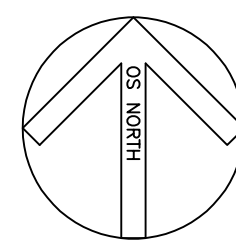


LEVEL- Related to Ordnance Survey by connection to the OS Active Network by G.P.S

GRID- Related to Ordnance Survey using One Point Localisation on Station S1. Orientation as OS Grid North.



FLOOR LEVELS ARE PRELIMINARY

-  Section 104 surface water sewer
 Section 104 foul water sewer
 Section 104 sewer easment
 Section 104 right of access 24/7

A. Storage revised to D1800mm, highway vertical alignment revised.	22-5-17
B. Main sewer network revised, Tubisdar storage added, FW pump station relocated, FW sewers stored, Floor levels revised, Sceptal private drainage added, rising main run and outfall location revised	7-8-17
C. S85 hydrobrake revised	8-8-17
D. Fuel water pump station revised position	4-9-17
E. Revised for section 104/38 submission	15-12-17
F. Plots 15-55 to 80-62 revised and updated for section 104/38 submission	18-1-19
G. Indicative layout added for northern part of the development, existing and proposed sewer routes added following meeting with UU	22-6-19
H. Full redesign in line with Alpha Design layout	17-10-19
I. Plots drainage added, storage tank Not1 volume and tank size revised	19-11-19
K. Details/revisions for section 104 submission	28-11-19
L. Revised following UU comment 29-11-19	2-12-19
M. Posing clarified	16-7-20
N. UU reference number added	2-8-20
P. Full redesign following layout changes and implementation of full run	14-8-21
Q. Plots 13-15 & 18 revised	26-8-21



R.A.B.
ENGINEERING
DESIGN LTD

High Grange Developments Ltd

Mill Hill, Cleator Moor
Engineering Layout 15-64 & 80-133
Impermeable areas

DRAWN BY rab

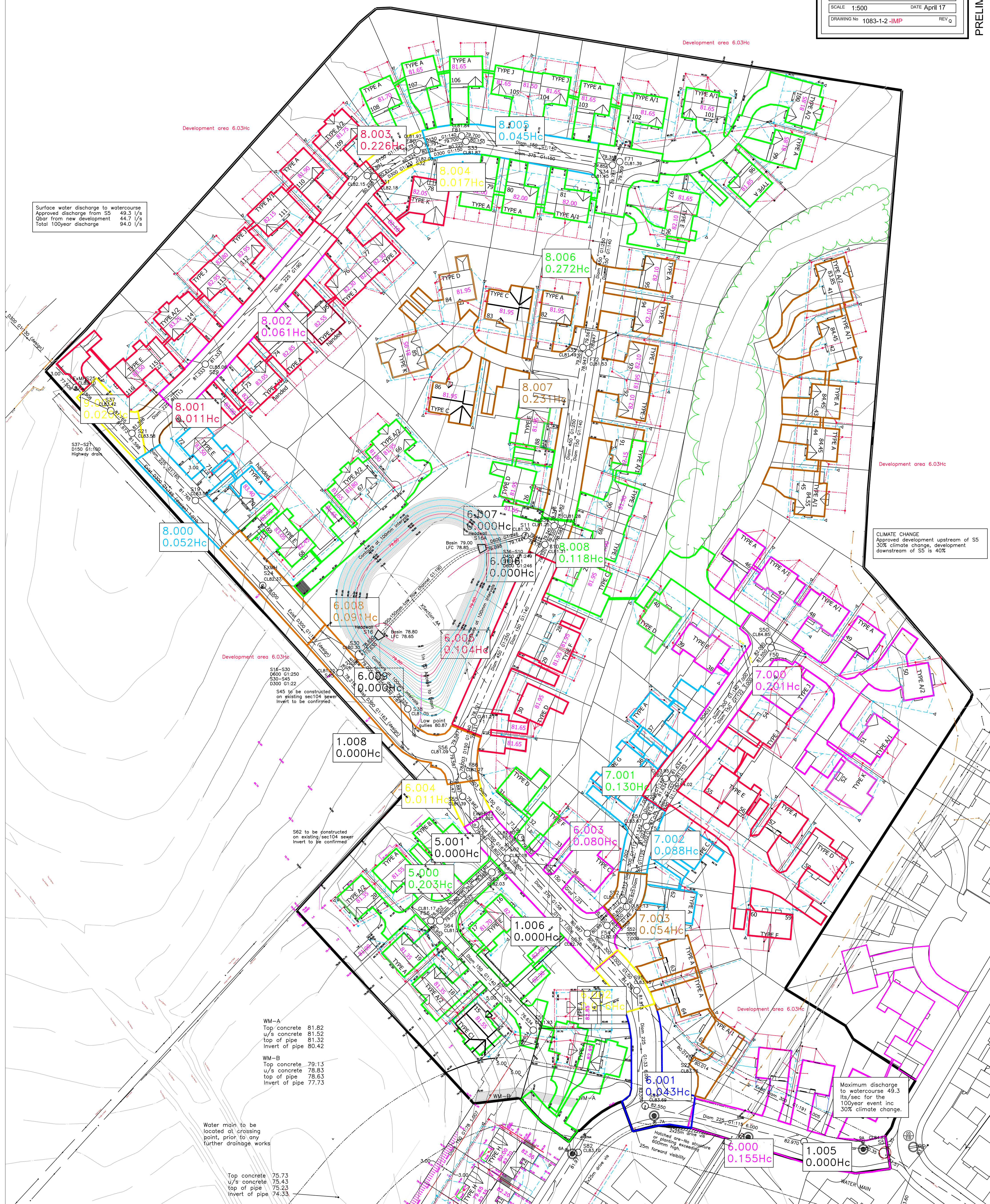
SCALE 1:500

DRAWING No 108

DATE April 17

REY

PRELIMINARY ONLY

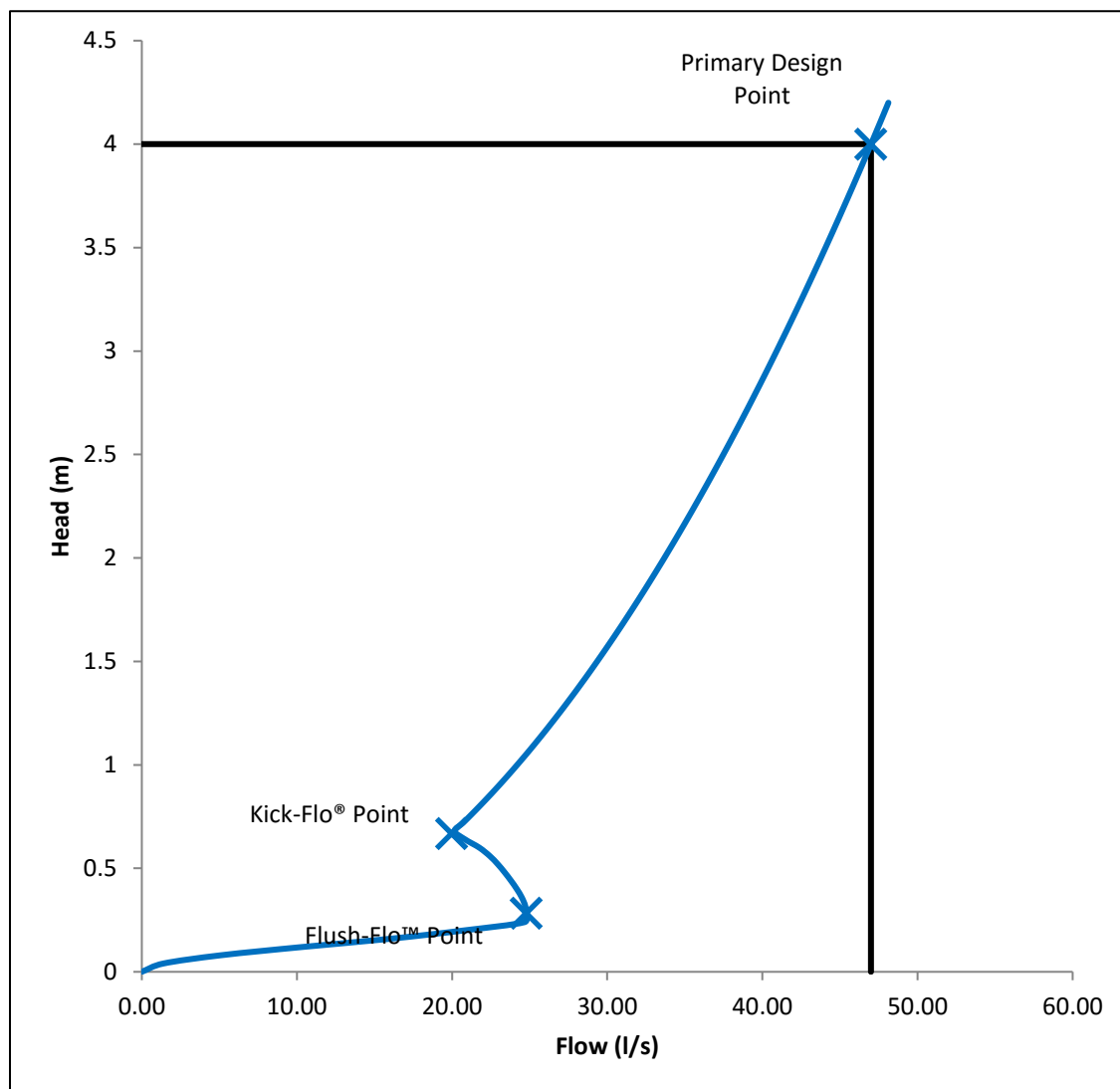


TECHNICAL SPECIFICATION

CONTROL POINT	HEAD (m)	FLOW (l/s)
Design Point	4.000	47.00
Flush-Flo™	0.283	24.79
Kick-Flo®	0.667	19.98
Mean Flow over head range		32.57



PT/329/0412



Head (m)	Flow (l/s)
0.200	20.76
0.400	24.17
0.600	21.76
0.800	21.77
1.000	24.20
1.200	26.39
1.400	28.40
1.600	30.27
1.800	32.02
2.000	33.68
2.200	35.25
2.400	36.76
2.600	38.20
2.800	39.58
3.000	40.92
3.200	42.21
3.400	43.46
3.600	44.68
3.800	45.86
4.000	47.00

DESIGN ADVICE



The head / flow characteristics of this Hydro-Brake Optimum® are unique. Dynamic hydraulic modelling evaluates the full head / flow characteristic curve. **The use of any other flow control will invalidate any design based on this unit and could constitute a flood risk.**



DATE	06-06-16
SITE NAME	Mill Hill Cleator Moor
SITE REF	12-2504
DESIGNER	Steven R. Waters

Product ID Code

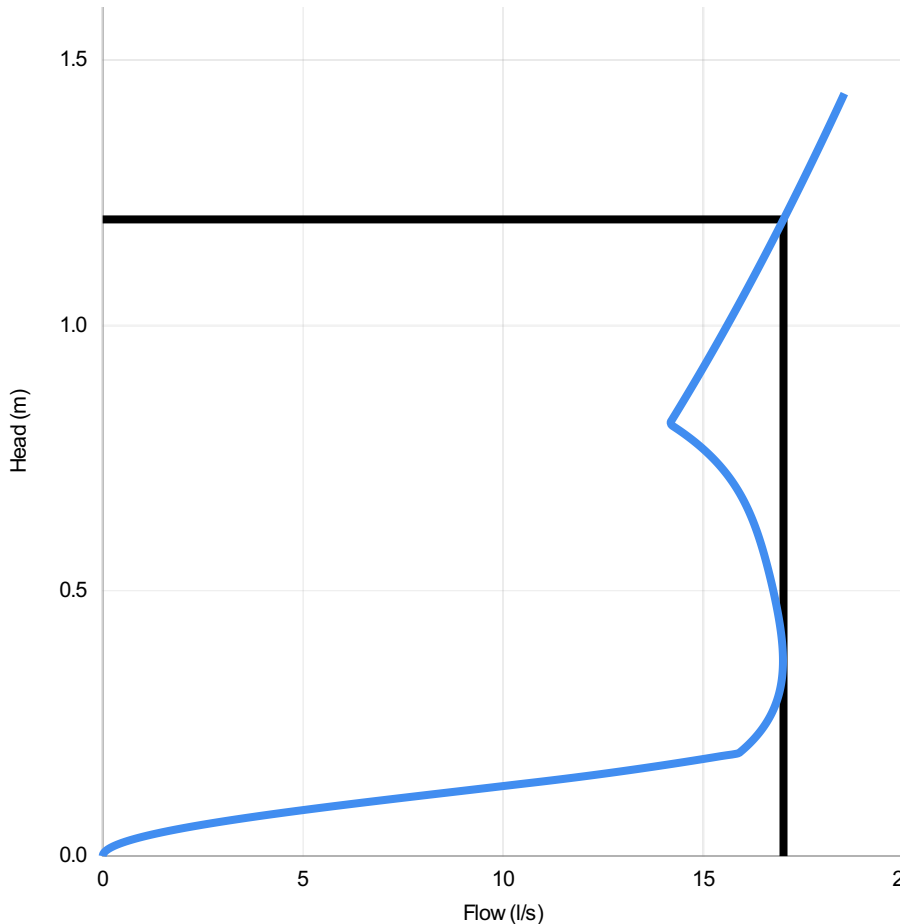
SXU-0200-47.00-4000-0650
Hydro-Brake Optimum®

Technical Specification

Control Point	Head (m)	Flow (l/s)
Primary Design	1.200	17.000
Flush-Flo	0.368	16.987
Kick-Flo®	0.814	14.144
Mean Flow		14.562



hydro-int.com/patents



Head (m)	Flow (l/s)
0.000	0.000
0.041	1.268
0.083	4.603
0.124	9.109
0.166	13.480
0.207	16.080
0.248	16.546
0.290	16.820
0.331	16.954
0.372	16.987
0.414	16.949
0.455	16.867
0.497	16.756
0.538	16.625
0.579	16.475
0.621	16.293
0.662	16.059
0.703	15.742
0.745	15.302
0.786	14.693
0.828	14.258
0.869	14.590
0.910	14.915
0.952	15.231
0.993	15.541
1.034	15.844
1.076	16.141
1.117	16.433
1.159	16.719
1.200	16.999

DESIGN ADVICE



The head/flow characteristics of this SHE-0182-1700-1200-1700 Hydro-Brake Optimum® Flow Control are unique. Dynamic hydraulic modelling evaluates the full head/flow characteristic curve.

The use of any other flow control will invalidate any design based on this data and could constitute a flood risk.

