

Project Title: Proposed Lidl Store at Wrexham

Project No: 09 – 124 CALC02

Client: Lidl UK GmbH

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Prepared by:	Date:	Checked by:	Date:	Approved by:	Date:
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Revisions

Ref	Date	Description	Checked	Approved

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DESIGN PHILOSOPHY

A) DESCRIPTION

This site has planning approval for under the previous planning application ref: P/2018/0675. This was for a Lidl store and Drive Thru.

EXISTING SITE AND PROPOSED WORKS

The existing site is currently developed as a Wrexham Police Station with associated access roads and car parking. The existing drainage is separate systems for surface water and foul, the foul discharging from site into the local drainage system while the surface water discharge via soakaways.

A Flood Consequence Assessment with Drainage Strategy has been undertaken by Beam Consulting, references 09-124-DOC-001 Rev 2 dated 15-01-2019, confirming the foul and surface water discharges from the site will remain as existing.

SURFACE WATER DRAINAGE

Based on the Flood Consequence Assessment report and discussions with the LLFA, the overall proposed impermeable area for the site area is 7028m².

It is proposed that the surface water discharge from the site will be discharged via two soakaways, one for the Lidl Store roof area and one for the Lidl Store Hardstanding.

Soakaway testing has been undertaken in accordance with BRE Digest 365 by Remada Ltd. The Remada letter report, reference 525.04.01 dated 12th May 2020, indicates that the infiltration rates vary from 2.09×10^{-4} m/s and 1.65×10^{-5} m/s this gives an average infiltration rate of 8.20×10^{-5} m/s. As this is a good infiltration rate it is proposed to use soakaways for the surface water system instead of discharging into the existing sewer system, as the existing site. This is a preferred method in the SuDS drainage Hierarchy.

The drainage system will be designed for a 1 in 100 year storm event plus 30% allowance for climate change with the soakaways being designed for a 1 in 10 year storm event plus 30% allowance for climate change.

The system is to be designed as Private with pipe cover of 600mm in footpaths/grassed areas and 900mm in roads.

FOUL WATER DRAINAGE

The drainage system is designed as a gravity system collecting foul water. The existing foul water drainage system on site will be removed except for the last manhole on the site, this and the existing connection into the existing sewer system will remain. The proposed foul water drainage from the proposed Lidl store will connect into the existing foul manhole on site.

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B) DESIGN CODES

- The Wallingford Procedure - Design and Analysis of Urban Drainage. Volume 1 Principles, Methods and Practice. Volume 4 - Modified Rational Method.
- BS EN 12056-2:2000 Gravity drainage systems inside buildings – Part 2: Sanitary pipework, layout and calculation.

C) CDM

- Construction method statement to be provided by contractor prior to construction
- Designers Risk Assessment has been prepared.

Rainfall Methodology	FSR
Return Period (years)	100
Additional Flow (%)	100
FSR Region	England and Wales
M5-60 (mm)	18.000
Ratio-R	0.350
CV	0.750
Time of Entry (mins)	1.00
Maximum Time of Concentration (mins)	30.00
Maximum Rainfall (mm/hr)	50.0
Minimum Velocity (m/s)	0.75
Connection Type	Level Soffits
Minimum Backdrop Height (m)	0.200
Preferred Cover Depth (m)	0.900
Include Intermediate Ground	✓
Enforce best practice design rules	✓

	Name	Area (ha)	T of E (mins)	Add Inflow (l/s)	Cover Level (m)	Node Type	Manhole Type	Diameter (mm)	Width (mm)	Easting (m)	Northing (m)	Depth (m)	Notes
✓	F1		1.00		84.700	Manhole	Adoptable	1200		333718.881	350719.921	1.050	
✓	F2				84.700	Manhole	Adoptable	1200		333736.768	350710.481	1.199	
✓	F3				84.700	Manhole	Adoptable	1200		333740.015	350708.767	1.226	
✓	F4				84.700	Manhole	Adoptable	1200		333749.717	350703.646	1.307	
✓	F5				84.700	Manhole	Adoptable	1200		333758.231	350699.169	1.378	
✓	F6				84.700	Manhole	Adoptable	1200		333780.834	350687.224	1.566	
✓	F7				84.720	Manhole	Adoptable	1200		333765.696	350658.184	1.827	
✓	F8				84.720	Manhole	Adoptable	1200		333765.035	350656.931	1.838	
✓	F9		1.00		84.800	Manhole	Adoptable	1200		333697.038	350703.501	1.050	
✓	F10				84.800	Manhole	Adoptable	1200		333690.618	350691.338	1.152	
✓	F11				84.800	Manhole	Adoptable	1200		333706.357	350683.030	1.283	
✓	F12				84.800	Manhole	Adoptable	1200		333726.821	350672.228	1.454	
✓	F13				84.720	Manhole	Adoptable	1200		333763.022	350653.119	1.870	
✓	EXG F1				84.110	Manhole	Adoptable	1200		333758.222	350646.138	1.323	

	Name	US Node	DS Node	Length (m)	ks (mm) / n	Velocity Equation	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	Link Type	T of C (mins)	Rain (mm/hr)	Con Offset (m)	Min DS IL (m)	Lateral Area (ha)	Lateral Ins Point (%)	Lateral T of E (mins)
✓	1.000	F1	F2	20.225	1.500	Colebrook-White	83.650	83.501	0.149	135.7	150	Circular	1.45	50.0					
✓	1.001	F2	F3	3.672	1.500	Colebrook-White	83.501	83.474	0.027	136.0	150	Circular	1.53	50.0					
✓	1.002	F3	F4	10.971	1.500	Colebrook-White	83.474	83.393	0.081	135.4	150	Circular	1.77	50.0					
✓	1.003	F4	F5	9.619	1.500	Colebrook-White	83.393	83.322	0.071	135.5	150	Circular	1.99	50.0					
✓	1.004	F5	F6	25.565	1.500	Colebrook-White	83.322	83.134	0.188	136.0	150	Circular	2.55	50.0					
✓	1.005	F6	F7	32.749	1.500	Colebrook-White	83.134	82.893	0.241	135.9	150	Circular	3.28	50.0					
✓	1.006	F7	F8	1.417	1.500	Colebrook-White	82.893	82.882	0.011	128.8	150	Circular	3.31	50.0					
✓	1.007	F8	F13	4.311	1.500	Colebrook-White	82.882	82.850	0.032	134.7	150	Circular	3.41	50.0					
✓	2.000	F9	F10	13.753	1.500	Colebrook-White	83.750	83.648	0.102	134.8	150	Circular	1.30	50.0					
✓	2.001	F10	F11	17.797	1.500	Colebrook-White	83.648	83.517	0.131	135.9	150	Circular	1.70	50.0					
✓	2.002	F11	F12	23.140	1.500	Colebrook-White	83.517	83.346	0.171	135.3	150	Circular	2.21	50.0					
✓	2.003	F12	F13	40.935	1.500	Colebrook-White	83.346	82.850	0.496	82.5	150	Circular	2.92	50.0					
✓	1.008	F13	EXG F1	8.472	1.500	Colebrook-White	82.850	82.787	0.063	134.5	150	Circular	3.60	50.0					

	Name	US Node	DS Node	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Minimum Depth (m)	Maximum Depth (m)	Σ Area (ha)	Σ Add Inflow (ha)	Pro Depth (mm)	Pro Velocity (m/s)	Notes
✓	1.000	F1	F2	0.751	13.3	0.0	0.900	1.049	0.900	1.049	0.000	0.0	0	0.000	
✓	1.001	F2	F3	0.750	13.3	0.0	1.049	1.076	1.049	1.076	0.000	0.0	0	0.000	
✓	1.002	F3	F4	0.752	13.3	0.0	1.076	1.157	1.076	1.157	0.000	0.0	0	0.000	
✓	1.003	F4	F5	0.752	13.3	0.0	1.157	1.228	1.157	1.228	0.000	0.0	0	0.000	
✓	1.004	F5	F6	0.750	13.3	0.0	1.228	1.416	1.228	1.416	0.000	0.0	0	0.000	
✓	1.005	F6	F7	0.750	13.3	0.0	1.416	1.677	1.416	1.677	0.000	0.0	0	0.000	
✓	1.006	F7	F8	0.771	13.6	0.0	1.677	1.688	1.677	1.688	0.000	0.0	0	0.000	
✓	1.007	F8	F13	0.754	13.3	0.0	1.688	1.720	1.688	1.720	0.000	0.0	0	0.000	
✓	2.000	F9	F10	0.753	13.3	0.0	0.900	1.002	0.900	1.002	0.000	0.0	0	0.000	
✓	2.001	F10	F11	0.751	13.3	0.0	1.002	1.133	1.002	1.133	0.000	0.0	0	0.000	
✓	2.002	F11	F12	0.752	13.3	0.0	1.133	1.304	1.133	1.304	0.000	0.0	0	0.000	
✓	2.003	F12	F13	0.964	17.0	0.0	1.304	1.720	1.304	1.720	0.000	0.0	0	0.000	Fall increased to remove backdrop
✓	1.008	F13	EXG F1	0.754	13.3	0.0	1.720	1.173	1.173	1.720	0.000	0.0	0	0.000	

Link Name	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)	US Node Name	Dia (mm)	Width (mm)	Node Type	MH Type	DS Node Name	Dia (mm)	Width (mm)	Node Type	MH Type
1.000	20.225	135.7	150	Circular	84.700	83.650	0.900	84.700	83.501	1.049	F1	1200		Manhole	Adoptable	F2	1200		Manhole	Adoptable
1.001	3.672	136.0	150	Circular	84.700	83.501	1.049	84.700	83.474	1.076	F2	1200		Manhole	Adoptable	F3	1200		Manhole	Adoptable
1.002	10.971	135.4	150	Circular	84.700	83.474	1.076	84.700	83.393	1.157	F3	1200		Manhole	Adoptable	F4	1200		Manhole	Adoptable
1.003	9.619	135.5	150	Circular	84.700	83.393	1.157	84.700	83.322	1.228	F4	1200		Manhole	Adoptable	F5	1200		Manhole	Adoptable
1.004	25.565	136.0	150	Circular	84.700	83.322	1.228	84.700	83.134	1.416	F5	1200		Manhole	Adoptable	F6	1200		Manhole	Adoptable
1.005	32.749	135.9	150	Circular	84.700	83.134	1.416	84.720	82.893	1.677	F6	1200		Manhole	Adoptable	F7	1200		Manhole	Adoptable
1.006	1.417	128.8	150	Circular	84.720	82.893	1.677	84.720	82.882	1.688	F7	1200		Manhole	Adoptable	F8	1200		Manhole	Adoptable
1.007	4.311	134.7	150	Circular	84.720	82.882	1.688	84.720	82.850	1.720	F8	1200		Manhole	Adoptable	F13	1200		Manhole	Adoptable
2.000	13.753	134.8	150	Circular	84.800	83.750	0.900	84.800	83.648	1.002	F9	1200		Manhole	Adoptable	F10	1200		Manhole	Adoptable
2.001	17.797	135.9	150	Circular	84.800	83.648	1.002	84.800	83.517	1.133	F10	1200		Manhole	Adoptable	F11	1200		Manhole	Adoptable
2.002	23.140	135.3	150	Circular	84.800	83.517	1.133	84.800	83.346	1.304	F11	1200		Manhole	Adoptable	F12	1200		Manhole	Adoptable
2.003	40.935	82.5	150	Circular	84.800	83.346	1.304	84.720	82.850	1.720	F12	1200		Manhole	Adoptable	F13	1200		Manhole	Adoptable
1.008	8.472	134.5	150	Circular	84.720	82.850	1.720	84.110	82.787	1.173	F13	1200		Manhole	Adoptable	EXG F1	1200		Manhole	Adoptable

Node Name	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Width (mm)	Node Type	MH Type		Link ID	IL (m)	Dia (mm)	Link Type
F1	333718.881	350719.921	84.700	1.050	1200		Manhole	Adoptable					
									0	1.000	83.650	150	Circular
F2	333736.768	350710.481	84.700	1.199	1200		Manhole	Adoptable	1	1.000	83.501	150	Circular
									0	1.001	83.501	150	Circular
F3	333740.015	350708.767	84.700	1.226	1200		Manhole	Adoptable	1	1.001	83.474	150	Circular
									0	1.002	83.474	150	Circular
F4	333749.717	350703.646	84.700	1.307	1200		Manhole	Adoptable	1	1.002	83.393	150	Circular
									0	1.003	83.393	150	Circular
F5	333758.231	350699.169	84.700	1.378	1200		Manhole	Adoptable	1	1.003	83.322	150	Circular
									0	1.004	83.322	150	Circular
F6	333780.834	350687.224	84.700	1.566	1200		Manhole	Adoptable	1	1.004	83.134	150	Circular
									0	1.005	83.134	150	Circular
F7	333765.696	350658.184	84.720	1.827	1200		Manhole	Adoptable	1	1.005	82.893	150	Circular
									0	1.006	82.893	150	Circular
F8	333765.035	350656.931	84.720	1.838	1200		Manhole	Adoptable	1	1.006	82.882	150	Circular

									0	1.007	82.882	150	Circular
F9	333697.038	350703.501	84.800	1.050	1200	Manhole	Adoptable						
									0	2.000	83.750	150	Circular
F10	333690.618	350691.338	84.800	1.152	1200	Manhole	Adoptable	1	2.000	83.648	150	Circular	
									0	2.001	83.648	150	Circular
F11	333706.357	350683.030	84.800	1.283	1200	Manhole	Adoptable	1	2.001	83.517	150	Circular	
									0	2.002	83.517	150	Circular
F12	333726.821	350672.228	84.800	1.454	1200	Manhole	Adoptable	1	2.002	83.346	150	Circular	
									0	2.003	83.346	150	Circular
F13	333763.022	350653.119	84.720	1.870	1200	Manhole	Adoptable	1	2.003	82.850	150	Circular	
								2	1.007	82.850	150	Circular	
								0	1.008	82.850	150	Circular	
EXG F1	333758.222	350646.138	84.110	1.323	1200	Manhole	Adoptable	1	1.008	82.787	150	Circular	

Rainfall Methodology	FSR		Return Period (years)	Climate Change (%)
FSR Region	England and Wales		1	0
M5-60 (mm)	18.000			
Ratio-R	0.350			
Summer CV	0.750			
Winter CV	0.840			
Analysis Speed	Normal			
Skip Steady State	x			
Drain Down Time (mins)	240			
Additional Storage (m³/ha)	20.0			
Storm Durations (mins)	15			
Check Discharge Rate(s)	x			
1 year (l/s)				
30 year (l/s)				
100 year (l/s)				
Check Discharge Volume	x			
100 year 360 minute (m³)				

Input Hydrograph										
Node	Overrides Design Area	Overrides Design Additional Inflow	Depression Storage Area (m²)	Depression Storage Depth (mm)	Evapo- transpiration (mm/day)	Duration (mins)	Timestep (mins)	Time (mins)	Flow (l/s)	Applies To
F1	x	x	0	0	0	15	2	2	1.8	All storms
								4	0.0	
								6	0.0	
								8	0.0	
								10	0.0	
								12	0.0	
								14	0.0	
								16	0.0	
F2	x	x	0	0	0	15	2	2	0.9	All storms
								4	0.0	
								6	0.0	
								8	0.0	
								10	0.0	
								12	0.0	
								14	0.0	
								16	0.0	
F3	x	x	0	0	0	15	2	2	0.2	All storms
								4	0.0	
								6	0.0	
								8	0.0	
								10	0.0	
								12	0.0	
								14	0.0	
								16	0.0	
F4	x	x	0	0	0	15	2	2	1.9	All storms
								4	0.0	
								6	0.0	

									8	0.0
									10	0.0
									12	0.0
									14	0.0
									16	0.0
F5	x	x		0	0	0	15	2	2	1.6All storms
									4	0.0
									6	0.0
									8	0.0
									10	0.0
									12	0.0
									14	0.0
									16	0.0
F6	x	x		0	0	0	15	2	2	0.2All storms
									4	0.0
									6	0.0
									8	0.0
									10	0.0
									12	0.0
									14	0.0
									16	0.0
F7	x	x		0	0	0	15	2	2	1.1All storms
									4	0.0
									6	0.0
									8	0.0
									10	0.0
									12	0.0
									14	0.0
									16	0.0
F8	x	x		0	0	0	15	2	2	1.6All storms
									4	0.0
									6	0.0

									8	0.0	
									10	0.0	
									12	0.0	
									14	0.0	
									16	0.0	
F9	x	x		0	0	0	15	2	2	1.6	All storms
									4	0.0	
									6	0.0	
									8	0.0	
									10	0.0	
									12	0.0	
									14	0.0	
									16	0.0	
F11	x	x		0	0	0	15	2	2	1.6	All storms
									4	0.0	
									6	0.0	
									8	0.0	
									10	0.0	
									12	0.0	
									14	0.0	
									16	0.0	

Default Values		Overrides						
Entry Loss (manhole)	0.250	Link	Entry Loss	Exit Loss		Node	Flood Risk (m)	
Exit Loss (manhole)	0.250							
Entry Loss (junction)	0.000							
Exit Loss (junction)	0.000							
Flood Risk (m)	0.300							

Node Size	✓
Node Losses	x
Link Size	✓
Minimum Diameter (mm)	150
Link Length	✓
Maximum Length (m)	100.000
Coordinates	✓
Accuracy (m)	1.000
Crossings	✓
Cover Depth	✓
Minimum Cover Depth (m)	0.900
Maximum Cover Depth (m)	3.000
Backdrops	✓
Minimum Backdrop Height (m)	0.200
Maximum Backdrop Height (m)	1.500
Full Bore Velocity	✓
Minimum Full Bore Velocity (m/s)	0.750
Maximum Full Bore Velocity (m/s)	3.000
Proportional Velocity	x
Return Period (years)	1
Minimum Proportional Velocity (m/s)	0.750
Maximum Proportional Velocity (m/s)	3.000
Surcharged Depth	✓
Return Period (years)	100
Maximum Surcharged Depth (m)	0.100
Flooding	✓
Return Period (years)	1
Discharge Rates	x
1 year (l/s)	
30 year (l/s)	
100 year (l/s)	
Discharge Volume	x



