technical note

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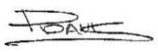
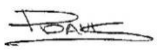
Title:	Proposed Great Wolf Lodge, Chesterton, Bicester	Date Approved:	August 2022
Discipline:	Civils	Author:	Paul Davis
Note Ref:	2180501-EWP-XX-ZZ-TN-C-0006		

			Issued or information				
revision:	P1	prepared by:	Paul Davis BEng (Hons) MSc CEng MICE	checked by:	Harry Hunter BEng (Hons)	approved by:	Paul Davis BEng (Hons) MSc CEng MICE
date:	02.08.22	signature:		signature:		signature:	

Introduction

This technical note has been prepared in response to the Lead Local Flood Authority (LLFA) comments on Condition 16 of application number 22/01815/DISC dated 19.07.22.

Main Note

LLFA Comment:

b) Provide surface water catchment plan, clearly showing the extent of the area and stating the area. Ensure all SuDS features are labelled on the drainage strategy drawing and read in line with the calculations.

EWP Response:

A catchment plan has been prepared, in addition pipe numbers have been added to the below ground drainage drawings, these drawings are presented in **Appendix A** of this report.

LLFA Comment:

h) Full details of the design and proposed location of the tank and the pipes and the conduits to be installed to convey water to and from the tank, such details to include the materials from which the tank, pipes and conduits are to be made.

EWP Response:

It is our intention to construct the attenuation tank with a pre-cast concrete tank. However, the design of this tank is ultimately a contractor design element. The contractor is currently procuring a supplier for the tank. As a result, the specific details requested are not currently available. Is it possible to get the wording of the condition amended so this information is provided prior to construction f the tank? This will allow the pre-commencement condition to be discharged and works to commence but the tank details would follow once the procurement has been resolved.

LLFA Comment:

i) Full details of the proposals for the installation of the tank, including the means by which the tank will be anchored.

EWP Response

Buoyancy calculations were provided as part of our initial submission on the assumption that the tank is constructed from pre-cast concrete. Inline with our comments above, full installation details for the tank cannot be provided until the procurement has been resolved by the contractor, can the wording of this element of the condition be amended to suit?

LLFA Comment:

k) full details of the on-going maintenance of the tank and the pipes and conduits to be installed to convey water to and from the tank and a scheme for on-going monitoring of its operation.

EWP Response

In line with the above, full details of the tank cannot be provided at this stage, nor can the full details of the connectivity to and from the tank and the building as well as its monitoring and operation until the contractor has procured this package. Can the wording of this element of the condition be amended to suit?

Appendix A

Catchment plan and updated below ground drainage drawings

This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.

Do not scale from this drawing.

LEGEND

ROOF CATCHMENT AREA

EXTERNAL HARDSTANDING CATCHMENT AREA

NOT FOR CONSTRUCTION

P1	S2	02.08.22	HHu	PDa	Issued for information
rev	sc	date	by	chk	description

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Project

Proposed Great Wolf Lodge, Chesterton, Bicester, Oxfordshire

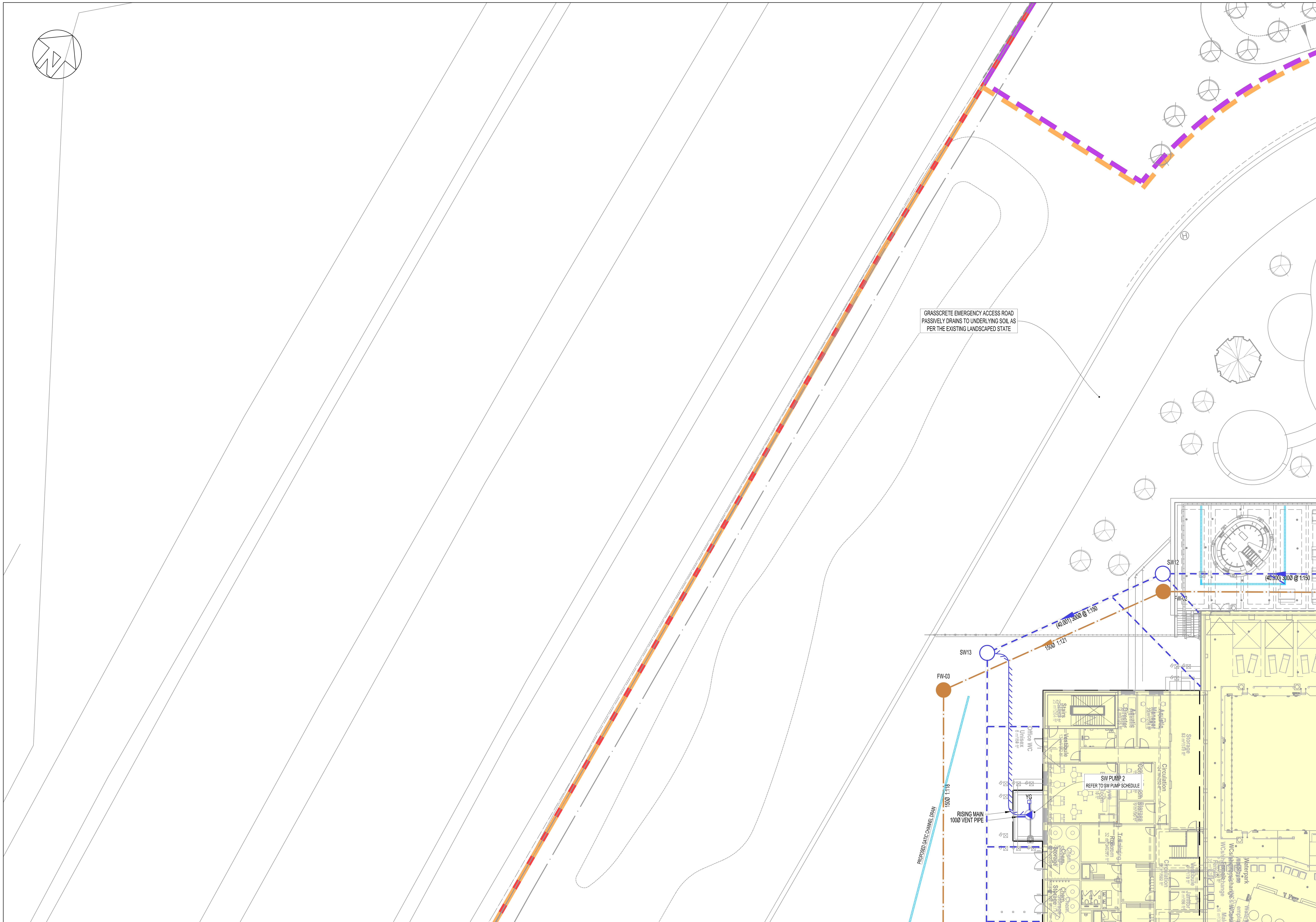
Drawing title

Surface Water Catchment Plan

Scale (s)	Date	Drawn
1:500@ A0	August 2022	HHu

Drawing status	Status	Revision
Preliminary	S2	P1

Project no.	Originator	Zone	Level	Type	Role	drg no.
2180501	- EWP	- ZZ	- XX	- DR	- C	- 0002



BELOW GROUND DRAINAGE NOTES

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7. DRAINS AT GROUND LEVEL ARE TO BE CONSTRUCTED USING VITRIFIED CLAY PIPES TO BS EN 295-1 SUPER STRENGTH SPECIFICATION (HEPWORTH SUPERSLEVE) OR SIMILAR APPROVED.
8. ALL SOIL CONNECTIONS UNDER BUILDINGS TO BE 100mm DIA LAID AT A MINIMUM GRADIENT OF 1/40 UNLESS NOTED OTHERWISE.
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LEGEND CONTINUED

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SH-CD-V	SCHLUTER KERDI LINE LINEAR DRAIN
PR-FG-V	WADE G1014 CAST IRON FLOOR GULLY WITH 150mm SQUARE L2601 GRATING
(pink line)	DENOTES DRAINAGE PIPE CAST-IN TO FOUNDATION
BD	DENOTES BACKDROP

This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.

Do not scale from this drawing.

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- SURFACE WATER MANHOLE
- KITCHEN WATER MANHOLE
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NOT FOR CONSTRUCTION

rev	sc	date	by	chk	description
P5	S2	02.08.22	HHu	PDa	Pipe Numbers Added
P4	S2	01.07.22	HHu	PDa	RIBA 4 Issue
P3	S2	17.06.22	HHu	PDa	Planning Condition Discharge
P2	S2	30.03.22	HHu	PDa	RIBA 3 Issue
P1	S2	18.02.22	HHu	PDa	RIBA 3 Part 1 Issue

Drawing title
Proposed Below Ground Drainage
Sheet 8 of 23

scale (s): 1:200@ A1; 1:400@A3 | date: February 2022 | drawn: HHu

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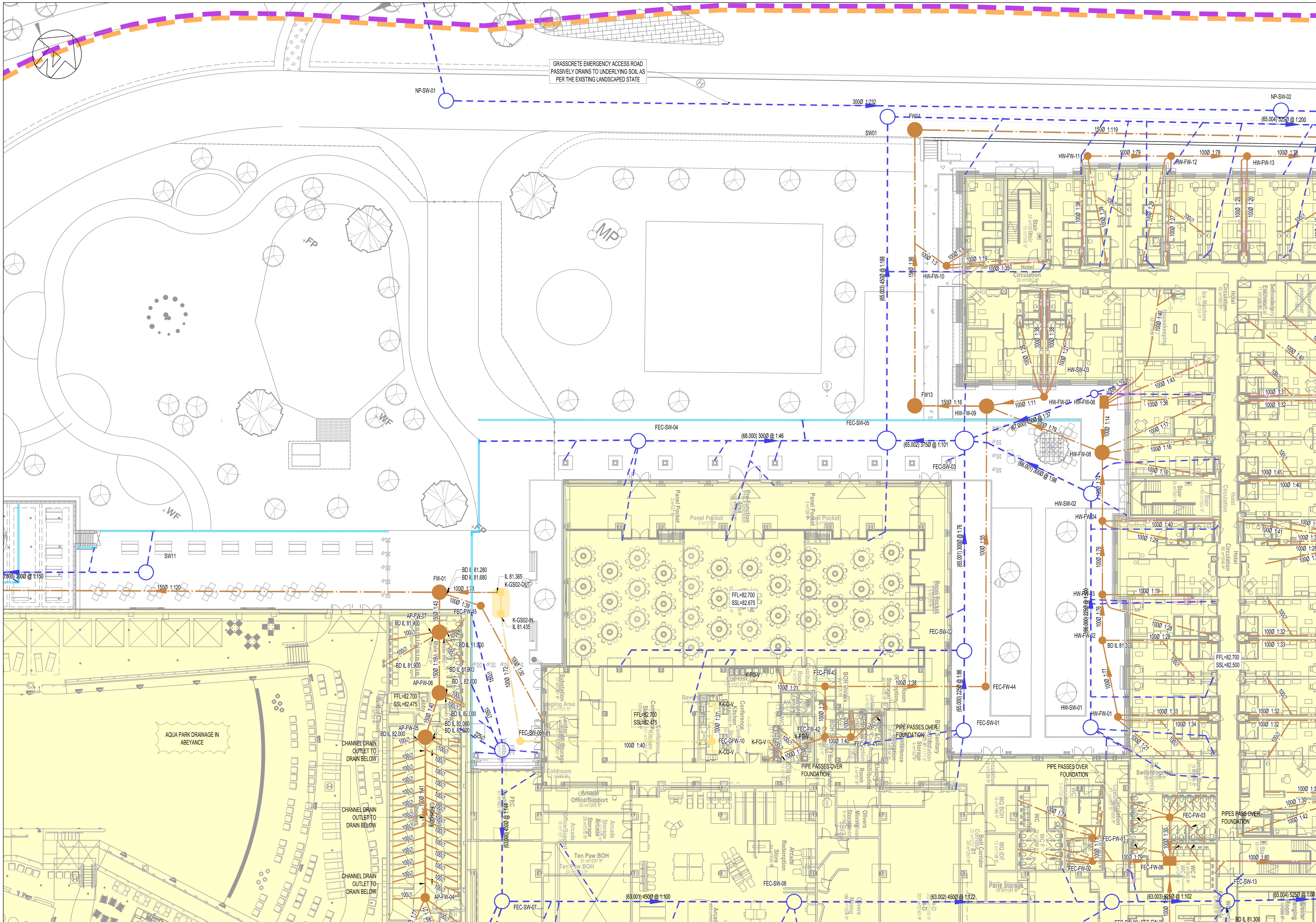
Drawing status: Preliminary | Status: S2 | Revision: P5

Project no. / Originator / Zone / Level / Type / Role / drg no.
2180501-EWP-Z8-EX-DR-C-1007



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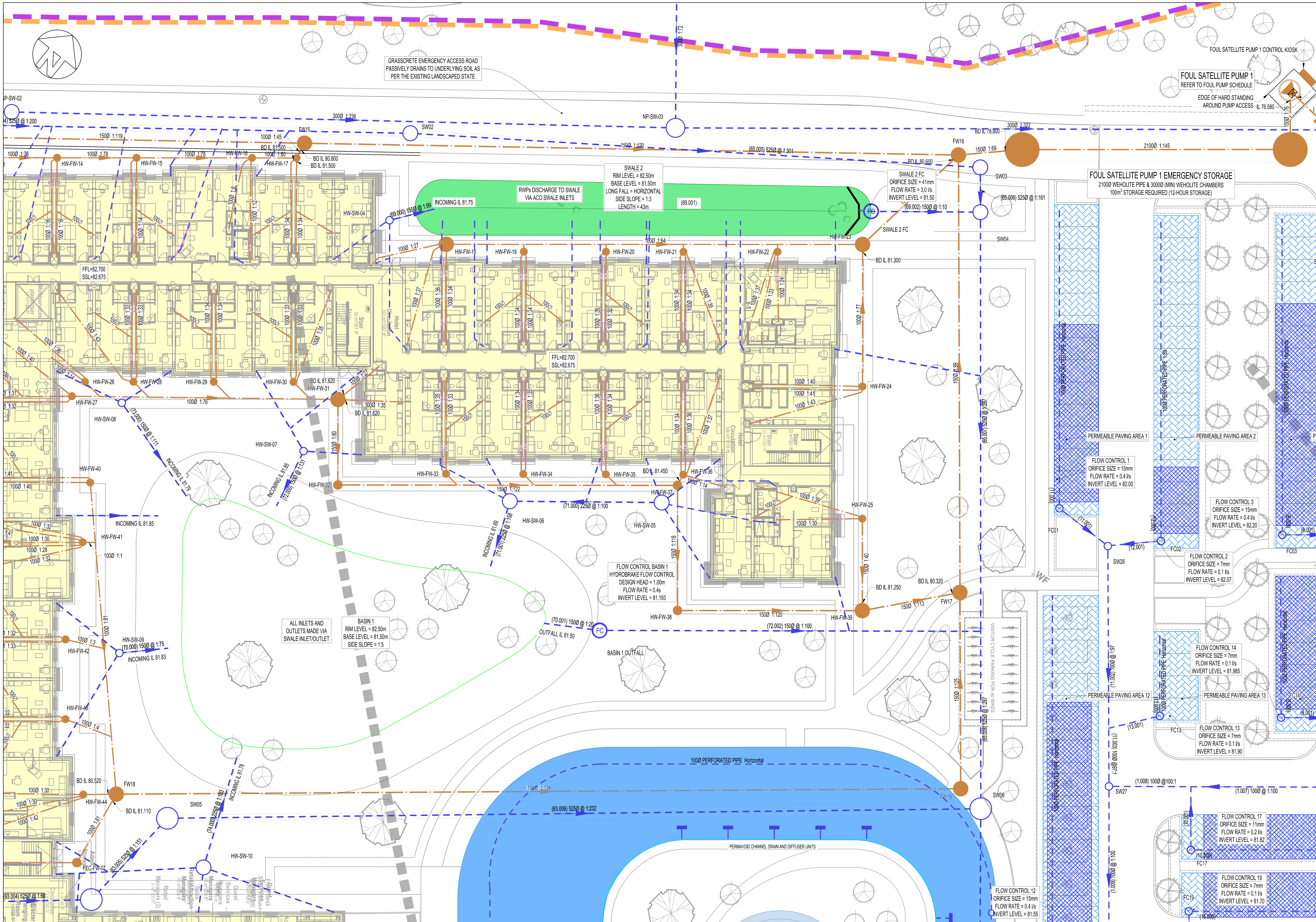

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LEGEND CONTINUED

K-FG-V	WADE Q2434 GRADE 304 SS FLOOR GULLY WITH 192mm SQUARE Q42 NON-SLIP MESH GRATING
K-TFG-V	WADE Q2434 GRADE 304 SS FLOOR GULLY WITH BOLT ON TUNDISH
K-CD-V	WADE RP GRADE 304 SS LINEAR CHANNEL AND 199mm WIDE SS7200B5F GRATING WITH Q28DS OUTLET
FOH-FG-V	WADE Q2434 GRADE 316 SS FLOOR GULLY WITH 192mm SQUARE Q6230 SMOOTH PERFORATED GRATING
FOH-CD-V	WADE RP GRADE 316 SS LINEAR CHANNEL AND 149mm WIDE SS40150A1 GRATING WITH Q28DS OUTLET
SH-CD-V	SCHLUTER KERDI LINE LINEAR DRAIN
PR-FG-V	WADE G1014 CAST IRON FLOOR GULLY WITH 150mm SQUARE L2601 GRATING
	DENOTES DRAINAGE PIPE CAST-IN TO FOUNDATION
BD	DENOTES BACKDROP

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LEGEND

- FOUL WATER MANHOLE
- SURFACE WATER MANHOLE
- KITCHEN WATER MANHOLE
- PROPOSED FOUL WATER
- PROPOSED SURFACE WATER
- PROPOSED KITCHEN WATER
- PROPOSED PRIVATE SURFACE WATER PUMPING STATION
- PROPOSED PRIVATE FOUL WATER PUMPING STATION
- PROPOSED FOUL WATER RISING MAIN
- PROPOSED SURFACE WATER RISING MAIN
- PROPOSED LINEAR CHANNEL WITH HEELGUARD GRATING
- PROPOSED THRESHOLD DRAIN WITH BRICK SLOT UPSTAND
- RG TRAPPED ROAD GULLY
- CG CHUTE GULLY
- YG TRAPPED YARD GULLY
- FD TRAPPED FLOOR DRAIN
- FOUL DROP POINT
- GEOCELLULAR SURFACE WATER ATTENUATION (TO CONTRACTOR DESIGN)
- PERMAVOID CRATES
- PROPOSED IMPERMEABLE SURFACE WITH 4/20 COARSE GRADED PERMEABLE SUBBASE
- RAINWATER DIFFUSER UNIT
- PROPOSED PERMEABLE SURFACING WITH 4/20 COARSE GRADED PERMEABLE SUBBASE
- EXISTING DITCH
- EXISTING DITCH TO BE REMOVED
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rev	sc	date	by	chk	description
P5	S2	02.08.22	HHU	PDa	Pipe Numbers Added
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Drawing title

Proposed Below Ground Drainage
Sheet 10 of 23

scale (s): 1:200@ A1; 1:400@A3
date: February 2022
drawn: HHu

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Elliott Wood Partnership Ltd
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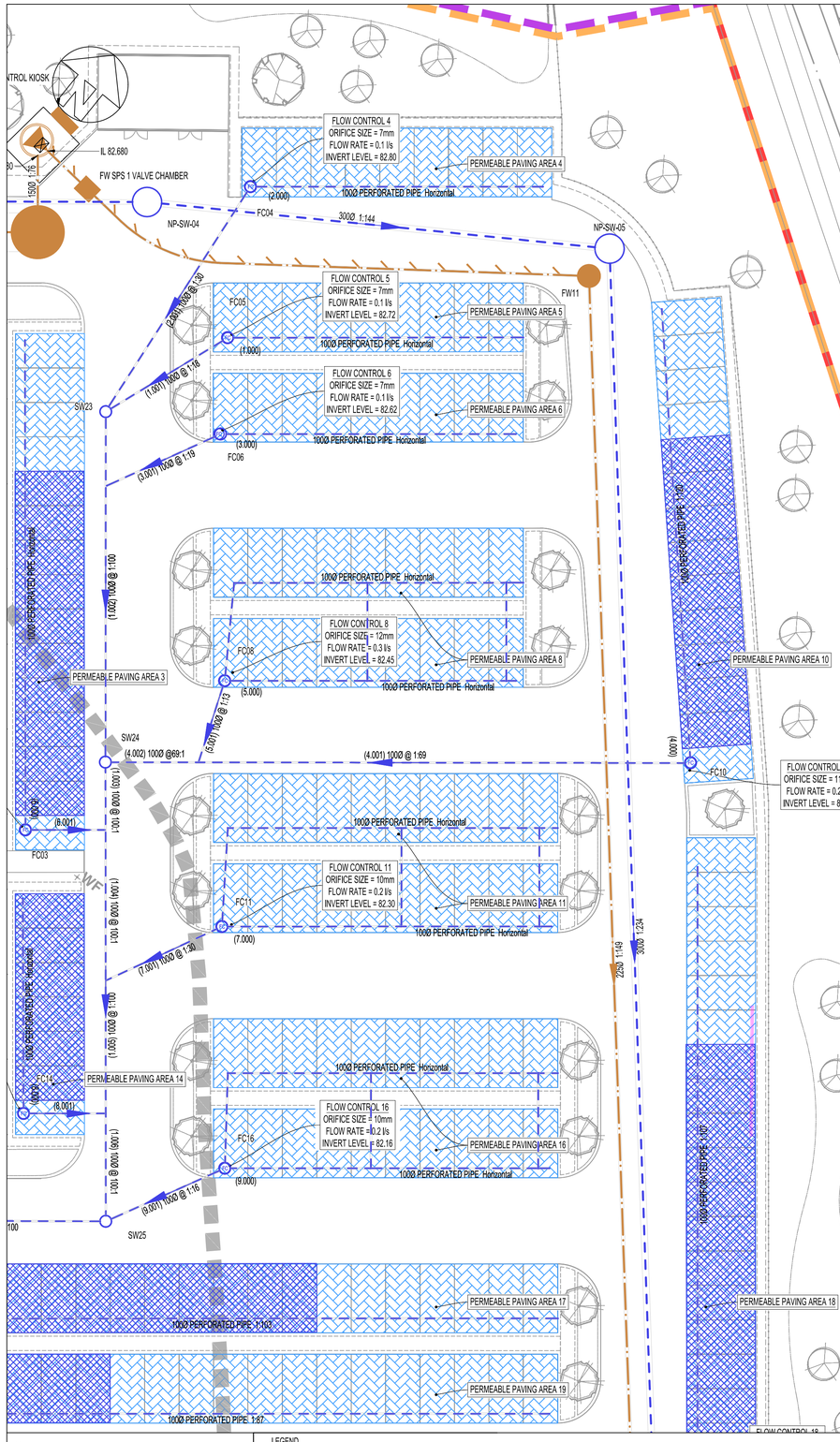
Project

Proposed Great Wolf Lodge, Chesterton, Bicester, Oxfordshire

Drawing status: Preliminary
Status: S2
Revision: P5

Project no. / Originator / Zone / Level / Type / Role / drg no.

2180501-EWP-Z10-EX-DR-C-1009



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7. DRAINS AT GROUND LEVEL ARE TO BE CONSTRUCTED USING VITRIFIED CLAY PIPES TO BS EN 295-1 SUPER STRENGTH SPECIFICATION (HEPWORTH SUPERSLEVE) OR SIMILAR APPROVED.
8. ALL SOIL CONNECTIONS UNDER BUILDINGS TO BE 100mm DIA LAID AT A MINIMUM GRADIENT OF 1/40 UNLESS NOTED OTHERWISE.
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Drawing title

Proposed Below Ground Drainage
Sheet 11 of 23

scale (s)	date	drawn
1:200@ A1; 1:400@A3	February 2022	HHu

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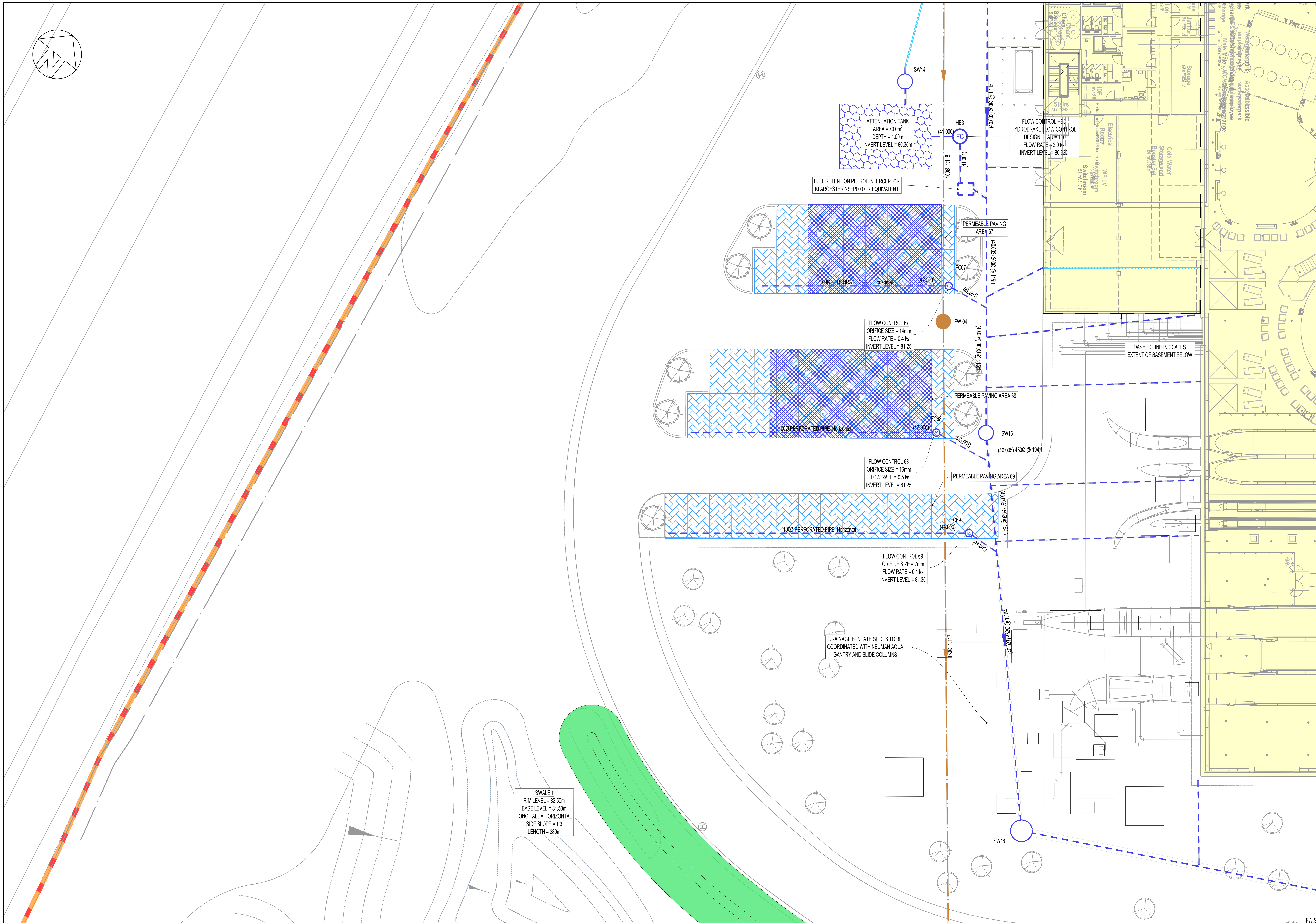
Project

Proposed Great Wolf Lodge,
Chesterton, Bicester,
Oxfordshire

Drawing status	Status	Revision
Preliminary	S2	P5

Project no.	Originator	Zone	Level	Type	Role	drg no.
2180501-EWP-Z11-EX-DR-C-1010						



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Drawing title
Proposed Below Ground Drainage
Sheet 12 of 23

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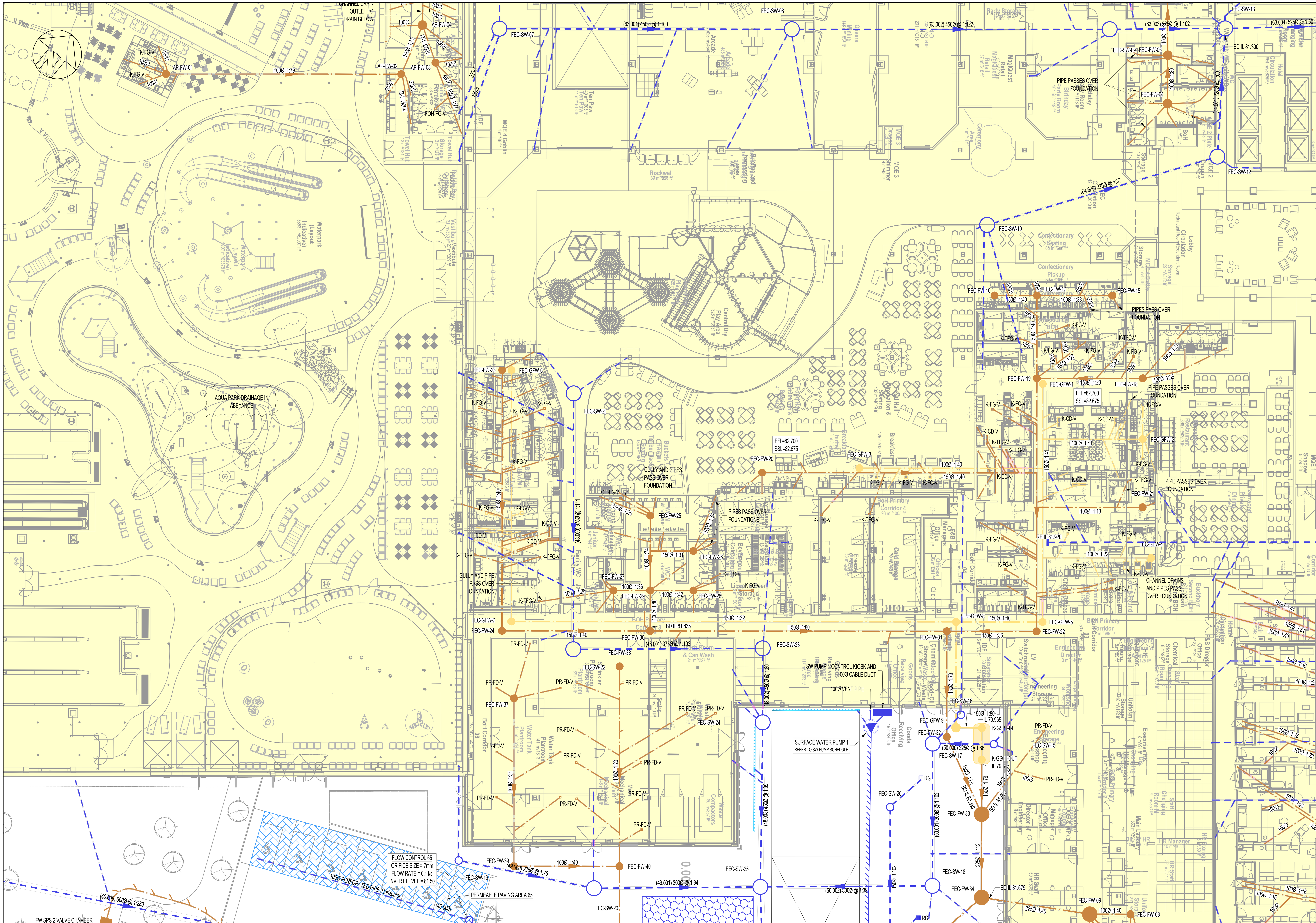
Proposed Great Wolf Lodge, Chesterton, Bicester, Oxfordshire

Drawing status: Preliminary
Status: S2
Revision: P5

Project no. / Originator / Zone / Level / Type / Role / drg no.
2180501-EWP-Z12-EX-DR-C-1011



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22. FOR DETAILS OF PERMEABLE PAVING CONSTRUCTION AND LEVELS, REFER TO ELLIOTT WOOD DOCUMENT 2180501-EWP-ZZ-XX-SH-C-0001.

LEGEND CONTINUED

K-FG-V	WADE Q2434 GRADE 304 SS FLOOR GULLY WITH 192mm SQUARE Q42 NON-SLIP MESH GRATING
K-TFG-V	WADE Q2434 GRADE 304 SS FLOOR GULLY WITH BOLT ON TUNDISH
K-CD-V	WADE RP GRADE 304 SS LINEAR CHANNEL AND 199mm WIDE SS7200B5F GRATING WITH Q28DS OUTLET
FOH-FG-V	WADE Q2434 GRADE 316 SS FLOOR GULLY WITH 192mm SQUARE Q6230 SMOOTH PERFORATED GRATING
FOH-CD-V	WADE RP GRADE 316 SS LINEAR CHANNEL AND 149mm WIDE SS40150A1 GRATING WITH Q28DS OUTLET
SH-CD-V	SCHLUTER KERDI LINE LINEAR DRAIN
PR-FG-V	WADE G1014 CAST IRON FLOOR GULLY WITH 150mm SQUARE L2601 GRATING
	DENOTES DRAINAGE PIPE CAST-IN TO FOUNDATION
BD	DENOTES BACKDROP

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LEGEND

- FOUL WATER MANHOLE
- SURFACE WATER MANHOLE
- KITCHEN WATER MANHOLE
- PROPOSED FOUL WATER
- PROPOSED SURFACE WATER
- PROPOSED KITCHEN WATER
- PROPOSED PRIVATE SURFACE WATER PUMPING STATION
- PROPOSED PRIVATE FOUL WATER PUMPING STATION
- PROPOSED FOUL WATER RISING MAIN
- PROPOSED SURFACE WATER RISING MAIN
- PROPOSED LINEAR CHANNEL WITH HEELGUARD GRATING
- PROPOSED THRESHOLD DRAIN WITH BRICK SLOT UPSTAND
- RG — TRAPPED ROAD GULLY
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- YG — TRAPPED YARD GULLY
- FD — TRAPPED FLOOR DRAIN
- FOUL DROP POINT
- GEOCELLULAR SURFACE WATER ATTENUATION (TO CONTRACTOR DESIGN)
- PERMAVOID CRATES
- PROPOSED IMPERMEABLE SURFACE WITH 4/20 COARSE GRADED PERMEABLE SUBBASE
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- EXISTING DITCH
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- SITE BOUNDARY
- NORTH PARK BOUNDARY
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Drawing title
Proposed Below Ground Drainage
Sheet 13 of 23

scale (s)	date	drawn
1:200@ A1; 1:400@A3	February 2022	HHu

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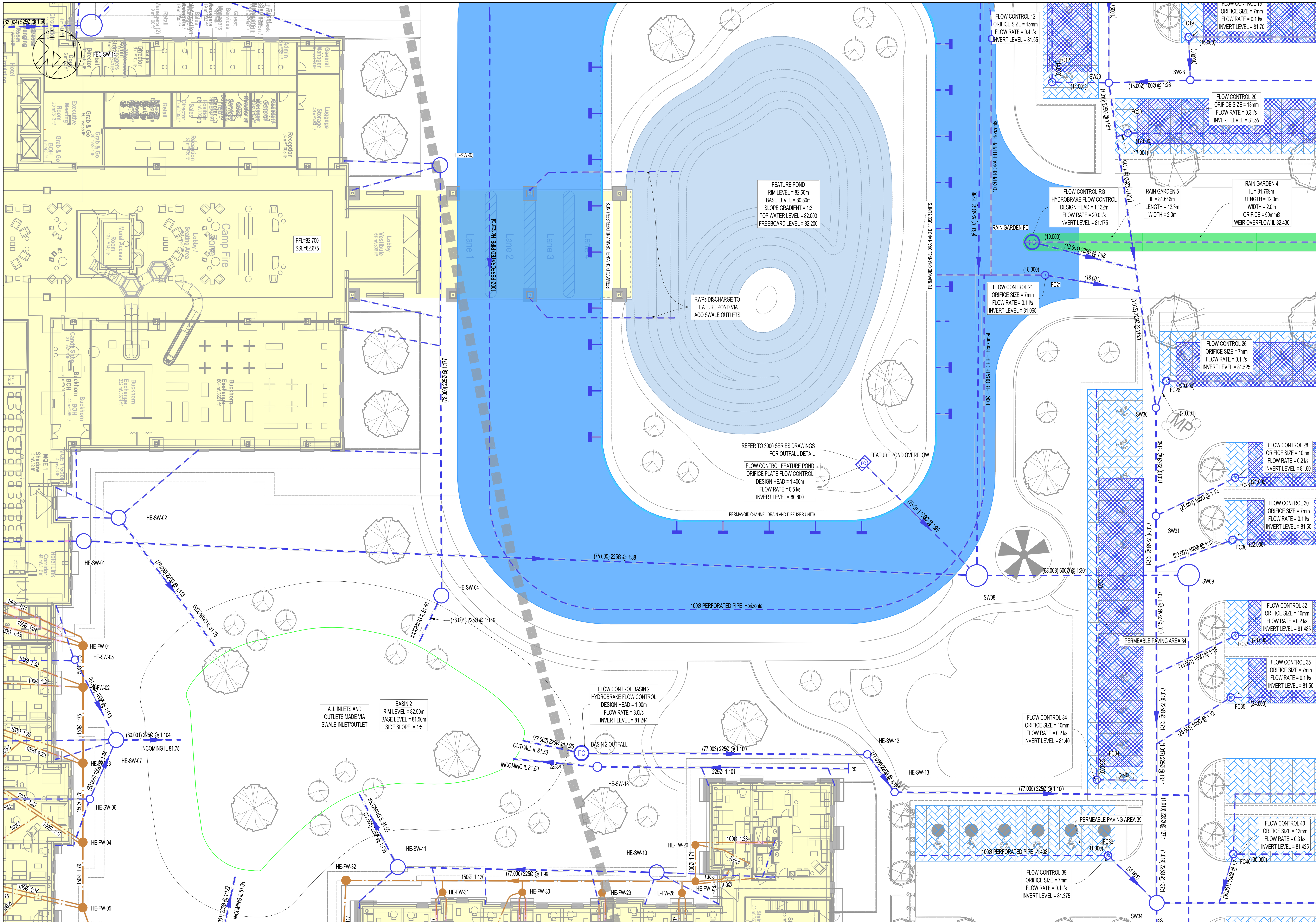
Project
Proposed Great Wolf Lodge, Chesterton, Bicester, Oxfordshire

Drawing status	Status	Revision
Preliminary	S2	P5

Project no. / Originator / Zone / Level / Type / Role / drg no.
2180501-EWP-Z13-EX-DR-C-1012



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8. ALL SOIL CONNECTIONS UNDER BUILDINGS TO BE 100mm DIA LAID AT A MINIMUM GRADIENT OF 1/40 UNLESS NOTED OTHERWISE.
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Drawing title
Proposed Below Ground Drainage
Sheet 14 of 23

scale (s): 1:200@ A1; 1:400@A3 | date: February 2022 | drawn: HHu

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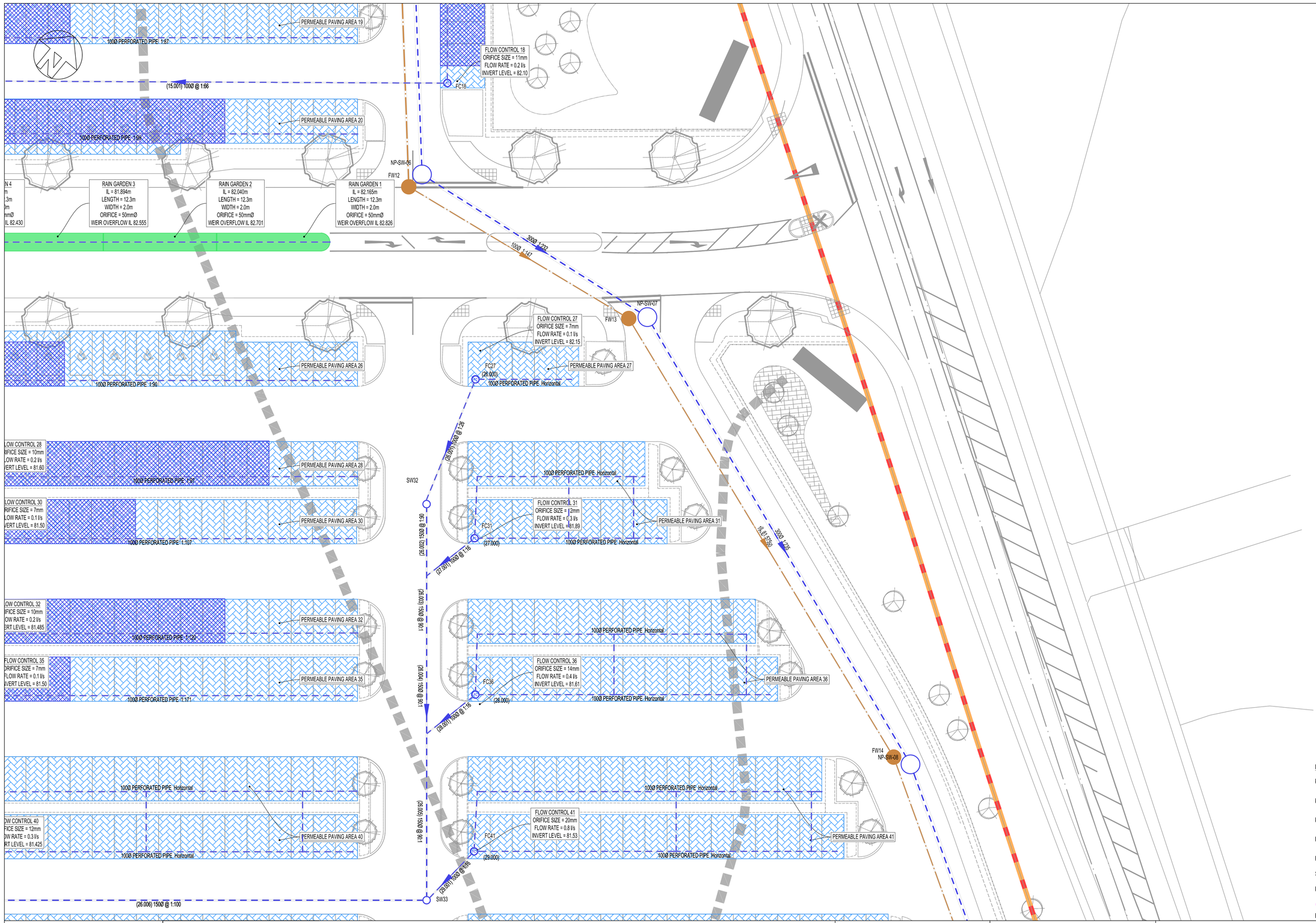
Project
Proposed Great Wolf Lodge, Chesterton, Bicester, Oxfordshire

Drawing status: Preliminary | Status: S2 | Revision: P5

Project no. / Originator / Zone / Level / Type / Role / drg no.
2180501-EWP-Z14-EX-DR-C-1013



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Drawing status	Status	Revision
Preliminary	S2	P5

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2180501	EWP	Z15	EX	DR	C	1014

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K-TFG-V	WADE Q2434 GRADE 304 SS FLOOR GULLY WITH BOLT ON TUNDISH
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	DENOTES DRAINAGE PIPE CAST-IN TO FOUNDATION
BD	DENOTES BACKDROP

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Drawing title

Proposed Below Ground Drainage
Sheet 16 of 23

scale (s)	date	drawn
1:200@ A1; 1:400@A3	February 2022	HHu

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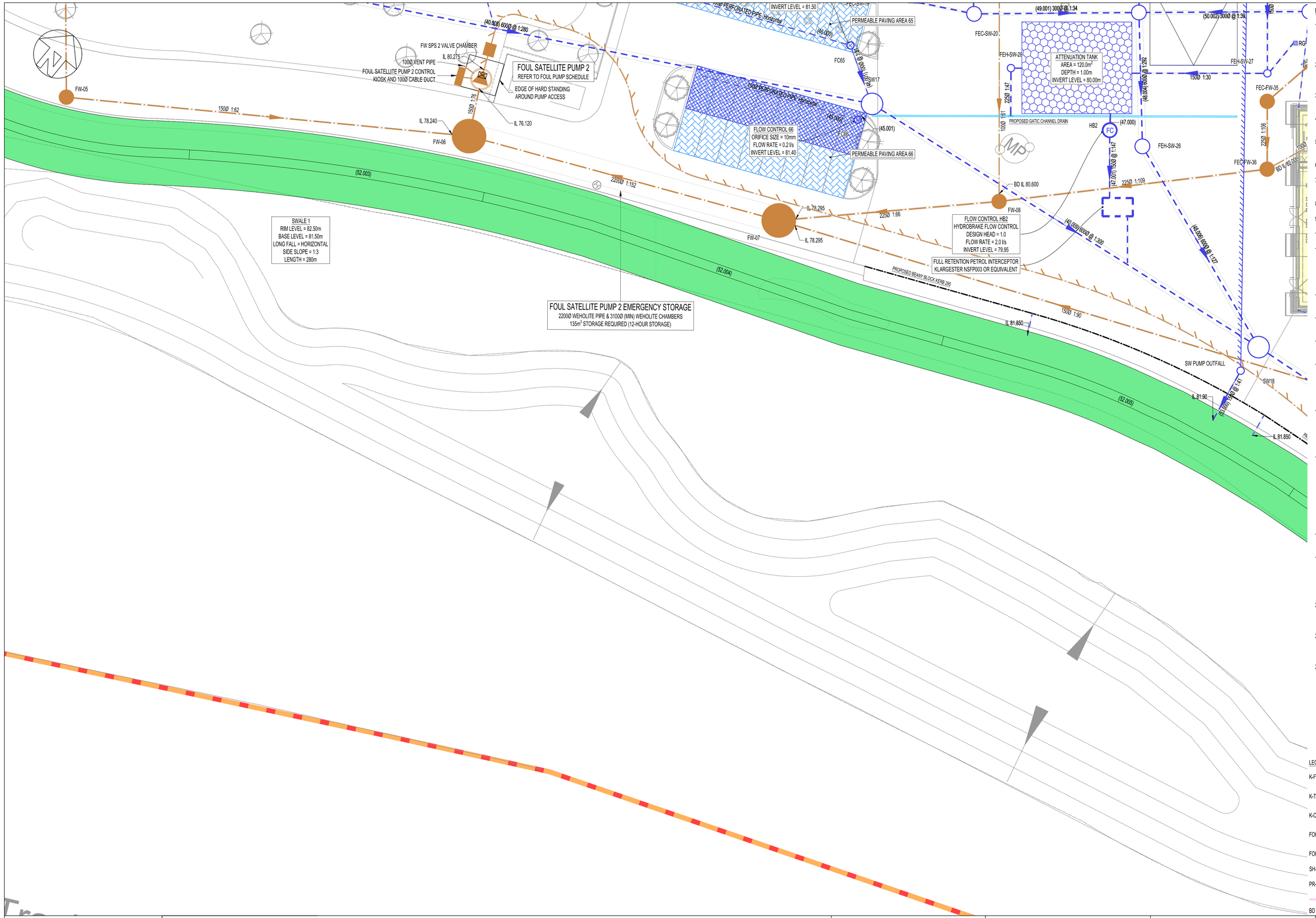
Project

Proposed Great Wolf Lodge, Chesterton, Bicester, Oxfordshire

Drawing status	Status	Revision
Preliminary	S2	P5

Project no.	Originator	Zone	Level	Type	Role	drg no.
2180501	EWP	Z16	EX	DR	C	1015



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Proposed Below Ground Drainage
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Project

Proposed Great Wolf Lodge,
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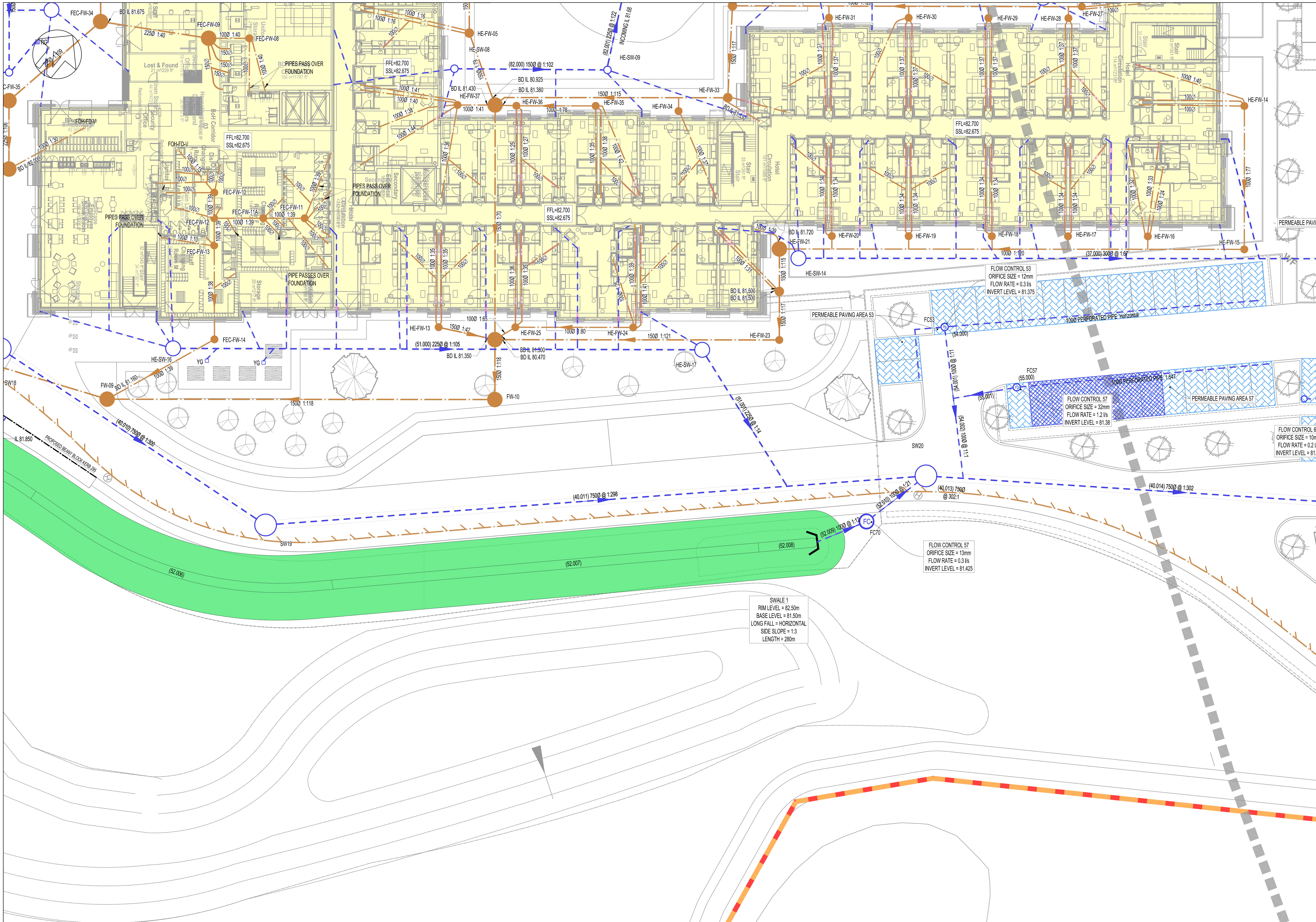
2180501	EWP	Z17	EX	DR	C	1016



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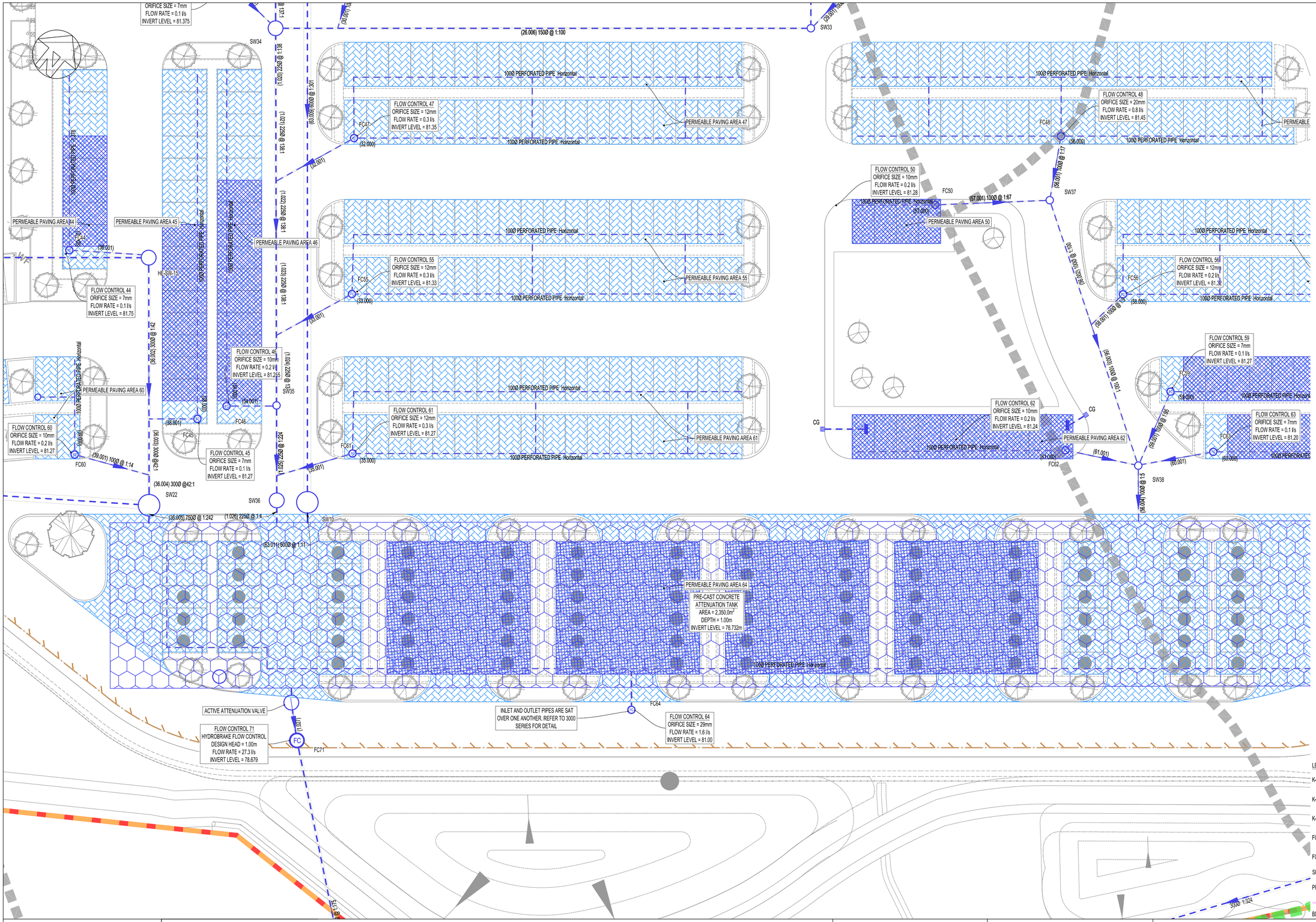

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14. BACKFILLING OF DRAIN TRENCHES ADJACENT TO BUILDING OR OTHER STRUCTURES IS TO BE IN ACCORDANCE WITH DIAGRAM 8 OF THE BUILDING REGULATIONS.
15. ANY PIPE OR GULLY OR OTHER FITTING OR DUCT PENETRATING THE BASEMENT SLAB OR WALL IS TO BE WATERPROOFED USING HYDROPHILIC STRIPS OR PUDDLE FLANGES TO ENSURE A WATER TIGHT JOINT. CONCRETE SURROUND TO DRAINAGE PIPES AND FITTINGS MAY BE REQUIRED IN CERTAIN CASES - REFER TO DETAILED DRAINAGE DRAWINGS AND RELEVANT STRUCTURAL DETAILS.
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20. DETAILED DESIGN OF GEOCELLULAR ATTENUATION CRATES IS A CDP ITEM AND SHOULD BE BASED ON LEVEL, LAYOUT AND VOLUME DETAILS SHOWN. DETAILED DESIGN INFORMATION SHOULD BE PROVIDED TO THE CIVIL ENGINEER TO PASS COMMENT..
21. MANHOLES LOCATED WITHIN PAVED AREAS ARE TO BE FITTED WITH RECESSED FRAME AND COVERS. COVERS IN ASPAHLT AND LANDSCAPED AREAS ARE TO BE FITTED WITH A SOLID FRAME AND COVER.
22. FOR DETAILS OF PERMEABLE PAVING CONSTRUCTION AND LEVELS, REFER TO ELLIOTT WOOD DOCUMENT 2180501-EWP-ZZ-XX-SH-C-0001.