Hydro
International

DATE 20/09/2021 08:53

Site mill hill

DESIGNER richard bland

Ref 5.001

SHE-0182-1700-1200-1700

Hydro-Brake Optimum®

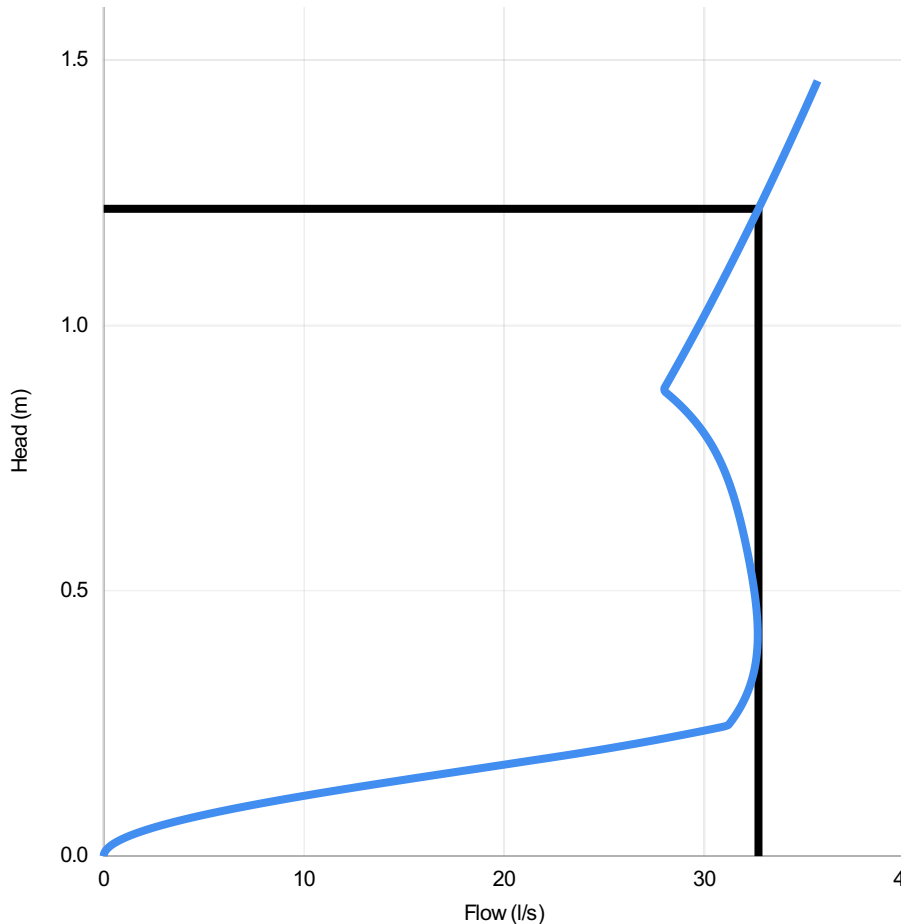
Technical Specification

Control Point	Head (m)	Flow (l/s)
Primary Design	1.220	32.700
Flush-Flo	0.418	32.665
Kick-Flo®	0.877	27.926
Mean Flow		27.507



PT/329/0412

hydro-int.com/patents



Head (m)	Flow (l/s)
0.000	0.000
0.042	1.552
0.084	5.801
0.126	12.021
0.168	19.283
0.210	26.326
0.252	31.307
0.294	31.988
0.337	32.402
0.379	32.611
0.421	32.665
0.463	32.606
0.505	32.471
0.547	32.284
0.589	32.061
0.631	31.804
0.673	31.500
0.715	31.120
0.757	30.619
0.799	29.940
0.841	29.012
0.883	28.023
0.926	28.652
0.968	29.267
1.010	29.869
1.052	30.457
1.094	31.034
1.136	31.600
1.178	32.155
1.220	32.700

DESIGN ADVICE



The head/flow characteristics of this SHE-0243-3270-1220-3270 Hydro-Brake Optimum® Flow Control are unique. Dynamic hydraulic modelling evaluates the full head/flow characteristic curve.

The use of any other flow control will invalidate any design based on this data and could constitute a flood risk.

Hydro
International

DATE 20/09/2021 08:55

Site mill hill

DESIGNER richard bland

Ref 6.009

SHE-0243-3270-1220-3270

Hydro-Brake Optimum®

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STORM SEWER DESIGN by the Modified Rational Method

Design Criteria for NETWORK1 FULL SYSTEM 11-8-21.SWS

Pipe Sizes NETWORK1 FULL SYSTEM 16-10-19 Manhole Sizes NETWORK1 FULL SYSTEM 16-10-19

FSR Rainfall Model - England and Wales

Return Period (years)	1	PIMP (%)	100
M5-60 (mm)	16.000	Add Flow / Climate Change (%)	30
Ratio R	0.261	Minimum Backdrop Height (m)	0.200
Maximum Rainfall (mm/hr)	50	Maximum Backdrop Height (m)	0.000
Maximum Time of Concentration (mins)	30	Min Design Depth for Optimisation (m)	1.500
Foul Sewage (l/s/ha)	0.000	Min Vel for Auto Design only (m/s)	0.75
Volumetric Runoff Coeff.	0.750	Min Slope for Optimisation (1:X)	500

Designed with Level Soffits

Network Design Table for NETWORK1 FULL SYSTEM 11-8-21.SWS

- Indicates pipe length does not match coordinates

« - 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
1.000	50.464	0.710	71.1	0.079	5.00	0.0	0.600	o	225	Pipe/Conduit	
1.001	6.496	0.043	151.1	0.100	0.00	0.0	0.600	o	225	Pipe/Conduit	
2.000	23.049	0.981	23.5	0.035	5.00	0.0	0.600	o	150	Pipe/Conduit	
2.001	25.308	0.169	149.8	0.043	0.00	0.0	0.600	o	225	Pipe/Conduit	
1.002	21.850	0.137	159.5	0.059	0.00	0.0	0.600	o	300	Pipe/Conduit	
1.003	5.455	0.022	248.0	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
1.004	31.521	0.130	242.5	0.051	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)
1.000	34.08	5.54	84.110	0.079	0.0	0.0	2.2	1.55	61.8	9.5
1.001	33.84	5.64	83.400	0.179	0.0	0.0	4.9	1.06	42.2	21.3
2.000	34.94	5.18	83.100	0.035	0.0	0.0	1.0	2.09	36.9	4.3
2.001	33.99	5.58	82.044	0.078	0.0	0.0	2.2	1.07	42.4	9.3
1.002	33.17	5.94	81.800	0.316	0.0	0.0	8.5	1.24	87.8	36.9
1.003	32.97	6.03	81.663	0.316	0.0	0.0	8.5	0.99	70.3	36.9
1.004	31.87	6.55	81.641	0.367	0.0	0.0	9.5	1.01	71.1	41.2

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Network Design Table for NETWORK1 FULL SYSTEM 11-8-21.SWS

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
3.000	31.196	0.156	200.0	0.205	5.00	0.0	0.600	o	300	Pipe/Conduit	
3.001	47.206	0.236	200.0	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
3.002	49.747	0.249	199.8	0.101	0.00	0.0	0.600	o	300	Pipe/Conduit	
3.003	60.714	0.304	199.7	0.254	0.00	0.0	0.600	o	375	Pipe/Conduit	
3.004	13.307	0.067	198.6	0.101	0.00	0.0	0.600	o	375	Pipe/Conduit	
3.005	30.824	0.103	299.3	0.068	0.00	0.0	0.600	o	1800	Pipe/Conduit	
4.000	16.420	0.210	78.2	0.123	5.00	0.0	0.600	o	225	Pipe/Conduit	
4.001	15.640	0.497	31.5	0.054	0.00	0.0	0.600	o	225	Pipe/Conduit	
3.006	86.800	0.289	300.3	0.189	0.00	0.0	0.600	o	1800	Pipe/Conduit	
1.005	63.642	0.334	190.5	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
1.006	81.127	1.212	66.9	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
5.000	21.035	0.084	250.4	0.166	5.00	0.0	0.600	o	1050	Pipe/Conduit	
5.001	6.172	0.041	150.5	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
1.007	13.735	0.205	67.0	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
1.008	60.548	0.371	163.0	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
6.000	48.450	0.420	115.4	0.170	5.00	0.0	0.600	o	225	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	E I.Area (ha)	E Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
3.000	34.25	5.47	83.177	0.205	0.0	0.0	5.7	1.11	78.3	24.7
3.001	32.64	6.18	83.021	0.205	0.0	0.0	5.7	1.11	78.3	24.7
3.002	31.13	6.93	82.785	0.306	0.0	0.0	7.7	1.11	78.4	33.5
3.003	29.72	7.72	82.536	0.560	0.0	0.0	13.5	1.28	141.2	58.6
3.004	29.43	7.89	82.232	0.661	0.0	0.0	15.8	1.28	141.6	68.5
3.005	29.13	8.08	80.740	0.729	0.0	0.0	17.3	2.77	7039.1	74.8
4.000	34.94	5.18	82.950	0.123	0.0	0.0	3.5	1.48	58.9	15.1
4.001	34.67	5.30	82.740	0.177	0.0	0.0	5.0	2.34	93.1	21.6
3.006	28.31	8.60	80.637	1.095	0.0	0.0	25.2	2.76	7026.4	109.2
1.005	27.00	9.54	80.348	1.462	0.0	0.0	32.1	1.14	80.3«	139.0
1.006	26.10	10.24	80.014	1.462	0.0	0.0	32.1	1.92	136.0«	139.0
5.000	35.00	5.16	79.052	0.166	0.0	0.0	4.7	2.17	1881.8	20.5
5.001	34.76	5.26	78.918	0.166	0.0	0.0	4.7	1.06	42.3	20.5
1.007	25.96	10.36	78.802	1.628	0.0	0.0	34.3	1.92	136.0«	148.8
1.008	25.02	11.18	78.587	1.628	0.0	0.0	34.3	1.23	86.9«	148.8
6.000	33.79	5.66	82.970	0.170	0.0	0.0	4.7	1.22	48.4	20.2

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Network Design Table for NETWORK1 FULL SYSTEM 11-8-21.SWS

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
8.007	53.724	0.215	249.9	0.254	0.00	0.0	0.600	o	450	Pipe/Conduit	
8.008	6.219	0.025	248.8	0.130	0.00	0.0	0.600	o	450	Pipe/Conduit	
6.006	6.398	0.026	246.1	0.000	0.00	0.0	0.600	o	600	Pipe/Conduit	
6.007	11.124#	0.044	252.8	0.101	0.00	0.0	0.600	o	600	Pipe/Conduit	
6.008	5.010#	0.020	249.5	0.000	0.00	0.0	0.600	o	600	Pipe/Conduit	
6.009	8.035	0.364	22.1	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
1.009	34.722	0.216	160.8	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
1.010	81.040	0.492	164.7	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
1.011	41.776	0.321	130.1	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
1.012	32.586	2.778	11.7	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
1.013	32.586	3.977	8.2	0.000	0.00	0.0	0.600	o	300	Pipe/Conduit	
1.014	49.999	0.500	100.0	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)
8.007	27.64	9.07	79.561	1.028	0.0	0.0	23.1	1.28	203.8	100.0
8.008	27.53	9.15	79.345	1.158	0.0	0.0	25.9	1.28	204.3	112.2
6.006	27.43	9.22	79.170	2.157	0.0	0.0	48.1	1.55	437.7	208.3
6.007	27.27	9.34	79.144	2.258	0.0	0.0	50.0	1.53	431.7	216.8
6.008	27.19	9.39	78.650	2.258	0.0	0.0	50.0	1.54	434.6	216.8
6.009	27.14	9.43	78.580	2.258	0.0	0.0	50.0	3.36	237.6	216.8
1.009	24.51	11.65	78.216	3.886	0.0	0.0	77.4	1.24	87.5«	335.4
1.010	23.43	12.75	78.000	3.886	0.0	0.0	77.4	1.22	86.4«	335.4
1.011	22.97	13.26	77.508	3.886	0.0	0.0	77.4	1.38	97.3«	335.4
1.012	22.86	13.37	77.187	3.886	0.0	0.0	77.4	4.62	326.2«	335.4
1.013	22.78	13.47	74.409	3.886	0.0	0.0	77.4	5.52	390.5	335.4
1.014	22.33	14.00	70.432	3.886	0.0	0.0	77.4	1.57	111.1«	335.4

Free Flowing Outfall Details for NETWORK1 FULL SYSTEM 11-8-21.SWS

Outfall Pipe Number	Outfall Name	C. Level (m)	I. Level (m)	Min I. Level (m)	D,L (mm)	W (mm)
1.014	27	71.000	69.932	0.000	1050	0

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Simulation Criteria for NETWORK1 FULL SYSTEM 11-8-21.SWS

Volumetric Runoff Coeff	0.840	Additional Flow - % of Total Flow	30.000
Areal Reduction Factor	1.000	MADD Factor * 10m ³ /ha Storage	0.000
Hot Start (mins)	0	Inlet Coefficient	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 Storage Structures	1
Number of Online Controls	3	Number of Time/Area Diagrams	0
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Profile Type	Winter
Return Period (years)	1	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	16.000	Storm Duration (mins)	15
Ratio R	0.261		

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Online Controls for NETWORK1 FULL SYSTEM 11-8-21.SWS

Depth/Flow Relationship Manhole: 5, DS/PN: 1.005, Volume (m³): 247.6

Invert Level (m) 80.348

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.200	20.7600	1.800	32.0200	3.400	43.4600	5.000	51.8600
0.400	24.1300	2.000	33.1600	3.600	44.6600	5.200	51.8600
0.600	21.7600	2.200	35.2500	3.800	45.8600	5.400	51.8600
0.800	21.7700	2.400	36.7500	4.000	47.0600	5.600	51.8600
1.000	24.2000	2.600	38.2000	4.200	48.2600	5.800	51.8600
1.200	26.3000	2.800	39.5500	4.400	49.4600	6.000	51.8600
1.400	28.4000	3.000	40.9200	4.600	50.6600		
1.600	30.2000	3.200	42.2000	4.800	51.8600		

Hydro-Brake® Optimum Manhole: 63, DS/PN: 5.001, Volume (m³): 27.3

Unit Reference MD-SHE-0182-1700-1200-1700
Design Head (m) 1.200
Design Flow (l/s) 17.0
Flush-Flo™ Calculated
Objective Minimise upstream storage
Application Surface
Sump Available Yes
Diameter (mm) 182
Invert Level (m) 78.918
Minimum Outlet Pipe Diameter (mm) 225
Suggested Manhole Diameter (mm) 1500

Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	1.200	17.0
Flush-Flo™	0.368	17.0
Kick-Flo®	0.814	14.1
Mean Flow over Head Range	-	14.6

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)
0.100	6.4	1.200	17.0	3.000	26.3	7.000	39.6
0.200	16.0	1.400	18.3	3.500	28.3	7.500	40.9
0.300	16.9	1.600	19.5	4.000	30.2	8.000	42.2
0.400	17.0	1.800	20.6	4.500	32.0	8.500	43.5
0.500	16.7	2.000	21.7	5.000	33.7	9.000	44.7
0.600	16.4	2.200	22.7	5.500	35.2	9.500	45.9
0.800	14.4	2.400	23.7	6.000	36.8		
1.000	15.6	2.600	24.6	6.500	38.2		