100 year 360 minute (m³)	
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Summary								
The network has been designed for a 1 in 100 year storm using FSR rainfall								
It contains 14 nodes (1 outfall) and 13 links								
The total impermeable area is 0.000 ha								
Input hydrographs have been defined at 10 nodes								
No additional storage is present								
Simulations have been completed using FSR summer and winter storms from 15 to 1440 minute duration								
Test Results								
No manholes are smaller than that required by the library								
The node losses test has not been completed								
No circular links have diameters < 150mm								
No links have lengths > 100.000m								
No links have lengths that differ from their coordinated length by more than 1.000m								
No links cross one or more other links								
No links have cover depth outside the range 0.900-3.000m								
No nodes have backdrops outside the range 0.200-1.500m								
No links have full bore velocity outside the range 0.750-3.000m/s								
The proportional velocity test has not been completed								
No links have a surcharged depth greater than 0.100m during the 100 year return period								
No nodes flood during the 1 year return period								
The 1 year discharge rate test has not been completed								
The 30 year discharge rate test has not been completed								
The 100 year discharge rate test has not been completed								
The discharge volume test has not been completed								

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
1 year 15 minute summer	93.928	26.578
1 year 15 minute winter	65.914	26.578
1 year 30 minute summer	62.257	17.617
1 year 30 minute winter	43.689	17.617
1 year 60 minute summer	43.047	11.376
1 year 60 minute winter	28.599	11.376
1 year 120 minute summer	27.360	7.231
1 year 120 minute winter	18.178	7.231
1 year 180 minute summer	21.468	5.524
1 year 180 minute winter	13.955	5.524
1 year 240 minute summer	17.257	4.561
1 year 240 minute winter	11.465	4.561
1 year 360 minute summer	13.498	3.474
1 year 360 minute winter	8.774	3.474
1 year 480 minute summer	10.770	2.846
1 year 480 minute winter	7.155	2.846
1 year 600 minute summer	8.916	2.439
1 year 600 minute winter	6.092	2.439
1 year 720 minute summer	8.021	2.150
1 year 720 minute winter	5.390	2.150
1 year 960 minute summer	6.691	1.762
1 year 960 minute winter	4.432	1.762
1 year 1440 minute summer	4.970	1.332
1 year 1440 minute winter	3.340	1.332
100 year 15 minute summer	296.473	83.892
100 year 15 minute winter	208.052	83.892
100 year 30 minute summer	199.443	56.436
100 year 30 minute winter	139.960	56.436
100 year 60 minute summer	137.337	36.294

100 year 60 minute winter	91.244	36.294
100 year 120 minute summer	85.467	22.586
100 year 120 minute winter	56.782	22.586
100 year 180 minute summer	65.610	16.884
100 year 180 minute winter	42.648	16.884
100 year 240 minute summer	51.637	13.646
100 year 240 minute winter	34.307	13.646
100 year 360 minute summer	38.964	10.027
100 year 360 minute winter	25.327	10.027
100 year 480 minute summer	30.506	8.062
100 year 480 minute winter	20.267	8.062
100 year 600 minute summer	24.865	6.801
100 year 600 minute winter	16.989	6.801
100 year 720 minute summer	22.073	5.916
100 year 720 minute winter	14.835	5.916
100 year 960 minute summer	18.012	4.743
100 year 960 minute winter	11.932	4.743
100 year 1440 minute summer	12.937	3.467
100 year 1440 minute winter	8.695	3.467

Results for 1 year Critical Storm Duration. Lowest mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	F1	3	83.681	0.031	1.8	0.0350	0.0000	OK	1.000	F2	1.2	0.452	0.092	0.0637	
15 minute summer	F2	3	83.540	0.039	1.9	0.0446	0.0000	OK	1.001	F3	1.8	0.545	0.138	0.0126	
15 minute summer	F3	3	83.510	0.036	1.9	0.0402	0.0000	OK	1.002	F4	1.6	0.436	0.121	0.0405	
15 minute summer	F4	3	83.436	0.043	2.6	0.0489	0.0000	OK	1.003	F5	2.3	0.490	0.176	0.0459	
15 minute summer	F5	3	83.373	0.051	3.1	0.0582	0.0000	OK	1.004	F6	2.9	0.722	0.217	0.1164	
15 minute summer	F6	4	83.179	0.045	3.0	0.0506	0.0000	OK	1.005	F7	2.5	0.551	0.188	0.1479	
180 minute summer	F7	8	82.946	0.053	2.5	0.0595	0.0000	OK	1.006	F8	2.7	0.505	0.197	0.0076	
180 minute summer	F8	8	82.932	0.050	2.7	0.0567	0.0000	OK	1.007	F13	2.8	0.493	0.208	0.0243	
15 minute summer	F9	2	83.783	0.033	1.6	0.0370	0.0000	OK	2.000	F10	1.2	0.657	0.087	0.0318	
15 minute summer	F10	3	83.674	0.026	1.2	0.0296	0.0000	OK	2.001	F11	0.9	0.321	0.065	0.0484	
15 minute summer	F11	3	83.554	0.037	1.7	0.0419	0.0000	OK	2.002	F12	1.4	0.657	0.107	0.0573	
180 minute summer	F12	8	83.373	0.027	1.0	0.0308	0.0000	OK	2.003	F13	1.2	0.301	0.071	0.1697	
180 minute summer	F13	8	82.907	0.057	4.0	0.0642	0.0000	OK	1.008	EXG F1	3.7	0.623	0.276	0.0502	1.6
180 minute summer	EXG F1	8	82.841	0.054	3.7	0.0000	0.0000	OK							

Results for 100 year Critical Storm Duration. Lowest mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	F1	3	83.681	0.031	1.8	0.0350	0.0000	OK	1.000	F2	1.2	0.452	0.092	0.0637	
15 minute summer	F2	3	83.540	0.039	1.9	0.0446	0.0000	OK	1.001	F3	1.8	0.545	0.138	0.0126	
15 minute summer	F3	3	83.510	0.036	1.9	0.0402	0.0000	OK	1.002	F4	1.6	0.436	0.121	0.0405	
15 minute summer	F4	3	83.436	0.043	2.6	0.0489	0.0000	OK	1.003	F5	2.3	0.490	0.176	0.0459	
15 minute summer	F5	3	83.373	0.051	3.1	0.0582	0.0000	OK	1.004	F6	2.9	0.722	0.217	0.1164	
15 minute summer	F6	4	83.179	0.045	3.0	0.0506	0.0000	OK	1.005	F7	2.5	0.551	0.188	0.1479	
180 minute summer	F7	8	82.946	0.053	2.5	0.0595	0.0000	OK	1.006	F8	2.7	0.505	0.197	0.0076	
180 minute summer	F8	8	82.932	0.050	2.7	0.0567	0.0000	OK	1.007	F13	2.8	0.493	0.208	0.0243	
15 minute summer	F9	2	83.783	0.033	1.6	0.0370	0.0000	OK	2.000	F10	1.2	0.657	0.087	0.0318	
15 minute summer	F10	3	83.674	0.026	1.2	0.0296	0.0000	OK	2.001	F11	0.9	0.321	0.065	0.0484	
15 minute summer	F11	3	83.554	0.037	1.7	0.0419	0.0000	OK	2.002	F12	1.4	0.657	0.107	0.0573	
180 minute summer	F12	8	83.373	0.027	1.0	0.0308	0.0000	OK	2.003	F13	1.2	0.301	0.071	0.1697	
180 minute summer	F13	8	82.907	0.057	4.0	0.0642	0.0000	OK	1.008	EXG F1	3.7	0.623	0.276	0.0502	1.6
180 minute summer	EXG F1	8	82.841	0.054	3.7	0.0000	0.0000	OK							

Results for 1 year 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	F1	3	83.681	0.031	1.8	0.0350	0.0000	OK	1.000	F2	1.2	0.452	0.092	0.0637	
15 minute summer	F2	3	83.540	0.039	1.9	0.0446	0.0000	OK	1.001	F3	1.8	0.545	0.138	0.0126	
15 minute summer	F3	3	83.510	0.036	1.9	0.0402	0.0000	OK	1.002	F4	1.6	0.436	0.121	0.0405	
15 minute summer	F4	3	83.436	0.043	2.6	0.0489	0.0000	OK	1.003	F5	2.3	0.490	0.176	0.0459	
15 minute summer	F5	3	83.373	0.051	3.1	0.0582	0.0000	OK	1.004	F6	2.9	0.722	0.217	0.1164	
15 minute summer	F6	4	83.179	0.045	3.0	0.0506	0.0000	OK	1.005	F7	2.5	0.551	0.188	0.1479	
15 minute summer	F7	5	82.941	0.048	2.5	0.0544	0.0000	OK	1.006	F8	2.3	0.495	0.171	0.0067	
15 minute summer	F8	5	82.928	0.046	2.3	0.0517	0.0000	OK	1.007	F13	2.4	0.725	0.177	0.0216	
15 minute summer	F9	2	83.783	0.033	1.6	0.0370	0.0000	OK	2.000	F10	1.2	0.657	0.087	0.0318	
15 minute summer	F10	3	83.674	0.026	1.2	0.0296	0.0000	OK	2.001	F11	0.9	0.321	0.065	0.0484	
15 minute summer	F11	3	83.554	0.037	1.7	0.0419	0.0000	OK	2.002	F12	1.4	0.657	0.107	0.0573	
15 minute summer	F12	4	83.372	0.026	1.4	0.0293	0.0000	OK	2.003	F13	1.1	0.336	0.064	0.1518	
15 minute summer	F13	5	82.902	0.052	3.4	0.0592	0.0000	OK	1.008	EXG F1	3.2	0.600	0.239	0.0450	1.3
15 minute summer	EXG F1	5	82.837	0.050	3.2	0.0000	0.0000	OK							

Results for 1 year 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%																
Event	US Node ID	Peak (mlns)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)	
15 minute winter	F1	3	83.681	0.031	1.8	0.0350	0.0000	OK	1.000	F2	1.2	0.452	0.092	0.0637		
15 minute winter	F2	3	83.540	0.039	1.9	0.0446	0.0000	OK	1.001	F3	1.8	0.545	0.138	0.0126		
15 minute winter	F3	3	83.510	0.036	1.9	0.0402	0.0000	OK	1.002	F4	1.6	0.436	0.121	0.0405		
15 minute winter	F4	3	83.436	0.043	2.6	0.0489	0.0000	OK	1.003	F5	2.3	0.490	0.176	0.0459		
15 minute winter	F5	3	83.373	0.051	3.1	0.0582	0.0000	OK	1.004	F6	2.9	0.722	0.217	0.1164		
15 minute winter	F6	4	83.179	0.045	3.0	0.0506	0.0000	OK	1.005	F7	2.5	0.551	0.188	0.1479		
15 minute winter	F7	5	82.941	0.048	2.5	0.0544	0.0000	OK	1.006	F8	2.3	0.495	0.171	0.0067		
15 minute winter	F8	5	82.928	0.046	2.3	0.0517	0.0000	OK	1.007	F13	2.4	0.725	0.177	0.0216		
15 minute winter	F9	2	83.783	0.033	1.6	0.0370	0.0000	OK	2.000	F10	1.2	0.657	0.087	0.0318		
15 minute winter	F10	3	83.674	0.026	1.2	0.0296	0.0000	OK	2.001	F11	0.9	0.321	0.065	0.0484		
15 minute winter	F11	3	83.554	0.037	1.7	0.0419	0.0000	OK	2.002	F12	1.4	0.657	0.107	0.0573		
15 minute winter	F12	4	83.372	0.026	1.4	0.0293	0.0000	OK	2.003	F13	1.1	0.336	0.064	0.1518		
15 minute winter	F13	5	82.902	0.052	3.4	0.0592	0.0000	OK	1.008	EXG F1	3.2	0.600	0.239	0.0450	1.3	
15 minute winter	EXG F1	5	82.837	0.050	3.2	0.0000	0.0000	OK								

Results for 1 year 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	F1	3	83.681	0.031	1.8	0.0350	0.0000	OK	1.000	F2	1.2	0.452	0.092	0.0637	
30 minute summer	F2	3	83.540	0.039	1.9	0.0446	0.0000	OK	1.001	F3	1.8	0.545	0.138	0.0126	
30 minute summer	F3	3	83.510	0.036	1.9	0.0402	0.0000	OK	1.002	F4	1.6	0.436	0.121	0.0405	
30 minute summer	F4	3	83.436	0.043	2.6	0.0489	0.0000	OK	1.003	F5	2.3	0.490	0.176	0.0459	
30 minute summer	F5	3	83.373	0.051	3.1	0.0582	0.0000	OK	1.004	F6	2.9	0.722	0.217	0.1164	
30 minute summer	F6	4	83.179	0.045	3.0	0.0506	0.0000	OK	1.005	F7	2.5	0.551	0.188	0.1479	
30 minute summer	F7	5	82.941	0.048	2.5	0.0544	0.0000	OK	1.006	F8	2.3	0.495	0.171	0.0067	
30 minute summer	F8	5	82.928	0.046	2.3	0.0517	0.0000	OK	1.007	F13	2.4	0.725	0.177	0.0216	
30 minute summer	F9	2	83.783	0.033	1.6	0.0370	0.0000	OK	2.000	F10	1.2	0.657	0.087	0.0318	
30 minute summer	F10	3	83.674	0.026	1.2	0.0296	0.0000	OK	2.001	F11	0.9	0.321	0.065	0.0484	
30 minute summer	F11	3	83.554	0.037	1.7	0.0419	0.0000	OK	2.002	F12	1.4	0.657	0.107	0.0573	
30 minute summer	F12	4	83.372	0.026	1.4	0.0293	0.0000	OK	2.003	F13	1.1	0.336	0.064	0.1518	
30 minute summer	F13	5	82.902	0.052	3.4	0.0592	0.0000	OK	1.008	EXG F1	3.2	0.600	0.239	0.0450	1.3
30 minute summer	EXG F1	5	82.837	0.050	3.2	0.0000	0.0000	OK							

Results for 1 year 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%																
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)	
30 minute winter	F1	3	83.681	0.031	1.8	0.0350	0.0000	OK	1.000	F2	1.2	0.452	0.092	0.0637		
30 minute winter	F2	3	83.540	0.039	1.9	0.0446	0.0000	OK	1.001	F3	1.8	0.545	0.138	0.0126		
30 minute winter	F3	3	83.510	0.036	1.9	0.0402	0.0000	OK	1.002	F4	1.6	0.436	0.121	0.0405		
30 minute winter	F4	3	83.436	0.043	2.6	0.0489	0.0000	OK	1.003	F5	2.3	0.490	0.176	0.0459		
30 minute winter	F5	3	83.373	0.051	3.1	0.0582	0.0000	OK	1.004	F6	2.9	0.722	0.217	0.1164		
30 minute winter	F6	4	83.179	0.045	3.0	0.0506	0.0000	OK	1.005	F7	2.5	0.551	0.188	0.1479		
30 minute winter	F7	5	82.941	0.048	2.5	0.0544	0.0000	OK	1.006	F8	2.3	0.495	0.171	0.0067		
30 minute winter	F8	5	82.928	0.046	2.3	0.0517	0.0000	OK	1.007	F13	2.4	0.725	0.177	0.0216		
30 minute winter	F9	2	83.783	0.033	1.6	0.0370	0.0000	OK	2.000	F10	1.2	0.657	0.087	0.0318		
30 minute winter	F10	3	83.674	0.026	1.2	0.0296	0.0000	OK	2.001	F11	0.9	0.321	0.065	0.0484		
30 minute winter	F11	3	83.554	0.037	1.7	0.0419	0.0000	OK	2.002	F12	1.4	0.657	0.107	0.0573		
30 minute winter	F12	4	83.372	0.026	1.4	0.0293	0.0000	OK	2.003	F13	1.1	0.336	0.064	0.1518		
30 minute winter	F13	5	82.902	0.052	3.4	0.0592	0.0000	OK	1.008	EXG F1	3.2	0.600	0.239	0.0450	1.3	
30 minute winter	EXG F1	5	82.837	0.050	3.2	0.0000	0.0000	OK								

Results for 1 year 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	F1	3	83.681	0.031	1.8	0.0350	0.0000	OK	1.000	F2	1.2	0.452	0.092	0.0637	
60 minute summer	F2	3	83.540	0.039	1.9	0.0446	0.0000	OK	1.001	F3	1.8	0.545	0.138	0.0126	
60 minute summer	F3	3	83.510	0.036	1.9	0.0402	0.0000	OK	1.002	F4	1.6	0.436	0.121	0.0405	
60 minute summer	F4	3	83.436	0.043	2.6	0.0489	0.0000	OK	1.003	F5	2.3	0.490	0.176	0.0459	
60 minute summer	F5	3	83.373	0.051	3.1	0.0582	0.0000	OK	1.004	F6	2.9	0.722	0.217	0.1164	
60 minute summer	F6	4	83.179	0.045	3.0	0.0506	0.0000	OK	1.005	F7	2.5	0.551	0.188	0.1479	
60 minute summer	F7	5	82.941	0.048	2.5	0.0544	0.0000	OK	1.006	F8	2.3	0.495	0.171	0.0067	
60 minute summer	F8	5	82.928	0.046	2.3	0.0517	0.0000	OK	1.007	F13	2.4	0.725	0.177	0.0216	
60 minute summer	F9	2	83.783	0.033	1.6	0.0370	0.0000	OK	2.000	F10	1.2	0.657	0.087	0.0318	
60 minute summer	F10	3	83.674	0.026	1.2	0.0296	0.0000	OK	2.001	F11	0.9	0.321	0.065	0.0484	
60 minute summer	F11	3	83.554	0.037	1.7	0.0419	0.0000	OK	2.002	F12	1.4	0.657	0.107	0.0573	
60 minute summer	F12	4	83.372	0.026	1.4	0.0293	0.0000	OK	2.003	F13	1.1	0.336	0.064	0.1518	
60 minute summer	F13	5	82.902	0.052	3.4	0.0592	0.0000	OK	1.008	EXG F1	3.2	0.600	0.239	0.0450	1.3
60 minute summer	EXG F1	5	82.837	0.050	3.2	0.0000	0.0000	OK							

