Project:	Date:		
3323-02-CIV-XX-XX-M3-C-30002_3.3	22/09/2025		
	Designed by:	Checked by:	Approved By:
	ZarakA		
Report Details:	Company Address:		
Type: Inflows Storm Phase: Phase			



Catchment Area (1)

Type : Catchment Area

Area (ha)	0.008

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100



Catchment Area (2)

Type : Catchment Area

Area (ha)	0.038

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100



Catchment Area (3)

Type : Catchment Area

Area (ha)	0.017

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100



Catchment Area (4)

Type : Catchment Area

Area (ha)	0.025

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (6) Type : Catchment Area

Area (ha)	0.028

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (5) Type : Catchment Area

Area (ha)	0.027

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (7) Type : Catchment Area

Area (ha)	0.068

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (8) Type : Catchment Area

Area (ha)	0.039

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100



Catchment Area (9)

Type : Catchment Area

Area (ha)	0.035

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100



Catchment Area (10)

Type : Catchment Area

Area (ha)	0.031

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100



Catchment Area (11)

Type : Catchment Area

Area (ha)	0.073

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100



Catchment Area (13)

Type : Catchment Area

Area (ha)	0.049

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100



Catchment Area (14)

Type : Catchment Area

Area (ha)	0.041

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100



Catchment Area (15)

Type : Catchment Area

Area (ha)	0.017

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100



Catchment Area (16)

Type : Catchment Area

Area (ha)	0.006

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100



Catchment Area (18)

Type : Catchment Area

Area (ha)	0.019

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (19) Type : Catchment Area

Area (ha)	0.023

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (20) Type : Catchment Area

Area (ha)	0.023

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (21) Type : Catchment Area

Area (ha)	0.033

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (22) Type : Catchment Area

Area (ha)	0.023

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100



Catchment Area (23)

Type : Catchment Area

Area (ha)	0.03

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100



Catchment Area (24)

Type : Catchment Area

Area (ha)	0.022

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100



Catchment Area (25)

Type : Catchment Area

Area (ha)	0.014

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100



Catchment Area (26)

Type : Catchment Area

Area (ha)	0.016

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (27) Type : Catchment Area

Area (ha)	0.02

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (28) Type : Catchment Area

Area (ha)	0.014

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (29) Type : Catchment Area

Area (ha)	0.017

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (30) Type : Catchment Area

Area (ha)	0.029

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (31) Type : Catchment Area

Area (ha)	0.017

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (32) Type : Catchment Area

Area (ha)	0.014

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (33) Type : Catchment Area

Area (ha)	0.006

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (34) Type : Catchment Area

Area (ha)	0.006

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (35) Type : Catchment Area

Area (ha)	0.002

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (36) Type : Catchment Area

Area (ha)	0.002

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (39) Type : Catchment Area

Area (ha)	0.009

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (40) Type : Catchment Area

Area (ha)	0.009

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (41) Type : Catchment Area

Area (ha)	0.017

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (42) Type : Catchment Area

Area (ha)	0.013

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (43) Type : Catchment Area

Area (ha)	0.005

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (44) Type : Catchment Area

Area (ha)	0.005

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (45) Type : Catchment Area

Area (ha)	0.006

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (46) Type : Catchment Area

Area (ha)	0.01

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (47) Type : Catchment Area

Area (ha)	0.002

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100

Catchment Area (48) Type : Catchment Area

Area (ha)	0.008

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100



Catchment Area (49)

Type : Catchment Area

Area (ha)	0.02

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100



Catchment Area (51)

Type : Catchment Area

Area (ha)	0.003

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100



Catchment Area (52)

Type : Catchment Area

Area (ha)	0.007

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	1.000
Winter Volumetric Runoff	1.000
Time of Concentration (mins)	10
Percentage Impervious (%)	100



Catchment Area (12)

Type : Catchment Area

Area (ha)	0.009

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Catchment Area (17) Type : Catchment Area

Area (ha)	0.011

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Catchment Area (38) Type : Catchment Area

Area (ha)	0.01

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Catchment Area (53) Type : Catchment Area

Area (ha)	0.011

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Catchment Area (54) Type : Catchment Area

Area (ha)	0.009

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Catchment Area (55) Type : Catchment Area

Area (ha)	0.013

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Catchment Area Type : Catchment Area

Area (ha)	0.003

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Catchment Area (56) Type : Catchment Area

Area (ha)	0.002

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Catchment Area (57) Type : Catchment Area

Area (ha)	0.002

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Catchment Area (58) Type : Catchment Area

Area (ha)	0.001

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Catchment Area (59) Type : Catchment Area

Area (ha)	0.003

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Catchment Area (60) Type : Catchment Area

Area (ha)	0.003

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Catchment Area (61) Type : Catchment Area

Area (ha)	0.003

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Catchment Area (62)

Type : Catchment Area

Area (ha)	0.004

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Catchment Area (63)

Type : Catchment Area

Area (ha)	0.004

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Catchment Area (64)

Type : Catchment Area

Area (ha)	0.018

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100



PROPOSED CONCRETE BOX CULVERT

Type : Tank

Dimensions

Exceedance Level (m)	59.600
Depth (m)	3.021
Base Level (m)	56.579
Freeboard (mm)	500
Initial Depth (m)	0.000
Porosity (%)	100
Average Slope (1:X)	0.00
Total Volume (m³)	253.121

Depth (m)	Area (m²)	Volume (m³)
0.000	180.00	0.000
1.400	180.00	252.000

Outlets

Outlet

Outgoing Connection	Pipe (8)
Outlet Type	Free Discharge

Advanced

Perimeter	Circular
Length (m)	23.027



PROPOSED GEO-CELLULAR ATTENUATION TANK

Type : Tank

Dimensions

Exceedance Level (m)	58.800
Depth (m)	1.250
Base Level (m)	57.550
Freeboard (mm)	0
Initial Depth (m)	0.000
Porosity (%)	95
Average Slope (1:X)	0.00
Total Volume (m³)	220.850

Depth (m)	Area (m²)	Volume (m³)
0.000	290.00	0.000
0.800	290.00	220.400

Outlets

Outlet

Outgoing Connection	Pipe (10)
Outlet Type	Free Discharge

Advanced

Perimeter	Circular
Length (m)	45.104



PP3

Type : Porous Paving

Dimensions

Exceedance Level (m)	58.550
Depth (m)	0.445
Base Level (m)	58.105
Paving Layer Depth (mm)	95
Membrane Percolation (m/hr)	2.5
Porosity (%)	30
Length (m)	12.956
Long. Slope (1:X)	400.00
Width (m)	5.000
Total Volume (m³)	6.873