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XP Solutions							
Network 2019.1							
<u>Hydro-Brake® Optimum Manhole: 30, DS/PN: 6.009, Volume (m³): 8.6</u>							
Unit Reference MD-SHE-0243-3270-1220-3270							
Design Head (m) 1.220							
Design Flow (l/s) 32.7							
Flush-Flo™ Calculated							
Objective Minimise upstream storage							
Application Surface							
Sump Available Yes							
Diameter (mm) 243							
Invert Level (m) 78.580							
Minimum Outlet Pipe Diameter (mm) 300							
Suggested Manhole Diameter (mm) 1800							
Control Points Head (m) Flow (l/s)							
Design Point (Calculated) 1.220 32.7							
Flush-Flo™ 0.418 32.7							
Kick-Flo® 0.877 27.9							
Mean Flow over Head Range - 27.5							
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)
0.100	8.0	1.200	32.4	3.000	50.4	7.000	76.1
0.200	24.7	1.400	34.9	3.500	54.3	7.500	78.7
0.300	32.1	1.600	37.2	4.000	58.0	8.000	81.2
0.400	32.7	1.800	39.4	4.500	61.4	8.500	83.6
0.500	32.5	2.000	41.5	5.000	64.6	9.000	86.0
0.600	32.0	2.200	43.4	5.500	67.6	9.500	88.3
0.800	29.9	2.400	45.3	6.000	70.6		
1.000	29.7	2.600	47.1	6.500	73.4		
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Storage Structures for NETWORK1 FULL SYSTEM 11-8-21.SWS

Tank or Pond Manhole: 16, DS/PN: 6.008

Invert Level (m) 78.800

Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)	Depth (m)	Area (m ²)
0.000	17.0	0.700	1075.0	1.400	1205.0	2.100	1205.0
0.100	375.0	0.800	1117.0	1.500	1205.0	2.200	1205.0
0.200	774.0	0.900	1161.0	1.600	1205.0	2.300	1205.0
0.300	913.0	1.000	1205.0	1.700	1205.0	2.400	1205.0
0.400	952.0	1.100	1205.0	1.800	1205.0	2.500	1205.0
0.500	992.0	1.200	1205.0	1.900	1205.0		
0.600	1033.0	1.300	1205.0	2.000	1205.0		

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Summary of Results for 15 minute 1 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

Margin for Flood Risk Warning (mm) 200.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status OFF
DVD Status ON
Inertia Status OFF

PN	US/MH Name	Water	Surcharged	Flooded	Pipe		Status
		Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (1/s)	
1.000	1	84.172	-0.163	0.000	0.16	9.7	OK
1.001	2	83.538	-0.087	0.000	0.68	20.4	OK
2.000	7	83.135	-0.115	0.000	0.13	4.4	OK
2.001	8	82.117	-0.152	0.000	0.23	8.9	OK
1.002	3	81.943	-0.157	0.000	0.46	35.5	OK
1.003	4	81.857	-0.106	0.000	0.74	35.2	OK
1.004	42	81.813	-0.128	0.000	0.62	40.3	OK
3.000	9	83.302	-0.175	0.000	0.35	25.3	OK
3.001	6	83.142	-0.179	0.000	0.33	24.6	OK
3.002	12	82.931	-0.154	0.000	0.46	33.8	OK
3.003	13	82.710	-0.201	0.000	0.43	56.7	OK
3.004	14	82.445	-0.162	0.000	0.61	65.7	OK
3.005	15	81.035	-1.505	0.000	0.02	69.8	OK
4.000	18	83.034	-0.141	0.000	0.30	15.5	OK
4.001	17	82.818	-0.147	0.000	0.26	21.1	OK
3.006	20	81.034	-1.403	0.000	0.02	94.4	OK
1.005	5	81.032	0.384	0.000	0.30	22.7	SURCHARGED
1.006	22	80.098	-0.216	0.000	0.17	22.7	OK
5.000	64	79.172	-0.930	0.000	0.02	20.3	OK
5.001	63	79.156	0.013	0.000	0.54	16.2	SURCHARGED
1.007	62	78.923	-0.179	0.000	0.34	38.7	OK
1.008	23	78.731	-0.156	0.000	0.47	38.5	OK
6.000	80	83.078	-0.117	0.000	0.45	20.9	OK
6.001	94	82.635	-0.140	0.000	0.30	25.9	OK
6.002	95	81.529	-0.209	0.000	0.20	27.8	OK
7.000	50	82.116	-0.184	0.000	0.31	27.4	OK
7.001	60	81.797	-0.137	0.000	0.57	43.0	OK
7.002	51	81.703	-0.139	0.000	0.56	52.9	OK
7.003	52	81.449	-0.163	0.000	0.42	58.7	OK
6.003	53	81.077	-0.210	0.000	0.40	96.9	OK
6.004	55	80.062	-0.275	0.000	0.32	98.8	OK
6.005	56	79.834	-0.203	0.000	0.56	106.5	OK
8.000	19	81.832	-0.158	0.000	0.19	7.0	OK
9.000	37	81.808	-0.107	0.000	0.18	2.8	OK
8.001	21	81.673	-0.150	0.000	0.24	11.1	OK
8.002	29	81.423	-0.135	0.000	0.33	17.4	OK
8.003	31	80.586	-0.137	0.000	0.57	42.9	OK
8.004	32	80.491	-0.133	0.000	0.59	44.5	OK
8.005	33	80.299	-0.226	0.000	0.33	49.4	OK
8.006	34	79.986	-0.245	0.000	0.42	77.6	OK
8.007	35	79.798	-0.213	0.000	0.53	99.4	OK
8.008	36	79.672	-0.123	0.000	0.88	108.5	OK

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Summary of Results for 15 minute 1 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

PN	US/MH Name	Water			Flooded		Pipe Flow (l/s)	Status
		Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)		
6.006	10	79.609	-0.161	0.000	0.89	210.6		OK
6.007	11	79.543	-0.201	0.000	0.78	217.7		OK
6.008	16	79.028	-0.222	0.000	0.17	36.7		OK
6.009	30	79.029	0.149	0.000	0.22	32.6	SURCHARGED	
1.009	45	78.435	-0.081	0.000	0.88	70.9		OK
1.010	24	78.213	-0.087	0.000	0.84	70.2		OK
1.011	25	77.707	-0.101	0.000	0.77	70.1		OK
1.012	26	77.285	-0.202	0.000	0.23	70.0		OK
1.013	10000	74.499	-0.210	0.000	0.20	70.0		OK
1.014	28	70.612	-0.120	0.000	0.67	70.0		OK

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Summary of Results for 30 minute 1 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

Margin for Flood Risk Warning (mm) 200.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status OFF
DVD Status ON
Inertia Status OFF

PN	US/MH Name	Water		Surcharged		Flooded		Pipe	Status
		Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Flow (l/s)		
1.000	1	84.165	-0.170	0.000	0.14		8.1	OK	
1.001	2	83.525	-0.100	0.000	0.59		17.6	OK	
2.000	7	83.132	-0.118	0.000	0.10		3.6	OK	
2.001	8	82.112	-0.157	0.000	0.20		7.7	OK	
1.002	3	81.932	-0.168	0.000	0.40		31.0	OK	
1.003	4	81.839	-0.124	0.000	0.65		30.8	OK	
1.004	42	81.800	-0.141	0.000	0.55		35.6	OK	
3.000	9	83.288	-0.189	0.000	0.30		21.1	OK	
3.001	6	83.130	-0.191	0.000	0.28		20.8	OK	
3.002	12	82.919	-0.166	0.000	0.40		29.9	OK	
3.003	13	82.701	-0.210	0.000	0.40		52.5	OK	
3.004	14	82.436	-0.171	0.000	0.57		61.1	OK	
3.005	15	81.126	-1.414	0.000	0.02		64.3	OK	
4.000	18	83.025	-0.150	0.000	0.24		12.7	OK	
4.001	17	82.811	-0.154	0.000	0.22		17.9	OK	
3.006	20	81.126	-1.311	0.000	0.02		84.1	OK	
1.005	5	81.123	0.475	0.000	0.30		22.7	SURCHARGED	
1.006	22	80.097	-0.217	0.000	0.17		22.7	OK	
5.000	64	79.154	-0.948	0.000	0.01		16.9	OK	
5.001	63	79.124	-0.019	0.000	0.53		15.8	OK	
1.007	62	78.923	-0.179	0.000	0.34		38.6	OK	
1.008	23	78.731	-0.156	0.000	0.46		38.4	OK	
6.000	80	83.066	-0.129	0.000	0.38		17.4	OK	
6.001	94	82.627	-0.148	0.000	0.26		21.8	OK	
6.002	95	81.521	-0.217	0.000	0.17		23.5	OK	
7.000	50	82.104	-0.196	0.000	0.26		22.9	OK	
7.001	60	81.782	-0.152	0.000	0.48		36.7	OK	
7.002	51	81.690	-0.152	0.000	0.49		46.0	OK	
7.003	52	81.438	-0.174	0.000	0.37		51.6	OK	
6.003	53	81.065	-0.222	0.000	0.35		85.4	OK	
6.004	55	80.049	-0.288	0.000	0.28		86.4	OK	
6.005	56	79.816	-0.221	0.000	0.50		95.5	OK	
8.000	19	81.824	-0.166	0.000	0.16		5.9	OK	
9.000	37	81.803	-0.112	0.000	0.15		2.3	OK	
8.001	21	81.667	-0.156	0.000	0.20		9.2	OK	
8.002	29	81.416	-0.142	0.000	0.29		15.3	OK	
8.003	31	80.576	-0.147	0.000	0.51		38.8	OK	
8.004	32	80.480	-0.144	0.000	0.53		40.5	OK	
8.005	33	80.291	-0.234	0.000	0.30		44.9	OK	
8.006	34	79.976	-0.255	0.000	0.39		71.9	OK	
8.007	35	79.788	-0.223	0.000	0.50		93.4	OK	
8.008	36	79.660	-0.135	0.000	0.83		102.9	OK	

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Summary of Results for 30 minute 1 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

PN	US/MH Name	Water			Surcharged		Pipe Flow (l/s)	Status
		Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)		
6.006	10	79.588	-0.182	0.000	0.83	196.1		OK
6.007	11	79.526	-0.218	0.000	0.73	203.8		OK
6.008	16	79.061	-0.189	0.000	0.17	36.5		OK
6.009	30	79.065	0.185	0.000	0.22	32.6	SURCHARGED	
1.009	45	78.435	-0.081	0.000	0.88	70.8		OK
1.010	24	78.213	-0.087	0.000	0.85	70.4		OK
1.011	25	77.708	-0.100	0.000	0.78	70.3		OK
1.012	26	77.285	-0.202	0.000	0.24	70.3		OK
1.013	10000	74.499	-0.210	0.000	0.20	70.3		OK
1.014	28	70.612	-0.120	0.000	0.67	70.3		OK

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Summary of Results for 60 minute 1 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

Margin for Flood Risk Warning (mm) 200.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status OFF
DVD Status ON
Inertia Status OFF

PN	US/MH Name	Water	Surcharged	Flooded	Pipe		Status
		Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (1/s)	
1.000	1	84.157	-0.178	0.000	0.10	5.8	OK
1.001	2	83.503	-0.122	0.000	0.43	13.0	OK
2.000	7	83.127	-0.123	0.000	0.07	2.6	OK
2.001	8	82.101	-0.168	0.000	0.14	5.7	OK
1.002	3	81.911	-0.189	0.000	0.30	22.9	OK
1.003	4	81.809	-0.154	0.000	0.48	22.8	OK
1.004	42	81.774	-0.167	0.000	0.41	26.3	OK
3.000	9	83.270	-0.207	0.000	0.21	15.0	OK
3.001	6	83.113	-0.208	0.000	0.20	15.0	OK
3.002	12	82.897	-0.188	0.000	0.30	21.9	OK
3.003	13	82.677	-0.234	0.000	0.30	39.8	OK
3.004	14	82.406	-0.201	0.000	0.44	46.9	OK
3.005	15	81.178	-1.362	0.000	0.01	48.6	OK
4.000	18	83.013	-0.162	0.000	0.17	9.0	OK
4.001	17	82.799	-0.166	0.000	0.16	12.9	OK
3.006	20	81.177	-1.260	0.000	0.01	61.9	OK
1.005	5	81.175	0.527	0.000	0.30	22.7	SURCHARGED
1.006	22	80.098	-0.216	0.000	0.17	22.7	OK
5.000	64	79.117	-0.985	0.000	0.01	12.1	OK
5.001	63	79.075	-0.068	0.000	0.40	11.9	OK
1.007	62	78.915	-0.187	0.000	0.31	34.6	OK
1.008	23	78.722	-0.165	0.000	0.42	34.4	OK
6.000	80	83.049	-0.146	0.000	0.27	12.4	OK
6.001	94	82.615	-0.160	0.000	0.19	15.8	OK
6.002	95	81.508	-0.230	0.000	0.12	17.1	OK
7.000	50	82.087	-0.213	0.000	0.18	16.3	OK
7.001	60	81.757	-0.177	0.000	0.35	26.8	OK
7.002	51	81.666	-0.176	0.000	0.36	33.8	OK
7.003	52	81.418	-0.194	0.000	0.27	38.0	OK
6.003	53	81.041	-0.246	0.000	0.26	63.1	OK
6.004	55	80.025	-0.312	0.000	0.21	63.9	OK
6.005	56	79.779	-0.258	0.000	0.38	71.6	OK
8.000	19	81.815	-0.175	0.000	0.11	4.2	OK
9.000	37	81.797	-0.118	0.000	0.10	1.6	OK
8.001	21	81.655	-0.168	0.000	0.15	6.6	OK
8.002	29	81.403	-0.155	0.000	0.21	11.4	OK
8.003	31	80.552	-0.171	0.000	0.39	29.3	OK
8.004	32	80.456	-0.168	0.000	0.40	30.5	OK
8.005	33	80.271	-0.254	0.000	0.23	33.8	OK
8.006	34	79.949	-0.283	0.000	0.29	54.7	OK
8.007	35	79.757	-0.255	0.000	0.39	72.6	OK
8.008	36	79.611	-0.184	0.000	0.65	81.1	OK

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Summary of Results for 60 minute 1 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

PN	US/MH Name	Water		Surcharged		Flooded		Pipe	Status
		Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Flow (l/s)		
6.006	10	79.520	-0.250	0.000	0.64		152.1	OK	
6.007	11	79.468	-0.276	0.000	0.57		158.6	OK	
6.008	16	79.079	-0.171	0.000	0.16		35.4	OK	
6.009	30	79.083	0.203	0.000	0.22		32.6	SURCHARGED	
1.009	45	78.426	-0.090	0.000	0.83		67.1	OK	
1.010	24	78.205	-0.095	0.000	0.80		66.9	OK	
1.011	25	77.700	-0.108	0.000	0.74		66.9	OK	
1.012	26	77.283	-0.204	0.000	0.22		66.9	OK	
1.013	10000	74.496	-0.213	0.000	0.19		66.9	OK	
1.014	28	70.606	-0.126	0.000	0.64		66.8	OK	

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Summary of Results for 120 minute 1 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

Margin for Flood Risk Warning (mm) 200.0
 Analysis Timestep 2.5 Second Increment (Extended)
 DTS Status OFF
 DVD Status ON
 Inertia Status OFF