LEGEND CONTINUED

K-FG-V	WADE Q2434 GRADE 304 SS FLOOR GULLY WITH 192mm SQUARE Q42 NON-SLIP MESH GRATING
K-TFG-V	WADE Q2434 GRADE 304 SS FLOOR GULLY WITH BOLT ON TUNDISH
K-CD-V	WADE RP GRADE 304 SS LINEAR CHANNEL AND 199mm WIDE SS7200B5F GRATING WITH Q28DS OUTLET
FOH-FG-V	WADE Q2434 GRADE 316 SS FLOOR GULLY WITH 192mm SQUARE Q6230 SMOOTH PERFORATED GRATING
FOH-CD-V	WADE RP GRADE 316 SS LINEAR CHANNEL AND 149mm WIDE SS40150A1 GRATING WITH Q28DS OUTLET
SH-CD-V	SCHLUTER KERDI LINE LINEAR DRAIN
PR-FG-V	WADE G1014 CAST IRON FLOOR GULLY WITH 150mm SQUARE L2601 GRATING
	DENOTES DRAINAGE PIPE CAST-IN TO FOUNDATION
BD	DENOTES BACKDROP

This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.

Do not scale from this drawing.

LEGEND

- FOUL WATER MANHOLE
- SURFACE WATER MANHOLE
- KITCHEN WATER MANHOLE
- PROPOSED FOUL WATER
- PROPOSED SURFACE WATER
- PROPOSED KITCHEN WATER
- PROPOSED PRIVATE SURFACE WATER PUMPING STATION
- PROPOSED PRIVATE FOUL WATER PUMPING STATION
- PROPOSED FOUL WATER RISING MAIN
- PROPOSED SURFACE WATER RISING MAIN
- PROPOSED LINEAR CHANNEL WITH HEELGUARD GRATING
- PROPOSED THRESHOLD DRAIN WITH BRICK SLOT UPSTAND
- RG TRAPPED ROAD GULLY
- CG CHUTE GULLY
- YG TRAPPED YARD GULLY
- FD TRAPPED FLOOR DRAIN
- FOUL DROP POINT
- GEOCELLULAR SURFACE WATER ATTENUATION (TO CONTRACTOR DESIGN)
- PERMAVOID CRATES
- PROPOSED IMPERMEABLE SURFACE WITH 4/20 COARSE GRADED PERMEABLE SUBBASE
- RAINWATER DIFFUSER UNIT
- PROPOSED PERMEABLE SURFACING WITH 4/20 COARSE GRADED PERMEABLE SUBBASE
- EXISTING DITCH
- EXISTING DITCH TO BE REMOVED
- PROPOSED BUILDING
- SITE BOUNDARY
- NORTH PARK BOUNDARY
- MAIN RESORT BOUNDARY
- EXISTING POND
- PROPOSED POND
- PROPOSED SWALE

NOT FOR CONSTRUCTION

rev	sc	date	by	chk	description
P5	S2	02.08.22	HHU	PDa	Pipe Numbers Added
P4	S2	01.07.22	HHu	PDa	RIBA 4 Issue
P3	S2	17.06.22	HHu	PDa	Planning Condition Discharge
P2	S2	30.03.22	HHu	PDa	RIBA 3 Issue
P1	S2	18.02.22	HHu	PDa	RIBA 3 Part 1 Issue

Drawing title

Proposed Below Ground Drainage
Sheet 19 of 23

scale (s)	date	drawn
1:200@ A1; 1:400@A3	February 2022	HHu

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Elliott Wood Partnership Ltd
Central London • Wimbledon • Nottingham
Consulting Structural and Civil Engineers
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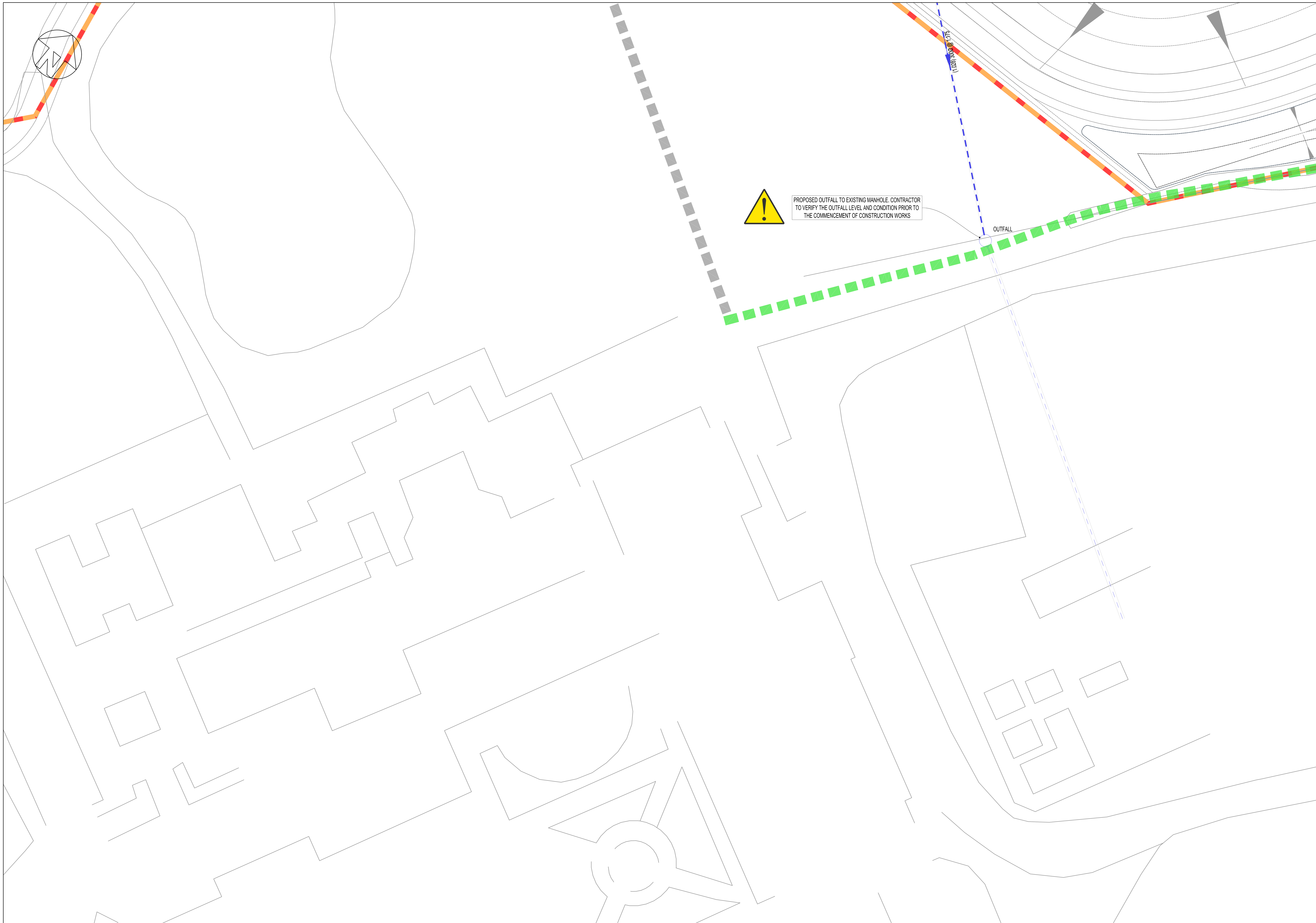
Project

Proposed Great Wolf Lodge, Chesterton, Bicester, Oxfordshire

Drawing status	Status	Revision
Preliminary	S2	P5

Project no.	Originator	Zone	Level	Type	Role	drg no.
2180501	EWP	Z	19	EX	DR	C-1018



BELOW GROUND DRAINAGE NOTES

1. THE LOCATION AND LEVEL OF EXISTING DRAINAGE CONNECTIONS AND EXISTING SERVICES IS TO BE CHECKED PRIOR TO COMMENCEMENT OF DRAINAGE WORKS. ANY VARIANCE TO THE DETAILS ON THIS DRAWING AND THE SCHEDULE IS TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
2. THE DESIGN IS BASED ON THE INFORMATION AVAILABLE ON THE DATE OF ISSUE FROM OTHER PARTIES (EG. ARCHITECT AND M & E ENGINEER). IT IS SUBJECT TO CHANGE RESULTING FROM UPDATES TO THE AVAILABLE INFORMATION FROM OTHERS.
3. THE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE NBS SPECIFICATIONS, ASSOCIATED MANHOLE SCHEDULE AND STANDARD DRAINAGE DETAIL DRAWINGS WHERE APPLICABLE.
4. THE POSITIONS OF FOUL AND SURFACE WATER DRAINAGE POINTS ARE INDICATIVE ONLY, REFER TO THE ARCHITECTS AND M&E ENGINEERS DRAWINGS FOR SETTING OUT DETAILS.
5. PRIVATE FOUL AND SURFACE WATER DRAINAGE IS TO BE CONSTRUCTED IN ACCORDANCE WITH BUILDING REGULATIONS PART H, BS EN752 AND BS EN12056.
6. DRAINS AT BASEMENT LEVEL ARE TO BE CONSTRUCTED USING CAST IRON (ENSIGN OR EQUIVALENT) AND FLEXIBLY JOINTED TO BS 437.
7. DRAINS AT GROUND LEVEL ARE TO BE CONSTRUCTED USING VITRIFIED CLAY PIPES TO BS EN 295-1 SUPER STRENGTH SPECIFICATION (HEPWORTH SUPERSLEVE) OR SIMILAR APPROVED.
8. ALL SOIL CONNECTIONS UNDER BUILDINGS TO BE 100mm DIA LAID AT A MINIMUM GRADIENT OF 1/40 UNLESS NOTED OTHERWISE.
9. ALL SURFACE WATER CONNECTIONS TO BE 150mm DIAMETER AND TO BE LAID AT A MINIMUM GRADIENT OF 1/80 UNLESS NOTED OTHERWISE.
10. ALL SOIL CONNECTIONS AND RAINWATER PIPES SHOULD BE RODDABLE FROM GROUND LEVEL.
11. IN CASES OF IN SITU CONCRETE FLOOR SLABS, DRAINS ARE TO BE CAST INTEGRAL WITH THE SLAB WHERE PIPE COVER TO THE CROWN IS LESS THAN 300mm. - NOTE SPECIAL PROVISIONS APPLY TO BASEMENT FLOOR SLABS - SEE DETAILED DRAINAGE AND STRUCTURAL DRAWINGS. CONCRETE ENCASEMENT TO BE REINFORCED AS PER DRAINAGE DETAIL.
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Drawing title

Proposed Below Ground Drainage
Sheet 22 of 23

scale (s)	date	drawn
1:200@ A1; 1:400@A3	February 2022	HHu

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Project

Proposed Great Wolf Lodge, Chesterton, Bicester, Oxfordshire

Drawing status	Status	Revision
Preliminary	S2	P5

Project no. Originator Zone Level Type Role drg no.

2180501-EWP-Z22-EX-DR-C-1021

STORM SEWER DESIGN by the Modified Rational Method

Design Criteria for Storm

Pipe Sizes STANDARD Manhole Sizes STANDARD

FSR Rainfall Model - England and Wales

Return Period (years)	100	PIMP (%)	100
M5-60 (mm)	20.000	Add Flow / Climate Change (%)	0
Ratio R	0.403	Minimum Backdrop Height (m)	0.200
Maximum Rainfall (mm/hr)	50	Maximum Backdrop Height (m)	1.500
Maximum Time of Concentration (mins)	30	Min Design Depth for Optimisation (m)	1.200
Foul Sewage (l/s/ha)	0.000	Min Vel for Auto Design only (m/s)	1.00
Volumetric Runoff Coeff.	0.750	Min Slope for Optimisation (1:X)	500

Designed with Level Soffits

Network Design Table for Storm

« - Indicates pipe capacity < flow

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S1.000	1.626	0.100	16.3	0.023	4.00	0.0	0.600	o	100	Pipe/Conduit	
S1.001	9.938	0.530	18.8	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S2.000	2.221	0.050	44.4	0.010	4.00	0.0	0.600	o	100	Pipe/Conduit	
S2.001	18.655	0.610	30.6	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S3.000	2.223	0.050	44.5	0.010	4.00	0.0	0.600	o	100	Pipe/Conduit	
S3.001	8.148	0.430	18.9	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S1.002	24.436	0.160	152.7	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S4.000	2.392	0.050	47.8	0.040	4.00	0.0	0.600	o	100	Pipe/Conduit	
S4.001	34.295	0.343	100.0	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S5.000	2.080	0.020	104.0	0.035	4.00	0.0	0.600	o	100	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S1.000	50.00	4.01	82.850	0.023	0.0	0.0	0.0	1.93	15.1	3.1
S1.001	50.00	4.11	82.720	0.023	0.0	0.0	0.0	1.79	14.1	3.1
S2.000	50.00	4.03	83.190	0.010	0.0	0.0	0.0	1.16	9.1	1.4
S2.001	50.00	4.25	82.800	0.010	0.0	0.0	0.0	1.40	11.0	1.4
S3.000	50.00	4.03	83.010	0.010	0.0	0.0	0.0	1.16	9.1	1.4
S3.001	50.00	4.11	82.620	0.010	0.0	0.0	0.0	1.78	14.0	1.4
S1.002	50.00	4.91	82.190	0.043	0.0	0.0	0.0	0.62	4.9«	5.8
S4.000	50.00	4.04	82.755	0.040	0.0	0.0	0.0	1.12	8.8	5.4
S4.001	50.00	4.78	82.530	0.040	0.0	0.0	0.0	0.77	6.0	5.4
S5.000	50.00	4.05	82.470	0.035	0.0	0.0	0.0	0.75	5.9	4.7

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S5.001	5.927	0.263	22.5	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S4.002	6.502	0.241	27.0	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S1.003	4.720	0.047	100.0	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S6.000	3.047	0.050	60.9	0.059	4.00	0.0	0.600	o	100	Pipe/Conduit	
S6.001	2.567	0.101	25.4	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S1.004	10.484	0.105	100.0	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S7.000	2.112	0.100	21.1	0.039	4.00	0.0	0.600	o	100	Pipe/Conduit	
S7.001	8.876	0.506	17.5	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S1.005	10.497	0.105	100.0	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S8.000	1.570	0.050	31.4	0.024	4.00	0.0	0.600	o	100	Pipe/Conduit	
S8.001	4.311	0.296	14.6	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S1.006	6.312	0.063	100.0	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S9.000	2.537	0.060	42.3	0.039	4.00	0.0	0.600	o	100	Pipe/Conduit	
S9.001	9.084	0.534	17.0	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S1.007	15.492	0.155	100.0	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S5.001	50.00	4.11	82.450	0.035	0.0	0.0	0.0	1.63	12.8	4.7
S4.002	50.00	4.85	82.187	0.075	0.0	0.0	0.0	1.49	11.7	10.2
S1.003	50.00	5.01	81.946	0.118	0.0	0.0	0.0	0.77	6.0«	16.0
S6.000	50.00	4.05	82.470	0.059	0.0	0.0	0.0	0.99	7.8«	8.0
S6.001	50.00	4.08	82.200	0.059	0.0	0.0	0.0	1.54	12.1	8.0
S1.004	50.00	5.24	81.899	0.177	0.0	0.0	0.0	0.77	6.0«	24.0
S7.000	50.00	4.02	82.400	0.039	0.0	0.0	0.0	1.69	13.3	5.3
S7.001	50.00	4.10	82.300	0.039	0.0	0.0	0.0	1.85	14.6	5.3
S1.005	50.00	5.47	81.794	0.216	0.0	0.0	0.0	0.77	6.0«	29.2
S8.000	50.00	4.02	82.235	0.024	0.0	0.0	0.0	1.38	10.9	3.2
S8.001	50.00	4.05	81.985	0.024	0.0	0.0	0.0	2.03	16.0	3.2
S1.006	50.00	5.60	81.689	0.240	0.0	0.0	0.0	0.77	6.0«	32.5
S9.000	50.00	4.04	82.220	0.039	0.0	0.0	0.0	1.19	9.3	5.3
S9.001	50.00	4.12	82.160	0.039	0.0	0.0	0.0	1.88	14.8	5.3
S1.007	50.00	5.94	81.626	0.279	0.0	0.0	0.0	0.77	6.0«	37.8

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S10.000	1.414	0.050	28.3	0.055	4.00	0.0	0.600	o	100	Pipe/Conduit	
S10.001	5.374	0.349	15.4	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S1.008	8.865	0.089	100.0	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S11.000	1.567	0.050	31.3	0.051	4.00	0.0	0.600	o	100	Pipe/Conduit	
S11.001	6.692	0.350	19.1	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S12.000	2.554	0.050	51.1	0.017	4.00	0.0	0.600	o	100	Pipe/Conduit	
S12.001	5.756	0.420	13.7	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S11.002	19.633	0.200	98.2	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S13.000	1.223	0.050	24.5	0.005	4.00	0.0	0.600	o	100	Pipe/Conduit	
S13.001	5.646	0.450	12.5	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S11.003	6.294	0.068	92.6	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S1.009	18.467	0.185	100.0	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S14.000	1.784	0.050	35.7	0.059	4.00	0.0	0.600	o	100	Pipe/Conduit	
S14.001	4.346	0.353	12.3	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S15.000	2.828	0.050	56.6	0.053	4.00	0.0	0.600	o	100	Pipe/Conduit	
S15.001	56.799	0.850	66.8	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S10.000	50.00	4.02	82.000	0.055	0.0	0.0	0.0	1.46	11.4	7.4
S10.001	50.00	4.06	81.820	0.055	0.0	0.0	0.0	1.98	15.5	7.4
S1.008	50.00	6.13	81.471	0.334	0.0	0.0	0.0	0.77	6.0«	45.2
S11.000	50.00	4.02	82.160	0.051	0.0	0.0	0.0	1.38	10.9	6.9
S11.001	50.00	4.08	82.000	0.051	0.0	0.0	0.0	1.77	13.9	6.9
S12.000	50.00	4.04	82.340	0.017	0.0	0.0	0.0	1.08	8.5	2.3
S12.001	50.00	4.09	82.070	0.017	0.0	0.0	0.0	2.10	16.5	2.3
S11.002	50.00	4.51	81.650	0.068	0.0	0.0	0.0	0.78	6.1«	9.2
S13.000	50.00	4.01	82.290	0.005	0.0	0.0	0.0	1.57	12.3	0.7
S13.001	50.00	4.06	81.900	0.005	0.0	0.0	0.0	2.19	17.2	0.7
S11.003	50.00	4.64	81.450	0.073	0.0	0.0	0.0	0.80	6.3«	9.9
S1.009	50.00	6.53	81.382	0.407	0.0	0.0	0.0	0.77	6.0«	55.1
S14.000	50.00	4.02	81.780	0.059	0.0	0.0	0.0	1.30	10.2	8.0
S14.001	50.00	4.06	81.550	0.059	0.0	0.0	0.0	2.21	17.4	8.0
S15.000	50.00	4.05	82.300	0.053	0.0	0.0	0.0	1.03	8.1	7.2
S15.001	50.00	5.05	82.100	0.053	0.0	0.0	0.0	0.94	7.4	7.2

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S16.000	1.833	0.050	36.7	0.023	4.00	0.0	0.600	o	100	Pipe/Conduit	
S16.001	4.679	0.450	10.4	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S15.002	8.828	0.335	26.4	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S1.010	5.895	0.059	100.0	0.000	0.00	0.0	0.600	o	150	Pipe/Conduit	
S17.000	2.224	0.050	44.5	0.072	4.00	0.0	0.600	o	100	Pipe/Conduit	
S17.001	1.289	0.412	3.1	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S1.011	14.060	0.094	150.0	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S18.000	2.215	0.050	44.3	0.271	4.00	0.0	0.600	o	100	Pipe/Conduit	
S18.001	8.714	0.356	24.5	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S19.000	1.571	0.025	62.8	0.097	4.00	0.0	0.600	o	225	Pipe/Conduit	
S19.001	3.633	0.181	20.1	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S1.012	15.557	0.104	150.0	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S20.000	2.450	0.050	49.0	0.029	4.00	0.0	0.600	o	100	Pipe/Conduit	
S20.001	3.098	0.031	100.0	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S1.013	11.696	0.078	150.0	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S21.000	1.379	0.050	27.6	0.059	4.00	0.0	0.600	o	100	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S16.000	50.00	4.02	81.970	0.023	0.0	0.0	0.0	1.28	10.0	3.1
S16.001	50.00	4.06	81.700	0.023	0.0	0.0	0.0	2.41	18.9	3.1
S15.002	50.00	5.15	81.250	0.076	0.0	0.0	0.0	1.51	11.9	10.3
S1.010	50.00	6.63	81.197	0.542	0.0	0.0	0.0	1.00	17.8«	73.4
S17.000	50.00	4.03	81.740	0.072	0.0	0.0	0.0	1.16	9.1«	9.7
S17.001	50.00	4.04	81.550	0.072	0.0	0.0	0.0	4.40	34.6	9.7
S1.011	50.00	6.85	81.088	0.614	0.0	0.0	0.0	1.07	42.4«	83.1
S18.000	50.00	4.03	81.790	0.271	0.0	0.0	0.0	1.16	9.1«	36.7
S18.001	50.00	4.12	81.400	0.271	0.0	0.0	0.0	1.57	12.3«	36.7
S19.000	50.00	4.02	81.200	0.097	0.0	0.0	0.0	1.65	65.7	13.1
S19.001	50.00	4.04	81.175	0.097	0.0	0.0	0.0	2.93	116.7	13.1
S1.012	50.00	7.09	80.994	0.982	0.0	0.0	0.0	1.07	42.4«	133.0
S20.000	50.00	4.04	81.845	0.029	0.0	0.0	0.0	1.10	8.7	3.9
S20.001	50.00	4.10	81.525	0.029	0.0	0.0	0.0	0.77	6.0	3.9
S1.013	50.00	7.28	80.890	1.011	0.0	0.0	0.0	1.07	42.4«	136.9
S21.000	50.00	4.02	81.780	0.059	0.0	0.0	0.0	1.48	11.6	8.0

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S21.001	9.515	0.738	12.9	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S1.014	7.134	0.049	146.2	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S22.000	2.329	0.050	46.6	0.021	4.00	0.0	0.600	o	100	Pipe/Conduit	
S22.001	9.223	0.687	13.4	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S1.015	9.890	0.065	152.9	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S23.000	1.419	0.050	28.4	0.058	4.00	0.0	0.600	o	100	Pipe/Conduit	
S23.001	9.388	0.737	12.7	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S1.016	7.580	0.051	150.0	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S24.000	1.937	0.050	38.7	0.021	4.00	0.0	0.600	o	100	Pipe/Conduit	
S24.001	9.359	0.803	11.7	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S1.017	5.707	0.038	150.0	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S25.000	1.595	0.050	31.9	0.053	4.00	0.0	0.600	o	150	Pipe/Conduit	
S25.001	5.107	0.741	6.9	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S1.018	3.840	0.026	150.0	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S1.019	7.707	0.077	100.0	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S26.000	1.930	0.050	38.6	0.006	4.00	0.0	0.600	o	100	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S21.001	50.00	4.09	81.600	0.059	0.0	0.0	0.0	2.16	17.0	8.0
S1.014	50.00	7.39	80.812	1.070	0.0	0.0	0.0	1.08	42.9«	144.9
S22.000	50.00	4.03	81.865	0.021	0.0	0.0	0.0	1.13	8.9	2.8
S22.001	50.00	4.11	81.500	0.021	0.0	0.0	0.0	2.12	16.7	2.8
S1.015	50.00	7.54	80.763	1.091	0.0	0.0	0.0	1.05	41.9«	147.7
S23.000	50.00	4.02	81.605	0.058	0.0	0.0	0.0	1.45	11.4	7.9
S23.001	50.00	4.09	81.485	0.058	0.0	0.0	0.0	2.18	17.1	7.9
S1.016	50.00	7.66	80.698	1.149	0.0	0.0	0.0	1.07	42.4«	155.6
S24.000	50.00	4.03	81.690	0.021	0.0	0.0	0.0	1.24	9.8	2.8
S24.001	50.00	4.09	81.500	0.021	0.0	0.0	0.0	2.28	17.9	2.8
S1.017	50.00	7.75	80.647	1.170	0.0	0.0	0.0	1.07	42.4«	158.4
S25.000	50.00	4.01	81.640	0.053	0.0	0.0	0.0	1.79	31.6	7.2
S25.001	50.00	4.04	81.400	0.053	0.0	0.0	0.0	2.96	23.3	7.2
S1.018	50.00	7.81	80.609	1.223	0.0	0.0	0.0	1.07	42.4«	165.6
S1.019	50.00	7.91	80.583	1.223	0.0	0.0	0.0	1.31	52.0«	165.6
S26.000	50.00	4.03	82.540	0.006	0.0	0.0	0.0	1.25	9.8	0.8

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S26.001	14.545	0.550	26.4	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S26.002	7.761	0.085	91.3	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S27.000	2.802	0.000	0.0	0.040	4.00	0.0	0.600	o	100	Pipe/Conduit	
S27.001	6.565	0.375	17.5	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S26.003	9.339	0.085	109.9	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S26.004	7.788	0.110	70.8	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S28.000	1.568	0.000	0.0	0.074	4.00	0.0	0.600	o	100	Pipe/Conduit	
S28.001	6.712	0.290	23.1	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S26.005	18.122	0.110	164.7	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S29.000	2.183	0.000	0.0	0.084	4.00	0.0	0.600	o	100	Pipe/Conduit	
S29.001	7.388	0.408	18.1	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S26.006	51.423	0.514	100.0	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S30.000	1.562	0.015	104.1	0.077	4.00	0.0	0.600	o	100	Pipe/Conduit	
S30.001	5.433	0.817	6.7	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S26.007	6.763	0.068	100.0	0.000	0.00	0.0	0.600	o	150	Pipe/Conduit	
S31.000	1.802	0.050	36.0	0.021	4.00	0.0	0.600	o	100	Pipe/Conduit	
S31.001	7.345	0.073	100.0	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S26.001	50.00	4.19	82.150	0.006	0.0	0.0	0.0	1.51	11.8	0.8
S26.002	50.00	4.35	81.600	0.006	0.0	0.0	0.0	0.81	6.3	0.8
S27.000	50.00	4.67	81.890	0.040	0.0	0.0	0.0	0.07	0.5«	5.4
S27.001	50.00	4.73	81.890	0.040	0.0	0.0	0.0	1.85	14.6	5.4
S26.003	50.00	4.94	81.515	0.046	0.0	0.0	0.0	0.73	5.8«	6.2
S26.004	50.00	5.09	81.430	0.046	0.0	0.0	0.0	0.92	7.2	6.2
S28.000	50.00	4.38	81.610	0.074	0.0	0.0	0.0	0.07	0.5«	10.0
S28.001	50.00	4.45	81.610	0.074	0.0	0.0	0.0	1.61	12.7	10.0
S26.005	50.00	5.59	81.320	0.120	0.0	0.0	0.0	0.60	4.7«	16.2
S29.000	50.00	4.52	81.530	0.084	0.0	0.0	0.0	0.07	0.5«	11.4
S29.001	50.00	4.59	81.530	0.084	0.0	0.0	0.0	1.82	14.3	11.4
S26.006	50.00	6.71	81.122	0.204	0.0	0.0	0.0	0.77	6.0«	27.6
S30.000	50.00	4.03	81.440	0.077	0.0	0.0	0.0	0.75	5.9«	10.4
S30.001	50.00	4.06	81.425	0.077	0.0	0.0	0.0	3.02	23.7	10.4
S26.007	50.00	6.82	80.608	0.281	0.0	0.0	0.0	1.00	17.8«	38.1
S31.000	50.00	4.02	81.575	0.021	0.0	0.0	0.0	1.29	10.1	2.8
S31.001	50.00	4.18	81.375	0.021	0.0	0.0	0.0	0.77	6.0	2.8

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S1.020	9.389	0.063	150.0	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S1.021	7.181	0.048	150.0	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S32.000	1.972	0.000	0.0	0.077	4.00	0.0	0.600	o	100	Pipe/Conduit	
S32.001	9.570	0.905	10.6	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S1.022	9.920	0.066	150.0	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S1.023	6.840	0.046	150.0	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S33.000	1.676	0.030	55.9	0.077	4.00	0.0	0.600	o	100	Pipe/Conduit	
S33.001	9.277	0.997	9.3	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S1.024	11.154	0.074	150.0	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S34.000	1.473	0.050	29.5	0.053	4.00	0.0	0.600	o	100	Pipe/Conduit	
S34.001	5.254	1.257	4.2	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S1.025	6.833	0.046	150.0	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S35.000	2.273	0.000	0.0	0.077	4.00	0.0	0.600	o	100	Pipe/Conduit	
S35.001	9.684	0.117	82.8	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S1.026	11.353	0.076	150.0	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S36.000	1.650	0.050	33.0	0.021	4.00	0.0	0.600	o	100	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S1.020	50.00	8.06	80.506	1.525	0.0	0.0	0.0	1.07	42.4«	206.5
S1.021	50.00	8.17	80.443	1.525	0.0	0.0	0.0	1.07	42.4«	206.5
S32.000	50.00	4.47	81.350	0.077	0.0	0.0	0.0	0.07	0.5«	10.4
S32.001	50.00	4.54	81.350	0.077	0.0	0.0	0.0	2.39	18.8	10.4
S1.022	50.00	8.32	80.395	1.602	0.0	0.0	0.0	1.07	42.4«	216.9
S1.023	50.00	8.43	80.329	1.602	0.0	0.0	0.0	1.07	42.4«	216.9
S33.000	50.00	4.03	81.360	0.077	0.0	0.0	0.0	1.03	8.1«	10.4
S33.001	50.00	4.09	81.330	0.077	0.0	0.0	0.0	2.55	20.0	10.4
S1.024	50.00	8.61	80.283	1.679	0.0	0.0	0.0	1.07	42.4«	227.4
S34.000	50.00	4.02	81.420	0.053	0.0	0.0	0.0	1.43	11.2	7.2
S34.001	50.00	4.04	81.255	0.053	0.0	0.0	0.0	3.81	29.9	7.2
S1.025	50.00	8.71	80.209	1.732	0.0	0.0	0.0	1.07	42.4«	234.5
S35.000	50.00	4.55	81.270	0.077	0.0	0.0	0.0	0.07	0.5«	10.4
S35.001	50.00	4.74	81.270	0.077	0.0	0.0	0.0	0.85	6.6«	10.4
S1.026	50.00	8.89	80.163	1.809	0.0	0.0	0.0	1.07	42.4«	245.0
S36.000	50.00	4.02	81.570	0.021	0.0	0.0	0.0	1.35	10.6	2.8

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S36.001	8.668	0.420	20.6	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S37.000	66.756	1.000	66.8	0.097	4.00	0.0	0.600	o	300	Pipe/Conduit	
S36.002	17.525	0.111	157.3	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
S38.000	1.832	0.050	36.6	0.034	4.00	0.0	0.600	o	100	Pipe/Conduit	
S38.001	5.234	0.545	9.6	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S36.003	6.021	0.060	100.0	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
S39.000	1.868	0.030	62.3	0.007	4.00	0.0	0.600	o	100	Pipe/Conduit	
S39.001	8.362	0.605	13.8	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S36.004	3.364	0.400	8.4	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
S40.000	27.006	0.180	150.0	0.054	4.00	0.0	0.600	o	300	Pipe/Conduit	
S40.001	20.828	0.139	150.0	0.026	0.00	0.0	0.600	o	300	Pipe/Conduit	
S40.002	39.990	0.267	150.0	0.055	0.00	0.0	0.600	o	300	Pipe/Conduit	
S41.000	3.050	0.038	80.3	0.106	4.00	0.0	0.600	o	300	Pipe/Conduit	
S41.001	3.274	0.033	100.0	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S40.003	17.237	0.115	150.0	0.061	0.00	0.0	0.600	o	300	Pipe/Conduit	
S42.000	1.963	0.050	39.3	0.069	4.00	0.0	0.600	o	100	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S36.001	50.00	4.11	81.320	0.021	0.0	0.0	0.0	1.71	13.4	2.8
S37.000	50.00	4.58	81.900	0.097	0.0	0.0	0.0	1.93	136.2	13.1
S36.002	50.00	4.81	80.900	0.118	0.0	0.0	0.0	1.25	88.4	16.0
S38.000	50.00	4.02	81.495	0.034	0.0	0.0	0.0	1.28	10.0	4.6
S38.001	50.00	4.06	81.270	0.034	0.0	0.0	0.0	2.51	19.7	4.6
S36.003	50.00	4.87	80.725	0.152	0.0	0.0	0.0	1.57	111.1	20.6
S39.000	50.00	4.03	81.510	0.007	0.0	0.0	0.0	0.98	7.7	0.9
S39.001	50.00	4.10	81.270	0.007	0.0	0.0	0.0	2.09	16.4	0.9
S36.004	50.00	4.88	80.665	0.159	0.0	0.0	0.0	5.45	385.5	21.5
S40.000	50.00	4.35	80.800	0.054	0.0	0.0	0.0	1.28	90.6	7.3
S40.001	50.00	4.62	80.620	0.080	0.0	0.0	0.0	1.28	90.6	10.8
S40.002	50.00	5.14	80.481	0.135	0.0	0.0	0.0	1.28	90.6	18.3
S41.000	50.00	4.03	80.350	0.106	0.0	0.0	0.0	1.76	124.1	14.4
S41.001	50.00	4.10	80.332	0.106	0.0	0.0	0.0	0.77	6.0«	14.4
S40.003	50.00	5.37	80.214	0.302	0.0	0.0	0.0	1.28	90.6	40.9
S42.000	50.00	4.03	81.440	0.069	0.0	0.0	0.0	1.23	9.7	9.3

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S42.001	4.907	0.585	8.4	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S40.004	4.544	0.030	150.0	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
S40.005	11.862	0.079	150.0	0.143	0.00	0.0	0.600	o	450	Pipe/Conduit	
S43.000	2.263	0.050	45.3	0.087	4.00	0.0	0.600	o	100	Pipe/Conduit	
S43.001	5.476	0.694	7.9	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S40.006	9.940	0.044	223.4	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
S44.000	3.285	0.050	65.7	0.018	4.00	0.0	0.600	o	100	Pipe/Conduit	
S44.001	3.487	0.786	4.4	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S40.007	30.313	0.100	304.2	0.131	0.00	0.0	0.600	o	450	Pipe/Conduit	
S40.008	81.577	0.291	280.4	0.038	0.00	0.0	0.600	o	600	Pipe/Conduit	
S45.000	2.102	0.050	42.0	0.042	4.00	0.0	0.600	o	100	Pipe/Conduit	
S45.001	2.325	0.023	100.0	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S46.000	2.260	0.050	45.2	0.015	4.00	0.0	0.600	o	100	Pipe/Conduit	
S46.001	6.799	0.068	100.0	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S47.000	4.606	0.050	92.1	0.165	4.00	0.0	0.600	o	225	Pipe/Conduit	
S47.001	5.315	0.053	100.0	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S40.009	49.809	0.166	300.0	0.000	0.00	0.0	0.600	o	600	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S42.001	50.00	4.06	81.250	0.069	0.0	0.0	0.0	2.69	21.1	9.3
S40.004	50.00	5.43	80.099	0.371	0.0	0.0	0.0	1.28	90.6	50.2
S40.005	50.00	5.54	80.069	0.514	0.0	0.0	0.0	1.66	263.6	69.6
S43.000	50.00	4.03	81.415	0.087	0.0	0.0	0.0	1.15	9.0«	11.8
S43.001	50.00	4.07	81.250	0.087	0.0	0.0	0.0	2.77	21.8	11.8
S40.006	50.00	5.67	79.990	0.601	0.0	0.0	0.0	1.36	215.7	81.4
S44.000	50.00	4.06	81.610	0.018	0.0	0.0	0.0	0.95	7.5	2.4
S44.001	50.00	4.07	81.350	0.018	0.0	0.0	0.0	3.70	29.0	2.4
S40.007	50.00	6.10	79.946	0.750	0.0	0.0	0.0	1.16	184.6	101.6
S40.008	50.00	7.04	79.846	0.788	0.0	0.0	0.0	1.45	409.8	106.7
S45.000	50.00	4.03	81.590	0.042	0.0	0.0	0.0	1.19	9.4	5.7
S45.001	50.00	4.08	81.400	0.042	0.0	0.0	0.0	0.77	6.0	5.7
S46.000	50.00	4.03	81.760	0.015	0.0	0.0	0.0	1.15	9.0	2.0
S46.001	50.00	4.18	81.500	0.015	0.0	0.0	0.0	0.77	6.0	2.0
S47.000	50.00	4.06	80.000	0.165	0.0	0.0	0.0	1.36	54.2	22.3
S47.001	50.00	4.12	79.950	0.165	0.0	0.0	0.0	1.31	52.0	22.3
S40.009	50.00	7.63	79.555	1.010	0.0	0.0	0.0	1.40	396.0	136.8

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S48.000	25.413	0.250	101.7	0.179	4.00	0.0	0.600	o	375	Pipe/Conduit	
S48.001	20.455	0.200	102.3	0.025	0.00	0.0	0.600	o	375	Pipe/Conduit	
S48.002	10.107	0.100	101.1	0.054	0.00	0.0	0.600	o	450	Pipe/Conduit	
S48.003	17.863	0.380	47.0	0.039	0.00	0.0	0.600	o	450	Pipe/Conduit	
S49.000	14.922	0.200	74.6	0.038	4.00	0.0	0.600	o	225	Pipe/Conduit	
S49.001	18.503	0.530	34.9	0.025	0.00	0.0	0.600	o	300	Pipe/Conduit	
S50.000	6.592	0.100	65.9	0.053	4.00	0.0	0.600	o	225	Pipe/Conduit	
S50.001	15.338	0.150	102.3	0.055	0.00	0.0	0.600	o	300	Pipe/Conduit	
S50.002	18.466	0.480	38.5	0.032	0.00	0.0	0.600	o	300	Pipe/Conduit	
S48.004	13.835	0.050	276.7	0.000	0.00	0.0	0.600	o	600	Pipe/Conduit	
S48.005	25.636	0.300	85.5	0.000	0.00	0.0	0.600	o	600	Pipe/Conduit	
S40.010	34.464	0.115	300.0	0.000	0.00	0.0	0.600	o	750	Pipe/Conduit	
S40.011	56.497	0.188	300.0	0.000	0.00	0.0	0.600	o	750	Pipe/Conduit	
S51.000	54.515	0.547	99.7	0.119	4.00	0.0	0.600	o	225	Pipe/Conduit	
S51.001	18.390	0.189	97.3	0.007	0.00	0.0	0.600	o	225	Pipe/Conduit	
S40.012	15.533	0.052	300.0	0.000	0.00	0.0	0.600	o	750	Pipe/Conduit	
S52.000	63.376	0.000	0.0	0.054	4.00	0.0	0.600	\/	-1	Pipe/Conduit	
S52.001	30.727	0.000	0.0	0.021	0.00	0.0	0.600	\/	-1	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S48.000	50.00	4.24	81.500	0.179	0.0	0.0	0.0	1.80	198.5	24.2
S48.001	50.00	4.43	81.250	0.204	0.0	0.0	0.0	1.79	197.9	27.6
S48.002	50.00	4.51	81.050	0.258	0.0	0.0	0.0	2.02	321.6	34.9
S48.003	50.00	4.61	80.950	0.297	0.0	0.0	0.0	2.97	472.6	40.2
S49.000	50.00	4.16	81.500	0.038	0.0	0.0	0.0	1.52	60.3	5.1
S49.001	50.00	4.28	81.300	0.063	0.0	0.0	0.0	2.67	188.7	8.5
S50.000	50.00	4.07	81.500	0.053	0.0	0.0	0.0	1.61	64.1	7.2
S50.001	50.00	4.23	81.400	0.108	0.0	0.0	0.0	1.55	109.9	14.6
S50.002	50.00	4.35	81.250	0.140	0.0	0.0	0.0	2.54	179.7	19.0
S48.004	50.00	4.70	80.770	0.500	0.0	0.0	0.0	1.74	492.3	67.7
S48.005	50.00	4.86	79.900	0.500	0.0	0.0	0.0	2.64	745.2	67.7
S40.010	50.00	7.99	79.389	1.510	0.0	0.0	0.0	1.61	711.5	204.5
S40.011	50.00	8.57	79.274	1.510	0.0	0.0	0.0	1.61	711.5	204.5
S51.000	50.00	4.69	79.800	0.119	0.0	0.0	0.0	1.31	52.1	16.1
S51.001	50.00	4.93	79.253	0.126	0.0	0.0	0.0	1.33	52.7	17.1
S40.012	50.00	8.74	79.086	1.636	0.0	0.0	0.0	1.61	711.5	221.5
S52.000	50.00	5.87	81.500	0.054	0.0	0.0	0.0	0.56	2820.4	7.3
S52.001	50.00	6.78	81.500	0.075	0.0	0.0	0.0	0.56	2820.4	10.1

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S52.002	58.270	0.000	0.0	0.044	0.00	0.0	0.600	\/	-1	Pipe/Conduit	
S52.003	40.459	0.000	0.0	0.053	0.00	0.0	0.600	\/	-1	Pipe/Conduit	
S53.000	14.946	0.149	100.0	0.000	4.00	0.0	0.600	o	300	Pipe/Conduit	
S52.004	33.605	0.000	0.0	0.023	0.00	0.0	0.600	\/	-1	Pipe/Conduit	
S52.005	45.154	0.000	0.0	0.070	0.00	0.0	0.600	\/	-1	Pipe/Conduit	
S52.006	4.979	0.000	0.0	0.000	0.00	0.0	0.600	\/	-1	Pipe/Conduit	
S52.007	7.491	0.075	100.0	0.000	0.00	0.0	0.600	o	150	Pipe/Conduit	
S52.008	7.678	0.077	100.0	0.000	0.00	0.0	0.600	o	150	Pipe/Conduit	
S40.013	3.620	0.012	300.0	0.000	0.00	0.0	0.600	o	750	Pipe/Conduit	
S54.000	2.823	0.015	188.2	0.038	4.00	0.0	0.600	o	100	Pipe/Conduit	
S54.001	11.067	0.345	32.1	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S55.000	2.336	0.050	46.7	0.024	4.00	0.0	0.600	o	100	Pipe/Conduit	
S55.001	6.945	0.406	17.1	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S54.002	8.539	1.396	6.1	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S40.014	49.110	0.164	300.0	0.000	0.00	0.0	0.600	o	750	Pipe/Conduit	
S36.005	17.871	0.100	178.7	0.000	0.00	0.0	0.600	o	750	Pipe/Conduit	
S56.000	2.296	0.000	0.0	0.094	4.00	0.0	0.600	o	100	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S52.002	50.00	8.51	81.500	0.118	0.0	0.0	0.0	0.56	2820.4	16.0
S52.003	50.00	9.70	81.500	0.171	0.0	0.0	0.0	0.56	2820.4	23.2
S53.000	50.00	4.16	81.800	0.000	0.0	0.0	0.0	1.57	111.1	0.0
S52.004	50.00	10.70	81.500	0.194	0.0	0.0	0.0	0.56	2820.4	26.3
S52.005	50.00	12.03	81.500	0.265	0.0	0.0	0.0	0.56	2820.4	35.9
S52.006	50.00	12.18	81.500	0.265	0.0	0.0	0.0	0.56	2820.4	35.9
S52.007	50.00	12.31	81.500	0.265	0.0	0.0	0.0	1.00	17.8«	35.9
S52.008	50.00	12.43	81.425	0.265	0.0	0.0	0.0	1.00	17.8«	35.9
S40.013	50.00	12.47	79.034	1.901	0.0	0.0	0.0	1.61	711.5	257.4
S54.000	50.00	4.08	81.390	0.038	0.0	0.0	0.0	0.56	4.4«	5.1
S54.001	50.00	4.22	81.375	0.038	0.0	0.0	0.0	1.37	10.7	5.1
S55.000	50.00	4.03	81.645	0.024	0.0	0.0	0.0	1.13	8.9	3.2
S55.001	50.00	4.10	81.380	0.024	0.0	0.0	0.0	1.88	14.7	3.2
S54.002	50.00	4.26	80.974	0.062	0.0	0.0	0.0	3.15	24.7	8.4
S40.014	50.00	12.98	79.022	1.963	0.0	0.0	0.0	1.61	711.5	265.8
S36.005	50.00	13.12	78.858	2.122	0.0	0.0	0.0	2.09	923.5	287.3
S56.000	50.00	4.55	81.450	0.094	0.0	0.0	0.0	0.07	0.5«	12.7