Under Drain

Height Above Base (m)	0.000
Diameter (mm)	100
No. of Barrels	1
Release Height (m)	0.000
Friction Scheme	Manning's n
n	0.015

Outlets

Outlet

Outgoing Connection	Pipe (38)
Outlet Type	Under Drain

Advanced

Conductivity (m/hr)	250.0

PP4

Type : Porous Paving

Dimensions

Exceedance Level (m)	58.480
Depth (m)	0.445
Base Level (m)	58.035
Paving Layer Depth (mm)	95
Membrane Percolation (m/hr)	2.5
Porosity (%)	30
Length (m)	12.929
Long. Slope (1:X)	400.00
Width (m)	4.890
Total Volume (m^3)	6.710

Under Drain

Height Above Base (m)	0.000
Diameter (mm)	100
No. of Barrels	1
Release Height (m)	0.000
Friction Scheme	Manning's n
n	0.015

Outlets

Outlet

Outgoing Connection	Pipe (39)
Outlet Type	Under Drain

Advanced

Conductivity (m/hr)	250.0

PP1

Type : Porous Paving

Dimensions

Exceedance Level (m)	58.470
Depth (m)	0.445
Base Level (m)	58.025
Paving Layer Depth (mm)	95
Membrane Percolation (m/hr)	2.5
Porosity (%)	30
Length (m)	10.400
Long. Slope (1:X)	400.00
Width (m)	5.000
Total Volume (m^3)	5.517

Under Drain

Height Above Base (m)	0.000
Diameter (mm)	100
No. of Barrels	1
Release Height (m)	0.000
Friction Scheme	Manning's n
n	0.015

Outlets

Outlet

Outgoing Connection	Pipe (35)
Outlet Type	Under Drain

Advanced

Conductivity (m/hr)	250.0

Project:	Date:		
3323-02-CIV-XX-XX-M3-C-30002_3.3	22/09/2025		
	Designed by:	Checked by:	Approved By:
	ZarakA		
Report Details:	Company Address:		
Type: Stormwater Controls Storm Phase: Phase			



PP2

Type : Porous Paving

Dimensions

Exceedance Level (m)	58.350
Depth (m)	0.445
Base Level (m)	57.905
Paving Layer Depth (mm)	95
Membrane Percolation (m/hr)	2.5
Porosity (%)	30
Length (m)	11.582
Long. Slope (1:X)	400.00
Width (m)	4.501
Total Volume (m^3)	5.537

Under Drain

Height Above Base (m)	0.000
Diameter (mm)	100
No. of Barrels	1
Release Height (m)	0.000
Friction Scheme	Manning's n
n	0.015

Outlets

Outlet

Outgoing Connection	Pipe (37)
Outlet Type	Under Drain

Advanced

Conductivity (m/hr)	250.0



PP5

Type : Porous Paving

Dimensions

Exceedance Level (m)	58.400
Depth (m)	0.445
Base Level (m)	57.955
Paving Layer Depth (mm)	95
Membrane Percolation (m/hr)	2.5
Porosity (%)	30
Length (m)	11.540
Long. Slope (1:X)	400.00
Width (m)	4.506
Total Volume (m^3)	5.523

Under Drain

Height Above Base (m)	0.000
Diameter (mm)	100
No. of Barrels	1
Release Height (m)	0.000
Friction Scheme	Manning's n
n	0.015

Outlets

Outlet

Outgoing Connection	Pipe (36)
Outlet Type	Under Drain

Advanced

Conductivity (m/hr)	250.0



PP6

Type : Porous Paving

Dimensions

Exceedance Level (m)	58.330
Depth (m)	0.445
Base Level (m)	57.885
Paving Layer Depth (mm)	95
Membrane Percolation (m/hr)	2.5
Porosity (%)	30
Length (m)	13.970
Long. Slope (1:X)	400.00
Width (m)	4.675
Total Volume (m^3)	6.934

Under Drain

Height Above Base (m)	0.000
Diameter (mm)	100
No. of Barrels	1
Release Height (m)	0.000
Friction Scheme	Manning's n
n	0.015

Outlets

Outlet

Outgoing Connection	Pipe (40)
Outlet Type	Under Drain

Advanced

Conductivity (m/hr)	250.0



PP7

Type : Porous Paving

Dimensions

Exceedance Level (m)	58.410
Depth (m)	0.445
Base Level (m)	57.965
Paving Layer Depth (mm)	95
Membrane Percolation (m/hr)	2.5
Porosity (%)	30
Length (m)	7.071
Long. Slope (1:X)	400.00
Width (m)	3.536
Total Volume (m^3)	2.664

Under Drain

Height Above Base (m)	0.000
Diameter (mm)	100
No. of Barrels	1
Release Height (m)	0.000
Friction Scheme	Manning's n
n	0.015

Outlets

Outlet

Outgoing Connection	(None)
Outlet Type	Under Drain

Outlet (1)

Outgoing Connection	Pipe (41)
Outlet Type	Free Discharge

Advanced

Conductivity (m/hr)	250.0



PP8

Type : Porous Paving

Dimensions

Exceedance Level (m)	58.410
Depth (m)	0.445
Base Level (m)	57.965
Paving Layer Depth (mm)	95
Membrane Percolation (m/hr)	2.5
Porosity (%)	30
Length (m)	7.071
Long. Slope (1:X)	400.00
Width (m)	3.536
Total Volume (m^3)	2.664

Under Drain

Height Above Base (m)	0.000
Diameter (mm)	100
No. of Barrels	1
Release Height (m)	0.000
Friction Scheme	Manning's n
n	0.015

Outlets

Outlet

Outgoing Connection	(None)
Outlet Type	Under Drain

Outlet (1)

Outgoing Connection	Pipe (42)
Outlet Type	Free Discharge

Advanced

Conductivity (m/hr)	250.0



PP9

Type : Porous Paving

Dimensions

Exceedance Level (m)	58.400
Depth (m)	0.445
Base Level (m)	57.955
Paving Layer Depth (mm)	95
Membrane Percolation (m/hr)	2.5
Porosity (%)	30
Length (m)	7.071
Long. Slope (1:X)	400.00
Width (m)	3.536
Total Volume (m^3)	2.664

Under Drain

Height Above Base (m)	0.000
Diameter (mm)	100
No. of Barrels	1
Release Height (m)	0.000
Friction Scheme	Manning's n
n	0.015

Outlets

Outlet

Outgoing Connection	(None)
Outlet Type	Under Drain

Outlet (1)