PN	US/MH Name	Water		Surcharged		Flooded		Pipe	Status
		Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (1/s)	Flow (1/s)		
1.000	1	84.148	-0.187	0.000	0.07		4.0	OK	
1.001	2	83.484	-0.141	0.000	0.30		9.0	OK	
2.000	7	83.122	-0.128	0.000	0.05		1.8	OK	
2.001	8	82.091	-0.178	0.000	0.10		3.9	OK	
1.002	3	81.892	-0.208	0.000	0.21		15.9	OK	
1.003	4	81.782	-0.181	0.000	0.33		15.8	OK	
1.004	42	81.750	-0.191	0.000	0.28		18.3	OK	
3.000	9	83.253	-0.224	0.000	0.14		10.3	OK	
3.001	6	83.095	-0.226	0.000	0.14		10.3	OK	
3.002	12	82.878	-0.207	0.000	0.21		15.2	OK	
3.003	13	82.653	-0.258	0.000	0.21		27.8	OK	
3.004	14	82.374	-0.233	0.000	0.31		32.7	OK	
3.005	15	81.194	-1.346	0.000	0.01		34.2	OK	
4.000	18	83.001	-0.174	0.000	0.12		6.2	OK	
4.001	17	82.789	-0.176	0.000	0.11		8.9	OK	
3.006	20	81.194	-1.243	0.000	0.01		43.8	OK	
1.005	5	81.191	0.543	0.000	0.30		22.7	SURCHARGED	
1.006	22	80.098	-0.216	0.000	0.17		22.7	OK	
5.000	64	79.091	-1.011	0.000	0.01		8.4	OK	
5.001	63	79.036	-0.107	0.000	0.28		8.3	OK	
1.007	62	78.909	-0.193	0.000	0.27		30.7	OK	
1.008	23	78.714	-0.173	0.000	0.37		30.8	OK	
6.000	80	83.035	-0.160	0.000	0.18		8.5	OK	
6.001	94	82.603	-0.172	0.000	0.13		10.9	OK	
6.002	95	81.497	-0.241	0.000	0.08		11.8	OK	
7.000	50	82.071	-0.229	0.000	0.13		11.2	OK	
7.001	60	81.734	-0.200	0.000	0.24		18.5	OK	
7.002	51	81.643	-0.199	0.000	0.25		23.4	OK	
7.003	52	81.400	-0.212	0.000	0.19		26.3	OK	
6.003	53	81.018	-0.269	0.000	0.18		43.7	OK	
6.004	55	80.000	-0.337	0.000	0.14		44.3	OK	
6.005	56	79.744	-0.293	0.000	0.26		49.6	OK	
8.000	19	81.806	-0.184	0.000	0.08		2.9	OK	
9.000	37	81.791	-0.124	0.000	0.07		1.1	OK	
8.001	21	81.646	-0.177	0.000	0.10		4.6	OK	
8.002	29	81.391	-0.167	0.000	0.15		7.9	OK	
8.003	31	80.529	-0.194	0.000	0.27		20.4	OK	
8.004	32	80.432	-0.192	0.000	0.28		21.3	OK	
8.005	33	80.250	-0.275	0.000	0.16		23.7	OK	
8.006	34	79.920	-0.311	0.000	0.21		38.5	OK	
8.007	35	79.722	-0.289	0.000	0.27		50.7	OK	
8.008	36	79.561	-0.234	0.000	0.46		57.2	OK	

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Summary of Results for 120 minute 1 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

PN	US/MH Name	Water			Surcharged		Pipe Flow (l/s)	Status
		Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)		
6.006	10	79.453	-0.317	0.000	0.45	106.8		OK
6.007	11	79.408	-0.336	0.000	0.40	111.8		OK
6.008	16	79.087	-0.163	0.000	0.16	33.9		OK
6.009	30	79.084	0.204	0.000	0.22	32.6	SURCHARGED	
1.009	45	78.418	-0.098	0.000	0.79	63.4		OK
1.010	24	78.197	-0.103	0.000	0.76	63.3		OK
1.011	25	77.693	-0.115	0.000	0.70	63.3		OK
1.012	26	77.280	-0.207	0.000	0.21	63.3		OK
1.013	10000	74.494	-0.215	0.000	0.18	63.3		OK
1.014	28	70.601	-0.131	0.000	0.61	63.3		OK

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Summary of Results for 180 minute 1 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

Margin for Flood Risk Warning (mm) 200.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status OFF
DVD Status ON
Inertia Status OFF

PN	US/MH Name	Water	Surcharged	Flooded	Pipe		Status
		Level (m)	Depth (m)	Volume (m ³)	Flow / Cap. (1/s)	Overflow Flow (1/s)	
1.000	1	84.143	-0.192	0.000	0.05	3.2	OK
1.001	2	83.475	-0.150	0.000	0.24	7.2	OK
2.000	7	83.119	-0.131	0.000	0.04	1.4	OK
2.001	8	82.086	-0.183	0.000	0.08	3.1	OK
1.002	3	81.881	-0.219	0.000	0.16	12.7	OK
1.003	4	81.768	-0.195	0.000	0.27	12.7	OK
1.004	42	81.738	-0.203	0.000	0.23	14.7	OK
3.000	9	83.245	-0.232	0.000	0.12	8.3	OK
3.001	6	83.088	-0.233	0.000	0.11	8.2	OK
3.002	12	82.867	-0.218	0.000	0.17	12.3	OK
3.003	13	82.639	-0.272	0.000	0.17	22.4	OK
3.004	14	82.358	-0.249	0.000	0.25	26.5	OK
3.005	15	81.177	-1.363	0.000	0.01	27.7	OK
4.000	18	82.996	-0.179	0.000	0.10	5.0	OK
4.001	17	82.784	-0.181	0.000	0.09	7.1	OK
3.006	20	81.177	-1.260	0.000	0.01	36.2	OK
1.005	5	81.174	0.526	0.000	0.30	22.8	SURCHARGED
1.006	22	80.098	-0.216	0.000	0.17	22.8	OK
5.000	64	79.082	-1.020	0.000	0.01	6.7	OK
5.001	63	79.021	-0.122	0.000	0.22	6.7	OK
1.007	62	78.906	-0.196	0.000	0.26	29.2	OK
1.008	23	78.710	-0.177	0.000	0.35	29.3	OK
6.000	80	83.027	-0.168	0.000	0.15	6.9	OK
6.001	94	82.598	-0.177	0.000	0.10	8.7	OK
6.002	95	81.489	-0.249	0.000	0.07	9.4	OK
7.000	50	82.064	-0.236	0.000	0.10	9.0	OK
7.001	60	81.724	-0.210	0.000	0.20	14.8	OK
7.002	51	81.633	-0.209	0.000	0.20	18.7	OK
7.003	52	81.390	-0.222	0.000	0.15	21.1	OK
6.003	53	81.006	-0.281	0.000	0.14	34.9	OK
6.004	55	79.988	-0.349	0.000	0.11	35.5	OK
6.005	56	79.727	-0.310	0.000	0.21	40.1	OK
8.000	19	81.801	-0.189	0.000	0.06	2.3	OK
9.000	37	81.788	-0.127	0.000	0.06	0.9	OK
8.001	21	81.640	-0.183	0.000	0.08	3.7	OK
8.002	29	81.384	-0.174	0.000	0.12	6.3	OK
8.003	31	80.517	-0.206	0.000	0.22	16.3	OK
8.004	32	80.420	-0.204	0.000	0.22	17.0	OK
8.005	33	80.239	-0.286	0.000	0.13	19.0	OK
8.006	34	79.904	-0.328	0.000	0.17	31.0	OK
8.007	35	79.704	-0.307	0.000	0.22	41.1	OK
8.008	36	79.535	-0.260	0.000	0.37	46.3	OK

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Summary of Results for 180 minute 1 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

PN	US/MH Name	Water			Surcharged		Pipe Flow (l/s)	Status
		Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)		
6.006	10	79.419	-0.351	0.000	0.36	86.4		OK
6.007	11	79.377	-0.367	0.000	0.32	90.4		OK
6.008	16	79.082	-0.168	0.000	0.16	33.7		OK
6.009	30	79.080	0.200	0.000	0.22	32.6	SURCHARGED	
1.009	45	78.414	-0.102	0.000	0.77	61.9		OK
1.010	24	78.193	-0.107	0.000	0.74	61.8		OK
1.011	25	77.690	-0.118	0.000	0.68	61.8		OK
1.012	26	77.279	-0.208	0.000	0.21	61.8		OK
1.013	10000	74.492	-0.217	0.000	0.17	61.8		OK
1.014	28	70.598	-0.134	0.000	0.59	61.8		OK

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Sheffield
S35 1AB

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Highgrange developments
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Full system

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Summary of Results for 240 minute 1 year Winter (NETWORK1 FULL SYSTEM 11-8-21.SWS)

Margin for Flood Risk Warning (mm)

200.0

Analysis Timestep 2.5 Second Increment (Extended)

DTS Status

DVD Status

Inertia Status

OFF

ON

OFF

		Water	Surcharged	Flooded		Pipe		
PN	US/MH Name	Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	1	84.141	-0.194	0.000	0.05		2.7	OK
1.001	2	83.469	-0.156	0.000	0.20		6.1	OK
2.000	7	83.118	-0.132	0.000	0.03		1.2	OK
2.001	8	82.082	-0.187	0.000	0.07		2.7	OK
1.002	3	81.874	-0.226	0.000	0.14		10.8	OK
1.003	4	81.759	-0.204	0.000	0.23		10.8	OK
1.004	42	81.730	-0.211	0.000	0.19		12.5	OK
3.000	9	83.240	-0.237	0.000	0.10		7.0	OK
3.001	6	83.083	-0.238	0.000	0.10		7.0	OK
3.002	12	82.860	-0.225	0.000	0.14		10.4	OK
3.003	13	82.630	-0.281	0.000	0.14		19.1	OK
3.004	14	82.348	-0.259	0.000	0.21		22.5	OK
3.005	15	81.145	-1.395	0.000	0.01		23.6	OK
4.000	18	82.992	-0.183	0.000	0.08		4.2	OK
4.001	17	82.780	-0.185	0.000	0.07		6.1	OK
3.006	20	81.144	-1.293	0.000	0.01		31.7	OK
1.005	5	81.141	0.493	0.000	0.30		22.8	SURCHARGED
1.006	22	80.098	-0.216	0.000	0.17		22.8	OK
5.000	64	79.076	-1.026	0.000	0.00		5.7	OK
5.001	63	79.011	-0.132	0.000	0.19		5.7	OK
1.007	62	78.904	-0.198	0.000	0.25		28.3	OK
1.008	23	78.708	-0.179	0.000	0.34		28.3	OK
6.000	80	83.023	-0.172	0.000	0.13		5.8	OK
6.001	94	82.595	-0.180	0.000	0.09		7.4	OK
6.002	95	81.484	-0.254	0.000	0.06		8.0	OK
7.000	50	82.059	-0.241	0.000	0.09		7.6	OK
7.001	60	81.715	-0.219	0.000	0.17		12.6	OK
7.002	51	81.624	-0.218	0.000	0.17		15.9	OK
7.003	52	81.383	-0.229	0.000	0.13		17.9	OK
6.003	53	80.998	-0.289	0.000	0.12		29.8	OK
6.004	55	79.981	-0.356	0.000	0.10		30.2	OK
6.005	56	79.715	-0.322	0.000	0.18		34.0	OK
8.000	19	81.798	-0.192	0.000	0.05		1.9	OK
9.000	37	81.786	-0.129	0.000	0.05		0.8	OK
8.001	21	81.636	-0.187	0.000	0.07		3.1	OK
8.002	29	81.381	-0.177	0.000	0.10		5.4	OK
8.003	31	80.509	-0.214	0.000	0.18		13.9	OK
8.004	32	80.413	-0.211	0.000	0.19		14.5	OK
8.005	33	80.232	-0.293	0.000	0.11		16.2	OK
8.006	34	79.893	-0.338	0.000	0.14		26.4	OK
8.007	35	79.693	-0.318	0.000	0.19		34.9	OK
8.008	36	79.519	-0.276	0.000	0.32		39.3	OK

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Summary of Results for 240 minute 1 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

PN	US/MH Name	Water			Surcharged		Pipe Flow (l/s)	Status
		Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)		
6.006	10	79.398	-0.372	0.000	0.31	73.3		OK
6.007	11	79.357	-0.387	0.000	0.27	76.8		OK
6.008	16	79.072	-0.178	0.000	0.16	34.0		OK
6.009	30	79.066	0.186	0.000	0.22	32.6	SURCHARGED	
1.009	45	78.412	-0.104	0.000	0.76	60.9		OK
1.010	24	78.191	-0.109	0.000	0.73	60.9		OK
1.011	25	77.688	-0.120	0.000	0.67	60.9		OK
1.012	26	77.279	-0.208	0.000	0.20	60.9		OK
1.013	10000	74.492	-0.217	0.000	0.17	60.9		OK
1.014	28	70.596	-0.136	0.000	0.58	60.9		OK

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Summary of Results for 360 minute 1 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

Margin for Flood Risk Warning (mm) 200.0
 Analysis Timestep 2.5 Second Increment (Extended)
 DTS Status OFF
 DVD Status ON
 Inertia Status OFF

PN	US/MH Name	Water		Surcharged		Flooded		Pipe	Status
		Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (1/s)	Flow (1/s)		
1.000	1	84.137	-0.198	0.000	0.04		2.1	OK	
1.001	2	83.460	-0.165	0.000	0.16		4.8	OK	
2.000	7	83.116	-0.134	0.000	0.03		0.9	OK	
2.001	8	82.077	-0.192	0.000	0.05		2.1	OK	
1.002	3	81.866	-0.234	0.000	0.11		8.5	OK	
1.003	4	81.748	-0.215	0.000	0.18		8.5	OK	
1.004	42	81.719	-0.222	0.000	0.15		9.9	OK	
3.000	9	83.232	-0.245	0.000	0.08		5.5	OK	
3.001	6	83.075	-0.246	0.000	0.08		5.5	OK	
3.002	12	82.851	-0.234	0.000	0.11		8.3	OK	
3.003	13	82.620	-0.291	0.000	0.11		15.1	OK	
3.004	14	82.334	-0.273	0.000	0.17		17.8	OK	
3.005	15	81.055	-1.485	0.000	0.00		18.9	OK	
4.000	18	82.987	-0.188	0.000	0.06		3.3	OK	
4.001	17	82.775	-0.190	0.000	0.06		4.8	OK	
3.006	20	81.055	-1.382	0.000	0.00		26.7	OK	
1.005	5	81.052	0.404	0.000	0.30		22.8	SURCHARGED	
1.006	22	80.098	-0.216	0.000	0.17		22.8	OK	
5.000	64	79.070	-1.032	0.000	0.00		4.5	OK	
5.001	63	78.999	-0.144	0.000	0.15		4.5	OK	
1.007	62	78.902	-0.200	0.000	0.24		27.2	OK	
1.008	23	78.705	-0.182	0.000	0.33		27.2	OK	
6.000	80	83.017	-0.178	0.000	0.10		4.6	OK	
6.001	94	82.588	-0.187	0.000	0.07		5.9	OK	
6.002	95	81.479	-0.259	0.000	0.05		6.3	OK	
7.000	50	82.051	-0.249	0.000	0.07		6.0	OK	
7.001	60	81.706	-0.228	0.000	0.13		10.0	OK	
7.002	51	81.614	-0.228	0.000	0.13		12.6	OK	
7.003	52	81.376	-0.236	0.000	0.10		14.2	OK	
6.003	53	80.990	-0.297	0.000	0.10		23.5	OK	
6.004	55	79.970	-0.367	0.000	0.08		23.9	OK	
6.005	56	79.699	-0.338	0.000	0.14		26.9	OK	
8.000	19	81.794	-0.196	0.000	0.04		1.5	OK	
9.000	37	81.784	-0.131	0.000	0.04		0.6	OK	
8.001	21	81.631	-0.192	0.000	0.05		2.5	OK	
8.002	29	81.375	-0.183	0.000	0.08		4.3	OK	
8.003	31	80.499	-0.224	0.000	0.14		11.0	OK	
8.004	32	80.401	-0.223	0.000	0.15		11.5	OK	
8.005	33	80.224	-0.302	0.000	0.09		12.8	OK	
8.006	34	79.881	-0.350	0.000	0.11		20.9	OK	
8.007	35	79.676	-0.335	0.000	0.15		27.7	OK	
8.008	36	79.498	-0.297	0.000	0.25		31.2	OK	