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S56.001	7.062	0.400	17.7	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S57.000	2.147	0.050	42.9	0.019	4.00	0.0	0.600	o	100	Pipe/Conduit	
S57.001	12.434	0.180	69.1	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S56.002	14.251	0.083	170.9	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S58.000	2.708	0.000	0.0	0.052	4.00	0.0	0.600	o	100	Pipe/Conduit	
S58.001	4.714	0.422	11.2	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S56.003	16.173	0.162	100.0	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S59.000	1.802	0.050	36.0	0.026	4.00	0.0	0.600	o	100	Pipe/Conduit	
S59.001	8.775	0.088	100.0	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S60.000	1.872	0.050	37.4	0.010	4.00	0.0	0.600	o	100	Pipe/Conduit	
S60.001	8.281	0.504	16.4	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S61.000	2.551	0.050	51.0	0.038	4.00	0.0	0.600	o	100	Pipe/Conduit	
S61.001	4.770	0.048	100.0	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S56.004	94.532	0.945	100.0	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S62.000	2.024	0.035	58.5	0.458	4.00	0.0	0.600	o	100	Pipe/Conduit	
S62.001	4.020	1.000	4.0	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S56.001	50.00	4.61	81.450	0.094	0.0	0.0	0.0	1.85	14.5	12.7
S57.000	50.00	4.03	81.545	0.019	0.0	0.0	0.0	1.18	9.3	2.6
S57.001	50.00	4.25	81.180	0.019	0.0	0.0	0.0	0.93	7.3	2.6
S56.002	50.00	5.02	81.000	0.113	0.0	0.0	0.0	0.59	4.6«	15.3
S58.000	50.00	4.65	81.330	0.052	0.0	0.0	0.0	0.07	0.5«	7.0
S58.001	50.00	4.68	81.330	0.052	0.0	0.0	0.0	2.33	18.3	7.0
S56.003	50.00	5.37	80.858	0.165	0.0	0.0	0.0	0.77	6.0«	22.3
S59.000	50.00	4.02	81.495	0.026	0.0	0.0	0.0	1.29	10.1	3.5
S59.001	50.00	4.21	81.270	0.026	0.0	0.0	0.0	0.77	6.0	3.5
S60.000	50.00	4.02	81.445	0.010	0.0	0.0	0.0	1.26	9.9	1.4
S60.001	50.00	4.10	81.200	0.010	0.0	0.0	0.0	1.92	15.0	1.4
S61.000	50.00	4.04	81.510	0.038	0.0	0.0	0.0	1.08	8.5	5.1
S61.001	50.00	4.14	81.240	0.038	0.0	0.0	0.0	0.77	6.0	5.1
S56.004	50.00	7.42	80.696	0.239	0.0	0.0	0.0	0.77	6.0«	32.4
S62.000	50.00	4.03	81.260	0.458	0.0	0.0	0.0	1.01	7.9«	62.0
S62.001	50.00	4.05	81.000	0.458	0.0	0.0	0.0	3.88	30.5«	62.0

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S63.000	15.882	0.314	50.6	0.125	4.00	0.0	0.600	o	450	Pipe/Conduit	
S63.001	31.594	0.316	100.0	0.175	0.00	0.0	0.600	o	450	Pipe/Conduit	
S63.002	34.354	0.282	121.8	0.043	0.00	0.0	0.600	o	450	Pipe/Conduit	
S63.003	12.486	0.123	101.6	0.051	0.00	0.0	0.600	o	525	Pipe/Conduit	
S64.000	26.303	0.300	87.7	0.061	4.00	0.0	0.600	o	225	Pipe/Conduit	
S64.001	14.857	0.200	74.3	0.028	0.00	0.0	0.600	o	225	Pipe/Conduit	
S63.004	14.132	0.240	58.9	0.045	0.00	0.0	0.600	o	525	Pipe/Conduit	
S63.005	12.536	0.080	156.7	0.000	0.00	0.0	0.600	o	525	Pipe/Conduit	
S63.006	87.333	0.380	229.8	0.000	0.00	0.0	0.600	o	525	Pipe/Conduit	
S65.000	8.616	0.100	86.2	0.040	4.00	0.0	0.600	o	225	Pipe/Conduit	
S65.001	22.739	0.301	75.5	0.066	0.00	0.0	0.600	o	300	Pipe/Conduit	
S66.000	25.277	0.253	100.0	0.060	4.00	0.0	0.600	o	225	Pipe/Conduit	
S66.001	14.830	0.148	100.0	0.020	0.00	0.0	0.600	o	300	Pipe/Conduit	
S67.000	16.243	0.401	40.5	0.022	4.00	0.0	0.600	o	150	Pipe/Conduit	
S65.002	8.422	0.084	100.0	0.027	0.00	0.0	0.600	o	375	Pipe/Conduit	
S68.000	26.869	0.269	100.0	0.096	4.00	0.0	0.600	o	300	Pipe/Conduit	
S65.003	36.467	0.186	195.8	0.018	0.00	0.0	0.600	o	450	Pipe/Conduit	
S65.004	85.693	0.429	199.6	0.109	0.00	0.0	0.600	o	525	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S63.000	50.00	4.09	81.650	0.125	0.0	0.0	0.0	2.86	455.3	16.9
S63.001	50.00	4.35	81.536	0.300	0.0	0.0	0.0	2.03	323.3	40.6
S63.002	50.00	4.66	81.220	0.343	0.0	0.0	0.0	1.84	292.8	46.4
S63.003	50.00	4.76	80.863	0.394	0.0	0.0	0.0	2.22	481.1	53.4
S64.000	50.00	4.31	81.800	0.061	0.0	0.0	0.0	1.40	55.6	8.3
S64.001	50.00	4.48	81.500	0.089	0.0	0.0	0.0	1.52	60.4	12.1
S63.004	50.00	4.84	80.740	0.528	0.0	0.0	0.0	2.92	632.8	71.5
S63.005	50.00	4.95	80.500	0.528	0.0	0.0	0.0	1.79	386.8	71.5
S63.006	50.00	5.94	80.420	0.528	0.0	0.0	0.0	1.47	318.9	71.5
S65.000	50.00	4.10	81.600	0.040	0.0	0.0	0.0	1.41	56.0	5.4
S65.001	50.00	4.31	81.500	0.106	0.0	0.0	0.0	1.81	128.0	14.4
S66.000	50.00	4.32	81.600	0.060	0.0	0.0	0.0	1.31	52.0	8.1
S66.001	50.00	4.48	81.347	0.080	0.0	0.0	0.0	1.57	111.1	10.8
S67.000	50.00	4.17	81.600	0.022	0.0	0.0	0.0	1.59	28.0	3.0
S65.002	50.00	4.56	81.199	0.235	0.0	0.0	0.0	1.81	200.1	31.8
S68.000	50.00	4.28	81.700	0.096	0.0	0.0	0.0	1.57	111.1	13.0
S65.003	50.00	4.98	81.115	0.349	0.0	0.0	0.0	1.45	230.5	47.3
S65.004	50.00	5.88	80.929	0.458	0.0	0.0	0.0	1.58	342.4	62.0

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S65.005	61.725	0.205	300.6	0.000	0.00	0.0	0.600	o	525	Pipe/Conduit	
S65.006	6.397	0.030	210.6	0.000	0.00	0.0	0.600	o	525	Pipe/Conduit	
S69.000	5.555	0.056	100.0	0.021	4.00	0.0	0.600	o	225	Pipe/Conduit	
S69.001	43.690	0.000	0.0	0.069	0.00	0.0	0.600	\/	-2	Pipe/Conduit	
S69.002	14.458	0.145	100.0	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S65.007	45.330	0.151	300.0	0.009	0.00	0.0	0.600	o	525	Pipe/Conduit	
S70.000	21.328	0.213	100.0	0.014	4.00	0.0	0.600	o	150	Pipe/Conduit	
S71.000	16.354	0.164	100.0	0.024	4.00	0.0	0.600	o	225	Pipe/Conduit	
S71.001	25.394	0.236	107.6	0.008	0.00	0.0	0.600	o	225	Pipe/Conduit	
S72.000	19.724	0.197	100.0	0.018	4.00	0.0	0.600	o	150	Pipe/Conduit	
S73.000	32.546	0.325	100.0	0.015	4.00	0.0	0.600	o	150	Pipe/Conduit	
S74.000	28.097	0.281	100.0	0.069	4.00	0.0	0.600	o	225	Pipe/Conduit	
S70.001	30.719	0.307	100.0	0.007	0.00	0.0	0.600	o	150	Pipe/Conduit	
S70.002	41.073	0.411	100.0	0.007	0.00	0.0	0.600	o	150	Pipe/Conduit	
S65.008	20.126	0.074	272.0	0.007	0.00	0.0	0.600	o	525	Pipe/Conduit	
S63.007	68.401	0.241	283.8	0.000	0.00	0.0	0.600	o	525	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S65.005	50.00	6.68	80.500	0.458	0.0	0.0	0.0	1.29	278.5	62.0
S65.006	50.00	6.75	80.295	0.458	0.0	0.0	0.0	1.54	333.3	62.0
S69.000	50.00	4.07	81.800	0.021	0.0	0.0	0.0	1.31	52.0	2.8
S69.001	50.00	5.57	81.500	0.090	0.0	0.0	0.0	0.49	1464.7	12.2
S69.002	50.00	5.88	81.500	0.090	0.0	0.0	0.0	0.77	6.0«	12.2
S65.007	50.00	7.33	80.265	0.557	0.0	0.0	0.0	1.29	278.8	75.4
S70.000	50.00	4.35	81.900	0.014	0.0	0.0	0.0	1.00	17.8	1.9
S71.000	50.00	4.21	81.900	0.024	0.0	0.0	0.0	1.31	52.0	3.2
S71.001	50.00	4.54	81.736	0.032	0.0	0.0	0.0	1.26	50.1	4.3
S72.000	50.00	4.33	81.900	0.018	0.0	0.0	0.0	1.00	17.8	2.4
S73.000	50.00	4.54	81.900	0.015	0.0	0.0	0.0	1.00	17.8	2.0
S74.000	50.00	4.36	81.900	0.069	0.0	0.0	0.0	1.31	52.0	9.3
S70.001	50.00	5.05	81.500	0.155	0.0	0.0	0.0	1.00	17.8«	21.0
S70.002	50.00	5.74	81.193	0.162	0.0	0.0	0.0	1.00	17.8«	21.9
S65.008	50.00	7.58	80.114	0.726	0.0	0.0	0.0	1.35	293.0	98.3
S63.007	50.00	8.44	80.040	1.254	0.0	0.0	0.0	1.32	286.7	169.8

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S75.000	55.627	0.556	100.0	0.091	4.00	0.0	0.600	o	300	Pipe/Conduit	
S75.001	41.248	0.412	100.0	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
S76.000	4.394	0.200	22.0	0.234	4.00	0.0	0.600	o	100	Pipe/Conduit	
S76.001	17.388	0.175	99.4	0.000	0.00	0.0	0.600	o	100	Pipe/Conduit	
S63.008	22.912	0.076	300.0	0.000	0.00	0.0	0.600	o	600	Pipe/Conduit	
S63.009	23.783	0.079	300.0	0.000	0.00	0.0	0.600	o	600	Pipe/Conduit	
S77.000	28.406	0.284	100.0	0.027	4.00	0.0	0.600	o	225	Pipe/Conduit	
S77.001	17.404	0.116	150.0	0.002	0.00	0.0	0.600	o	225	Pipe/Conduit	
S78.000	46.541	0.263	177.2	0.048	4.00	0.0	0.600	o	225	Pipe/Conduit	
S78.001	16.315	0.137	119.1	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S79.000	32.663	0.400	81.7	0.058	4.00	0.0	0.600	o	225	Pipe/Conduit	
S80.000	7.350	0.083	88.6	0.017	4.00	0.0	0.600	o	225	Pipe/Conduit	
S81.000	8.267	0.083	100.0	0.016	4.00	0.0	0.600	o	225	Pipe/Conduit	
S80.001	25.238	0.252	100.0	0.014	0.00	0.0	0.600	o	225	Pipe/Conduit	
S82.000	16.155	0.162	100.0	0.031	4.00	0.0	0.600	o	225	Pipe/Conduit	
S82.001	28.467	0.238	119.6	0.015	0.00	0.0	0.600	o	225	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S75.000	50.00	4.59	81.600	0.091	0.0	0.0	0.0	1.57	111.1	12.3
S75.001	50.00	5.03	81.044	0.091	0.0	0.0	0.0	1.57	111.1	12.3
S76.000	50.00	4.04	82.000	0.234	0.0	0.0	0.0	1.65	13.0«	31.7
S76.001	50.00	4.42	80.800	0.234	0.0	0.0	0.0	0.77	6.1«	31.7
S63.008	50.00	8.72	79.799	1.579	0.0	0.0	0.0	1.40	396.0	213.8
S63.009	50.00	9.00	79.723	1.579	0.0	0.0	0.0	1.40	396.0	213.8
S77.000	50.00	4.36	81.900	0.027	0.0	0.0	0.0	1.31	52.0	3.7
S77.001	50.00	4.63	81.616	0.029	0.0	0.0	0.0	1.07	42.4	3.9
S78.000	50.00	4.79	81.900	0.048	0.0	0.0	0.0	0.98	38.9	6.5
S78.001	50.00	5.02	81.637	0.048	0.0	0.0	0.0	1.20	47.6	6.5
S79.000	50.00	4.38	81.900	0.058	0.0	0.0	0.0	1.45	57.6	7.9
S80.000	50.00	4.09	81.900	0.017	0.0	0.0	0.0	1.39	55.3	2.3
S81.000	50.00	4.11	81.900	0.016	0.0	0.0	0.0	1.31	52.0	2.2
S80.001	50.00	4.43	81.817	0.047	0.0	0.0	0.0	1.31	52.0	6.4
S82.000	50.00	4.21	81.900	0.031	0.0	0.0	0.0	1.31	52.0	4.2
S82.001	50.00	4.60	81.738	0.046	0.0	0.0	0.0	1.19	47.5	6.2

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S77.002	25.605	0.256	100.0	0.011	0.00	0.0	0.600	o	225	Pipe/Conduit	
S77.003	30.920	0.309	100.0	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S77.004	5.029	0.050	100.0	0.006	0.00	0.0	0.600	o	225	Pipe/Conduit	
S77.005	31.859	0.319	100.0	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S63.010	62.928	0.210	300.0	0.000	0.00	0.0	0.600	o	600	Pipe/Conduit	
S63.011	11.774	0.201	58.5	0.000	0.00	0.0	0.600	o	600	Pipe/Conduit	
S1.027	10.691	0.053	200.0	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
S1.028	45.000	0.225	200.0	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S77.002	50.00	5.35	81.500	0.239	0.0	0.0	0.0	1.31	52.0	32.4
S77.003	50.00	5.74	81.244	0.239	0.0	0.0	0.0	1.31	52.0	32.4
S77.004	50.00	5.80	80.935	0.245	0.0	0.0	0.0	1.31	52.0	33.2
S77.005	50.00	6.21	80.885	0.245	0.0	0.0	0.0	1.31	52.0	33.2
S63.010	50.00	9.75	79.644	1.824	0.0	0.0	0.0	1.40	396.0	247.0
S63.011	50.00	9.81	79.434	1.824	0.0	0.0	0.0	3.19	901.5	247.0
S1.027	50.00	13.28	78.732	6.452	0.0	0.0	0.0	1.11	78.3«	873.7
S1.028	50.00	13.96	78.679	6.452	0.0	0.0	0.0	1.11	78.3«	873.7

Manhole Schedules for Storm

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam.,L*W (mm)	Pipe Out PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	Pipes In PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Backdrop (mm)
SPP05	83.720	0.870	Open Manhole	450	S1.000	82.850	100				
SFC05	83.720	1.000	Open Manhole	450	S1.001	82.720	100	S1.000	82.750	100	30
SPP04	83.800	0.610	Open Manhole	450	S2.000	83.190	100				
SFC04	83.800	1.000	Open Manhole	450	S2.001	82.800	100	S2.000	83.140	100	340
SPP06	83.620	0.610	Open Manhole	450	S3.000	83.010	100				
SFC06	83.620	1.000	Open Manhole	450	S3.001	82.620	100	S3.000	82.960	100	340
SSW23	83.540	1.350	Open Manhole	450	S1.002	82.190	100	S1.001	82.190	100	
								S2.001	82.190	100	
								S3.001	82.190	100	
SPP10	83.530	0.775	Open Manhole	450	S4.000	82.755	100				
SFC10	83.530	1.000	Open Manhole	450	S4.001	82.530	100	S4.000	82.705	100	175
SPP08	83.450	0.980	Open Manhole	450	S5.000	82.470	100				
SFC08	83.450	1.000	Open Manhole	450	S5.001	82.450	100	S5.000	82.450	100	
S13	83.350	1.163	Junction		S4.002	82.187	100	S4.001	82.187	100	
								S5.001	82.187	100	
SSW24	83.270	1.324	Open Manhole	450	S1.003	81.946	100	S1.002	82.030	100	84
								S4.002	81.946	100	
SPP03	83.200	0.730	Open Manhole	450	S6.000	82.470	100				
SFC03	83.200	1.000	Open Manhole	450	S6.001	82.200	100	S6.000	82.420	100	220
S7	83.240	1.341	Junction		S1.004	81.899	100	S1.003	81.899	100	
								S6.001	82.099	100	200
SPP11	83.300	0.900	Open Manhole	450	S7.000	82.400	100				
SFC11	83.300	1.000	Open Manhole	450	S7.001	82.300	100	S7.000	82.300	100	
S7	83.180	1.386	Junction		S1.005	81.794	100	S1.004	81.794	100	
								S7.001	81.794	100	
SPP14	82.985	0.750	Open Manhole	450	S8.000	82.235	100				
SFC14	82.985	1.000	Open Manhole	450	S8.001	81.985	100	S8.000	82.185	100	200
S6	83.060	1.371	Junction		S1.006	81.689	100	S1.005	81.689	100	
								S8.001	81.689	100	
SPP16	83.160	0.940	Open Manhole	450	S9.000	82.220	100				
SFC16	83.160	1.000	Open Manhole	450	S9.001	82.160	100	S9.000	82.160	100	
SSW25	83.000	1.374	Open Manhole	450	S1.007	81.626	100	S1.006	81.626	100	
								S9.001	81.626	100	
SPP17	82.820	0.820	Open Manhole	450	S10.000	82.000	100				
SFC17	82.820	1.000	Open Manhole	450	S10.001	81.820	100	S10.000	81.950	100	130
S17	82.875	1.404	Junction		S1.008	81.471	100	S1.007	81.471	100	
								S10.001	81.471	100	
SPP01	83.000	0.840	Open Manhole	450	S11.000	82.160	100				
SFC01	83.000	1.000	Open Manhole	450	S11.001	82.000	100	S11.000	82.110	100	110
SPP02	83.070	0.730	Open Manhole	450	S12.000	82.340	100				
SFC02	83.070	1.000	Open Manhole	450	S12.001	82.070	100	S12.000	82.290	100	220
SSW26	83.000	1.350	Open Manhole	450	S11.002	81.650	100	S11.001	81.650	100	
								S12.001	81.650	100	
SPP13	82.900	0.610	Open Manhole	450	S13.000	82.290	100				

Manhole Schedules for Storm

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam.,L*W (mm)	Pipe Out PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	Pipes In PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Backdrop (mm)
SFC13	82.900	1.000	Open Manhole	450	S13.001	81.900	100	S13.000	82.240	100	340
S27	82.875	1.425	Junction		S11.003	81.450	100	S11.002	81.450	100	
								S13.001	81.450	100	
SSW27	82.750	1.368	Open Manhole	450	S1.009	81.382	100	S1.008	81.382	100	
								S11.003	81.382	100	
SPP12	82.550	0.770	Open Manhole	450	S14.000	81.780	100				
SFC12	82.550	1.000	Open Manhole	450	S14.001	81.550	100	S14.000	81.730	100	180
SPP18	83.100	0.800	Open Manhole	450	S15.000	82.300	100				
SFC18	83.100	1.000	Open Manhole	450	S15.001	82.100	100	S15.000	82.250	100	150
SPP19	82.700	0.730	Open Manhole	450	S16.000	81.970	100				
SFC19	82.700	1.000	Open Manhole	450	S16.001	81.700	100	S16.000	81.920	100	220
SSW28	82.600	1.350	Open Manhole	450	S15.002	81.250	100	S15.001	81.250	100	
								S16.001	81.250	100	
SSW29	82.500	1.585	Open Manhole	450	S1.010	81.197	150	S1.009	81.197	100	
								S14.001	81.197	100	
								S15.002	80.915	100	
SPP20	82.550	0.810	Open Manhole	450	S17.000	81.740	100				
SFC20	82.550	1.000	Open Manhole	450	S17.001	81.550	100	S17.000	81.690	100	140
S25	82.500	1.412	Junction		S1.011	81.088	225	S1.010	81.138	150	
								S17.001	81.138	100	
SPP21	82.400	0.610	Open Manhole	450	S18.000	81.790	100				
SFC21	82.400	1.000	Open Manhole	450	S18.001	81.400	100	S18.000	81.740	100	340
SRAIN GARDEN	82.600	1.400	Open Manhole	450	S19.000	81.200	225				
SRG FC	82.600	1.425	Open Manhole	1200	S19.001	81.175	225	S19.000	81.175	225	
S27	82.600	1.606	Junction		S1.012	80.994	225	S1.011	80.994	225	
								S18.001	81.044	100	
								S19.001	80.994	225	
SPP26	82.525	0.680	Open Manhole	450	S20.000	81.845	100				
SFC26	82.525	1.000	Open Manhole	450	S20.001	81.525	100	S20.000	81.795	100	270
SSW30	82.500	1.610	Open Manhole	450	S1.013	80.890	225	S1.012	80.890	225	
								S20.001	81.494	100	479
SPP28	82.600	0.820	Open Manhole	450	S21.000	81.780	100				
SFC28	82.600	1.000	Open Manhole	450	S21.001	81.600	100	S21.000	81.730	100	130
SSW31	82.500	1.688	Open Manhole	1200	S1.014	80.812	225	S1.013	80.812	225	
								S21.001	80.862	100	
SPP30	82.500	0.635	Open Manhole	450	S22.000	81.865	100				
SFC30	82.500	1.000	Open Manhole	450	S22.001	81.500	100	S22.000	81.815	100	315
S66	82.500	1.737	Junction		S1.015	80.763	225	S1.014	80.763	225	
								S22.001	80.813	100	
SPP32	82.485	0.880	Open Manhole	450	S23.000	81.605	100				
SFC32	82.485	1.000	Open Manhole	450	S23.001	81.485	100	S23.000	81.555	100	70
S45	82.500	1.802	Junction		S1.016	80.698	225	S1.015	80.698	225	
								S23.001	80.748	100	
SPP35	82.500	0.810	Open Manhole	450	S24.000	81.690	100				

Manhole Schedules for Storm

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam.,L*W (mm)	Pipe Out PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	Pipes In PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Backdrop (mm)
SFC35	82.500	1.000	Open Manhole	450	S24.001	81.500	100	S24.000	81.640	100	140
S70	82.450	1.803	Junction		S1.017	80.647	225	S1.016	80.647	225	
								S24.001	80.697	100	
SPP34	82.400	0.760	Open Manhole	450	S25.000	81.640	150				
SFC34	82.400	1.000	Open Manhole	450	S25.001	81.400	100	S25.000	81.590	150	240
S46	82.400	1.791	Junction		S1.018	80.609	225	S1.017	80.609	225	
								S25.001	80.659	100	
S47	82.400	1.817	Junction		S1.019	80.583	225	S1.018	80.583	225	
SPP27	83.150	0.610	Open Manhole	450	S26.000	82.540	100				
SFC27	83.150	1.000	Open Manhole	450	S26.001	82.150	100	S26.000	82.490	100	340
SSW32	82.950	1.350	Open Manhole	450	S26.002	81.600	100	S26.001	81.600	100	
SPP31	82.910	1.020	Open Manhole	450	S27.000	81.890	100				
SFC31	82.910	1.020	Open Manhole	450	S27.001	81.890	100	S27.000	81.890	100	
S80	82.865	1.350	Junction		S26.003	81.515	100	S26.002	81.515	100	
								S27.001	81.515	100	
S56	82.780	1.350	Junction		S26.004	81.430	100	S26.003	81.430	100	
SPP36	82.710	1.100	Open Manhole	450	S28.000	81.610	100				
SFC36	82.710	1.100	Open Manhole	450	S28.001	81.610	100	S28.000	81.610	100	
S84	82.670	1.350	Junction		S26.005	81.320	100	S26.004	81.320	100	
								S28.001	81.320	100	
SPP41	82.570	1.040	Open Manhole	450	S29.000	81.530	100				
SFC41	82.570	1.040	Open Manhole	450	S29.001	81.530	100	S29.000	81.530	100	
SSW33	82.485	1.363	Open Manhole	1200	S26.006	81.122	100	S26.005	81.210	100	88
								S29.001	81.122	100	
SPP40	82.425	0.985	Open Manhole	450	S30.000	81.440	100				
SFC40	82.425	1.000	Open Manhole	450	S30.001	81.425	100	S30.000	81.425	100	
S91	82.435	1.827	Junction		S26.007	80.608	150	S26.006	80.608	100	
								S30.001	80.608	100	
SPP39	82.375	0.800	Open Manhole	450	S31.000	81.575	100				
SFC39	82.375	1.000	Open Manhole	450	S31.001	81.375	100	S31.000	81.525	100	150
SSW34	82.370	1.864	Open Manhole	1200	S1.020	80.506	225	S1.019	80.506	225	
								S26.007	80.540	150	
								S31.001	81.302	100	671
S53	82.370	1.927	Junction		S1.021	80.443	225	S1.020	80.443	225	
SPP47	82.380	1.030	Open Manhole	450	S32.000	81.350	100				
SFC47	82.380	1.030	Open Manhole	450	S32.001	81.350	100	S32.000	81.350	100	
S96	82.345	1.950	Junction		S1.022	80.395	225	S1.021	80.395	225	
								S32.001	80.445	100	
S53	82.320	1.991	Junction		S1.023	80.329	225	S1.022	80.329	225	
SPP55	82.333	0.973	Open Manhole	450	S33.000	81.360	100				
SFC55	82.333	1.003	Open Manhole	450	S33.001	81.330	100	S33.000	81.330	100	
S100	82.285	2.002	Junction		S1.024	80.283	225	S1.023	80.283	225	
								S33.001	80.333	100	
SPP46	82.255	0.835	Open Manhole	450	S34.000	81.420	100				

Manhole Schedules for Storm

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam.,L*W (mm)	Pipe Out PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	Pipes In PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Backdrop (mm)
SFC46	82.255	1.000	Open Manhole	450	S34.001	81.255	100	S34.000	81.370	100	115
SSW35	82.250	2.252	Open Manhole	1200	S1.025	80.209	225	S1.024	80.209	225	
								S34.001	79.998	100	
SPP61	82.250	0.980	Open Manhole	450	S35.000	81.270	100				
SFC61	82.250	0.980	Open Manhole	450	S35.001	81.270	100	S35.000	81.270	100	
SSW36	82.180	2.017	Open Manhole	1200	S1.026	80.163	225	S1.025	80.163	225	
								S35.001	81.153	100	865
SPP44	82.320	0.750	Open Manhole	450	S36.000	81.570	100				
SFC44	82.320	1.000	Open Manhole	450	S36.001	81.320	100	S36.000	81.520	100	200
SHE-SW-14	82.550	0.650	Open Manhole	1200	S37.000	81.900	300				
SHE-SW-15	82.300	1.400	Open Manhole	1200	S36.002	80.900	300	S36.001	80.900	100	
								S37.000	80.900	300	
SPP45	82.270	0.775	Open Manhole	450	S38.000	81.495	100				
SFC45	82.270	1.000	Open Manhole	450	S38.001	81.270	100	S38.000	81.445	100	175
S145	82.300	1.575	Junction		S36.003	80.725	300	S36.002	80.789	300	64
								S38.001	80.725	100	
SPP60	82.270	0.760	Open Manhole	450	S39.000	81.510	100				
SFC60	82.270	1.000	Open Manhole	450	S39.001	81.270	100	S39.000	81.480	100	210
S146	82.200	1.535	Junction		S36.004	80.665	300	S36.003	80.665	300	
								S39.001	80.665	100	
SSW11	82.550	1.750	Open Manhole	1200	S40.000	80.800	300				
SSW12	82.550	1.930	Open Manhole	1200	S40.001	80.620	300	S40.000	80.620	300	
SSW13	82.550	2.069	Open Manhole	1200	S40.002	80.481	300	S40.001	80.481	300	
STANK 3	82.500	2.150	Open Manhole	1200	S41.000	80.350	300				
SHB 3	82.500	2.188	Open Manhole	1200	S41.001	80.332	100	S41.000	80.312	300	
S148	82.550	2.336	Junction		S40.003	80.214	300	S40.002	80.214	300	
								S41.001	80.299	100	
SPP67	82.250	0.810	Open Manhole	450	S42.000	81.440	100				
SFC67	82.250	1.000	Open Manhole	450	S42.001	81.250	100	S42.000	81.390	100	140
S148	82.550	2.451	Junction		S40.004	80.099	300	S40.003	80.099	300	
								S42.001	80.665	100	366
SSW15	82.550	2.481	Open Manhole	1350	S40.005	80.069	450	S40.004	80.069	300	
SPP68	82.250	0.835	Open Manhole	450	S43.000	81.415	100				
SFC68	82.250	1.000	Open Manhole	450	S43.001	81.250	100	S43.000	81.365	100	115
S150	82.550	2.560	Junction		S40.006	79.990	450	S40.005	79.990	450	
								S43.001	80.556	100	216
SPP69	82.350	0.740	Open Manhole	450	S44.000	81.610	100				
SFC69	82.350	1.000	Open Manhole	1200	S44.001	81.350	100	S44.000	81.560	100	210
S151	82.550	2.604	Junction		S40.007	79.946	450	S40.006	79.946	450	
								S44.001	80.564	100	268
SSW16	82.500	2.654	Open Manhole	1800	S40.008	79.846	600	S40.007	79.846	450	
SPP66	82.400	0.810	Open Manhole	450	S45.000	81.590	100				
SFC66	82.400	1.000	Open Manhole	450	S45.001	81.400	100	S45.000	81.540	100	140
SPP65	82.500	0.740	Open Manhole	450	S46.000	81.760	100				

Manhole Schedules for Storm

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam.,L*W (mm)	Pipe Out PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	Pipes In PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Backd (mm
SFC65	82.500	1.000	Open Manhole	450	S46.001	81.500	100	S46.000	81.710	100	
STANK 2	82.500	2.500	Open Manhole	1200	S47.000	80.000	225				
SHB 2	82.500	2.550	Open Manhole	1200	S47.001	79.950	225	S47.000	79.950	225	
SSW17	82.400	2.845	Open Manhole	1800	S40.009	79.555	600	S40.008	79.555	600	
								S45.001	81.377	100	1
								S46.001	81.432	100	1
								S47.001	79.897	225	
SFEC-SW-21	82.700	1.200	Open Manhole	1350	S48.000	81.500	375				
SFEC-SW-22	82.700	1.450	Open Manhole	1350	S48.001	81.250	375	S48.000	81.250	375	
SFEC-SW-23	82.700	1.650	Open Manhole	1350	S48.002	81.050	450	S48.001	81.050	375	
SFEC-SW-24	82.550	1.600	Open Manhole	1350	S48.003	80.950	450	S48.002	80.950	450	
SFEC-SW-19	82.600	1.100	Open Manhole	1200	S49.000	81.500	225				
SFEC-SW-20	82.500	1.200	Open Manhole	1200	S49.001	81.300	300	S49.000	81.300	225	
SFEC-SW-15	82.500	1.000	Open Manhole	1200	S50.000	81.500	225				
SFEC-SW-17	82.500	1.100	Open Manhole	1200	S50.001	81.400	300	S50.000	81.400	225	
SFEC-SW-18	82.500	1.250	Open Manhole	1200	S50.002	81.250	300	S50.001	81.250	300	
SFEC-SW-25	82.500	1.930	Open Manhole	1500	S48.004	80.770	600	S48.003	80.570	450	
								S49.001	80.770	300	
								S50.002	80.770	300	
SFEC-SW-26	82.400	2.500	Open Manhole	1500	S48.005	79.900	600	S48.004	80.720	600	
SSW18	82.500	3.111	Open Manhole	1800	S40.010	79.389	750	S40.009	79.389	600	
								S48.005	79.600	600	
SSW19	82.450	3.176	Open Manhole	1800	S40.011	79.274	750	S40.010	79.274	750	
SHE-SW-16	82.550	2.750	Open Manhole	1200	S51.000	79.800	225				
SHE-SW-17	82.550	3.297	Open Manhole	1200	S51.001	79.253	225	S51.000	79.253	225	
S154	82.450	3.386	Junction		S40.012	79.086	750	S40.011	79.086	750	
								S51.001	79.064	225	
SSwale In 1	82.500	1.000	Junction		S52.000	81.500	-1				
SSwale 2	82.500	1.000	Junction		S52.001	81.500	-1	S52.000	81.500	-1	
SSwale in 3	82.500	1.000	Junction		S52.002	81.500	-1	S52.001	81.500	-1	
SSwale 4	82.500	1.000	Junction		S52.003	81.500	-1	S52.002	81.500	-1	
SSW PUMP OUTFALL	82.400	0.600	Open Manhole	1200	S53.000	81.800	300				
SSwale in 5	82.500	1.000	Junction		S52.004	81.500	-1	S52.003	81.500	-1	
								S53.000	81.651	300	
SSwale 6	82.500	1.000	Junction		S52.005	81.500	-1	S52.004	81.500	-1	
SSwale in 7	82.500	1.000	Junction		S52.006	81.500	-1	S52.005	81.500	-1	
SSwale out	82.500	1.000	Junction		S52.007	81.500	150	S52.006	81.500	-1	
SSWALE FC70	82.500	1.075	Junction		S52.008	81.425	150	S52.007	81.425	150	
SSW20	82.350	3.316	Open Manhole	1800	S40.013	79.034	750	S40.012	79.034	750	
								S52.008	81.348	150	1
SPP53	82.375	0.985	Open Manhole	450	S54.000	81.390	100				
SFC53	82.375	1.000	Open Manhole	450	S54.001	81.375	100	S54.000	81.375	100	
SPP57	82.380	0.735	Open Manhole	450	S55.000	81.645	100				
SFC57	82.380	1.000	Open Manhole	450	S55.001	81.380	100	S55.000	81.595	100	

Manhole Schedules for Storm

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam.,L*W (mm)	Pipe Out PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	Pipes In PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Backdrop (mm)
S170	82.400	1.426	Junction		S54.002	80.974	100	S54.001	81.030	100	56
								S55.001	80.974	100	
S167	82.350	3.328	Junction		S40.014	79.022	750	S40.013	79.022	750	
								S54.002	79.578	100	
SSW22	82.200	3.342	Open Manhole	1800	S36.005	78.858	750	S36.004	80.265	300	957
								S40.014	78.858	750	
SPP48	82.450	1.000	Open Manhole	450	S56.000	81.450	100				
SFC48	82.450	1.000	Open Manhole	450	S56.001	81.450	100	S56.000	81.450	100	
SPP50	82.280	0.735	Open Manhole	450	S57.000	81.545	100				
SFC50	82.280	1.100	Open Manhole	450	S57.001	81.180	100	S57.000	81.495	100	315
SSW36	82.350	1.350	Open Manhole	450	S56.002	81.000	100	S56.001	81.050	100	50
								S57.001	81.000	100	
Spp56	82.370	1.040	Open Manhole	450	S58.000	81.330	100				
SFC56	82.370	1.040	Open Manhole	450	S58.001	81.330	100	S58.000	81.330	100	
S187	81.300	0.442	Junction		S56.003	80.858	100	S56.002	80.917	100	59
								S58.001	80.908	100	50
SPP59	82.270	0.775	Open Manhole	450	S59.000	81.495	100				
SFC59	82.270	1.000	Open Manhole	450	S59.001	81.270	100	S59.000	81.445	100	175
SPP63	82.200	0.755	Open Manhole	450	S60.000	81.445	100				
SFC63	82.200	1.000	Open Manhole	450	S60.001	81.200	100	S60.000	81.395	100	195
SPP62	82.240	0.730	Open Manhole	450	S61.000	81.510	100				
SFC62	82.240	1.000	Open Manhole	450	S61.001	81.240	100	S61.000	81.460	100	220
SSW37	82.200	1.504	Open Manhole	1200	S56.004	80.696	100	S56.003	80.696	100	
								S59.001	81.182	100	486
								S60.001	80.696	100	
								S61.001	81.192	100	496
SPP64	82.000	0.740	Open Manhole	450	S62.000	81.260	100				
SFC64	82.000	1.000	Open Manhole	450	S62.001	81.000	100	S62.000	81.225	100	225
SFEC-SW-06	82.550	0.900	Open Manhole	450	S63.000	81.650	450				
SFEC-SW-07	82.700	1.364	Open Manhole	1350	S63.001	81.536	450	S63.000	81.336	450	
SFEC-SW-08	82.700	1.480	Open Manhole	1350	S63.002	81.220	450	S63.001	81.220	450	
SFEC-SW-09	82.700	1.837	Open Manhole	1500	S63.003	80.863	525	S63.002	80.938	450	
SFEC-SW-10	82.700	0.900	Open Manhole	1200	S64.000	81.800	225				
SFEC-SW-12	82.700	1.200	Open Manhole	1200	S64.001	81.500	225	S64.000	81.500	225	
SFEC-SW-13	82.700	1.960	Open Manhole	1500	S63.004	80.740	525	S63.003	80.740	525	
								S64.001	81.300	225	260
SFEC-SW-14	82.550	2.050	Open Manhole	1800	S63.005	80.500	525	S63.004	80.500	525	
SSW05	82.400	1.980	Open Manhole	1800	S63.006	80.420	525	S63.005	80.420	525	
SFEC-SW-01	82.550	0.950	Open Manhole	1200	S65.000	81.600	225				
SFEC-SW-02	82.550	1.050	Open Manhole	1200	S65.001	81.500	300	S65.000	81.500	225	
SHW-SW-01	82.550	0.950	Open Manhole	1200	S66.000	81.600	225				
SHW-SW-02	82.550	1.203	Open Manhole	1200	S66.001	81.347	300	S66.000	81.347	225	
SHW-SW-03	82.550	0.950	Open Manhole	1200	S67.000	81.600	150				
SFEC-SW-03	82.550	1.351	Open Manhole	1350	S65.002	81.199	375	S65.001	81.199	300	

Manhole Schedules for Storm

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam.,L*W (mm)	Pipe Out PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	Pipes In PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Backdrop (mm)
								S66.001	81.199	300	
								S67.000	81.199	150	
SFEC-SW-04	82.550	0.850	Open Manhole	1200	S68.000	81.700	300				
SFEC-SW-05	82.550	1.435	Open Manhole	1350	S65.003	81.115	450	S65.002	81.115	375	
								S68.000	81.431	300	166
SSW01	83.650	2.721	Open Manhole	1500	S65.004	80.929	525	S65.003	80.929	450	
SSW02	83.650	3.150	Open Manhole	1500	S65.005	80.500	525	S65.004	80.500	525	
SSW03	83.650	3.355	Open Manhole	1500	S65.006	80.295	525	S65.005	80.295	525	
SHW-SW-04	82.550	0.750	Open Manhole	450	S69.000	81.800	225				
SSWALE2 IN	82.500	1.000	Open Manhole	1200	S69.001	81.500	-2	S69.000	81.744	225	
SSWALE 2 FC	82.500	1.000	Open Manhole	1200	S69.002	81.500	100	S69.001	81.500	-2	
SSW04	83.400	3.135	Open Manhole	1500	S65.007	80.265	525	S65.006	80.265	525	
								S69.002	81.355	100	665
SHW-SW-09	82.550	0.650	Open Manhole	1200	S70.000	81.900	150				
SHW-SW-05	82.550	0.650	Open Manhole	1200	S71.000	81.900	225				
SHW-SW-06	82.550	0.814	Open Manhole	1200	S71.001	81.736	225	S71.000	81.736	225	
SHW-SW-07	82.550	0.650	Open Manhole	1200	S72.000	81.900	150				
SHW-SW-08	82.550	0.650	Open Manhole	1200	S73.000	81.900	150				
SHW-SW-10	82.550	0.650	Open Manhole	1200	S74.000	81.900	225				
SBASIN 1	82.550	1.050	Open Manhole	1200	S70.001	81.500	150	S70.000	81.687	150	187
								S71.001	81.500	225	
								S72.000	81.703	150	203
								S73.000	81.575	150	75
								S74.000	81.619	225	194
SBASIN 1 OUT	82.500	1.307	Open Manhole	450	S70.002	81.193	150	S70.001	81.193	150	
S238	82.650	2.536	Junction		S65.008	80.114	525	S65.007	80.114	525	
								S70.002	80.782	150	293
SSW06	82.400	2.360	Open Manhole	1800	S63.007	80.040	525	S63.006	80.040	525	
								S65.008	80.040	525	
SHE-SW-01	82.550	0.950	Open Manhole	1200	S75.000	81.600	300				
SSW07	82.400	1.356	Open Manhole	1200	S75.001	81.044	300	S75.000	81.044	300	
SFEATURE POND	82.200	0.200	Open Manhole	1200	S76.000	82.000	100				
SFP FC	82.200	1.400	Open Manhole	1200	S76.001	80.800	100	S76.000	81.800	100	1000
SSW08	82.550	2.751	Open Manhole	1800	S63.008	79.799	600	S63.007	79.799	525	
								S75.001	80.632	300	533
								S76.001	80.625	100	326
SSW09	82.500	2.777	Open Manhole	1800	S63.009	79.723	600	S63.008	79.723	600	
SHE-SW-10	82.550	0.650	Open Manhole	1200	S77.000	81.900	225				
SHE-SW-11	82.550	0.934	Open Manhole	1200	S77.001	81.616	225	S77.000	81.616	225	
SHE-SW-03	82.500	0.600	Open Manhole	1200	S78.000	81.900	225				
SHE-SW-04	82.500	0.863	Open Manhole	1200	S78.001	81.637	225	S78.000	81.637	225	
SHE-SW-02	82.550	0.650	Open Manhole	1200	S79.000	81.900	225				
SHW-SW-06	82.550	0.650	Open Manhole	1200	S80.000	81.900	225				
SHE-SW-05	82.550	0.650	Open Manhole	1200	S81.000	81.900	225				

Manhole Schedules for Storm

MH Name	MH CL (m)	MH Depth (m)	MH Connection	MH Diam.,L*W (mm)	Pipe Out PN	Pipe Out Invert Level (m)	Pipe Out Diameter (mm)	Pipes In PN	Pipes In Invert Level (m)	Pipes In Diameter (mm)	Backdrop (mm)
SHE-SW-07	82.550	0.733	Open Manhole	1200	S80.001	81.817	225	S80.000	81.817	225	
								S81.000	81.817	225	
SHE-SW-08	82.550	0.650	Open Manhole	1200	S82.000	81.900	225				
SHE-SW-09	82.550	0.812	Open Manhole	1200	S82.001	81.738	225	S82.000	81.738	225	
SBASIN 2	82.550	1.050	Open Manhole	1200	S77.002	81.500	225	S77.001	81.500	225	
								S78.001	81.500	225	
								S79.000	81.500	225	
								S80.001	81.565	225	65
								S82.001	81.500	225	
SBASIN 2 OUT	82.500	1.256	Open Manhole	600	S77.003	81.244	225	S77.002	81.244	225	
SHE-SW-12	82.500	1.565	Open Manhole	600	S77.004	80.935	225	S77.003	80.935	225	
SHE-SW-13	82.500	1.615	Open Manhole	600	S77.005	80.885	225	S77.004	80.885	225	
S241	82.400	2.756	Junction		S63.010	79.644	600	S63.009	79.644	600	
								S77.005	80.566	225	547
SSW10	82.180	2.746	Open Manhole	1800	S63.011	79.434	600	S63.010	79.434	600	
STANK	82.000	3.268	Open Manhole	1800	S1.027	78.732	300	S1.026	80.087	225	1280
								S36.005	78.758	750	476
								S56.004	79.751	100	819
								S62.001	80.000	100	1068
								S63.011	79.233	600	801
SFC71	82.000	3.321	Open Manhole	1200	S1.028	78.679	300	S1.027	78.679	300	
S	80.600	2.146	Open Manhole	0		OUTFALL		S1.028	78.454	300	

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
SPP05	455013.467	221814.940	455013.467	221814.940	Required	
SFC05	455012.197	221813.925	455012.197	221813.925	Required	
SPP04	455008.411	221824.560	455008.411	221824.560	Required	
SFC04	455006.754	221823.082	455006.754	221823.082	Required	
SPP06	455017.766	221809.853	455017.766	221809.853	Required	
SFC06	455016.071	221808.414	455016.071	221808.414	Required	
SSW23	455008.898	221804.551	455008.898	221804.551	Required	

Manhole Schedules for Storm

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
SPP10	455054.337	221813.233	455054.337	221813.233	Required	
SFC10	455055.944	221811.462	455055.944	221811.462	Required	
SPP08	455028.827	221796.589	455028.827	221796.589	Required	
SFC08	455027.198	221795.296	455027.198	221795.296	Required	
S13	455029.371	221789.783			No Entry	
SSW24	455024.366	221785.633	455024.366	221785.633	Required	
SPP03	455023.038	221778.446	455023.038	221778.446	Required	
SFC03	455025.424	221780.342	455025.424	221780.342	Required	
S7	455027.382	221782.002			No Entry	
SPP11	455039.547	221783.250	455039.547	221783.250	Required	
SFC11	455037.908	221781.918	455037.908	221781.918	Required	
S7	455034.059	221773.920			No Entry	
SPP14	455035.471	221763.068	455035.471	221763.068	Required	
SFC14	455036.854	221763.812	455036.854	221763.812	Required	
S6	455040.689	221765.782			No Entry	
SPP16	455050.711	221770.614	455050.711	221770.614	Required	
SFC16	455048.748	221769.007	455048.748	221769.007	Required	
SSW25	455044.675	221760.887	455044.675	221760.887	Required	

Manhole Schedules for Storm

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
SPP17	455036.987	221745.821	455036.987	221745.821	Required	
SFC17	455036.102	221746.924	455036.102	221746.924	Required	
S17	455032.688	221751.073			No Entry	
SPP01	455001.606	221766.613	455001.606	221766.613	Required	
SFC01	455002.575	221765.382	455002.575	221765.382	Required	
SPP02	455011.682	221771.580	455011.682	221771.580	Required	
SFC02	455013.306	221769.609	455013.306	221769.609	Required	
SSW26	455009.265	221765.510	455009.265	221765.510	Required	
SPP13	455024.435	221755.849	455024.435	221755.849	Required	
SFC13	455025.202	221754.897	455025.202	221754.897	Required	
S27	455021.795	221750.395			No Entry	
SSW27	455025.777	221745.520	455025.777	221745.520	Required	
SPP12	455032.688	221727.402	455032.688	221727.402	Required	
SFC12	455034.062	221728.539	455034.062	221728.539	Required	
SPP18	455086.488	221775.083	455086.488	221775.083	Required	
SFC18	455088.216	221772.844	455088.216	221772.844	Required	
SPP19	455042.427	221741.702	455042.427	221741.702	Required	
SFC19	455041.010	221740.539	455041.010	221740.539	Required	

Manhole Schedules for Storm

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
SSW28	455044.119	221737.043	455044.119	221737.043	Required	
SSW29	455037.475	221731.230	455037.475	221731.230	Required	
SPP20	455044.246	221729.753	455044.246	221729.753	Required	
SFC20	455042.534	221728.333	455042.534	221728.333	Required	
S25	455041.827	221727.254			No Entry	
SPP21	455043.493	221711.264	455043.493	221711.264	Required	
SFC21	455045.344	221712.480	455045.344	221712.480	Required	
SRAIN GARDEN	455053.572	221722.398	455053.572	221722.398	Required	
SRG FC	455052.328	221721.439	455052.328	221721.439	Required	
S27	455052.240	221717.807			No Entry	
SPP26	455064.625	221711.773	455064.625	221711.773	Required	
SFC26	455062.728	221710.222	455062.728	221710.222	Required	
SSW30	455063.692	221707.277	455063.692	221707.277	Required	
SPP28	455076.202	221707.709	455076.202	221707.709	Required	
SFC28	455075.117	221706.857	455075.117	221706.857	Required	
SSW31	455071.105	221698.230	455071.105	221698.230	Required	
SPP30	455080.975	221702.940	455080.975	221702.940	Required	
SFC30	455079.158	221701.483	455079.158	221701.483	Required	

Manhole Schedules for Storm

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
S66	455075.828	221692.883			No Entry	
SPP32	455086.891	221694.700	455086.891	221694.700	Required	
SFC32	455085.943	221693.643	455085.943	221693.643	Required	
S45	455081.974	221685.135			No Entry	
SPP35	455091.217	221689.491	455091.217	221689.491	Required	
SFC35	455089.806	221688.164	455089.806	221688.164	Required	
S70	455086.809	221679.297			No Entry	
SPP34	455084.240	221672.100	455084.240	221672.100	Required	
SFC34	455085.677	221672.792	455085.677	221672.792	Required	
S46	455090.360	221674.830			No Entry	
S47	455092.831	221671.890			No Entry	
SPP27	455112.451	221751.131	455112.451	221751.131	Required	
SFC27	455110.966	221749.898	455110.966	221749.898	Required	
SSW32	455115.444	221736.060	455115.444	221736.060	Required	
SPP31	455123.978	221738.285	455123.978	221738.285	Required	
SFC31	455121.819	221736.499	455121.819	221736.499	Required	
S80	455120.401	221730.089			No Entry	
S56	455126.282	221722.833			No Entry	

Manhole Schedules for Storm

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
SPP36	455133.880	221724.388	455133.880	221724.388	Required	
SFC36	455132.648	221723.419	455132.648	221723.419	Required	
S84	455131.268	221716.850			No Entry	
SPP41	455145.010	221711.540	455145.010	221711.540	Required	
SFC41	455143.325	221710.154	455143.325	221710.154	Required	
SSW33	455142.704	221702.791	455142.704	221702.791	Required	
SPP40	455101.968	221676.241	455101.968	221676.241	Required	
SFC40	455100.767	221675.242	455100.767	221675.242	Required	
S91	455102.893	221670.242			No Entry	
SPP39	455089.043	221665.324	455089.043	221665.324	Required	
SFC39	455090.378	221666.534	455090.378	221666.534	Required	
SSW34	455097.697	221665.914	455097.697	221665.914	Required	
S53	455103.666	221658.666			No Entry	
SPP47	455113.329	221663.387	455113.329	221663.387	Required	
SFC47	455111.851	221662.081	455111.851	221662.081	Required	
S96	455108.312	221653.190			No Entry	
S53	455114.502	221645.438			No Entry	
SPP55	455123.697	221649.923	455123.697	221649.923	Required	

Manhole Schedules for Storm

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
SFC55	455122.419	221648.837	455122.419	221648.837	Required	
S100	455118.944	221640.236			No Entry	
SPP46	455119.600	221630.771	455119.600	221630.771	Required	
SFC46	455120.710	221631.739	455120.710	221631.739	Required	
SSW35	455125.960	221631.566	455125.960	221631.566	Required	
SPP61	455135.176	221636.945	455135.176	221636.945	Required	
SFC61	455133.455	221635.461	455133.455	221635.461	Required	
SSW36	455130.314	221626.300	455130.314	221626.300	Required	
SPP44	455094.573	221634.306	455094.573	221634.306	Required	
SFC44	455095.633	221633.040	455095.633	221633.040	Required	
SHE-SW-14	455051.148	221595.618	455051.148	221595.618	Required	
SHE-SW-15	455102.822	221637.882	455102.822	221637.882	Required	
SPP45	455116.815	221629.064	455116.815	221629.064	Required	
SFC45	455118.025	221627.688	455118.025	221627.688	Required	
S145	455113.980	221624.367			No Entry	
SPP60	455108.949	221617.645	455108.949	221617.645	Required	
SFC60	455110.165	221616.227	455110.165	221616.227	Required	
S146	455117.774	221619.694			No Entry	