Outgoing Connection	Pipe (43)
Outlet Type	Free Discharge

Advanced

Conductivity (m/hr)	250.0



PP10

Type : Porous Paving

Dimensions

Exceedance Level (m)	58.350
Depth (m)	0.445
Base Level (m)	57.905
Paving Layer Depth (mm)	95
Membrane Percolation (m/hr)	2.5
Porosity (%)	30
Length (m)	5.590
Long. Slope (1:X)	400.00
Width (m)	2.236
Total Volume (m^3)	1.343

Under Drain

Height Above Base (m)	0.000
Diameter (mm)	100
No. of Barrels	1
Release Height (m)	0.000
Friction Scheme	Manning's n
n	0.015

Outlets

Outlet

Outgoing Connection	(None)
Outlet Type	Under Drain

Outlet (1)

Outgoing Connection	Pipe (44)
Outlet Type	Free Discharge

Advanced

Conductivity (m/hr)	250.0



PP11

Type : Porous Paving

Dimensions

Exceedance Level (m)	58.300
Depth (m)	0.445
Base Level (m)	57.855
Paving Layer Depth (mm)	95
Membrane Percolation (m/hr)	2.5
Porosity (%)	30
Length (m)	7.071
Long. Slope (1:X)	400.00
Width (m)	3.536
Total Volume (m^3)	2.664

Under Drain

Height Above Base (m)	0.000
Diameter (mm)	100
No. of Barrels	1
Release Height (m)	0.000
Friction Scheme	Manning's n
n	0.015

Outlets

Outlet

Outgoing Connection	(None)
Outlet Type	Under Drain

Outlet (1)

Outgoing Connection	Pipe (45)
Outlet Type	Free Discharge

Advanced

Conductivity (m/hr)	250.0



PP12

Type : Porous Paving

Dimensions

Exceedance Level (m)	58.800
Depth (m)	0.445
Base Level (m)	58.355
Paving Layer Depth (mm)	95
Membrane Percolation (m/hr)	2.5
Porosity (%)	30
Length (m)	7.071
Long. Slope (1:X)	400.00
Width (m)	3.536
Total Volume (m^3)	2.664

Under Drain

Height Above Base (m)	0.000
Diameter (mm)	100
No. of Barrels	1
Release Height (m)	0.000
Friction Scheme	Manning's n
n	0.015

Outlets

Outlet

Outgoing Connection	(None)
Outlet Type	Under Drain

Outlet (1)

Outgoing Connection	Pipe (46)
Outlet Type	Free Discharge

Advanced

Conductivity (m/hr)	250.0



PP13

Type : Porous Paving

Dimensions

Exceedance Level (m)	58.750
Depth (m)	0.445
Base Level (m)	58.305
Paving Layer Depth (mm)	95
Membrane Percolation (m/hr)	2.5
Porosity (%)	30
Length (m)	7.071
Long. Slope (1:X)	400.00
Width (m)	3.536
Total Volume (m³)	2.664

Under Drain

Height Above Base (m)	0.000
Diameter (mm)	100
No. of Barrels	1
Release Height (m)	0.000
Friction Scheme	Manning's n
n	0.015

Outlets

Outlet

Outgoing Connection	(None)
Outlet Type	Under Drain

Outlet (1)

Outgoing Connection	Pipe (47)
Outlet Type	Free Discharge

Advanced

Conductivity (m/hr)	250.0



PP14

Type : Porous Paving

Dimensions

Exceedance Level (m)	58.700
Depth (m)	0.445
Base Level (m)	58.255
Paving Layer Depth (mm)	95
Membrane Percolation (m/hr)	2.5
Porosity (%)	30
Length (m)	9.948
Long. Slope (1:X)	400.00
Width (m)	4.321
Total Volume (m³)	4.568

Under Drain

Height Above Base (m)	0.000
Diameter (mm)	100
No. of Barrels	1
Release Height (m)	0.000
Friction Scheme	Manning's n
n	0.015

Outlets

Outlet

Outgoing Connection	(None)
Outlet Type	Under Drain

Outlet (1)

Outgoing Connection	Pipe (48)
Outlet Type	Free Discharge

Advanced

Conductivity (m/hr)	250.0



PP15

Type : Porous Paving

Dimensions

Exceedance Level (m)	58.650
Depth (m)	0.445
Base Level (m)	58.205
Paving Layer Depth (mm)	95
Membrane Percolation (m/hr)	2.5
Porosity (%)	30
Length (m)	9.948
Long. Slope (1:X)	400.00
Width (m)	4.323
Total Volume (m^3)	4.570

Under Drain

Height Above Base (m)	0.000
Diameter (mm)	100
No. of Barrels	1
Release Height (m)	0.000
Friction Scheme	Manning's n
n	0.015

Outlets

Outlet

Outgoing Connection	(None)
Outlet Type	Under Drain

Outlet (1)

Outgoing Connection	Pipe (49)
Outlet Type	Free Discharge

Advanced

Conductivity (m/hr)	250.0



PP16

Type : Porous Paving

Dimensions

Exceedance Level (m)	60.000
Depth (m)	0.445
Base Level (m)	59.555
Paving Layer Depth (mm)	95
Membrane Percolation (m/hr)	2.5
Porosity (%)	30
Length (m)	17.237
Long. Slope (1:X)	400.00
Width (m)	4.781
Total Volume (m^3)	8.747

Under Drain

Height Above Base (m)	0.000
Diameter (mm)	100
No. of Barrels	1
Release Height (m)	0.000
Friction Scheme	Manning's n
n	0.015

Outlets

Outlet

Outgoing Connection	(None)
Outlet Type	Under Drain

Outlet (1)

Outgoing Connection	Pipe (50)
Outlet Type	Free Discharge

Advanced

Conductivity (m/hr)	250.0



PP17

Type : Porous Paving

Dimensions

Exceedance Level (m)	59.800
Depth (m)	0.445
Base Level (m)	59.355
Paving Layer Depth (mm)	95
Membrane Percolation (m/hr)	2.5
Porosity (%)	30
Length (m)	17.532
Long. Slope (1:X)	400.00
Width (m)	4.792
Total Volume (m³)	8.918

Under Drain

Height Above Base (m)	0.000
Diameter (mm)	100
No. of Barrels	1
Release Height (m)	0.000
Friction Scheme	Manning's n
n	0.015

Outlets

Outlet

Outgoing Connection	(None)
Outlet Type	Under Drain

Outlet (1)