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Summary of Results for 360 minute 1 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

PN	US/MH Name	Water			Surcharged		Pipe Flow (l/s)	Status
		Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)		
6.006	10	79.370	-0.400	0.000	0.24	58.1		OK
6.007	11	79.333	-0.411	0.000	0.22	60.8		OK
6.008	16	79.044	-0.206	0.000	0.15	33.1		OK
6.009	30	79.044	0.164	0.000	0.22	32.6	SURCHARGED	
1.009	45	78.409	-0.107	0.000	0.74	59.8		OK
1.010	24	78.189	-0.111	0.000	0.72	59.8		OK
1.011	25	77.686	-0.122	0.000	0.66	59.8		OK
1.012	26	77.278	-0.209	0.000	0.20	59.8		OK
1.013	10000	74.491	-0.218	0.000	0.17	59.8		OK
1.014	28	70.595	-0.137	0.000	0.57	59.8		OK

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S35 1AB

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Summary of Results for 15 minute 30 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

Margin for Flood Risk Warning (mm)200.0

Analysis Timestep 2.5 Second Increment (Extended)

DTS StatusOFF

DVD StatusON

Inertia StatusOFF

		Water	Surcharged	Flooded		Pipe	
	US/MH	Level	Depth	Volume	Flow / Overflow	Flow	
PN	Name	(m)	(m)	(m³)	Cap.	(l/s)	Status
1.000	1	84.210	-0.125	0.000	0.39	23.4	OK
1.001	2	83.727	0.102	0.000	1.81	54.0	SURCHARGED
2.000	7	83.157	-0.093	0.000	0.30	10.6	OK
2.001	8	82.490	0.221	0.000	0.54	21.3	SURCHARGED
1.002	3	82.426	0.326	0.000	1.15	88.9	SURCHARGED
1.003	4	82.246	0.283	0.000	1.84	87.7	SURCHARGED
1.004	42	82.120	0.179	0.000	1.56	101.2	SURCHARGED
3.000	9	83.424	-0.053	0.000	0.84	60.2	OK
3.001	6	83.325	0.004	0.000	0.73	53.7	SURCHARGED
3.002	12	83.220	0.135	0.000	1.02	75.3	SURCHARGED
3.003	13	82.988	0.077	0.000	0.98	129.1	SURCHARGED
3.004	14	82.678	0.071	0.000	1.43	152.8	SURCHARGED
3.005	15	81.599	-0.941	0.000	0.04	155.9	OK
4.000	18	83.092	-0.083	0.000	0.71	37.2	OK
4.001	17	82.875	-0.090	0.000	0.66	54.2	OK
3.006	20	81.592	-0.845	0.000	0.04	195.6	OK
1.005	5	81.582	0.934	0.000	0.35	26.6	SURCHARGED
1.006	22	80.105	-0.209	0.000	0.20	26.6	OK
5.000	64	79.579	-0.523	0.000	0.04	46.2	OK
5.001	63	79.573	0.430	0.000	0.57	16.9	SURCHARGED
1.007	62	78.931	-0.171	0.000	0.39	43.6	OK
1.008	23	78.742	-0.145	0.000	0.53	43.5	OK
6.000	80	83.283	0.088	0.000	1.08	49.9	SURCHARGED
6.001	94	82.697	-0.078	0.000	0.74	63.2	OK
6.002	95	81.588	-0.150	0.000	0.49	68.4	OK
7.000	50	82.402	0.102	0.000	0.72	63.8	SURCHARGED
7.001	60	82.217	0.283	0.000	1.33	101.4	SURCHARGED
7.002	51	82.064	0.222	0.000	1.34	126.5	SURCHARGED
7.003	52	81.693	0.081	0.000	0.95	131.2	SURCHARGED
6.003	53	81.419	0.132	0.000	0.90	220.8	SURCHARGED
6.004	55	80.719	0.382	0.000	0.69	213.4	SURCHARGED
6.005	56	80.536	0.499	0.000	1.21	228.2	SURCHARGED
8.000	19	81.873	-0.117	0.000	0.45	16.9	OK
9.000	37	81.834	-0.081	0.000	0.42	6.6	OK
8.001	21	81.728	-0.095	0.000	0.59	27.1	OK
8.002	29	81.661	0.103	0.000	0.75	40.0	SURCHARGED
8.003	31	81.283	0.560	0.000	1.42	107.7	SURCHARGED
8.004	32	81.142	0.518	0.000	1.46	110.3	SURCHARGED
8.005	33	80.998	0.473	0.000	0.72	107.3	SURCHARGED
8.006	34	80.867	0.636	0.000	0.92	170.7	SURCHARGED
8.007	35	80.668	0.657	0.000	1.20	223.7	SURCHARGED
8.008	36	80.330	0.535	0.000	2.01	249.7	SURCHARGED

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Summary of Results for 15 minute 30 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

PN	US/MH Name	Water			Surcharged		Pipe Flow (l/s)	Status
		Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)		
6.006	10	80.136	0.366	0.000	1.98	469.6	SURCHARGED	
6.007	11	79.912	0.168	0.000	1.73	485.8	SURCHARGED	
6.008	16	79.226	-0.024	0.000	0.21	44.4	OK	
6.009	30	79.274	0.394	0.000	0.22	32.6	SURCHARGED	
1.009	45	78.445	-0.071	0.000	0.94	75.6	OK	
1.010	24	78.224	-0.076	0.000	0.91	75.5	OK	
1.011	25	77.718	-0.090	0.000	0.83	75.5	OK	
1.012	26	77.289	-0.198	0.000	0.25	75.5	OK	
1.013	10000	74.502	-0.207	0.000	0.21	75.5	OK	
1.014	28	70.621	-0.111	0.000	0.72	75.5	OK	

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S35 1AB

Highrange developments
Mill Hill Cleator Moor
Full system

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Micro Drainage

Summary of Results for 30 minute 30 year Winter (NETWORK1 FULL SYSTEM 11-8-21.SWS)

Margin for Flood Risk Warning (mm)

200.0

Analysis Timestep 2.5 Second Increment (Extended)

DTS Status

OFF

DVD Status

ON

Inertia Status

OFF

		Water	Surcharged	Flooded		Pipe	
	US/MH	Level	Depth	Volume	Flow /	Overflow	Flow
PN	Name	(m)	(m)	(m³)	Cap.	(l/s)	(l/s)
							Status
1.000	1	84.200	-0.135	0.000	0.34	19.9	OK
1.001	2	83.676	0.051	0.000	1.52	45.5	SURCHARGED
2.000	7	83.151	-0.099	0.000	0.25	8.9	OK
2.001	8	82.313	0.044	0.000	0.47	18.5	SURCHARGED
1.002	3	82.265	0.165	0.000	0.99	76.6	SURCHARGED
1.003	4	82.130	0.167	0.000	1.60	76.5	SURCHARGED
1.004	42	82.037	0.096	0.000	1.35	87.8	SURCHARGED
3.000	9	83.367	-0.110	0.000	0.72	51.8	OK
3.001	6	83.232	-0.089	0.000	0.67	49.3	OK
3.002	12	83.135	0.050	0.000	0.94	69.7	SURCHARGED
3.003	13	82.918	0.007	0.000	0.92	121.5	SURCHARGED
3.004	14	82.656	0.049	0.000	1.33	142.9	SURCHARGED
3.005	15	81.897	-0.643	0.000	0.04	146.8	OK
4.000	18	83.075	-0.100	0.000	0.60	31.2	OK
4.001	17	82.859	-0.106	0.000	0.55	45.0	OK
3.006	20	81.885	-0.552	0.000	0.03	160.2	OK
1.005	5	81.866	1.218	0.000	0.38	29.4	SURCHARGED
1.006	22	80.110	-0.204	0.000	0.22	29.4	OK
5.000	64	79.611	-0.491	0.000	0.03	39.0	OK
5.001	63	79.606	0.463	0.000	0.57	17.0	SURCHARGED
1.007	62	78.936	-0.166	0.000	0.41	46.4	OK
1.008	23	78.748	-0.139	0.000	0.56	46.3	OK
6.000	80	83.141	-0.054	0.000	0.92	42.6	OK
6.001	94	82.681	-0.094	0.000	0.64	54.4	OK
6.002	95	81.574	-0.164	0.000	0.42	58.9	OK
7.000	50	82.193	-0.107	0.000	0.63	55.9	OK
7.001	60	82.048	0.114	0.000	1.17	89.1	SURCHARGED
7.002	51	81.922	0.080	0.000	1.18	111.5	SURCHARGED
7.003	52	81.535	-0.077	0.000	0.90	125.0	OK
6.003	53	81.269	-0.018	0.000	0.84	204.8	OK
6.004	55	80.651	0.314	0.000	0.65	200.6	SURCHARGED
6.005	56	80.466	0.429	0.000	1.16	219.5	SURCHARGED
8.000	19	81.862	-0.128	0.000	0.38	14.4	OK
9.000	37	81.827	-0.088	0.000	0.36	5.6	OK
8.001	21	81.711	-0.112	0.000	0.50	22.8	OK
8.002	29	81.488	-0.070	0.000	0.73	38.7	OK
8.003	31	81.110	0.387	0.000	1.26	95.2	SURCHARGED
8.004	32	80.979	0.355	0.000	1.29	97.8	SURCHARGED
8.005	33	80.841	0.315	0.000	0.68	101.3	SURCHARGED
8.006	34	80.713	0.482	0.000	0.86	159.7	SURCHARGED
8.007	35	80.546	0.535	0.000	1.12	209.6	SURCHARGED
8.008	36	80.272	0.477	0.000	1.89	234.9	SURCHARGED

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Summary of Results for 30 minute 30 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

		Water	Surcharged	Flooded		Pipe		
	US/MH	Level	Depth	Volume	Flow / Overflow	Flow		
PN	Name	(m)	(m)	(m³)	Cap.	(l/s)	(l/s)	Status
6.006	10	80.098	0.328	0.000	1.90	452.0		SURCHARGED
6.007	11	79.893	0.149	0.000	1.68	469.8		SURCHARGED
6.008	16	79.332	0.082	0.000	0.18	38.7		SURCHARGED
6.009	30	79.302	0.422	0.000	0.22	32.6		SURCHARGED
1.009	45	78.449	-0.067	0.000	0.96	77.5		OK
1.010	24	78.228	-0.072	0.000	0.93	77.4		OK
1.011	25	77.721	-0.087	0.000	0.85	77.3		OK
1.012	26	77.290	-0.197	0.000	0.26	77.3		OK
1.013	10000	74.503	-0.206	0.000	0.22	77.4		OK
1.014	28	70.625	-0.107	0.000	0.74	77.3		OK

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Summary of Results for 60 minute 30 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

Margin for Flood Risk Warning (mm) 200.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status OFF
DVD Status ON
Inertia Status OFF

PN	US/MH Name	Water	Surcharged	Flooded	Pipe		Status
		Level (m)	Depth (m)	Volume (m ³)	Flow / Cap. (1/s)	Overflow Flow (1/s)	
1.000	1	84.185	-0.150	0.000	0.24	14.1	OK
1.001	2	83.625	0.000	0.000	1.07	31.9	OK
2.000	7	83.143	-0.107	0.000	0.18	6.3	OK
2.001	8	82.173	-0.096	0.000	0.36	14.0	OK
1.002	3	82.169	0.069	0.000	0.73	56.6	SURCHARGED
1.003	4	82.162	0.199	0.000	1.19	56.6	SURCHARGED
1.004	42	82.159	0.218	0.000	0.99	64.5	SURCHARGED
3.000	9	83.330	-0.147	0.000	0.51	36.7	OK
3.001	6	83.172	-0.149	0.000	0.50	36.7	OK
3.002	12	82.977	-0.108	0.000	0.73	54.0	OK
3.003	13	82.779	-0.132	0.000	0.74	98.1	OK
3.004	14	82.608	0.001	0.000	1.05	112.8	SURCHARGED
3.005	15	82.192	-0.348	0.000	0.03	115.8	OK
4.000	18	83.052	-0.123	0.000	0.42	22.1	OK
4.001	17	82.837	-0.128	0.000	0.39	31.9	OK
3.006	20	82.181	-0.256	0.000	0.02	122.1	OK
1.005	5	82.151	1.503	0.000	0.42	32.0	SURCHARGED
1.006	22	80.114	-0.200	0.000	0.24	32.0	OK
5.000	64	79.516	-0.586	0.000	0.02	28.2	OK
5.001	63	79.512	0.369	0.000	0.57	17.0	SURCHARGED
1.007	62	78.939	-0.163	0.000	0.43	48.4	OK
1.008	23	78.752	-0.135	0.000	0.59	48.4	OK
6.000	80	83.104	-0.091	0.000	0.66	30.4	OK
6.001	94	82.657	-0.118	0.000	0.46	38.8	OK
6.002	95	81.551	-0.187	0.000	0.30	42.1	OK
7.000	50	82.142	-0.158	0.000	0.45	39.9	OK
7.001	60	81.853	-0.081	0.000	0.87	66.1	OK
7.002	51	81.764	-0.078	0.000	0.89	83.6	OK
7.003	52	81.495	-0.117	0.000	0.68	94.3	OK
6.003	53	81.131	-0.156	0.000	0.64	156.5	OK
6.004	55	80.185	-0.152	0.000	0.51	157.2	OK
6.005	56	80.135	0.098	0.000	0.91	172.9	SURCHARGED
8.000	19	81.845	-0.145	0.000	0.27	10.2	OK
9.000	37	81.816	-0.099	0.000	0.25	4.0	OK
8.001	21	81.691	-0.132	0.000	0.36	16.3	OK
8.002	29	81.451	-0.107	0.000	0.53	28.3	OK
8.003	31	80.665	-0.058	0.000	0.96	72.5	OK
8.004	32	80.572	-0.052	0.000	1.00	75.8	OK
8.005	33	80.389	-0.136	0.000	0.57	84.6	OK
8.006	34	80.312	0.081	0.000	0.68	126.1	SURCHARGED
8.007	35	80.200	0.189	0.000	0.87	162.9	SURCHARGED
8.008	36	80.034	0.239	0.000	1.47	182.3	SURCHARGED

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Summary of Results for 60 minute 30 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

PN	US/MH Name	Water			Flooded		Pipe Flow (l/s)	Status
		Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)		
6.006	10	79.928	0.158	0.000	1.47	349.2	SURCHARGED	
6.007	11	79.805	0.061	0.000	1.30	364.9	SURCHARGED	
6.008	16	79.432	0.182	0.000	0.17	37.7	SURCHARGED	
6.009	30	79.458	0.578	0.000	0.22	32.6	SURCHARGED	
1.009	45	78.453	-0.063	0.000	0.98	78.5	OK	
1.010	24	78.230	-0.070	0.000	0.94	78.5	OK	
1.011	25	77.724	-0.084	0.000	0.87	78.5	OK	
1.012	26	77.291	-0.196	0.000	0.26	78.5	OK	
1.013	10000	74.504	-0.205	0.000	0.22	78.5	OK	
1.014	28	70.627	-0.105	0.000	0.75	78.5	OK	

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S35 1AB

Highrange developments
Mill Hill Cleator Moor
Full system

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Micro
Drainage

Summary of Results for 120 minute 30 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

Margin for Flood Risk Warning (mm)200.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS StatusOFF
DVD StatusON
Inertia StatusOFF

Water

Surcharged

Flooded

Pipe

US/MH

Level

Depth

Volume

Flow /

Overflow

Flow

PN

Name

(m)

(m)

(m³)

Cap.