Results for 1 year 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mlns)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	F1	3	83.681	0.031	1.8	0.0350	0.0000	OK	1.000	F2	1.2	0.452	0.092	0.0637	
60 minute winter	F2	3	83.540	0.039	1.9	0.0446	0.0000	OK	1.001	F3	1.8	0.545	0.138	0.0126	
60 minute winter	F3	3	83.510	0.036	1.9	0.0402	0.0000	OK	1.002	F4	1.6	0.436	0.121	0.0405	
60 minute winter	F4	3	83.436	0.043	2.6	0.0489	0.0000	OK	1.003	F5	2.3	0.490	0.176	0.0459	
60 minute winter	F5	3	83.373	0.051	3.1	0.0582	0.0000	OK	1.004	F6	2.9	0.722	0.217	0.1164	
60 minute winter	F6	4	83.179	0.045	3.0	0.0506	0.0000	OK	1.005	F7	2.5	0.551	0.188	0.1479	
60 minute winter	F7	5	82.941	0.048	2.5	0.0544	0.0000	OK	1.006	F8	2.3	0.495	0.171	0.0067	
60 minute winter	F8	5	82.928	0.046	2.3	0.0517	0.0000	OK	1.007	F13	2.4	0.725	0.177	0.0216	
60 minute winter	F9	2	83.783	0.033	1.6	0.0370	0.0000	OK	2.000	F10	1.2	0.657	0.087	0.0318	
60 minute winter	F10	3	83.674	0.026	1.2	0.0296	0.0000	OK	2.001	F11	0.9	0.321	0.065	0.0484	
60 minute winter	F11	3	83.554	0.037	1.7	0.0419	0.0000	OK	2.002	F12	1.4	0.657	0.107	0.0573	
60 minute winter	F12	4	83.372	0.026	1.4	0.0293	0.0000	OK	2.003	F13	1.1	0.336	0.064	0.1518	
60 minute winter	F13	5	82.902	0.052	3.4	0.0592	0.0000	OK	1.008	EXG F1	3.2	0.600	0.239	0.0450	1.3
60 minute winter	EXG F1	5	82.837	0.050	3.2	0.0000	0.0000	OK							

Results for 1 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	F1	4	83.669	0.019	1.6	0.0219	0.0000	OK	1.000	F2	0.5	0.273	0.035	0.0352	
120 minute summer	F2	4	83.528	0.027	0.8	0.0306	0.0000	OK	1.001	F3	0.9	0.415	0.067	0.0079	
120 minute summer	F3	4	83.501	0.027	0.9	0.0304	0.0000	OK	1.002	F4	0.9	0.403	0.069	0.0249	
120 minute summer	F4	4	83.422	0.029	1.7	0.0331	0.0000	OK	1.003	F5	1.1	0.390	0.083	0.0271	
120 minute summer	F5	4	83.358	0.036	1.4	0.0406	0.0000	OK	1.004	F6	1.5	0.580	0.114	0.0669	
120 minute summer	F6	6	83.162	0.028	1.5	0.0313	0.0000	OK	1.005	F7	1.0	0.410	0.074	0.0782	
120 minute summer	F7	6	82.923	0.030	1.0	0.0343	0.0000	OK	1.006	F8	1.0	0.414	0.074	0.0035	
120 minute summer	F8	6	82.911	0.029	1.4	0.0326	0.0000	OK	1.007	F13	1.0	0.437	0.076	0.0113	
120 minute summer	F9	4	83.769	0.019	1.4	0.0211	0.0000	OK	2.000	F10	0.4	0.335	0.033	0.0181	
120 minute summer	F10	4	83.668	0.020	0.4	0.0225	0.0000	OK	2.001	F11	0.5	0.287	0.037	0.0307	
120 minute summer	F11	4	83.543	0.026	1.4	0.0298	0.0000	OK	2.002	F12	0.7	0.527	0.056	0.0336	
120 minute summer	F12	6	83.363	0.017	0.7	0.0196	0.0000	OK	2.003	F13	0.5	0.241	0.028	0.0820	
120 minute summer	F13	6	82.883	0.033	1.5	0.0375	0.0000	OK	1.008	EXG F1	1.3	0.472	0.100	0.0240	0.8
120 minute summer	EXG F1	6	82.819	0.032	1.3	0.0000	0.0000	OK							

Results for 1 year 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	F1	4	83.669	0.019	1.6	0.0219	0.0000	OK	1.000	F2	0.5	0.273	0.035	0.0352	
120 minute winter	F2	4	83.528	0.027	0.8	0.0306	0.0000	OK	1.001	F3	0.9	0.415	0.067	0.0079	
120 minute winter	F3	4	83.501	0.027	0.9	0.0304	0.0000	OK	1.002	F4	0.9	0.403	0.069	0.0249	
120 minute winter	F4	4	83.422	0.029	1.7	0.0331	0.0000	OK	1.003	F5	1.1	0.390	0.083	0.0271	
120 minute winter	F5	4	83.358	0.036	1.4	0.0406	0.0000	OK	1.004	F6	1.5	0.580	0.114	0.0669	
120 minute winter	F6	6	83.162	0.028	1.5	0.0313	0.0000	OK	1.005	F7	1.0	0.410	0.074	0.0782	
120 minute winter	F7	6	82.923	0.030	1.0	0.0343	0.0000	OK	1.006	F8	1.0	0.414	0.074	0.0035	
120 minute winter	F8	6	82.911	0.029	1.4	0.0326	0.0000	OK	1.007	F13	1.0	0.437	0.076	0.0113	
120 minute winter	F9	4	83.769	0.019	1.4	0.0211	0.0000	OK	2.000	F10	0.4	0.335	0.033	0.0181	
120 minute winter	F10	4	83.668	0.020	0.4	0.0225	0.0000	OK	2.001	F11	0.5	0.287	0.037	0.0307	
120 minute winter	F11	4	83.543	0.026	1.4	0.0298	0.0000	OK	2.002	F12	0.7	0.527	0.056	0.0336	
120 minute winter	F12	6	83.363	0.017	0.7	0.0196	0.0000	OK	2.003	F13	0.5	0.241	0.028	0.0820	
120 minute winter	F13	6	82.883	0.033	1.5	0.0375	0.0000	OK	1.008	EXG F1	1.3	0.472	0.100	0.0240	0.8
120 minute winter	EXG F1	6	82.819	0.032	1.3	0.0000	0.0000	OK							

Results for 1 year 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	F1	8	83.666	0.016	1.6	0.0180	0.0000	OK	1.000	F2	0.3	0.226	0.023	0.0281	
180 minute summer	F2	8	83.525	0.024	0.8	0.0269	0.0000	OK	1.001	F3	0.7	0.354	0.053	0.0073	
180 minute summer	F3	8	83.501	0.027	0.7	0.0308	0.0000	OK	1.002	F4	0.9	0.380	0.071	0.0274	
180 minute summer	F4	8	83.426	0.033	1.7	0.0369	0.0000	OK	1.003	F5	1.4	0.419	0.103	0.0315	
180 minute summer	F5	8	83.362	0.040	1.4	0.0450	0.0000	OK	1.004	F6	2.0	0.501	0.153	0.1035	
180 minute summer	F6	8	83.178	0.044	2.0	0.0503	0.0000	OK	1.005	F7	2.5	0.511	0.190	0.1616	
180 minute summer	F7	8	82.946	0.053	2.5	0.0595	0.0000	OK	1.006	F8	2.7	0.505	0.197	0.0076	
180 minute summer	F8	8	82.932	0.050	2.7	0.0567	0.0000	OK	1.007	F13	2.8	0.493	0.208	0.0243	
180 minute summer	F9	8	83.764	0.014	1.4	0.0163	0.0000	OK	2.000	F10	0.3	0.226	0.019	0.0156	
180 minute summer	F10	8	83.668	0.020	0.3	0.0228	0.0000	OK	2.001	F11	0.5	0.276	0.038	0.0330	
180 minute summer	F11	8	83.545	0.028	1.4	0.0320	0.0000	OK	2.002	F12	1.0	0.457	0.077	0.0519	
180 minute summer	F12	8	83.373	0.027	1.0	0.0308	0.0000	OK	2.003	F13	1.2	0.301	0.071	0.1697	
180 minute summer	F13	8	82.907	0.057	4.0	0.0642	0.0000	OK	1.008	EXG F1	3.7	0.623	0.276	0.0502	1.6
180 minute summer	EXG F1	8	82.841	0.054	3.7	0.0000	0.0000	OK							

Results for 1 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	F1	8	83.666	0.016	1.6	0.0180	0.0000	OK	1.000	F2	0.3	0.226	0.023	0.0281	
180 minute winter	F2	8	83.525	0.024	0.8	0.0269	0.0000	OK	1.001	F3	0.7	0.354	0.053	0.0073	
180 minute winter	F3	8	83.501	0.027	0.7	0.0308	0.0000	OK	1.002	F4	0.9	0.380	0.071	0.0274	
180 minute winter	F4	8	83.426	0.033	1.7	0.0369	0.0000	OK	1.003	F5	1.4	0.419	0.103	0.0315	
180 minute winter	F5	8	83.362	0.040	1.4	0.0450	0.0000	OK	1.004	F6	2.0	0.501	0.153	0.1035	
180 minute winter	F6	8	83.178	0.044	2.0	0.0503	0.0000	OK	1.005	F7	2.5	0.511	0.190	0.1616	
180 minute winter	F7	8	82.946	0.053	2.5	0.0595	0.0000	OK	1.006	F8	2.7	0.505	0.197	0.0076	
180 minute winter	F8	8	82.932	0.050	2.7	0.0567	0.0000	OK	1.007	F13	2.8	0.493	0.208	0.0243	
180 minute winter	F9	8	83.764	0.014	1.4	0.0163	0.0000	OK	2.000	F10	0.3	0.226	0.019	0.0156	
180 minute winter	F10	8	83.668	0.020	0.3	0.0228	0.0000	OK	2.001	F11	0.5	0.276	0.038	0.0330	
180 minute winter	F11	8	83.545	0.028	1.4	0.0320	0.0000	OK	2.002	F12	1.0	0.457	0.077	0.0519	
180 minute winter	F12	8	83.373	0.027	1.0	0.0308	0.0000	OK	2.003	F13	1.2	0.301	0.071	0.1697	
180 minute winter	F13	8	82.907	0.057	4.0	0.0642	0.0000	OK	1.008	EXG F1	3.7	0.623	0.276	0.0502	1.6
180 minute winter	EXG F1	8	82.841	0.054	3.7	0.0000	0.0000	OK							

Results for 1 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	F1	8	83.666	0.016	1.6	0.0180	0.0000	OK	1.000	F2	0.3	0.226	0.023	0.0281	
240 minute summer	F2	8	83.525	0.024	0.8	0.0269	0.0000	OK	1.001	F3	0.7	0.354	0.053	0.0073	
240 minute summer	F3	8	83.501	0.027	0.7	0.0308	0.0000	OK	1.002	F4	0.9	0.380	0.071	0.0274	
240 minute summer	F4	8	83.426	0.033	1.7	0.0369	0.0000	OK	1.003	F5	1.4	0.419	0.103	0.0315	
240 minute summer	F5	8	83.362	0.040	1.4	0.0450	0.0000	OK	1.004	F6	2.0	0.501	0.153	0.1035	
240 minute summer	F6	8	83.178	0.044	2.0	0.0503	0.0000	OK	1.005	F7	2.5	0.511	0.190	0.1616	
240 minute summer	F7	8	82.946	0.053	2.5	0.0595	0.0000	OK	1.006	F8	2.7	0.505	0.197	0.0076	
240 minute summer	F8	8	82.932	0.050	2.7	0.0567	0.0000	OK	1.007	F13	2.8	0.493	0.208	0.0243	
240 minute summer	F9	8	83.764	0.014	1.4	0.0163	0.0000	OK	2.000	F10	0.3	0.226	0.019	0.0156	
240 minute summer	F10	8	83.668	0.020	0.3	0.0228	0.0000	OK	2.001	F11	0.5	0.276	0.038	0.0330	
240 minute summer	F11	8	83.545	0.028	1.4	0.0320	0.0000	OK	2.002	F12	1.0	0.457	0.077	0.0519	
240 minute summer	F12	8	83.373	0.027	1.0	0.0308	0.0000	OK	2.003	F13	1.2	0.301	0.071	0.1697	
240 minute summer	F13	8	82.907	0.057	4.0	0.0642	0.0000	OK	1.008	EXG F1	3.7	0.623	0.276	0.0502	1.6
240 minute summer	EXG F1	8	82.841	0.054	3.7	0.0000	0.0000	OK							

Results for 1 year 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	F1	8	83.666	0.016	1.6	0.0180	0.0000	OK	1.000	F2	0.3	0.226	0.023	0.0281	
240 minute winter	F2	8	83.525	0.024	0.8	0.0269	0.0000	OK	1.001	F3	0.7	0.354	0.053	0.0073	
240 minute winter	F3	8	83.501	0.027	0.7	0.0308	0.0000	OK	1.002	F4	0.9	0.380	0.071	0.0274	
240 minute winter	F4	8	83.426	0.033	1.7	0.0369	0.0000	OK	1.003	F5	1.4	0.419	0.103	0.0315	
240 minute winter	F5	8	83.362	0.040	1.4	0.0450	0.0000	OK	1.004	F6	2.0	0.501	0.153	0.1035	
240 minute winter	F6	8	83.178	0.044	2.0	0.0503	0.0000	OK	1.005	F7	2.5	0.511	0.190	0.1616	
240 minute winter	F7	8	82.946	0.053	2.5	0.0595	0.0000	OK	1.006	F8	2.7	0.505	0.197	0.0076	
240 minute winter	F8	8	82.932	0.050	2.7	0.0567	0.0000	OK	1.007	F13	2.8	0.493	0.208	0.0243	
240 minute winter	F9	8	83.764	0.014	1.4	0.0163	0.0000	OK	2.000	F10	0.3	0.226	0.019	0.0156	
240 minute winter	F10	8	83.668	0.020	0.3	0.0228	0.0000	OK	2.001	F11	0.5	0.276	0.038	0.0330	
240 minute winter	F11	8	83.545	0.028	1.4	0.0320	0.0000	OK	2.002	F12	1.0	0.457	0.077	0.0519	
240 minute winter	F12	8	83.373	0.027	1.0	0.0308	0.0000	OK	2.003	F13	1.2	0.301	0.071	0.1697	
240 minute winter	F13	8	82.907	0.057	4.0	0.0642	0.0000	OK	1.008	EXG F1	3.7	0.623	0.276	0.0502	1.6
240 minute winter	EXG F1	8	82.841	0.054	3.7	0.0000	0.0000	OK							

Results for 1 year 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	F1	16	83.660	0.010	0.8	0.0114	0.0000	OK	1.000	F2	0.1	0.170	0.009	0.0139	
360 minute summer	F2	16	83.516	0.015	0.5	0.0165	0.0000	OK	1.001	F3	0.3	0.260	0.019	0.0036	
360 minute summer	F3	16	83.491	0.017	0.3	0.0193	0.0000	OK	1.002	F4	0.4	0.282	0.027	0.0140	
360 minute summer	F4	16	83.414	0.021	0.9	0.0233	0.0000	OK	1.003	F5	0.5	0.316	0.040	0.0162	
360 minute summer	F5	16	83.347	0.025	0.7	0.0283	0.0000	OK	1.004	F6	0.8	0.364	0.060	0.0560	
360 minute summer	F6	16	83.164	0.030	0.8	0.0335	0.0000	OK	1.005	F7	1.1	0.387	0.084	0.0950	
360 minute summer	F7	16	82.930	0.037	1.1	0.0416	0.0000	OK	1.006	F8	1.4	0.435	0.105	0.0047	
360 minute summer	F8	16	82.918	0.036	1.4	0.0405	0.0000	OK	1.007	F13	1.6	0.409	0.119	0.0167	
360 minute summer	F9	16	83.759	0.009	0.7	0.0104	0.0000	OK	2.000	F10	0.1	0.167	0.007	0.0079	
360 minute summer	F10	16	83.661	0.013	0.1	0.0144	0.0000	OK	2.001	F11	0.2	0.208	0.015	0.0165	
360 minute summer	F11	16	83.535	0.018	0.7	0.0198	0.0000	OK	2.002	F12	0.4	0.314	0.028	0.0279	
360 minute summer	F12	16	83.365	0.019	0.4	0.0212	0.0000	OK	2.003	F13	0.6	0.202	0.033	0.1186	
360 minute summer	F13	16	82.896	0.046	2.1	0.0516	0.0000	OK	1.008	EXG F1	2.5	0.568	0.189	0.0377	1.5
360 minute summer	EXG F1	16	82.831	0.044	2.5	0.0000	0.0000	OK							

Results for 1 year 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	F1	16	83.660	0.010	0.8	0.0114	0.0000	OK	1.000	F2	0.1	0.170	0.009	0.0139	
360 minute winter	F2	16	83.516	0.015	0.5	0.0165	0.0000	OK	1.001	F3	0.3	0.260	0.019	0.0036	
360 minute winter	F3	16	83.491	0.017	0.3	0.0193	0.0000	OK	1.002	F4	0.4	0.282	0.027	0.0140	
360 minute winter	F4	16	83.414	0.021	0.9	0.0233	0.0000	OK	1.003	F5	0.5	0.316	0.040	0.0162	
360 minute winter	F5	16	83.347	0.025	0.7	0.0283	0.0000	OK	1.004	F6	0.8	0.364	0.060	0.0560	
360 minute winter	F6	16	83.164	0.030	0.8	0.0335	0.0000	OK	1.005	F7	1.1	0.387	0.084	0.0950	
360 minute winter	F7	16	82.930	0.037	1.1	0.0416	0.0000	OK	1.006	F8	1.4	0.435	0.105	0.0047	
360 minute winter	F8	16	82.918	0.036	1.4	0.0405	0.0000	OK	1.007	F13	1.6	0.409	0.119	0.0167	
360 minute winter	F9	16	83.759	0.009	0.7	0.0104	0.0000	OK	2.000	F10	0.1	0.167	0.007	0.0079	
360 minute winter	F10	16	83.661	0.013	0.1	0.0144	0.0000	OK	2.001	F11	0.2	0.208	0.015	0.0165	
360 minute winter	F11	16	83.535	0.018	0.7	0.0198	0.0000	OK	2.002	F12	0.4	0.314	0.028	0.0279	
360 minute winter	F12	16	83.365	0.019	0.4	0.0212	0.0000	OK	2.003	F13	0.6	0.202	0.033	0.1186	
360 minute winter	F13	16	82.896	0.046	2.1	0.0516	0.0000	OK	1.008	EXG F1	2.5	0.568	0.189	0.0377	1.5
360 minute winter	EXG F1	16	82.831	0.044	2.5	0.0000	0.0000	OK							