Outgoing Connection	Pipe (51)
Outlet Type	Free Discharge

Advanced

Conductivity (m/hr)	250.0

Project:	Date:		
3323-02-CIV-XX-XX-M3-C-30002_3.3	22/09/2025		
	Designed by:	Checked by:	Approved By:
	ZarakA		
Report Details:	Company Address:		
Type: Network Design Criteria Storm Phase: Phase			

Flow Options

Peak Flow Calculation	(UK) Modified Rational Method
Min. Time of Entry (mins)	5
Max. Travel Time (mins)	30

Pipe Options

Lock Slope Options	None
Design Options	Minimise Excavation
Design Level	Level Soffits
Min. Cover Depth (m)	1.200
Min. Slope (1:X)	500.00
Max. Slope (1:X)	40.00
Min. Velocity (m/s)	1.0
Max. Velocity (m/s)	3.0
Use Flow Restriction	☐
Reduce Channel Depths	☐

Manhole Options

Apply Offset	☐

Project:	Date:		
3323-02-CIV-XX-XX-M3-C-30002_3.3	22/09/2025		
	Designed by:	Checked by:	Approved By:
	ZarakA		
Report Title:	Company Address:		
Rainfall Analysis Criteria			

Runoff Type	Dynamic
Output Interval (mins)	5
Time Step	Default
Urban Creep	Apply Global Value
Urban Creep Global Value (%)	0
Junction Flood Risk Margin (mm)	300
Perform No Discharge Analysis	☐

Rainfall

FEH

Type: FEH

Site Location	GB 382517 387053 SJ 82517 87053
Rainfall Version	2022
Summer	☑
Winter	☑

Return Period

Return Period (years)	Increase Rainfall (%)
2.0	0.000
30.0	0.000
100.0	45.000

Storm Durations

Duration (mins)	Run Time (mins)
15	30
30	60
60	120
120	240
180	360
240	480
360	720
480	960
600	1200
720	1440
960	1920
1440	2880

Project: 3323-02-CIV-XX-XX-M3-C-30002_3.3	Date: 22/09/2025		
	Designed by: ZarakA	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Phase	Company Address:		

FEH: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Flooded Volume

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
SW1	FEH: 2 years: +0 %: 15 mins: Summer	58.500	56.850	56.891	0.041	6.5	0.293	0.000	6.2	5.554	OK
SW2	FEH: 2 years: +0 %: 15 mins: Summer	58.400	56.818	56.869	0.051	10.8	0.364	0.000	8.0	8.413	OK
SW3	FEH: 2 years: +0 %: 15 mins: Summer	59.150	56.640	56.844	0.204	89.6	1.445	0.000	80.5	55.342	OK
SW4	FEH: 2 years: +0 %: 15 mins: Summer	59.700	56.556	56.825	0.270	88.7	1.906	0.000	7.7	52.729	OK
OUTFALL	FEH: 2 years: +0 %: 15 mins: Summer	59.500	56.540	56.606	0.066	7.7	0.000	0.000	7.7	9.052	OK
SW6	FEH: 2 years: +0 %: 15 mins: Summer	58.750	56.728	56.866	0.138	58.8	0.973	0.000	53.9	40.698	OK
SW8	FEH: 2 years: +0 %: 15 mins: Summer	59.250	56.691	56.845	0.154	13.1	1.086	0.000	12.3	6.826	OK
SW9	FEH: 2 years: +0 %: 15 mins: Summer	59.550	56.582	56.827	0.244	82.0	1.728	0.000	79.9	49.917	OK
SW10	FEH: 2 years: +0 %: 15 mins: Summer	59.450	56.600	56.832	0.232	82.2	1.641	0.000	79.0	51.680	OK
SW11	FEH: 2 years: +0 %: 15 mins: Summer	59.600	57.200	57.244	0.044	4.2	0.111	0.000	4.2	2.979	OK
SW12	FEH: 2 years: +0 %: 15 mins: Summer	59.600	56.570	56.825	0.255	79.3	0.884	0.000	6.8	42.864	OK
SW13	FEH: 2 years: +0 %: 15 mins: Summer	58.800	57.294	57.456	0.162	37.1	0.183	0.000	37.3	26.396	OK
SW32	FEH: 2 years: +0 %: 15 mins: Summer	59.929	58.269	58.289	0.020	0.6	0.006	0.000	0.6	0.423	OK
SW42	FEH: 2 years: +0 %: 15 mins: Summer	59.907	58.159	58.178	0.019	0.6	0.005	0.000	0.6	0.419	OK
SW41	FEH: 2 years: +0 %: 15 mins: Summer	59.905	58.098	58.147	0.049	4.6	0.014	0.000	4.6	3.245	OK
SW40	FEH: 2 years: +0 %: 15 mins: Summer	59.983	57.989	58.063	0.074	9.5	0.021	0.000	9.5	6.736	OK
SW27	FEH: 2 years: +0 %: 15 mins: Summer	59.990	57.872	58.017	0.145	23.2	0.041	0.000	23.2	16.384	OK
SW28	FEH: 2 years: +0 %: 15 mins: Summer	59.931	58.488	58.530	0.042	9.9	0.012	0.000	9.8	6.971	OK
SW29	FEH: 2 years: +0 %: 15 mins: Summer	59.977	58.846	58.897	0.051	6.1	0.014	0.000	6.1	4.282	OK
SW30	FEH: 2 years: +0 %: 15 mins: Summer	59.977	58.902	58.902	0.000	0.0	0.000	0.000	0.0	0.000	OK
SW25	FEH: 2 years: +0 %: 15 mins: Summer	59.995	57.782	57.917	0.135	28.0	0.038	0.000	28.1	20.500	OK
SW26	FEH: 2 years: +0 %: 15 mins: Summer	60.000	57.814	57.966	0.152	26.3	0.043	0.000	26.3	18.540	OK
SW20	FEH: 2 years: +0 %: 15 mins: Summer	58.824	57.599	57.729	0.130	28.3	0.037	0.000	28.7	20.684	OK
SW17	FEH: 2 years: +0 %: 15 mins: Summer	58.783	57.324	57.494	0.170	34.7	0.048	0.000	34.7	24.836	OK
SW21	FEH: 2 years: +0 %: 15 mins: Summer	58.790	57.650	57.729	0.079	0.4	0.022	0.000	0.3	0.102	OK
SW85	FEH: 2 years: +0 %: 15 mins: Summer	58.478	57.878	57.918	0.040	3.5	0.011	0.000	3.6	2.513	OK
SW86	FEH: 2 years: +0 %: 15 mins: Summer	59.013	57.355	57.396	0.041	5.6	0.012	0.000	5.6	3.935	OK
SW87	FEH: 2 years: +0 %: 15 mins: Summer	59.315	58.625	58.647	0.022	2.0	0.006	0.000	2.0	1.446	OK
SW43	FEH: 2 years: +0 %: 15 mins: Summer	58.436	57.733	57.803	0.070	8.4	0.079	0.000	8.4	5.910	OK
SW46	FEH: 2 years: +0 %: 15 mins: Summer	59.220	57.263	57.359	0.096	13.1	0.109	0.000	13.1	9.207	OK