(l/s)

(l/s)

Status

1.000

1

84.170

-0.165

0.000

0.16

9.5

OK

1.001

2

83.542

-0.083

0.000

0.72

21.6

OK

2.000

7

83.134

-0.116

0.000

0.12

4.2

OK

2.001

8

82.464

0.195

0.000

0.24

9.4

SURCHARGED

1.002

3

82.460

0.360

0.000

0.49

38.1

SURCHARGED

1.003

4

82.453

0.490

0.000

0.80

38.1

SURCHARGED

1.004

42

82.450

0.509

0.000

0.68

44.2

SURCHARGED

3.000

9

83.299

-0.178

0.000

0.35

24.7

OK

3.001

6

83.141

-0.180

0.000

0.33

24.6

OK

3.002

12

82.935

-0.150

0.000

0.50

36.6

OK

3.003

13

82.726

-0.185

0.000

0.51

67.0

OK

3.004

14

82.500

-0.107

0.000

0.74

78.9

OK

3.005

15

82.479

-0.061

0.000

0.02

82.0

OK

4.000

18

83.031

-0.144

0.000

0.28

14.8

OK

4.001

17

82.818

-0.147

0.000

0.26

21.4

OK

3.006

20

82.439

0.002

0.000

0.02

87.2

SURCHARGED

1.005

5

82.439

1.791

0.000

0.45

34.1

SURCHARGED

1.006

22

80.117

-0.197

0.000

0.26

34.1

OK

5.000

64

79.265

-0.837

0.000

0.02

19.6

OK

5.001

63

79.263

0.120

0.000

0.56

16.9

SURCHARGED

1.007

62

78.938

-0.164

0.000

0.42

47.7

OK

1.008

23

78.751

-0.136

0.000

0.58

47.6

OK

6.000

80

83.075

-0.120

0.000

0.44

20.5

OK

6.001

94

82.635

-0.140

0.000

0.31

26.1

OK

6.002

95

81.529

-0.209

0.000

0.20

28.3

OK

7.000

50

82.113

-0.187

0.000

0.30

26.9

OK

7.001

60

81.799

-0.135

0.000

0.59

44.5

OK

7.002

51

81.709

-0.133

0.000

0.60

56.1

OK

7.003

52

81.454

-0.158

0.000

0.46

63.2

OK

6.003

53

81.083

-0.204

0.000

0.43

105.0

OK

6.004

55

80.069

-0.268

0.000

0.34

106.5

OK

6.005

56

79.869

-0.168

0.000

0.63

119.7

OK

8.000

19

81.830

-0.160

0.000

0.18

6.9

OK

9.000

37

81.806

-0.109

0.000

0.17

2.7

OK

8.001

21

81.673

-0.150

0.000

0.24

11.0

OK

8.002

29

81.426

-0.132

0.000

0.36

19.0

OK

8.003

31

80.599

-0.124

0.000

0.65

49.1

OK

8.004

32

80.505

-0.119

0.000

0.68

51.2

OK

8.005

33

80.311

-0.214

0.000

0.38

57.2

OK

8.006

34

80.006

-0.225

0.000

0.50

93.2

OK

8.007

35

79.890

-0.121

0.000

0.64

120.0

OK

8.008

36

79.798

0.003

0.000

1.08

134.5

SURCHARGED

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Summary of Results for 120 minute 30 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

PN	US/MH Name	Water			Surcharged		Pipe Flow (l/s)	Status
		Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)		
6.006	10	79.770	0.000	0.000	1.05	250.2	OK	
6.007	11	79.592	-0.152	0.000	0.93	261.0	OK	
6.008	16	79.510	0.260	0.000	0.18	38.1	SURCHARGED	
6.009	30	79.519	0.639	0.000	0.22	32.6	SURCHARGED	
1.009	45	78.452	-0.064	0.000	0.97	78.3	OK	
1.010	24	78.230	-0.070	0.000	0.94	78.3	OK	
1.011	25	77.723	-0.085	0.000	0.86	78.4	OK	
1.012	26	77.291	-0.196	0.000	0.26	78.4	OK	
1.013	10000	74.504	-0.205	0.000	0.22	78.4	OK	
1.014	28	70.626	-0.106	0.000	0.75	78.4	OK	

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S35 1AB

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Highrange developments
Mill Hill Cleator Moor
Full system

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Summary of Results for 180 minute 30 year Winter (NETWORK1 FULL SYSTEM 11-8-21.SWS)

Margin for Flood Risk Warning (mm)

200.0

Analysis Timestep 2.5 Second Increment (Extended)

DTS Status

OFF

DVD Status

ON

Inertia Status

OFF

		Water	Surcharged	Flooded		Pipe	
	US/MH	Level	Depth	Volume	Flow /	Overflow	Pipe
PN	Name	(m)	(m)	(m³)	Cap.	(l/s)	Flow
							Status
1.000	1	84.163	-0.172	0.000	0.13	7.5	OK
1.001	2	83.521	-0.104	0.000	0.57	16.9	OK
2.000	7	83.131	-0.119	0.000	0.09	3.3	OK
2.001	8	82.542	0.273	0.000	0.19	7.4	SURCHARGED
1.002	3	82.538	0.438	0.000	0.39	29.8	SURCHARGED
1.003	4	82.530	0.567	0.000	0.62	29.8	SURCHARGED
1.004	42	82.527	0.586	0.000	0.53	34.6	SURCHARGED
3.000	9	83.283	-0.194	0.000	0.27	19.4	OK
3.001	6	83.125	-0.196	0.000	0.26	19.3	OK
3.002	12	82.915	-0.170	0.000	0.39	28.8	OK
3.003	13	82.700	-0.211	0.000	0.40	52.5	OK
3.004	14	82.572	-0.035	0.000	0.58	62.0	OK
3.005	15	82.540	0.000	0.000	0.02	64.7	OK
4.000	18	83.022	-0.153	0.000	0.22	11.6	OK
4.001	17	82.809	-0.156	0.000	0.20	16.7	OK
3.006	20	82.516	0.079	0.000	0.01	70.0	SURCHARGED
1.005	5	82.516	1.868	0.000	0.46	34.9	SURCHARGED
1.006	22	80.119	-0.195	0.000	0.27	34.9	OK
5.000	64	79.153	-0.949	0.000	0.01	15.7	OK
5.001	63	79.125	-0.018	0.000	0.52	15.5	OK
1.007	62	78.931	-0.171	0.000	0.39	43.3	OK
1.008	23	78.741	-0.146	0.000	0.52	43.3	OK
6.000	80	83.061	-0.134	0.000	0.35	16.1	OK
6.001	94	82.625	-0.150	0.000	0.24	20.5	OK
6.002	95	81.518	-0.220	0.000	0.16	22.2	OK
7.000	50	82.099	-0.201	0.000	0.24	21.1	OK
7.001	60	81.777	-0.157	0.000	0.46	34.9	OK
7.002	51	81.686	-0.156	0.000	0.47	44.0	OK
7.003	52	81.436	-0.176	0.000	0.36	49.5	OK
6.003	53	81.062	-0.225	0.000	0.34	82.2	OK
6.004	55	80.046	-0.291	0.000	0.27	83.4	OK
6.005	56	79.812	-0.225	0.000	0.50	94.0	OK
8.000	19	81.821	-0.169	0.000	0.14	5.4	OK
9.000	37	81.801	-0.114	0.000	0.13	2.1	OK
8.001	21	81.664	-0.159	0.000	0.19	8.6	OK
8.002	29	81.414	-0.144	0.000	0.28	14.9	OK
8.003	31	80.575	-0.148	0.000	0.51	38.4	OK
8.004	32	80.479	-0.145	0.000	0.53	40.1	OK
8.005	33	80.290	-0.235	0.000	0.30	44.7	OK
8.006	34	79.976	-0.255	0.000	0.39	72.8	OK
8.007	35	79.792	-0.219	0.000	0.52	96.6	OK
8.008	36	79.672	-0.123	0.000	0.88	108.8	OK

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XP Solutions		Network 2019.1

Summary of Results for 180 minute 30 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

PN	US/MH Name	Water			Surcharged		Pipe Flow (l/s)	Status
		Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)		
6.006	10	79.596	-0.174	0.000	0.85	202.8		OK
6.007	11	79.550	-0.194	0.000	0.76	212.2		OK
6.008	16	79.533	0.283	0.000	0.19	40.5		SURCHARGED
6.009	30	79.532	0.652	0.000	0.22	32.6		SURCHARGED
1.009	45	78.443	-0.073	0.000	0.93	74.5		OK
1.010	24	78.221	-0.079	0.000	0.90	74.5		OK
1.011	25	77.716	-0.092	0.000	0.82	74.5		OK
1.012	26	77.288	-0.199	0.000	0.25	74.5		OK
1.013	10000	74.501	-0.208	0.000	0.21	74.5		OK
1.014	28	70.620	-0.112	0.000	0.71	74.5		OK

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12 Berry Holm Close Sheffield S35 1AB	Highgrange developments Mill Hill Cleator Moor Full system	
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XP Solutions	Network 2019.1	

Summary of Results for 240 minute 30 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

Margin for Flood Risk Warning (mm) 200.0
 Analysis Timestep 2.5 Second Increment (Extended)
 DTS Status OFF
 DVD Status ON
 Inertia Status OFF

PN	US/MH Name	Water	Surcharged	Flooded	Pipe		Status
		Level (m)	Depth (m)	Volume (m ³)	Flow / Cap. (1/s)	Overflow (1/s)	
1.000	1	84.158	-0.177	0.000	0.10	6.2	OK
1.001	2	83.508	-0.117	0.000	0.47	14.0	OK
2.000	7	83.128	-0.122	0.000	0.08	2.7	OK
2.001	8	82.496	0.227	0.000	0.16	6.1	SURCHARGED
1.002	3	82.492	0.392	0.000	0.32	24.8	SURCHARGED
1.003	4	82.484	0.521	0.000	0.52	24.8	SURCHARGED
1.004	42	82.480	0.539	0.000	0.44	28.8	SURCHARGED
3.000	9	83.273	-0.204	0.000	0.23	16.1	OK
3.001	6	83.116	-0.205	0.000	0.22	16.1	OK
3.002	12	82.902	-0.183	0.000	0.32	23.9	OK
3.003	13	82.684	-0.227	0.000	0.33	43.8	OK
3.004	14	82.524	-0.083	0.000	0.48	51.7	OK
3.005	15	82.508	-0.032	0.000	0.01	54.1	OK
4.000	18	83.015	-0.160	0.000	0.18	9.6	OK
4.001	17	82.802	-0.163	0.000	0.17	13.9	OK
3.006	20	82.470	0.033	0.000	0.01	59.7	SURCHARGED
1.005	5	82.470	1.822	0.000	0.45	34.4	SURCHARGED
1.006	22	80.118	-0.196	0.000	0.26	34.4	OK
5.000	64	79.129	-0.973	0.000	0.01	13.0	OK
5.001	63	79.094	-0.049	0.000	0.43	12.9	OK
1.007	62	78.927	-0.175	0.000	0.37	41.0	OK
1.008	23	78.736	-0.151	0.000	0.50	41.0	OK
6.000	80	83.052	-0.143	0.000	0.29	13.3	OK
6.001	94	82.618	-0.157	0.000	0.20	17.0	OK
6.002	95	81.510	-0.228	0.000	0.13	18.4	OK
7.000	50	82.090	-0.210	0.000	0.20	17.5	OK
7.001	60	81.762	-0.172	0.000	0.38	28.9	OK
7.002	51	81.671	-0.171	0.000	0.39	36.5	OK
7.003	52	81.423	-0.189	0.000	0.30	41.2	OK
6.003	53	81.046	-0.241	0.000	0.28	68.3	OK
6.004	55	80.031	-0.306	0.000	0.22	69.4	OK
6.005	56	79.788	-0.249	0.000	0.41	78.2	OK
8.000	19	81.816	-0.174	0.000	0.12	4.5	OK
9.000	37	81.798	-0.117	0.000	0.11	1.7	OK
8.001	21	81.657	-0.166	0.000	0.16	7.1	OK
8.002	29	81.406	-0.152	0.000	0.23	12.4	OK
8.003	31	80.559	-0.164	0.000	0.42	31.9	OK
8.004	32	80.463	-0.161	0.000	0.44	33.3	OK
8.005	33	80.277	-0.249	0.000	0.25	37.2	OK
8.006	34	79.957	-0.274	0.000	0.33	60.7	OK
8.007	35	79.768	-0.244	0.000	0.43	80.5	OK
8.008	36	79.632	-0.163	0.000	0.73	90.5	OK

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XP Solutions	Network 2019.1	

Summary of Results for 240 minute 30 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

PN	US/MH Name	Water			Surcharged		Pipe Flow (l/s)	Status
		Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)		
6.006	10	79.558	-0.212	0.000	0.71	168.4		OK
6.007	11	79.550	-0.194	0.000	0.63	176.2		OK
6.008	16	79.533	0.283	0.000	0.17	37.7		SURCHARGED
6.009	30	79.529	0.649	0.000	0.22	32.6		SURCHARGED
1.009	45	78.438	-0.078	0.000	0.90	72.1		OK
1.010	24	78.216	-0.084	0.000	0.87	72.0		OK
1.011	25	77.711	-0.097	0.000	0.79	72.0		OK
1.012	26	77.287	-0.200	0.000	0.24	72.0		OK
1.013	10000	74.500	-0.209	0.000	0.20	72.0		OK
1.014	28	70.615	-0.117	0.000	0.69	72.0		OK

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Summary of Results for 360 minute 30 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

Margin for Flood Risk Warning (mm) 200.0
 Analysis Timestep 2.5 Second Increment (Extended)
 DTS Status OFF
 DVD Status ON
 Inertia Status OFF