Results for 1 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	F1	16	83.660	0.010	0.8	0.0114	0.0000	OK	1.000	F2	0.1	0.170	0.009	0.0139	
480 minute summer	F2	16	83.516	0.015	0.5	0.0165	0.0000	OK	1.001	F3	0.3	0.260	0.019	0.0036	
480 minute summer	F3	16	83.491	0.017	0.3	0.0193	0.0000	OK	1.002	F4	0.4	0.282	0.027	0.0140	
480 minute summer	F4	16	83.414	0.021	0.9	0.0233	0.0000	OK	1.003	F5	0.5	0.316	0.040	0.0162	
480 minute summer	F5	16	83.347	0.025	0.7	0.0283	0.0000	OK	1.004	F6	0.8	0.364	0.060	0.0560	
480 minute summer	F6	16	83.164	0.030	0.8	0.0335	0.0000	OK	1.005	F7	1.1	0.387	0.084	0.0950	
480 minute summer	F7	16	82.930	0.037	1.1	0.0416	0.0000	OK	1.006	F8	1.4	0.435	0.105	0.0047	
480 minute summer	F8	16	82.918	0.036	1.4	0.0405	0.0000	OK	1.007	F13	1.6	0.409	0.119	0.0167	
480 minute summer	F9	16	83.759	0.009	0.7	0.0104	0.0000	OK	2.000	F10	0.1	0.167	0.007	0.0079	
480 minute summer	F10	16	83.661	0.013	0.1	0.0144	0.0000	OK	2.001	F11	0.2	0.208	0.015	0.0165	
480 minute summer	F11	16	83.535	0.018	0.7	0.0198	0.0000	OK	2.002	F12	0.4	0.314	0.028	0.0279	
480 minute summer	F12	16	83.365	0.019	0.4	0.0212	0.0000	OK	2.003	F13	0.6	0.202	0.033	0.1186	
480 minute summer	F13	16	82.896	0.046	2.1	0.0516	0.0000	OK	1.008	EXG F1	2.5	0.568	0.189	0.0377	1.5
480 minute summer	EXG F1	16	82.831	0.044	2.5	0.0000	0.0000	OK							

Results for 1 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	F1	16	83.660	0.010	0.8	0.0114	0.0000	OK	1.000	F2	0.1	0.170	0.009	0.0139	
480 minute winter	F2	16	83.516	0.015	0.5	0.0165	0.0000	OK	1.001	F3	0.3	0.260	0.019	0.0036	
480 minute winter	F3	16	83.491	0.017	0.3	0.0193	0.0000	OK	1.002	F4	0.4	0.282	0.027	0.0140	
480 minute winter	F4	16	83.414	0.021	0.9	0.0233	0.0000	OK	1.003	F5	0.5	0.316	0.040	0.0162	
480 minute winter	F5	16	83.347	0.025	0.7	0.0283	0.0000	OK	1.004	F6	0.8	0.364	0.060	0.0560	
480 minute winter	F6	16	83.164	0.030	0.8	0.0335	0.0000	OK	1.005	F7	1.1	0.387	0.084	0.0950	
480 minute winter	F7	16	82.930	0.037	1.1	0.0416	0.0000	OK	1.006	F8	1.4	0.435	0.105	0.0047	
480 minute winter	F8	16	82.918	0.036	1.4	0.0405	0.0000	OK	1.007	F13	1.6	0.409	0.119	0.0167	
480 minute winter	F9	16	83.759	0.009	0.7	0.0104	0.0000	OK	2.000	F10	0.1	0.167	0.007	0.0079	
480 minute winter	F10	16	83.661	0.013	0.1	0.0144	0.0000	OK	2.001	F11	0.2	0.208	0.015	0.0165	
480 minute winter	F11	16	83.535	0.018	0.7	0.0198	0.0000	OK	2.002	F12	0.4	0.314	0.028	0.0279	
480 minute winter	F12	16	83.365	0.019	0.4	0.0212	0.0000	OK	2.003	F13	0.6	0.202	0.033	0.1186	
480 minute winter	F13	16	82.896	0.046	2.1	0.0516	0.0000	OK	1.008	EXG F1	2.5	0.568	0.189	0.0377	1.5
480 minute winter	EXG F1	16	82.831	0.044	2.5	0.0000	0.0000	OK							

Results for 1 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	F1	30	83.657	0.007	0.4	0.0077	0.0000	OK	1.000	F2	0.1	0.136	0.004	0.0074	
600 minute summer	F2	30	83.510	0.009	0.2	0.0107	0.0000	OK	1.001	F3	0.1	0.197	0.008	0.0019	
600 minute summer	F3	30	83.485	0.011	0.1	0.0126	0.0000	OK	1.002	F4	0.1	0.215	0.011	0.0074	
600 minute summer	F4	30	83.406	0.013	0.4	0.0151	0.0000	OK	1.003	F5	0.2	0.242	0.016	0.0085	
600 minute summer	F5	30	83.338	0.016	0.4	0.0181	0.0000	OK	1.004	F6	0.3	0.277	0.024	0.0292	
600 minute summer	F6	30	83.153	0.019	0.3	0.0214	0.0000	OK	1.005	F7	0.4	0.306	0.034	0.0477	
600 minute summer	F7	30	82.915	0.022	0.4	0.0253	0.0000	OK	1.006	F8	0.6	0.346	0.041	0.0023	
600 minute summer	F8	30	82.904	0.022	0.6	0.0249	0.0000	OK	1.007	F13	0.6	0.316	0.046	0.0085	
600 minute summer	F9	30	83.756	0.006	0.4	0.0069	0.0000	OK	2.000	F10	0.0	0.129	0.003	0.0042	
600 minute summer	F10	30	83.656	0.008	0.0	0.0094	0.0000	OK	2.001	F11	0.1	0.162	0.006	0.0086	
600 minute summer	F11	30	83.528	0.011	0.4	0.0127	0.0000	OK	2.002	F12	0.1	0.236	0.011	0.0144	
600 minute summer	F12	30	83.358	0.012	0.1	0.0136	0.0000	OK	2.003	F13	0.2	0.154	0.013	0.0610	
600 minute summer	F13	30	82.878	0.028	0.8	0.0322	0.0000	OK	1.008	EXG F1	1.0	0.438	0.076	0.0195	1.1
600 minute summer	EXG F1	30	82.815	0.028	1.0	0.0000	0.0000	OK							

Results for 1 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	F1	30	83.657	0.007	0.4	0.0077	0.0000	OK	1.000	F2	0.1	0.136	0.004	0.0074	
600 minute winter	F2	30	83.510	0.009	0.2	0.0107	0.0000	OK	1.001	F3	0.1	0.197	0.008	0.0019	
600 minute winter	F3	30	83.485	0.011	0.1	0.0126	0.0000	OK	1.002	F4	0.1	0.215	0.011	0.0074	
600 minute winter	F4	30	83.406	0.013	0.4	0.0151	0.0000	OK	1.003	F5	0.2	0.242	0.016	0.0085	
600 minute winter	F5	30	83.338	0.016	0.4	0.0181	0.0000	OK	1.004	F6	0.3	0.277	0.024	0.0292	
600 minute winter	F6	30	83.153	0.019	0.3	0.0214	0.0000	OK	1.005	F7	0.4	0.306	0.034	0.0477	
600 minute winter	F7	30	82.915	0.022	0.4	0.0253	0.0000	OK	1.006	F8	0.6	0.346	0.041	0.0023	
600 minute winter	F8	30	82.904	0.022	0.6	0.0249	0.0000	OK	1.007	F13	0.6	0.316	0.046	0.0085	
600 minute winter	F9	30	83.756	0.006	0.4	0.0069	0.0000	OK	2.000	F10	0.0	0.129	0.003	0.0042	
600 minute winter	F10	30	83.656	0.008	0.0	0.0094	0.0000	OK	2.001	F11	0.1	0.162	0.006	0.0086	
600 minute winter	F11	30	83.528	0.011	0.4	0.0127	0.0000	OK	2.002	F12	0.1	0.236	0.011	0.0144	
600 minute winter	F12	30	83.358	0.012	0.1	0.0136	0.0000	OK	2.003	F13	0.2	0.154	0.013	0.0610	
600 minute winter	F13	30	82.878	0.028	0.8	0.0322	0.0000	OK	1.008	EXG F1	1.0	0.438	0.076	0.0195	1.1
600 minute winter	EXG F1	30	82.815	0.028	1.0	0.0000	0.0000	OK							

Results for 1 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	F1	30	83.657	0.007	0.4	0.0077	0.0000	OK	1.000	F2	0.1	0.136	0.004	0.0074	
720 minute summer	F2	30	83.510	0.009	0.2	0.0107	0.0000	OK	1.001	F3	0.1	0.197	0.008	0.0019	
720 minute summer	F3	30	83.485	0.011	0.1	0.0126	0.0000	OK	1.002	F4	0.1	0.215	0.011	0.0074	
720 minute summer	F4	30	83.406	0.013	0.4	0.0151	0.0000	OK	1.003	F5	0.2	0.242	0.016	0.0085	
720 minute summer	F5	30	83.338	0.016	0.4	0.0181	0.0000	OK	1.004	F6	0.3	0.277	0.024	0.0292	
720 minute summer	F6	30	83.153	0.019	0.3	0.0214	0.0000	OK	1.005	F7	0.4	0.306	0.034	0.0477	
720 minute summer	F7	30	82.915	0.022	0.4	0.0253	0.0000	OK	1.006	F8	0.6	0.346	0.041	0.0023	
720 minute summer	F8	30	82.904	0.022	0.6	0.0249	0.0000	OK	1.007	F13	0.6	0.316	0.046	0.0085	
720 minute summer	F9	30	83.756	0.006	0.4	0.0069	0.0000	OK	2.000	F10	0.0	0.129	0.003	0.0042	
720 minute summer	F10	30	83.656	0.008	0.0	0.0094	0.0000	OK	2.001	F11	0.1	0.162	0.006	0.0086	
720 minute summer	F11	30	83.528	0.011	0.4	0.0127	0.0000	OK	2.002	F12	0.1	0.236	0.011	0.0144	
720 minute summer	F12	30	83.358	0.012	0.1	0.0136	0.0000	OK	2.003	F13	0.2	0.154	0.013	0.0610	
720 minute summer	F13	30	82.878	0.028	0.8	0.0322	0.0000	OK	1.008	EXG F1	1.0	0.438	0.076	0.0195	1.1
720 minute summer	EXG F1	30	82.815	0.028	1.0	0.0000	0.0000	OK							

Results for 1 year 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	F1	30	83.657	0.007	0.4	0.0077	0.0000	OK	1.000	F2	0.1	0.136	0.004	0.0074	
720 minute winter	F2	30	83.510	0.009	0.2	0.0107	0.0000	OK	1.001	F3	0.1	0.197	0.008	0.0019	
720 minute winter	F3	30	83.485	0.011	0.1	0.0126	0.0000	OK	1.002	F4	0.1	0.215	0.011	0.0074	
720 minute winter	F4	30	83.406	0.013	0.4	0.0151	0.0000	OK	1.003	F5	0.2	0.242	0.016	0.0085	
720 minute winter	F5	30	83.338	0.016	0.4	0.0181	0.0000	OK	1.004	F6	0.3	0.277	0.024	0.0292	
720 minute winter	F6	30	83.153	0.019	0.3	0.0214	0.0000	OK	1.005	F7	0.4	0.306	0.034	0.0477	
720 minute winter	F7	30	82.915	0.022	0.4	0.0253	0.0000	OK	1.006	F8	0.6	0.346	0.041	0.0023	
720 minute winter	F8	30	82.904	0.022	0.6	0.0249	0.0000	OK	1.007	F13	0.6	0.316	0.046	0.0085	
720 minute winter	F9	30	83.756	0.006	0.4	0.0069	0.0000	OK	2.000	F10	0.0	0.129	0.003	0.0042	
720 minute winter	F10	30	83.656	0.008	0.0	0.0094	0.0000	OK	2.001	F11	0.1	0.162	0.006	0.0086	
720 minute winter	F11	30	83.528	0.011	0.4	0.0127	0.0000	OK	2.002	F12	0.1	0.236	0.011	0.0144	
720 minute winter	F12	30	83.358	0.012	0.1	0.0136	0.0000	OK	2.003	F13	0.2	0.154	0.013	0.0610	
720 minute winter	F13	30	82.878	0.028	0.8	0.0322	0.0000	OK	1.008	EXG F1	1.0	0.438	0.076	0.0195	1.1
720 minute winter	EXG F1	30	82.815	0.028	1.0	0.0000	0.0000	OK							

Results for 1 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	F1	30	83.657	0.007	0.4	0.0077	0.0000	OK	1.000	F2	0.1	0.136	0.004	0.0074	
960 minute summer	F2	30	83.510	0.009	0.2	0.0107	0.0000	OK	1.001	F3	0.1	0.197	0.008	0.0019	
960 minute summer	F3	30	83.485	0.011	0.1	0.0126	0.0000	OK	1.002	F4	0.1	0.215	0.011	0.0074	
960 minute summer	F4	30	83.406	0.013	0.4	0.0151	0.0000	OK	1.003	F5	0.2	0.242	0.016	0.0085	
960 minute summer	F5	30	83.338	0.016	0.4	0.0181	0.0000	OK	1.004	F6	0.3	0.277	0.024	0.0292	
960 minute summer	F6	30	83.153	0.019	0.3	0.0214	0.0000	OK	1.005	F7	0.4	0.306	0.034	0.0477	
960 minute summer	F7	30	82.915	0.022	0.4	0.0253	0.0000	OK	1.006	F8	0.6	0.346	0.041	0.0023	
960 minute summer	F8	30	82.904	0.022	0.6	0.0249	0.0000	OK	1.007	F13	0.6	0.316	0.046	0.0085	
960 minute summer	F9	30	83.756	0.006	0.4	0.0069	0.0000	OK	2.000	F10	0.0	0.129	0.003	0.0042	
960 minute summer	F10	30	83.656	0.008	0.0	0.0094	0.0000	OK	2.001	F11	0.1	0.162	0.006	0.0086	
960 minute summer	F11	30	83.528	0.011	0.4	0.0127	0.0000	OK	2.002	F12	0.1	0.236	0.011	0.0144	
960 minute summer	F12	30	83.358	0.012	0.1	0.0136	0.0000	OK	2.003	F13	0.2	0.154	0.013	0.0610	
960 minute summer	F13	30	82.878	0.028	0.8	0.0322	0.0000	OK	1.008	EXG F1	1.0	0.438	0.076	0.0195	1.1
960 minute summer	EXG F1	30	82.815	0.028	1.0	0.0000	0.0000	OK							

Results for 1 year 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	F1	30	83.657	0.007	0.4	0.0077	0.0000	OK	1.000	F2	0.1	0.136	0.004	0.0074	
960 minute winter	F2	30	83.510	0.009	0.2	0.0107	0.0000	OK	1.001	F3	0.1	0.197	0.008	0.0019	
960 minute winter	F3	30	83.485	0.011	0.1	0.0126	0.0000	OK	1.002	F4	0.1	0.215	0.011	0.0074	
960 minute winter	F4	30	83.406	0.013	0.4	0.0151	0.0000	OK	1.003	F5	0.2	0.242	0.016	0.0085	
960 minute winter	F5	30	83.338	0.016	0.4	0.0181	0.0000	OK	1.004	F6	0.3	0.277	0.024	0.0292	
960 minute winter	F6	30	83.153	0.019	0.3	0.0214	0.0000	OK	1.005	F7	0.4	0.306	0.034	0.0477	
960 minute winter	F7	30	82.915	0.022	0.4	0.0253	0.0000	OK	1.006	F8	0.6	0.346	0.041	0.0023	
960 minute winter	F8	30	82.904	0.022	0.6	0.0249	0.0000	OK	1.007	F13	0.6	0.316	0.046	0.0085	
960 minute winter	F9	30	83.756	0.006	0.4	0.0069	0.0000	OK	2.000	F10	0.0	0.129	0.003	0.0042	
960 minute winter	F10	30	83.656	0.008	0.0	0.0094	0.0000	OK	2.001	F11	0.1	0.162	0.006	0.0086	
960 minute winter	F11	30	83.528	0.011	0.4	0.0127	0.0000	OK	2.002	F12	0.1	0.236	0.011	0.0144	
960 minute winter	F12	30	83.358	0.012	0.1	0.0136	0.0000	OK	2.003	F13	0.2	0.154	0.013	0.0610	
960 minute winter	F13	30	82.878	0.028	0.8	0.0322	0.0000	OK	1.008	EXG F1	1.0	0.438	0.076	0.0195	1.1
960 minute winter	EXG F1	30	82.815	0.028	1.0	0.0000	0.0000	OK							

Results for 1 year 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	F1	60	83.654	0.004	0.2	0.0046	0.0000	OK	1.000	F2	0.0	0.096	0.001	0.0034	
1440 minute summer	F2	60	83.507	0.006	0.1	0.0065	0.0000	OK	1.001	F3	0.0	0.143	0.003	0.0009	
1440 minute summer	F3	60	83.481	0.007	0.0	0.0075	0.0000	OK	1.002	F4	0.0	0.148	0.003	0.0034	
1440 minute summer	F4	60	83.401	0.008	0.3	0.0091	0.0000	OK	1.003	F5	0.1	0.172	0.005	0.0040	
1440 minute summer	F5	60	83.332	0.010	0.2	0.0110	0.0000	OK	1.004	F6	0.1	0.200	0.008	0.0138	
1440 minute summer	F6	60	83.145	0.011	0.1	0.0128	0.0000	OK	1.005	F7	0.1	0.227	0.011	0.0216	
1440 minute summer	F7	60	82.906	0.013	0.1	0.0145	0.0000	OK	1.006	F8	0.2	0.252	0.013	0.0010	
1440 minute summer	F8	60	82.895	0.013	0.2	0.0148	0.0000	OK	1.007	F13	0.2	0.225	0.015	0.0039	
1440 minute summer	F9	60	83.754	0.004	0.2	0.0045	0.0000	OK	2.000	F10	0.0	0.097	0.001	0.0021	
1440 minute summer	F10	60	83.653	0.005	0.0	0.0060	0.0000	OK	2.001	F11	0.0	0.120	0.002	0.0043	
1440 minute summer	F11	60	83.524	0.007	0.2	0.0080	0.0000	OK	2.002	F12	0.1	0.175	0.004	0.0072	
1440 minute summer	F12	60	83.354	0.008	0.1	0.0086	0.0000	OK	2.003	F13	0.1	0.120	0.005	0.0289	
1440 minute summer	F13	60	82.867	0.017	0.3	0.0191	0.0000	OK	1.008	EXG F1	0.3	0.326	0.025	0.0088	0.7
1440 minute summer	EXG F1	60	82.803	0.016	0.3	0.0000	0.0000	OK							