SW48	FEH: 2 years: +0 %: 15 mins: Summer	59.404	58.150	58.150	0.000	0.0	0.000	0.000	0.0	0.000	OK
SW90	FEH: 2 years: +0 %: 15 mins: Summer	59.494	58.534	58.534	0.000	0.0	0.000	0.000	0.0	0.000	OK
SW89	FEH: 2 years: +0 %: 15 mins: Summer	59.429	58.126	58.144	0.018	1.7	0.005	0.000	1.7	1.209	OK
SW88	FEH: 2 years: +0 %: 15 mins: Summer	59.767	58.540	58.540	0.000	0.0	0.000	0.000	0.0	0.000	OK
SW15	FEH: 2 years: +0 %: 15 mins: Summer	58.407	57.532	57.559	0.027	1.3	0.031	0.000	1.3	1.092	OK
SW95	FEH: 2 years: +0 %: 15 mins: Summer	58.544	57.404	57.453	0.049	4.0	0.056	0.000	3.7	3.764	OK
SW34	FEH: 2 years: +0 %: 15 mins: Summer	59.859	57.793	57.805	0.012	1.0	0.004	0.000	0.9	0.643	OK

Project: 3323-02-CIV-XX-XX-M3-C-30002_3.3	Date: 22/09/2025		
	Designed by: ZarakA	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Phase	Company Address:		

FEH: 30 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Flooded Volume

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
SW1	FEH: 30 years: +0 %: 15 mins: Summer	58.500	56.850	57.040	0.190	19.0	1.342	0.000	17.4	11.588	OK
SW2	FEH: 30 years: +0 %: 15 mins: Summer	58.400	56.818	57.040	0.222	27.6	1.570	0.000	22.3	11.367	OK
SW3	FEH: 30 years: +0 %: 15 mins: Summer	59.150	56.640	57.044	0.404	192.4	2.853	0.000	175.6	96.851	OK
SW4	FEH: 30 years: +0 %: 15 mins: Summer	59.700	56.556	57.045	0.489	187.8	3.459	0.000	9.9	91.231	Surcharged
OUTFALL	FEH: 30 years: +0 %: 15 mins: Summer	59.500	56.540	56.614	0.074	9.8	0.000	0.000	9.9	10.075	OK
SW6	FEH: 30 years: +0 %: 15 mins: Summer	58.750	56.728	57.042	0.314	128.2	2.217	0.000	117.5	73.186	OK
SW8	FEH: 30 years: +0 %: 15 mins: Summer	59.250	56.691	57.043	0.352	28.9	2.491	0.000	23.2	12.550	OK
SW9	FEH: 30 years: +0 %: 15 mins: Summer	59.550	56.582	57.045	0.463	178.8	3.272	0.000	168.6	85.468	OK
SW10	FEH: 30 years: +0 %: 15 mins: Summer	59.450	56.600	57.044	0.444	179.4	3.142	0.000	170.0	88.368	OK
SW11	FEH: 30 years: +0 %: 15 mins: Summer	59.600	57.200	57.265	0.065	9.3	0.164	0.000	9.3	6.580	OK
SW12	FEH: 30 years: +0 %: 15 mins: Summer	59.600	56.570	57.046	0.476	170.6	1.648	0.000	1.5	78.567	OK
SW13	FEH: 30 years: +0 %: 15 mins: Summer	58.800	57.294	57.572	0.278	77.5	0.315	0.000	76.2	58.516	OK
SW32	FEH: 30 years: +0 %: 15 mins: Summer	59.929	58.269	58.435	0.166	1.3	0.047	0.000	1.3	1.009	OK
SW42	FEH: 30 years: +0 %: 15 mins: Summer	59.907	58.159	58.434	0.275	1.3	0.078	0.000	1.0	1.578	Surcharged
SW41	FEH: 30 years: +0 %: 15 mins: Summer	59.905	58.098	58.434	0.336	9.8	0.095	0.000	8.8	7.757	Surcharged
SW40	FEH: 30 years: +0 %: 15 mins: Summer	59.983	57.989	58.430	0.441	19.7	0.125	0.000	19.3	14.893	Surcharged
SW27	FEH: 30 years: +0 %: 15 mins: Summer	59.990	57.872	58.395	0.523	49.5	0.148	0.000	49.1	36.201	Surcharged
SW28	FEH: 30 years: +0 %: 15 mins: Summer	59.931	58.488	58.550	0.062	21.7	0.018	0.000	21.7	15.379	OK
SW29	FEH: 30 years: +0 %: 15 mins: Summer	59.977	58.846	58.923	0.077	13.3	0.022	0.000	13.3	9.467	OK
SW30	FEH: 30 years: +0 %: 15 mins: Summer	59.977	58.902	58.923	0.021	0.1	0.006	0.000	0.0	0.025	OK