PN	US/MH Name	Water	Surcharged	Flooded	Pipe		Status
		Level (m)	Depth (m)	Volume (m ³)	Flow / Cap. (1/s)	Overflow Flow (1/s)	
1.000	1	84.152	-0.183	0.000	0.08	4.7	OK
1.001	2	83.493	-0.132	0.000	0.36	10.7	OK
2.000	7	83.124	-0.126	0.000	0.06	2.1	OK
2.001	8	82.308	0.039	0.000	0.12	4.7	SURCHARGED
1.002	3	82.304	0.204	0.000	0.24	18.9	SURCHARGED
1.003	4	82.296	0.333	0.000	0.40	18.9	SURCHARGED
1.004	42	82.293	0.352	0.000	0.34	21.9	SURCHARGED
3.000	9	83.260	-0.217	0.000	0.17	12.2	OK
3.001	6	83.103	-0.218	0.000	0.17	12.2	OK
3.002	12	82.886	-0.199	0.000	0.25	18.3	OK
3.003	13	82.663	-0.248	0.000	0.25	33.4	OK
3.004	14	82.389	-0.218	0.000	0.37	39.5	OK
3.005	15	82.348	-0.192	0.000	0.01	41.5	OK
4.000	18	83.006	-0.169	0.000	0.14	7.3	OK
4.001	17	82.793	-0.172	0.000	0.13	10.6	OK
3.006	20	82.336	-0.101	0.000	0.01	47.4	OK
1.005	5	82.283	1.635	0.000	0.43	32.8	SURCHARGED
1.006	22	80.115	-0.199	0.000	0.25	32.8	OK
5.000	64	79.103	-0.999	0.000	0.01	9.9	OK
5.001	63	79.057	-0.086	0.000	0.33	9.9	OK
1.007	62	78.923	-0.179	0.000	0.34	38.3	OK
1.008	23	78.731	-0.156	0.000	0.46	38.3	OK
6.000	80	83.041	-0.154	0.000	0.22	10.2	OK
6.001	94	82.608	-0.167	0.000	0.15	13.0	OK
6.002	95	81.501	-0.237	0.000	0.10	14.0	OK
7.000	50	82.077	-0.223	0.000	0.15	13.3	OK
7.001	60	81.744	-0.190	0.000	0.29	22.0	OK
7.002	51	81.653	-0.189	0.000	0.30	27.8	OK
7.003	52	81.408	-0.204	0.000	0.23	31.4	OK
6.003	53	81.029	-0.258	0.000	0.21	52.1	OK
6.004	55	80.011	-0.326	0.000	0.17	52.9	OK
6.005	56	79.760	-0.277	0.000	0.32	59.7	OK
8.000	19	81.810	-0.180	0.000	0.09	3.4	OK
9.000	37	81.794	-0.121	0.000	0.08	1.3	OK
8.001	21	81.649	-0.174	0.000	0.12	5.4	OK
8.002	29	81.396	-0.162	0.000	0.18	9.4	OK
8.003	31	80.539	-0.184	0.000	0.32	24.3	OK
8.004	32	80.443	-0.181	0.000	0.34	25.4	OK
8.005	33	80.260	-0.265	0.000	0.19	28.4	OK
8.006	34	79.932	-0.299	0.000	0.25	46.2	OK
8.007	35	79.739	-0.273	0.000	0.33	61.4	OK
8.008	36	79.585	-0.210	0.000	0.56	69.1	OK

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Summary of Results for 360 minute 30 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

PN	US/MH Name	Water			Surcharged		Pipe Flow (l/s)	Status
		Level (m)	Depth (m)	Volume (m ³)	Flow /	Overflow (l/s)		
6.006	10	79.547	-0.223	0.000	0.54	128.8	OK	
6.007	11	79.539	-0.205	0.000	0.48	134.8	OK	
6.008	16	79.523	0.273	0.000	0.17	36.9	SURCHARGED	
6.009	30	79.525	0.645	0.000	0.22	32.6	SURCHARGED	
1.009	45	78.430	-0.086	0.000	0.86	68.9	OK	
1.010	24	78.209	-0.091	0.000	0.83	68.9	OK	
1.011	25	77.704	-0.104	0.000	0.76	68.9	OK	
1.012	26	77.284	-0.203	0.000	0.23	68.9	OK	
1.013	10000	74.498	-0.211	0.000	0.19	68.9	OK	
1.014	28	70.610	-0.122	0.000	0.66	68.9	OK	

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12 Berry Holm Close
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S35 1AB

Highrange developments
Mill Hill Cleator Moor
Full system

Date 20/09/2021 09:19
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Micro Drainage

Summary of Results for 15 minute 100 year Winter (NETWORK1 FULL SYSTEM 11-8-21.SWS)

Margin for Flood Risk Warning (mm)200.0

Analysis Timestep 2.5 Second Increment (Extended)

DTS StatusOFF

DVD StatusON

Inertia StatusOFF

		Water	Surcharged	Flooded		Pipe	
	US/MH	Level	Depth	Volume	Flow / Overflow	Flow	
PN	Name	(m)	(m)	(m³)	Cap.	(l/s)	Status
1.000	1	84.225	-0.110	0.000	0.50	29.8	OK
1.001	2	83.824	0.199	0.000	2.30	68.7	SURCHARGED
2.000	7	83.165	-0.085	0.000	0.39	13.5	OK
2.001	8	82.882	0.613	0.000	0.67	26.3	SURCHARGED
1.002	3	82.793	0.693	0.000	1.45	111.8	SURCHARGED
1.003	4	82.505	0.542	0.000	2.33	111.1	SURCHARGED
1.004	42	82.307	0.366	0.000	1.96	127.1	SURCHARGED
3.000	9	84.000	0.523	0.000	0.96	68.5	SURCHARGED
3.001	6	83.852	0.531	0.000	0.93	68.3	SURCHARGED
3.002	12	83.666	0.581	0.000	1.25	92.1	SURCHARGED
3.003	13	83.278	0.367	0.000	1.22	161.8	SURCHARGED
3.004	14	82.774	0.167	0.000	1.80	192.6	SURCHARGED
3.005	15	81.862	-0.678	0.000	0.05	197.3	OK
4.000	18	83.119	-0.056	0.000	0.91	47.5	OK
4.001	17	82.901	-0.064	0.000	0.84	69.2	OK
3.006	20	81.850	-0.587	0.000	0.04	235.0	OK
1.005	5	81.825	1.177	0.000	0.38	29.1	SURCHARGED
1.006	22	80.109	-0.205	0.000	0.22	29.1	OK
5.000	64	79.808	-0.294	0.000	0.05	58.8	OK
5.001	63	79.801	0.658	0.000	0.57	16.9	SURCHARGED
1.007	62	78.935	-0.167	0.000	0.41	46.0	OK
1.008	23	78.747	-0.140	0.000	0.56	45.9	OK
6.000	80	83.594	0.399	0.000	1.36	63.0	SURCHARGED
6.001	94	82.882	0.107	0.000	0.89	76.2	SURCHARGED
6.002	95	82.276	0.538	0.000	0.55	77.0	SURCHARGED
7.000	50	83.496	1.196	0.000	0.83	73.5	SURCHARGED
7.001	60	83.238	1.304	0.000	1.58	120.1	SURCHARGED
7.002	51	83.014	1.172	0.000	1.56	146.6	SURCHARGED
7.003	52	82.484	0.872	0.000	1.14	157.3	SURCHARGED
6.003	53	82.091	0.804	0.000	1.03	251.8	SURCHARGED
6.004	55	81.108	0.771	0.000	0.82	252.2	SURCHARGED
6.005	56	80.910	0.873	0.000	1.43	270.3	FLOOD RISK
8.000	19	82.514	0.524	0.000	0.52	19.6	SURCHARGED
9.000	37	82.494	0.579	0.000	0.57	8.9	SURCHARGED
8.001	21	82.474	0.651	0.000	0.69	31.5	SURCHARGED
8.002	29	82.398	0.840	0.000	0.84	45.0	SURCHARGED
8.003	31	82.101	1.378	0.000	1.50	113.3	FLOOD RISK
8.004	32	81.891	1.267	0.000	1.51	114.2	FLOOD RISK
8.005	33	81.667	1.141	0.000	0.85	126.4	SURCHARGED
8.006	34	81.445	1.214	0.105	1.12	209.8	FLOOD
8.007	35	81.168	1.157	0.000	1.50	280.1	SURCHARGED
8.008	36	80.652	0.857	0.000	2.53	314.2	SURCHARGED

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Summary of Results for 15 minute 100 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

PN	US/MH Name	Water		Surcharged		Flooded		Pipe	Status
		Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Flow (l/s)		
6.006	10	80.349	0.579	0.000	2.39		568.4	SURCHARGED	
6.007	11	80.023	0.279	0.000	2.10		588.2	SURCHARGED	
6.008	16	79.312	0.062	0.000	0.25		52.8	SURCHARGED	
6.009	30	79.406	0.526	0.000	0.22		32.6	SURCHARGED	
1.009	45	78.451	-0.065	0.000	0.97		78.2	OK	
1.010	24	78.229	-0.071	0.000	0.94		78.2	OK	
1.011	25	77.723	-0.085	0.000	0.86		78.2	OK	
1.012	26	77.291	-0.196	0.000	0.26		78.2	OK	
1.013	10000	74.504	-0.205	0.000	0.22		78.2	OK	
1.014	28	70.626	-0.106	0.000	0.75		78.2	OK	

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Date 20/09/2021 09:20 File NETWORK1 FULL SYSTEM 11...	Designed by RAB Checked by	
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Summary of Results for 30 minute 100 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

PN	US/MH Name	Water			Surcharged		Pipe Flow (l/s)	Status
		Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)		
6.006	10	80.316	0.546	0.000	2.34	555.6	SURCHARGED	
6.007	11	80.007	0.263	0.000	2.06	578.3	SURCHARGED	
6.008	16	79.456	0.206	0.000	0.30	65.6	SURCHARGED	
6.009	30	79.593	0.713	0.000	0.22	32.6	SURCHARGED	
1.009	45	78.454	-0.062	0.000	0.99	79.5	OK	
1.010	24	78.232	-0.068	0.000	0.95	79.4	OK	
1.011	25	77.726	-0.082	0.000	0.88	79.4	OK	
1.012	26	77.292	-0.195	0.000	0.27	79.4	OK	
1.013	10000	74.504	-0.205	0.000	0.22	79.4	OK	
1.014	28	70.628	-0.104	0.000	0.76	79.4	OK	

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12 Berry Holm Close
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S35 1AB

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Highrange developments
Mill Hill Cleator Moor
Full system

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Summary of Results for 60 minute 100 year Winter (NETWORK1 FULL SYSTEM 11-8-21.SWS)

Margin for Flood Risk Warning (mm)

Analysis Timestep 2.5 Second Increment (Extended)

DTS Status

DVD Status

Inertia Status

200.0

OFF

ON

OFF

		Water	Surcharged	Flooded		Pipe	
	US/MH	Level	Depth	Volume	Flow /	Overflow	Pipe
PN	Name	(m)	(m)	(m³)	Cap.	(l/s)	Flow
							Status
1.000	1	84.196	-0.139	0.000	0.31	18.5	OK
1.001	2	83.755	0.130	0.000	1.40	42.0	SURCHARGED
2.000	7	83.759	0.509	0.000	0.24	8.2	SURCHARGED
2.001	8	83.754	1.485	0.000	0.46	17.9	SURCHARGED
1.002	3	83.750	1.650	0.000	0.95	73.3	SURCHARGED
1.003	4	83.740	1.777	0.000	1.53	73.2	SURCHARGED
1.004	42	83.737	1.796	0.000	1.30	84.3	SURCHARGED
3.000	9	83.849	0.372	0.000	0.67	48.0	SURCHARGED
3.001	6	83.840	0.519	0.000	0.63	46.6	SURCHARGED
3.002	12	83.829	0.744	0.000	0.92	68.2	SURCHARGED
3.003	13	83.813	0.902	0.000	0.92	122.4	SURCHARGED
3.004	14	83.795	1.188	0.000	1.34	144.1	SURCHARGED
3.005	15	83.725	1.185	0.000	0.04	147.8	SURCHARGED
4.000	18	83.743	0.568	0.000	0.55	29.0	SURCHARGED
4.001	17	83.735	0.770	0.000	0.51	41.7	SURCHARGED
3.006	20	83.725	1.288	0.000	0.03	153.9	SURCHARGED
1.005	5	83.725	3.077	0.000	0.57	43.3	SURCHARGED
1.006	22	80.132	-0.182	0.000	0.33	43.3	OK
5.000	64	79.895	-0.207	0.000	0.03	36.6	OK
5.001	63	79.887	0.744	0.000	0.57	16.9	SURCHARGED
1.007	62	78.958	-0.144	0.000	0.54	60.1	OK
1.008	23	78.815	-0.072	0.000	0.72	59.7	OK
6.000	80	83.132	-0.063	0.000	0.86	39.8	OK
6.001	94	82.676	-0.099	0.000	0.60	50.8	OK
6.002	95	81.570	-0.168	0.000	0.40	55.0	OK
7.000	50	82.167	-0.133	0.000	0.59	52.2	OK
7.001	60	82.015	0.081	0.000	1.12	85.1	SURCHARGED
7.002	51	81.899	0.057	0.000	1.14	107.2	SURCHARGED
7.003	52	81.530	-0.082	0.000	0.87	120.6	OK
6.003	53	81.285	-0.002	0.000	0.80	195.9	OK
6.004	55	80.676	0.339	0.000	0.64	198.1	SURCHARGED
6.005	56	80.488	0.451	0.000	1.16	220.2	SURCHARGED
8.000	19	81.858	-0.132	0.000	0.36	13.3	OK
9.000	37	81.824	-0.091	0.000	0.33	5.2	OK
8.001	21	81.707	-0.116	0.000	0.47	21.4	OK
8.002	29	81.540	-0.018	0.000	0.67	35.7	OK
8.003	31	81.208	0.485	0.000	1.16	87.5	SURCHARGED
8.004	32	81.076	0.452	0.000	1.21	91.5	SURCHARGED
8.005	33	80.934	0.409	0.000	0.68	101.9	SURCHARGED
8.006	34	80.801	0.569	0.000	0.88	165.0	SURCHARGED
8.007	35	80.623	0.612	0.000	1.17	218.8	SURCHARGED
8.008	36	80.316	0.521	0.000	1.98	246.0	SURCHARGED

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Summary of Results for 60 minute 100 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

PN	US/MH Name	Water			Surcharged		Pipe Flow (l/s)	Status
		Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (l/s)		
6.006	10	80.123	0.353	0.000	1.96	466.0	SURCHARGED	
6.007	11	79.907	0.163	0.000	1.74	486.7	SURCHARGED	
6.008	16	79.593	0.343	0.000	0.21	45.5	SURCHARGED	
6.009	30	79.633	0.753	0.000	0.22	32.6	SURCHARGED	
1.009	45	78.626	0.110	0.000	1.11	89.4	SURCHARGED	
1.010	24	78.360	0.060	0.000	1.07	89.2	SURCHARGED	
1.011	25	77.745	-0.063	0.000	0.98	89.2	OK	
1.012	26	77.299	-0.188	0.000	0.30	89.2	OK	
1.013	10000	74.510	-0.199	0.000	0.25	89.2	OK	
1.014	28	70.645	-0.087	0.000	0.85	89.2	OK	

