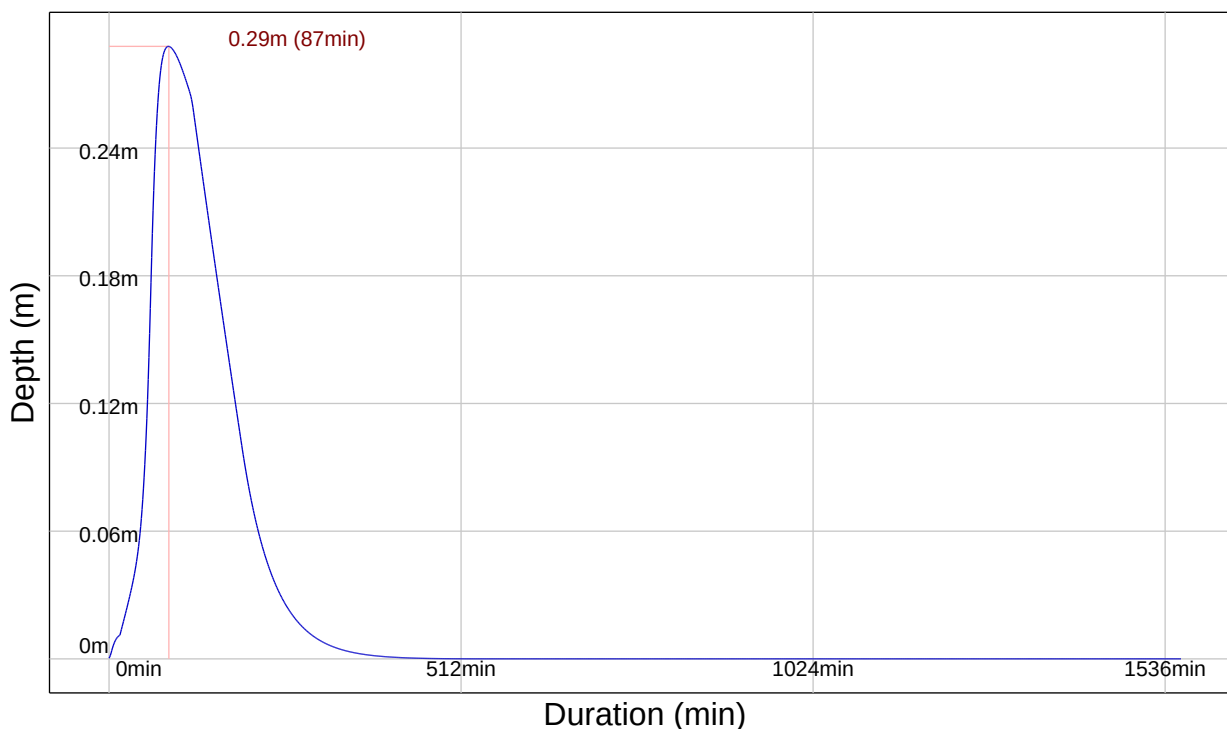
Outfall Manhole PP1-Dummy Outfall : Free Discharge

Flow Control Details

Tank Structure at Manhole S3-DIF

Tank Invert (m)	Tank Height (m)	Porosity Ratio (%)	Area (m2)	Effective Area (m2) Area x Porosity Ratio	Max Storage (m3) Effective Area x Height	Infil Base (m/hr)	Infil Side (m/hr)	Safety Factor
16.330	0.550	30.00	81.317	24.395	13.417	0.07812000	0.07812000	2.00

Permeable Paving 1 at S3-DIF (100Yr+45% 120Min Summer)



Controls within Manhole PP1-Dummy Outfall

Orifice Control

Invert Offset (m)	Orifice Diameter (m)	Discharge Coeff
0.000	0.001	0.600

Simulation Settings

FEH2022 (point): Filename=FEH_Point_Descriptors_494812_106233_v5_1_0.xml

Summer (Cv: 1.00), Winter (Cv: 1.00)

Global Time of Entry: 5.0 mins

Durations (mins): 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440

Return Periods (yrs) + Climate Change: (1, +0%), (30, +40%), (100, +45%)