SW25	FEH: 30 years: +0 %: 15 mins: Summer	59.995	57.782	58.161	0.379	59.4	0.107	0.000	59.3	45.282	Surcharged
SW26	FEH: 30 years: +0 %: 15 mins: Summer	60.000	57.814	58.271	0.457	55.9	0.129	0.000	55.7	40.974	Surcharged
SW20	FEH: 30 years: +0 %: 15 mins: Summer	58.824	57.599	57.809	0.210	59.8	0.060	0.000	59.5	45.832	OK
SW17	FEH: 30 years: +0 %: 15 mins: Summer	58.783	57.324	57.626	0.302	72.9	0.086	0.000	72.3	54.979	Surcharged
SW21	FEH: 30 years: +0 %: 15 mins: Summer	58.790	57.650	57.809	0.159	0.6	0.045	0.000	0.7	0.216	OK
SW85	FEH: 30 years: +0 %: 15 mins: Summer	58.478	57.878	57.937	0.059	7.8	0.017	0.000	7.8	5.547	OK
SW86	FEH: 30 years: +0 %: 15 mins: Summer	59.013	57.355	57.417	0.062	12.3	0.018	0.000	12.3	8.708	OK
SW87	FEH: 30 years: +0 %: 15 mins: Summer	59.315	58.625	58.657	0.032	4.5	0.009	0.000	4.5	3.192	OK
SW43	FEH: 30 years: +0 %: 15 mins: Summer	58.436	57.733	57.841	0.108	18.4	0.122	0.000	18.5	13.055	OK
SW46	FEH: 30 years: +0 %: 15 mins: Summer	59.220	57.263	57.422	0.159	29.0	0.180	0.000	28.9	20.403	OK
SW48	FEH: 30 years: +0 %: 15 mins: Summer	59.404	58.150	58.150	0.000	0.0	0.000	0.000	0.0	0.000	OK
SW90	FEH: 30 years: +0 %: 15 mins: Summer	59.494	58.534	58.534	0.000	0.0	0.000	0.000	0.0	0.000	OK
SW89	FEH: 30 years: +0 %: 15 mins: Summer	59.429	58.126	58.153	0.027	3.8	0.008	0.000	3.8	2.672	OK
SW88	FEH: 30 years: +0 %: 15 mins: Summer	59.767	58.540	58.540	0.000	0.0	0.000	0.000	0.0	0.000	OK
SW15	FEH: 30 years: +0 %: 15 mins: Summer	58.407	57.532	57.580	0.048	4.2	0.054	0.000	4.0	3.308	OK
SW95	FEH: 30 years: +0 %: 15 mins: Summer	58.544	57.404	57.500	0.096	13.0	0.109	0.000	12.6	10.211	OK
SW34	FEH: 30 years: +0 %: 15 mins: Summer	59.859	57.793	57.816	0.023	3.1	0.006	0.000	3.1	2.172	OK

FEH: 100 years: Increase Rainfall (%): +45: Critical Storm Per Item: Rank By: Max. Flooded Volume

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
SW1	FEH: 100 years: +45 %: 15 mins: Summer	58.500	56.850	57.365	0.515	36.0	3.644	0.000	24.2	17.798	OK
SW2	FEH: 100 years: +45 %: 15 mins: Summer	58.400	56.818	57.365	0.547	43.0	3.869	0.000	10.5	9.625	OK
SW3	FEH: 100 years: +45 %: 15 mins: Summer	59.150	56.640	57.363	0.723	274.1	5.108	0.000	237.1	148.472	OK
SW4	FEH: 100 years: +45 %: 15 mins: Summer	59.700	56.556	57.362	0.806	265.4	5.697	0.000	9.7	144.900	Surcharged
OUTFALL	FEH: 100 years: +45 %: 15 mins: Summer	59.500	56.540	56.613	0.073	9.6	0.000	0.000	9.6	10.239	OK
SW6	FEH: 100 years: +45 %: 15 mins: Summer	58.750	56.728	57.364	0.636	174.8	4.499	0.000	140.2	108.479	OK
SW8	FEH: 100 years: +45 %: 15 mins: Summer	59.250	56.691	57.362	0.671	53.2	4.745	0.000	38.5	21.737	OK
SW9	FEH: 100 years: +45 %: 15 mins: Summer	59.550	56.582	57.362	0.780	245.0	5.514	0.000	230.0	132.373	Surcharged
SW10	FEH: 100 years: +45 %: 15 mins: Summer	59.450	56.600	57.362	0.762	244.1	5.388	0.000	227.2	134.519	Surcharged
SW11	FEH: 100 years: +45 %: 15 mins: Summer	59.600	57.200	57.362	0.162	17.1	0.412	0.000	17.1	11.565	OK
SW12	FEH: 100 years: +45 %: 15 mins: Summer	59.600	56.570	57.362	0.792	246.3	2.743	0.000	0.0	130.088	Surcharged
SW13	FEH: 100 years: +45 %: 15 mins: Summer	58.800	57.294	57.771	0.477	127.6	0.539	0.000	109.6	109.216	Surcharged
SW32	FEH: 100 years: +45 %: 15 mins: Summer	59.929	58.269	59.649	1.380	4.0	0.391	0.000	6.5	2.554	Flood Risk
SW42	FEH: 100 years: +45 %: 15 mins: Summer	59.907	58.159	59.649	1.490	6.5	0.422	0.000	12.6	5.374	Flood Risk
SW41	FEH: 100 years: +45 %: 15 mins: Summer	59.905	58.098	59.649	1.551	16.2	0.439	0.000	21.7	16.655	Flood Risk
SW40	FEH: 100 years: +45 %: 15 mins: Summer	59.983	57.989	59.642	1.653	32.0	0.468	0.000	31.5	28.021	Surcharged
SW27	FEH: 100 years: +45 %: 15 mins: Summer	59.990	57.872	59.571	1.699	78.8	0.481	0.000	76.8	66.658	Surcharged
SW28	FEH: 100 years: +45 %: 15 mins: Summer	59.931	58.488	59.628	1.140	40.4	0.323	0.000	33.5	28.291	Surcharged
SW29	FEH: 100 years: +45 %: 15 mins: Summer	59.977	58.846	59.676	0.830	24.6	0.235	0.000	25.0	18.315	Surcharged
SW30	FEH: 100 years: +45 %: 15 mins: Summer	59.977	58.902	59.676	0.774	2.2	0.219	0.000	4.0	0.965	Surcharged

SW25	FEH: 100 years: +45 %: 15 mins: Summer	59.995	57.782	59.058	1.276	94.5	0.361	0.000	93.3	83.380	Surcharged
SW26	FEH: 100 years: +45 %: 15 mins: Summer	60.000	57.814	59.303	1.489	89.2	0.421	0.000	87.6	75.444	Surcharged
SW20	FEH: 100 years: +45 %: 15 mins: Summer	58.824	57.599	58.234	0.635	94.3	0.180	0.000	93.5	84.762	Surcharged
SW17	FEH: 100 years: +45 %: 15 mins: Summer	58.783	57.324	57.908	0.584	118.0	0.165	0.000	118.0	101.201	Surcharged
SW21	FEH: 100 years: +45 %: 15 mins: Summer	58.790	57.650	58.234	0.584	0.8	0.165	0.000	1.2	0.714	Surcharged
SW85	FEH: 100 years: +45 %: 15 mins: Summer	58.478	57.878	57.960	0.082	14.4	0.023	0.000	14.4	10.212	OK
SW86	FEH: 100 years: +45 %: 15 mins: Summer	59.013	57.355	57.441	0.086	22.7	0.024	0.000	22.7	15.999	OK
SW87	FEH: 100 years: +45 %: 15 mins: Summer	59.315	58.625	58.669	0.044	8.3	0.012	0.000	8.3	5.867	OK
SW43	FEH: 100 years: +45 %: 15 mins: Summer	58.436	57.733	57.902	0.169	33.9	0.192	0.000	33.9	24.019	OK
SW46	FEH: 100 years: +45 %: 15 mins: Summer	59.220	57.263	57.554	0.291	53.2	0.329	0.000	53.2	36.850	Surcharged
SW48	FEH: 100 years: +45 %: 15 mins: Summer	59.404	58.150	58.150	0.000	0.0	0.000	0.000	0.0	0.000	OK
SW90	FEH: 100 years: +45 %: 15 mins: Summer	59.494	58.534	58.534	0.000	0.0	0.000	0.000	0.0	0.000	OK
SW89	FEH: 100 years: +45 %: 15 mins: Summer	59.429	58.126	58.163	0.037	6.9	0.011	0.000	6.9	4.907	OK
SW88	FEH: 100 years: +45 %: 15 mins: Summer	59.767	58.540	58.540	0.000	0.0	0.000	0.000	0.0	0.000	OK
SW15	FEH: 100 years: +45 %: 15 mins: Summer	58.407	57.532	57.599	0.067	8.0	0.075	0.000	7.9	6.680	OK
SW95	FEH: 100 years: +45 %: 15 mins: Summer	58.544	57.404	57.548	0.144	24.6	0.162	0.000	24.3	19.612	OK
SW34	FEH: 100 years: +45 %: 15 mins: Summer	59.859	57.793	57.825	0.032	5.9	0.009	0.000	5.9	4.623	OK