Results for 1 year 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	F1	60	83.654	0.004	0.2	0.0046	0.0000	OK	1.000	F2	0.0	0.096	0.001	0.0034	
1440 minute winter	F2	60	83.507	0.006	0.1	0.0065	0.0000	OK	1.001	F3	0.0	0.143	0.003	0.0009	
1440 minute winter	F3	60	83.481	0.007	0.0	0.0075	0.0000	OK	1.002	F4	0.0	0.148	0.003	0.0034	
1440 minute winter	F4	60	83.401	0.008	0.3	0.0091	0.0000	OK	1.003	F5	0.1	0.172	0.005	0.0040	
1440 minute winter	F5	60	83.332	0.010	0.2	0.0110	0.0000	OK	1.004	F6	0.1	0.200	0.008	0.0138	
1440 minute winter	F6	60	83.145	0.011	0.1	0.0128	0.0000	OK	1.005	F7	0.1	0.227	0.011	0.0216	
1440 minute winter	F7	60	82.906	0.013	0.1	0.0145	0.0000	OK	1.006	F8	0.2	0.252	0.013	0.0010	
1440 minute winter	F8	60	82.895	0.013	0.2	0.0148	0.0000	OK	1.007	F13	0.2	0.225	0.015	0.0039	
1440 minute winter	F9	60	83.754	0.004	0.2	0.0045	0.0000	OK	2.000	F10	0.0	0.097	0.001	0.0021	
1440 minute winter	F10	60	83.653	0.005	0.0	0.0060	0.0000	OK	2.001	F11	0.0	0.120	0.002	0.0043	
1440 minute winter	F11	60	83.524	0.007	0.2	0.0080	0.0000	OK	2.002	F12	0.1	0.175	0.004	0.0072	
1440 minute winter	F12	60	83.354	0.008	0.1	0.0086	0.0000	OK	2.003	F13	0.1	0.120	0.005	0.0289	
1440 minute winter	F13	60	82.867	0.017	0.3	0.0191	0.0000	OK	1.008	EXG F1	0.3	0.326	0.025	0.0088	0.7
1440 minute winter	EXG F1	60	82.803	0.016	0.3	0.0000	0.0000	OK							

Results for 100 year 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	F1	3	83.681	0.031	1.8	0.0350	0.0000	OK	1.000	F2	1.2	0.452	0.092	0.0637	
15 minute summer	F2	3	83.540	0.039	1.9	0.0446	0.0000	OK	1.001	F3	1.8	0.545	0.138	0.0126	
15 minute summer	F3	3	83.510	0.036	1.9	0.0402	0.0000	OK	1.002	F4	1.6	0.436	0.121	0.0405	
15 minute summer	F4	3	83.436	0.043	2.6	0.0489	0.0000	OK	1.003	F5	2.3	0.490	0.176	0.0459	
15 minute summer	F5	3	83.373	0.051	3.1	0.0582	0.0000	OK	1.004	F6	2.9	0.722	0.217	0.1164	
15 minute summer	F6	4	83.179	0.045	3.0	0.0506	0.0000	OK	1.005	F7	2.5	0.551	0.188	0.1479	
15 minute summer	F7	5	82.941	0.048	2.5	0.0544	0.0000	OK	1.006	F8	2.3	0.495	0.171	0.0067	
15 minute summer	F8	5	82.928	0.046	2.3	0.0517	0.0000	OK	1.007	F13	2.4	0.725	0.177	0.0216	
15 minute summer	F9	2	83.783	0.033	1.6	0.0370	0.0000	OK	2.000	F10	1.2	0.657	0.087	0.0318	
15 minute summer	F10	3	83.674	0.026	1.2	0.0296	0.0000	OK	2.001	F11	0.9	0.321	0.065	0.0484	
15 minute summer	F11	3	83.554	0.037	1.7	0.0419	0.0000	OK	2.002	F12	1.4	0.657	0.107	0.0573	
15 minute summer	F12	4	83.372	0.026	1.4	0.0293	0.0000	OK	2.003	F13	1.1	0.336	0.064	0.1518	
15 minute summer	F13	5	82.902	0.052	3.4	0.0592	0.0000	OK	1.008	EXG F1	3.2	0.600	0.239	0.0450	1.3
15 minute summer	EXG F1	5	82.837	0.050	3.2	0.0000	0.0000	OK							

Results for 100 year 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	F1	3	83.681	0.031	1.8	0.0350	0.0000	OK	1.000	F2	1.2	0.452	0.092	0.0637	
15 minute winter	F2	3	83.540	0.039	1.9	0.0446	0.0000	OK	1.001	F3	1.8	0.545	0.138	0.0126	
15 minute winter	F3	3	83.510	0.036	1.9	0.0402	0.0000	OK	1.002	F4	1.6	0.436	0.121	0.0405	
15 minute winter	F4	3	83.436	0.043	2.6	0.0489	0.0000	OK	1.003	F5	2.3	0.490	0.176	0.0459	
15 minute winter	F5	3	83.373	0.051	3.1	0.0582	0.0000	OK	1.004	F6	2.9	0.722	0.217	0.1164	
15 minute winter	F6	4	83.179	0.045	3.0	0.0506	0.0000	OK	1.005	F7	2.5	0.551	0.188	0.1479	
15 minute winter	F7	5	82.941	0.048	2.5	0.0544	0.0000	OK	1.006	F8	2.3	0.495	0.171	0.0067	
15 minute winter	F8	5	82.928	0.046	2.3	0.0517	0.0000	OK	1.007	F13	2.4	0.725	0.177	0.0216	
15 minute winter	F9	2	83.783	0.033	1.6	0.0370	0.0000	OK	2.000	F10	1.2	0.657	0.087	0.0318	
15 minute winter	F10	3	83.674	0.026	1.2	0.0296	0.0000	OK	2.001	F11	0.9	0.321	0.065	0.0484	
15 minute winter	F11	3	83.554	0.037	1.7	0.0419	0.0000	OK	2.002	F12	1.4	0.657	0.107	0.0573	
15 minute winter	F12	4	83.372	0.026	1.4	0.0293	0.0000	OK	2.003	F13	1.1	0.336	0.064	0.1518	
15 minute winter	F13	5	82.902	0.052	3.4	0.0592	0.0000	OK	1.008	EXG F1	3.2	0.600	0.239	0.0450	1.3
15 minute winter	EXG F1	5	82.837	0.050	3.2	0.0000	0.0000	OK							

Results for 100 year 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	F1	3	83.681	0.031	1.8	0.0350	0.0000	OK	1.000	F2	1.2	0.452	0.092	0.0637	
30 minute summer	F2	3	83.540	0.039	1.9	0.0446	0.0000	OK	1.001	F3	1.8	0.545	0.138	0.0126	
30 minute summer	F3	3	83.510	0.036	1.9	0.0402	0.0000	OK	1.002	F4	1.6	0.436	0.121	0.0405	
30 minute summer	F4	3	83.436	0.043	2.6	0.0489	0.0000	OK	1.003	F5	2.3	0.490	0.176	0.0459	
30 minute summer	F5	3	83.373	0.051	3.1	0.0582	0.0000	OK	1.004	F6	2.9	0.722	0.217	0.1164	
30 minute summer	F6	4	83.179	0.045	3.0	0.0506	0.0000	OK	1.005	F7	2.5	0.551	0.188	0.1479	
30 minute summer	F7	5	82.941	0.048	2.5	0.0544	0.0000	OK	1.006	F8	2.3	0.495	0.171	0.0067	
30 minute summer	F8	5	82.928	0.046	2.3	0.0517	0.0000	OK	1.007	F13	2.4	0.725	0.177	0.0216	
30 minute summer	F9	2	83.783	0.033	1.6	0.0370	0.0000	OK	2.000	F10	1.2	0.657	0.087	0.0318	
30 minute summer	F10	3	83.674	0.026	1.2	0.0296	0.0000	OK	2.001	F11	0.9	0.321	0.065	0.0484	
30 minute summer	F11	3	83.554	0.037	1.7	0.0419	0.0000	OK	2.002	F12	1.4	0.657	0.107	0.0573	
30 minute summer	F12	4	83.372	0.026	1.4	0.0293	0.0000	OK	2.003	F13	1.1	0.336	0.064	0.1518	
30 minute summer	F13	5	82.902	0.052	3.4	0.0592	0.0000	OK	1.008	EXG F1	3.2	0.600	0.239	0.0450	1.3
30 minute summer	EXG F1	5	82.837	0.050	3.2	0.0000	0.0000	OK							

Results for 100 year 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mlns)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	F1	3	83.681	0.031	1.8	0.0350	0.0000	OK	1.000	F2	1.2	0.452	0.092	0.0637	
30 minute winter	F2	3	83.540	0.039	1.9	0.0446	0.0000	OK	1.001	F3	1.8	0.545	0.138	0.0126	
30 minute winter	F3	3	83.510	0.036	1.9	0.0402	0.0000	OK	1.002	F4	1.6	0.436	0.121	0.0405	
30 minute winter	F4	3	83.436	0.043	2.6	0.0489	0.0000	OK	1.003	F5	2.3	0.490	0.176	0.0459	
30 minute winter	F5	3	83.373	0.051	3.1	0.0582	0.0000	OK	1.004	F6	2.9	0.722	0.217	0.1164	
30 minute winter	F6	4	83.179	0.045	3.0	0.0506	0.0000	OK	1.005	F7	2.5	0.551	0.188	0.1479	
30 minute winter	F7	5	82.941	0.048	2.5	0.0544	0.0000	OK	1.006	F8	2.3	0.495	0.171	0.0067	
30 minute winter	F8	5	82.928	0.046	2.3	0.0517	0.0000	OK	1.007	F13	2.4	0.725	0.177	0.0216	
30 minute winter	F9	2	83.783	0.033	1.6	0.0370	0.0000	OK	2.000	F10	1.2	0.657	0.087	0.0318	
30 minute winter	F10	3	83.674	0.026	1.2	0.0296	0.0000	OK	2.001	F11	0.9	0.321	0.065	0.0484	
30 minute winter	F11	3	83.554	0.037	1.7	0.0419	0.0000	OK	2.002	F12	1.4	0.657	0.107	0.0573	
30 minute winter	F12	4	83.372	0.026	1.4	0.0293	0.0000	OK	2.003	F13	1.1	0.336	0.064	0.1518	
30 minute winter	F13	5	82.902	0.052	3.4	0.0592	0.0000	OK	1.008	EXG F1	3.2	0.600	0.239	0.0450	1.3
30 minute winter	EXG F1	5	82.837	0.050	3.2	0.0000	0.0000	OK							

Results for 100 year 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	F1	3	83.681	0.031	1.8	0.0350	0.0000	OK	1.000	F2	1.2	0.452	0.092	0.0637	
60 minute summer	F2	3	83.540	0.039	1.9	0.0446	0.0000	OK	1.001	F3	1.8	0.545	0.138	0.0126	
60 minute summer	F3	3	83.510	0.036	1.9	0.0402	0.0000	OK	1.002	F4	1.6	0.436	0.121	0.0405	
60 minute summer	F4	3	83.436	0.043	2.6	0.0489	0.0000	OK	1.003	F5	2.3	0.490	0.176	0.0459	
60 minute summer	F5	3	83.373	0.051	3.1	0.0582	0.0000	OK	1.004	F6	2.9	0.722	0.217	0.1164	
60 minute summer	F6	4	83.179	0.045	3.0	0.0506	0.0000	OK	1.005	F7	2.5	0.551	0.188	0.1479	
60 minute summer	F7	5	82.941	0.048	2.5	0.0544	0.0000	OK	1.006	F8	2.3	0.495	0.171	0.0067	
60 minute summer	F8	5	82.928	0.046	2.3	0.0517	0.0000	OK	1.007	F13	2.4	0.725	0.177	0.0216	
60 minute summer	F9	2	83.783	0.033	1.6	0.0370	0.0000	OK	2.000	F10	1.2	0.657	0.087	0.0318	
60 minute summer	F10	3	83.674	0.026	1.2	0.0296	0.0000	OK	2.001	F11	0.9	0.321	0.065	0.0484	
60 minute summer	F11	3	83.554	0.037	1.7	0.0419	0.0000	OK	2.002	F12	1.4	0.657	0.107	0.0573	
60 minute summer	F12	4	83.372	0.026	1.4	0.0293	0.0000	OK	2.003	F13	1.1	0.336	0.064	0.1518	
60 minute summer	F13	5	82.902	0.052	3.4	0.0592	0.0000	OK	1.008	EXG F1	3.2	0.600	0.239	0.0450	1.3
60 minute summer	EXG F1	5	82.837	0.050	3.2	0.0000	0.0000	OK							

Results for 100 year 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mlns)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	F1	3	83.681	0.031	1.8	0.0350	0.0000	OK	1.000	F2	1.2	0.452	0.092	0.0637	
60 minute winter	F2	3	83.540	0.039	1.9	0.0446	0.0000	OK	1.001	F3	1.8	0.545	0.138	0.0126	
60 minute winter	F3	3	83.510	0.036	1.9	0.0402	0.0000	OK	1.002	F4	1.6	0.436	0.121	0.0405	
60 minute winter	F4	3	83.436	0.043	2.6	0.0489	0.0000	OK	1.003	F5	2.3	0.490	0.176	0.0459	
60 minute winter	F5	3	83.373	0.051	3.1	0.0582	0.0000	OK	1.004	F6	2.9	0.722	0.217	0.1164	
60 minute winter	F6	4	83.179	0.045	3.0	0.0506	0.0000	OK	1.005	F7	2.5	0.551	0.188	0.1479	
60 minute winter	F7	5	82.941	0.048	2.5	0.0544	0.0000	OK	1.006	F8	2.3	0.495	0.171	0.0067	
60 minute winter	F8	5	82.928	0.046	2.3	0.0517	0.0000	OK	1.007	F13	2.4	0.725	0.177	0.0216	
60 minute winter	F9	2	83.783	0.033	1.6	0.0370	0.0000	OK	2.000	F10	1.2	0.657	0.087	0.0318	
60 minute winter	F10	3	83.674	0.026	1.2	0.0296	0.0000	OK	2.001	F11	0.9	0.321	0.065	0.0484	
60 minute winter	F11	3	83.554	0.037	1.7	0.0419	0.0000	OK	2.002	F12	1.4	0.657	0.107	0.0573	
60 minute winter	F12	4	83.372	0.026	1.4	0.0293	0.0000	OK	2.003	F13	1.1	0.336	0.064	0.1518	
60 minute winter	F13	5	82.902	0.052	3.4	0.0592	0.0000	OK	1.008	EXG F1	3.2	0.600	0.239	0.0450	1.3
60 minute winter	EXG F1	5	82.837	0.050	3.2	0.0000	0.0000	OK							

Results for 100 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	F1	4	83.669	0.019	1.6	0.0219	0.0000	OK	1.000	F2	0.5	0.273	0.035	0.0352	
120 minute summer	F2	4	83.528	0.027	0.8	0.0306	0.0000	OK	1.001	F3	0.9	0.415	0.067	0.0079	
120 minute summer	F3	4	83.501	0.027	0.9	0.0304	0.0000	OK	1.002	F4	0.9	0.403	0.069	0.0249	
120 minute summer	F4	4	83.422	0.029	1.7	0.0331	0.0000	OK	1.003	F5	1.1	0.390	0.083	0.0271	
120 minute summer	F5	4	83.358	0.036	1.4	0.0406	0.0000	OK	1.004	F6	1.5	0.580	0.114	0.0669	
120 minute summer	F6	6	83.162	0.028	1.5	0.0313	0.0000	OK	1.005	F7	1.0	0.410	0.074	0.0782	
120 minute summer	F7	6	82.923	0.030	1.0	0.0343	0.0000	OK	1.006	F8	1.0	0.414	0.074	0.0035	
120 minute summer	F8	6	82.911	0.029	1.4	0.0326	0.0000	OK	1.007	F13	1.0	0.437	0.076	0.0113	
120 minute summer	F9	4	83.769	0.019	1.4	0.0211	0.0000	OK	2.000	F10	0.4	0.335	0.033	0.0181	
120 minute summer	F10	4	83.668	0.020	0.4	0.0225	0.0000	OK	2.001	F11	0.5	0.287	0.037	0.0307	
120 minute summer	F11	4	83.543	0.026	1.4	0.0298	0.0000	OK	2.002	F12	0.7	0.527	0.056	0.0336	
120 minute summer	F12	6	83.363	0.017	0.7	0.0196	0.0000	OK	2.003	F13	0.5	0.241	0.028	0.0820	
120 minute summer	F13	6	82.883	0.033	1.5	0.0375	0.0000	OK	1.008	EXG F1	1.3	0.472	0.100	0.0240	0.8
120 minute summer	EXG F1	6	82.819	0.032	1.3	0.0000	0.0000	OK							

Results for 100 year 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	F1	4	83.669	0.019	1.6	0.0219	0.0000	OK	1.000	F2	0.5	0.273	0.035	0.0352	
120 minute winter	F2	4	83.528	0.027	0.8	0.0306	0.0000	OK	1.001	F3	0.9	0.415	0.067	0.0079	
120 minute winter	F3	4	83.501	0.027	0.9	0.0304	0.0000	OK	1.002	F4	0.9	0.403	0.069	0.0249	
120 minute winter	F4	4	83.422	0.029	1.7	0.0331	0.0000	OK	1.003	F5	1.1	0.390	0.083	0.0271	
120 minute winter	F5	4	83.358	0.036	1.4	0.0406	0.0000	OK	1.004	F6	1.5	0.580	0.114	0.0669	
120 minute winter	F6	6	83.162	0.028	1.5	0.0313	0.0000	OK	1.005	F7	1.0	0.410	0.074	0.0782	
120 minute winter	F7	6	82.923	0.030	1.0	0.0343	0.0000	OK	1.006	F8	1.0	0.414	0.074	0.0035	
120 minute winter	F8	6	82.911	0.029	1.4	0.0326	0.0000	OK	1.007	F13	1.0	0.437	0.076	0.0113	
120 minute winter	F9	4	83.769	0.019	1.4	0.0211	0.0000	OK	2.000	F10	0.4	0.335	0.033	0.0181	
120 minute winter	F10	4	83.668	0.020	0.4	0.0225	0.0000	OK	2.001	F11	0.5	0.287	0.037	0.0307	
120 minute winter	F11	4	83.543	0.026	1.4	0.0298	0.0000	OK	2.002	F12	0.7	0.527	0.056	0.0336	
120 minute winter	F12	6	83.363	0.017	0.7	0.0196	0.0000	OK	2.003	F13	0.5	0.241	0.028	0.0820	
120 minute winter	F13	6	82.883	0.033	1.5	0.0375	0.0000	OK	1.008	EXG F1	1.3	0.472	0.100	0.0240	0.8
120 minute winter	EXG F1	6	82.819	0.032	1.3	0.0000	0.0000	OK							