Manhole Flood Risk Freeboard: 0.300m

Simulated Rainfall Events

Storm	Average Intensity (mm/hr)	Runoff Continuity %	Flow Continuity %	Item Volume Continuity Errors
1Yr 15Min Winter	15.628	0.00	12.32	PP1-Dummy Outfall 0.12m3
1Yr 15Min Summer	15.628	0.00	12.10	PP1-Dummy Outfall 0.12m3
1Yr 30Min Winter	10.316	0.00	9.39	PP1-Dummy Outfall 0.12m3
1Yr 30Min Summer	10.316	0.00	9.38	PP1-Dummy Outfall 0.12m3
1Yr 60Min Winter	6.595	0.00	7.39	PP1-Dummy Outfall 0.12m3
1Yr 60Min Summer	6.595	0.00	7.37	PP1-Dummy Outfall 0.12m3
1Yr 120Min Summer	5.323	0.00	4.59	
1Yr 120Min Winter	5.323	0.00	4.61	
1Yr 180Min Winter	4.511	0.00	3.62	
1Yr 180Min Summer	4.511	0.00	3.61	
1Yr 240Min Winter	3.753	0.00	3.26	
1Yr 240Min Summer	3.753	0.00	3.25	
1Yr 360Min Winter	2.919	0.00	2.78	
1Yr 360Min Summer	2.919	0.00	2.77	
1Yr 480Min Summer	2.427	0.00	2.49	
1Yr 480Min Winter	2.427	0.00	2.50	
1Yr 600Min Winter	2.074	0.00	2.33	
1Yr 600Min Summer	2.074	0.00	2.33	
1Yr 720Min Summer	1.811	0.00	2.22	
1Yr 720Min Winter	1.811	0.00	2.21	
1Yr 960Min Summer	1.465	0.00	2.05	
1Yr 960Min Winter	1.465	0.00	2.04	
1Yr 1440Min Winter	1.102	0.00	1.80	
1Yr 1440Min Summer	1.102	0.00	1.81	
30Yr+40% 15Min Winter	115.253	0.00	1.70	
30Yr+40% 15Min Summer	115.253	0.00	1.68	
30Yr+40% 30Min Summer	76.731	0.00	1.30	
30Yr+40% 30Min Winter	76.731	0.00	1.29	
30Yr+40% 60Min Summer	48.847	0.00	1.02	
30Yr+40% 60Min Winter	48.847	0.00	1.03	
30Yr+40% 120Min Summer	29.859	0.00	0.84	
30Yr+40% 120Min Winter	29.859	0.00	0.84	
30Yr+40% 180Min Winter	22.126	0.00	0.75	
30Yr+40% 180Min Summer	22.126	0.00	0.75	
30Yr+40% 240Min Summer	17.757	0.00	0.70	
30Yr+40% 240Min Winter	17.757	0.00	0.70	
30Yr+40% 360Min Summer	12.891	0.00	0.64	
30Yr+40% 360Min Winter	12.891	0.00	0.64	
30Yr+40% 480Min Summer	10.228	0.00	0.60	
30Yr+40% 480Min Winter	10.228	0.00	0.60	
30Yr+40% 600Min Summer	8.522	0.00	0.57	
30Yr+40% 600Min Winter	8.522	0.00	0.57	
30Yr+40% 720Min Summer	7.326	0.00	0.55	
30Yr+40% 720Min Winter	7.326	0.00	0.56	
30Yr+40% 960Min Summer	5.766	0.00	0.53	
30Yr+40% 960Min Winter	5.766	0.00	0.53	
30Yr+40% 1440Min Summer	4.126	0.00	0.49	
30Yr+40% 1440Min Winter	4.126	0.00	0.49	
100Yr+45% 15Min Summer	149.272	0.00	1.30	
100Yr+45% 15Min Winter	149.272	0.00	1.32	
100Yr+45% 30Min Summer	100.198	0.00	1.00	
100Yr+45% 30Min Winter	100.198	0.00	1.00	
100Yr+45% 60Min Summer	64.450	0.00	0.78	
100Yr+45% 60Min Winter	64.450	0.00	0.78	

Simulated Rainfall Events

Storm	Average Intensity (mm/hr)	Runoff Continuity %	Flow Continuity %	Item Volume Continuity Errors
100Yr+45% 120Min Summer	38.652	0.00	0.65	
100Yr+45% 120Min Winter	38.652	0.00	0.66	
100Yr+45% 180Min Summer	28.339	0.00	0.59	
100Yr+45% 180Min Winter	28.339	0.00	0.59	
100Yr+45% 240Min Summer	22.782	0.00	0.55	
100Yr+45% 240Min Winter	22.782	0.00	0.55	
100Yr+45% 360Min Summer	16.530	0.00	0.50	
100Yr+45% 360Min Winter	16.530	0.00	0.50	
100Yr+45% 480Min Summer	13.117	0.00	0.47	
100Yr+45% 480Min Winter	13.117	0.00	0.47	
100Yr+45% 600Min Summer	10.952	0.00	0.45	
100Yr+45% 600Min Winter	10.952	0.00	0.45	
100Yr+45% 720Min Summer	9.434	0.00	0.43	
100Yr+45% 720Min Winter	9.434	0.00	0.43	
100Yr+45% 960Min Summer	7.431	0.00	0.41	
100Yr+45% 960Min Winter	7.431	0.00	0.41	
100Yr+45% 1440Min Winter	5.311	0.00	0.38	
100Yr+45% 1440Min Summer	5.311	0.00	0.38	

Simulation Results

Return Period (yrs) + Climate Change (%):

1yr+0%

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S3-DIF	180 min Summer	109	16.363	0.033	0.306		OK
PP1-Dummy Outfall	180 min Summer	109	16.363	0.188	0.001		OK

Conduits

Pipe No.	Critical Storm	Peak (mins)	US Manhole	DS Manhole	Flow Depth (m)	Max Velocity (m/s)	Max Flow (l/s)	Flow / Capacity	Status
1.000	180 min Summer	109	S3-DIF	PP1-Dummy Outfall	0.110	0.120	0.158	0.004	OK

Return Period (yrs) + Climate Change (%):

30yr+40%

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S3-DIF	120 min Summer	82	16.538	0.208	0.985		Surcharged
PP1-Dummy Outfall	120 min Summer	82	16.538	0.363	0.001		OK

Conduits

Pipe No.	Critical Storm	Peak (mins)	US Manhole	DS Manhole	Flow Depth (m)	Max Velocity (m/s)	Max Flow (l/s)	Flow / Capacity	Status
1.000	120 min Summer	82	S3-DIF	PP1-Dummy Outfall	0.217	0.327	0.361	0.009	OK

Return Period (yrs) + Climate Change (%):

100yr+45%

Manholes

Manhole	Critical Storm	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Flood (m3)	Status
S3-DIF	120 min Summer	86	16.618	0.288	1.038		Surcharged
PP1-Dummy Outfall	120 min Summer	86	16.618	0.443	0.002		OK

Conduits

Pipe No.	Critical Storm	Peak (mins)	US Manhole	DS Manhole	Flow Depth (m)	Max Velocity (m/s)	Max Flow (l/s)	Flow / Capacity	Status
1.000	30 min Winter	22	S3-DIF	PP1-Dummy Outfall	0.225	0.460	1.368	0.032	OK