FEH: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Resident Volume

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m^3)	Max. Flooded Volume (m^3)	Total Lost Volume (m^3)	Max. Outflow (L/s)	Total Discharge Volume (m^3)	Percentage Available (%)	Status
PROPOSED CONCRETE BOX CULVERT	FEH: 2 years: +0 %: 360 mins: Summer	56.991	56.991	0.412	0.412	15.2	74.156	0.000	0.000	3.6	65.429	70.703	OK
PROPOSED GEO-CELLULAR ATTENUATION TANK	FEH: 2 years: +0 %: 15 mins: Summer	57.550	57.550	0.000	0.000	0.0	0.000	0.000	0.000	0.0	0.000	100.000	OK
PP3	FEH: 2 years: +0 %: 30 mins: Winter	58.185	58.137	0.048	0.032	1.1	0.739	0.000	0.000	0.7	0.903	89.252	OK
PP4	FEH: 2 years: +0 %: 30 mins: Winter	58.115	58.067	0.047	0.032	1.1	0.716	0.000	0.000	0.7	0.891	89.328	OK
PP1	FEH: 2 years: +0 %: 30 mins: Winter	58.092	58.054	0.041	0.029	0.9	0.517	0.000	0.000	0.6	0.699	90.624	OK
PP2	FEH: 2 years: +0 %: 30 mins: Winter	57.982	57.944	0.048	0.039	1.3	0.699	0.000	0.000	1.0	1.386	87.375	OK
PP5	FEH: 2 years: +0 %: 15 mins: Winter	58.022	57.983	0.038	0.028	1.4	0.541	0.000	0.000	0.5	0.434	90.213	OK
PP6	FEH: 2 years: +0 %: 30 mins: Winter	57.973	57.927	0.053	0.042	1.5	0.943	0.000	0.000	1.2	1.611	86.396	OK
PP7	FEH: 2 years: +0 %: 15 mins: Winter	58.004	57.984	0.022	0.019	0.6	0.154	0.000	0.000	0.3	0.263	94.213	OK
PP8	FEH: 2 years: +0 %: 30 mins: Winter	57.996	57.977	0.013	0.012	0.4	0.093	0.000	0.000	0.1	0.379	96.527	OK
PP9	FEH: 2 years: +0 %: 30 mins: Winter	57.987	57.959	0.015	0.004	0.3	0.070	0.000	0.000	0.1	0.222	97.356	OK
PP10	FEH: 2 years: +0 %: 30 mins: Winter	57.938	57.912	0.019	0.007	0.2	0.048	0.000	0.000	0.1	0.130	96.392	OK
PP11	FEH: 2 years: +0 %: 30 mins: Winter	57.896	57.861	0.023	0.006	0.3	0.108	0.000	0.000	0.3	0.245	95.931	OK
PP12	FEH: 2 years: +0 %: 30 mins: Winter	58.394	58.363	0.021	0.008	0.3	0.110	0.000	0.000	0.2	0.205	95.877	OK
PP13	FEH: 2 years: +0 %: 15 mins: Winter	58.347	58.315	0.024	0.010	0.4	0.129	0.000	0.000	0.3	0.189	95.168	OK
PP14	FEH: 2 years: +0 %: 30 mins: Winter	58.309	58.267	0.029	0.012	0.5	0.266	0.000	0.000	0.4	0.433	94.181	OK
PP15	FEH: 2 years: +0 %: 30 mins: Winter	58.259	58.213	0.030	0.008	0.5	0.244	0.000	0.000	0.4	0.497	94.655	OK

PP16	FEH: 2 years: +0 %: 60 mins: Summer	59.639	59.561	0.041	0.006	0.9	0.664	0.000	0.000	0.6	1.020	92.407	OK
PP17	FEH: 2 years: +0 %: 60 mins: Summer	59.443	59.363	0.044	0.008	1.0	0.746	0.000	0.000	0.8	1.193	91.631	OK