Results for 100 year 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	F1	8	83.666	0.016	1.6	0.0180	0.0000	OK	1.000	F2	0.3	0.226	0.023	0.0281	
180 minute summer	F2	8	83.525	0.024	0.8	0.0269	0.0000	OK	1.001	F3	0.7	0.354	0.053	0.0073	
180 minute summer	F3	8	83.501	0.027	0.7	0.0308	0.0000	OK	1.002	F4	0.9	0.380	0.071	0.0274	
180 minute summer	F4	8	83.426	0.033	1.7	0.0369	0.0000	OK	1.003	F5	1.4	0.419	0.103	0.0315	
180 minute summer	F5	8	83.362	0.040	1.4	0.0450	0.0000	OK	1.004	F6	2.0	0.501	0.153	0.1035	
180 minute summer	F6	8	83.178	0.044	2.0	0.0503	0.0000	OK	1.005	F7	2.5	0.511	0.190	0.1616	
180 minute summer	F7	8	82.946	0.053	2.5	0.0595	0.0000	OK	1.006	F8	2.7	0.505	0.197	0.0076	
180 minute summer	F8	8	82.932	0.050	2.7	0.0567	0.0000	OK	1.007	F13	2.8	0.493	0.208	0.0243	
180 minute summer	F9	8	83.764	0.014	1.4	0.0163	0.0000	OK	2.000	F10	0.3	0.226	0.019	0.0156	
180 minute summer	F10	8	83.668	0.020	0.3	0.0228	0.0000	OK	2.001	F11	0.5	0.276	0.038	0.0330	
180 minute summer	F11	8	83.545	0.028	1.4	0.0320	0.0000	OK	2.002	F12	1.0	0.457	0.077	0.0519	
180 minute summer	F12	8	83.373	0.027	1.0	0.0308	0.0000	OK	2.003	F13	1.2	0.301	0.071	0.1697	
180 minute summer	F13	8	82.907	0.057	4.0	0.0642	0.0000	OK	1.008	EXG F1	3.7	0.623	0.276	0.0502	1.6
180 minute summer	EXG F1	8	82.841	0.054	3.7	0.0000	0.0000	OK							

Results for 100 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	F1	8	83.666	0.016	1.6	0.0180	0.0000	OK	1.000	F2	0.3	0.226	0.023	0.0281	
180 minute winter	F2	8	83.525	0.024	0.8	0.0269	0.0000	OK	1.001	F3	0.7	0.354	0.053	0.0073	
180 minute winter	F3	8	83.501	0.027	0.7	0.0308	0.0000	OK	1.002	F4	0.9	0.380	0.071	0.0274	
180 minute winter	F4	8	83.426	0.033	1.7	0.0369	0.0000	OK	1.003	F5	1.4	0.419	0.103	0.0315	
180 minute winter	F5	8	83.362	0.040	1.4	0.0450	0.0000	OK	1.004	F6	2.0	0.501	0.153	0.1035	
180 minute winter	F6	8	83.178	0.044	2.0	0.0503	0.0000	OK	1.005	F7	2.5	0.511	0.190	0.1616	
180 minute winter	F7	8	82.946	0.053	2.5	0.0595	0.0000	OK	1.006	F8	2.7	0.505	0.197	0.0076	
180 minute winter	F8	8	82.932	0.050	2.7	0.0567	0.0000	OK	1.007	F13	2.8	0.493	0.208	0.0243	
180 minute winter	F9	8	83.764	0.014	1.4	0.0163	0.0000	OK	2.000	F10	0.3	0.226	0.019	0.0156	
180 minute winter	F10	8	83.668	0.020	0.3	0.0228	0.0000	OK	2.001	F11	0.5	0.276	0.038	0.0330	
180 minute winter	F11	8	83.545	0.028	1.4	0.0320	0.0000	OK	2.002	F12	1.0	0.457	0.077	0.0519	
180 minute winter	F12	8	83.373	0.027	1.0	0.0308	0.0000	OK	2.003	F13	1.2	0.301	0.071	0.1697	
180 minute winter	F13	8	82.907	0.057	4.0	0.0642	0.0000	OK	1.008	EXG F1	3.7	0.623	0.276	0.0502	1.6
180 minute winter	EXG F1	8	82.841	0.054	3.7	0.0000	0.0000	OK							

Results for 100 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	F1	8	83.666	0.016	1.6	0.0180	0.0000	OK	1.000	F2	0.3	0.226	0.023	0.0281	
240 minute summer	F2	8	83.525	0.024	0.8	0.0269	0.0000	OK	1.001	F3	0.7	0.354	0.053	0.0073	
240 minute summer	F3	8	83.501	0.027	0.7	0.0308	0.0000	OK	1.002	F4	0.9	0.380	0.071	0.0274	
240 minute summer	F4	8	83.426	0.033	1.7	0.0369	0.0000	OK	1.003	F5	1.4	0.419	0.103	0.0315	
240 minute summer	F5	8	83.362	0.040	1.4	0.0450	0.0000	OK	1.004	F6	2.0	0.501	0.153	0.1035	
240 minute summer	F6	8	83.178	0.044	2.0	0.0503	0.0000	OK	1.005	F7	2.5	0.511	0.190	0.1616	
240 minute summer	F7	8	82.946	0.053	2.5	0.0595	0.0000	OK	1.006	F8	2.7	0.505	0.197	0.0076	
240 minute summer	F8	8	82.932	0.050	2.7	0.0567	0.0000	OK	1.007	F13	2.8	0.493	0.208	0.0243	
240 minute summer	F9	8	83.764	0.014	1.4	0.0163	0.0000	OK	2.000	F10	0.3	0.226	0.019	0.0156	
240 minute summer	F10	8	83.668	0.020	0.3	0.0228	0.0000	OK	2.001	F11	0.5	0.276	0.038	0.0330	
240 minute summer	F11	8	83.545	0.028	1.4	0.0320	0.0000	OK	2.002	F12	1.0	0.457	0.077	0.0519	
240 minute summer	F12	8	83.373	0.027	1.0	0.0308	0.0000	OK	2.003	F13	1.2	0.301	0.071	0.1697	
240 minute summer	F13	8	82.907	0.057	4.0	0.0642	0.0000	OK	1.008	EXG F1	3.7	0.623	0.276	0.0502	1.6
240 minute summer	EXG F1	8	82.841	0.054	3.7	0.0000	0.0000	OK							

Results for 100 year 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	F1	8	83.666	0.016	1.6	0.0180	0.0000	OK	1.000	F2	0.3	0.226	0.023	0.0281	
240 minute winter	F2	8	83.525	0.024	0.8	0.0269	0.0000	OK	1.001	F3	0.7	0.354	0.053	0.0073	
240 minute winter	F3	8	83.501	0.027	0.7	0.0308	0.0000	OK	1.002	F4	0.9	0.380	0.071	0.0274	
240 minute winter	F4	8	83.426	0.033	1.7	0.0369	0.0000	OK	1.003	F5	1.4	0.419	0.103	0.0315	
240 minute winter	F5	8	83.362	0.040	1.4	0.0450	0.0000	OK	1.004	F6	2.0	0.501	0.153	0.1035	
240 minute winter	F6	8	83.178	0.044	2.0	0.0503	0.0000	OK	1.005	F7	2.5	0.511	0.190	0.1616	
240 minute winter	F7	8	82.946	0.053	2.5	0.0595	0.0000	OK	1.006	F8	2.7	0.505	0.197	0.0076	
240 minute winter	F8	8	82.932	0.050	2.7	0.0567	0.0000	OK	1.007	F13	2.8	0.493	0.208	0.0243	
240 minute winter	F9	8	83.764	0.014	1.4	0.0163	0.0000	OK	2.000	F10	0.3	0.226	0.019	0.0156	
240 minute winter	F10	8	83.668	0.020	0.3	0.0228	0.0000	OK	2.001	F11	0.5	0.276	0.038	0.0330	
240 minute winter	F11	8	83.545	0.028	1.4	0.0320	0.0000	OK	2.002	F12	1.0	0.457	0.077	0.0519	
240 minute winter	F12	8	83.373	0.027	1.0	0.0308	0.0000	OK	2.003	F13	1.2	0.301	0.071	0.1697	
240 minute winter	F13	8	82.907	0.057	4.0	0.0642	0.0000	OK	1.008	EXG F1	3.7	0.623	0.276	0.0502	1.6
240 minute winter	EXG F1	8	82.841	0.054	3.7	0.0000	0.0000	OK							

Results for 100 year 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	F1	16	83.660	0.010	0.8	0.0114	0.0000	OK	1.000	F2	0.1	0.170	0.009	0.0139	
360 minute summer	F2	16	83.516	0.015	0.5	0.0165	0.0000	OK	1.001	F3	0.3	0.260	0.019	0.0036	
360 minute summer	F3	16	83.491	0.017	0.3	0.0193	0.0000	OK	1.002	F4	0.4	0.282	0.027	0.0140	
360 minute summer	F4	16	83.414	0.021	0.9	0.0233	0.0000	OK	1.003	F5	0.5	0.316	0.040	0.0162	
360 minute summer	F5	16	83.347	0.025	0.7	0.0283	0.0000	OK	1.004	F6	0.8	0.364	0.060	0.0560	
360 minute summer	F6	16	83.164	0.030	0.8	0.0335	0.0000	OK	1.005	F7	1.1	0.387	0.084	0.0950	
360 minute summer	F7	16	82.930	0.037	1.1	0.0416	0.0000	OK	1.006	F8	1.4	0.435	0.105	0.0047	
360 minute summer	F8	16	82.918	0.036	1.4	0.0405	0.0000	OK	1.007	F13	1.6	0.409	0.119	0.0167	
360 minute summer	F9	16	83.759	0.009	0.7	0.0104	0.0000	OK	2.000	F10	0.1	0.167	0.007	0.0079	
360 minute summer	F10	16	83.661	0.013	0.1	0.0144	0.0000	OK	2.001	F11	0.2	0.208	0.015	0.0165	
360 minute summer	F11	16	83.535	0.018	0.7	0.0198	0.0000	OK	2.002	F12	0.4	0.314	0.028	0.0279	
360 minute summer	F12	16	83.365	0.019	0.4	0.0212	0.0000	OK	2.003	F13	0.6	0.202	0.033	0.1186	
360 minute summer	F13	16	82.896	0.046	2.1	0.0516	0.0000	OK	1.008	EXG F1	2.5	0.568	0.189	0.0377	1.5
360 minute summer	EXG F1	16	82.831	0.044	2.5	0.0000	0.0000	OK							

Results for 100 year 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	F1	16	83.660	0.010	0.8	0.0114	0.0000	OK	1.000	F2	0.1	0.170	0.009	0.0139	
360 minute winter	F2	16	83.516	0.015	0.5	0.0165	0.0000	OK	1.001	F3	0.3	0.260	0.019	0.0036	
360 minute winter	F3	16	83.491	0.017	0.3	0.0193	0.0000	OK	1.002	F4	0.4	0.282	0.027	0.0140	
360 minute winter	F4	16	83.414	0.021	0.9	0.0233	0.0000	OK	1.003	F5	0.5	0.316	0.040	0.0162	
360 minute winter	F5	16	83.347	0.025	0.7	0.0283	0.0000	OK	1.004	F6	0.8	0.364	0.060	0.0560	
360 minute winter	F6	16	83.164	0.030	0.8	0.0335	0.0000	OK	1.005	F7	1.1	0.387	0.084	0.0950	
360 minute winter	F7	16	82.930	0.037	1.1	0.0416	0.0000	OK	1.006	F8	1.4	0.435	0.105	0.0047	
360 minute winter	F8	16	82.918	0.036	1.4	0.0405	0.0000	OK	1.007	F13	1.6	0.409	0.119	0.0167	
360 minute winter	F9	16	83.759	0.009	0.7	0.0104	0.0000	OK	2.000	F10	0.1	0.167	0.007	0.0079	
360 minute winter	F10	16	83.661	0.013	0.1	0.0144	0.0000	OK	2.001	F11	0.2	0.208	0.015	0.0165	
360 minute winter	F11	16	83.535	0.018	0.7	0.0198	0.0000	OK	2.002	F12	0.4	0.314	0.028	0.0279	
360 minute winter	F12	16	83.365	0.019	0.4	0.0212	0.0000	OK	2.003	F13	0.6	0.202	0.033	0.1186	
360 minute winter	F13	16	82.896	0.046	2.1	0.0516	0.0000	OK	1.008	EXG F1	2.5	0.568	0.189	0.0377	1.5
360 minute winter	EXG F1	16	82.831	0.044	2.5	0.0000	0.0000	OK							

Results for 100 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	F1	16	83.660	0.010	0.8	0.0114	0.0000	OK	1.000	F2	0.1	0.170	0.009	0.0139	
480 minute summer	F2	16	83.516	0.015	0.5	0.0165	0.0000	OK	1.001	F3	0.3	0.260	0.019	0.0036	
480 minute summer	F3	16	83.491	0.017	0.3	0.0193	0.0000	OK	1.002	F4	0.4	0.282	0.027	0.0140	
480 minute summer	F4	16	83.414	0.021	0.9	0.0233	0.0000	OK	1.003	F5	0.5	0.316	0.040	0.0162	
480 minute summer	F5	16	83.347	0.025	0.7	0.0283	0.0000	OK	1.004	F6	0.8	0.364	0.060	0.0560	
480 minute summer	F6	16	83.164	0.030	0.8	0.0335	0.0000	OK	1.005	F7	1.1	0.387	0.084	0.0950	
480 minute summer	F7	16	82.930	0.037	1.1	0.0416	0.0000	OK	1.006	F8	1.4	0.435	0.105	0.0047	
480 minute summer	F8	16	82.918	0.036	1.4	0.0405	0.0000	OK	1.007	F13	1.6	0.409	0.119	0.0167	
480 minute summer	F9	16	83.759	0.009	0.7	0.0104	0.0000	OK	2.000	F10	0.1	0.167	0.007	0.0079	
480 minute summer	F10	16	83.661	0.013	0.1	0.0144	0.0000	OK	2.001	F11	0.2	0.208	0.015	0.0165	
480 minute summer	F11	16	83.535	0.018	0.7	0.0198	0.0000	OK	2.002	F12	0.4	0.314	0.028	0.0279	
480 minute summer	F12	16	83.365	0.019	0.4	0.0212	0.0000	OK	2.003	F13	0.6	0.202	0.033	0.1186	
480 minute summer	F13	16	82.896	0.046	2.1	0.0516	0.0000	OK	1.008	EXG F1	2.5	0.568	0.189	0.0377	1.5
480 minute summer	EXG F1	16	82.831	0.044	2.5	0.0000	0.0000	OK							

Results for 100 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	F1	16	83.660	0.010	0.8	0.0114	0.0000	OK	1.000	F2	0.1	0.170	0.009	0.0139	
480 minute winter	F2	16	83.516	0.015	0.5	0.0165	0.0000	OK	1.001	F3	0.3	0.260	0.019	0.0036	
480 minute winter	F3	16	83.491	0.017	0.3	0.0193	0.0000	OK	1.002	F4	0.4	0.282	0.027	0.0140	
480 minute winter	F4	16	83.414	0.021	0.9	0.0233	0.0000	OK	1.003	F5	0.5	0.316	0.040	0.0162	
480 minute winter	F5	16	83.347	0.025	0.7	0.0283	0.0000	OK	1.004	F6	0.8	0.364	0.060	0.0560	
480 minute winter	F6	16	83.164	0.030	0.8	0.0335	0.0000	OK	1.005	F7	1.1	0.387	0.084	0.0950	
480 minute winter	F7	16	82.930	0.037	1.1	0.0416	0.0000	OK	1.006	F8	1.4	0.435	0.105	0.0047	
480 minute winter	F8	16	82.918	0.036	1.4	0.0405	0.0000	OK	1.007	F13	1.6	0.409	0.119	0.0167	
480 minute winter	F9	16	83.759	0.009	0.7	0.0104	0.0000	OK	2.000	F10	0.1	0.167	0.007	0.0079	
480 minute winter	F10	16	83.661	0.013	0.1	0.0144	0.0000	OK	2.001	F11	0.2	0.208	0.015	0.0165	
480 minute winter	F11	16	83.535	0.018	0.7	0.0198	0.0000	OK	2.002	F12	0.4	0.314	0.028	0.0279	
480 minute winter	F12	16	83.365	0.019	0.4	0.0212	0.0000	OK	2.003	F13	0.6	0.202	0.033	0.1186	
480 minute winter	F13	16	82.896	0.046	2.1	0.0516	0.0000	OK	1.008	EXG F1	2.5	0.568	0.189	0.0377	1.5
480 minute winter	EXG F1	16	82.831	0.044	2.5	0.0000	0.0000	OK							

Results for 100 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	F1	30	83.657	0.007	0.4	0.0077	0.0000	OK	1.000	F2	0.1	0.136	0.004	0.0074	
600 minute summer	F2	30	83.510	0.009	0.2	0.0107	0.0000	OK	1.001	F3	0.1	0.197	0.008	0.0019	
600 minute summer	F3	30	83.485	0.011	0.1	0.0126	0.0000	OK	1.002	F4	0.1	0.215	0.011	0.0074	
600 minute summer	F4	30	83.406	0.013	0.4	0.0151	0.0000	OK	1.003	F5	0.2	0.242	0.016	0.0085	
600 minute summer	F5	30	83.338	0.016	0.4	0.0181	0.0000	OK	1.004	F6	0.3	0.277	0.024	0.0292	
600 minute summer	F6	30	83.153	0.019	0.3	0.0214	0.0000	OK	1.005	F7	0.4	0.306	0.034	0.0477	
600 minute summer	F7	30	82.915	0.022	0.4	0.0253	0.0000	OK	1.006	F8	0.6	0.346	0.041	0.0023	
600 minute summer	F8	30	82.904	0.022	0.6	0.0249	0.0000	OK	1.007	F13	0.6	0.316	0.046	0.0085	
600 minute summer	F9	30	83.756	0.006	0.4	0.0069	0.0000	OK	2.000	F10	0.0	0.129	0.003	0.0042	
600 minute summer	F10	30	83.656	0.008	0.0	0.0094	0.0000	OK	2.001	F11	0.1	0.162	0.006	0.0086	
600 minute summer	F11	30	83.528	0.011	0.4	0.0127	0.0000	OK	2.002	F12	0.1	0.236	0.011	0.0144	
600 minute summer	F12	30	83.358	0.012	0.1	0.0136	0.0000	OK	2.003	F13	0.2	0.154	0.013	0.0610	
600 minute summer	F13	30	82.878	0.028	0.8	0.0322	0.0000	OK	1.008	EXG F1	1.0	0.438	0.076	0.0195	1.1
600 minute summer	EXG F1	30	82.815	0.028	1.0	0.0000	0.0000	OK							