Manhole Schedules for Storm

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
SSW11	454824.415	221610.245	454824.415	221610.245	Required	
SSW12	454803.499	221593.163	454803.499	221593.163	Required	
SSW13	454794.243	221574.504	454794.243	221574.504	Required	
STANK 3	454814.393	221540.088	454814.393	221540.088	Required	
SHB 3	454816.942	221541.765	454816.942	221541.765	Required	
S148	454819.642	221543.616			No Entry	
SPP67	454824.062	221528.074	454824.062	221528.074	Required	
SFC67	454825.590	221529.306	454825.590	221529.306	Required	
S148	454830.421	221530.164			No Entry	
SSW15	454833.334	221526.677	454833.334	221526.677	Required	
SPP68	454833.548	221515.356	454833.548	221515.356	Required	
SFC68	454835.287	221516.804	454835.287	221516.804	Required	
S150	454840.730	221517.402			No Entry	
SPP69	454841.791	221508.066	454841.791	221508.066	Required	
SFC69	454844.344	221510.132	454844.344	221510.132	Required	
S151	454847.818	221510.434			No Entry	
SSW16	454869.102	221488.850	454869.102	221488.850	Required	
SPP66	454939.079	221524.003	454939.079	221524.003	Required	

Manhole Schedules for Storm

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
SFC66	454941.014	221524.825	454941.014	221524.825	Required	
SPP65	454933.197	221529.680	454933.197	221529.680	Required	
SFC65	454935.266	221530.588	454935.266	221530.588	Required	
STANK 2	454943.763	221534.610	454943.763	221534.610	Required	
SHB 2	454939.784	221532.289	454939.784	221532.289	Required	
SSW17	454941.131	221527.147	454941.131	221527.147	Required	
SFEC-SW-21	454907.925	221581.756	454907.925	221581.756	Required	
SFEC-SW-22	454924.014	221562.084	454924.014	221562.084	Required	
SFEC-SW-23	454939.848	221575.033	454939.848	221575.033	Required	
SFEC-SW-24	454946.245	221567.208	454946.245	221567.208	Required	
SFEC-SW-19	454930.298	221534.849	454930.298	221534.849	Required	
SFEC-SW-20	454943.506	221541.792	454943.506	221541.792	Required	
SFEC-SW-15	454967.059	221581.209	454967.059	221581.209	Required	
SFEC-SW-17	454961.927	221577.071	454961.927	221577.071	Required	
SFEC-SW-18	454971.923	221565.438	454971.923	221565.438	Required	
SFEC-SW-25	454957.778	221553.567	454957.778	221553.567	Required	
SFEC-SW-26	454966.862	221543.132	454966.862	221543.132	Required	
SSW18	454990.554	221533.337	454990.554	221533.337	Required	

Manhole Schedules for Storm

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
SSW19	455024.846	221536.771	455024.846	221536.771	Required	
SHE-SW-16	455005.001	221545.202	455005.001	221545.202	Required	
SHE-SW-17	455047.615	221579.203	455047.615	221579.203	Required	
S154	455065.688	221575.807			No Entry	
SSwale In 1	454826.861	221467.748			No Entry	
SSwale 2	454886.528	221475.941			No Entry	
SSwale in 3	454912.706	221491.975			No Entry	
SSwale 4	454965.976	221515.588			No Entry	
SSW PUMP OUTFALL	454990.671	221530.108	454990.671	221530.108	Required	
SSwale in 5	455004.910	221525.565			No Entry	
SSwale 6	455035.198	221537.718			No Entry	
SSwale in 7	455067.380	221569.392			No Entry	
SSwale out	455071.006	221572.804			No Entry	
SSWALE FC70	455072.688	221580.104			No Entry	
SSW20	455076.991	221586.463	455076.991	221586.463	Required	
SPP53	455067.832	221604.267	455067.832	221604.267	Required	
SFC53	455065.829	221602.277	455065.829	221602.277	Required	
SPP57	455079.890	221601.456	455079.890	221601.456	Required	

Manhole Schedules for Storm

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
SFC57	455078.254	221599.788	455078.254	221599.788	Required	
S170	455073.725	221594.523			No Entry	
S167	455079.897	221588.622			No Entry	
SSW22	455119.910	221617.095	455119.910	221617.095	Required	
SPP48	455169.375	221709.521	455169.375	221709.521	Required	
SFC48	455171.170	221710.953	455171.170	221710.953	Required	
SPP50	455163.714	221695.127	455163.714	221695.127	Required	
SFC50	455165.344	221696.524	455165.344	221696.524	Required	
SSW36	455174.628	221704.796	455174.628	221704.796	Required	
Spp56	455189.405	221703.587	455189.405	221703.587	Required	
SFC56	455187.269	221701.922	455187.269	221701.922	Required	
S187	455186.712	221697.241			No Entry	
SPP59	455199.335	221698.210	455199.335	221698.210	Required	
SFC59	455197.983	221697.019	455197.983	221697.019	Required	
SPP63	455207.213	221696.019	455207.213	221696.019	Required	
SFC63	455205.713	221694.899	455205.713	221694.899	Required	
SPP62	455193.238	221689.750	455193.238	221689.750	Required	
SFC62	455195.602	221688.791	455195.602	221688.791	Required	

Manhole Schedules for Storm

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
SSW37	455200.367	221688.575	455200.367	221688.575	Required	
SPP64	455138.381	221623.715	455138.381	221623.715	Required	
SFC64	455137.873	221621.756	455137.873	221621.756	Required	
SFEC-SW-06	454866.684	221619.424	454866.684	221619.424	Required	
SFEC-SW-07	454876.751	221607.140	454876.751	221607.140	Required	
SFEC-SW-08	454901.224	221627.121	454901.224	221627.121	Required	
SFEC-SW-09	454927.800	221648.891	454927.800	221648.891	Required	
SFEC-SW-10	454931.831	221622.869	454931.831	221622.869	Required	
SFEC-SW-12	454946.195	221644.904	454946.195	221644.904	Required	
SFEC-SW-13	454937.398	221656.877	454937.398	221656.877	Required	
SFEC-SW-14	454948.121	221666.081	454948.121	221666.081	Required	
SSW05	454949.782	221678.507	454949.782	221678.507	Required	
SFEC-SW-01	454903.679	221653.068	454903.679	221653.068	Required	
SFEC-SW-02	454898.273	221659.777	454898.273	221659.777	Required	
SHW-SW-01	454914.078	221662.050	454914.078	221662.050	Required	
SHW-SW-02	454898.090	221681.628	454898.090	221681.628	Required	
SHW-SW-03	454892.676	221691.036	454892.676	221691.036	Required	
SFEC-SW-03	454883.880	221677.381	454883.880	221677.381	Required	

Manhole Schedules for Storm

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
SFEC-SW-04	454856.599	221654.993	454856.599	221654.993	Required	
SFEC-SW-05	454877.357	221672.053	454877.357	221672.053	Required	
SSW01	454854.338	221700.337	454854.338	221700.337	Required	
SSW02	454921.968	221752.963	454921.968	221752.963	Required	
SSW03	454971.590	221789.673	454971.590	221789.673	Required	
SHW-SW-04	454926.940	221743.920	454926.940	221743.920	Required	
SSWALE2 IN	454930.356	221748.300	454930.356	221748.300	Required	
SSWALE 2 FC	454964.415	221775.664	454964.415	221775.664	Required	
SSW04	454975.668	221784.743	454975.668	221784.743	Required	
SHW-SW-09	454933.843	221688.834	454933.843	221688.834	Required	
SHW-SW-05	454968.868	221738.521	454968.868	221738.521	Required	
SHW-SW-06	454956.104	221728.297	454956.104	221728.297	Required	
SHW-SW-07	454935.414	221718.350	454935.414	221718.350	Required	
SHW-SW-08	454916.900	221709.928	454916.900	221709.928	Required	
SHW-SW-10	454955.570	221676.656	454955.570	221676.656	Required	
SBASIN 1	454948.891	221703.948	454948.891	221703.948	Required	
SBASIN 1 OUT	454972.465	221723.644	454972.465	221723.644	Required	
S238	455004.298	221749.599			No Entry	

Manhole Schedules for Storm

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
SSW06	455017.135	221734.099	455017.135	221734.099	Required	
SHE-SW-01	454983.133	221622.611	454983.133	221622.611	Required	
SSW07	455025.535	221658.616	455025.535	221658.616	Required	
SFEATURE POND	455038.810	221684.218	455038.810	221684.218	Required	
SFP FC	455042.895	221682.601	455042.895	221682.601	Required	
SSW08	455060.205	221680.962	455060.205	221680.962	Required	
SSW09	455077.906	221695.511	455077.906	221695.511	Required	
SHE-SW-10	455054.081	221634.424	455054.081	221634.424	Required	
SHE-SW-11	455031.745	221616.873	455031.745	221616.873	Required	
SHE-SW-03	454987.174	221678.499	454987.174	221678.499	Required	
SHE-SW-04	455016.769	221642.579	455016.769	221642.579	Required	
SHE-SW-02	454984.439	221626.967	454984.439	221626.967	Required	
SHW-SW-06	455000.709	221600.962	455000.709	221600.962	Required	
SHE-SW-05	454991.491	221610.378	454991.491	221610.378	Required	
SHE-SW-07	454999.468	221608.206	454999.468	221608.206	Required	
SHE-SW-08	455009.648	221588.178	455009.648	221588.178	Required	
SHE-SW-09	455022.261	221598.274	455022.261	221598.274	Required	
SBASIN 2	455017.095	221626.268	455017.095	221626.268	Required	

Manhole Schedules for Storm

MH Name	Manhole Easting (m)	Manhole Northing (m)	Intersection Easting (m)	Intersection Northing (m)	Manhole Access	Layout (North)
SBASIN 2 OUT	455039.312	221638.997	455039.312	221638.997	Required	
SHE-SW-12	455063.308	221658.496	455063.308	221658.496	Required	
SHE-SW-13	455068.169	221657.207	455068.169	221657.207	Required	
S241	455093.018	221677.147			No Entry	
SSW10	455132.862	221628.440	455132.862	221628.440	Required	
STANK	455137.769	221617.737	455137.769	221617.737	Required	
SFC71	455145.302	221610.151	455145.302	221610.151	Required	
S	455180.195	221581.735			No Entry	

PIPELINE SCHEDULES for Storm

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S1.000	o	100	SPP05	83.720	82.850	0.770	Open Manhole	450
S1.001	o	100	SFC05	83.720	82.720	0.900	Open Manhole	450
S2.000	o	100	SPP04	83.800	83.190	0.510	Open Manhole	450
S2.001	o	100	SFC04	83.800	82.800	0.900	Open Manhole	450
S3.000	o	100	SPP06	83.620	83.010	0.510	Open Manhole	450
S3.001	o	100	SFC06	83.620	82.620	0.900	Open Manhole	450
S1.002	o	100	SSW23	83.540	82.190	1.250	Open Manhole	450
S4.000	o	100	SPP10	83.530	82.755	0.675	Open Manhole	450
S4.001	o	100	SFC10	83.530	82.530	0.900	Open Manhole	450
S5.000	o	100	SPP08	83.450	82.470	0.880	Open Manhole	450
S5.001	o	100	SFC08	83.450	82.450	0.900	Open Manhole	450
S4.002	o	100	S13	83.350	82.187	1.063	Junction	
S1.003	o	100	SSW24	83.270	81.946	1.224	Open Manhole	450
S6.000	o	100	SPP03	83.200	82.470	0.630	Open Manhole	450
S6.001	o	100	SFC03	83.200	82.200	0.900	Open Manhole	450
S1.004	o	100	S7	83.240	81.899	1.241	Junction	

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S1.000	1.626	16.3	SFC05	83.720	82.750	0.870	Open Manhole	450
S1.001	9.938	18.8	SSW23	83.540	82.190	1.250	Open Manhole	450
S2.000	2.221	44.4	SFC04	83.800	83.140	0.560	Open Manhole	450
S2.001	18.655	30.6	SSW23	83.540	82.190	1.250	Open Manhole	450
S3.000	2.223	44.5	SFC06	83.620	82.960	0.560	Open Manhole	450
S3.001	8.148	18.9	SSW23	83.540	82.190	1.250	Open Manhole	450
S1.002	24.436	152.7	SSW24	83.270	82.030	1.140	Open Manhole	450
S4.000	2.392	47.8	SFC10	83.530	82.705	0.725	Open Manhole	450
S4.001	34.295	100.0	S13	83.350	82.187	1.063	Junction	
S5.000	2.080	104.0	SFC08	83.450	82.450	0.900	Open Manhole	450
S5.001	5.927	22.5	S13	83.350	82.187	1.063	Junction	
S4.002	6.502	27.0	SSW24	83.270	81.946	1.224	Open Manhole	450
S1.003	4.720	100.0	S7	83.240	81.899	1.241	Junction	
S6.000	3.047	60.9	SFC03	83.200	82.420	0.680	Open Manhole	450
S6.001	2.567	25.4	S7	83.240	82.099	1.041	Junction	
S1.004	10.484	100.0	S7	83.180	81.794	1.286	Junction	

PIPELINE SCHEDULES for Storm

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S7.000	o	100	SPP11	83.300	82.400	0.800	Open Manhole	450
S7.001	o	100	SFC11	83.300	82.300	0.900	Open Manhole	450
S1.005	o	100	S7	83.180	81.794	1.286	Junction	
S8.000	o	100	SPP14	82.985	82.235	0.650	Open Manhole	450
S8.001	o	100	SFC14	82.985	81.985	0.900	Open Manhole	450
S1.006	o	100	S6	83.060	81.689	1.271	Junction	
S9.000	o	100	SPP16	83.160	82.220	0.840	Open Manhole	450
S9.001	o	100	SFC16	83.160	82.160	0.900	Open Manhole	450
S1.007	o	100	SSW25	83.000	81.626	1.274	Open Manhole	450
S10.000	o	100	SPP17	82.820	82.000	0.720	Open Manhole	450
S10.001	o	100	SFC17	82.820	81.820	0.900	Open Manhole	450
S1.008	o	100	S17	82.875	81.471	1.304	Junction	
S11.000	o	100	SPP01	83.000	82.160	0.740	Open Manhole	450
S11.001	o	100	SFC01	83.000	82.000	0.900	Open Manhole	450
S12.000	o	100	SPP02	83.070	82.340	0.630	Open Manhole	450

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S7.000	2.112	21.1	SFC11	83.300	82.300	0.900	Open Manhole	450
S7.001	8.876	17.5	S7	83.180	81.794	1.286	Junction	
S1.005	10.497	100.0	S6	83.060	81.689	1.271	Junction	
S8.000	1.570	31.4	SFC14	82.985	82.185	0.700	Open Manhole	450
S8.001	4.311	14.6	S6	83.060	81.689	1.271	Junction	
S1.006	6.312	100.0	SSW25	83.000	81.626	1.274	Open Manhole	450
S9.000	2.537	42.3	SFC16	83.160	82.160	0.900	Open Manhole	450
S9.001	9.084	17.0	SSW25	83.000	81.626	1.274	Open Manhole	450
S1.007	15.492	100.0	S17	82.875	81.471	1.304	Junction	
S10.000	1.414	28.3	SFC17	82.820	81.950	0.770	Open Manhole	450
S10.001	5.374	15.4	S17	82.875	81.471	1.304	Junction	
S1.008	8.865	100.0	SSW27	82.750	81.382	1.268	Open Manhole	450
S11.000	1.567	31.3	SFC01	83.000	82.110	0.790	Open Manhole	450
S11.001	6.692	19.1	SSW26	83.000	81.650	1.250	Open Manhole	450
S12.000	2.554	51.1	SFC02	83.070	82.290	0.680	Open Manhole	450

PIPELINE SCHEDULES for Storm

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S12.001	o	100	SFC02	83.070	82.070	0.900	Open Manhole	450
S11.002	o	100	SSW26	83.000	81.650	1.250	Open Manhole	450
S13.000	o	100	SPP13	82.900	82.290	0.510	Open Manhole	450
S13.001	o	100	SFC13	82.900	81.900	0.900	Open Manhole	450
S11.003	o	100	S27	82.875	81.450	1.325	Junction	
S1.009	o	100	SSW27	82.750	81.382	1.268	Open Manhole	450
S14.000	o	100	SPP12	82.550	81.780	0.670	Open Manhole	450
S14.001	o	100	SFC12	82.550	81.550	0.900	Open Manhole	450
S15.000	o	100	SPP18	83.100	82.300	0.700	Open Manhole	450
S15.001	o	100	SFC18	83.100	82.100	0.900	Open Manhole	450
S16.000	o	100	SPP19	82.700	81.970	0.630	Open Manhole	450
S16.001	o	100	SFC19	82.700	81.700	0.900	Open Manhole	450
S15.002	o	100	SSW28	82.600	81.250	1.250	Open Manhole	450
S1.010	o	150	SSW29	82.500	81.197	1.153	Open Manhole	450
S17.000	o	100	SPP20	82.550	81.740	0.710	Open Manhole	450

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S12.001	5.756	13.7	SSW26	83.000	81.650	1.250	Open Manhole	450
S11.002	19.633	98.2	S27	82.875	81.450	1.325	Junction	
S13.000	1.223	24.5	SFC13	82.900	82.240	0.560	Open Manhole	450
S13.001	5.646	12.5	S27	82.875	81.450	1.325	Junction	
S11.003	6.294	92.6	SSW27	82.750	81.382	1.268	Open Manhole	450
S1.009	18.467	100.0	SSW29	82.500	81.197	1.203	Open Manhole	450
S14.000	1.784	35.7	SFC12	82.550	81.730	0.720	Open Manhole	450
S14.001	4.346	12.3	SSW29	82.500	81.197	1.203	Open Manhole	450
S15.000	2.828	56.6	SFC18	83.100	82.250	0.750	Open Manhole	450
S15.001	56.799	66.8	SSW28	82.600	81.250	1.250	Open Manhole	450
S16.000	1.833	36.7	SFC19	82.700	81.920	0.680	Open Manhole	450
S16.001	4.679	10.4	SSW28	82.600	81.250	1.250	Open Manhole	450
S15.002	8.828	26.4	SSW29	82.500	80.915	1.485	Open Manhole	450
S1.010	5.895	100.0	S25	82.500	81.138	1.212	Junction	
S17.000	2.224	44.5	SFC20	82.550	81.690	0.760	Open Manhole	450

PIPELINE SCHEDULES for Storm

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S17.001	o	100	SFC20	82.550	81.550	0.900	Open Manhole	450
S1.011	o	225	S25	82.500	81.088	1.187	Junction	
S18.000	o	100	SPP21	82.400	81.790	0.510	Open Manhole	450
S18.001	o	100	SFC21	82.400	81.400	0.900	Open Manhole	450
S19.000	o	225	SRAIN GARDEN	82.600	81.200	1.175	Open Manhole	450
S19.001	o	225	SRG FC	82.600	81.175	1.200	Open Manhole	1200
S1.012	o	225	S27	82.600	80.994	1.381	Junction	
S20.000	o	100	SPP26	82.525	81.845	0.580	Open Manhole	450
S20.001	o	100	SFC26	82.525	81.525	0.900	Open Manhole	450
S1.013	o	225	SSW30	82.500	80.890	1.385	Open Manhole	450
S21.000	o	100	SPP28	82.600	81.780	0.720	Open Manhole	450
S21.001	o	100	SFC28	82.600	81.600	0.900	Open Manhole	450
S1.014	o	225	SSW31	82.500	80.812	1.463	Open Manhole	1200
S22.000	o	100	SPP30	82.500	81.865	0.535	Open Manhole	450
S22.001	o	100	SFC30	82.500	81.500	0.900	Open Manhole	450

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S17.001	1.289	3.1	S25	82.500	81.138	1.262	Junction	
S1.011	14.060	150.0	S27	82.600	80.994	1.381	Junction	
S18.000	2.215	44.3	SFC21	82.400	81.740	0.560	Open Manhole	450
S18.001	8.714	24.5	S27	82.600	81.044	1.456	Junction	
S19.000	1.571	62.8	SRG FC	82.600	81.175	1.200	Open Manhole	1200
S19.001	3.633	20.1	S27	82.600	80.994	1.381	Junction	
S1.012	15.557	150.0	SSW30	82.500	80.890	1.385	Open Manhole	450
S20.000	2.450	49.0	SFC26	82.525	81.795	0.630	Open Manhole	450
S20.001	3.098	100.0	SSW30	82.500	81.494	0.906	Open Manhole	450
S1.013	11.696	150.0	SSW31	82.500	80.812	1.463	Open Manhole	1200
S21.000	1.379	27.6	SFC28	82.600	81.730	0.770	Open Manhole	450
S21.001	9.515	12.9	SSW31	82.500	80.862	1.538	Open Manhole	1200
S1.014	7.134	146.2	S66	82.500	80.763	1.512	Junction	
S22.000	2.329	46.6	SFC30	82.500	81.815	0.585	Open Manhole	450
S22.001	9.223	13.4	S66	82.500	80.813	1.587	Junction	

PIPELINE SCHEDULES for Storm

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S1.015	o	225	S66	82.500	80.763	1.512	Junction	
S23.000	o	100	SPP32	82.485	81.605	0.780	Open Manhole	450
S23.001	o	100	SFC32	82.485	81.485	0.900	Open Manhole	450
S1.016	o	225	S45	82.500	80.698	1.577	Junction	
S24.000	o	100	SPP35	82.500	81.690	0.710	Open Manhole	450
S24.001	o	100	SFC35	82.500	81.500	0.900	Open Manhole	450
S1.017	o	225	S70	82.450	80.647	1.578	Junction	
S25.000	o	150	SPP34	82.400	81.640	0.610	Open Manhole	450
S25.001	o	100	SFC34	82.400	81.400	0.900	Open Manhole	450
S1.018	o	225	S46	82.400	80.609	1.566	Junction	
S1.019	o	225	S47	82.400	80.583	1.592	Junction	
S26.000	o	100	SPP27	83.150	82.540	0.510	Open Manhole	450
S26.001	o	100	SFC27	83.150	82.150	0.900	Open Manhole	450
S26.002	o	100	SSW32	82.950	81.600	1.250	Open Manhole	450
S27.000	o	100	SPP31	82.910	81.890	0.920	Open Manhole	450
S27.001	o	100	SFC31	82.910	81.890	0.920	Open Manhole	450

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S1.015	9.890	152.9	S45	82.500	80.698	1.577	Junction	
S23.000	1.419	28.4	SFC32	82.485	81.555	0.830	Open Manhole	450
S23.001	9.388	12.7	S45	82.500	80.748	1.652	Junction	
S1.016	7.580	150.0	S70	82.450	80.647	1.578	Junction	
S24.000	1.937	38.7	SFC35	82.500	81.640	0.760	Open Manhole	450
S24.001	9.359	11.7	S70	82.450	80.697	1.653	Junction	
S1.017	5.707	150.0	S46	82.400	80.609	1.566	Junction	
S25.000	1.595	31.9	SFC34	82.400	81.590	0.660	Open Manhole	450
S25.001	5.107	6.9	S46	82.400	80.659	1.641	Junction	
S1.018	3.840	150.0	S47	82.400	80.583	1.592	Junction	
S1.019	7.707	100.0	SSW34	82.370	80.506	1.639	Open Manhole	1200
S26.000	1.930	38.6	SFC27	83.150	82.490	0.560	Open Manhole	450
S26.001	14.545	26.4	SSW32	82.950	81.600	1.250	Open Manhole	450
S26.002	7.761	91.3	S80	82.865	81.515	1.250	Junction	
S27.000	2.802	0.0	SFC31	82.910	81.890	0.920	Open Manhole	450
S27.001	6.565	17.5	S80	82.865	81.515	1.250	Junction	

PIPELINE SCHEDULES for Storm

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S26.003	o	100	S80	82.865	81.515	1.250	Junction	
S26.004	o	100	S56	82.780	81.430	1.250	Junction	
S28.000	o	100	SPP36	82.710	81.610	1.000	Open Manhole	450
S28.001	o	100	SFC36	82.710	81.610	1.000	Open Manhole	450
S26.005	o	100	S84	82.670	81.320	1.250	Junction	
S29.000	o	100	SPP41	82.570	81.530	0.940	Open Manhole	450
S29.001	o	100	SFC41	82.570	81.530	0.940	Open Manhole	450
S26.006	o	100	SSW33	82.485	81.122	1.263	Open Manhole	1200
S30.000	o	100	SPP40	82.425	81.440	0.885	Open Manhole	450
S30.001	o	100	SFC40	82.425	81.425	0.900	Open Manhole	450
S26.007	o	150	S91	82.435	80.608	1.677	Junction	
S31.000	o	100	SPP39	82.375	81.575	0.700	Open Manhole	450
S31.001	o	100	SFC39	82.375	81.375	0.900	Open Manhole	450
S1.020	o	225	SSW34	82.370	80.506	1.639	Open Manhole	1200
S1.021	o	225	S53	82.370	80.443	1.702	Junction	
S32.000	o	100	SPP47	82.380	81.350	0.930	Open Manhole	450

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S26.003	9.339	109.9	S56	82.780	81.430	1.250	Junction	
S26.004	7.788	70.8	S84	82.670	81.320	1.250	Junction	
S28.000	1.568	0.0	SFC36	82.710	81.610	1.000	Open Manhole	450
S28.001	6.712	23.1	S84	82.670	81.320	1.250	Junction	
S26.005	18.122	164.7	SSW33	82.485	81.210	1.175	Open Manhole	1200
S29.000	2.183	0.0	SFC41	82.570	81.530	0.940	Open Manhole	450
S29.001	7.388	18.1	SSW33	82.485	81.122	1.263	Open Manhole	1200
S26.006	51.423	100.0	S91	82.435	80.608	1.727	Junction	
S30.000	1.562	104.1	SFC40	82.425	81.425	0.900	Open Manhole	450
S30.001	5.433	6.7	S91	82.435	80.608	1.727	Junction	
S26.007	6.763	100.0	SSW34	82.370	80.540	1.680	Open Manhole	1200
S31.000	1.802	36.0	SFC39	82.375	81.525	0.750	Open Manhole	450
S31.001	7.345	100.0	SSW34	82.370	81.302	0.968	Open Manhole	1200
S1.020	9.389	150.0	S53	82.370	80.443	1.702	Junction	
S1.021	7.181	150.0	S96	82.345	80.395	1.725	Junction	
S32.000	1.972	0.0	SFC47	82.380	81.350	0.930	Open Manhole	450

PIPELINE SCHEDULES for Storm

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S32.001	o	100	SFC47	82.380	81.350	0.930	Open Manhole	450
S1.022	o	225	S96	82.345	80.395	1.725	Junction	
S1.023	o	225	S53	82.320	80.329	1.766	Junction	
S33.000	o	100	SPP55	82.333	81.360	0.873	Open Manhole	450
S33.001	o	100	SFC55	82.333	81.330	0.903	Open Manhole	450
S1.024	o	225	S100	82.285	80.283	1.777	Junction	
S34.000	o	100	SPP46	82.255	81.420	0.735	Open Manhole	450
S34.001	o	100	SFC46	82.255	81.255	0.900	Open Manhole	450
S1.025	o	225	SSW35	82.250	80.209	1.816	Open Manhole	1200
S35.000	o	100	SPP61	82.250	81.270	0.880	Open Manhole	450
S35.001	o	100	SFC61	82.250	81.270	0.880	Open Manhole	450
S1.026	o	225	SSW36	82.180	80.163	1.792	Open Manhole	1200
S36.000	o	100	SPP44	82.320	81.570	0.650	Open Manhole	450
S36.001	o	100	SFC44	82.320	81.320	0.900	Open Manhole	450
S37.000	o	300	SHE-SW-14	82.550	81.900	0.350	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S32.001	9.570	10.6	S96	82.345	80.445	1.800	Junction	
S1.022	9.920	150.0	S53	82.320	80.329	1.766	Junction	
S1.023	6.840	150.0	S100	82.285	80.283	1.777	Junction	
S33.000	1.676	55.9	SFC55	82.333	81.330	0.903	Open Manhole	450
S33.001	9.277	9.3	S100	82.285	80.333	1.852	Junction	
S1.024	11.154	150.0	SSW35	82.250	80.209	1.816	Open Manhole	1200
S34.000	1.473	29.5	SFC46	82.255	81.370	0.785	Open Manhole	450
S34.001	5.254	4.2	SSW35	82.250	79.998	2.152	Open Manhole	1200
S1.025	6.833	150.0	SSW36	82.180	80.163	1.792	Open Manhole	1200
S35.000	2.273	0.0	SFC61	82.250	81.270	0.880	Open Manhole	450
S35.001	9.684	82.8	SSW36	82.180	81.153	0.927	Open Manhole	1200
S1.026	11.353	150.0	STANK	82.000	80.087	1.688	Open Manhole	1800
S36.000	1.650	33.0	SFC44	82.320	81.520	0.700	Open Manhole	450
S36.001	8.668	20.6	SHE-SW-15	82.300	80.900	1.300	Open Manhole	1200
S37.000	66.756	66.8	SHE-SW-15	82.300	80.900	1.100	Open Manhole	1200

PIPELINE SCHEDULES for Storm

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S36.002	o	300	SHE-SW-15	82.300	80.900	1.100	Open Manhole	1200
S38.000	o	100	SPP45	82.270	81.495	0.675	Open Manhole	450
S38.001	o	100	SFC45	82.270	81.270	0.900	Open Manhole	450
S36.003	o	300	S145	82.300	80.725	1.275	Junction	
S39.000	o	100	SPP60	82.270	81.510	0.660	Open Manhole	450
S39.001	o	100	SFC60	82.270	81.270	0.900	Open Manhole	450
S36.004	o	300	S146	82.200	80.665	1.235	Junction	
S40.000	o	300	SSW11	82.550	80.800	1.450	Open Manhole	1200
S40.001	o	300	SSW12	82.550	80.620	1.630	Open Manhole	1200
S40.002	o	300	SSW13	82.550	80.481	1.769	Open Manhole	1200
S41.000	o	300	STANK 3	82.500	80.350	1.850	Open Manhole	1200
S41.001	o	100	SHB 3	82.500	80.332	2.068	Open Manhole	1200
S40.003	o	300	S148	82.550	80.214	2.036	Junction	
S42.000	o	100	SPP67	82.250	81.440	0.710	Open Manhole	450
S42.001	o	100	SFC67	82.250	81.250	0.900	Open Manhole	450
S40.004	o	300	S148	82.550	80.099	2.151	Junction	

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S36.002	17.525	157.3	S145	82.300	80.789	1.211	Junction	
S38.000	1.832	36.6	SFC45	82.270	81.445	0.725	Open Manhole	450
S38.001	5.234	9.6	S145	82.300	80.725	1.475	Junction	
S36.003	6.021	100.0	S146	82.200	80.665	1.235	Junction	
S39.000	1.868	62.3	SFC60	82.270	81.480	0.690	Open Manhole	450
S39.001	8.362	13.8	S146	82.200	80.665	1.435	Junction	
S36.004	3.364	8.4	SSW22	82.200	80.265	1.635	Open Manhole	1800
S40.000	27.006	150.0	SSW12	82.550	80.620	1.630	Open Manhole	1200
S40.001	20.828	150.0	SSW13	82.550	80.481	1.769	Open Manhole	1200
S40.002	39.990	150.0	S148	82.550	80.214	2.036	Junction	
S41.000	3.050	80.3	SHB 3	82.500	80.312	1.888	Open Manhole	1200
S41.001	3.274	100.0	S148	82.550	80.299	2.151	Junction	
S40.003	17.237	150.0	S148	82.550	80.099	2.151	Junction	
S42.000	1.963	39.3	SFC67	82.250	81.390	0.760	Open Manhole	450
S42.001	4.907	8.4	S148	82.550	80.665	1.785	Junction	
S40.004	4.544	150.0	SSW15	82.550	80.069	2.181	Open Manhole	1350

PIPELINE SCHEDULES for Storm

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S40.005	o	450	SSW15	82.550	80.069	2.031	Open Manhole	1350
S43.000	o	100	SPP68	82.250	81.415	0.735	Open Manhole	450
S43.001	o	100	SFC68	82.250	81.250	0.900	Open Manhole	450
S40.006	o	450	S150	82.550	79.990	2.110	Junction	
S44.000	o	100	SPP69	82.350	81.610	0.640	Open Manhole	450
S44.001	o	100	SFC69	82.350	81.350	0.900	Open Manhole	1200
S40.007	o	450	S151	82.550	79.946	2.154	Junction	
S40.008	o	600	SSW16	82.500	79.846	2.054	Open Manhole	1800
S45.000	o	100	SPP66	82.400	81.590	0.710	Open Manhole	450
S45.001	o	100	SFC66	82.400	81.400	0.900	Open Manhole	450
S46.000	o	100	SPP65	82.500	81.760	0.640	Open Manhole	450
S46.001	o	100	SFC65	82.500	81.500	0.900	Open Manhole	450
S47.000	o	225	STANK 2	82.500	80.000	2.275	Open Manhole	1200
S47.001	o	225	SHB 2	82.500	79.950	2.325	Open Manhole	1200
S40.009	o	600	SSW17	82.400	79.555	2.245	Open Manhole	1800
S48.000	o	375	SFEC-SW-21	82.700	81.500	0.825	Open Manhole	1350

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S40.005	11.862	150.0	S150	82.550	79.990	2.110	Junction	
S43.000	2.263	45.3	SFC68	82.250	81.365	0.785	Open Manhole	450
S43.001	5.476	7.9	S150	82.550	80.556	1.894	Junction	
S40.006	9.940	223.4	S151	82.550	79.946	2.154	Junction	
S44.000	3.285	65.7	SFC69	82.350	81.560	0.690	Open Manhole	1200
S44.001	3.487	4.4	S151	82.550	80.564	1.886	Junction	
S40.007	30.313	304.2	SSW16	82.500	79.846	2.204	Open Manhole	1800
S40.008	81.577	280.4	SSW17	82.400	79.555	2.245	Open Manhole	1800
S45.000	2.102	42.0	SFC66	82.400	81.540	0.760	Open Manhole	450
S45.001	2.325	100.0	SSW17	82.400	81.377	0.923	Open Manhole	1800
S46.000	2.260	45.2	SFC65	82.500	81.710	0.690	Open Manhole	450
S46.001	6.799	100.0	SSW17	82.400	81.432	0.868	Open Manhole	1800
S47.000	4.606	92.1	SHB 2	82.500	79.950	2.325	Open Manhole	1200
S47.001	5.315	100.0	SSW17	82.400	79.897	2.278	Open Manhole	1800
S40.009	49.809	300.0	SSW18	82.500	79.389	2.511	Open Manhole	1800
S48.000	25.413	101.7	SFEC-SW-22	82.700	81.250	1.075	Open Manhole	1350

PIPELINE SCHEDULES for Storm

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S48.001	o	375	SFEC-SW-22	82.700	81.250	1.075	Open Manhole	1350
S48.002	o	450	SFEC-SW-23	82.700	81.050	1.200	Open Manhole	1350
S48.003	o	450	SFEC-SW-24	82.550	80.950	1.150	Open Manhole	1350
S49.000	o	225	SFEC-SW-19	82.600	81.500	0.875	Open Manhole	1200
S49.001	o	300	SFEC-SW-20	82.500	81.300	0.900	Open Manhole	1200
S50.000	o	225	SFEC-SW-15	82.500	81.500	0.775	Open Manhole	1200
S50.001	o	300	SFEC-SW-17	82.500	81.400	0.800	Open Manhole	1200
S50.002	o	300	SFEC-SW-18	82.500	81.250	0.950	Open Manhole	1200
S48.004	o	600	SFEC-SW-25	82.500	80.770	1.130	Open Manhole	1500
S48.005	o	600	SFEC-SW-26	82.400	79.900	1.900	Open Manhole	1500
S40.010	o	750	SSW18	82.500	79.389	2.361	Open Manhole	1800
S40.011	o	750	SSW19	82.450	79.274	2.426	Open Manhole	1800
S51.000	o	225	SHE-SW-16	82.550	79.800	2.525	Open Manhole	1200
S51.001	o	225	SHE-SW-17	82.550	79.253	3.072	Open Manhole	1200
S40.012	o	750	S154	82.450	79.086	2.614	Junction	
S52.000	\/	-1	SSwale In 1	82.500	81.500	0.999	Junction	
S52.001	\/	-1	SSwale 2	82.500	81.500	0.999	Junction	
S52.002	\/	-1	SSwale in 3	82.500	81.500	0.999	Junction	

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S48.001	20.455	102.3	SFEC-SW-23	82.700	81.050	1.275	Open Manhole	1350
S48.002	10.107	101.1	SFEC-SW-24	82.550	80.950	1.150	Open Manhole	1350
S48.003	17.863	47.0	SFEC-SW-25	82.500	80.570	1.480	Open Manhole	1500
S49.000	14.922	74.6	SFEC-SW-20	82.500	81.300	0.975	Open Manhole	1200
S49.001	18.503	34.9	SFEC-SW-25	82.500	80.770	1.430	Open Manhole	1500
S50.000	6.592	65.9	SFEC-SW-17	82.500	81.400	0.875	Open Manhole	1200
S50.001	15.338	102.3	SFEC-SW-18	82.500	81.250	0.950	Open Manhole	1200
S50.002	18.466	38.5	SFEC-SW-25	82.500	80.770	1.430	Open Manhole	1500
S48.004	13.835	276.7	SFEC-SW-26	82.400	80.720	1.080	Open Manhole	1500
S48.005	25.636	85.5	SSW18	82.500	79.600	2.300	Open Manhole	1800
S40.010	34.464	300.0	SSW19	82.450	79.274	2.426	Open Manhole	1800
S40.011	56.497	300.0	S154	82.450	79.086	2.614	Junction	
S51.000	54.515	99.7	SHE-SW-17	82.550	79.253	3.072	Open Manhole	1200
S51.001	18.390	97.3	S154	82.450	79.064	3.161	Junction	
S40.012	15.533	300.0	SSW20	82.350	79.034	2.566	Open Manhole	1800
S52.000	63.376	0.0	SSwale 2	82.500	81.500	0.999	Junction	
S52.001	30.727	0.0	SSwale in 3	82.500	81.500	0.999	Junction	
S52.002	58.270	0.0	SSwale 4	82.500	81.500	0.999	Junction	

PIPELINE SCHEDULES for Storm

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S52.003	\/	-1	SSwale 4	82.500	81.500	0.999	Junction	
S53.000	o	300	SSW PUMP OUTFALL	82.400	81.800	0.300	Open Manhole	1200
S52.004	\/	-1	SSwale in 5	82.500	81.500	0.999	Junction	
S52.005	\/	-1	SSwale 6	82.500	81.500	0.999	Junction	
S52.006	\/	-1	SSwale in 7	82.500	81.500	0.999	Junction	
S52.007	o	150	SSwale out	82.500	81.500	0.850	Junction	
S52.008	o	150	SSWALE FC70	82.500	81.425	0.925	Junction	
S40.013	o	750	SSW20	82.350	79.034	2.566	Open Manhole	1800
S54.000	o	100	SPP53	82.375	81.390	0.885	Open Manhole	450
S54.001	o	100	SFC53	82.375	81.375	0.900	Open Manhole	450
S55.000	o	100	SPP57	82.380	81.645	0.635	Open Manhole	450
S55.001	o	100	SFC57	82.380	81.380	0.900	Open Manhole	450
S54.002	o	100	S170	82.400	80.974	1.326	Junction	
S40.014	o	750	S167	82.350	79.022	2.578	Junction	
S36.005	o	750	SSW22	82.200	78.858	2.592	Open Manhole	1800
S56.000	o	100	SPP48	82.450	81.450	0.900	Open Manhole	450

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S52.003	40.459	0.0	SSwale in 5	82.500	81.500	0.999	Junction	
S53.000	14.946	100.0	SSwale in 5	82.500	81.651	0.549	Junction	
S52.004	33.605	0.0	SSwale 6	82.500	81.500	0.999	Junction	
S52.005	45.154	0.0	SSwale in 7	82.500	81.500	0.999	Junction	
S52.006	4.979	0.0	SSwale out	82.500	81.500	0.999	Junction	
S52.007	7.491	100.0	SSWALE FC70	82.500	81.425	0.925	Junction	
S52.008	7.678	100.0	SSW20	82.350	81.348	0.852	Open Manhole	1800
S40.013	3.620	300.0	S167	82.350	79.022	2.578	Junction	
S54.000	2.823	188.2	SFC53	82.375	81.375	0.900	Open Manhole	450
S54.001	11.067	32.1	S170	82.400	81.030	1.270	Junction	
S55.000	2.336	46.7	SFC57	82.380	81.595	0.685	Open Manhole	450
S55.001	6.945	17.1	S170	82.400	80.974	1.326	Junction	
S54.002	8.539	6.1	S167	82.350	79.578	2.672	Junction	
S40.014	49.110	300.0	SSW22	82.200	78.858	2.592	Open Manhole	1800
S36.005	17.871	178.7	STANK	82.000	78.758	2.492	Open Manhole	1800
S56.000	2.296	0.0	SFC48	82.450	81.450	0.900	Open Manhole	450

PIPELINE SCHEDULES for Storm

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S56.001	o	100	SFC48	82.450	81.450	0.900	Open Manhole	450
S57.000	o	100	SPP50	82.280	81.545	0.635	Open Manhole	450
S57.001	o	100	SFC50	82.280	81.180	1.000	Open Manhole	450
S56.002	o	100	SSW36	82.350	81.000	1.250	Open Manhole	450
S58.000	o	100	Spp56	82.370	81.330	0.940	Open Manhole	450
S58.001	o	100	SFC56	82.370	81.330	0.940	Open Manhole	450
S56.003	o	100	S187	81.300	80.858	0.342	Junction	
S59.000	o	100	SPP59	82.270	81.495	0.675	Open Manhole	450
S59.001	o	100	SFC59	82.270	81.270	0.900	Open Manhole	450
S60.000	o	100	SPP63	82.200	81.445	0.655	Open Manhole	450
S60.001	o	100	SFC63	82.200	81.200	0.900	Open Manhole	450
S61.000	o	100	SPP62	82.240	81.510	0.630	Open Manhole	450
S61.001	o	100	SFC62	82.240	81.240	0.900	Open Manhole	450
S56.004	o	100	SSW37	82.200	80.696	1.404	Open Manhole	1200
S62.000	o	100	SPP64	82.000	81.260	0.640	Open Manhole	450
S62.001	o	100	SFC64	82.000	81.000	0.900	Open Manhole	450

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S56.001	7.062	17.7	SSW36	82.350	81.050	1.200	Open Manhole	450
S57.000	2.147	42.9	SFC50	82.280	81.495	0.685	Open Manhole	450
S57.001	12.434	69.1	SSW36	82.350	81.000	1.250	Open Manhole	450
S56.002	14.251	170.9	S187	81.300	80.917	0.283	Junction	
S58.000	2.708	0.0	SFC56	82.370	81.330	0.940	Open Manhole	450
S58.001	4.714	11.2	S187	81.300	80.908	0.292	Junction	
S56.003	16.173	100.0	SSW37	82.200	80.696	1.404	Open Manhole	1200
S59.000	1.802	36.0	SFC59	82.270	81.445	0.725	Open Manhole	450
S59.001	8.775	100.0	SSW37	82.200	81.182	0.918	Open Manhole	1200
S60.000	1.872	37.4	SFC63	82.200	81.395	0.705	Open Manhole	450
S60.001	8.281	16.4	SSW37	82.200	80.696	1.404	Open Manhole	1200
S61.000	2.551	51.0	SFC62	82.240	81.460	0.680	Open Manhole	450
S61.001	4.770	100.0	SSW37	82.200	81.192	0.908	Open Manhole	1200
S56.004	94.532	100.0	STANK	82.000	79.751	2.149	Open Manhole	1800
S62.000	2.024	58.5	SFC64	82.000	81.225	0.675	Open Manhole	450
S62.001	4.020	4.0	STANK	82.000	80.000	1.900	Open Manhole	1800

PIPELINE SCHEDULES for Storm

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S63.000	o	450	SFEC-SW-06	82.550	81.650	0.450	Open Manhole	450
S63.001	o	450	SFEC-SW-07	82.700	81.536	0.714	Open Manhole	1350
S63.002	o	450	SFEC-SW-08	82.700	81.220	1.030	Open Manhole	1350
S63.003	o	525	SFEC-SW-09	82.700	80.863	1.312	Open Manhole	1500
S64.000	o	225	SFEC-SW-10	82.700	81.800	0.675	Open Manhole	1200
S64.001	o	225	SFEC-SW-12	82.700	81.500	0.975	Open Manhole	1200
S63.004	o	525	SFEC-SW-13	82.700	80.740	1.435	Open Manhole	1500
S63.005	o	525	SFEC-SW-14	82.550	80.500	1.525	Open Manhole	1800
S63.006	o	525	SSW05	82.400	80.420	1.455	Open Manhole	1800
S65.000	o	225	SFEC-SW-01	82.550	81.600	0.725	Open Manhole	1200
S65.001	o	300	SFEC-SW-02	82.550	81.500	0.750	Open Manhole	1200
S66.000	o	225	SHW-SW-01	82.550	81.600	0.725	Open Manhole	1200
S66.001	o	300	SHW-SW-02	82.550	81.347	0.903	Open Manhole	1200
S67.000	o	150	SHW-SW-03	82.550	81.600	0.800	Open Manhole	1200
S65.002	o	375	SFEC-SW-03	82.550	81.199	0.976	Open Manhole	1350
S68.000	o	300	SFEC-SW-04	82.550	81.700	0.550	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S63.000	15.882	50.6	SFEC-SW-07	82.700	81.336	0.914	Open Manhole	1350
S63.001	31.594	100.0	SFEC-SW-08	82.700	81.220	1.030	Open Manhole	1350
S63.002	34.354	121.8	SFEC-SW-09	82.700	80.938	1.312	Open Manhole	1500
S63.003	12.486	101.6	SFEC-SW-13	82.700	80.740	1.435	Open Manhole	1500
S64.000	26.303	87.7	SFEC-SW-12	82.700	81.500	0.975	Open Manhole	1200
S64.001	14.857	74.3	SFEC-SW-13	82.700	81.300	1.175	Open Manhole	1500
S63.004	14.132	58.9	SFEC-SW-14	82.550	80.500	1.525	Open Manhole	1800
S63.005	12.536	156.7	SSW05	82.400	80.420	1.455	Open Manhole	1800
S63.006	87.333	229.8	SSW06	82.400	80.040	1.835	Open Manhole	1800
S65.000	8.616	86.2	SFEC-SW-02	82.550	81.500	0.825	Open Manhole	1200
S65.001	22.739	75.5	SFEC-SW-03	82.550	81.199	1.051	Open Manhole	1350
S66.000	25.277	100.0	SHW-SW-02	82.550	81.347	0.978	Open Manhole	1200
S66.001	14.830	100.0	SFEC-SW-03	82.550	81.199	1.051	Open Manhole	1350
S67.000	16.243	40.5	SFEC-SW-03	82.550	81.199	1.201	Open Manhole	1350
S65.002	8.422	100.0	SFEC-SW-05	82.550	81.115	1.060	Open Manhole	1350
S68.000	26.869	100.0	SFEC-SW-05	82.550	81.431	0.819	Open Manhole	1350

PIPELINE SCHEDULES for Storm

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S65.003	o	450	SFEC-SW-05	82.550	81.115	0.985	Open Manhole	1350
S65.004	o	525	SSW01	83.650	80.929	2.196	Open Manhole	1500
S65.005	o	525	SSW02	83.650	80.500	2.625	Open Manhole	1500
S65.006	o	525	SSW03	83.650	80.295	2.830	Open Manhole	1500
S69.000	o	225	SHW-SW-04	82.550	81.800	0.525	Open Manhole	450
S69.001	\/	-2	SSWALE2 IN	82.500	81.500	0.000	Open Manhole	1200
S69.002	o	100	SSWALE 2 FC	82.500	81.500	0.900	Open Manhole	1200
S65.007	o	525	SSW04	83.400	80.265	2.610	Open Manhole	1500
S70.000	o	150	SHW-SW-09	82.550	81.900	0.500	Open Manhole	1200
S71.000	o	225	SHW-SW-05	82.550	81.900	0.425	Open Manhole	1200
S71.001	o	225	SHW-SW-06	82.550	81.736	0.589	Open Manhole	1200
S72.000	o	150	SHW-SW-07	82.550	81.900	0.500	Open Manhole	1200
S73.000	o	150	SHW-SW-08	82.550	81.900	0.500	Open Manhole	1200
S74.000	o	225	SHW-SW-10	82.550	81.900	0.425	Open Manhole	1200
S70.001	o	150	SBASIN 1	82.550	81.500	0.900	Open Manhole	1200
S70.002	o	150	SBASIN 1 OUT	82.500	81.193	1.157	Open Manhole	450

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S65.003	36.467	195.8	SSW01	83.650	80.929	2.271	Open Manhole	1500
S65.004	85.693	199.6	SSW02	83.650	80.500	2.625	Open Manhole	1500
S65.005	61.725	300.6	SSW03	83.650	80.295	2.830	Open Manhole	1500
S65.006	6.397	210.6	SSW04	83.400	80.265	2.610	Open Manhole	1500
S69.000	5.555	100.0	SSWALE2 IN	82.500	81.744	0.531	Open Manhole	1200
S69.001	43.690	0.0	SSWALE 2 FC	82.500	81.500	0.000	Open Manhole	1200
S69.002	14.458	100.0	SSW04	83.400	81.355	1.945	Open Manhole	1500
S65.007	45.330	300.0	S238	82.650	80.114	2.011	Junction	
S70.000	21.328	100.0	SBASIN 1	82.550	81.687	0.713	Open Manhole	1200
S71.000	16.354	100.0	SHW-SW-06	82.550	81.736	0.589	Open Manhole	1200
S71.001	25.394	107.6	SBASIN 1	82.550	81.500	0.825	Open Manhole	1200
S72.000	19.724	100.0	SBASIN 1	82.550	81.703	0.697	Open Manhole	1200
S73.000	32.546	100.0	SBASIN 1	82.550	81.575	0.825	Open Manhole	1200
S74.000	28.097	100.0	SBASIN 1	82.550	81.619	0.706	Open Manhole	1200
S70.001	30.719	100.0	SBASIN 1 OUT	82.500	81.193	1.157	Open Manhole	450
S70.002	41.073	100.0	S238	82.650	80.782	1.718	Junction	