FEH: 30 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Resident Volume

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m^3)	Max. Flooded Volume (m^3)	Total Lost Volume (m^3)	Max. Outflow (L/s)	Total Discharge Volume (m^3)	Percentage Available (%)	Status
PROPOSED CONCRETE BOX CULVERT	FEH: 30 years: +0 %: 360 mins: Winter	57.433	57.433	0.854	0.854	18.1	153.781	0.000	0.000	3.7	55.879	39.246	OK
PROPOSED GEO-CELLULAR ATTENUATION TANK	FEH: 30 years: +0 %: 15 mins: Summer	57.551	57.551	0.001	0.001	0.7	0.242	0.000	0.000	0.0	0.001	99.891	OK
PP3	FEH: 30 years: +0 %: 15 mins: Winter	58.213	58.164	0.076	0.059	3.9	1.303	0.000	0.000	1.9	1.419	81.038	OK
PP4	FEH: 30 years: +0 %: 15 mins: Winter	58.143	58.094	0.076	0.059	3.9	1.266	0.000	0.000	1.9	1.413	81.127	OK
PP1	FEH: 30 years: +0 %: 30 mins: Winter	58.117	58.078	0.066	0.053	2.0	0.913	0.000	0.000	1.6	1.703	83.458	OK
PP2	FEH: 30 years: +0 %: 30 mins: Winter	58.027	57.983	0.093	0.078	3.6	1.349	0.000	0.000	2.9	3.485	75.628	OK
PP5	FEH: 30 years: +0 %: 15 mins: Winter	58.050	58.030	0.066	0.075	3.4	1.068	0.000	0.000	1.6	1.191	80.660	OK
PP6	FEH: 30 years: +0 %: 30 mins: Winter	58.021	57.962	0.101	0.077	3.9	1.765	0.000	0.000	2.9	4.092	74.538	OK
PP7	FEH: 30 years: +0 %: 30 mins: Winter	58.017	57.999	0.034	0.034	1.0	0.255	0.000	0.000	0.5	0.859	90.446	OK
PP8	FEH: 30 years: +0 %: 15 mins: Winter	58.005	57.987	0.023	0.022	1.3	0.152	0.000	0.000	0.3	0.615	94.309	OK
PP9	FEH: 30 years: +0 %: 15 mins: Winter	57.996	57.962	0.024	0.007	0.9	0.114	0.000	0.000	0.2	0.379	95.735	OK
PP10	FEH: 30 years: +0 %: 30 mins: Winter	57.946	57.918	0.027	0.013	0.4	0.076	0.000	0.000	0.4	0.335	94.330	OK
PP11	FEH: 30 years: +0 %: 30 mins: Winter	57.908	57.865	0.036	0.010	0.7	0.171	0.000	0.000	0.7	0.616	93.594	OK

PP12	FEH: 30 years: +0 %: 30 mins: Winter	58.404	58.369	0.032	0.014	0.6	0.170	0.000	0.000	0.6	0.491	93.610	OK
PP13	FEH: 30 years: +0 %: 30 mins: Winter	58.364	58.329	0.042	0.024	0.9	0.245	0.000	0.000	0.7	0.742	90.817	OK
PP14	FEH: 30 years: +0 %: 30 mins: Winter	58.328	58.279	0.048	0.024	1.2	0.462	0.000	0.000	1.0	1.074	89.887	OK
PP15	FEH: 30 years: +0 %: 30 mins: Winter	58.277	58.218	0.047	0.013	1.3	0.388	0.000	0.000	1.1	1.297	91.516	OK
PP16	FEH: 30 years: +0 %: 30 mins: Summer	59.664	59.565	0.066	0.010	2.4	1.098	0.000	0.000	1.8	1.830	87.443	OK
PP17	FEH: 30 years: +0 %: 30 mins: Summer	59.471	59.367	0.072	0.012	2.7	1.230	0.000	0.000	2.1	2.148	86.207	OK

FEH: 100 years: Increase Rainfall (%): +45: Critical Storm Per Item: Rank By: Max. Resident Volume

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m^3)	Max. Flooded Volume (m^3)	Total Lost Volume (m^3)	Max. Outflow (L/s)	Total Discharge Volume (m^3)	Percentage Available (%)	Status
PROPOSED CONCRETE BOX CULVERT	FEH: 100 years: +45 %: 600 mins: Winter	58.077	58.077	1.498	1.498	34.7	252.162	0.000	0.000	5.0	117.368	0.379	OK
PROPOSED GEO-CELLULAR ATTENUATION TANK	FEH: 100 years: +45 %: 600 mins: Winter	58.077	58.077	0.527	0.527	44.2	145.215	0.000	0.000	8.4	144.035	34.247	OK
PP3	FEH: 100 years: +45 %: 15 mins: Winter	58.271	58.193	0.134	0.088	7.2	2.181	0.000	0.000	3.5	2.814	68.263	OK
PP4	FEH: 100 years: +45 %: 15 mins: Winter	58.199	58.123	0.132	0.088	7.1	2.112	0.000	0.000	3.5	2.787	68.528	OK
PP1	FEH: 100 years: +45 %: 30 mins: Winter	58.158	58.133	0.107	0.108	3.7	1.649	0.000	0.000	2.5	3.238	70.107	OK
PP2	FEH: 100 years: +45 %: 600 mins: Winter	58.077	58.076	0.143	0.171	1.1	2.459	0.000	0.000	1.1	15.560	55.591	OK
PP5	FEH: 100 years: +45 %: 30 mins: Winter	58.131	58.115	0.147	0.160	3.6	2.403	0.000	0.000	2.1	3.201	56.491	OK
PP6	FEH: 100 years: +45 %: 600 mins: Winter	58.077	58.076	0.157	0.191	1.2	3.416	0.000	0.000	1.2	19.724	50.732	OK
PP7	FEH: 100 years: +45 %: 15 mins: Winter	58.034	58.012	0.051	0.047	2.4	0.368	0.000	0.000	1.1	1.095	86.185	OK
PP8	FEH: 100 years: +45 %: 30 mins: Winter	58.015	58.001	0.032	0.036	1.6	0.254	0.000	0.000	0.5	1.507	90.473	OK
PP9	FEH: 100 years: +45 %: 15 mins: Winter	58.006	57.967	0.034	0.012	1.6	0.171	0.000	0.000	0.5	0.715	93.591	OK
PP10	FEH: 100 years: +45 %: 600 mins: Winter	57.963	57.963	0.044	0.058	2.1	0.191	0.000	0.000	0.1	22.994	85.814	OK
PP11	FEH: 100 years: +45 %: 600 mins: Winter	57.978	57.982	0.106	0.127	6.9	0.873	0.000	0.000	0.2	106.207	67.236	OK

PP12	FEH: 100 years: +45 %: 30 mins: Winter	58.419	58.381	0.046	0.026	1.1	0.269	0.000	0.000	1.0	0.940	89.920	OK
PP13	FEH: 100 years: +45 %: 30 mins: Winter	58.379	58.347	0.056	0.042	1.5	0.367	0.000	0.000	1.4	1.377	86.237	OK
PP14	FEH: 100 years: +45 %: 30 mins: Winter	58.347	58.295	0.067	0.040	1.9	0.690	0.000	0.000	1.7	1.879	84.891	OK
PP15	FEH: 100 years: +45 %: 30 mins: Winter	58.294	58.223	0.064	0.018	2.3	0.533	0.000	0.000	2.1	2.290	88.327	OK
PP16	FEH: 100 years: +45 %: 30 mins: Summer	59.701	59.570	0.103	0.015	4.4	1.641	0.000	0.000	3.4	3.574	81.235	OK
PP17	FEH: 100 years: +45 %: 30 mins: Summer	59.523	59.371	0.124	0.016	5.1	1.916	0.000	0.000	3.7	4.165	78.511	OK