Results for 100 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	F1	30	83.657	0.007	0.4	0.0077	0.0000	OK	1.000	F2	0.1	0.136	0.004	0.0074	
600 minute winter	F2	30	83.510	0.009	0.2	0.0107	0.0000	OK	1.001	F3	0.1	0.197	0.008	0.0019	
600 minute winter	F3	30	83.485	0.011	0.1	0.0126	0.0000	OK	1.002	F4	0.1	0.215	0.011	0.0074	
600 minute winter	F4	30	83.406	0.013	0.4	0.0151	0.0000	OK	1.003	F5	0.2	0.242	0.016	0.0085	
600 minute winter	F5	30	83.338	0.016	0.4	0.0181	0.0000	OK	1.004	F6	0.3	0.277	0.024	0.0292	
600 minute winter	F6	30	83.153	0.019	0.3	0.0214	0.0000	OK	1.005	F7	0.4	0.306	0.034	0.0477	
600 minute winter	F7	30	82.915	0.022	0.4	0.0253	0.0000	OK	1.006	F8	0.6	0.346	0.041	0.0023	
600 minute winter	F8	30	82.904	0.022	0.6	0.0249	0.0000	OK	1.007	F13	0.6	0.316	0.046	0.0085	
600 minute winter	F9	30	83.756	0.006	0.4	0.0069	0.0000	OK	2.000	F10	0.0	0.129	0.003	0.0042	
600 minute winter	F10	30	83.656	0.008	0.0	0.0094	0.0000	OK	2.001	F11	0.1	0.162	0.006	0.0086	
600 minute winter	F11	30	83.528	0.011	0.4	0.0127	0.0000	OK	2.002	F12	0.1	0.236	0.011	0.0144	
600 minute winter	F12	30	83.358	0.012	0.1	0.0136	0.0000	OK	2.003	F13	0.2	0.154	0.013	0.0610	
600 minute winter	F13	30	82.878	0.028	0.8	0.0322	0.0000	OK	1.008	EXG F1	1.0	0.438	0.076	0.0195	1.1
600 minute winter	EXG F1	30	82.815	0.028	1.0	0.0000	0.0000	OK							

Results for 100 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	F1	30	83.657	0.007	0.4	0.0077	0.0000	OK	1.000	F2	0.1	0.136	0.004	0.0074	
720 minute summer	F2	30	83.510	0.009	0.2	0.0107	0.0000	OK	1.001	F3	0.1	0.197	0.008	0.0019	
720 minute summer	F3	30	83.485	0.011	0.1	0.0126	0.0000	OK	1.002	F4	0.1	0.215	0.011	0.0074	
720 minute summer	F4	30	83.406	0.013	0.4	0.0151	0.0000	OK	1.003	F5	0.2	0.242	0.016	0.0085	
720 minute summer	F5	30	83.338	0.016	0.4	0.0181	0.0000	OK	1.004	F6	0.3	0.277	0.024	0.0292	
720 minute summer	F6	30	83.153	0.019	0.3	0.0214	0.0000	OK	1.005	F7	0.4	0.306	0.034	0.0477	
720 minute summer	F7	30	82.915	0.022	0.4	0.0253	0.0000	OK	1.006	F8	0.6	0.346	0.041	0.0023	
720 minute summer	F8	30	82.904	0.022	0.6	0.0249	0.0000	OK	1.007	F13	0.6	0.316	0.046	0.0085	
720 minute summer	F9	30	83.756	0.006	0.4	0.0069	0.0000	OK	2.000	F10	0.0	0.129	0.003	0.0042	
720 minute summer	F10	30	83.656	0.008	0.0	0.0094	0.0000	OK	2.001	F11	0.1	0.162	0.006	0.0086	
720 minute summer	F11	30	83.528	0.011	0.4	0.0127	0.0000	OK	2.002	F12	0.1	0.236	0.011	0.0144	
720 minute summer	F12	30	83.358	0.012	0.1	0.0136	0.0000	OK	2.003	F13	0.2	0.154	0.013	0.0610	
720 minute summer	F13	30	82.878	0.028	0.8	0.0322	0.0000	OK	1.008	EXG F1	1.0	0.438	0.076	0.0195	1.1
720 minute summer	EXG F1	30	82.815	0.028	1.0	0.0000	0.0000	OK							

Results for 100 year 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	F1	30	83.657	0.007	0.4	0.0077	0.0000	OK	1.000	F2	0.1	0.136	0.004	0.0074	
720 minute winter	F2	30	83.510	0.009	0.2	0.0107	0.0000	OK	1.001	F3	0.1	0.197	0.008	0.0019	
720 minute winter	F3	30	83.485	0.011	0.1	0.0126	0.0000	OK	1.002	F4	0.1	0.215	0.011	0.0074	
720 minute winter	F4	30	83.406	0.013	0.4	0.0151	0.0000	OK	1.003	F5	0.2	0.242	0.016	0.0085	
720 minute winter	F5	30	83.338	0.016	0.4	0.0181	0.0000	OK	1.004	F6	0.3	0.277	0.024	0.0292	
720 minute winter	F6	30	83.153	0.019	0.3	0.0214	0.0000	OK	1.005	F7	0.4	0.306	0.034	0.0477	
720 minute winter	F7	30	82.915	0.022	0.4	0.0253	0.0000	OK	1.006	F8	0.6	0.346	0.041	0.0023	
720 minute winter	F8	30	82.904	0.022	0.6	0.0249	0.0000	OK	1.007	F13	0.6	0.316	0.046	0.0085	
720 minute winter	F9	30	83.756	0.006	0.4	0.0069	0.0000	OK	2.000	F10	0.0	0.129	0.003	0.0042	
720 minute winter	F10	30	83.656	0.008	0.0	0.0094	0.0000	OK	2.001	F11	0.1	0.162	0.006	0.0086	
720 minute winter	F11	30	83.528	0.011	0.4	0.0127	0.0000	OK	2.002	F12	0.1	0.236	0.011	0.0144	
720 minute winter	F12	30	83.358	0.012	0.1	0.0136	0.0000	OK	2.003	F13	0.2	0.154	0.013	0.0610	
720 minute winter	F13	30	82.878	0.028	0.8	0.0322	0.0000	OK	1.008	EXG F1	1.0	0.438	0.076	0.0195	1.1
720 minute winter	EXG F1	30	82.815	0.028	1.0	0.0000	0.0000	OK							

Results for 100 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	F1	30	83.657	0.007	0.4	0.0077	0.0000	OK	1.000	F2	0.1	0.136	0.004	0.0074	
960 minute summer	F2	30	83.510	0.009	0.2	0.0107	0.0000	OK	1.001	F3	0.1	0.197	0.008	0.0019	
960 minute summer	F3	30	83.485	0.011	0.1	0.0126	0.0000	OK	1.002	F4	0.1	0.215	0.011	0.0074	
960 minute summer	F4	30	83.406	0.013	0.4	0.0151	0.0000	OK	1.003	F5	0.2	0.242	0.016	0.0085	
960 minute summer	F5	30	83.338	0.016	0.4	0.0181	0.0000	OK	1.004	F6	0.3	0.277	0.024	0.0292	
960 minute summer	F6	30	83.153	0.019	0.3	0.0214	0.0000	OK	1.005	F7	0.4	0.306	0.034	0.0477	
960 minute summer	F7	30	82.915	0.022	0.4	0.0253	0.0000	OK	1.006	F8	0.6	0.346	0.041	0.0023	
960 minute summer	F8	30	82.904	0.022	0.6	0.0249	0.0000	OK	1.007	F13	0.6	0.316	0.046	0.0085	
960 minute summer	F9	30	83.756	0.006	0.4	0.0069	0.0000	OK	2.000	F10	0.0	0.129	0.003	0.0042	
960 minute summer	F10	30	83.656	0.008	0.0	0.0094	0.0000	OK	2.001	F11	0.1	0.162	0.006	0.0086	
960 minute summer	F11	30	83.528	0.011	0.4	0.0127	0.0000	OK	2.002	F12	0.1	0.236	0.011	0.0144	
960 minute summer	F12	30	83.358	0.012	0.1	0.0136	0.0000	OK	2.003	F13	0.2	0.154	0.013	0.0610	
960 minute summer	F13	30	82.878	0.028	0.8	0.0322	0.0000	OK	1.008	EXG F1	1.0	0.438	0.076	0.0195	1.1
960 minute summer	EXG F1	30	82.815	0.028	1.0	0.0000	0.0000	OK							

Results for 100 year 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	F1	30	83.657	0.007	0.4	0.0077	0.0000	OK	1.000	F2	0.1	0.136	0.004	0.0074	
960 minute winter	F2	30	83.510	0.009	0.2	0.0107	0.0000	OK	1.001	F3	0.1	0.197	0.008	0.0019	
960 minute winter	F3	30	83.485	0.011	0.1	0.0126	0.0000	OK	1.002	F4	0.1	0.215	0.011	0.0074	
960 minute winter	F4	30	83.406	0.013	0.4	0.0151	0.0000	OK	1.003	F5	0.2	0.242	0.016	0.0085	
960 minute winter	F5	30	83.338	0.016	0.4	0.0181	0.0000	OK	1.004	F6	0.3	0.277	0.024	0.0292	
960 minute winter	F6	30	83.153	0.019	0.3	0.0214	0.0000	OK	1.005	F7	0.4	0.306	0.034	0.0477	
960 minute winter	F7	30	82.915	0.022	0.4	0.0253	0.0000	OK	1.006	F8	0.6	0.346	0.041	0.0023	
960 minute winter	F8	30	82.904	0.022	0.6	0.0249	0.0000	OK	1.007	F13	0.6	0.316	0.046	0.0085	
960 minute winter	F9	30	83.756	0.006	0.4	0.0069	0.0000	OK	2.000	F10	0.0	0.129	0.003	0.0042	
960 minute winter	F10	30	83.656	0.008	0.0	0.0094	0.0000	OK	2.001	F11	0.1	0.162	0.006	0.0086	
960 minute winter	F11	30	83.528	0.011	0.4	0.0127	0.0000	OK	2.002	F12	0.1	0.236	0.011	0.0144	
960 minute winter	F12	30	83.358	0.012	0.1	0.0136	0.0000	OK	2.003	F13	0.2	0.154	0.013	0.0610	
960 minute winter	F13	30	82.878	0.028	0.8	0.0322	0.0000	OK	1.008	EXG F1	1.0	0.438	0.076	0.0195	1.1
960 minute winter	EXG F1	30	82.815	0.028	1.0	0.0000	0.0000	OK							

Results for 100 year 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	F1	60	83.654	0.004	0.2	0.0046	0.0000	OK	1.000	F2	0.0	0.096	0.001	0.0034	
1440 minute summer	F2	60	83.507	0.006	0.1	0.0065	0.0000	OK	1.001	F3	0.0	0.143	0.003	0.0009	
1440 minute summer	F3	60	83.481	0.007	0.0	0.0075	0.0000	OK	1.002	F4	0.0	0.148	0.003	0.0034	
1440 minute summer	F4	60	83.401	0.008	0.3	0.0091	0.0000	OK	1.003	F5	0.1	0.172	0.005	0.0040	
1440 minute summer	F5	60	83.332	0.010	0.2	0.0110	0.0000	OK	1.004	F6	0.1	0.200	0.008	0.0138	
1440 minute summer	F6	60	83.145	0.011	0.1	0.0128	0.0000	OK	1.005	F7	0.1	0.227	0.011	0.0216	
1440 minute summer	F7	60	82.906	0.013	0.1	0.0145	0.0000	OK	1.006	F8	0.2	0.252	0.013	0.0010	
1440 minute summer	F8	60	82.895	0.013	0.2	0.0148	0.0000	OK	1.007	F13	0.2	0.225	0.015	0.0039	
1440 minute summer	F9	60	83.754	0.004	0.2	0.0045	0.0000	OK	2.000	F10	0.0	0.097	0.001	0.0021	
1440 minute summer	F10	60	83.653	0.005	0.0	0.0060	0.0000	OK	2.001	F11	0.0	0.120	0.002	0.0043	
1440 minute summer	F11	60	83.524	0.007	0.2	0.0080	0.0000	OK	2.002	F12	0.1	0.175	0.004	0.0072	
1440 minute summer	F12	60	83.354	0.008	0.1	0.0086	0.0000	OK	2.003	F13	0.1	0.120	0.005	0.0289	
1440 minute summer	F13	60	82.867	0.017	0.3	0.0191	0.0000	OK	1.008	EXG F1	0.3	0.326	0.025	0.0088	0.7
1440 minute summer	EXG F1	60	82.803	0.016	0.3	0.0000	0.0000	OK							

Results for 100 year 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	F1	60	83.654	0.004	0.2	0.0046	0.0000	OK	1.000	F2	0.0	0.096	0.001	0.0034	
1440 minute winter	F2	60	83.507	0.006	0.1	0.0065	0.0000	OK	1.001	F3	0.0	0.143	0.003	0.0009	
1440 minute winter	F3	60	83.481	0.007	0.0	0.0075	0.0000	OK	1.002	F4	0.0	0.148	0.003	0.0034	
1440 minute winter	F4	60	83.401	0.008	0.3	0.0091	0.0000	OK	1.003	F5	0.1	0.172	0.005	0.0040	
1440 minute winter	F5	60	83.332	0.010	0.2	0.0110	0.0000	OK	1.004	F6	0.1	0.200	0.008	0.0138	
1440 minute winter	F6	60	83.145	0.011	0.1	0.0128	0.0000	OK	1.005	F7	0.1	0.227	0.011	0.0216	
1440 minute winter	F7	60	82.906	0.013	0.1	0.0145	0.0000	OK	1.006	F8	0.2	0.252	0.013	0.0010	
1440 minute winter	F8	60	82.895	0.013	0.2	0.0148	0.0000	OK	1.007	F13	0.2	0.225	0.015	0.0039	
1440 minute winter	F9	60	83.754	0.004	0.2	0.0045	0.0000	OK	2.000	F10	0.0	0.097	0.001	0.0021	
1440 minute winter	F10	60	83.653	0.005	0.0	0.0060	0.0000	OK	2.001	F11	0.0	0.120	0.002	0.0043	
1440 minute winter	F11	60	83.524	0.007	0.2	0.0080	0.0000	OK	2.002	F12	0.1	0.175	0.004	0.0072	
1440 minute winter	F12	60	83.354	0.008	0.1	0.0086	0.0000	OK	2.003	F13	0.1	0.120	0.005	0.0289	
1440 minute winter	F13	60	82.867	0.017	0.3	0.0191	0.0000	OK	1.008	EXG F1	0.3	0.326	0.025	0.0088	0.7
1440 minute winter	EXG F1	60	82.803	0.016	0.3	0.0000	0.0000	OK							

Adoptable						
Max Width (mm)	Diameter (mm)	Width (mm)		Max Depth (m)	Diameter (mm)	Width (mm)
225	450			1.500	1200	
374	1200			99.999	1200	
749	1500					
900	1800					
>900	Link+900 mm					
Plastic						
Max Width (mm)	Diameter (mm)	Width (mm)		Max Depth (m)	Diameter (mm)	Width (mm)
225	450			1.500	450	
>225	Link+225 mm					

Circular						
Shape	Circular		Dia (mm)			
Barrels	1		150			
Height (mm)			225			
Width (mm)						
Side Slope (1:X)						
Auto Increment (mm)	75					
Preferred Cover (m)						
Steep Slope (1:X)						
Follow Ground	x					
Velocity	Default					
ks (mm) / n						
Storage tank 1						
Shape	Circular		Dia (mm)			
Barrels	5		1300			
Height (mm)						
Width (mm)						
Side Slope (1:X)						
Auto Increment (mm)	300					
Preferred Cover (m)						
Steep Slope (1:X)	1000					
Follow Ground	x					
Velocity	Default					
ks (mm) / n						

Project Title: Lidl Wrexham

Project No: 09-124

Prepared By: KA

Date: May 2020

Checked By: KGP

Date: May 2020

SOAKAWAY FOR 10 YEAR RAINFALL RETURN PERIOD - LIDL ROOF

DESIGN DATA

Site location =	Wrexham
M5-60 rainfall ratio (mm) =	18
60min rainfall ratio to 2 day rainfalls of 5 year return period, r =	0.35
Impermeable Roof Area (m ²) =	2104
Allowance for Climate Change (%) =	30
Soil Infiltration Rate based on average from site test results 13-6-2011 (m/s) =	0.000082
Soakaway Type	Polystorm
Soakaway voids - Polystorm unit (%) =	0.95
Restricted discharge, Qe (l/s)	0

CALCULATIONS RESULTS

Soakaway Length (m) =	13.60
Soakaway Depth (m) =	2.00
Soakaway Width (m) =	5.00
Soakaway to be made of Polystorm units	

DETAILED CALCULATIONS

Soakaway Width (m)	5.00								
Soakaway Depth (m)	2.00								
Duration, D	15	30	60	120	240	360	600	1440	2880
Z1	0.64	0.79	1.00	1.20	1.44	1.63	1.85	2.35	2.81
M5-D	11.52	14.22	18	21.6	25.92	29.34	33.3	42.3	50.58
Z2	1.23	1.24	1.24	1.24	1.22	1.21	1.19	1.17	1.16
M10-D	14.17	17.63	22.32	26.78	31.62	35.50	39.63	49.49	58.67
i (mm/hr)	56.68	35.27	22.32	13.39	7.91	5.92	3.96	2.06	1.22
i + Climate Change %	73.68	45.85	29.02	17.41	10.28	7.69	5.15	2.68	1.59
Area (m ²)	2104	2104	2104	2104	2104	2104	2104	2104	2104
Qp (l/s)	43.10	26.82	16.97	10.18	6.01	4.50	3.01	1.57	0.93
Qe (l/s)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Balancing Q	43.10	26.82	16.97	10.18	6.01	4.50	3.01	1.57	0.93
In flow volume (m ³)	77.6	96.5	122.2	146.6	173.1	194.4	216.9	271.0	321.2
Soakaway Length (m)	7.96	9.70	11.82	13.18	13.60	13.54	12.17	8.45	4.74