PIPELINE SCHEDULES for Storm

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S65.008	o	525	S238	82.650	80.114	2.011	Junction	
S63.007	o	525	SSW06	82.400	80.040	1.835	Open Manhole	1800
S75.000	o	300	SHE-SW-01	82.550	81.600	0.650	Open Manhole	1200
S75.001	o	300	SSW07	82.400	81.044	1.056	Open Manhole	1200
S76.000	o	100	SFEATURE POND	82.200	82.000	0.100	Open Manhole	1200
S76.001	o	100	SFP FC	82.200	80.800	1.300	Open Manhole	1200
S63.008	o	600	SSW08	82.550	79.799	2.151	Open Manhole	1800
S63.009	o	600	SSW09	82.500	79.723	2.177	Open Manhole	1800
S77.000	o	225	SHE-SW-10	82.550	81.900	0.425	Open Manhole	1200
S77.001	o	225	SHE-SW-11	82.550	81.616	0.709	Open Manhole	1200
S78.000	o	225	SHE-SW-03	82.500	81.900	0.375	Open Manhole	1200
S78.001	o	225	SHE-SW-04	82.500	81.637	0.638	Open Manhole	1200
S79.000	o	225	SHE-SW-02	82.550	81.900	0.425	Open Manhole	1200
S80.000	o	225	SHW-SW-06	82.550	81.900	0.425	Open Manhole	1200
S81.000	o	225	SHE-SW-05	82.550	81.900	0.425	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S65.008	20.126	272.0	SSW06	82.400	80.040	1.835	Open Manhole	1800
S63.007	68.401	283.8	SSW08	82.550	79.799	2.226	Open Manhole	1800
S75.000	55.627	100.0	SSW07	82.400	81.044	1.056	Open Manhole	1200
S75.001	41.248	100.0	SSW08	82.550	80.632	1.618	Open Manhole	1800
S76.000	4.394	22.0	SFP FC	82.200	81.800	0.300	Open Manhole	1200
S76.001	17.388	99.4	SSW08	82.550	80.625	1.825	Open Manhole	1800
S63.008	22.912	300.0	SSW09	82.500	79.723	2.177	Open Manhole	1800
S63.009	23.783	300.0	S241	82.400	79.644	2.156	Junction	
S77.000	28.406	100.0	SHE-SW-11	82.550	81.616	0.709	Open Manhole	1200
S77.001	17.404	150.0	SBASIN 2	82.550	81.500	0.825	Open Manhole	1200
S78.000	46.541	177.2	SHE-SW-04	82.500	81.637	0.638	Open Manhole	1200
S78.001	16.315	119.1	SBASIN 2	82.550	81.500	0.825	Open Manhole	1200
S79.000	32.663	81.7	SBASIN 2	82.550	81.500	0.825	Open Manhole	1200
S80.000	7.350	88.6	SHE-SW-07	82.550	81.817	0.508	Open Manhole	1200
S81.000	8.267	100.0	SHE-SW-07	82.550	81.817	0.508	Open Manhole	1200

PIPELINE SCHEDULES for Storm

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S80.001	o	225	SHE-SW-07	82.550	81.817	0.508	Open Manhole	1200
S82.000	o	225	SHE-SW-08	82.550	81.900	0.425	Open Manhole	1200
S82.001	o	225	SHE-SW-09	82.550	81.738	0.587	Open Manhole	1200
S77.002	o	225	SBASIN 2	82.550	81.500	0.825	Open Manhole	1200
S77.003	o	225	SBASIN 2 OUT	82.500	81.244	1.031	Open Manhole	600
S77.004	o	225	SHE-SW-12	82.500	80.935	1.340	Open Manhole	600
S77.005	o	225	SHE-SW-13	82.500	80.885	1.390	Open Manhole	600
S63.010	o	600	S241	82.400	79.644	2.156	Junction	
S63.011	o	600	SSW10	82.180	79.434	2.146	Open Manhole	1800
S1.027	o	300	STANK	82.000	78.732	2.968	Open Manhole	1800
S1.028	o	300	SFC71	82.000	78.679	3.021	Open Manhole	1200

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S80.001	25.238	100.0	SBASIN 2	82.550	81.565	0.760	Open Manhole	1200
S82.000	16.155	100.0	SHE-SW-09	82.550	81.738	0.587	Open Manhole	1200
S82.001	28.467	119.6	SBASIN 2	82.550	81.500	0.825	Open Manhole	1200
S77.002	25.605	100.0	SBASIN 2 OUT	82.500	81.244	1.031	Open Manhole	600
S77.003	30.920	100.0	SHE-SW-12	82.500	80.935	1.340	Open Manhole	600
S77.004	5.029	100.0	SHE-SW-13	82.500	80.885	1.390	Open Manhole	600
S77.005	31.859	100.0	S241	82.400	80.566	1.609	Junction	
S63.010	62.928	300.0	SSW10	82.180	79.434	2.146	Open Manhole	1800
S63.011	11.774	58.5	STANK	82.000	79.233	2.167	Open Manhole	1800
S1.027	10.691	200.0	SFC71	82.000	78.679	3.021	Open Manhole	1200
S1.028	45.000	200.0	S	80.600	78.454	1.846	Open Manhole	0

Area Summary for Storm

Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)
1.000	-	-	100	0.023	0.023	0.023
1.001	-	-	100	0.000	0.000	0.000
2.000	-	-	100	0.010	0.010	0.010
2.001	-	-	100	0.000	0.000	0.000
3.000	-	-	100	0.010	0.010	0.010
3.001	-	-	100	0.000	0.000	0.000
1.002	-	-	100	0.000	0.000	0.000
4.000	-	-	100	0.040	0.040	0.040
4.001	-	-	100	0.000	0.000	0.000
5.000	-	-	100	0.035	0.035	0.035
5.001	-	-	100	0.000	0.000	0.000
4.002	-	-	100	0.000	0.000	0.000
1.003	-	-	100	0.000	0.000	0.000
6.000	-	-	100	0.059	0.059	0.059
6.001	-	-	100	0.000	0.000	0.000
1.004	-	-	100	0.000	0.000	0.000
7.000	-	-	100	0.039	0.039	0.039
7.001	-	-	100	0.000	0.000	0.000
1.005	-	-	100	0.000	0.000	0.000
8.000	-	-	100	0.024	0.024	0.024
8.001	-	-	100	0.000	0.000	0.000
1.006	-	-	100	0.000	0.000	0.000
9.000	-	-	100	0.039	0.039	0.039
9.001	-	-	100	0.000	0.000	0.000
1.007	-	-	100	0.000	0.000	0.000
10.000	-	-	100	0.055	0.055	0.055
10.001	-	-	100	0.000	0.000	0.000
1.008	-	-	100	0.000	0.000	0.000
11.000	-	-	100	0.051	0.051	0.051
11.001	-	-	100	0.000	0.000	0.000
12.000	-	-	100	0.017	0.017	0.017
12.001	-	-	100	0.000	0.000	0.000
11.002	-	-	100	0.000	0.000	0.000
13.000	-	-	100	0.005	0.005	0.005
13.001	-	-	100	0.000	0.000	0.000
11.003	-	-	100	0.000	0.000	0.000
1.009	-	-	100	0.000	0.000	0.000
14.000	-	-	100	0.059	0.059	0.059
14.001	-	-	100	0.000	0.000	0.000
15.000	-	-	100	0.053	0.053	0.053
15.001	-	-	100	0.000	0.000	0.000
16.000	-	-	100	0.023	0.023	0.023
16.001	-	-	100	0.000	0.000	0.000
15.002	-	-	100	0.000	0.000	0.000
1.010	-	-	100	0.000	0.000	0.000
17.000	-	-	100	0.072	0.072	0.072
17.001	-	-	100	0.000	0.000	0.000
1.011	-	-	100	0.000	0.000	0.000
18.000	-	-	100	0.271	0.271	0.271
18.001	-	-	100	0.000	0.000	0.000
19.000	-	-	100	0.097	0.097	0.097
19.001	-	-	100	0.000	0.000	0.000
1.012	-	-	100	0.000	0.000	0.000
20.000	-	-	100	0.029	0.029	0.029
20.001	-	-	100	0.000	0.000	0.000
1.013	-	-	100	0.000	0.000	0.000
21.000	-	-	100	0.059	0.059	0.059
21.001	-	-	100	0.000	0.000	0.000
1.014	-	-	100	0.000	0.000	0.000

Area Summary for Storm

Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)
22.000	-	-	100	0.021	0.021	0.021
22.001	-	-	100	0.000	0.000	0.000
1.015	-	-	100	0.000	0.000	0.000
23.000	-	-	100	0.058	0.058	0.058
23.001	-	-	100	0.000	0.000	0.000
1.016	-	-	100	0.000	0.000	0.000
24.000	-	-	100	0.021	0.021	0.021
24.001	-	-	100	0.000	0.000	0.000
1.017	-	-	100	0.000	0.000	0.000
25.000	-	-	100	0.053	0.053	0.053
25.001	-	-	100	0.000	0.000	0.000
1.018	-	-	100	0.000	0.000	0.000
1.019	-	-	100	0.000	0.000	0.000
26.000	-	-	100	0.006	0.006	0.006
26.001	-	-	100	0.000	0.000	0.000
26.002	-	-	100	0.000	0.000	0.000
27.000	-	-	100	0.040	0.040	0.040
27.001	-	-	100	0.000	0.000	0.000
26.003	-	-	100	0.000	0.000	0.000
26.004	-	-	100	0.000	0.000	0.000
28.000	-	-	100	0.074	0.074	0.074
28.001	-	-	100	0.000	0.000	0.000
26.005	-	-	100	0.000	0.000	0.000
29.000	-	-	100	0.084	0.084	0.084
29.001	-	-	100	0.000	0.000	0.000
26.006	-	-	100	0.000	0.000	0.000
30.000	-	-	100	0.077	0.077	0.077
30.001	-	-	100	0.000	0.000	0.000
26.007	-	-	100	0.000	0.000	0.000
31.000	-	-	100	0.021	0.021	0.021
31.001	-	-	100	0.000	0.000	0.000
1.020	-	-	100	0.000	0.000	0.000
1.021	-	-	100	0.000	0.000	0.000
32.000	-	-	100	0.077	0.077	0.077
32.001	-	-	100	0.000	0.000	0.000
1.022	-	-	100	0.000	0.000	0.000
1.023	-	-	100	0.000	0.000	0.000
33.000	-	-	100	0.077	0.077	0.077
33.001	-	-	100	0.000	0.000	0.000
1.024	-	-	100	0.000	0.000	0.000
34.000	-	-	100	0.053	0.053	0.053
34.001	-	-	100	0.000	0.000	0.000
1.025	-	-	100	0.000	0.000	0.000
35.000	-	-	100	0.077	0.077	0.077
35.001	-	-	100	0.000	0.000	0.000
1.026	-	-	100	0.000	0.000	0.000
36.000	-	-	100	0.021	0.021	0.021
36.001	-	-	100	0.000	0.000	0.000
37.000	-	-	100	0.097	0.097	0.097
36.002	-	-	100	0.000	0.000	0.000
38.000	-	-	100	0.034	0.034	0.034
38.001	-	-	100	0.000	0.000	0.000
36.003	-	-	100	0.000	0.000	0.000
39.000	-	-	100	0.007	0.007	0.007
39.001	-	-	100	0.000	0.000	0.000
36.004	-	-	100	0.000	0.000	0.000
40.000	-	-	100	0.054	0.054	0.054
40.001	-	-	100	0.026	0.026	0.026
40.002	-	-	100	0.055	0.055	0.055

Area Summary for Storm

Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)
41.000	-	-	100	0.106	0.106	0.106
41.001	-	-	100	0.000	0.000	0.000
40.003	-	-	100	0.061	0.061	0.061
42.000	-	-	100	0.069	0.069	0.069
42.001	-	-	100	0.000	0.000	0.000
40.004	-	-	100	0.000	0.000	0.000
40.005	-	-	100	0.143	0.143	0.143
43.000	-	-	100	0.087	0.087	0.087
43.001	-	-	100	0.000	0.000	0.000
40.006	-	-	100	0.000	0.000	0.000
44.000	-	-	100	0.018	0.018	0.018
44.001	-	-	100	0.000	0.000	0.000
40.007	-	-	100	0.131	0.131	0.131
40.008	-	-	100	0.038	0.038	0.038
45.000	-	-	100	0.042	0.042	0.042
45.001	-	-	100	0.000	0.000	0.000
46.000	-	-	100	0.015	0.015	0.015
46.001	-	-	100	0.000	0.000	0.000
47.000	-	-	100	0.165	0.165	0.165
47.001	-	-	100	0.000	0.000	0.000
40.009	-	-	100	0.000	0.000	0.000
48.000	-	-	100	0.179	0.179	0.179
48.001	-	-	100	0.025	0.025	0.025
48.002	-	-	100	0.054	0.054	0.054
48.003	-	-	100	0.039	0.039	0.039
49.000	-	-	100	0.038	0.038	0.038
49.001	-	-	100	0.025	0.025	0.025
50.000	-	-	100	0.053	0.053	0.053
50.001	-	-	100	0.055	0.055	0.055
50.002	-	-	100	0.032	0.032	0.032
48.004	-	-	100	0.000	0.000	0.000
48.005	-	-	100	0.000	0.000	0.000
40.010	-	-	100	0.000	0.000	0.000
40.011	-	-	100	0.000	0.000	0.000
51.000	-	-	100	0.119	0.119	0.119
51.001	-	-	100	0.007	0.007	0.007
40.012	-	-	100	0.000	0.000	0.000
52.000	User	-	100	0.016	0.016	0.016
	User	-	100	0.038	0.038	0.054
52.001	User	-	100	0.021	0.021	0.021
52.002	User	-	100	0.044	0.044	0.044
52.003	User	-	100	0.053	0.053	0.053
53.000	-	-	100	0.000	0.000	0.000
52.004	-	-	100	0.023	0.023	0.023
52.005	User	-	100	0.070	0.070	0.070
52.006	-	-	100	0.000	0.000	0.000
52.007	-	-	100	0.000	0.000	0.000
52.008	-	-	100	0.000	0.000	0.000
40.013	-	-	100	0.000	0.000	0.000
54.000	-	-	100	0.038	0.038	0.038
54.001	-	-	100	0.000	0.000	0.000
55.000	-	-	100	0.024	0.024	0.024
55.001	-	-	100	0.000	0.000	0.000
54.002	-	-	100	0.000	0.000	0.000
40.014	-	-	100	0.000	0.000	0.000
36.005	-	-	100	0.000	0.000	0.000
56.000	-	-	100	0.094	0.094	0.094
56.001	-	-	100	0.000	0.000	0.000
57.000	-	-	100	0.019	0.019	0.019

Area Summary for Storm

Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)
57.001	-	-	100	0.000	0.000	0.000
56.002	-	-	100	0.000	0.000	0.000
58.000	-	-	100	0.052	0.052	0.052
58.001	-	-	100	0.000	0.000	0.000
56.003	-	-	100	0.000	0.000	0.000
59.000	-	-	100	0.026	0.026	0.026
59.001	-	-	100	0.000	0.000	0.000
60.000	-	-	100	0.010	0.010	0.010
60.001	-	-	100	0.000	0.000	0.000
61.000	-	-	100	0.038	0.038	0.038
61.001	-	-	100	0.000	0.000	0.000
56.004	-	-	100	0.000	0.000	0.000
62.000	-	-	100	0.458	0.458	0.458
62.001	-	-	100	0.000	0.000	0.000
63.000	-	-	100	0.125	0.125	0.125
63.001	-	-	100	0.175	0.175	0.175
63.002	-	-	100	0.043	0.043	0.043
63.003	-	-	100	0.051	0.051	0.051
64.000	-	-	100	0.061	0.061	0.061
64.001	-	-	100	0.028	0.028	0.028
63.004	-	-	100	0.045	0.045	0.045
63.005	-	-	100	0.000	0.000	0.000
63.006	-	-	100	0.000	0.000	0.000
65.000	-	-	100	0.040	0.040	0.040
65.001	-	-	100	0.066	0.066	0.066
66.000	-	-	100	0.060	0.060	0.060
66.001	-	-	100	0.020	0.020	0.020
67.000	-	-	100	0.022	0.022	0.022
65.002	-	-	100	0.027	0.027	0.027
68.000	-	-	100	0.096	0.096	0.096
65.003	-	-	100	0.018	0.018	0.018
65.004	-	-	100	0.109	0.109	0.109
65.005	-	-	100	0.000	0.000	0.000
65.006	-	-	100	0.000	0.000	0.000
69.000	-	-	100	0.021	0.021	0.021
69.001	-	-	100	0.069	0.069	0.069
69.002	-	-	100	0.000	0.000	0.000
65.007	-	-	100	0.009	0.009	0.009
70.000	-	-	100	0.014	0.014	0.014
71.000	-	-	100	0.024	0.024	0.024
71.001	-	-	100	0.008	0.008	0.008
72.000	-	-	100	0.018	0.018	0.018
73.000	-	-	100	0.015	0.015	0.015
74.000	-	-	100	0.069	0.069	0.069
70.001	-	-	100	0.007	0.007	0.007
70.002	-	-	100	0.007	0.007	0.007
65.008	-	-	100	0.007	0.007	0.007
63.007	-	-	100	0.000	0.000	0.000
75.000	-	-	100	0.091	0.091	0.091
75.001	-	-	100	0.000	0.000	0.000
76.000	-	-	100	0.234	0.234	0.234
76.001	-	-	100	0.000	0.000	0.000
63.008	-	-	100	0.000	0.000	0.000
63.009	-	-	100	0.000	0.000	0.000
77.000	-	-	100	0.027	0.027	0.027
77.001	-	-	100	0.002	0.002	0.002
78.000	-	-	100	0.048	0.048	0.048
78.001	-	-	100	0.000	0.000	0.000
79.000	-	-	100	0.058	0.058	0.058

Area Summary for Storm

Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)
80.000	-	-	100	0.017	0.017	0.017
81.000	-	-	100	0.016	0.016	0.016
80.001	-	-	100	0.014	0.014	0.014
82.000	-	-	100	0.031	0.031	0.031
82.001	-	-	100	0.015	0.015	0.015
77.002	-	-	100	0.011	0.011	0.011
77.003	-	-	100	0.000	0.000	0.000
77.004	-	-	100	0.006	0.006	0.006
77.005	-	-	100	0.000	0.000	0.000
63.010	-	-	100	0.000	0.000	0.000
63.011	-	-	100	0.000	0.000	0.000
1.027	-	-	100	0.000	0.000	0.000
1.028	-	-	100	0.000	0.000	0.000
				Total	Total	Total
				6.452	6.452	6.452

Network Classifications for Storm

PN	USMH Name	Pipe Dia (mm)	Min Cover Depth (m)	Max Cover Depth (m)	Pipe Type	MH Dia (mm)	MH Width (mm)	MH Ring Depth (m)	MH Type
S1.000	SPP05	100	0.770	0.870	Unclassified	450	0	0.770	Unclassified
S1.001	SFC05	100	0.900	1.250	Unclassified	450	0	0.900	Unclassified
S2.000	SPP04	100	0.510	0.560	Unclassified	450	0	0.510	Unclassified
S2.001	SFC04	100	0.900	1.250	Unclassified	450	0	0.900	Unclassified
S3.000	SPP06	100	0.510	0.560	Unclassified	450	0	0.510	Unclassified
S3.001	SFC06	100	0.900	1.250	Unclassified	450	0	0.900	Unclassified
S1.002	SSW23	100	1.140	1.250	Unclassified	450	0	1.250	Unclassified
S4.000	SPP10	100	0.675	0.725	Unclassified	450	0	0.675	Unclassified
S4.001	SFC10	100	0.900	1.063	Unclassified	450	0	0.900	Unclassified
S5.000	SPP08	100	0.880	0.900	Unclassified	450	0	0.880	Unclassified
S5.001	SFC08	100	0.900	1.063	Unclassified	450	0	0.900	Unclassified
S4.002	S13	100	1.063	1.224	Unclassified				Junction
S1.003	SSW24	100	1.224	1.241	Unclassified	450	0	1.224	Unclassified
S6.000	SPP03	100	0.630	0.680	Unclassified	450	0	0.630	Unclassified
S6.001	SFC03	100	0.900	1.041	Unclassified	450	0	0.900	Unclassified
S1.004	S7	100	1.241	1.286	Unclassified				Junction
S7.000	SPP11	100	0.800	0.900	Unclassified	450	0	0.800	Unclassified
S7.001	SFC11	100	0.900	1.286	Unclassified	450	0	0.900	Unclassified
S1.005	S7	100	1.271	1.286	Unclassified				Junction
S8.000	SPP14	100	0.650	0.700	Unclassified	450	0	0.650	Unclassified
S8.001	SFC14	100	0.900	1.271	Unclassified	450	0	0.900	Unclassified
S1.006	S6	100	1.271	1.274	Unclassified				Junction
S9.000	SPP16	100	0.840	0.900	Unclassified	450	0	0.840	Unclassified
S9.001	SFC16	100	0.900	1.274	Unclassified	450	0	0.900	Unclassified
S1.007	SSW25	100	1.274	1.304	Unclassified	450	0	1.274	Unclassified
S10.000	SPP17	100	0.720	0.770	Unclassified	450	0	0.720	Unclassified
S10.001	SFC17	100	0.900	1.304	Unclassified	450	0	0.900	Unclassified
S1.008	S17	100	1.268	1.304	Unclassified				Junction
S11.000	SPP01	100	0.740	0.790	Unclassified	450	0	0.740	Unclassified
S11.001	SFC01	100	0.900	1.250	Unclassified	450	0	0.900	Unclassified
S12.000	SPP02	100	0.630	0.680	Unclassified	450	0	0.630	Unclassified
S12.001	SFC02	100	0.900	1.250	Unclassified	450	0	0.900	Unclassified
S11.002	SSW26	100	1.250	1.325	Unclassified	450	0	1.250	Unclassified
S13.000	SPP13	100	0.510	0.560	Unclassified	450	0	0.510	Unclassified
S13.001	SFC13	100	0.900	1.325	Unclassified	450	0	0.900	Unclassified
S11.003	S27	100	1.268	1.325	Unclassified				Junction
S1.009	SSW27	100	1.203	1.268	Unclassified	450	0	1.268	Unclassified
S14.000	SPP12	100	0.670	0.720	Unclassified	450	0	0.670	Unclassified
S14.001	SFC12	100	0.900	1.203	Unclassified	450	0	0.900	Unclassified
S15.000	SPP18	100	0.700	0.750	Unclassified	450	0	0.700	Unclassified
S15.001	SFC18	100	0.900	1.250	Unclassified	450	0	0.900	Unclassified
S16.000	SPP19	100	0.630	0.680	Unclassified	450	0	0.630	Unclassified
S16.001	SFC19	100	0.900	1.250	Unclassified	450	0	0.900	Unclassified
S15.002	SSW28	100	1.250	1.485	Unclassified	450	0	1.250	Unclassified
S1.010	SSW29	150	1.153	1.212	Unclassified	450	0	1.153	Unclassified
S17.000	SPP20	100	0.710	0.760	Unclassified	450	0	0.710	Unclassified
S17.001	SFC20	100	0.900	1.262	Unclassified	450	0	0.900	Unclassified
S1.011	S25	225	1.187	1.381	Unclassified				Junction
S18.000	SPP21	100	0.510	0.560	Unclassified	450	0	0.510	Unclassified
S18.001	SFC21	100	0.900	1.456	Unclassified	450	0	0.900	Unclassified
S19.000	SRAIN GARDEN	225	1.175	1.200	Unclassified	450	0	1.175	Unclassified
S19.001	SRG FC	225	1.200	1.381	Unclassified	1200	0	1.200	Unclassified
S1.012	S27	225	1.381	1.385	Unclassified				Junction
S20.000	SPP26	100	0.580	0.630	Unclassified	450	0	0.580	Unclassified
S20.001	SFC26	100	0.900	0.906	Unclassified	450	0	0.900	Unclassified
S1.013	SSW30	225	1.385	1.463	Unclassified	450	0	1.385	Unclassified
S21.000	SPP28	100	0.720	0.770	Unclassified	450	0	0.720	Unclassified

Network Classifications for Storm

PN	USMH Name	Pipe Dia (mm)	Min Cover Depth (m)	Max Cover Depth (m)	Pipe Type	MH Dia (mm)	MH Width (mm)	MH Ring Depth (m)	MH Type
S21.001	SFC28	100	0.900	1.538	Unclassified	450	0	0.900	Unclassified
S1.014	SSW31	225	1.463	1.512	Unclassified	1200	0	1.463	Unclassified
S22.000	SPP30	100	0.535	0.585	Unclassified	450	0	0.535	Unclassified
S22.001	SFC30	100	0.900	1.587	Unclassified	450	0	0.900	Unclassified
S1.015	S66	225	1.512	1.577	Unclassified				Junction
S23.000	SPP32	100	0.780	0.830	Unclassified	450	0	0.780	Unclassified
S23.001	SFC32	100	0.900	1.652	Unclassified	450	0	0.900	Unclassified
S1.016	S45	225	1.577	1.578	Unclassified				Junction
S24.000	SPP35	100	0.710	0.760	Unclassified	450	0	0.710	Unclassified
S24.001	SFC35	100	0.900	1.653	Unclassified	450	0	0.900	Unclassified
S1.017	S70	225	1.566	1.578	Unclassified				Junction
S25.000	SPP34	150	0.610	0.660	Unclassified	450	0	0.610	Unclassified
S25.001	SFC34	100	0.900	1.641	Unclassified	450	0	0.900	Unclassified
S1.018	S46	225	1.566	1.592	Unclassified				Junction
S1.019	S47	225	1.592	1.639	Unclassified				Junction
S26.000	SPP27	100	0.510	0.560	Unclassified	450	0	0.510	Unclassified
S26.001	SFC27	100	0.900	1.250	Unclassified	450	0	0.900	Unclassified
S26.002	SSW32	100	1.250	1.250	Unclassified	450	0	1.250	Unclassified
S27.000	SPP31	100	0.920	0.920	Unclassified	450	0	0.920	Unclassified
S27.001	SFC31	100	0.920	1.250	Unclassified	450	0	0.920	Unclassified
S26.003	S80	100	1.250	1.250	Unclassified				Junction
S26.004	S56	100	1.250	1.250	Unclassified				Junction
S28.000	SPP36	100	1.000	1.000	Unclassified	450	0	1.000	Unclassified
S28.001	SFC36	100	1.000	1.250	Unclassified	450	0	1.000	Unclassified
S26.005	S84	100	1.175	1.250	Unclassified				Junction
S29.000	SPP41	100	0.940	0.940	Unclassified	450	0	0.940	Unclassified
S29.001	SFC41	100	0.940	1.263	Unclassified	450	0	0.940	Unclassified
S26.006	SSW33	100	1.263	1.727	Unclassified	1200	0	1.263	Unclassified
S30.000	SPP40	100	0.885	0.900	Unclassified	450	0	0.885	Unclassified
S30.001	SFC40	100	0.900	1.727	Unclassified	450	0	0.900	Unclassified
S26.007	S91	150	1.677	1.680	Unclassified				Junction
S31.000	SPP39	100	0.700	0.750	Unclassified	450	0	0.700	Unclassified
S31.001	SFC39	100	0.900	0.968	Unclassified	450	0	0.900	Unclassified
S1.020	SSW34	225	1.639	1.702	Unclassified	1200	0	1.639	Unclassified
S1.021	S53	225	1.702	1.725	Unclassified				Junction
S32.000	SPP47	100	0.930	0.930	Unclassified	450	0	0.930	Unclassified
S32.001	SFC47	100	0.930	1.800	Unclassified	450	0	0.930	Unclassified
S1.022	S96	225	1.725	1.766	Unclassified				Junction
S1.023	S53	225	1.766	1.777	Unclassified				Junction
S33.000	SPP55	100	0.873	0.903	Unclassified	450	0	0.873	Unclassified
S33.001	SFC55	100	0.903	1.852	Unclassified	450	0	0.903	Unclassified
S1.024	S100	225	1.777	1.816	Unclassified				Junction
S34.000	SPP46	100	0.735	0.785	Unclassified	450	0	0.735	Unclassified
S34.001	SFC46	100	0.900	2.152	Unclassified	450	0	0.900	Unclassified
S1.025	SSW35	225	1.792	1.816	Unclassified	1200	0	1.816	Unclassified
S35.000	SPP61	100	0.880	0.880	Unclassified	450	0	0.880	Unclassified
S35.001	SFC61	100	0.880	0.927	Unclassified	450	0	0.880	Unclassified
S1.026	SSW36	225	1.688	1.792	Unclassified	1200	0	1.792	Unclassified
S36.000	SPP44	100	0.650	0.700	Unclassified	450	0	0.650	Unclassified
S36.001	SFC44	100	0.900	1.300	Unclassified	450	0	0.900	Unclassified
S37.000	SHE-SW-14	300	0.350	1.100	Unclassified	1200	0	0.350	Unclassified
S36.002	SHE-SW-15	300	1.100	1.211	Unclassified	1200	0	1.100	Unclassified
S38.000	SPP45	100	0.675	0.725	Unclassified	450	0	0.675	Unclassified
S38.001	SFC45	100	0.900	1.475	Unclassified	450	0	0.900	Unclassified
S36.003	S145	300	1.235	1.275	Unclassified				Junction
S39.000	SPP60	100	0.660	0.690	Unclassified	450	0	0.660	Unclassified
S39.001	SFC60	100	0.900	1.435	Unclassified	450	0	0.900	Unclassified

Network Classifications for Storm

PN	USMH Name	Pipe Dia (mm)	Min Cover Depth (m)	Max Cover Depth (m)	Pipe Type	MH Dia (mm)	MH Width (mm)	MH Ring Depth (m)	MH Type
S36.004	S146	300	1.235	1.635	Unclassified				Junction
S40.000	SSW11	300	1.450	1.630	Unclassified	1200	0	1.450	Unclassified
S40.001	SSW12	300	1.630	1.769	Unclassified	1200	0	1.630	Unclassified
S40.002	SSW13	300	1.769	2.036	Unclassified	1200	0	1.769	Unclassified
S41.000	STANK 3	300	1.850	1.888	Unclassified	1200	0	1.850	Unclassified
S41.001	SHB 3	100	2.068	2.151	Unclassified	1200	0	2.068	Unclassified
S40.003	S148	300	2.036	2.151	Unclassified				Junction
S42.000	SPP67	100	0.710	0.760	Unclassified	450	0	0.710	Unclassified
S42.001	SFC67	100	0.900	1.785	Unclassified	450	0	0.900	Unclassified
S40.004	S148	300	2.151	2.181	Unclassified				Junction
S40.005	SSW15	450	2.031	2.110	Unclassified	1350	0	2.031	Unclassified
S43.000	SPP68	100	0.735	0.785	Unclassified	450	0	0.735	Unclassified
S43.001	SFC68	100	0.900	1.894	Unclassified	450	0	0.900	Unclassified
S40.006	S150	450	2.110	2.154	Unclassified				Junction
S44.000	SPP69	100	0.640	0.690	Unclassified	450	0	0.640	Unclassified
S44.001	SFC69	100	0.900	1.886	Unclassified	1200	0	0.900	Unclassified
S40.007	S151	450	2.154	2.204	Unclassified				Junction
S40.008	SSW16	600	2.054	2.245	Unclassified	1800	0	2.054	Unclassified
S45.000	SPP66	100	0.710	0.760	Unclassified	450	0	0.710	Unclassified
S45.001	SFC66	100	0.900	0.923	Unclassified	450	0	0.900	Unclassified
S46.000	SPP65	100	0.640	0.690	Unclassified	450	0	0.640	Unclassified
S46.001	SFC65	100	0.868	0.900	Unclassified	450	0	0.900	Unclassified
S47.000	STANK 2	225	2.275	2.325	Unclassified	1200	0	2.275	Unclassified
S47.001	SHB 2	225	2.278	2.325	Unclassified	1200	0	2.325	Unclassified
S40.009	SSW17	600	2.245	2.511	Unclassified	1800	0	2.245	Unclassified
S48.000	SFEC-SW-21	375	0.825	1.075	Unclassified	1350	0	0.825	Unclassified
S48.001	SFEC-SW-22	375	1.075	1.275	Unclassified	1350	0	1.075	Unclassified
S48.002	SFEC-SW-23	450	1.150	1.200	Unclassified	1350	0	1.200	Unclassified
S48.003	SFEC-SW-24	450	1.150	1.480	Unclassified	1350	0	1.150	Unclassified
S49.000	SFEC-SW-19	225	0.875	0.975	Unclassified	1200	0	0.875	Unclassified
S49.001	SFEC-SW-20	300	0.900	1.430	Unclassified	1200	0	0.900	Unclassified
S50.000	SFEC-SW-15	225	0.775	0.875	Unclassified	1200	0	0.775	Unclassified
S50.001	SFEC-SW-17	300	0.800	0.950	Unclassified	1200	0	0.800	Unclassified
S50.002	SFEC-SW-18	300	0.950	1.430	Unclassified	1200	0	0.950	Unclassified
S48.004	SFEC-SW-25	600	1.080	1.130	Unclassified	1500	0	1.130	Unclassified
S48.005	SFEC-SW-26	600	1.900	2.300	Unclassified	1500	0	1.900	Unclassified
S40.010	SSW18	750	2.361	2.426	Unclassified	1800	0	2.361	Unclassified
S40.011	SSW19	750	2.426	2.614	Unclassified	1800	0	2.426	Unclassified
S51.000	SHE-SW-16	225	2.525	3.072	Unclassified	1200	0	2.525	Unclassified
S51.001	SHE-SW-17	225	3.072	3.161	Unclassified	1200	0	3.072	Unclassified
S40.012	S154	750	2.566	2.614	Unclassified				Junction
S52.000	SSwale In 1	-1	0.999	0.999	Unclassified				Junction
S52.001	SSwale 2	-1	0.999	0.999	Unclassified				Junction
S52.002	SSwale in 3	-1	0.999	0.999	Unclassified				Junction
S52.003	SSwale 4	-1	0.999	0.999	Unclassified				Junction
S53.000	SSW PUMP OUTFALL	300	0.300	0.549	Unclassified	1200	0	0.300	Unclassified
S52.004	SSwale in 5	-1	0.999	0.999	Unclassified				Junction
S52.005	SSwale 6	-1	0.999	0.999	Unclassified				Junction
S52.006	SSwale in 7	-1	0.999	0.999	Unclassified				Junction
S52.007	SSwale out	150	0.850	0.925	Unclassified				Junction
S52.008	SSWALE FC70	150	0.852	0.925	Unclassified				Junction
S40.013	SSW20	750	2.566	2.578	Unclassified	1800	0	2.566	Unclassified
S54.000	SPP53	100	0.885	0.900	Unclassified	450	0	0.885	Unclassified
S54.001	SFC53	100	0.900	1.270	Unclassified	450	0	0.900	Unclassified
S55.000	SPP57	100	0.635	0.685	Unclassified	450	0	0.635	Unclassified
S55.001	SFC57	100	0.900	1.326	Unclassified	450	0	0.900	Unclassified
S54.002	S170	100	1.326	2.672	Unclassified				Junction

Network Classifications for Storm

PN	USMH Name	Pipe Dia (mm)	Min Cover Depth (m)	Max Cover Depth (m)	Pipe Type	MH Dia (mm)	MH Width (mm)	MH Ring Depth (m)	MH Type
S40.014	S167	750	2.578	2.592	Unclassified				Junction
S36.005	SSW22	750	2.492	2.592	Unclassified	1800	0	2.592	Unclassified
S56.000	SPP48	100	0.900	0.900	Unclassified	450	0	0.900	Unclassified
S56.001	SFC48	100	0.900	1.200	Unclassified	450	0	0.900	Unclassified
S57.000	SPP50	100	0.635	0.685	Unclassified	450	0	0.635	Unclassified
S57.001	SFC50	100	1.000	1.250	Unclassified	450	0	1.000	Unclassified
S56.002	SSW36	100	0.283	1.250	Unclassified	450	0	1.250	Unclassified
S58.000	Spp56	100	0.940	0.940	Unclassified	450	0	0.940	Unclassified
S58.001	SFC56	100	0.292	0.940	Unclassified	450	0	0.940	Unclassified
S56.003	S187	100	0.342	1.404	Unclassified				Junction
S59.000	SPP59	100	0.675	0.725	Unclassified	450	0	0.675	Unclassified
S59.001	SFC59	100	0.900	0.918	Unclassified	450	0	0.900	Unclassified
S60.000	SPP63	100	0.655	0.705	Unclassified	450	0	0.655	Unclassified
S60.001	SFC63	100	0.900	1.404	Unclassified	450	0	0.900	Unclassified
S61.000	SPP62	100	0.630	0.680	Unclassified	450	0	0.630	Unclassified
S61.001	SFC62	100	0.900	0.908	Unclassified	450	0	0.900	Unclassified
S56.004	SSW37	100	1.404	2.149	Unclassified	1200	0	1.404	Unclassified
S62.000	SPP64	100	0.640	0.675	Unclassified	450	0	0.640	Unclassified
S62.001	SFC64	100	0.900	1.900	Unclassified	450	0	0.900	Unclassified
S63.000	SFEC-SW-06	450	0.450	0.914	Unclassified	450	0	0.450	Unclassified
S63.001	SFEC-SW-07	450	0.714	1.030	Unclassified	1350	0	0.714	Unclassified
S63.002	SFEC-SW-08	450	1.030	1.312	Unclassified	1350	0	1.030	Unclassified
S63.003	SFEC-SW-09	525	1.312	1.435	Unclassified	1500	0	1.312	Unclassified
S64.000	SFEC-SW-10	225	0.675	0.975	Unclassified	1200	0	0.675	Unclassified
S64.001	SFEC-SW-12	225	0.975	1.175	Unclassified	1200	0	0.975	Unclassified
S63.004	SFEC-SW-13	525	1.435	1.525	Unclassified	1500	0	1.435	Unclassified
S63.005	SFEC-SW-14	525	1.455	1.525	Unclassified	1800	0	1.525	Unclassified
S63.006	SSW05	525	1.455	1.835	Unclassified	1800	0	1.455	Unclassified
S65.000	SFEC-SW-01	225	0.725	0.825	Unclassified	1200	0	0.725	Unclassified
S65.001	SFEC-SW-02	300	0.750	1.051	Unclassified	1200	0	0.750	Unclassified
S66.000	SHW-SW-01	225	0.725	0.978	Unclassified	1200	0	0.725	Unclassified
S66.001	SHW-SW-02	300	0.903	1.051	Unclassified	1200	0	0.903	Unclassified
S67.000	SHW-SW-03	150	0.800	1.201	Unclassified	1200	0	0.800	Unclassified
S65.002	SFEC-SW-03	375	0.976	1.060	Unclassified	1350	0	0.976	Unclassified
S68.000	SFEC-SW-04	300	0.550	0.819	Unclassified	1200	0	0.550	Unclassified
S65.003	SFEC-SW-05	450	0.985	2.271	Unclassified	1350	0	0.985	Unclassified
S65.004	SSW01	525	2.196	2.625	Unclassified	1500	0	2.196	Unclassified
S65.005	SSW02	525	2.625	2.830	Unclassified	1500	0	2.625	Unclassified
S65.006	SSW03	525	2.610	2.830	Unclassified	1500	0	2.830	Unclassified
S69.000	SHW-SW-04	225	0.525	0.531	Unclassified	450	0	0.525	Unclassified
S69.001	SSWALE2 IN	-2	0.000	0.000	Unclassified	1200	0	0.000	Unclassified
S69.002	SSWALE 2 FC	100	0.900	1.945	Unclassified	1200	0	0.900	Unclassified
S65.007	SSW04	525	2.011	2.610	Unclassified	1500	0	2.610	Unclassified
S70.000	SHW-SW-09	150	0.500	0.713	Unclassified	1200	0	0.500	Unclassified
S71.000	SHW-SW-05	225	0.425	0.589	Unclassified	1200	0	0.425	Unclassified
S71.001	SHW-SW-06	225	0.589	0.825	Unclassified	1200	0	0.589	Unclassified
S72.000	SHW-SW-07	150	0.500	0.697	Unclassified	1200	0	0.500	Unclassified
S73.000	SHW-SW-08	150	0.500	0.825	Unclassified	1200	0	0.500	Unclassified
S74.000	SHW-SW-10	225	0.425	0.706	Unclassified	1200	0	0.425	Unclassified
S70.001	SBASIN 1	150	0.900	1.157	Unclassified	1200	0	0.900	Unclassified
S70.002	SBASIN 1 OUT	150	1.157	1.718	Unclassified	450	0	1.157	Unclassified
S65.008	S238	525	1.835	2.011	Unclassified				Junction
S63.007	SSW06	525	1.835	2.226	Unclassified	1800	0	1.835	Unclassified
S75.000	SHE-SW-01	300	0.650	1.056	Unclassified	1200	0	0.650	Unclassified
S75.001	SSW07	300	1.056	1.618	Unclassified	1200	0	1.056	Unclassified
S76.000	SFEATURE POND	100	0.100	0.300	Unclassified	1200	0	0.100	Unclassified
S76.001	SFP FC	100	1.300	1.825	Unclassified	1200	0	1.300	Unclassified

Network Classifications for Storm

PN	USMH Name	Pipe Dia (mm)	Min Cover Depth (m)	Max Cover Depth (m)	Pipe Type	MH Dia (mm)	MH Width (mm)	MH Ring Depth (m)	MH Type
S63.008	SSW08	600	2.151	2.177	Unclassified	1800	0	2.151	Unclassified
S63.009	SSW09	600	2.156	2.177	Unclassified	1800	0	2.177	Unclassified
S77.000	SHE-SW-10	225	0.425	0.709	Unclassified	1200	0	0.425	Unclassified
S77.001	SHE-SW-11	225	0.709	0.825	Unclassified	1200	0	0.709	Unclassified
S78.000	SHE-SW-03	225	0.375	0.638	Unclassified	1200	0	0.375	Unclassified
S78.001	SHE-SW-04	225	0.638	0.825	Unclassified	1200	0	0.638	Unclassified
S79.000	SHE-SW-02	225	0.425	0.825	Unclassified	1200	0	0.425	Unclassified
S80.000	SHW-SW-06	225	0.425	0.508	Unclassified	1200	0	0.425	Unclassified
S81.000	SHE-SW-05	225	0.425	0.508	Unclassified	1200	0	0.425	Unclassified
S80.001	SHE-SW-07	225	0.508	0.760	Unclassified	1200	0	0.508	Unclassified
S82.000	SHE-SW-08	225	0.425	0.587	Unclassified	1200	0	0.425	Unclassified
S82.001	SHE-SW-09	225	0.587	0.825	Unclassified	1200	0	0.587	Unclassified
S77.002	SBASIN 2	225	0.825	1.031	Unclassified	1200	0	0.825	Unclassified
S77.003	SBASIN 2 OUT	225	1.031	1.340	Unclassified	600	0	1.031	Unclassified
S77.004	SHE-SW-12	225	1.340	1.390	Unclassified	600	0	1.340	Unclassified
S77.005	SHE-SW-13	225	1.390	1.609	Unclassified	600	0	1.390	Unclassified
S63.010	S241	600	2.146	2.156	Unclassified				Junction
S63.011	SSW10	600	2.146	2.167	Unclassified	1800	0	2.146	Unclassified
S1.027	STANK	300	2.968	3.021	Unclassified	1800	0	2.968	Unclassified
S1.028	SFC71	300	1.846	3.021	Unclassified	1200	0	3.021	Unclassified

Free Flowing Outfall Details for Storm

Outfall Pipe Number	Outfall Name	C. Level (m)	I. Level (m)	Min I. Level (m)	D,L (mm)	W (mm)
S1.028	S	80.600	78.454	0.000	0	0

Simulation Criteria for Storm

Volumetric Runoff Coeff	1.000	Additional Flow - % of Total Flow	0.000
Areal Reduction Factor	1.000	MADD Factor * 10m³/ha Storage	2.000
Hot Start (mins)	0	Inlet Coeffiecient	0.800
Hot Start Level (mm)	0	Flow per Person per Day (l/per/day)	0.000
Manhole Headloss Coeff (Global)	0.500	Run Time (mins)	60
Foul Sewage per hectare (l/s)	0.000	Output Interval (mins)	1

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 60 Number of Storage Structures 58 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model	FEH
Return Period (years)	100
FEH Rainfall Version	2013
Site Location	GB 455061 221552 SP 55061 21552
Data Type	Point
Summer Storms	Yes
Winter Storms	No
Cv (Summer)	1.000
Cv (Winter)	0.840
Storm Duration (mins)	30

Online Controls for Storm

Orifice Manhole: SFC05, DS/PN: S1.001, Volume (m³): 0.2

Diameter (m) 0.007 Discharge Coefficient 0.600 Invert Level (m) 82.720

Orifice Manhole: SFC04, DS/PN: S2.001, Volume (m³): 0.2

Diameter (m) 0.007 Discharge Coefficient 0.600 Invert Level (m) 82.800

Orifice Manhole: SFC06, DS/PN: S3.001, Volume (m³): 0.2

Diameter (m) 0.007 Discharge Coefficient 0.600 Invert Level (m) 82.620

Orifice Manhole: SFC10, DS/PN: S4.001, Volume (m³): 0.2

Diameter (m) 0.011 Discharge Coefficient 0.600 Invert Level (m) 82.530

Orifice Manhole: SFC08, DS/PN: S5.001, Volume (m³): 0.2

Diameter (m) 0.012 Discharge Coefficient 0.600 Invert Level (m) 82.450

Orifice Manhole: SFC03, DS/PN: S6.001, Volume (m³): 0.2

Diameter (m) 0.015 Discharge Coefficient 0.600 Invert Level (m) 82.200

Orifice Manhole: SFC11, DS/PN: S7.001, Volume (m³): 0.2

Diameter (m) 0.010 Discharge Coefficient 0.600 Invert Level (m) 82.300

Orifice Manhole: SFC14, DS/PN: S8.001, Volume (m³): 0.2

Diameter (m) 0.007 Discharge Coefficient 0.600 Invert Level (m) 81.985

Orifice Manhole: SFC16, DS/PN: S9.001, Volume (m³): 0.2

Diameter (m) 0.010 Discharge Coefficient 0.600 Invert Level (m) 82.160

Orifice Manhole: SFC17, DS/PN: S10.001, Volume (m³): 0.2

Diameter (m) 0.011 Discharge Coefficient 0.600 Invert Level (m) 81.820

Orifice Manhole: SFC01, DS/PN: S11.001, Volume (m³): 0.2

Diameter (m) 0.015 Discharge Coefficient 0.600 Invert Level (m) 82.000

Orifice Manhole: SFC02, DS/PN: S12.001, Volume (m³): 0.2

Diameter (m) 0.007 Discharge Coefficient 0.600 Invert Level (m) 82.070

Orifice Manhole: SFC13, DS/PN: S13.001, Volume (m³): 0.2

Diameter (m) 0.007 Discharge Coefficient 0.600 Invert Level (m) 81.900

Orifice Manhole: SFC12, DS/PN: S14.001, Volume (m³): 0.2

Diameter (m) 0.015 Discharge Coefficient 0.600 Invert Level (m) 81.550

Orifice Manhole: SFC18, DS/PN: S15.001, Volume (m³): 0.2

Diameter (m) 0.011 Discharge Coefficient 0.600 Invert Level (m) 82.100

Orifice Manhole: SFC19, DS/PN: S16.001, Volume (m³): 0.2

Diameter (m) 0.007 Discharge Coefficient 0.600 Invert Level (m) 81.700

Orifice Manhole: SFC20, DS/PN: S17.001, Volume (m³): 0.2

Diameter (m) 0.013 Discharge Coefficient 0.600 Invert Level (m) 81.550

Orifice Manhole: SFC21, DS/PN: S18.001, Volume (m³): 0.2

Diameter (m) 0.007 Discharge Coefficient 0.600 Invert Level (m) 81.400

Hydro-Brake® Optimum Manhole: SRG FC, DS/PN: S19.001, Volume (m³): 1.6

Unit Reference	MD-SHE-0197-2000-1132-2000
Design Head (m)	1.132
Design Flow (l/s)	20.0
Flush-Flo™	Calculated
Objective	Minimise upstream storage
Application	Surface
Sump Available	Yes
Diameter (mm)	197
Invert Level (m)	81.175
Minimum Outlet Pipe Diameter (mm)	225
Suggested Manhole Diameter (mm)	1500

Control Points	Head (m)	Flow (l/s)	Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	1.132	20.0	Kick-Flo®	0.790	16.8
Flush-Flo™	0.363	19.9	Mean Flow over Head Range	-	17.0

The hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake® Optimum as specified. Should another type of control device other than a Hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	6.8	0.800	16.9	2.000	26.2	4.000	36.6	7.000	48.0
0.200	18.4	1.000	18.8	2.200	27.4	4.500	38.7	7.500	49.6
0.300	19.8	1.200	20.5	2.400	28.6	5.000	40.7	8.000	51.2
0.400	19.9	1.400	22.1	2.600	29.7	5.500	42.7	8.500	52.7
0.500	19.6	1.600	23.6	3.000	31.8	6.000	44.5	9.000	54.2
0.600	19.2	1.800	24.9	3.500	34.3	6.500	46.3	9.500	55.6

Orifice Manhole: SFC26, DS/PN: S20.001, Volume (m³): 0.2

Diameter (m) 0.007 Discharge Coefficient 0.600 Invert Level (m) 81.525

Orifice Manhole: SFC28, DS/PN: S21.001, Volume (m³): 0.2

Diameter (m) 0.010 Discharge Coefficient 0.600 Invert Level (m) 81.600

Orifice Manhole: SFC30, DS/PN: S22.001, Volume (m³): 0.2

Diameter (m) 0.007 Discharge Coefficient 0.600 Invert Level (m) 81.500

Orifice Manhole: SFC32, DS/PN: S23.001, Volume (m³): 0.2

Diameter (m) 0.010 Discharge Coefficient 0.600 Invert Level (m) 81.485

Orifice Manhole: SFC35, DS/PN: S24.001, Volume (m³): 0.2

Diameter (m) 0.007 Discharge Coefficient 0.600 Invert Level (m) 81.500

Orifice Manhole: SFC34, DS/PN: S25.001, Volume (m³): 0.2

Diameter (m) 0.010 Discharge Coefficient 0.600 Invert Level (m) 81.400

Orifice Manhole: SFC27, DS/PN: S26.001, Volume (m³): 0.2

Diameter (m) 0.007 Discharge Coefficient 0.600 Invert Level (m) 82.150

Orifice Manhole: SFC31, DS/PN: S27.001, Volume (m³): 0.2

Diameter (m) 0.012 Discharge Coefficient 0.600 Invert Level (m) 81.890

Orifice Manhole: SFC36, DS/PN: S28.001, Volume (m³): 0.2

Diameter (m) 0.014 Discharge Coefficient 0.600 Invert Level (m) 81.610

Orifice Manhole: SFC41, DS/PN: S29.001, Volume (m³): 0.2

Diameter (m) 0.020 Discharge Coefficient 0.600 Invert Level (m) 81.530

Orifice Manhole: SFC40, DS/PN: S30.001, Volume (m³): 0.2

Diameter (m) 0.012 Discharge Coefficient 0.600 Invert Level (m) 81.425

Orifice Manhole: SFC39, DS/PN: S31.001, Volume (m³): 0.2

Diameter (m) 0.007 Discharge Coefficient 0.600 Invert Level (m) 81.375

Orifice Manhole: SFC47, DS/PN: S32.001, Volume (m³): 0.2

Diameter (m) 0.012 Discharge Coefficient 0.600 Invert Level (m) 81.350

Orifice Manhole: SFC55, DS/PN: S33.001, Volume (m³): 0.2

Diameter (m) 0.012 Discharge Coefficient 0.600 Invert Level (m) 81.330

Orifice Manhole: SFC46, DS/PN: S34.001, Volume (m³): 0.2

Diameter (m) 0.010 Discharge Coefficient 0.600 Invert Level (m) 81.255

Orifice Manhole: SFC61, DS/PN: S35.001, Volume (m³): 0.2

Diameter (m) 0.012 Discharge Coefficient 0.600 Invert Level (m) 81.270

Orifice Manhole: SFC44, DS/PN: S36.001, Volume (m³): 0.2

Diameter (m) 0.007 Discharge Coefficient 0.600 Invert Level (m) 81.320

Orifice Manhole: SFC45, DS/PN: S38.001, Volume (m³): 0.2

Diameter (m) 0.007 Discharge Coefficient 0.600 Invert Level (m) 81.270

Orifice Manhole: SFC60, DS/PN: S39.001, Volume (m³): 0.2

Diameter (m) 0.010 Discharge Coefficient 0.600 Invert Level (m) 81.270

Hydro-Brake® Optimum Manhole: SHB 3, DS/PN: S41.001, Volume (m³): 2.6

Unit Reference	MD-SHE-0067-2000-1000-2000
Design Head (m)	1.000
Design Flow (l/s)	2.0
Flush-Flo™	Calculated
Objective	Minimise upstream storage
Application	Surface
Sump Available	Yes
Diameter (mm)	67
Invert Level (m)	80.332
Minimum Outlet Pipe Diameter (mm)	100
Suggested Manhole Diameter (mm)	1200