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Summary of Results for 120 minute 100 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

PN	US/MH Name	Water			Surcharged		Pipe Flow (l/s)	Status
		Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)		
6.006	10	79.804	0.034	0.000	1.40	331.6	SURCHARGED	
6.007	11	79.754	0.010	0.000	1.24	346.7	SURCHARGED	
6.008	16	79.709	0.459	0.000	0.19	40.3	SURCHARGED	
6.009	30	79.757	0.877	0.000	0.22	32.6	SURCHARGED	
1.009	45	78.731	0.215	0.000	1.16	93.7	SURCHARGED	
1.010	24	78.437	0.137	0.000	1.13	93.6	SURCHARGED	
1.011	25	77.814	0.006	0.000	1.03	93.5	SURCHARGED	
1.012	26	77.302	-0.185	0.000	0.31	93.5	OK	
1.013	10000	74.513	-0.196	0.000	0.26	93.5	OK	
1.014	28	70.653	-0.079	0.000	0.89	93.5	OK	

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Summary of Results for 180 minute 100 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

Margin for Flood Risk Warning (mm) 200.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status OFF
DVD Status ON
Inertia Status OFF

PN	US/MH Name	Water	Surcharged	Flooded	Pipe		Status
		Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (1/s)	
1.000	1	84.618	0.283	0.000	0.17	9.8	SURCHARGED
1.001	2	84.608	0.983	0.000	0.74	22.2	SURCHARGED
2.000	7	84.615	1.365	0.000	0.12	4.4	FLOOD RISK
2.001	8	84.604	2.335	0.000	0.24	9.6	SURCHARGED
1.002	3	84.600	2.500	0.000	0.49	37.8	SURCHARGED
1.003	4	84.586	2.623	0.000	0.77	36.9	SURCHARGED
1.004	42	84.579	2.638	0.000	0.66	42.5	SURCHARGED
3.000	9	84.807	1.330	0.000	0.36	25.5	SURCHARGED
3.001	6	84.791	1.470	0.000	0.34	25.4	SURCHARGED
3.002	12	84.773	1.688	0.000	0.51	37.8	SURCHARGED
3.003	13	84.747	1.836	0.000	0.52	69.0	FLOOD RISK
3.004	14	84.642	2.035	0.000	0.76	81.5	SURCHARGED
3.005	15	84.551	2.011	0.000	0.02	84.1	SURCHARGED
4.000	18	84.572	1.397	0.000	0.29	15.3	SURCHARGED
4.001	17	84.562	1.597	0.000	0.27	22.0	FLOOD RISK
3.006	20	84.551	2.114	25.371	0.02	89.0	FLOOD
1.005	5	84.548	3.900	0.000	0.63	48.1	SURCHARGED
1.006	22	80.139	-0.175	0.000	0.37	48.1	OK
5.000	64	79.348	-0.754	0.000	0.02	20.1	OK
5.001	63	79.345	0.202	0.000	0.57	16.9	SURCHARGED
1.007	62	78.975	-0.127	0.000	0.57	64.1	OK
1.008	23	78.912	0.025	0.000	0.77	63.3	SURCHARGED
6.000	80	83.077	-0.118	0.000	0.46	21.1	OK
6.001	94	82.637	-0.138	0.000	0.32	26.9	OK
6.002	95	81.531	-0.207	0.000	0.21	29.2	OK
7.000	50	82.115	-0.185	0.000	0.31	27.7	OK
7.001	60	81.802	-0.132	0.000	0.60	45.8	OK
7.002	51	81.712	-0.130	0.000	0.61	57.8	OK
7.003	52	81.457	-0.155	0.000	0.47	65.1	OK
6.003	53	81.086	-0.201	0.000	0.44	108.0	OK
6.004	55	80.072	-0.265	0.000	0.35	109.6	OK
6.005	56	79.885	-0.152	0.000	0.65	123.4	OK
8.000	19	81.831	-0.159	0.000	0.19	7.1	OK
9.000	37	81.807	-0.108	0.000	0.17	2.7	OK
8.001	21	81.674	-0.149	0.000	0.25	11.3	OK
8.002	29	81.427	-0.131	0.000	0.37	19.6	OK
8.003	31	80.603	-0.120	0.000	0.67	50.5	OK
8.004	32	80.509	-0.115	0.000	0.70	52.7	OK
8.005	33	80.313	-0.212	0.000	0.39	58.8	OK
8.006	34	80.010	-0.221	0.000	0.51	95.7	OK
8.007	35	79.903	-0.108	0.000	0.68	126.7	OK
8.008	36	79.803	0.008	0.000	1.15	142.5	SURCHARGED

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Summary of Results for 180 minute 100 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

		Water	Surcharged	Flooded		Pipe		
	US/MH	Level	Depth	Volume	Flow / Overflow	Flow		
PN	Name	(m)	(m)	(m³)	Cap.	(l/s)	(l/s)	Status
6.006	10	79.770	0.000	0.000	1.12	266.0		OK
6.007	11	79.763	0.019	0.000	0.99	278.4		SURCHARGED
6.008	16	79.757	0.507	0.000	0.22	46.6		SURCHARGED
6.009	30	79.758	0.878	0.000	0.22	32.6		SURCHARGED
1.009	45	78.700	0.184	0.000	1.16	93.2		SURCHARGED
1.010	24	78.413	0.113	0.000	1.12	92.9		SURCHARGED
1.011	25	77.808	0.000	0.000	1.01	92.0		OK
1.012	26	77.301	-0.186	0.000	0.31	91.9		OK
1.013	10000	74.512	-0.197	0.000	0.26	91.8		OK
1.014	28	70.650	-0.082	0.000	0.88	91.6		OK

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S35 1AB

Highrange developments
Mill Hill Cleator Moor
Full system

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Micro Drainage

Summary of Results for 240 minute 100 year Winter (NETWORK1 FULL SYSTEM 11-8-21.SWS)

Margin for Flood Risk Warning (mm)200.0

Analysis Timestep 2.5 Second Increment (Extended)

DTS StatusOFF

DVD StatusON

Inertia StatusOFF

		Water	Surcharged	Flooded		Pipe		
	US/MH	Level	Depth	Volume	Flow /	Overflow	Flow	
PN	Name	(m)	(m)	(m³)	Cap.	(l/s)	(l/s)	Status
1.000	1	84.611	0.276	0.000	0.14		8.1	SURCHARGED
1.001	2	84.596	0.971	0.000	0.62		18.4	SURCHARGED
2.000	7	84.597	1.347	0.000	0.10		3.6	SURCHARGED
2.001	8	84.595	2.326	0.000	0.20		7.9	SURCHARGED
1.002	3	84.585	2.485	0.000	0.40		31.2	SURCHARGED
1.003	4	84.568	2.605	0.000	0.64		30.7	SURCHARGED
1.004	42	84.561	2.620	0.000	0.55		35.4	SURCHARGED
3.000	9	84.783	1.306	0.000	0.29		21.1	SURCHARGED
3.001	6	84.769	1.448	0.000	0.29		21.0	SURCHARGED
3.002	12	84.752	1.667	0.000	0.42		31.4	SURCHARGED
3.003	13	84.727	1.816	0.000	0.43		57.4	FLOOD RISK
3.004	14	84.638	2.031	0.000	0.63		67.7	SURCHARGED
3.005	15	84.548	2.008	0.000	0.02		69.6	SURCHARGED
4.000	18	84.568	1.393	0.000	0.24		12.6	SURCHARGED
4.001	17	84.559	1.594	0.000	0.22		18.2	FLOOD RISK
3.006	20	84.548	2.111	21.721	0.01		74.5	FLOOD
1.005	5	84.539	3.891	0.000	0.63		48.1	SURCHARGED
1.006	22	80.139	-0.175	0.000	0.37		48.1	OK
5.000	64	79.184	-0.918	0.000	0.01		16.9	OK
5.001	63	79.175	0.032	0.000	0.54		16.2	SURCHARGED
1.007	62	78.955	-0.147	0.000	0.52		57.9	OK
1.008	23	78.777	-0.110	0.000	0.70		57.9	OK
6.000	80	83.065	-0.130	0.000	0.38		17.5	OK
6.001	94	82.628	-0.147	0.000	0.26		22.3	OK
6.002	95	81.522	-0.216	0.000	0.17		24.1	OK
7.000	50	82.103	-0.197	0.000	0.26		22.9	OK
7.001	60	81.784	-0.150	0.000	0.50		37.9	OK
7.002	51	81.694	-0.148	0.000	0.51		47.8	OK
7.003	52	81.442	-0.170	0.000	0.39		53.9	OK
6.003	53	81.068	-0.219	0.000	0.37		89.5	OK
6.004	55	80.053	-0.284	0.000	0.29		90.8	OK
6.005	56	79.823	-0.214	0.000	0.54		102.4	OK
8.000	19	81.824	-0.166	0.000	0.16		5.9	OK
9.000	37	81.803	-0.112	0.000	0.14		2.3	OK
8.001	21	81.667	-0.156	0.000	0.20		9.3	OK
8.002	29	81.418	-0.140	0.000	0.30		16.2	OK
8.003	31	80.582	-0.141	0.000	0.55		41.8	OK
8.004	32	80.487	-0.137	0.000	0.58		43.6	OK
8.005	33	80.297	-0.228	0.000	0.33		48.8	OK
8.006	34	79.986	-0.245	0.000	0.43		79.5	OK
8.007	35	79.849	-0.162	0.000	0.57		105.4	OK
8.008	36	79.795	0.000	0.000	0.96		118.4	OK

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Summary of Results for 240 minute 100 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

PN	US/MH Name	Water		Surcharged		Flooded		Pipe	Status
		Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	Flow (l/s)		
6.006	10	79.779	0.009	0.000	0.93		220.4	SURCHARGED	
6.007	11	79.776	0.032	0.000	0.82		230.7	SURCHARGED	
6.008	16	79.771	0.521	0.000	0.19		40.1	SURCHARGED	
6.009	30	79.772	0.892	0.000	0.22		32.6	SURCHARGED	
1.009	45	78.601	0.085	0.000	1.09		88.0	SURCHARGED	
1.010	24	78.342	0.042	0.000	1.06		87.9	SURCHARGED	
1.011	25	77.743	-0.065	0.000	0.97		87.9	OK	
1.012	26	77.298	-0.189	0.000	0.29		87.9	OK	
1.013	10000	74.510	-0.199	0.000	0.25		87.9	OK	
1.014	28	70.643	-0.089	0.000	0.84		87.9	OK	

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Summary of Results for 360 minute 100 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

Margin for Flood Risk Warning (mm) 200.0
Analysis Timestep 2.5 Second Increment (Extended)
DTS Status OFF
DVD Status ON
Inertia Status OFF

PN	US/MH Name	Water	Surcharged	Flooded	Pipe		Status
		Level (m)	Depth (m)	Volume (m ³)	Flow / Cap.	Overflow (1/s)	
1.000	1	84.492	0.157	0.000	0.10	6.1	SURCHARGED
1.001	2	84.484	0.859	0.000	0.46	13.9	SURCHARGED
2.000	7	84.489	1.239	0.000	0.08	2.7	SURCHARGED
2.001	8	84.484	2.215	0.000	0.15	6.0	SURCHARGED
1.002	3	84.478	2.378	0.000	0.31	23.7	SURCHARGED
1.003	4	84.467	2.504	0.000	0.49	23.4	SURCHARGED
1.004	42	84.463	2.522	0.000	0.42	27.0	SURCHARGED
3.000	9	84.550	1.073	0.000	0.22	15.9	SURCHARGED
3.001	6	84.541	1.220	0.000	0.22	15.9	SURCHARGED
3.002	12	84.530	1.445	0.000	0.32	23.7	SURCHARGED
3.003	13	84.514	1.603	0.000	0.33	43.4	SURCHARGED
3.004	14	84.495	1.888	0.000	0.48	51.3	SURCHARGED
3.005	15	84.449	1.909	0.000	0.01	53.0	SURCHARGED
4.000	18	84.467	1.292	0.000	0.18	9.5	SURCHARGED
4.001	17	84.459	1.494	0.000	0.17	13.7	FLOOD RISK
3.006	20	84.449	2.012	0.000	0.01	58.8	FLOOD RISK
1.005	5	84.449	3.801	0.000	0.62	47.7	SURCHARGED
1.006	22	80.139	-0.175	0.000	0.36	47.6	OK
5.000	64	79.131	-0.971	0.000	0.01	12.9	OK
5.001	63	79.099	-0.044	0.000	0.43	12.8	OK
1.007	62	78.948	-0.154	0.000	0.48	53.9	OK
1.008	23	78.764	-0.123	0.000	0.65	53.8	OK
6.000	80	83.052	-0.143	0.000	0.28	13.2	OK
6.001	94	82.618	-0.157	0.000	0.20	16.8	OK
6.002	95	81.510	-0.228	0.000	0.13	18.2	OK
7.000	50	82.090	-0.210	0.000	0.20	17.3	OK
7.001	60	81.761	-0.173	0.000	0.38	28.6	OK
7.002	51	81.671	-0.171	0.000	0.38	36.2	OK
7.003	52	81.423	-0.189	0.000	0.29	40.7	OK
6.003	53	81.046	-0.241	0.000	0.28	67.6	OK
6.004	55	80.030	-0.307	0.000	0.22	68.7	OK
6.005	56	79.818	-0.219	0.000	0.41	77.5	OK
8.000	19	81.816	-0.174	0.000	0.12	4.4	OK
9.000	37	81.798	-0.117	0.000	0.11	1.7	OK
8.001	21	81.657	-0.166	0.000	0.15	7.1	OK
8.002	29	81.406	-0.152	0.000	0.23	12.3	OK
8.003	31	80.558	-0.165	0.000	0.42	31.6	OK
8.004	32	80.462	-0.162	0.000	0.44	33.0	OK
8.005	33	80.276	-0.249	0.000	0.25	36.8	OK
8.006	34	79.956	-0.275	0.000	0.32	60.0	OK
8.007	35	79.849	-0.162	0.000	0.43	79.7	OK
8.008	36	79.795	0.000	0.000	0.72	89.8	SURCHARGED

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Summary of Results for 360 minute 100 year Winter (NETWORK1 FULL SYSTEM
11-8-21.SWS)

PN	US/MH Name	Water			Surcharged		Pipe Flow (l/s)	Status
		Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)		
6.006	10	79.770	0.000	0.000	0.70	167.2	SURCHARGED	
6.007	11	79.761	0.017	0.000	0.62	175.0	SURCHARGED	
6.008	16	79.756	0.506	0.000	0.17	36.6	SURCHARGED	
6.009	30	79.758	0.878	0.000	0.22	32.6	SURCHARGED	
1.009	45	78.539	0.023	0.000	1.05	84.5	SURCHARGED	
1.010	24	78.301	0.001	0.000	1.02	84.5	SURCHARGED	
1.011	25	77.736	-0.072	0.000	0.93	84.5	OK	
1.012	26	77.295	-0.192	0.000	0.28	84.5	OK	
1.013	10000	74.507	-0.202	0.000	0.24	84.5	OK	
1.014	28	70.637	-0.095	0.000	0.81	84.5	OK	