Control Points	Head (m)	Flow (l/s)	Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	1.000	2.0	Kick-Flo®	0.599	1.6
Flush-Flo™	0.296	1.9	Mean Flow over Head Range	-	1.7

The hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake® Optimum as specified. Should another type of control device other than a Hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	1.6	0.800	1.8	2.000	2.7	4.000	3.8	7.000	4.9
0.200	1.9	1.000	2.0	2.200	2.9	4.500	4.0	7.500	5.1
0.300	1.9	1.200	2.2	2.400	3.0	5.000	4.2	8.000	5.2
0.400	1.9	1.400	2.3	2.600	3.1	5.500	4.4	8.500	5.4
0.500	1.8	1.600	2.5	3.000	3.3	6.000	4.6	9.000	5.5
0.600	1.6	1.800	2.6	3.500	3.5	6.500	4.7	9.500	5.7

Orifice Manhole: SFC67, DS/PN: S42.001, Volume (m³): 0.2

Diameter (m) 0.014 Discharge Coefficient 0.600 Invert Level (m) 81.250

Orifice Manhole: SFC68, DS/PN: S43.001, Volume (m³): 0.2

Diameter (m) 0.016 Discharge Coefficient 0.600 Invert Level (m) 81.250

Orifice Manhole: SFC69, DS/PN: S44.001, Volume (m³): 1.2

Diameter (m) 0.007 Discharge Coefficient 0.600 Invert Level (m) 81.350

Orifice Manhole: SFC66, DS/PN: S45.001, Volume (m³): 0.2

Diameter (m) 0.010 Discharge Coefficient 0.600 Invert Level (m) 81.500

Orifice Manhole: SFC65, DS/PN: S46.001, Volume (m³): 0.2

Diameter (m) 0.007 Discharge Coefficient 0.600 Invert Level (m) 81.500

Hydro-Brake® Optimum Manhole: SHB 2, DS/PN: S47.001, Volume (m³): 3.0

Unit Reference	MD-SHE-0067-2000-1000-2000
Design Head (m)	1.000
Design Flow (l/s)	2.0
Flush-Flo™	Calculated
Objective	Minimise upstream storage
Application	Surface
Sump Available	Yes
Diameter (mm)	67
Invert Level (m)	79.950
Minimum Outlet Pipe Diameter (mm)	100
Suggested Manhole Diameter (mm)	1200

Control Points	Head (m)	Flow (l/s)	Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	1.000	2.0	Kick-Flo®	0.599	1.6
Flush-Flo™	0.296	1.9	Mean Flow over Head Range	-	1.7

The hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake® Optimum as specified. Should another type of control device other than a Hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	1.6	0.800	1.8	2.000	2.7	4.000	3.8	7.000	4.9
0.200	1.9	1.000	2.0	2.200	2.9	4.500	4.0	7.500	5.1
0.300	1.9	1.200	2.2	2.400	3.0	5.000	4.2	8.000	5.2
0.400	1.9	1.400	2.3	2.600	3.1	5.500	4.4	8.500	5.4
0.500	1.8	1.600	2.5	3.000	3.3	6.000	4.6	9.000	5.5
0.600	1.6	1.800	2.6	3.500	3.5	6.500	4.7	9.500	5.7

Orifice Manhole: SSWALE FC70, DS/PN: S52.008, Volume (m³): 0.1

Diameter (m) 0.013 Discharge Coefficient 0.600 Invert Level (m) 81.425

Orifice Manhole: SFC53, DS/PN: S54.001, Volume (m³): 0.2

Diameter (m) 0.012 Discharge Coefficient 0.600 Invert Level (m) 81.375

Orifice Manhole: SFC57, DS/PN: S55.001, Volume (m³): 0.2

Diameter (m) 0.007 Discharge Coefficient 0.600 Invert Level (m) 81.380

Orifice Manhole: SFC48, DS/PN: S56.001, Volume (m³): 0.2

Diameter (m) 0.020 Discharge Coefficient 0.600 Invert Level (m) 81.450

Orifice Manhole: SFC50, DS/PN: S57.001, Volume (m³): 0.2

Diameter (m) 0.010 Discharge Coefficient 0.600 Invert Level (m) 81.180

Orifice Manhole: SFC56, DS/PN: S58.001, Volume (m³): 0.2

Diameter (m) 0.012 Discharge Coefficient 0.600 Invert Level (m) 81.330

Orifice Manhole: SFC59, DS/PN: S59.001, Volume (m³): 0.2

Diameter (m) 0.007 Discharge Coefficient 0.600 Invert Level (m) 81.270

Orifice Manhole: SFC63, DS/PN: S60.001, Volume (m³): 0.2

Diameter (m) 0.007 Discharge Coefficient 0.600 Invert Level (m) 81.200

Orifice Manhole: SFC62, DS/PN: S61.001, Volume (m³): 0.2

Diameter (m) 0.010 Discharge Coefficient 0.600 Invert Level (m) 81.240

Orifice Manhole: SFC64, DS/PN: S62.001, Volume (m³): 0.2

Diameter (m) 0.029 Discharge Coefficient 0.600 Invert Level (m) 81.000

Orifice Manhole: SSWALE 2 FC, DS/PN: S69.002, Volume (m³): 128.9

Diameter (m) 0.041 Discharge Coefficient 0.600 Invert Level (m) 81.500

Hydro-Brake® Optimum Manhole: SBASIN 1 OUT, DS/PN: S70.002, Volume (m³): 0.7

Unit Reference	MD-SHE-0028-4000-1000-4000
Design Head (m)	1.000
Design Flow (l/s)	0.4
Flush-Flo™	Calculated
Objective	Minimise upstream storage
Application	Surface
Sump Available	Yes
Diameter (mm)	28
Invert Level (m)	81.193
Minimum Outlet Pipe Diameter (mm)	75
Suggested Manhole Diameter (mm)	1200

Control Points	Head (m)	Flow (l/s)	Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	1.000	0.4	Kick-Flo®	0.256	0.2
Flush-Flo™	0.127	0.3	Mean Flow over Head Range	-	0.3

The hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake® Optimum as specified. Should another type of control device other than a Hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	0.3	0.800	0.4	2.000	0.5	4.000	0.7	7.000	0.9
0.200	0.3	1.000	0.4	2.200	0.6	4.500	0.8	7.500	1.0
0.300	0.2	1.200	0.4	2.400	0.6	5.000	0.8	8.000	1.0
0.400	0.3	1.400	0.5	2.600	0.6	5.500	0.8	8.500	1.0
0.500	0.3	1.600	0.5	3.000	0.6	6.000	0.9	9.000	1.1
0.600	0.3	1.800	0.5	3.500	0.7	6.500	0.9	9.500	1.1

Orifice Manhole: SFP FC, DS/PN: S76.001, Volume (m³): 1.6

Diameter (m) 0.014 Discharge Coefficient 0.600 Invert Level (m) 80.800

Hydro-Brake® Optimum Manhole: SBASIN 2 OUT, DS/PN: S77.003, Volume (m³): 1.3

Unit Reference	MD-SHE-0082-3000-1000-3000
Design Head (m)	1.000

Hydro-Brake® Optimum Manhole: SBASIN 2 OUT, DS/PN: S77.003, Volume (m³): 1.3

Design Flow (l/s)	3.0
Flush-Flo™	Calculated
Objective	Minimise upstream storage
Application	Surface
Sump Available	Yes
Diameter (mm)	82
Invert Level (m)	81.244
Minimum Outlet Pipe Diameter (mm)	100
Suggested Manhole Diameter (mm)	1200

Control Points	Head (m)	Flow (l/s)	Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	1.000	3.0	Kick-Flo®	0.623	2.4
Flush-Flo™	0.297	3.0	Mean Flow over Head Range	-	2.6

The hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake® Optimum as specified. Should another type of control device other than a Hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	2.4	0.800	2.7	2.000	4.1	4.000	5.7	7.000	7.4
0.200	2.9	1.000	3.0	2.200	4.3	4.500	6.0	7.500	7.7
0.300	3.0	1.200	3.3	2.400	4.5	5.000	6.3	8.000	7.9
0.400	2.9	1.400	3.5	2.600	4.7	5.500	6.6	8.500	8.2
0.500	2.8	1.600	3.7	3.000	5.0	6.000	6.9	9.000	8.4
0.600	2.5	1.800	3.9	3.500	5.4	6.500	7.2	9.500	8.6

Hydro-Brake® Optimum Manhole: SFC71, DS/PN: S1.028, Volume (m³): 4.4

Unit Reference	MD-SHE-0227-2730-1000-2730
Design Head (m)	1.000
Design Flow (l/s)	27.3
Flush-Flo™	Calculated
Objective	Minimise upstream storage
Application	Surface
Sump Available	Yes
Diameter (mm)	227
Invert Level (m)	78.679
Minimum Outlet Pipe Diameter (mm)	300
Suggested Manhole Diameter (mm)	1500

Control Points	Head (m)	Flow (l/s)	Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	1.000	27.3	Kick-Flo®	0.740	23.6
Flush-Flo™	0.369	27.3	Mean Flow over Head Range	-	22.7

The hydrological calculations have been based on the Head/Discharge relationship for the Hydro-Brake® Optimum as specified. Should another type of control device other than a Hydro-Brake Optimum® be utilised then these storage routing calculations will be invalidated

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	7.6	0.800	24.5	2.000	38.1	4.000	53.2	7.000	69.8
0.200	22.7	1.000	27.3	2.200	39.9	4.500	56.3	7.500	72.2
0.300	27.1	1.200	29.8	2.400	41.6	5.000	59.3	8.000	74.5
0.400	27.2	1.400	32.1	2.600	43.2	5.500	62.1	8.500	76.7
0.500	26.9	1.600	34.2	3.000	46.3	6.000	64.8	9.000	78.9
0.600	26.1	1.800	36.2	3.500	49.9	6.500	67.3	9.500	81.0

Storage Structures for Storm

Porous Car Park Manhole: SPP05, DS/PN: S1.000

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	21.6
Max Percolation (l/s)	28.8	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	82.850	Cap Volume Depth (m)	0.730

Porous Car Park Manhole: SPP04, DS/PN: S2.000

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	35.9
Max Percolation (l/s)	47.9	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	83.190	Cap Volume Depth (m)	0.480

Porous Car Park Manhole: SPP06, DS/PN: S3.000

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	21.7
Max Percolation (l/s)	28.9	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	83.010	Cap Volume Depth (m)	0.480

Complex Manhole: SPP10, DS/PN: S4.000

Cellular Storage

Invert Level (m)	82.755	Safety Factor	2.0
Infiltration Coefficient Base (m/hr)	0.00000	Porosity	0.95
Infiltration Coefficient Side (m/hr)	0.00000		

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	103.7	103.7	0.300	103.7	115.9

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	33.6
Max Percolation (l/s)	44.8	Slope (1:X)	120.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	83.055	Cap Volume Depth (m)	0.350

Porous Car Park Manhole: SPP08, DS/PN: S5.000

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	9.6
Membrane Percolation (mm/hr)	1000	Length (m)	21.6
Max Percolation (l/s)	57.6	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	82.470	Cap Volume Depth (m)	0.480

Complex Manhole: SPP03, DS/PN: S6.000

Cellular Storage

Invert Level (m)	82.470	Safety Factor	2.0
Infiltration Coefficient Base (m/hr)	0.00000	Porosity	0.95
Infiltration Coefficient Side (m/hr)	0.00000		

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	115.2	115.2	0.300	115.2	128.1

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	35.9
Max Percolation (l/s)	47.9	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	82.770	Cap Volume Depth (m)	0.300

Porous Car Park Manhole: SPP11, DS/PN: S7.000

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	9.6
Membrane Percolation (mm/hr)	1000	Length (m)	24.0
Max Percolation (l/s)	64.0	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	82.400	Membrane Depth (mm)	0

Complex Manhole: SPP14, DS/PN: S8.000

Cellular Storage

Invert Level (m)	82.235	Safety Factor	2.0
Infiltration Coefficient Base (m/hr)	0.00000	Porosity	0.95
Infiltration Coefficient Side (m/hr)	0.00000		

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	69.1	69.1	0.300	69.1	79.1

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	16.8
Max Percolation (l/s)	22.4	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	82.535	Membrane Depth (mm)	0

Porous Car Park Manhole: SPP16, DS/PN: S9.000

Infiltration Coefficient Base (m/hr)	0.00000	Invert Level (m)	82.220
Membrane Percolation (mm/hr)	1000	Width (m)	9.6
Max Percolation (l/s)	64.0	Length (m)	24.0
Safety Factor	2.0	Slope (1:X)	0.0
Porosity	0.30	Depression Storage (mm)	5

Porous Car Park Manhole: SPP16, DS/PN: S9.000

Evaporation (mm/day) 3 Membrane Depth (mm) 0

Complex Manhole: SPP17, DS/PN: S10.000

Cellular Storage

Invert Level (m)	82.000	Safety Factor	2.0
Infiltration Coefficient Base (m/hr)	0.00000	Porosity	0.95
Infiltration Coefficient Side (m/hr)	0.00000		

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	138.2	138.2	0.300	138.2	152.3

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	48.0
Max Percolation (l/s)	64.0	Slope (1:X)	103.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	82.300	Membrane Depth (mm)	0

Complex Manhole: SPP01, DS/PN: S11.000

Cellular Storage

Invert Level (m)	82.160	Safety Factor	2.0
Infiltration Coefficient Base (m/hr)	0.00000	Porosity	0.95
Infiltration Coefficient Side (m/hr)	0.00000		

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	92.1	92.1	0.300	92.1	103.6

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	33.8
Max Percolation (l/s)	45.1	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	82.460	Cap Volume Depth (m)	0.410

Complex Manhole: SPP02, DS/PN: S12.000

Cellular Storage

Invert Level (m)	82.340	Safety Factor	2.0
Infiltration Coefficient Base (m/hr)	0.00000	Porosity	0.95
Infiltration Coefficient Side (m/hr)	0.00000		

Cellular Storage

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	34.5	34.5	0.300	34.5	41.5

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	35.9
Max Percolation (l/s)	47.9	Slope (1:X)	89.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	82.640	Cap Volume Depth (m)	0.300

Porous Car Park Manhole: SPP13, DS/PN: S13.000

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	9.6
Max Percolation (l/s)	12.8	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	82.290	Membrane Depth (mm)	0

Complex Manhole: SPP12, DS/PN: S14.000

Cellular Storage

Invert Level (m)	81.780	Safety Factor	2.0
Infiltration Coefficient Base (m/hr)	0.00000	Porosity	0.95
Infiltration Coefficient Side (m/hr)	0.00000		

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	126.7	126.7	0.300	126.7	140.2

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	6.0
Membrane Percolation (mm/hr)	1000	Length (m)	40.8
Max Percolation (l/s)	68.0	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	82.080	Membrane Depth (mm)	0

Complex Manhole: SPP18, DS/PN: S15.000

Cellular Storage

Invert Level (m)	82.300	Safety Factor	2.0
Infiltration Coefficient Base (m/hr)	0.00000	Porosity	0.95
Infiltration Coefficient Side (m/hr)	0.00000		

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	138.2	138.2	0.300	138.2	152.3

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	45.5
Max Percolation (l/s)	60.7	Slope (1:X)	107.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	82.600	Membrane Depth (mm)	0

Complex Manhole: SPP19, DS/PN: S16.000

Cellular Storage

Invert Level (m)	81.970	Safety Factor	2.0
Infiltration Coefficient Base (m/hr)	0.00000	Porosity	0.95
Infiltration Coefficient Side (m/hr)	0.00000		

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	69.1	69.1	0.300	69.1	79.1

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	48.1
Max Percolation (l/s)	64.1	Slope (1:X)	87.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	82.270	Membrane Depth (mm)	0

Complex Manhole: SPP20, DS/PN: S17.000

Cellular Storage

Invert Level (m)	81.740	Safety Factor	2.0
Infiltration Coefficient Base (m/hr)	0.00000	Porosity	0.95
Infiltration Coefficient Side (m/hr)	0.00000		

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	184.3	184.3	0.300	184.3	200.6

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	5.5
Membrane Percolation (mm/hr)	1000	Length (m)	55.2
Max Percolation (l/s)	84.3	Slope (1:X)	99.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	82.040	Membrane Depth (mm)	0

Porous Car Park Manhole: SPP21, DS/PN: S18.000

Infiltration Coefficient Base (m/hr)	0.00000	Invert Level (m)	81.790
Membrane Percolation (mm/hr)	1000	Width (m)	7.0
Max Percolation (l/s)	706.6	Length (m)	363.4
Safety Factor	2.0	Slope (1:X)	0.0
Porosity	0.30	Depression Storage (mm)	5

Porous Car Park Manhole: SPP21, DS/PN: S18.000

Evaporation (mm/day) 3 Membrane Depth (mm) 0

Cellular Storage Manhole: SRAIN GARDEN, DS/PN: S19.000

Invert Level (m) 81.200 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.00000

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	27.0	27.0	1.000	27.0	47.8	1.001	0.0	47.8

Complex Manhole: SPP26, DS/PN: S20.000

Cellular Storage

Invert Level (m) 81.845 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.00000

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	80.6	80.6	0.300	80.6	91.4

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	5.7
Membrane Percolation (mm/hr)	1000	Length (m)	50.5
Max Percolation (l/s)	80.0	Slope (1:X)	90.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	82.145	Membrane Depth (mm)	0

Complex Manhole: SPP28, DS/PN: S21.000

Cellular Storage

Invert Level (m) 81.780 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.00000

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	149.7	149.7	0.300	149.7	164.4

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	43.3
Max Percolation (l/s)	57.7	Slope (1:X)	97.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	82.080	Membrane Depth (mm)	0

Complex Manhole: SPP30, DS/PN: S22.000

Cellular Storage

Invert Level (m)	81.865	Safety Factor	2.0
Infiltration Coefficient Base (m/hr)	0.00000	Porosity	0.95
Infiltration Coefficient Side (m/hr)	0.00000		

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	80.6	80.6	0.300	80.6	91.4

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	43.3
Max Percolation (l/s)	57.7	Slope (1:X)	107.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	82.165	Membrane Depth (mm)	0

Complex Manhole: SPP32, DS/PN: S23.000

Cellular Storage

Invert Level (m)	81.605	Safety Factor	2.0
Infiltration Coefficient Base (m/hr)	0.00000	Porosity	0.95
Infiltration Coefficient Side (m/hr)	0.00000		

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	126.7	126.7	0.300	126.7	140.2

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	43.2
Max Percolation (l/s)	57.6	Slope (1:X)	120.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.905	Membrane Depth (mm)	0

Complex Manhole: SPP35, DS/PN: S24.000

Cellular Storage

Invert Level (m)	81.690	Safety Factor	2.0
Infiltration Coefficient Base (m/hr)	0.00000	Porosity	0.95
Infiltration Coefficient Side (m/hr)	0.00000		

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	46.1	46.1	0.300	46.1	54.2

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	43.4
Max Percolation (l/s)	57.9	Slope (1:X)	171.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.990	Membrane Depth (mm)	0

Complex Manhole: SPP34, DS/PN: S25.000

Cellular Storage

Invert Level (m)	81.640	Safety Factor	2.0
Infiltration Coefficient Base (m/hr)	0.00000	Porosity	0.95
Infiltration Coefficient Side (m/hr)	0.00000		

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	149.7	149.7	0.300	149.7	164.4

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	5.8
Membrane Percolation (mm/hr)	1000	Length (m)	44.5
Max Percolation (l/s)	71.7	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.940	Membrane Depth (mm)	0

Porous Car Park Manhole: SPP27, DS/PN: S26.000

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	12.0
Max Percolation (l/s)	16.0	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	82.540	Membrane Depth (mm)	0

Porous Car Park Manhole: SPP31, DS/PN: S27.000

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	9.6
Membrane Percolation (mm/hr)	1000	Length (m)	20.4
Max Percolation (l/s)	54.4	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.890	Membrane Depth (mm)	0

Porous Car Park Manhole: SPP36, DS/PN: S28.000

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	9.6
Membrane Percolation (mm/hr)	1000	Length (m)	32.5
Max Percolation (l/s)	86.7	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.610	Membrane Depth (mm)	0

Porous Car Park Manhole: SPP41, DS/PN: S29.000

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	9.6
Membrane Percolation (mm/hr)	1000	Length (m)	39.6
Max Percolation (l/s)	105.6	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.530	Membrane Depth (mm)	0

Porous Car Park Manhole: SPP40, DS/PN: S30.000

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	9.6
Membrane Percolation (mm/hr)	1000	Length (m)	43.4
Max Percolation (l/s)	115.7	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.440	Membrane Depth (mm)	0

Complex Manhole: SPP39, DS/PN: S31.000

Cellular Storage

Invert Level (m)	81.575	Safety Factor	2.0
Infiltration Coefficient Base (m/hr)	0.00000	Porosity	0.95
Infiltration Coefficient Side (m/hr)	0.00000		

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	16.1	16.1	0.300	16.1	20.9

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	5.7
Membrane Percolation (mm/hr)	1000	Length (m)	22.9
Max Percolation (l/s)	36.3	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.875	Membrane Depth (mm)	0

Porous Car Park Manhole: SPP47, DS/PN: S32.000

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	9.6
Membrane Percolation (mm/hr)	1000	Length (m)	43.4
Max Percolation (l/s)	115.7	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.350	Membrane Depth (mm)	0

Porous Car Park Manhole: SPP55, DS/PN: S33.000

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	9.6
Membrane Percolation (mm/hr)	1000	Length (m)	42.9
Max Percolation (l/s)	114.4	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.360	Membrane Depth (mm)	0

Complex Manhole: SPP46, DS/PN: S34.000

Cellular Storage

Invert Level (m)	81.420	Safety Factor	2.0
Infiltration Coefficient Base (m/hr)	0.00000	Porosity	0.95
Infiltration Coefficient Side (m/hr)	0.00000		

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	115.2	115.2	0.300	115.2	128.1

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	38.5
Max Percolation (l/s)	51.3	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.720	Membrane Depth (mm)	0

Porous Car Park Manhole: SPP61, DS/PN: S35.000

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	9.6
Membrane Percolation (mm/hr)	1000	Length (m)	42.9
Max Percolation (l/s)	114.4	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.270	Membrane Depth (mm)	0

Complex Manhole: SPP44, DS/PN: S36.000

Cellular Storage

Invert Level (m)	81.570	Safety Factor	2.0
Infiltration Coefficient Base (m/hr)	0.00000	Porosity	0.95
Infiltration Coefficient Side (m/hr)	0.00000		

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	57.6	57.6	0.300	57.6	66.7

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	21.6
Max Percolation (l/s)	28.8	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.870	Membrane Depth (mm)	0

Complex Manhole: SPP45, DS/PN: S38.000

Cellular Storage

Invert Level (m) 81.495 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.00000

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	92.1	92.1	0.300	92.1	103.6

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	38.3
Max Percolation (l/s)	51.1	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.795	Membrane Depth (mm)	0

Porous Car Park Manhole: SPP60, DS/PN: S39.000

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	9.6
Membrane Percolation (mm/hr)	1000	Length (m)	4.8
Max Percolation (l/s)	12.8	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.510	Membrane Depth (mm)	0

Cellular Storage Manhole: STANK 3, DS/PN: S41.000

Invert Level (m) 80.350 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.00000

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	70.0	70.0	1.000	70.0	103.5	1.001	0.0	103.5

Complex Manhole: SPP67, DS/PN: S42.000

Cellular Storage

Invert Level (m) 81.440 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.00000

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	138.2	138.2	0.300	138.2	152.3

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	40.8
Max Percolation (l/s)	54.4	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.740	Membrane Depth (mm)	0

Complex Manhole: SPP68, DS/PN: S43.000

Cellular Storage

Invert Level (m)	81.415	Safety Factor	2.0
Infiltration Coefficient Base (m/hr)	0.00000	Porosity	0.95
Infiltration Coefficient Side (m/hr)	0.00000		

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	161.3	161.3	0.300	161.3	176.5

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	55.4
Max Percolation (l/s)	73.9	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.715	Membrane Depth (mm)	0

Porous Car Park Manhole: SPP69, DS/PN: S44.000

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	36.7
Max Percolation (l/s)	48.9	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.610	Membrane Depth (mm)	0

Complex Manhole: SPP66, DS/PN: S45.000

Cellular Storage

Invert Level (m)	81.590	Safety Factor	2.0
Infiltration Coefficient Base (m/hr)	0.00000	Porosity	0.95
Infiltration Coefficient Side (m/hr)	0.00000		

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	92.1	92.1	0.300	92.1	103.6

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	38.4
Max Percolation (l/s)	51.2	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.890	Membrane Depth (mm)	0

Porous Car Park Manhole: SPP65, DS/PN: S46.000

Infiltration Coefficient Base (m/hr)	0.00000	Invert Level (m)	81.760
Membrane Percolation (mm/hr)	1000	Width (m)	4.8
Max Percolation (l/s)	42.0	Length (m)	31.5
Safety Factor	2.0	Slope (1:X)	0.0
Porosity	0.30	Depression Storage (mm)	5

Porous Car Park Manhole: SPP65, DS/PN: S46.000

Evaporation (mm/day) 3 Membrane Depth (mm) 0

Cellular Storage Manhole: STANK 2, DS/PN: S47.000

Invert Level (m) 80.000 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.00000

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	120.0	120.0	1.000	120.0	163.8	1.001	0.0	163.8

Porous Car Park Manhole: SPP53, DS/PN: S54.000

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	40.8
Max Percolation (l/s)	54.4	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.390	Membrane Depth (mm)	0

Complex Manhole: SPP57, DS/PN: S55.000

Cellular Storage

Invert Level (m) 81.645 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.00000

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	69.1	0.0	0.300	69.1	0.0

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	28.8
Max Percolation (l/s)	38.4	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.945	Membrane Depth (mm)	0

Porous Car Park Manhole: SPP48, DS/PN: S56.000

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	9.6
Membrane Percolation (mm/hr)	1000	Length (m)	46.7
Max Percolation (l/s)	124.5	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.450	Membrane Depth (mm)	0

Complex Manhole: SPP50, DS/PN: S57.000

Cellular Storage

Invert Level (m) 81.545 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.00000

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	46.0	46.0	0.300	46.0	54.1

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	9.6
Max Percolation (l/s)	12.8	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.845	Membrane Depth (mm)	0

Porous Car Park Manhole: Spp56, DS/PN: S58.000

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	9.6
Membrane Percolation (mm/hr)	1000	Length (m)	24.0
Max Percolation (l/s)	64.0	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.330	Membrane Depth (mm)	0

Complex Manhole: SPP59, DS/PN: S59.000

Cellular Storage

Invert Level (m) 81.495 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.00000

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	69.1	69.1	0.300	69.1	79.1

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	24.0
Max Percolation (l/s)	32.0	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.795	Membrane Depth (mm)	0

Complex Manhole: SPP63, DS/PN: S60.000

Cellular Storage

Invert Level (m) 81.445 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.00000

Cellular Storage

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	92.1	92.1	0.300	92.1	103.6

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	21.5
Max Percolation (l/s)	28.7	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.745	Membrane Depth (mm)	0

Complex Manhole: SPP62, DS/PN: S61.000

Cellular Storage

Invert Level (m)	81.510	Safety Factor	2.0
Infiltration Coefficient Base (m/hr)	0.00000	Porosity	0.95
Infiltration Coefficient Side (m/hr)	0.00000		

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	115.0	115.0	0.300	115.0	127.9

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	24.0
Max Percolation (l/s)	32.0	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.810	Membrane Depth (mm)	0

Complex Manhole: SPP64, DS/PN: S62.000

Cellular Storage

Invert Level (m)	81.260	Safety Factor	2.0
Infiltration Coefficient Base (m/hr)	0.00000	Porosity	0.95
Infiltration Coefficient Side (m/hr)	0.00000		

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	879.2	879.2	0.300	879.2	914.8

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	4.8
Membrane Percolation (mm/hr)	1000	Length (m)	413.8
Max Percolation (l/s)	551.7	Slope (1:X)	0.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	81.560	Membrane Depth (mm)	0

Tank or Pond Manhole: SBASIN 1, DS/PN: S70.001

Invert Level (m) 81.500

Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)
0.000	703.0	1.000	1321.0	1.001	0.0

Tank or Pond Manhole: SFEATURE POND, DS/PN: S76.000

Invert Level (m) 82.000

Depth (m)	Area (m²)	Depth (m)	Area (m²)
0.000	995.0	0.200	1458.0

Tank or Pond Manhole: SBASIN 2, DS/PN: S77.002

Invert Level (m) 81.500

Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)
0.000	177.6	1.000	603.0	1.001	0.0

Cellular Storage Manhole: STANK, DS/PN: S1.027

Invert Level (m) 78.732 Safety Factor 2.0
Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.98
Infiltration Coefficient Side (m/hr) 0.00000

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	2350.0	2350.0	1.000	2350.0	2543.9	1.001	0.0	2544.0

2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m³/ha Storage	2.000
Hot Start Level (mm)	0	Inlet Coeffiecient	0.800
Manhole Headloss Coeff (Global)	0.500	Flow per Person per Day (l/per/day)	0.000
Foul Sewage per hectare (l/s)	0.000		

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 60 Number of Storage Structures 58 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model		FEH	Data Type Point
FEH Rainfall Version		2013	Cv (Summer) 1.000
Site Location	GB 455061 221552 SP 55061 21552		Cv (Winter) 1.000

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	OFF
Inertia Status	OFF

Profile(s)	Summer and Winter
Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	2, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)	Surcharged Depth (m)
S1.000	SPP05	480 Winter	2	+0%	2/120 Summer				83.012	0.062
S1.001	SFC05	480 Winter	2	+0%	2/15 Summer				83.053	0.233
S2.000	SPP04	480 Summer	2	+0%	100/120 Summer				83.213	-0.077
S2.001	SFC04	480 Summer	2	+0%	2/30 Summer				83.214	0.314
S3.000	SPP06	480 Summer	2	+0%	30/240 Summer				83.054	-0.056
S3.001	SFC06	480 Summer	2	+0%	2/15 Summer				83.055	0.335
S1.002	SSW23	480 Winter	2	+0%					82.203	-0.087
S4.000	SPP10	480 Winter	2	+0%	30/60 Summer				82.838	-0.017
S4.001	SFC10	480 Winter	2	+0%	2/15 Summer				82.840	0.210
S5.000	SPP08	480 Winter	2	+0%	2/240 Summer				82.588	0.018
S5.001	SFC08	480 Winter	2	+0%	2/120 Summer				82.625	0.075
S4.002	S13	480 Winter	2	+0%					82.197	-0.090
S1.003	SSW24	480 Winter	2	+0%					81.965	-0.081
S6.000	SPP03	360 Winter	2	+0%	2/360 Summer				82.571	0.001
S6.001	SFC03	360 Winter	2	+0%	2/15 Summer				82.574	0.274
S1.004	S7	480 Winter	2	+0%					81.922	-0.077
S7.000	SPP11	480 Winter	2	+0%	2/240 Summer				82.521	0.021
S7.001	SFC11	480 Winter	2	+0%	2/15 Summer				82.561	0.161
S1.005	S7	480 Winter	2	+0%					81.818	-0.076
S8.000	SPP14	480 Winter	2	+0%	30/60 Summer				82.316	-0.019
S8.001	SFC14	480 Winter	2	+0%	2/15 Summer				82.323	0.238
S1.006	S6	480 Winter	2	+0%					81.714	-0.075
S9.000	SPP16	960 Winter	2	+0%	2/240 Summer				82.346	0.026
S9.001	SFC16	960 Winter	2	+0%	2/30 Summer				82.365	0.105
S1.007	SSW25	480 Winter	2	+0%					81.653	-0.073
S10.000	SPP17	480 Winter	2	+0%	30/30 Summer				82.094	-0.006
S10.001	SFC17	480 Winter	2	+0%	2/15 Summer				82.127	0.207
S1.008	S17	480 Winter	2	+0%					81.500	-0.071
S11.000	SPP01	360 Winter	2	+0%	2/240 Summer				82.269	0.009

2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S1.000	SPP05	0.000	0.02		847	0.2	SURCHARGED	
S1.001	SFC05	0.000	0.00			0.1	SURCHARGED	
S2.000	SPP04	0.000	0.02		252	0.1	OK	
S2.001	SFC04	0.000	0.01			0.1	SURCHARGED	
S3.000	SPP06	0.000	0.02		275	0.1	OK	
S3.001	SFC06	0.000	0.01			0.1	SURCHARGED	
S1.002	SSW23	0.000	0.04			0.2	OK	
S4.000	SPP10	0.000	0.03		531	0.2	OK	
S4.001	SFC10	0.000	0.02			0.1	SURCHARGED	
S5.000	SPP08	0.000	0.06		655	0.2	SURCHARGED	
S5.001	SFC08	0.000	0.01			0.1	SURCHARGED	
S4.002	S13	0.000	0.02			0.3	OK*	
S1.003	SSW24	0.000	0.08			0.4	OK	
S6.000	SPP03	0.000	0.05		361	0.3	SURCHARGED	
S6.001	SFC03	0.000	0.03			0.3	SURCHARGED	
S1.004	S7	0.000	0.12			0.7	OK*	
S7.000	SPP11	0.000	0.02		795	0.2	SURCHARGED	
S7.001	SFC11	0.000	0.01			0.1	SURCHARGED	
S1.005	S7	0.000	0.14			0.8	OK*	
S8.000	SPP14	0.000	0.01		807	0.1	OK	
S8.001	SFC14	0.000	0.00			0.1	SURCHARGED	
S1.006	S6	0.000	0.15			0.9	OK*	
S9.000	SPP16	0.000	0.02		958	0.1	SURCHARGED	
S9.001	SFC16	0.000	0.01			0.1	SURCHARGED	
S1.007	SSW25	0.000	0.17			1.0	OK	
S10.000	SPP17	0.000	0.04		839	0.2	OK	
S10.001	SFC17	0.000	0.01			0.1	SURCHARGED	
S1.008	S17	0.000	0.18			1.1	OK*	
S11.000	SPP01	0.000	0.06		367	0.4	SURCHARGED	

2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
S11.001	SFC01	360 Winter	2	+0%	2/15 Summer				82.304
S12.000	SPP02	480 Summer	2	+0%	30/30 Summer				82.431
S12.001	SFC02	480 Summer	2	+0%	2/15 Summer				82.432
S11.002	SSW26	360 Winter	2	+0%					81.665
S13.000	SPP13	240 Summer	2	+0%	30/240 Summer				82.326
S13.001	SFC13	240 Summer	2	+0%	2/15 Summer				82.329
S11.003	S27	360 Summer	2	+0%					81.466
S1.009	SSW27	480 Winter	2	+0%					81.416
S14.000	SPP12	360 Winter	2	+0%	30/30 Summer				81.872
S14.001	SFC12	360 Winter	2	+0%	2/15 Summer				81.912
S15.000	SPP18	480 Winter	2	+0%	30/60 Summer				82.389
S15.001	SFC18	480 Winter	2	+0%	2/15 Summer				82.390
S16.000	SPP19	480 Summer	2	+0%	30/120 Summer				82.039
S16.001	SFC19	960 Summer	2	+0%	2/15 Summer				82.042
S15.002	SSW28	480 Winter	2	+0%					81.258
S1.010	SSW29	480 Winter	2	+0%					81.233
S17.000	SPP20	480 Winter	2	+0%	30/60 Summer				81.831
S17.001	SFC20	480 Winter	2	+0%	2/15 Summer				81.834
S1.011	S25	480 Winter	2	+0%					81.120
S18.000	SPP21	1440 Summer	2	+0%	2/1440 Summer				81.897
S18.001	SFC21	1440 Summer	2	+0%	2/15 Summer				81.899
S19.000	SRAIN GARDEN	15 Summer	2	+0%	30/15 Summer				81.341
S19.001	SRG FC	15 Summer	2	+0%	30/15 Summer				81.337
S1.012	S27	15 Summer	2	+0%					81.084
S20.000	SPP26	960 Summer	2	+0%	30/60 Summer				81.923
S20.001	SFC26	960 Summer	2	+0%	2/15 Summer				81.923
S1.013	SSW30	15 Summer	2	+0%					80.988
S21.000	SPP28	960 Winter	2	+0%	2/960 Winter				81.880
S21.001	SFC28	960 Winter	2	+0%	2/15 Summer				81.916
S1.014	SSW31	15 Summer	2	+0%					80.920
S22.000	SPP30	480 Summer	2	+0%	30/240 Summer				81.916
S22.001	SFC30	480 Summer	2	+0%	2/15 Summer				81.917
S1.015	S66	15 Summer	2	+0%					80.862
S23.000	SPP32	960 Winter	2	+0%	2/240 Summer				81.724
S23.001	SFC32	960 Winter	2	+0%	2/15 Summer				81.771
S1.016	S45	15 Summer	2	+0%					80.805
S24.000	SPP35	960 Summer	2	+0%	30/30 Summer				81.784
S24.001	SFC35	960 Summer	2	+0%	2/15 Summer				81.785
S1.017	S70	15 Summer	2	+0%					80.758
S25.000	SPP34	480 Winter	2	+0%	30/240 Summer				81.723
S25.001	SFC34	480 Winter	2	+0%	2/15 Summer				81.766
S1.018	S46	15 Summer	2	+0%					80.720
S1.019	S47	15 Summer	2	+0%					80.678
S26.000	SPP27	360 Summer	2	+0%	30/240 Summer				82.578
S26.001	SFC27	360 Summer	2	+0%	2/15 Summer				82.579
S26.002	SSW32	360 Summer	2	+0%					81.605
S27.000	SPP31	960 Summer	2	+0%	2/120 Summer				82.041
S27.001	SFC31	960 Summer	2	+0%	2/120 Summer				82.070
S26.003	S80	480 Winter	2	+0%					81.527
S26.004	S56	480 Winter	2	+0%					81.441
S28.000	SPP36	960 Winter	2	+0%	2/120 Summer				81.797
S28.001	SFC36	960 Winter	2	+0%	2/120 Summer				81.839
S26.005	S84	960 Summer	2	+0%					81.338
S29.000	SPP41	480 Winter	2	+0%	2/120 Summer				81.684
S29.001	SFC41	480 Winter	2	+0%	2/120 Summer				81.717
S26.006	SSW33	480 Winter	2	+0%					81.144
S30.000	SPP40	960 Winter	2	+0%	2/240 Summer				81.597

2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m^3)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S11.001	SFC01	0.204	0.000	0.02			0.2	SURCHARGED	
S12.000	SPP02	-0.009	0.000	0.02		460	0.1	OK	
S12.001	SFC02	0.262	0.000	0.00			0.1	SURCHARGED	
S11.002	SSW26	-0.085	0.000	0.05			0.3	OK	
S13.000	SPP13	-0.064	0.000	0.03		114	0.2	OK	
S13.001	SFC13	0.329	0.000	0.00			0.1	SURCHARGED	
S11.003	S27	-0.084	0.000	0.06			0.4	OK*	
S1.009	SSW27	-0.066	0.000	0.25			1.5	OK	
S14.000	SPP12	-0.008	0.000	0.06		385	0.4	OK	
S14.001	SFC12	0.262	0.000	0.02			0.3	SURCHARGED	
S15.000	SPP18	-0.011	0.000	0.02		779	0.1	OK	
S15.001	SFC18	0.190	0.000	0.02			0.1	SURCHARGED	
S16.000	SPP19	-0.031	0.000	0.02		664	0.1	OK	
S16.001	SFC19	0.242	0.000	0.00			0.1	SURCHARGED	
S15.002	SSW28	-0.092	0.000	0.02			0.2	OK	
S1.010	SSW29	-0.114	0.000	0.13			1.9	OK	
S17.000	SPP20	-0.009	0.000	0.03		773	0.2	OK	
S17.001	SFC20	0.184	0.000	0.01			0.2	SURCHARGED	
S1.011	S25	-0.193	0.000	0.05			2.1	OK*	
S18.000	SPP21	0.007	0.000	0.01			0.1	SURCHARGED	
S18.001	SFC21	0.399	0.000	0.01			0.1	SURCHARGED	
S19.000	SRAIN GARDEN	-0.084	0.000	0.47		8	14.0	OK	
S19.001	SRG FC	-0.063	0.000	0.24			14.2	OK	
S1.012	S27	-0.135	0.000	0.34			14.4	OK*	
S20.000	SPP26	-0.022	0.000	0.01		907	0.1	OK	
S20.001	SFC26	0.298	0.000	0.01			0.1	SURCHARGED	
S1.013	SSW30	-0.127	0.000	0.39			14.2	OK	
S21.000	SPP28	0.000	0.000	0.04			0.2	SURCHARGED	
S21.001	SFC28	0.216	0.000	0.01			0.1	SURCHARGED	
S1.014	SSW31	-0.117	0.000	0.46			14.4	OK	
S22.000	SPP30	-0.049	0.000	0.02		516	0.1	OK	
S22.001	SFC30	0.317	0.000	0.00			0.1	SURCHARGED	
S1.015	S66	-0.126	0.000	0.40			14.5	OK*	
S23.000	SPP32	0.019	0.000	0.04			0.2	SURCHARGED	
S23.001	SFC32	0.186	0.000	0.01			0.1	SURCHARGED	
S1.016	S45	-0.118	0.000	0.45			14.4	OK*	
S24.000	SPP35	-0.006	0.000	0.01		832	0.1	OK	
S24.001	SFC35	0.185	0.000	0.00			0.1	SURCHARGED	
S1.017	S70	-0.114	0.000	0.49			14.6	OK*	
S25.000	SPP34	-0.067	0.000	0.02		870	0.3	OK	
S25.001	SFC34	0.266	0.000	0.01			0.1	SURCHARGED	
S1.018	S46	-0.114	0.000	0.49			14.7	OK*	
S1.019	S47	-0.130	0.000	0.37			14.6	OK*	
S26.000	SPP27	-0.062	0.000	0.02		152	0.1	OK	
S26.001	SFC27	0.329	0.000	0.01			0.1	SURCHARGED	
S26.002	SSW32	-0.095	0.000	0.01			0.1	OK	
S27.000	SPP31	0.051	0.000	0.05		948	0.2	SURCHARGED	
S27.001	SFC31	0.080	0.000	0.01			0.1	SURCHARGED	
S26.003	S80	-0.088	0.000	0.03			0.2	OK*	
S26.004	S56	-0.089	0.000	0.03			0.2	OK*	
S28.000	SPP36	0.087	0.000	0.08			0.3	SURCHARGED	
S28.001	SFC36	0.129	0.000	0.02			0.2	SURCHARGED	
S26.005	S84	-0.082	0.000	0.08			0.4	OK*	
S29.000	SPP41	0.054	0.000	0.11		575	0.5	SURCHARGED	
S29.001	SFC41	0.087	0.000	0.02			0.3	SURCHARGED	
S26.006	SSW33	-0.078	0.000	0.11			0.7	OK	

2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m^3)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S30.000	SPP40	0.057	0.000	0.07			0.3	SURCHARGED	

2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
S30.001	SFC40	960 Winter	2	+0%	2/120 Summer				81.640
S26.007	S91	480 Winter	2	+0%					80.629
S31.000	SPP39	480 Winter	2	+0%	2/30 Summer				81.837
S31.001	SFC39	480 Winter	2	+0%	2/15 Summer				81.878
S1.020	SSW34	15 Summer	2	+0%					80.609
S1.021	S53	15 Summer	2	+0%					80.553
S32.000	SPP47	1440 Winter	2	+0%	2/240 Summer				81.510
S32.001	SFC47	960 Winter	2	+0%	2/240 Summer				81.547
S1.022	S96	15 Summer	2	+0%					80.496
S1.023	S53	15 Summer	2	+0%					80.442
S33.000	SPP55	960 Winter	2	+0%	2/240 Summer				81.516
S33.001	SFC55	960 Winter	2	+0%	2/60 Summer				81.558
S1.024	S100	15 Summer	2	+0%					80.381
S34.000	SPP46	960 Winter	2	+0%	2/360 Summer				81.533
S34.001	SFC46	960 Winter	2	+0%	2/15 Summer				81.571
S1.025	SSW35	15 Summer	2	+0%					80.322
S35.000	SPP61	1440 Winter	2	+0%	2/240 Summer				81.432
S35.001	SFC61	1440 Winter	2	+0%	2/240 Summer				81.474
S1.026	SSW36	15 Summer	2	+0%					80.265
S36.000	SPP44	480 Winter	2	+0%	30/60 Summer				81.651
S36.001	SFC44	480 Winter	2	+0%	2/15 Summer				81.657
S37.000	SHE-SW-14	15 Summer	2	+0%					81.983
S36.002	SHE-SW-15	15 Summer	2	+0%	100/15 Summer				81.010
S38.000	SPP45	960 Winter	2	+0%	30/60 Summer				81.588
S38.001	SFC45	960 Winter	2	+0%	2/15 Summer				81.594
S36.003	S145	15 Summer	2	+0%	100/15 Summer				80.849
S39.000	SPP60	240 Summer	2	+0%	30/30 Summer				81.562
S39.001	SFC60	240 Summer	2	+0%	2/15 Summer				81.563
S36.004	S146	15 Summer	2	+0%					80.739
S40.000	SSW11	15 Summer	2	+0%	100/15 Summer				80.878
S40.001	SSW12	15 Summer	2	+0%	100/15 Summer				80.714
S40.002	SSW13	15 Summer	2	+0%	30/15 Summer				80.596
S41.000	STANK 3	240 Summer	2	+0%	30/15 Summer				80.532
S41.001	SHB 3	240 Summer	2	+0%	2/15 Summer				80.541
S40.003	S148	15 Summer	2	+0%					80.353
S42.000	SPP67	480 Winter	2	+0%	2/240 Summer				81.552
S42.001	SFC67	360 Winter	2	+0%	2/15 Summer				81.583
S40.004	S148	15 Summer	2	+0%	30/15 Summer				80.270
S40.005	SSW15	15 Summer	2	+0%	100/15 Summer				80.255
S43.000	SPP68	480 Winter	2	+0%	2/240 Summer				81.536
S43.001	SFC68	480 Winter	2	+0%	2/15 Summer				81.559
S40.006	S150	15 Summer	2	+0%	100/15 Summer				80.187
S44.000	SPP69	480 Summer	2	+0%	30/120 Summer				81.668
S44.001	SFC69	480 Summer	2	+0%	2/15 Summer				81.668
S40.007	S151	15 Summer	2	+0%	30/15 Summer				80.160
S40.008	SSW16	15 Summer	2	+0%	100/15 Summer				80.039
S45.000	SPP66	960 Winter	2	+0%	2/360 Summer				81.700
S45.001	SFC66	960 Winter	2	+0%	2/15 Summer				81.723
S46.000	SPP65	480 Summer	2	+0%	30/120 Summer				81.817
S46.001	SFC65	480 Winter	2	+0%	2/15 Summer				81.819
S47.000	STANK 2	240 Summer	2	+0%	30/15 Summer				80.198
S47.001	SHB 2	240 Summer	2	+0%	2/120 Summer				80.200
S40.009	SSW17	15 Summer	2	+0%	100/15 Summer				79.765
S48.000	SFEC-SW-21	15 Summer	2	+0%	100/15 Summer				81.624
S48.001	SFEC-SW-22	15 Summer	2	+0%	100/15 Summer				81.383
S48.002	SFEC-SW-23	15 Summer	2	+0%	100/15 Summer				81.221
S48.003	SFEC-SW-24	15 Summer	2	+0%	100/15 Summer				81.078

2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S30.001	SFC40	0.115	0.000	0.01			0.1	SURCHARGED	
S26.007	S91	-0.129	0.000	0.05			0.8	OK*	
S31.000	SPP39	0.162	0.000	0.04		564	0.2	SURCHARGED	
S31.001	SFC39	0.403	0.000	0.01			0.1	SURCHARGED	
S1.020	SSW34	-0.122	0.000	0.43			14.9	OK	
S1.021	S53	-0.115	0.000	0.48			14.9	OK*	
S32.000	SPP47	0.060	0.000	0.06			0.2	SURCHARGED	
S32.001	SFC47	0.097	0.000	0.01			0.1	SURCHARGED	
S1.022	S96	-0.124	0.000	0.41			14.9	OK*	
S1.023	S53	-0.112	0.000	0.50			14.9	OK*	
S33.000	SPP55	0.056	0.000	0.06			0.3	SURCHARGED	
S33.001	SFC55	0.128	0.000	0.01			0.1	SURCHARGED	
S1.024	S100	-0.127	0.000	0.39			15.0	OK*	
S34.000	SPP46	0.013	0.000	0.04			0.2	SURCHARGED	
S34.001	SFC46	0.216	0.000	0.00			0.1	SURCHARGED	
S1.025	SSW35	-0.112	0.000	0.50			15.0	OK	
S35.000	SPP61	0.062	0.000	0.06			0.2	SURCHARGED	
S35.001	SFC61	0.104	0.000	0.02			0.1	SURCHARGED	
S1.026	SSW36	-0.123	0.000	0.42			15.1	OK	
S36.000	SPP44	-0.019	0.000	0.01		672	0.1	OK	
S36.001	SFC44	0.237	0.000	0.00			0.1	SURCHARGED	
S37.000	SHE-SW-14	-0.217	0.000	0.17			21.7	OK	
S36.002	SHE-SW-15	-0.190	0.000	0.28			21.5	OK	
S38.000	SPP45	-0.007	0.000	0.01			0.1	OK	
S38.001	SFC45	0.224	0.000	0.00			0.1	SURCHARGED	
S36.003	S145	-0.176	0.000	0.36			21.9	OK*	
S39.000	SPP60	-0.048	0.000	0.04		102	0.2	OK	
S39.001	SFC60	0.193	0.000	0.01			0.1	SURCHARGED	
S36.004	S146	-0.226	0.000	0.14			21.9	OK*	
S40.000	SSW11	-0.222	0.000	0.15			12.4	OK	
S40.001	SSW12	-0.206	0.000	0.21			16.6	OK	
S40.002	SSW13	-0.185	0.000	0.31			25.8	OK	
S41.000	STANK 3	-0.118	0.000	0.04		100	2.2	OK	
S41.001	SHB 3	0.109	0.000	0.38			1.9	SURCHARGED	
S40.003	S148	-0.161	0.000	0.44			37.1	OK*	
S42.000	SPP67	0.012	0.000	0.05		600	0.3	SURCHARGED	
S42.001	SFC67	0.233	0.000	0.01			0.2	SURCHARGED	
S40.004	S148	-0.129	0.000	0.61			37.2	OK*	
S40.005	SSW15	-0.264	0.000	0.35			60.0	OK	
S43.000	SPP68	0.021	0.000	0.06		602	0.4	SURCHARGED	
S43.001	SFC68	0.209	0.000	0.01			0.3	SURCHARGED	
S40.006	S150	-0.253	0.000	0.35			59.7	OK*	
S44.000	SPP69	-0.042	0.000	0.05		479	0.3	OK	
S44.001	SFC69	0.218	0.000	0.00			0.1	SURCHARGED	
S40.007	S151	-0.236	0.000	0.45			80.0	OK*	
S40.008	SSW16	-0.407	0.000	0.22			82.1	OK	
S45.000	SPP66	0.010	0.000	0.03		991	0.2	SURCHARGED	
S45.001	SFC66	0.223	0.000	0.02			0.1	SURCHARGED	
S46.000	SPP65	-0.043	0.000	0.02		445	0.1	OK	
S46.001	SFC65	0.219	0.000	0.01			0.1	SURCHARGED	
S47.000	STANK 2	-0.027	0.000	0.07		151	2.1	OK	
S47.001	SHB 2	0.025	0.000	0.06			1.9	SURCHARGED	
S40.009	SSW17	-0.390	0.000	0.24			83.2	OK	
S48.000	SFEC-SW-21	-0.251	0.000	0.24			41.2	OK	
S48.001	SFEC-SW-22	-0.242	0.000	0.27			45.5	OK	
S48.002	SFEC-SW-23	-0.279	0.000	0.30			54.0	OK	

2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S48.003	SFEC-SW-24	-0.322	0.000	0.18			61.3	OK	

2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
S49.000	SFEC-SW-19	15 Summer	2	+0%					81.561
S49.001	SFEC-SW-20	15 Summer	2	+0%					81.357
S50.000	SFEC-SW-15	15 Summer	2	+0%	100/15 Summer				81.580
S50.001	SFEC-SW-17	15 Summer	2	+0%	100/15 Summer				81.498
S50.002	SFEC-SW-18	15 Summer	2	+0%	100/15 Summer				81.335
S48.004	SFEC-SW-25	15 Summer	2	+0%	100/15 Summer				81.018
S48.005	SFEC-SW-26	15 Summer	2	+0%					80.073
S40.010	SSW18	15 Summer	2	+0%	100/15 Summer				79.662
S40.011	SSW19	15 Summer	2	+0%	100/15 Summer				79.541
S51.000	SHE-SW-16	15 Summer	2	+0%	30/15 Summer				79.919
S51.001	SHE-SW-17	15 Summer	2	+0%	30/15 Summer				79.422
S40.012	S154	15 Summer	2	+0%					79.407
S52.000	SSwale In 1	1440 Summer	2	+0%					81.835
S52.001	SSwale 2	1440 Summer	2	+0%					81.835
S52.002	SSwale in 3	1440 Summer	2	+0%					81.835
S52.003	SSwale 4	1440 Summer	2	+0%					81.835
S53.000	SSW PUMP OUTFALL	1440 Summer	2	+0%					81.835
S52.004	SSwale in 5	1440 Summer	2	+0%					81.835
S52.005	SSwale 6	1440 Summer	2	+0%					81.835
S52.006	SSwale in 7	1440 Summer	2	+0%					81.837
S52.007	SSwale out	1440 Summer	2	+0%	2/120 Summer				81.842
S52.008	SSWALE FC70	15 Summer	2	+0%					81.575
S40.013	SSW20	15 Summer	2	+0%	100/15 Summer				79.383
S54.000	SPP53	480 Winter	2	+0%	2/240 Summer				81.528
S54.001	SFC53	480 Winter	2	+0%	2/120 Summer				81.557
S55.000	SPP57	480 Winter	2	+0%	30/60 Summer				81.723
S55.001	SFC57	480 Winter	2	+0%	2/15 Summer				81.723
S54.002	S170	480 Winter	2	+0%					80.977
S40.014	S167	15 Summer	2	+0%					79.277
S36.005	SSW22	15 Summer	2	+0%	100/15 Summer				79.121
S56.000	SPP48	960 Summer	2	+0%	2/120 Summer				81.601
S56.001	SFC48	960 Summer	2	+0%	2/120 Summer				81.633
S57.000	SPP50	360 Summer	2	+0%	30/30 Summer				81.613
S57.001	SFC50	360 Summer	2	+0%	2/15 Summer				81.615
S56.002	SSW36	480 Winter	2	+0%					81.021
S58.000	Spp56	960 Winter	2	+0%	2/120 Summer				81.506
S58.001	SFC56	960 Winter	2	+0%	2/120 Summer				81.538
S56.003	S187	480 Winter	2	+0%					80.879
S59.000	SPP59	480 Winter	2	+0%	30/60 Summer				81.584
S59.001	SFC59	480 Winter	2	+0%	2/15 Summer				81.591
S60.000	SPP63	480 Summer	2	+0%					81.463
S60.001	SFC63	480 Summer	2	+0%	2/15 Summer				81.464
S61.000	SPP62	480 Winter	2	+0%	30/60 Summer				81.584
S61.001	SFC62	480 Winter	2	+0%	2/15 Summer				81.586
S56.004	SSW37	480 Winter	2	+0%					80.720
S62.000	SPP64	960 Summer	2	+0%	2/240 Summer				81.387
S62.001	SFC64	480 Winter	2	+0%	2/15 Summer				81.403
S63.000	SFEC-SW-06	15 Summer	2	+0%	100/15 Summer				81.741
S63.001	SFEC-SW-07	15 Summer	2	+0%	100/15 Summer				81.676
S63.002	SFEC-SW-08	15 Summer	2	+0%	100/15 Summer				81.376
S63.003	SFEC-SW-09	15 Summer	2	+0%	100/15 Summer				81.051
S64.000	SFEC-SW-10	15 Summer	2	+0%	100/15 Summer				81.880
S64.001	SFEC-SW-12	15 Summer	2	+0%	100/15 Summer				81.593
S63.004	SFEC-SW-13	15 Summer	2	+0%	100/15 Summer				80.925
S63.005	SFEC-SW-14	15 Summer	2	+0%	30/15 Summer				80.731
S63.006	SSW05	15 Summer	2	+0%	100/15 Summer				80.630
S65.000	SFEC-SW-01	15 Summer	2	+0%	100/15 Summer				81.669

2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S49.000	SFEC-SW-19	-0.164	0.000	0.17			8.8	OK	
S49.001	SFEC-SW-20	-0.243	0.000	0.08			13.1	OK	
S50.000	SFEC-SW-15	-0.145	0.000	0.27			12.2	OK	
S50.001	SFEC-SW-17	-0.202	0.000	0.24			21.8	OK	
S50.002	SFEC-SW-18	-0.215	0.000	0.18			27.3	OK	
S48.004	SFEC-SW-25	-0.352	0.000	0.36			101.6	OK	
S48.005	SFEC-SW-26	-0.427	0.000	0.18			101.5	OK	
S40.010	SSW18	-0.477	0.000	0.28			160.1	OK	
S40.011	SSW19	-0.483	0.000	0.25			154.0	OK	
S51.000	SHE-SW-16	-0.106	0.000	0.53			26.5	OK	
S51.001	SHE-SW-17	-0.056	0.000	0.57			27.1	OK	
S40.012	S154	-0.429	0.000	0.26			157.4	OK*	
S52.000	SSwale In 1	-0.665	0.000	0.00			0.9	OK	
S52.001	SSwale 2	-0.665	0.000	0.00			5.8	OK	
S52.002	SSwale in 3	-0.665	0.000	0.00			5.8	OK	
S52.003	SSwale 4	-0.665	0.000	0.00			6.3	OK	
S53.000	SSW PUMP OUTFALL	-0.265	0.000	0.00			0.0	OK	
S52.004	SSwale in 5	-0.665	0.000	0.00			8.0	OK	
S52.005	SSwale 6	-0.665	0.000	0.00			5.9	OK	
S52.006	SSwale in 7	-0.663	0.000	0.00			1.1	OK	
S52.007	SSwale out	0.192	0.000	0.04			0.7	SURCHARGED*	
S52.008	SSWALE FC70	0.000	0.000	0.01			0.2	SURCHARGED*	
S40.013	SSW20	-0.401	0.000	0.44			158.2	OK	
S54.000	SPP53	0.038	0.000	0.05		697	0.2	SURCHARGED	
S54.001	SFC53	0.082	0.000	0.01			0.1	SURCHARGED	
S55.000	SPP57	-0.022	0.000	0.01		759	0.1	OK	
S55.001	SFC57	0.243	0.000	0.00			0.1	SURCHARGED	
S54.002	S170	-0.097	0.000	0.01			0.2	OK*	
S40.014	S167	-0.495	0.000	0.25			156.4	OK*	
S36.005	SSW22	-0.487	0.000	0.27			162.1	OK	
S56.000	SPP48	0.051	0.000	0.11		839	0.4	SURCHARGED	
S56.001	SFC48	0.083	0.000	0.02			0.3	SURCHARGED	
S57.000	SPP50	-0.032	0.000	0.03		261	0.2	OK	
S57.001	SFC50	0.335	0.000	0.02			0.1	SURCHARGED	
S56.002	SSW36	-0.079	0.000	0.10			0.5	OK	
S58.000	Spp56	0.076	0.000	0.06		1017	0.2	SURCHARGED	
S58.001	SFC56	0.108	0.000	0.01			0.1	SURCHARGED	
S56.003	S187	-0.079	0.000	0.10			0.6	OK*	
S59.000	SPP59	-0.011	0.000	0.01		907	0.1	OK	
S59.001	SFC59	0.221	0.000	0.01			0.1	SURCHARGED	
S60.000	SPP63	-0.082	0.000	0.01		348	0.1	OK	
S60.001	SFC63	0.164	0.000	0.00			0.1	SURCHARGED	
S61.000	SPP62	-0.026	0.000	0.02		587	0.1	OK	
S61.001	SFC62	0.246	0.000	0.02			0.1	SURCHARGED	
S56.004	SSW37	-0.076	0.000	0.14			0.8	OK	
S62.000	SPP64	0.027	0.000	0.23		1003	1.2	SURCHARGED	
S62.001	SFC64	0.303	0.000	0.04			1.1	SURCHARGED	
S63.000	SFEC-SW-06	-0.359	0.000	0.09			28.8	OK	
S63.001	SFEC-SW-07	-0.310	0.000	0.21			58.7	OK	
S63.002	SFEC-SW-08	-0.294	0.000	0.26			65.8	OK	
S63.003	SFEC-SW-09	-0.337	0.000	0.28			74.7	OK	
S64.000	SFEC-SW-10	-0.145	0.000	0.27			14.0	OK	
S64.001	SFEC-SW-12	-0.132	0.000	0.36			18.9	OK	
S63.004	SFEC-SW-13	-0.340	0.000	0.27			100.6	OK	
S63.005	SFEC-SW-14	-0.294	0.000	0.40			100.1	OK	
S63.006	SSW05	-0.315	0.000	0.31			93.7	OK	

2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S65.000	SFEC-SW-01	-0.156	0.000	0.21			9.2	OK	

2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
S65.001	SFEC-SW-02	15 Summer	2	+0%	100/15 Summer				81.586
S66.000	SHW-SW-01	15 Summer	2	+0%	100/15 Summer				81.682
S66.001	SHW-SW-02	15 Summer	2	+0%	100/15 Summer				81.434
S67.000	SHW-SW-03	15 Summer	2	+0%	100/15 Summer				81.645
S65.002	SFEC-SW-03	15 Summer	2	+0%	100/15 Summer				81.369
S68.000	SFEC-SW-04	15 Summer	2	+0%	100/15 Summer				81.795
S65.003	SFEC-SW-05	15 Summer	2	+0%	100/15 Summer				81.301
S65.004	SSW01	15 Summer	2	+0%	100/15 Summer				81.117
S65.005	SSW02	15 Summer	2	+0%	100/15 Summer				80.708
S65.006	SSW03	15 Summer	2	+0%	100/15 Summer				80.530
S69.000	SHW-SW-04	15 Summer	2	+0%	100/15 Summer				81.857
S69.001	SSWALE2 IN	120 Summer	2	+0%					81.826
S69.002	SSWALE 2 FC	120 Summer	2	+0%	2/15 Summer				81.826
S65.007	SSW04	15 Summer	2	+0%	100/15 Summer				80.474
S70.000	SHW-SW-09	15 Summer	2	+0%					81.944
S71.000	SHW-SW-05	15 Summer	2	+0%					81.952
S71.001	SHW-SW-06	15 Summer	2	+0%					81.794
S72.000	SHW-SW-07	15 Summer	2	+0%	100/15 Summer				81.951
S73.000	SHW-SW-08	15 Summer	2	+0%					81.946
S74.000	SHW-SW-10	15 Summer	2	+0%	100/15 Summer				81.989
S70.001	SBASIN 1	960 Winter	2	+0%	100/120 Summer				81.559
S70.002	SBASIN 1 OUT	960 Winter	2	+0%	2/15 Summer				81.558
S65.008	S238	15 Summer	2	+0%	30/15 Summer				80.362
S63.007	SSW06	15 Summer	2	+0%	30/15 Summer				80.328
S75.000	SHE-SW-01	15 Summer	2	+0%					81.690
S75.001	SSW07	15 Summer	2	+0%					81.135
S76.000	SFEATURE POND	960 Winter	2	+0%	30/360 Summer				82.055
S76.001	SFP FC	960 Winter	2	+0%	2/15 Summer				82.053
S63.008	SSW08	15 Summer	2	+0%	100/15 Summer				80.099
S63.009	SSW09	15 Summer	2	+0%	100/15 Summer				80.021
S77.000	SHE-SW-10	15 Summer	2	+0%					81.953
S77.001	SHE-SW-11	15 Summer	2	+0%	100/15 Summer				81.679
S78.000	SHE-SW-03	15 Summer	2	+0%	100/15 Summer				81.984
S78.001	SHE-SW-04	15 Summer	2	+0%	100/15 Summer				81.714
S79.000	SHE-SW-02	15 Summer	2	+0%	100/15 Summer				81.976
S80.000	SHW-SW-06	15 Summer	2	+0%					81.947
S81.000	SHE-SW-05	15 Summer	2	+0%					81.946
S80.001	SHE-SW-07	15 Summer	2	+0%	100/240 Summer				81.887
S82.000	SHE-SW-08	15 Summer	2	+0%					81.959
S82.001	SHE-SW-09	15 Summer	2	+0%	100/60 Summer				81.809
S77.002	SBASIN 2	240 Summer	2	+0%	30/30 Summer				81.656
S77.003	SBASIN 2 OUT	240 Summer	2	+0%	2/15 Summer	100/30 Summer			81.658
S77.004	SHE-SW-12	30 Summer	2	+0%					80.987
S77.005	SHE-SW-13	30 Summer	2	+0%					80.926
S63.010	S241	15 Summer	2	+0%	100/15 Summer				79.903
S63.011	SSW10	15 Summer	2	+0%					79.675
S1.027	STANK	480 Summer	2	+0%	30/60 Summer				78.984
S1.028	SFC71	480 Summer	2	+0%	30/30 Summer				78.965

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m^3)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S65.001	SFEC-SW-02	-0.214	0.000	0.18			20.7	OK	
S66.000	SHW-SW-01	-0.143	0.000	0.29			13.8	OK	
S66.001	SHW-SW-02	-0.213	0.000	0.19			17.2	OK	

2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m^3)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S67.000	SHW-SW-03	-0.105	0.000	0.20			5.1	OK	
S65.002	SFEC-SW-03	-0.205	0.000	0.41			46.9	OK	
S68.000	SFEC-SW-04	-0.205	0.000	0.22			22.1	OK	
S65.003	SFEC-SW-05	-0.264	0.000	0.35			71.7	OK	
S65.004	SSW01	-0.337	0.000	0.27			85.0	OK	
S65.005	SSW02	-0.317	0.000	0.32			81.4	OK	
S65.006	SSW03	-0.290	0.000	0.41			79.2	OK	
S69.000	SHW-SW-04	-0.168	0.000	0.15			4.8	OK	
S69.001	SSWALE2 IN	-0.674	0.000	0.00			8.2	OK	
S69.002	SSWALE 2 FC	0.226	0.000	0.34			1.9	SURCHARGED	
S65.007	SSW04	-0.316	0.000	0.32			79.9	OK	
S70.000	SHW-SW-09	-0.106	0.000	0.19			3.2	OK	
S71.000	SHW-SW-05	-0.173	0.000	0.12			5.5	OK	
S71.001	SHW-SW-06	-0.167	0.000	0.15			6.9	OK	
S72.000	SHW-SW-07	-0.099	0.000	0.25			4.1	OK	
S73.000	SHW-SW-08	-0.104	0.000	0.20			3.4	OK	
S74.000	SHW-SW-10	-0.136	0.000	0.33			15.9	OK	
S70.001	SBASIN 1	-0.091	0.000	0.02			0.4	OK	
S70.002	SBASIN 1 OUT	0.215	0.000	0.02			0.3	SURCHARGED	
S65.008	S238	-0.277	0.000	0.33			81.1	OK*	
S63.007	SSW06	-0.237	0.000	0.57			148.9	OK	
S75.000	SHE-SW-01	-0.210	0.000	0.19			20.4	OK	
S75.001	SSW07	-0.209	0.000	0.20			20.5	OK	
S76.000	SFEATURE POND	-0.045	0.000	0.07			0.8	FLOOD RISK	
S76.001	SFP FC	1.153	0.000	0.08			0.5	FLOOD RISK	
S63.008	SSW08	-0.300	0.000	0.50			152.9	OK	
S63.009	SSW09	-0.302	0.000	0.49			152.3	OK	
S77.000	SHE-SW-10	-0.172	0.000	0.13			6.2	OK	
S77.001	SHE-SW-11	-0.162	0.000	0.17			6.4	OK	
S78.000	SHE-SW-03	-0.141	0.000	0.28			10.3	OK	
S78.001	SHE-SW-04	-0.148	0.000	0.25			10.5	OK	
S79.000	SHE-SW-02	-0.149	0.000	0.25			13.3	OK	
S80.000	SHW-SW-06	-0.178	0.000	0.10			3.9	OK	
S81.000	SHE-SW-05	-0.179	0.000	0.09			3.7	OK	
S80.001	SHE-SW-07	-0.155	0.000	0.21			10.0	OK	
S82.000	SHE-SW-08	-0.166	0.000	0.16			7.2	OK	
S82.001	SHE-SW-09	-0.154	0.000	0.22			9.6	OK	
S77.002	SBASIN 2	-0.069	0.000	0.09			4.3	OK	
S77.003	SBASIN 2 OUT	0.189	0.000	0.06			3.0	SURCHARGED	16
S77.004	SHE-SW-12	-0.173	0.000	0.12			3.8	OK	
S77.005	SHE-SW-13	-0.184	0.000	0.08			3.8	OK	
S63.010	S241	-0.341	0.000	0.39			153.1	OK*	
S63.011	SSW10	-0.359	0.000	0.34			152.1	OK	
S1.027	STANK	-0.048	0.000	0.44		413	27.0	OK	
S1.028	SFC71	-0.014	0.000	0.37			27.0	OK	

30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m³/ha Storage	2.000
Hot Start Level (mm)	0	Inlet Coeffiecient	0.800
Manhole Headloss Coeff (Global)	0.500	Flow per Person per Day (l/per/day)	0.000
Foul Sewage per hectare (l/s)	0.000		

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 60 Number of Storage Structures 58 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model		FEH	Data Type Point
FEH Rainfall Version		2013	Cv (Summer) 1.000
Site Location	GB 455061 221552 SP 55061 21552		Cv (Winter) 1.000

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	OFF
Inertia Status	OFF

Profile(s)	Summer and Winter
Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	2, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)	Surcharged Depth (m)
S1.000	SPP05	480 Winter	30	+0%	2/120 Summer				83.188	0.238
S1.001	SFC05	480 Winter	30	+0%	2/15 Summer				83.232	0.412
S2.000	SPP04	360 Summer	30	+0%	100/120 Summer				83.256	-0.034
S2.001	SFC04	360 Summer	30	+0%	2/30 Summer				83.257	0.357
S3.000	SPP06	360 Winter	30	+0%	30/240 Summer				83.124	0.014
S3.001	SFC06	360 Winter	30	+0%	2/15 Summer				83.147	0.427
S1.002	SSW23	480 Winter	30	+0%					82.204	-0.086
S4.000	SPP10	480 Winter	30	+0%	30/60 Summer				82.935	0.080
S4.001	SFC10	480 Winter	30	+0%	2/15 Summer				82.975	0.345
S5.000	SPP08	480 Winter	30	+0%	2/240 Summer				82.718	0.148
S5.001	SFC08	480 Winter	30	+0%	2/120 Summer				82.759	0.209
S4.002	S13	480 Winter	30	+0%					82.198	-0.089
S1.003	SSW24	480 Winter	30	+0%					81.967	-0.079
S6.000	SPP03	360 Winter	30	+0%	2/360 Summer				82.694	0.124
S6.001	SFC03	360 Winter	30	+0%	2/15 Summer				82.728	0.428
S1.004	S7	480 Winter	30	+0%					81.924	-0.075
S7.000	SPP11	480 Winter	30	+0%	2/240 Summer				82.657	0.157
S7.001	SFC11	960 Winter	30	+0%	2/15 Summer				82.700	0.300
S1.005	S7	480 Winter	30	+0%					81.821	-0.073
S8.000	SPP14	480 Winter	30	+0%	30/60 Summer				82.406	0.071
S8.001	SFC14	480 Winter	30	+0%	2/15 Summer				82.451	0.366
S1.006	S6	480 Winter	30	+0%					81.717	-0.072
S9.000	SPP16	960 Winter	30	+0%	2/240 Summer				82.482	0.162
S9.001	SFC16	960 Winter	30	+0%	2/30 Summer				82.522	0.262
S1.007	SSW25	480 Winter	30	+0%					81.656	-0.070
S10.000	SPP17	960 Winter	30	+0%	30/30 Summer				82.197	0.097
S10.001	SFC17	960 Winter	30	+0%	2/15 Summer				82.256	0.336
S1.008	S17	480 Winter	30	+0%					81.503	-0.068
S11.000	SPP01	360 Winter	30	+0%	2/240 Summer				82.401	0.141

30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S1.000	SPP05	0.000	0.03			0.2	SURCHARGED	
S1.001	SFC05	0.000	0.01			0.1	SURCHARGED	
S2.000	SPP04	0.000	0.02		431	0.2	OK	
S2.001	SFC04	0.000	0.01			0.1	SURCHARGED	
S3.000	SPP06	0.000	0.03		442	0.2	SURCHARGED	
S3.001	SFC06	0.000	0.01			0.1	SURCHARGED	
S1.002	SSW23	0.000	0.04			0.2	OK	
S4.000	SPP10	0.000	0.05			0.3	SURCHARGED	
S4.001	SFC10	0.000	0.03			0.2	SURCHARGED	
S5.000	SPP08	0.000	0.08			0.3	SURCHARGED	
S5.001	SFC08	0.000	0.01			0.2	SURCHARGED	
S4.002	S13	0.000	0.03			0.3	OK*	
S1.003	SSW24	0.000	0.10			0.5	OK	
S6.000	SPP03	0.000	0.07		681	0.4	SURCHARGED	
S6.001	SFC03	0.000	0.04			0.3	SURCHARGED	
S1.004	S7	0.000	0.14			0.9	OK*	
S7.000	SPP11	0.000	0.03			0.2	SURCHARGED	
S7.001	SFC11	0.000	0.01			0.1	SURCHARGED	
S1.005	S7	0.000	0.16			1.0	OK*	
S8.000	SPP14	0.000	0.04			0.2	SURCHARGED	
S8.001	SFC14	0.000	0.00			0.1	SURCHARGED	
S1.006	S6	0.000	0.17			1.0	OK*	
S9.000	SPP16	0.000	0.04			0.3	SURCHARGED	
S9.001	SFC16	0.000	0.01			0.1	SURCHARGED	
S1.007	SSW25	0.000	0.20			1.2	OK	
S10.000	SPP17	0.000	0.05			0.3	SURCHARGED	
S10.001	SFC17	0.000	0.01			0.2	SURCHARGED	
S1.008	S17	0.000	0.22			1.3	OK*	
S11.000	SPP01	0.000	0.08		665	0.5	SURCHARGED	

30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
S11.001	SFC01	360 Winter	30	+0%	2/15 Summer				82.449
S12.000	SPP02	480 Winter	30	+0%	30/30 Summer				82.553
S12.001	SFC02	480 Winter	30	+0%	2/15 Summer				82.589
S11.002	SSW26	360 Winter	30	+0%					81.666
S13.000	SPP13	240 Summer	30	+0%	30/240 Summer				82.392
S13.001	SFC13	240 Summer	30	+0%	2/15 Summer				82.427
S11.003	S27	360 Winter	30	+0%					81.467
S1.009	SSW27	480 Winter	30	+0%					81.420
S14.000	SPP12	480 Winter	30	+0%	30/30 Summer				81.986
S14.001	SFC12	480 Winter	30	+0%	2/15 Summer				82.026
S15.000	SPP18	480 Winter	30	+0%	30/60 Summer				82.488
S15.001	SFC18	480 Summer	30	+0%	2/15 Summer				82.526
S16.000	SPP19	960 Winter	30	+0%	30/120 Summer				82.125
S16.001	SFC19	960 Winter	30	+0%	2/15 Summer				82.170
S15.002	SSW28	960 Winter	30	+0%					81.260
S1.010	SSW29	480 Winter	30	+0%					81.236
S17.000	SPP20	480 Winter	30	+0%	30/60 Summer				81.931
S17.001	SFC20	960 Summer	30	+0%	2/15 Summer				81.969
S1.011	S25	30 Summer	30	+0%					81.129
S18.000	SPP21	1440 Winter	30	+0%	2/1440 Summer				81.995
S18.001	SFC21	1440 Summer	30	+0%	2/15 Summer				82.043
S19.000	SRAIN GARDEN	15 Summer	30	+0%	30/15 Summer				81.569
S19.001	SRG FC	15 Summer	30	+0%	30/15 Summer				81.560
S1.012	S27	30 Summer	30	+0%					81.109
S20.000	SPP26	960 Winter	30	+0%	30/60 Summer				82.018
S20.001	SFC26	960 Winter	30	+0%	2/15 Summer				82.064
S1.013	SSW30	30 Summer	30	+0%					81.017
S21.000	SPP28	960 Winter	30	+0%	2/960 Winter				81.986
S21.001	SFC28	960 Winter	30	+0%	2/15 Summer				82.046
S1.014	SSW31	30 Summer	30	+0%					80.953
S22.000	SPP30	480 Winter	30	+0%	30/240 Summer				81.983
S22.001	SFC30	480 Winter	30	+0%	2/15 Summer				82.000
S1.015	S66	30 Summer	30	+0%					80.891
S23.000	SPP32	960 Winter	30	+0%	2/240 Summer				81.847
S23.001	SFC32	960 Winter	30	+0%	2/15 Summer				81.906
S1.016	S45	30 Summer	30	+0%					80.838
S24.000	SPP35	960 Winter	30	+0%	30/30 Summer				81.899
S24.001	SFC35	480 Winter	30	+0%	2/15 Summer				81.945
S1.017	S70	30 Summer	30	+0%					80.793
S25.000	SPP34	960 Winter	30	+0%	30/240 Summer				81.818
S25.001	SFC34	960 Winter	30	+0%	2/15 Summer				82.004
S1.018	S46	30 Summer	30	+0%					80.755
S1.019	S47	30 Summer	30	+0%					80.705
S26.000	SPP27	240 Winter	30	+0%	30/240 Summer				82.645
S26.001	SFC27	240 Winter	30	+0%	2/15 Summer				82.651
S26.002	SSW32	240 Winter	30	+0%					81.606
S27.000	SPP31	480 Winter	30	+0%	2/120 Summer				82.198
S27.001	SFC31	480 Winter	30	+0%	2/120 Summer				82.234
S26.003	S80	480 Winter	30	+0%					81.528
S26.004	S56	480 Winter	30	+0%					81.442
S28.000	SPP36	960 Winter	30	+0%	2/120 Summer				81.982
S28.001	SFC36	480 Winter	30	+0%	2/120 Summer				82.023
S26.005	S84	480 Winter	30	+0%					81.341
S29.000	SPP41	480 Winter	30	+0%	2/120 Summer				81.848
S29.001	SFC41	480 Winter	30	+0%	2/120 Summer				81.885
S26.006	SSW33	480 Winter	30	+0%					81.149
S30.000	SPP40	960 Winter	30	+0%	2/240 Summer				81.750

30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m^3)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S11.001	SFC01	0.349	0.000	0.02			0.3	SURCHARGED	
S12.000	SPP02	0.113	0.000	0.03		897	0.2	SURCHARGED	
S12.001	SFC02	0.419	0.000	0.00			0.1	SURCHARGED	
S11.002	SSW26	-0.084	0.000	0.06			0.4	OK	
S13.000	SPP13	0.002	0.000	0.04		219	0.2	SURCHARGED	
S13.001	SFC13	0.427	0.000	0.00			0.1	SURCHARGED	
S11.003	S27	-0.083	0.000	0.07			0.4	OK*	
S1.009	SSW27	-0.062	0.000	0.30			1.8	OK	
S14.000	SPP12	0.106	0.000	0.07		734	0.5	SURCHARGED	
S14.001	SFC12	0.376	0.000	0.02			0.3	SURCHARGED	
S15.000	SPP18	0.088	0.000	0.04			0.3	SURCHARGED	
S15.001	SFC18	0.326	0.000	0.02			0.2	SURCHARGED	
S16.000	SPP19	0.055	0.000	0.03			0.2	SURCHARGED	
S16.001	SFC19	0.370	0.000	0.00			0.1	SURCHARGED	
S15.002	SSW28	-0.090	0.000	0.02			0.2	OK	
S1.010	SSW29	-0.111	0.000	0.16			2.3	OK	
S17.000	SPP20	0.091	0.000	0.05			0.3	SURCHARGED	
S17.001	SFC20	0.319	0.000	0.01			0.2	SURCHARGED	
S1.011	S25	-0.184	0.000	0.05			2.2	OK*	
S18.000	SPP21	0.105	0.000	0.03			0.2	SURCHARGED	
S18.001	SFC21	0.543	0.000	0.01			0.1	SURCHARGED	
S19.000	SRAIN GARDEN	0.144	0.000	0.70		8	21.0	SURCHARGED	
S19.001	SRG FC	0.160	0.000	0.33			19.9	SURCHARGED	
S1.012	S27	-0.110	0.000	0.52			22.0	OK*	
S20.000	SPP26	0.073	0.000	0.03			0.2	SURCHARGED	
S20.001	SFC26	0.439	0.000	0.01			0.1	SURCHARGED	
S1.013	SSW30	-0.098	0.000	0.61			22.0	OK	
S21.000	SPP28	0.106	0.000	0.05			0.3	SURCHARGED	
S21.001	SFC28	0.346	0.000	0.01			0.1	SURCHARGED	
S1.014	SSW31	-0.084	0.000	0.71			22.1	OK	
S22.000	SPP30	0.018	0.000	0.02			0.1	SURCHARGED	
S22.001	SFC30	0.400	0.000	0.00			0.1	SURCHARGED	
S1.015	S66	-0.097	0.000	0.62			22.2	OK*	
S23.000	SPP32	0.142	0.000	0.05			0.3	SURCHARGED	
S23.001	SFC32	0.321	0.000	0.01			0.1	SURCHARGED	
S1.016	S45	-0.085	0.000	0.70			22.3	OK*	
S24.000	SPP35	0.109	0.000	0.04			0.2	SURCHARGED	
S24.001	SFC35	0.345	0.000	0.00			0.1	SURCHARGED	
S1.017	S70	-0.079	0.000	0.75			22.4	OK*	
S25.000	SPP34	0.028	0.000	0.05			0.8	SURCHARGED	
S25.001	SFC34	0.504	0.000	0.01			0.1	SURCHARGED	
S1.018	S46	-0.079	0.000	0.75			22.5	OK*	
S1.019	S47	-0.103	0.000	0.57			22.5	OK*	
S26.000	SPP27	0.005	0.000	0.03		236	0.2	SURCHARGED	
S26.001	SFC27	0.401	0.000	0.01			0.1	SURCHARGED	
S26.002	SSW32	-0.094	0.000	0.01			0.1	OK	
S27.000	SPP31	0.208	0.000	0.07			0.3	SURCHARGED	
S27.001	SFC31	0.244	0.000	0.01			0.2	SURCHARGED	
S26.003	S80	-0.087	0.000	0.04			0.2	OK*	
S26.004	S56	-0.088	0.000	0.03			0.2	OK*	
S28.000	SPP36	0.272	0.000	0.10			0.4	SURCHARGED	
S28.001	SFC36	0.313	0.000	0.02			0.2	SURCHARGED	
S26.005	S84	-0.079	0.000	0.10			0.5	OK*	
S29.000	SPP41	0.218	0.000	0.15		790	0.6	SURCHARGED	
S29.001	SFC41	0.255	0.000	0.04			0.5	SURCHARGED	
S26.006	SSW33	-0.073	0.000	0.16			1.0	OK	

30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m^3)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S30.000	SPP40	0.210	0.000	0.08			0.3	SURCHARGED	

30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)	Surcharged Depth (m)
S30.001	SFC40	960 Summer	30	+0%	2/120 Summer				81.793	0.268
S26.007	S91	30 Summer	30	+0%					80.644	-0.114
S31.000	SPP39	480 Winter	30	+0%	2/30 Summer				81.956	0.281
S31.001	SFC39	480 Winter	30	+0%	2/15 Summer				82.001	0.526
S1.020	SSW34	30 Summer	30	+0%					80.641	-0.090
S1.021	S53	30 Summer	30	+0%					80.590	-0.078
S32.000	SPP47	960 Winter	30	+0%	2/240 Summer				81.663	0.213
S32.001	SFC47	960 Winter	30	+0%	2/240 Summer				81.707	0.257
S1.022	S96	30 Summer	30	+0%					80.527	-0.093
S1.023	S53	30 Summer	30	+0%					80.479	-0.075
S33.000	SPP55	960 Winter	30	+0%	2/240 Summer				81.671	0.211
S33.001	SFC55	960 Winter	30	+0%	2/60 Summer				81.715	0.285
S1.024	S100	30 Summer	30	+0%					80.411	-0.097
S34.000	SPP46	960 Winter	30	+0%	2/360 Summer				81.655	0.135
S34.001	SFC46	960 Winter	30	+0%	2/15 Summer				81.714	0.359
S1.025	SSW35	30 Summer	30	+0%					80.360	-0.074
S35.000	SPP61	960 Winter	30	+0%	2/240 Summer				81.586	0.216
S35.001	SFC61	960 Summer	30	+0%	2/240 Summer				81.625	0.255
S1.026	SSW36	30 Summer	30	+0%					80.297	-0.091
S36.000	SPP44	480 Winter	30	+0%	30/60 Summer				81.744	0.074
S36.001	SFC44	480 Winter	30	+0%	2/15 Summer				81.789	0.369
S37.000	SHE-SW-14	15 Summer	30	+0%					82.031	-0.169
S36.002	SHE-SW-15	15 Summer	30	+0%	100/15 Summer				81.081	-0.119
S38.000	SPP45	960 Winter	30	+0%	30/60 Summer				81.688	0.093
S38.001	SFC45	960 Summer	30	+0%	2/15 Summer				81.732	0.362
S36.003	S145	15 Summer	30	+0%	100/15 Summer				80.934	-0.091
S39.000	SPP60	120 Winter	30	+0%	30/30 Summer				81.648	0.038
S39.001	SFC60	120 Summer	30	+0%	2/15 Summer				81.677	0.307
S36.004	S146	15 Summer	30	+0%					80.781	-0.184
S40.000	SSW11	15 Summer	30	+0%	100/15 Summer				80.923	-0.177
S40.001	SSW12	15 Summer	30	+0%	100/15 Summer				80.849	-0.071
S40.002	SSW13	15 Summer	30	+0%	30/15 Summer				80.813	0.032
S41.000	STANK 3	120 Winter	30	+0%	30/15 Summer				80.819	0.169
S41.001	SHB 3	120 Summer	30	+0%	2/15 Summer				80.906	0.474
S40.003	S148	15 Summer	30	+0%					80.514	0.000
S42.000	SPP67	480 Winter	30	+0%	2/240 Summer				81.678	0.138
S42.001	SFC67	480 Winter	30	+0%	2/15 Summer				81.720	0.370
S40.004	S148	15 Summer	30	+0%	30/15 Summer				80.584	0.185
S40.005	SSW15	15 Summer	30	+0%	100/15 Summer				80.486	-0.033
S43.000	SPP68	480 Winter	30	+0%	2/240 Summer				81.671	0.156
S43.001	SFC68	480 Winter	30	+0%	2/15 Summer				81.709	0.359
S40.006	S150	15 Summer	30	+0%	100/15 Summer				80.437	-0.003
S44.000	SPP69	480 Winter	30	+0%	30/120 Summer				81.749	0.039
S44.001	SFC69	480 Winter	30	+0%	2/15 Summer				81.749	0.299
S40.007	S151	15 Summer	30	+0%	30/15 Summer				80.412	0.016
S40.008	SSW16	15 Summer	30	+0%	100/15 Summer				80.175	-0.271
S45.000	SPP66	960 Winter	30	+0%	2/360 Summer				81.818	0.128
S45.001	SFC66	480 Winter	30	+0%	2/15 Summer				81.859	0.359
S46.000	SPP65	480 Winter	30	+0%	30/120 Summer				81.896	0.036
S46.001	SFC65	480 Winter	30	+0%	2/15 Summer				81.925	0.325
S47.000	STANK 2	240 Winter	30	+0%	30/15 Summer				80.495	0.270
S47.001	SHB 2	240 Winter	30	+0%	2/120 Summer				80.501	0.326
S40.009	SSW17	15 Summer	30	+0%	100/15 Summer				79.945	-0.210
S48.000	SFEC-SW-21	15 Summer	30	+0%	100/15 Summer				81.700	-0.175
S48.001	SFEC-SW-22	15 Summer	30	+0%	100/15 Summer				81.472	-0.153
S48.002	SFEC-SW-23	15 Summer	30	+0%	100/15 Summer				81.349	-0.151
S48.003	SFEC-SW-24	15 Summer	30	+0%	100/15 Summer				81.294	-0.106

30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S30.001	SFC40	0.000	0.01			0.2	SURCHARGED	
S26.007	S91	0.000	0.06			0.9	OK*	
S31.000	SPP39	0.000	0.04			0.2	SURCHARGED	
S31.001	SFC39	0.000	0.01			0.1	SURCHARGED	
S1.020	SSW34	0.000	0.67			23.3	OK	
S1.021	S53	0.000	0.76			23.3	OK*	
S32.000	SPP47	0.000	0.08			0.3	SURCHARGED	
S32.001	SFC47	0.000	0.01			0.2	SURCHARGED	
S1.022	S96	0.000	0.65			23.5	OK*	
S1.023	S53	0.000	0.78			23.5	OK*	
S33.000	SPP55	0.000	0.07			0.3	SURCHARGED	
S33.001	SFC55	0.000	0.01			0.2	SURCHARGED	
S1.024	S100	0.000	0.61			23.6	OK*	
S34.000	SPP46	0.000	0.05			0.3	SURCHARGED	
S34.001	SFC46	0.000	0.01			0.1	SURCHARGED	
S1.025	SSW35	0.000	0.79			23.7	OK	
S35.000	SPP61	0.000	0.07			0.3	SURCHARGED	
S35.001	SFC61	0.000	0.03			0.2	SURCHARGED	
S1.026	SSW36	0.000	0.66			23.8	OK	
S36.000	SPP44	0.000	0.04			0.2	SURCHARGED	
S36.001	SFC44	0.000	0.01			0.1	SURCHARGED	
S37.000	SHE-SW-14	0.000	0.39			50.5	OK	
S36.002	SHE-SW-15	0.000	0.66			49.7	OK	
S38.000	SPP45	0.000	0.03			0.2	SURCHARGED	
S38.001	SFC45	0.000	0.00			0.1	SURCHARGED	
S36.003	S145	0.000	0.83			50.7	OK*	
S39.000	SPP60	0.000	0.05		138	0.3	SURCHARGED	
S39.001	SFC60	0.000	0.01			0.1	SURCHARGED	
S36.004	S146	0.000	0.32			50.8	OK*	
S40.000	SSW11	0.000	0.35			28.7	OK	
S40.001	SSW12	0.000	0.50			39.3	OK	
S40.002	SSW13	0.000	0.70			59.1	SURCHARGED	
S41.000	STANK 3	0.000	0.08		147	4.7	SURCHARGED	
S41.001	SHB 3	0.000	0.39			1.9	SURCHARGED	
S40.003	S148	0.000	0.96			81.3	SURCHARGED*	
S42.000	SPP67	0.000	0.07			0.4	SURCHARGED	
S42.001	SFC67	0.000	0.01			0.3	SURCHARGED	
S40.004	S148	0.000	1.37			83.9	SURCHARGED*	
S40.005	SSW15	0.000	0.85			143.7	OK	
S43.000	SPP68	0.000	0.08			0.5	SURCHARGED	
S43.001	SFC68	0.000	0.02			0.3	SURCHARGED	
S40.006	S150	0.000	0.85			144.1	OK*	
S44.000	SPP69	0.000	0.05			0.3	SURCHARGED	
S44.001	SFC69	0.000	0.00			0.1	SURCHARGED	
S40.007	S151	0.000	1.14			202.9	SURCHARGED*	
S40.008	SSW16	0.000	0.55			207.0	OK	
S45.000	SPP66	0.000	0.04			0.2	SURCHARGED	
S45.001	SFC66	0.000	0.03			0.1	SURCHARGED	
S46.000	SPP65	0.000	0.03		860	0.2	SURCHARGED	
S46.001	SFC65	0.000	0.01			0.1	SURCHARGED	
S47.000	STANK 2	0.000	0.07		266	2.3	SURCHARGED	
S47.001	SHB 2	0.000	0.06			1.9	SURCHARGED	
S40.009	SSW17	0.000	0.57			197.0	OK	
S48.000	SFEC-SW-21	0.000	0.56			95.5	OK	
S48.001	SFEC-SW-22	0.000	0.65			108.5	OK	
S48.002	SFEC-SW-23	0.000	0.76			135.0	OK	

30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Flooded Volume (m^3)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S48.003	SFEC-SW-24	0.000	0.45			154.9	OK	

30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
S49.000	SFEC-SW-19	15 Summer	30	+0%					81.596
S49.001	SFEC-SW-20	15 Summer	30	+0%					81.392
S50.000	SFEC-SW-15	15 Summer	30	+0%	100/15 Summer				81.630
S50.001	SFEC-SW-17	15 Summer	30	+0%	100/15 Summer				81.573
S50.002	SFEC-SW-18	15 Summer	30	+0%	100/15 Summer				81.398
S48.004	SFEC-SW-25	15 Summer	30	+0%	100/15 Summer				81.225
S48.005	SFEC-SW-26	15 Summer	30	+0%					80.193
S40.010	SSW18	15 Summer	30	+0%	100/15 Summer				79.863
S40.011	SSW19	15 Summer	30	+0%	100/15 Summer				79.792
S51.000	SHE-SW-16	15 Summer	30	+0%	30/15 Summer				80.434
S51.001	SHE-SW-17	15 Summer	30	+0%	30/15 Summer				79.807
S40.012	S154	15 Summer	30	+0%					79.729
S52.000	SSwale In 1	1440 Winter	30	+0%					81.853
S52.001	SSwale 2	1440 Winter	30	+0%					81.853
S52.002	SSwale in 3	1440 Winter	30	+0%					81.853
S52.003	SSwale 4	1440 Winter	30	+0%					81.853
S53.000	SSW PUMP OUTFALL	1440 Winter	30	+0%					81.853
S52.004	SSwale in 5	1440 Winter	30	+0%					81.853
S52.005	SSwale 6	1440 Winter	30	+0%					81.853
S52.006	SSwale in 7	1440 Winter	30	+0%					81.853
S52.007	SSwale out	1440 Winter	30	+0%	2/120 Summer				81.859
S52.008	SSWALE FC70	15 Summer	30	+0%					81.575
S40.013	SSW20	15 Summer	30	+0%	100/15 Summer				79.704
S54.000	SPP53	480 Winter	30	+0%	2/240 Summer				81.678
S54.001	SFC53	480 Winter	30	+0%	2/120 Summer				81.714
S55.000	SPP57	480 Winter	30	+0%	30/60 Summer				81.812
S55.001	SFC57	960 Winter	30	+0%	2/15 Summer				81.856
S54.002	S170	480 Summer	30	+0%					80.979
S40.014	S167	30 Summer	30	+0%					79.435
S36.005	SSW22	30 Summer	30	+0%	100/15 Summer				79.286
S56.000	SPP48	480 Winter	30	+0%	2/120 Summer				81.759
S56.001	SFC48	480 Winter	30	+0%	2/120 Summer				81.793
S57.000	SPP50	240 Winter	30	+0%	30/30 Summer				81.708
S57.001	SFC50	240 Winter	30	+0%	2/15 Summer				81.749
S56.002	SSW36	480 Winter	30	+0%					81.025
S58.000	Spp56	960 Winter	30	+0%	2/120 Summer				81.681
S58.001	SFC56	960 Winter	30	+0%	2/120 Summer				81.720
S56.003	S187	480 Winter	30	+0%					80.882
S59.000	SPP59	960 Winter	30	+0%	30/60 Summer				81.683
S59.001	SFC59	960 Winter	30	+0%	2/15 Summer				81.729
S60.000	SPP63	480 Winter	30	+0%					81.490
S60.001	SFC63	360 Summer	30	+0%	2/15 Summer				81.491
S61.000	SPP62	480 Winter	30	+0%	30/60 Summer				81.668
S61.001	SFC62	480 Winter	30	+0%	2/15 Summer				81.706
S56.004	SSW37	480 Winter	30	+0%					80.724
S62.000	SPP64	960 Winter	30	+0%	2/240 Summer				81.523
S62.001	SFC64	960 Summer	30	+0%	2/15 Summer				81.553
S63.000	SFEC-SW-06	15 Summer	30	+0%	100/15 Summer				81.811
S63.001	SFEC-SW-07	15 Summer	30	+0%	100/15 Summer				81.780
S63.002	SFEC-SW-08	15 Summer	30	+0%	100/15 Summer				81.502
S63.003	SFEC-SW-09	15 Summer	30	+0%	100/15 Summer				81.212
S64.000	SFEC-SW-10	15 Summer	30	+0%	100/15 Summer				81.930
S64.001	SFEC-SW-12	15 Summer	30	+0%	100/15 Summer				81.666
S63.004	SFEC-SW-13	15 Summer	30	+0%	100/15 Summer				81.154
S63.005	SFEC-SW-14	15 Summer	30	+0%	30/15 Summer				81.039
S63.006	SSW05	15 Summer	30	+0%	100/15 Summer				80.803
S65.000	SFEC-SW-01	15 Summer	30	+0%	100/15 Summer				81.710

30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S49.000	SFEC-SW-19	-0.129	0.000	0.38			20.3	OK	
S49.001	SFEC-SW-20	-0.208	0.000	0.21			33.7	OK	
S50.000	SFEC-SW-15	-0.095	0.000	0.64			28.3	OK	
S50.001	SFEC-SW-17	-0.127	0.000	0.63			57.8	OK	
S50.002	SFEC-SW-18	-0.152	0.000	0.48			74.9	OK	
S48.004	SFEC-SW-25	-0.145	0.000	0.91			260.2	OK	
S48.005	SFEC-SW-26	-0.307	0.000	0.48			261.4	OK	
S40.010	SSW18	-0.276	0.000	0.70			393.8	OK	
S40.011	SSW19	-0.232	0.000	0.60			368.2	OK	
S51.000	SHE-SW-16	0.409	0.000	1.13			56.4	SURCHARGED	
S51.001	SHE-SW-17	0.329	0.000	1.10			51.9	SURCHARGED	
S40.012	S154	-0.107	0.000	0.60			363.1	OK*	
S52.000	SSwale In 1	-0.647	0.000	0.00			1.0	OK	
S52.001	SSwale 2	-0.647	0.000	0.00			5.9	OK	
S52.002	SSwale in 3	-0.647	0.000	0.00			5.7	OK	
S52.003	SSwale 4	-0.647	0.000	0.00			6.4	OK	
S53.000	SSW PUMP OUTFALL	-0.247	0.000	0.00			0.0	OK	
S52.004	SSwale in 5	-0.647	0.000	0.00			7.7	OK	
S52.005	SSwale 6	-0.647	0.000	0.00			6.8	OK	
S52.006	SSwale in 7	-0.647	0.000	0.00			1.0	OK	
S52.007	SSwale out	0.209	0.000	0.03			0.5	SURCHARGED*	
S52.008	SSWALE FC70	0.000	0.000	0.01			0.2	SURCHARGED*	
S40.013	SSW20	-0.080	0.000	1.00			356.7	OK	
S54.000	SPP53	0.188	0.000	0.07			0.3	SURCHARGED	
S54.001	SFC53	0.239	0.000	0.02			0.2	SURCHARGED	
S55.000	SPP57	0.067	0.000	0.03			0.2	SURCHARGED	
S55.001	SFC57	0.376	0.000	0.01			0.1	SURCHARGED	
S54.002	S170	-0.095	0.000	0.01			0.2	OK*	
S40.014	S167	-0.337	0.000	0.56			356.5	OK*	
S36.005	SSW22	-0.322	0.000	0.62			374.9	OK	
S56.000	SPP48	0.209	0.000	0.15		911	0.6	SURCHARGED	
S56.001	SFC48	0.243	0.000	0.04			0.5	SURCHARGED	
S57.000	SPP50	0.063	0.000	0.05		421	0.3	SURCHARGED	
S57.001	SFC50	0.469	0.000	0.02			0.2	SURCHARGED	
S56.002	SSW36	-0.075	0.000	0.14			0.6	OK	
S58.000	Spp56	0.251	0.000	0.08			0.3	SURCHARGED	
S58.001	SFC56	0.290	0.000	0.01			0.2	SURCHARGED	
S56.003	S187	-0.076	0.000	0.13			0.8	OK*	
S59.000	SPP59	0.088	0.000	0.04			0.2	SURCHARGED	
S59.001	SFC59	0.359	0.000	0.01			0.1	SURCHARGED	
S60.000	SPP63	-0.055	0.000	0.01		626	0.1	OK	
S60.001	SFC63	0.191	0.000	0.00			0.1	SURCHARGED	
S61.000	SPP62	0.058	0.000	0.04			0.3	SURCHARGED	
S61.001	SFC62	0.366	0.000	0.03			0.1	SURCHARGED	
S56.004	SSW37	-0.072	0.000	0.17			1.0	OK	
S62.000	SPP64	0.163	0.000	0.27			1.4	SURCHARGED	
S62.001	SFC64	0.453	0.000	0.05			1.2	SURCHARGED	
S63.000	SFEC-SW-06	-0.289	0.000	0.21			66.7	OK	
S63.001	SFEC-SW-07	-0.206	0.000	0.57			159.6	OK	
S63.002	SFEC-SW-08	-0.168	0.000	0.69			177.3	OK	
S63.003	SFEC-SW-09	-0.176	0.000	0.76			204.6	OK	
S64.000	SFEC-SW-10	-0.095	0.000	0.63			32.5	OK	
S64.001	SFEC-SW-12	-0.059	0.000	0.89			47.3	OK	
S63.004	SFEC-SW-13	-0.111	0.000	0.70			262.5	OK	
S63.005	SFEC-SW-14	0.014	0.000	1.03			257.2	SURCHARGED	
S63.006	SSW05	-0.142	0.000	0.82			244.8	OK	

30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S65.000	SFEC-SW-01	-0.115	0.000	0.48			21.4	OK	

30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
S65.001	SFEC-SW-02	15 Summer	30	+0%	100/15 Summer				81.651
S66.000	SHW-SW-01	15 Summer	30	+0%	100/15 Summer				81.735
S66.001	SHW-SW-02	15 Summer	30	+0%	100/15 Summer				81.606
S67.000	SHW-SW-03	15 Summer	30	+0%	100/15 Summer				81.671
S65.002	SFEC-SW-03	15 Summer	30	+0%	100/15 Summer				81.571
S68.000	SFEC-SW-04	15 Summer	30	+0%	100/15 Summer				81.852
S65.003	SFEC-SW-05	15 Summer	30	+0%	100/15 Summer				81.437
S65.004	SSW01	15 Summer	30	+0%	100/15 Summer				81.258
S65.005	SSW02	15 Summer	30	+0%	100/15 Summer				80.863
S65.006	SSW03	15 Summer	30	+0%	100/15 Summer				80.805
S69.000	SHW-SW-04	120 Winter	30	+0%	100/15 Summer				82.005
S69.001	SSWALE2 IN	120 Winter	30	+0%					82.005
S69.002	SSWALE 2 FC	120 Winter	30	+0%	2/15 Summer				82.005
S65.007	SSW04	15 Summer	30	+0%	100/15 Summer				80.784
S70.000	SHW-SW-09	15 Summer	30	+0%					81.970
S71.000	SHW-SW-05	15 Summer	30	+0%					81.980
S71.001	SHW-SW-06	15 Summer	30	+0%					81.831
S72.000	SHW-SW-07	15 Summer	30	+0%	100/15 Summer				81.982
S73.000	SHW-SW-08	15 Summer	30	+0%					81.972
S74.000	SHW-SW-10	15 Summer	30	+0%	100/15 Summer				82.048
S70.001	SBASIN 1	960 Winter	30	+0%	100/120 Summer				81.617
S70.002	SBASIN 1 OUT	30 Summer	30	+0%	2/15 Summer				81.681
S65.008	S238	15 Summer	30	+0%	30/15 Summer				80.716
S63.007	SSW06	15 Summer	30	+0%	30/15 Summer				80.682
S75.000	SHE-SW-01	15 Summer	30	+0%					81.743
S75.001	SSW07	15 Summer	30	+0%					81.187
S76.000	SFEATURE POND	960 Winter	30	+0%	30/360 Summer				82.107
S76.001	SFP FC	960 Winter	30	+0%	2/15 Summer				82.105
S63.008	SSW08	15 Summer	30	+0%	100/15 Summer				80.356
S63.009	SSW09	30 Summer	30	+0%	100/15 Summer				80.200
S77.000	SHE-SW-10	15 Summer	30	+0%					81.984
S77.001	SHE-SW-11	240 Winter	30	+0%	100/15 Summer				81.832
S78.000	SHE-SW-03	15 Summer	30	+0%	100/15 Summer				82.038
S78.001	SHE-SW-04	240 Winter	30	+0%	100/15 Summer				81.832
S79.000	SHE-SW-02	15 Summer	30	+0%	100/15 Summer				82.022
S80.000	SHW-SW-06	15 Summer	30	+0%					81.972
S81.000	SHE-SW-05	15 Summer	30	+0%					81.970
S80.001	SHE-SW-07	15 Summer	30	+0%	100/240 Summer				81.933
S82.000	SHE-SW-08	15 Summer	30	+0%					81.993
S82.001	SHE-SW-09	15 Summer	30	+0%	100/60 Summer				81.858
S77.002	SBASIN 2	240 Winter	30	+0%	30/30 Summer				81.832
S77.003	SBASIN 2 OUT	240 Winter	30	+0%	2/15 Summer	100/30 Summer			82.433
S77.004	SHE-SW-12	15 Summer	30	+0%					81.001
S77.005	SHE-SW-13	15 Summer	30	+0%					80.937
S63.010	S241	30 Summer	30	+0%	100/15 Summer				80.045
S63.011	SSW10	30 Summer	30	+0%					79.801
S1.027	STANK	480 Summer	30	+0%	30/60 Summer				79.253
S1.028	SFC71	480 Summer	30	+0%	30/30 Summer				79.291

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m^3)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S65.001	SFEC-SW-02	-0.149	0.000	0.50			56.7	OK	
S66.000	SHW-SW-01	-0.090	0.000	0.67			32.0	OK	
S66.001	SHW-SW-02	-0.041	0.000	0.42			39.1	OK	

30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m^3)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S67.000	SHW-SW-03	-0.079	0.000	0.45			11.8	OK	
S65.002	SFEC-SW-03	-0.003	0.000	1.01			114.5	OK	
S68.000	SFEC-SW-04	-0.148	0.000	0.51			51.3	OK	
S65.003	SFEC-SW-05	-0.128	0.000	0.85			171.9	OK	
S65.004	SSW01	-0.196	0.000	0.66			210.7	OK	
S65.005	SSW02	-0.162	0.000	0.79			200.1	OK	
S65.006	SSW03	-0.015	0.000	0.87			166.2	OK	
S69.000	SHW-SW-04	-0.020	0.000	0.09			2.9	OK	
S69.001	SSWALE2 IN	-0.495	0.000	0.00			12.1	OK	
S69.002	SSWALE 2 FC	0.405	0.000	0.43			2.4	SURCHARGED	
S65.007	SSW04	-0.006	0.000	0.66			162.3	OK	
S70.000	SHW-SW-09	-0.080	0.000	0.45			7.5	OK	
S71.000	SHW-SW-05	-0.145	0.000	0.28			12.8	OK	
S71.001	SHW-SW-06	-0.130	0.000	0.37			17.1	OK	
S72.000	SHW-SW-07	-0.068	0.000	0.58			9.6	OK	
S73.000	SHW-SW-08	-0.078	0.000	0.47			8.0	OK	
S74.000	SHW-SW-10	-0.077	0.000	0.76			36.8	OK	
S70.001	SBASIN 1	-0.033	0.000	0.02			0.4	OK	
S70.002	SBASIN 1 OUT	0.338	0.000	0.02			0.3	SURCHARGED	
S65.008	S238	0.077	0.000	0.68			169.3	SURCHARGED*	
S63.007	SSW06	0.117	0.000	1.21			317.5	SURCHARGED	
S75.000	SHE-SW-01	-0.157	0.000	0.45			47.4	OK	
S75.001	SSW07	-0.157	0.000	0.46			47.4	OK	
S76.000	SFEATURE POND	0.007	0.000	0.07			0.8	FLOOD RISK	
S76.001	SFP FC	1.205	0.000	0.08			0.5	FLOOD RISK	
S63.008	SSW08	-0.043	0.000	1.00			307.1	OK	
S63.009	SSW09	-0.123	0.000	0.99			307.1	OK	
S77.000	SHE-SW-10	-0.141	0.000	0.30			14.4	OK	
S77.001	SHE-SW-11	-0.009	0.000	0.06			2.4	OK	
S78.000	SHE-SW-03	-0.087	0.000	0.65			24.1	OK	
S78.001	SHE-SW-04	-0.030	0.000	0.09			4.0	OK	
S79.000	SHE-SW-02	-0.103	0.000	0.57			30.8	OK	
S80.000	SHW-SW-06	-0.153	0.000	0.22			9.1	OK	
S81.000	SHE-SW-05	-0.155	0.000	0.21			8.6	OK	
S80.001	SHE-SW-07	-0.109	0.000	0.52			25.1	OK	
S82.000	SHE-SW-08	-0.132	0.000	0.36			16.6	OK	
S82.001	SHE-SW-09	-0.105	0.000	0.55			24.2	OK	
S77.002	SBASIN 2	0.107	0.000	0.14			6.6	SURCHARGED	
S77.003	SBASIN 2 OUT	0.964	0.000	0.06			3.0	FLOOD RISK	16
S77.004	SHE-SW-12	-0.159	0.000	0.19			6.1	OK	
S77.005	SHE-SW-13	-0.173	0.000	0.12			6.0	OK	
S63.010	S241	-0.199	0.000	0.78			309.9	OK*	
S63.011	SSW10	-0.233	0.000	0.69			309.4	OK	
S1.027	STANK	0.221	0.000	0.46		717	28.4	SURCHARGED	
S1.028	SFC71	0.312	0.000	0.37			27.2	SURCHARGED	

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m³/ha Storage	2.000
Hot Start Level (mm)	0	Inlet Coeffiecient	0.800
Manhole Headloss Coeff (Global)	0.500	Flow per Person per Day (l/per/day)	0.000
Foul Sewage per hectare (l/s)	0.000		

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 60 Number of Storage Structures 58 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model		FEH	Data Type Point
FEH Rainfall Version		2013	Cv (Summer) 1.000
Site Location	GB 455061 221552 SP 55061 21552		Cv (Winter) 1.000

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	OFF
Inertia Status	OFF

Profile(s)	Summer and Winter
Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480, 960, 1440
Return Period(s) (years)	2, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)	Surcharged Depth (m)
S1.000	SPP05	960 Winter	100	+40%	2/120 Summer				83.500	0.550
S1.001	SFC05	960 Winter	100	+40%	2/15 Summer				83.544	0.724
S2.000	SPP04	480 Winter	100	+40%	100/120 Summer				83.332	0.042
S2.001	SFC04	480 Winter	100	+40%	2/30 Summer				83.374	0.474
S3.000	SPP06	480 Winter	100	+40%	30/240 Summer				83.246	0.136
S3.001	SFC06	480 Winter	100	+40%	2/15 Summer				83.285	0.565
S1.002	SSW23	480 Winter	100	+40%					82.205	-0.085
S4.000	SPP10	960 Winter	100	+40%	30/60 Summer				83.097	0.242
S4.001	SFC10	960 Winter	100	+40%	2/15 Summer				83.136	0.506
S5.000	SPP08	480 Winter	100	+40%	2/240 Summer				82.937	0.367
S5.001	SFC08	480 Winter	100	+40%	2/120 Summer				82.979	0.429
S4.002	S13	480 Winter	100	+40%					82.199	-0.088
S1.003	SSW24	480 Winter	100	+40%					81.969	-0.077
S6.000	SPP03	480 Winter	100	+40%	2/360 Summer				82.863	0.293
S6.001	SFC03	480 Winter	100	+40%	2/15 Summer				82.898	0.598
S1.004	S7	480 Winter	100	+40%					81.927	-0.072
S7.000	SPP11	960 Winter	100	+40%	2/240 Summer				82.895	0.395
S7.001	SFC11	960 Winter	100	+40%	2/15 Summer				82.939	0.539
S1.005	S7	480 Winter	100	+40%					81.824	-0.070
S8.000	SPP14	960 Winter	100	+40%	30/60 Summer				82.559	0.224
S8.001	SFC14	960 Winter	100	+40%	2/15 Summer				82.603	0.518
S1.006	S6	480 Winter	100	+40%					81.720	-0.069
S9.000	SPP16	960 Winter	100	+40%	2/240 Summer				82.721	0.401
S9.001	SFC16	960 Winter	100	+40%	2/30 Summer				82.761	0.501
S1.007	SSW25	480 Winter	100	+40%					81.660	-0.066
S10.000	SPP17	960 Winter	100	+40%	30/30 Summer				82.377	0.277

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S1.000	SPP05	0.000	0.03			0.3	FLOOD RISK	
S1.001	SFC05	0.000	0.01			0.1	FLOOD RISK	
S2.000	SPP04	0.000	0.03		868	0.2	SURCHARGED	
S2.001	SFC04	0.000	0.01			0.1	SURCHARGED	
S3.000	SPP06	0.000	0.03		819	0.2	SURCHARGED	
S3.001	SFC06	0.000	0.01			0.1	SURCHARGED	
S1.002	SSW23	0.000	0.05			0.2	OK	
S4.000	SPP10	0.000	0.05			0.3	SURCHARGED	
S4.001	SFC10	0.000	0.03			0.2	SURCHARGED	
S5.000	SPP08	0.000	0.09			0.4	SURCHARGED	
S5.001	SFC08	0.000	0.02			0.2	SURCHARGED	
S4.002	S13	0.000	0.03			0.4	OK*	
S1.003	SSW24	0.000	0.12			0.6	OK	
S6.000	SPP03	0.000	0.08			0.5	SURCHARGED	
S6.001	SFC03	0.000	0.04			0.4	SURCHARGED	
S1.004	S7	0.000	0.17			1.0	OK*	
S7.000	SPP11	0.000	0.03			0.3	SURCHARGED	
S7.001	SFC11	0.000	0.01			0.2	SURCHARGED	
S1.005	S7	0.000	0.20			1.2	OK*	
S8.000	SPP14	0.000	0.04			0.2	SURCHARGED	
S8.001	SFC14	0.000	0.01			0.1	SURCHARGED	
S1.006	S6	0.000	0.21			1.3	OK*	
S9.000	SPP16	0.000	0.04			0.3	SURCHARGED	
S9.001	SFC16	0.000	0.01			0.2	SURCHARGED	
S1.007	SSW25	0.000	0.25			1.4	OK	
S10.000	SPP17	0.000	0.06			0.4	SURCHARGED	

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
S10.001	SFC17	960 Winter	100	+40%	2/15 Summer				82.435
S1.008	S17	960 Winter	100	+40%					81.506
S11.000	SPP01	480 Winter	100	+40%	2/240 Summer				82.570
S11.001	SFC01	480 Winter	100	+40%	2/15 Summer				82.624
S12.000	SPP02	960 Winter	100	+40%	30/30 Summer				82.740
S12.001	SFC02	960 Winter	100	+40%	2/15 Summer				82.780
S11.002	SSW26	480 Winter	100	+40%					81.668
S13.000	SPP13	240 Winter	100	+40%	30/240 Summer				82.513
S13.001	SFC13	240 Winter	100	+40%	2/15 Summer				82.549
S11.003	S27	480 Winter	100	+40%					81.469
S1.009	SSW27	480 Winter	100	+40%					81.424
S14.000	SPP12	480 Winter	100	+40%	30/30 Summer				82.143
S14.001	SFC12	480 Winter	100	+40%	2/15 Summer				82.186
S15.000	SPP18	960 Winter	100	+40%	30/60 Summer				82.661
S15.001	SFC18	960 Summer	100	+40%	2/15 Summer				82.698
S16.000	SPP19	960 Winter	100	+40%	30/120 Summer				82.277
S16.001	SFC19	1440 Winter	100	+40%	2/15 Summer				82.317
S15.002	SSW28	960 Winter	100	+40%					81.261
S1.010	SSW29	480 Winter	100	+40%					81.240
S17.000	SPP20	960 Winter	100	+40%	30/60 Summer				82.107
S17.001	SFC20	960 Winter	100	+40%	2/15 Summer				82.149
S1.011	S25	120 Summer	100	+40%					81.134
S18.000	SPP21	1440 Winter	100	+40%	2/1440 Summer				82.165
S18.001	SFC21	1440 Summer	100	+40%	2/15 Summer				82.212
S19.000	SRAIN GARDEN	30 Summer	100	+40%	30/15 Summer				82.085
S19.001	SRG FC	30 Summer	100	+40%	30/15 Summer				82.077
S1.012	S27	120 Summer	100	+40%					81.111
S20.000	SPP26	960 Winter	100	+40%	30/60 Summer				82.183
S20.001	SFC26	960 Winter	100	+40%	2/15 Summer				82.230
S1.013	SSW30	120 Summer	100	+40%					81.020
S21.000	SPP28	960 Winter	100	+40%	2/960 Winter				82.167
S21.001	SFC28	960 Winter	100	+40%	2/15 Summer				82.226
S1.014	SSW31	120 Summer	100	+40%					80.956
S22.000	SPP30	960 Winter	100	+40%	30/240 Summer				82.100
S22.001	SFC30	960 Winter	100	+40%	2/15 Summer				82.144
S1.015	S66	120 Summer	100	+40%					80.894
S23.000	SPP32	960 Winter	100	+40%	2/240 Summer				82.045
S23.001	SFC32	960 Winter	100	+40%	2/15 Summer				82.104
S1.016	S45	120 Summer	100	+40%					80.841
S24.000	SPP35	960 Winter	100	+40%	30/30 Summer				82.082
S24.001	SFC35	960 Summer	100	+40%	2/15 Summer				82.125
S1.017	S70	120 Summer	100	+40%					80.796
S25.000	SPP34	960 Winter	100	+40%	30/240 Summer				81.968
S25.001	SFC34	960 Winter	100	+40%	2/15 Summer				82.273
S1.018	S46	120 Summer	100	+40%					80.759
S1.019	S47	120 Summer	100	+40%					80.708
S26.000	SPP27	360 Winter	100	+40%	30/240 Summer				82.764
S26.001	SFC27	360 Winter	100	+40%	2/15 Summer				82.805
S26.002	SSW32	360 Winter	100	+40%					81.607
S27.000	SPP31	960 Winter	100	+40%	2/120 Summer				82.465
S27.001	SFC31	960 Winter	100	+40%	2/120 Summer				82.501
S26.003	S80	480 Winter	100	+40%					81.530
S26.004	S56	480 Winter	100	+40%					81.443
S28.000	SPP36	960 Winter	100	+40%	2/120 Summer				82.309
S28.001	SFC36	960 Winter	100	+40%	2/120 Summer				82.364
S26.005	S84	960 Winter	100	+40%					81.345
S29.000	SPP41	480 Winter	100	+40%	2/120 Summer				82.128

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m^3)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S10.001	SFC17	0.515	0.000	0.01			0.2	SURCHARGED	
S1.008	S17	-0.065	0.000	0.27			1.6	OK*	
S11.000	SPP01	0.310	0.000	0.08			0.5	SURCHARGED	
S11.001	SFC01	0.524	0.000	0.03			0.4	SURCHARGED	
S12.000	SPP02	0.300	0.000	0.03			0.2	SURCHARGED	
S12.001	SFC02	0.610	0.000	0.01			0.1	FLOOD RISK	
S11.002	SSW26	-0.082	0.000	0.07			0.4	OK	
S13.000	SPP13	0.123	0.000	0.04		352	0.2	SURCHARGED	
S13.001	SFC13	0.549	0.000	0.01			0.1	SURCHARGED	
S11.003	S27	-0.081	0.000	0.08			0.5	OK*	
S1.009	SSW27	-0.058	0.000	0.37			2.1	OK	
S14.000	SPP12	0.263	0.000	0.08			0.5	SURCHARGED	
S14.001	SFC12	0.536	0.000	0.02			0.4	SURCHARGED	
S15.000	SPP18	0.261	0.000	0.05			0.3	SURCHARGED	
S15.001	SFC18	0.498	0.000	0.03			0.2	SURCHARGED	
S16.000	SPP19	0.207	0.000	0.04			0.2	SURCHARGED	
S16.001	SFC19	0.517	0.000	0.00			0.1	SURCHARGED	
S15.002	SSW28	-0.089	0.000	0.02			0.3	OK	
S1.010	SSW29	-0.107	0.000	0.19			2.7	OK	
S17.000	SPP20	0.267	0.000	0.06			0.4	SURCHARGED	
S17.001	SFC20	0.499	0.000	0.01			0.3	SURCHARGED	
S1.011	S25	-0.179	0.000	0.07			2.8	OK*	
S18.000	SPP21	0.275	0.000	0.04			0.2	FLOOD RISK	
S18.001	SFC21	0.712	0.000	0.01			0.1	FLOOD RISK	
S19.000	SRAIN GARDEN	0.660	0.000	0.74		18	22.1	SURCHARGED	
S19.001	SRG FC	0.677	0.000	0.33			19.9	SURCHARGED	
S1.012	S27	-0.108	0.000	0.53			22.6	OK*	
S20.000	SPP26	0.238	0.000	0.03			0.2	SURCHARGED	
S20.001	SFC26	0.605	0.000	0.02			0.1	FLOOD RISK	
S1.013	SSW30	-0.095	0.000	0.63			22.7	OK	
S21.000	SPP28	0.287	0.000	0.05			0.3	SURCHARGED	
S21.001	SFC28	0.526	0.000	0.01			0.2	SURCHARGED	
S1.014	SSW31	-0.081	0.000	0.73			22.8	OK	
S22.000	SPP30	0.135	0.000	0.04			0.2	SURCHARGED	
S22.001	SFC30	0.544	0.000	0.01			0.1	SURCHARGED	
S1.015	S66	-0.094	0.000	0.64			22.9	OK*	
S23.000	SPP32	0.340	0.000	0.05			0.3	SURCHARGED	
S23.001	SFC32	0.519	0.000	0.01			0.2	SURCHARGED	
S1.016	S45	-0.082	0.000	0.73			23.1	OK*	
S24.000	SPP35	0.292	0.000	0.04			0.2	SURCHARGED	
S24.001	SFC35	0.525	0.000	0.00			0.1	SURCHARGED	
S1.017	S70	-0.076	0.000	0.77			23.1	OK*	
S25.000	SPP34	0.178	0.000	0.08			1.1	SURCHARGED	
S25.001	SFC34	0.773	0.000	0.01			0.2	FLOOD RISK	
S1.018	S46	-0.075	0.000	0.78			23.3	OK*	
S1.019	S47	-0.100	0.000	0.59			23.3	OK*	
S26.000	SPP27	0.124	0.000	0.03		443	0.2	SURCHARGED	
S26.001	SFC27	0.555	0.000	0.01			0.1	SURCHARGED	
S26.002	SSW32	-0.093	0.000	0.01			0.1	OK	
S27.000	SPP31	0.475	0.000	0.09			0.3	SURCHARGED	
S27.001	SFC31	0.511	0.000	0.02			0.2	SURCHARGED	
S26.003	S80	-0.085	0.000	0.05			0.3	OK*	
S26.004	S56	-0.087	0.000	0.04			0.3	OK*	
S28.000	SPP36	0.599	0.000	0.13			0.5	SURCHARGED	
S28.001	SFC36	0.654	0.000	0.03			0.3	SURCHARGED	
S26.005	S84	-0.075	0.000	0.14			0.6	OK*	

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m^3)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S29.000	SPP41	0.498	0.000	0.20			0.8	SURCHARGED	

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
S29.001	SFC41	480 Winter	100	+40%	2/120 Summer				82.166
S26.006	SSW33	480 Winter	100	+40%					81.153
S30.000	SPP40	1440 Winter	100	+40%	2/240 Summer				82.016
S30.001	SFC40	960 Winter	100	+40%	2/120 Summer				82.063
S26.007	S91	120 Summer	100	+40%					80.650
S31.000	SPP39	960 Winter	100	+40%	2/30 Summer				82.118
S31.001	SFC39	960 Winter	100	+40%	2/15 Summer				82.163
S1.020	SSW34	120 Summer	100	+40%					80.646
S1.021	S53	120 Summer	100	+40%					80.596
S32.000	SPP47	1440 Winter	100	+40%	2/240 Summer				81.930
S32.001	SFC47	1440 Winter	100	+40%	2/240 Summer				81.974
S1.022	S96	120 Summer	100	+40%					80.532
S1.023	S53	120 Summer	100	+40%					80.485
S33.000	SPP55	960 Winter	100	+40%	2/240 Summer				81.940
S33.001	SFC55	960 Winter	100	+40%	2/60 Summer				81.986
S1.024	S100	120 Summer	100	+40%					80.415
S34.000	SPP46	960 Winter	100	+40%	2/360 Summer				81.819
S34.001	SFC46	960 Winter	100	+40%	2/15 Summer				81.878
S1.025	SSW35	120 Summer	100	+40%					80.367
S35.000	SPP61	1440 Winter	100	+40%	2/240 Summer				81.856
S35.001	SFC61	1440 Winter	100	+40%	2/240 Summer				81.898
S1.026	SSW36	120 Summer	100	+40%					80.303
S36.000	SPP44	960 Winter	100	+40%	30/60 Summer				81.894
S36.001	SFC44	960 Winter	100	+40%	2/15 Summer				81.939
S37.000	SHE-SW-14	15 Summer	100	+40%					82.088
S36.002	SHE-SW-15	15 Summer	100	+40%	100/15 Summer				81.243
S38.000	SPP45	1440 Winter	100	+40%	30/60 Summer				81.837
S38.001	SFC45	1440 Winter	100	+40%	2/15 Summer				81.882
S36.003	S145	15 Summer	100	+40%	100/15 Summer				81.077
S39.000	SPP60	240 Winter	100	+40%	30/30 Summer				81.803
S39.001	SFC60	240 Winter	100	+40%	2/15 Summer				81.840
S36.004	S146	15 Summer	100	+40%					80.827
S40.000	SSW11	15 Summer	100	+40%	100/15 Summer				82.214
S40.001	SSW12	15 Summer	100	+40%	100/15 Summer				82.170
S40.002	SSW13	15 Summer	100	+40%	30/15 Summer				82.100
S41.000	STANK 3	240 Winter	100	+40%	30/15 Summer				81.325
S41.001	SHB 3	240 Winter	100	+40%	2/15 Summer				81.408
S40.003	S148	15 Summer	100	+40%					80.514
S42.000	SPP67	960 Winter	100	+40%	2/240 Summer				81.846
S42.001	SFC67	960 Winter	100	+40%	2/15 Summer				81.888
S40.004	S148	15 Summer	100	+40%	30/15 Summer				80.765
S40.005	SSW15	15 Summer	100	+40%	100/15 Summer				81.179
S43.000	SPP68	960 Winter	100	+40%	2/240 Summer				81.839
S43.001	SFC68	960 Winter	100	+40%	2/15 Summer				81.878
S40.006	S150	15 Summer	100	+40%	100/15 Summer				80.656
S44.000	SPP69	960 Winter	100	+40%	30/120 Summer				81.890
S44.001	SFC69	960 Winter	100	+40%	2/15 Summer				81.889
S40.007	S151	15 Summer	100	+40%	30/15 Summer				80.664
S40.008	SSW16	15 Summer	100	+40%	100/15 Summer				80.560
S45.000	SPP66	960 Winter	100	+40%	2/360 Summer				81.974
S45.001	SFC66	960 Winter	100	+40%	2/15 Summer				82.019
S46.000	SPP65	480 Winter	100	+40%	30/120 Summer				82.028
S46.001	SFC65	960 Winter	100	+40%	2/15 Summer				82.070
S47.000	STANK 2	240 Winter	100	+40%	30/15 Summer				80.999
S47.001	SHB 2	360 Winter	100	+40%	2/120 Summer				81.007
S40.009	SSW17	15 Summer	100	+40%	100/15 Summer				80.456
S48.000	SFEC-SW-21	15 Summer	100	+40%	100/15 Summer				82.287

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m^3)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S29.001	SFC41	0.536	0.000	0.05			0.6	SURCHARGED	
S26.006	SSW33	-0.069	0.000	0.22			1.3	OK	
S30.000	SPP40	0.476	0.000	0.09			0.4	SURCHARGED	
S30.001	SFC40	0.538	0.000	0.01			0.2	SURCHARGED	
S26.007	S91	-0.108	0.000	0.09			1.4	OK*	
S31.000	SPP39	0.443	0.000	0.04			0.2	FLOOD RISK	
S31.001	SFC39	0.688	0.000	0.02			0.1	FLOOD RISK	
S1.020	SSW34	-0.085	0.000	0.70			24.6	OK	
S1.021	S53	-0.072	0.000	0.80			24.6	OK*	
S32.000	SPP47	0.480	0.000	0.09			0.3	SURCHARGED	
S32.001	SFC47	0.524	0.000	0.01			0.2	SURCHARGED	
S1.022	S96	-0.088	0.000	0.68			24.8	OK*	
S1.023	S53	-0.069	0.000	0.82			24.8	OK*	
S33.000	SPP55	0.480	0.000	0.07			0.4	SURCHARGED	
S33.001	SFC55	0.556	0.000	0.01			0.2	SURCHARGED	
S1.024	S100	-0.093	0.000	0.65			25.0	OK*	
S34.000	SPP46	0.299	0.000	0.05			0.3	SURCHARGED	
S34.001	SFC46	0.523	0.000	0.01			0.2	SURCHARGED	
S1.025	SSW35	-0.067	0.000	0.84			25.1	OK	
S35.000	SPP61	0.486	0.000	0.09			0.4	SURCHARGED	
S35.001	SFC61	0.528	0.000	0.04			0.2	SURCHARGED	
S1.026	SSW36	-0.085	0.000	0.70			25.3	OK	
S36.000	SPP44	0.224	0.000	0.04			0.2	SURCHARGED	
S36.001	SFC44	0.519	0.000	0.01			0.1	SURCHARGED	
S37.000	SHE-SW-14	-0.112	0.000	0.70			90.7	OK	
S36.002	SHE-SW-15	0.043	0.000	1.18			89.3	SURCHARGED	
S38.000	SPP45	0.242	0.000	0.03			0.2	SURCHARGED	
S38.001	SFC45	0.512	0.000	0.00			0.1	SURCHARGED	
S36.003	S145	0.052	0.000	1.46			89.6	SURCHARGED*	
S39.000	SPP60	0.193	0.000	0.06		257	0.3	SURCHARGED	
S39.001	SFC60	0.470	0.000	0.01			0.2	SURCHARGED	
S36.004	S146	-0.138	0.000	0.56			88.9	OK*	
S40.000	SSW11	1.114	0.000	0.47			38.6	SURCHARGED	
S40.001	SSW12	1.250	0.000	0.73			57.8	SURCHARGED	
S40.002	SSW13	1.319	0.000	1.12			94.2	SURCHARGED	
S41.000	STANK 3	0.675	0.000	0.08		323	4.9	SURCHARGED	
S41.001	SHB 3	0.976	0.000	0.40			2.0	SURCHARGED	
S40.003	S148	0.000	0.000	1.57			133.0	SURCHARGED*	
S42.000	SPP67	0.306	0.000	0.07			0.5	SURCHARGED	
S42.001	SFC67	0.538	0.000	0.02			0.3	SURCHARGED	
S40.004	S148	0.366	0.000	2.19			134.4	SURCHARGED*	
S40.005	SSW15	0.660	0.000	1.44			243.1	SURCHARGED	
S43.000	SPP68	0.324	0.000	0.08			0.5	SURCHARGED	
S43.001	SFC68	0.528	0.000	0.02			0.4	SURCHARGED	
S40.006	S150	0.216	0.000	1.44			242.9	SURCHARGED*	
S44.000	SPP69	0.180	0.000	0.02			0.1	SURCHARGED	
S44.001	SFC69	0.439	0.000	0.00			0.1	SURCHARGED	
S40.007	S151	0.268	0.000	1.96			348.2	SURCHARGED*	
S40.008	SSW16	0.114	0.000	0.92			345.5	SURCHARGED	
S45.000	SPP66	0.284	0.000	0.05			0.3	SURCHARGED	
S45.001	SFC66	0.519	0.000	0.03			0.1	SURCHARGED	
S46.000	SPP65	0.168	0.000	0.03			0.2	SURCHARGED	
S46.001	SFC65	0.470	0.000	0.01			0.1	SURCHARGED	
S47.000	STANK 2	0.774	0.000	0.07		552	2.3	SURCHARGED	
S47.001	SHB 2	0.832	0.000	0.06			2.0	SURCHARGED	
S40.009	SSW17	0.301	0.000	0.87			300.3	SURCHARGED	

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m^3)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S48.000	SFEC-SW-21	0.412	0.000	0.89			152.5	SURCHARGED	

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
S48.001	SFEC-SW-22	15 Summer	100	+40%	100/15 Summer				82.072
S48.002	SFEC-SW-23	15 Summer	100	+40%	100/15 Summer				81.844
S48.003	SFEC-SW-24	15 Summer	100	+40%	100/15 Summer				81.686
S49.000	SFEC-SW-19	15 Summer	100	+40%					81.638
S49.001	SFEC-SW-20	15 Summer	100	+40%					81.546
S50.000	SFEC-SW-15	15 Summer	100	+40%	100/15 Summer				82.063
S50.001	SFEC-SW-17	15 Summer	100	+40%	100/15 Summer				81.951
S50.002	SFEC-SW-18	15 Summer	100	+40%	100/15 Summer				81.787
S48.004	SFEC-SW-25	15 Summer	100	+40%	100/15 Summer				81.478
S48.005	SFEC-SW-26	15 Summer	100	+40%					80.422
S40.010	SSW18	15 Summer	100	+40%	100/15 Summer				80.358
S40.011	SSW19	15 Summer	100	+40%	100/15 Summer				80.254
S51.000	SHE-SW-16	15 Summer	100	+40%	30/15 Summer				82.340
S51.001	SHE-SW-17	15 Summer	100	+40%	30/15 Summer				80.540
S40.012	S154	15 Summer	100	+40%					79.836
S52.000	SSwale In 1	960 Summer	100	+40%					81.960
S52.001	SSwale 2	960 Summer	100	+40%					81.960
S52.002	SSwale in 3	960 Summer	100	+40%					81.960
S52.003	SSwale 4	960 Summer	100	+40%					81.960
S53.000	SSW PUMP OUTFALL	960 Summer	100	+40%					81.960
S52.004	SSwale in 5	960 Summer	100	+40%					81.960
S52.005	SSwale 6	960 Summer	100	+40%					81.960
S52.006	SSwale in 7	960 Summer	100	+40%					81.961
S52.007	SSwale out	960 Summer	100	+40%	2/120 Summer				81.965
S52.008	SSWALE FC70	15 Summer	100	+40%					81.575
S40.013	SSW20	15 Summer	100	+40%	100/15 Summer				79.932
S54.000	SPP53	480 Winter	100	+40%	2/240 Summer				81.929
S54.001	SFC53	480 Winter	100	+40%	2/120 Summer				81.966
S55.000	SPP57	960 Winter	100	+40%	30/60 Summer				81.962
S55.001	SFC57	960 Winter	100	+40%	2/15 Summer				82.006
S54.002	S170	960 Winter	100	+40%					80.980
S40.014	S167	15 Summer	100	+40%					79.772
S36.005	SSW22	960 Winter	100	+40%	100/15 Summer				79.711
S56.000	SPP48	480 Winter	100	+40%	2/120 Summer				82.028
S56.001	SFC48	480 Winter	100	+40%	2/120 Summer				82.063
S57.000	SPP50	360 Winter	100	+40%	30/30 Summer				81.865
S57.001	SFC50	480 Winter	100	+40%	2/15 Summer				81.905
S56.002	SSW36	480 Winter	100	+40%					81.029
S58.000	Spp56	960 Winter	100	+40%	2/120 Summer				81.991
S58.001	SFC56	960 Winter	100	+40%	2/120 Summer				82.028
S56.003	S187	480 Winter	100	+40%					80.886
S59.000	SPP59	960 Winter	100	+40%	30/60 Summer				81.837
S59.001	SFC59	960 Winter	100	+40%	2/15 Summer				81.883
S60.000	SPP63	480 Winter	100	+40%					81.536
S60.001	SFC63	480 Winter	100	+40%	2/15 Summer				81.542
S61.000	SPP62	960 Winter	100	+40%	30/60 Summer				81.813
S61.001	SFC62	960 Winter	100	+40%	2/15 Summer				81.854
S56.004	SSW37	480 Winter	100	+40%					80.728
S62.000	SPP64	960 Winter	100	+40%	2/240 Summer				81.679
S62.001	SFC64	960 Winter	100	+40%	2/15 Summer				81.706
S63.000	SFEC-SW-06	15 Summer	100	+40%	100/15 Summer				82.460
S63.001	SFEC-SW-07	15 Summer	100	+40%	100/15 Summer				82.428
S63.002	SFEC-SW-08	15 Summer	100	+40%	100/15 Summer				82.234
S63.003	SFEC-SW-09	15 Summer	100	+40%	100/15 Summer				82.020
S64.000	SFEC-SW-10	15 Summer	100	+40%	100/15 Summer				82.332
S64.001	SFEC-SW-12	15 Summer	100	+40%	100/15 Summer				82.114
S63.004	SFEC-SW-13	15 Summer	100	+40%	100/15 Summer				81.969

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S48.001	SFEC-SW-22	0.447	0.000	1.05			174.9	SURCHARGED	
S48.002	SFEC-SW-23	0.344	0.000	1.23			219.9	SURCHARGED	
S48.003	SFEC-SW-24	0.286	0.000	0.73			252.2	SURCHARGED	
S49.000	SFEC-SW-19	-0.087	0.000	0.69			36.4	OK	
S49.001	SFEC-SW-20	-0.054	0.000	0.35			56.4	OK	
S50.000	SFEC-SW-15	0.338	0.000	1.03			46.0	SURCHARGED	
S50.001	SFEC-SW-17	0.251	0.000	1.01			93.2	SURCHARGED	
S50.002	SFEC-SW-18	0.237	0.000	0.78			120.9	SURCHARGED	
S48.004	SFEC-SW-25	0.108	0.000	1.51			429.0	SURCHARGED	
S48.005	SFEC-SW-26	-0.078	0.000	0.78			428.0	OK	
S40.010	SSW18	0.219	0.000	1.09			617.1	SURCHARGED	
S40.011	SSW19	0.230	0.000	0.95			579.0	SURCHARGED	
S51.000	SHE-SW-16	2.315	0.000	1.82			91.3	FLOOD RISK	
S51.001	SHE-SW-17	1.062	0.000	1.96			92.7	SURCHARGED	
S40.012	S154	0.000	0.000	1.06			642.6	SURCHARGED*	
S52.000	SSwale In 1	-0.540	0.000	0.00			3.9	OK	
S52.001	SSwale 2	-0.540	0.000	0.00			6.1	OK	
S52.002	SSwale in 3	-0.540	0.000	0.00			5.4	OK	
S52.003	SSwale 4	-0.540	0.000	0.00			7.1	OK	
S53.000	SSW PUMP OUTFALL	-0.140	0.000	0.00			0.0	OK	
S52.004	SSwale in 5	-0.540	0.000	0.00			7.9	OK	
S52.005	SSwale 6	-0.540	0.000	0.00			6.6	OK	
S52.006	SSwale in 7	-0.539	0.000	0.00			1.0	OK	
S52.007	SSwale out	0.315	0.000	0.03			0.5	SURCHARGED*	
S52.008	SSWALE FC70	0.000	0.000	0.01			0.2	SURCHARGED*	
S40.013	SSW20	0.148	0.000	1.80			640.5	SURCHARGED	
S54.000	SPP53	0.439	0.000	0.09			0.3	SURCHARGED	
S54.001	SFC53	0.491	0.000	0.02			0.2	SURCHARGED	
S55.000	SPP57	0.217	0.000	0.03			0.2	SURCHARGED	
S55.001	SFC57	0.526	0.000	0.01			0.1	SURCHARGED	
S54.002	S170	-0.094	0.000	0.01			0.3	OK*	
S40.014	S167	0.000	0.000	0.99			624.3	SURCHARGED*	
S36.005	SSW22	0.103	0.000	0.10			61.2	SURCHARGED	
S56.000	SPP48	0.478	0.000	0.20			0.8	SURCHARGED	
S56.001	SFC48	0.513	0.000	0.05			0.6	SURCHARGED	
S57.000	SPP50	0.220	0.000	0.05		750	0.3	SURCHARGED	
S57.001	SFC50	0.625	0.000	0.03			0.2	SURCHARGED	
S56.002	SSW36	-0.071	0.000	0.18			0.8	OK	
S58.000	Spp56	0.561	0.000	0.09			0.4	SURCHARGED	
S58.001	SFC56	0.598	0.000	0.02			0.2	SURCHARGED	
S56.003	S187	-0.072	0.000	0.17			1.0	OK*	
S59.000	SPP59	0.242	0.000	0.04			0.2	SURCHARGED	
S59.001	SFC59	0.513	0.000	0.01			0.1	SURCHARGED	
S60.000	SPP63	-0.009	0.000	0.01			0.1	OK	
S60.001	SFC63	0.242	0.000	0.00			0.1	SURCHARGED	
S61.000	SPP62	0.203	0.000	0.05			0.3	SURCHARGED	
S61.001	SFC62	0.514	0.000	0.03			0.2	SURCHARGED	
S56.004	SSW37	-0.068	0.000	0.22			1.3	OK	
S62.000	SPP64	0.319	0.000	0.30			1.6	SURCHARGED	
S62.001	SFC64	0.606	0.000	0.06			1.4	FLOOD RISK	
S63.000	SFEC-SW-06	0.360	0.000	0.35			109.2	FLOOD RISK	
S63.001	SFEC-SW-07	0.441	0.000	0.90			251.1	FLOOD RISK	
S63.002	SFEC-SW-08	0.564	0.000	1.02			261.5	SURCHARGED	
S63.003	SFEC-SW-09	0.632	0.000	1.10			295.6	SURCHARGED	
S64.000	SFEC-SW-10	0.307	0.000	1.02			52.5	SURCHARGED	
S64.001	SFEC-SW-12	0.389	0.000	1.39			73.7	SURCHARGED	

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S63.004	SFEC-SW-13	0.704	0.000	1.04			391.7	SURCHARGED	

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
S63.005	SFEC-SW-14	15 Summer	100	+40%	30/15 Summer				81.822
S63.006	SSW05	15 Summer	100	+40%	100/15 Summer				81.765
S65.000	SFEC-SW-01	15 Summer	100	+40%	100/15 Summer				82.308
S65.001	SFEC-SW-02	15 Summer	100	+40%	100/15 Summer				82.261
S66.000	SHW-SW-01	15 Summer	100	+40%	100/15 Summer				82.407
S66.001	SHW-SW-02	15 Summer	100	+40%	100/15 Summer				82.170
S67.000	SHW-SW-03	15 Summer	100	+40%	100/15 Summer				82.265
S65.002	SFEC-SW-03	15 Summer	100	+40%	100/15 Summer				82.107
S68.000	SFEC-SW-04	15 Summer	100	+40%	100/15 Summer				82.132
S65.003	SFEC-SW-05	15 Summer	100	+40%	100/15 Summer				82.059
S65.004	SSW01	15 Summer	100	+40%	100/15 Summer				82.005
S65.005	SSW02	15 Summer	100	+40%	100/15 Summer				81.901
S65.006	SSW03	15 Summer	100	+40%	100/15 Summer				81.776
S69.000	SHW-SW-04	120 Winter	100	+40%	100/15 Summer				82.203
S69.001	SSWALE2 IN	120 Winter	100	+40%					82.202
S69.002	SSWALE 2 FC	120 Winter	100	+40%	2/15 Summer				82.202
S65.007	SSW04	15 Summer	100	+40%	100/15 Summer				81.741
S70.000	SHW-SW-09	15 Summer	100	+40%					82.002
S71.000	SHW-SW-05	15 Summer	100	+40%					82.012
S71.001	SHW-SW-06	15 Summer	100	+40%					81.870
S72.000	SHW-SW-07	15 Summer	100	+40%	100/15 Summer				82.051
S73.000	SHW-SW-08	15 Summer	100	+40%					82.006
S74.000	SHW-SW-10	15 Summer	100	+40%	100/15 Summer				82.333
S70.001	SBASIN 1	1440 Winter	100	+40%	100/120 Summer				81.712
S70.002	SBASIN 1 OUT	1440 Winter	100	+40%	2/15 Summer				81.807
S65.008	S238	15 Summer	100	+40%	30/15 Summer				80.932
S63.007	SSW06	15 Summer	100	+40%	30/15 Summer				81.572
S75.000	SHE-SW-01	15 Summer	100	+40%					81.809
S75.001	SSW07	15 Summer	100	+40%					81.254
S76.000	SFEATURE POND	1440 Winter	100	+40%	30/360 Summer				82.187
S76.001	SFP FC	1440 Winter	100	+40%	2/15 Summer				82.184
S63.008	SSW08	30 Summer	100	+40%	100/15 Summer				80.803
S63.009	SSW09	15 Summer	100	+40%	100/15 Summer				80.568
S77.000	SHE-SW-10	240 Winter	100	+40%					82.067
S77.001	SHE-SW-11	240 Winter	100	+40%	100/15 Summer				82.066
S78.000	SHE-SW-03	15 Summer	100	+40%	100/15 Summer				82.236
S78.001	SHE-SW-04	240 Winter	100	+40%	100/15 Summer				82.067
S79.000	SHE-SW-02	15 Summer	100	+40%	100/15 Summer				82.127
S80.000	SHW-SW-06	240 Winter	100	+40%					82.067
S81.000	SHE-SW-05	240 Winter	100	+40%					82.067
S80.001	SHE-SW-07	240 Winter	100	+40%	100/240 Summer				82.067
S82.000	SHE-SW-08	240 Winter	100	+40%					82.068
S82.001	SHE-SW-09	240 Winter	100	+40%	100/60 Summer				82.067
S77.002	SBASIN 2	240 Winter	100	+40%	30/30 Summer				82.066
S77.003	SBASIN 2 OUT	360 Summer	100	+40%	2/15 Summer	100/30 Summer			82.500
S77.004	SHE-SW-12	15 Summer	100	+40%					81.014
S77.005	SHE-SW-13	15 Summer	100	+40%					80.948
S63.010	S241	15 Summer	100	+40%	100/15 Summer				80.331
S63.011	SSW10	30 Summer	100	+40%					80.034
S1.027	STANK	960 Winter	100	+40%	30/60 Summer				79.710
S1.028	SFC71	960 Winter	100	+40%	30/30 Summer				79.731

100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m^3)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S63.005	SFEC-SW-14	0.797	0.000	1.53			380.5	SURCHARGED	
S63.006	SSW05	0.820	0.000	1.15			343.7	SURCHARGED	
S65.000	SFEC-SW-01	0.483	0.000	0.70			31.3	FLOOD RISK	
S65.001	SFEC-SW-02	0.461	0.000	0.75			84.6	FLOOD RISK	
S66.000	SHW-SW-01	0.582	0.000	0.99			47.4	FLOOD RISK	
S66.001	SHW-SW-02	0.523	0.000	0.67			62.5	SURCHARGED	
S67.000	SHW-SW-03	0.515	0.000	0.61			15.9	FLOOD RISK	
S65.002	SFEC-SW-03	0.533	0.000	1.61			182.4	SURCHARGED	
S68.000	SFEC-SW-04	0.132	0.000	0.88			88.1	SURCHARGED	
S65.003	SFEC-SW-05	0.494	0.000	1.32			268.5	SURCHARGED	
S65.004	SSW01	0.551	0.000	1.02			327.0	SURCHARGED	
S65.005	SSW02	0.876	0.000	0.96			242.7	SURCHARGED	
S65.006	SSW03	0.956	0.000	1.19			228.4	SURCHARGED	
S69.000	SHW-SW-04	0.178	0.000	0.16			5.2	SURCHARGED	
S69.001	SSWALE2 IN	-0.298	0.000	0.01			22.3	FLOOD RISK	
S69.002	SSWALE 2 FC	0.602	0.000	0.50			2.9	FLOOD RISK	
S65.007	SSW04	0.951	0.000	0.92			226.4	SURCHARGED	
S70.000	SHW-SW-09	-0.048	0.000	0.80			13.4	OK	
S71.000	SHW-SW-05	-0.113	0.000	0.50			23.0	OK	
S71.001	SHW-SW-06	-0.091	0.000	0.66			30.5	OK	
S72.000	SHW-SW-07	0.001	0.000	1.00			16.7	SURCHARGED	
S73.000	SHW-SW-08	-0.044	0.000	0.84			14.4	OK	
S74.000	SHW-SW-10	0.208	0.000	1.30			62.7	FLOOD RISK	
S70.001	SBASIN 1	0.062	0.000	0.03			0.5	SURCHARGED	
S70.002	SBASIN 1 OUT	0.464	0.000	0.02			0.3	SURCHARGED	
S65.008	S238	0.293	0.000	0.91			225.2	SURCHARGED*	
S63.007	SSW06	1.007	0.000	1.78			467.1	SURCHARGED	
S75.000	SHE-SW-01	-0.091	0.000	0.81			85.1	OK	
S75.001	SSW07	-0.090	0.000	0.82			85.2	OK	
S76.000	SFEATURE POND	0.087	0.000	0.06			0.7	FLOOD RISK	
S76.001	SFP FC	1.284	0.000	0.08			0.5	FLOOD RISK	
S63.008	SSW08	0.404	0.000	1.59			486.8	SURCHARGED	
S63.009	SSW09	0.245	0.000	1.58			487.6	SURCHARGED	
S77.000	SHE-SW-10	-0.058	0.000	0.08			4.1	OK	
S77.001	SHE-SW-11	0.225	0.000	0.10			3.9	SURCHARGED	
S78.000	SHE-SW-03	0.111	0.000	1.15			42.8	FLOOD RISK	
S78.001	SHE-SW-04	0.205	0.000	0.16			6.6	SURCHARGED	
S79.000	SHE-SW-02	0.002	0.000	0.99			53.8	SURCHARGED	
S80.000	SHW-SW-06	-0.058	0.000	0.06			2.6	OK	
S81.000	SHE-SW-05	-0.058	0.000	0.06			2.4	OK	
S80.001	SHE-SW-07	0.025	0.000	0.15			7.1	SURCHARGED	
S82.000	SHE-SW-08	-0.057	0.000	0.10			4.7	OK	
S82.001	SHE-SW-09	0.104	0.000	0.15			6.6	SURCHARGED	
S77.002	SBASIN 2	0.341	0.000	0.17			8.2	SURCHARGED	
S77.003	SBASIN 2 OUT	1.031	0.120	0.06			3.0	FLOOD	16
S77.004	SHE-SW-12	-0.146	0.000	0.27			8.4	OK	
S77.005	SHE-SW-13	-0.162	0.000	0.17			8.5	OK	
S63.010	S241	0.087	0.000	1.22			483.4	SURCHARGED*	
S63.011	SSW10	0.000	0.000	1.03			464.8	OK	
S1.027	STANK	0.678	0.000	0.47			28.9	SURCHARGED	
S1.028	SFC71	0.752	0.000	0.37			27.4	SURCHARGED	