DESIGN NOTES

1. Soakaway design is in accordance with BRE Digest 350
2. Design rainfall return period is 10 years based on Building Regulations Part H
2. Factor of Safety of 2.0 is adopted as per CIRIA C753 SUDS Manual guidance

Project Title: Lidl Wrexham

Project No: 09-124

Prepared By: KA

Date: May 2020

Checked By: KGP

Date: May 2020

SOAKAWAY FOR 10 YEAR RAINFALL RETURN PERIOD - LIDL HARDSTANDING

DESIGN DATA

Site location =	Wrexham
M5-60 rainfall ratio (mm) =	18
60min rainfall ratio to 2 day rainfalls of 5 year return period, r =	0.35
Impermeable Roof Area (m ²) =	4924
Allowance for Climate Change (%) =	30
Soil Infiltration Rate based on average from site test results 13-6-2011 (m/s) =	0.000082
Soakaway Type	Polystorm
Soakaway voids - Polystorm unit (%) =	0.95
Restricted discharge, Qe (l/s)	0

CALCULATIONS RESULTS

Soakaway Length (m) =	33.52
Soakaway Depth (m) =	2.00
Soakaway Width (m) =	5.00
Soakaway to be made of Polystorm units	

DETAILED CALCULATIONS

Soakaway Width (m)	5.00								
Soakaway Depth (m)	2.00								
Duration, D	15	30	60	120	240	360	600	1440	2880
Z1	0.64	0.79	1.00	1.20	1.44	1.63	1.85	2.35	2.81
M5-D	11.52	14.22	18	21.6	25.92	29.34	33.3	42.3	50.58
Z2	1.23	1.24	1.24	1.24	1.22	1.21	1.19	1.17	1.16
M10-D	14.17	17.63	22.32	26.78	31.62	35.50	39.63	49.49	58.67
i (mm/hr)	56.68	35.27	22.32	13.39	7.91	5.92	3.96	2.06	1.22
i + Climate Change %	73.68	45.85	29.02	17.41	10.28	7.69	5.15	2.68	1.59
Area (m ²)	4924	4924	4924	4924	4924	4924	4924	4924	4924
Qp (l/s)	100.86	62.76	39.72	23.83	14.07	10.53	7.05	3.67	2.18
Qe (l/s)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Balancing Q	100.86	62.76	39.72	23.83	14.07	10.53	7.05	3.67	2.18
In flow volume (m ³)	181.6	225.9	286.0	343.2	405.2	454.9	507.7	634.1	751.8
Soakaway Length (m)	18.74	22.91	28.05	31.58	33.16	33.52	31.04	23.80	16.12

DESIGN NOTES

1. Soakaway design is in accordance with BRE Digest 350
2. Design rainfall return period is 10 years based on Building Regulations Part H
2. Factor of Safety of 2.0 is adopted as per CIRIA C753 SUDS Manual guidance

Rainfall Methodology	FSR
Return Period (years)	100
Additional Flow (%)	0
FSR Region	England and Wales
M5-60 (mm)	18.000
Ratio-R	0.350
CV	0.750
Time of Entry (mins)	1.00
Maximum Time of Concentration (mins)	30.00
Maximum Rainfall (mm/hr)	116.0
Minimum Velocity (m/s)	1.00
Connection Type	Level Soffits
Minimum Backdrop Height (m)	0.200
Preferred Cover Depth (m)	0.900
Include Intermediate Ground	✓
Enforce best practice design rules	✓

	Name	Area (ha)	T of E (mins)	Add Inflow (l/s)	Cover Level (m)	Node Type	Manhole Type	Diameter (mm)	Width (mm)	Easting (m)	Northing (m)	Depth (m)	Notes
✓	S1	0.020	1.00		84.800	Manhole	Adoptable	1200		333708.469	350727.808	1.200	
✓	S2	0.078	1.00		84.675	Manhole	Adoptable	1200		333734.620	350724.773	1.200	
✓	S3	0.067	1.00		84.300	Manhole	Adoptable	1200		333785.171	350645.173	1.200	
✓	S4	0.091	1.00		84.300	Manhole	Adoptable	1500		333792.677	350659.304	1.341	
✓	S5	0.027	1.00		84.330	Manhole	Adoptable	1500		333789.343	350675.614	1.498	
✓	S6	0.136	1.00		84.400	Manhole	Adoptable	1500		333781.528	350689.281	1.607	
✓	S7	0.072	1.00		84.575	Manhole	Adoptable	1500		333753.319	350714.880	1.876	
✓	Soakaway 1				84.550	Manhole	Adoptable	1500		333757.180	350722.196	1.872	
✓	S8	0.140	1.00		84.800	Manhole	Adoptable	1500		333702.543	350686.518	1.275	
✓	S9	0.070	1.00		84.800	Manhole	Adoptable	1500		333735.560	350669.092	1.391	
✓	S10				84.350	Manhole	Adoptable	1500		333768.499	350651.519	1.275	
✓	Soakaway 2				84.500	Manhole	Adoptable	1500		333801.490	350634.106	1.540	

	Name	US Node	DS Node	Length (m)	ks (mm) / n	Velocity Equation	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	Link Type	T of C (mins)	Rain (mm/hr)	Con Offset (m)	Min DS IL (m)	Lateral Area (ha)	Lateral Ins Point (%)	Lateral T of E (mins)
✓	3.000	S1	S2	26.327	0.600	Colebrook-White	83.600	83.475	0.125	210.6	300	Circular	1.41	116.0					
✓	3.001	S2	S7	21.155	0.600	Colebrook-White	83.475	83.375	0.100	211.5	300	Circular	1.73	116.0					
✓	2.000	S3	S4	16.001	0.600	Colebrook-White	83.100	83.034	0.066	242.4	300	Circular	1.27	116.0					
✓	2.001	S4	S5	16.647	0.600	Colebrook-White	82.959	82.907	0.052	320.1	375	Circular	1.54	116.0					
✓	2.002	S5	S6	15.744	0.600	Colebrook-White	82.832	82.793	0.039	403.7	450	Circular	1.80	116.0					
✓	2.003	S6	S7	38.093	0.600	Colebrook-White	82.793	82.699	0.094	405.2	450	Circular	2.43	116.0					
✓	2.004	S7	Soakaway 1	8.272	0.600	Colebrook-White	82.699	82.678	0.021	393.9	450	Circular	2.57	116.0					
✓	1.000	S8	S9	37.333	0.600	Colebrook-White	83.525	83.409	0.116	321.8	375	Circular	1.62	116.0					
✓	1.001	S9	S10	37.333	0.600	Colebrook-White	83.409	83.075	0.334	111.8	375	Circular	1.98	116.0					
✓	1.002	S10	Soakaway 2	37.304	0.600	Colebrook-White	83.075	82.960	0.115	324.4	375	Circular	2.60	116.0					

	Name	US Node	DS Node	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Minimum Depth (m)	Maximum Depth (m)	Σ Area (ha)	Σ Add Inflow (ha)	Pro Depth (mm)	Pro Velocity (m/s)	Notes
✓	3.000	S1	S2	1.079	76.3	6.3	0.900	0.900	0.900	0.900	0.020	0.0	58	0.657	
✓	3.001	S2	S7	1.077	76.1	30.8	0.900	0.900	0.900	0.900	0.098	0.0	133	1.022	
✓	2.000	S3	S4	1.005	71.0	21.1	0.900	0.966	0.900	0.966	0.067	0.0	112	0.879	
✓	2.001	S4	S5	1.007	111.2	49.7	0.966	1.048	0.966	1.048	0.158	0.0	175	0.979	
✓	2.002	S5	S6	1.005	159.9	58.2	1.048	1.157	1.048	1.157	0.185	0.0	188	0.929	
✓	2.003	S6	S7	1.003	159.6	100.9	1.157	1.426	1.157	1.426	0.321	0.0	260	1.059	
✓	2.004	S7	Soakaway 1	1.018	161.9	154.4	1.426	1.422	1.422	1.426	0.491	0.0	354	1.151	
✓	1.000	S8	S9	1.004	110.9	44.0	0.900	1.016	0.900	1.016	0.140	0.0	164	0.947	
✓	1.001	S9	S10	1.713	189.2	66.0	1.016	0.900	0.900	1.016	0.210	0.0	153	1.566	
✓	1.002	S10	Soakaway 2	1.000	110.5	66.0	0.900	1.165	0.900	1.165	0.210	0.0	209	1.043	

Link Name	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)	US Node Name	Dia (mm)	Width (mm)	Node Type	MH Type	DS Node Name	Dia (mm)	Width (mm)	Node Type	MH Type
3.000	26.327	210.6	300	Circular	84.800	83.600	0.900	84.675	83.475	0.900	S1	1200		Manhole	Adoptable	S2	1200		Manhole	Adoptable
3.001	21.155	211.5	300	Circular	84.675	83.475	0.900	84.575	83.375	0.900	S2	1200		Manhole	Adoptable	S7	1500		Manhole	Adoptable
2.000	16.001	242.4	300	Circular	84.300	83.100	0.900	84.300	83.034	0.966	S3	1200		Manhole	Adoptable	S4	1500		Manhole	Adoptable
2.001	16.647	320.1	375	Circular	84.300	82.959	0.966	84.330	82.907	1.048	S4	1500		Manhole	Adoptable	S5	1500		Manhole	Adoptable
2.002	15.744	403.7	450	Circular	84.330	82.832	1.048	84.400	82.793	1.157	S5	1500		Manhole	Adoptable	S6	1500		Manhole	Adoptable
2.003	38.093	405.2	450	Circular	84.400	82.793	1.157	84.575	82.699	1.426	S6	1500		Manhole	Adoptable	S7	1500		Manhole	Adoptable
2.004	8.272	393.9	450	Circular	84.575	82.699	1.426	84.550	82.678	1.422	S7	1500		Manhole	Adoptable	Soakaway 1	1500		Manhole	Adoptable
1.000	37.333	321.8	375	Circular	84.800	83.525	0.900	84.800	83.409	1.016	S8	1500		Manhole	Adoptable	S9	1500		Manhole	Adoptable
1.001	37.333	111.8	375	Circular	84.800	83.409	1.016	84.350	83.075	0.900	S9	1500		Manhole	Adoptable	S10	1500		Manhole	Adoptable
1.002	37.304	324.4	375	Circular	84.350	83.075	0.900	84.500	82.960	1.165	S10	1500		Manhole	Adoptable	Soakaway 2	1500		Manhole	Adoptable

Node Name	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Width (mm)	Node Type	MH Type		Link ID	IL (m)	Dia (mm)	Link Type
S1	333708.469	350727.808	84.800	1.200	1200		Manhole	Adoptable					
									0	3.000	83.600	300	Circular
S2	333734.620	350724.773	84.675	1.200	1200		Manhole	Adoptable	1	3.000	83.475	300	Circular
									0	3.001	83.475	300	Circular
S3	333785.171	350645.173	84.300	1.200	1200		Manhole	Adoptable					
									0	2.000	83.100	300	Circular
S4	333792.677	350659.304	84.300	1.341	1500		Manhole	Adoptable	1	2.000	83.034	300	Circular
									0	2.001	82.959	375	Circular
S5	333789.343	350675.614	84.330	1.498	1500		Manhole	Adoptable	1	2.001	82.907	375	Circular
									0	2.002	82.832	450	Circular
S6	333781.528	350689.281	84.400	1.607	1500		Manhole	Adoptable	1	2.002	82.793	450	Circular
									0	2.003	82.793	450	Circular
S7	333753.319	350714.880	84.575	1.876	1500		Manhole	Adoptable	1	3.001	83.375	300	Circular
									2	2.003	82.699	450	Circular
									0	2.004	82.699	450	Circular
Soakaway 1	333757.180	350722.196	84.550	1.872	1500		Manhole	Adoptable	1	2.004	82.678	450	Circular

S8	333702.543	350686.518	84.800	1.275	1500	Manhole	Adoptable						
									0	1.000	83.525	375	Circular
S9	333735.560	350669.092	84.800	1.391	1500	Manhole	Adoptable	1	1.000	83.409	375	Circular	
									0	1.001	83.409	375	Circular
S10	333768.499	350651.519	84.350	1.275	1500	Manhole	Adoptable	1	1.001	83.075	375	Circular	
									0	1.002	83.075	375	Circular
Soakaway 2	333801.490	350634.106	84.500	1.540	1500	Manhole	Adoptable	1	1.002	82.960	375	Circular	

Rainfall Methodology	FSR		Return Period (years)	Climate Change (%)
FSR Region	England and Wales		2	30
M5-60 (mm)	18.000		10	30
Ratio-R	0.350		30	30
Summer CV	0.750		100	30
Winter CV	0.840			
Analysis Speed	Normal			
Skip Steady State	x			
Drain Down Time (mins)	240			
Additional Storage (m³/ha)	0.0			
Storm Durations (mins)	15			
	30			
	60			
	120			
	180			
	240			
	360			
	480			
	600			
	720			
	960			
	1440			
Check Discharge Rate(s)	x			
1 year (l/s)				
30 year (l/s)				
100 year (l/s)				
Check Discharge Volume	x			
100 year 360 minute (m³)				

Soakaway											
Node	Base Inf Coefficient (m/hr)	Side Inf Coefficient (m/hr)	Safety Factor	Porosity	Invert Level (m)	Time to half empty (mins)	Pit Width (m)	Pit Length (m)	Depth (m)	Inf Depth (m)	Number Required
Soakaway 1	0.29520	0.29520	2.0	1.00	82.000	279	5.000	35.000	2.000		1
Soakaway 2	0.29520	0.29520	2.0	1.00	82.000	268	5.000	17.000	2.000		1

Default Values		Overrides					
Entry Loss (manhole)	0.250	Link	Entry Loss	Exit Loss		Node	Flood Risk (m)
Exit Loss (manhole)	0.250						
Entry Loss (junction)	0.000						
Exit Loss (junction)	0.000						
Flood Risk (m)	0.300						

Node Size	✓
Node Losses	x
Link Size	✓
Minimum Diameter (mm)	150
Link Length	✓
Maximum Length (m)	100.000
Coordinates	✓
Accuracy (m)	1.000
Crossings	✓
Cover Depth	✓
Minimum Cover Depth (m)	0.900
Maximum Cover Depth (m)	3.000
Backdrops	✓
Minimum Backdrop Height (m)	0.200
Maximum Backdrop Height (m)	1.500
Full Bore Velocity	✓
Minimum Full Bore Velocity (m/s)	1.000
Maximum Full Bore Velocity (m/s)	3.000
Proportional Velocity	x
Return Period (years)	100
Minimum Proportional Velocity (m/s)	0.750
Maximum Proportional Velocity (m/s)	3.000
Surcharged Depth	✓
Return Period (years)	100
Maximum Surcharged Depth (m)	0.200
Flooding	✓
Return Period (years)	30
Discharge Rates	x
1 year (l/s)	
30 year (l/s)	
100 year (l/s)	
Discharge Volume	x



100 year 360 minute (m³)	
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Summary								
The network has been designed for a 1 in 100 year storm using FSR rainfall								
It contains 12 nodes (0 outfalls) and 10 links								
The total impermeable area is 0.701 ha								
2 structures have been defined, providing 520m ³ of storage below the flood risk level								
Infiltration based on BRE 365 has been applied at 2 of the structures								
Simulations have been completed using FSR summer and winter storms from 15 to 1440 minute duration								
Test Results								
No manholes are smaller than that required by the library								
The node losses test has not been completed								
No circular links have diameters < 150mm								
No links have lengths > 100.000m								
No links have lengths that differ from their coordinated length by more than 1.000m								
No links cross one or more other links								
No links have cover depth outside the range 0.900-3.000m								
No nodes have backdrops outside the range 0.200-1.500m								
No links have full bore velocity outside the range 1.000-3.000m/s								
The proportional velocity test has not been completed								
No links have a surcharged depth greater than 0.200m during the 100 year return period								
No nodes flood during the 30 year return period								
The 1 year discharge rate test has not been completed								
The 30 year discharge rate test has not been completed								
The 100 year discharge rate test has not been completed								
The discharge volume test has not been completed								

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
30 year +30% 15 minute summer	298.632	84.502
30 year +30% 15 minute winter	209.566	84.502
30 year +30% 30 minute summer	198.894	56.280
30 year +30% 30 minute winter	139.575	56.280
30 year +30% 60 minute summer	136.032	35.949
30 year +30% 60 minute winter	90.377	35.949
30 year +30% 120 minute summer	84.471	22.323
30 year +30% 120 minute winter	56.121	22.323
30 year +30% 180 minute summer	64.962	16.717
30 year +30% 180 minute winter	42.227	16.717
30 year +30% 240 minute summer	51.289	13.554
30 year +30% 240 minute winter	34.075	13.554
30 year +30% 360 minute summer	38.971	10.029
30 year +30% 360 minute winter	25.332	10.029
30 year +30% 480 minute summer	30.646	8.099
30 year +30% 480 minute winter	20.361	8.099
30 year +30% 600 minute summer	25.070	6.857
30 year +30% 600 minute winter	17.130	6.857
30 year +30% 720 minute summer	22.324	5.983
30 year +30% 720 minute winter	15.003	5.983
30 year +30% 960 minute summer	18.311	4.822
30 year +30% 960 minute winter	12.129	4.822
30 year +30% 1440 minute summer	13.255	3.552
30 year +30% 1440 minute winter	8.908	3.552
100 year +30% 15 minute summer	385.416	109.059
100 year +30% 15 minute winter	270.467	109.059
100 year +30% 30 minute summer	259.276	73.366
100 year +30% 30 minute winter	181.948	73.366
100 year +30% 60 minute summer	178.538	47.182

100 year +30% 60 minute winter	118.617	47.182
100 year +30% 120 minute summer	111.107	29.362
100 year +30% 120 minute winter	73.817	29.362
100 year +30% 180 minute summer	85.292	21.949
100 year +30% 180 minute winter	55.442	21.949
100 year +30% 240 minute summer	67.129	17.740
100 year +30% 240 minute winter	44.599	17.740
100 year +30% 360 minute summer	50.653	13.035
100 year +30% 360 minute winter	32.926	13.035
100 year +30% 480 minute summer	39.657	10.480
100 year +30% 480 minute winter	26.347	10.480
100 year +30% 600 minute summer	32.325	8.842
100 year +30% 600 minute winter	22.086	8.842
100 year +30% 720 minute summer	28.695	7.691
100 year +30% 720 minute winter	19.285	7.691
100 year +30% 960 minute summer	23.416	6.166
100 year +30% 960 minute winter	15.511	6.166
100 year +30% 1440 minute summer	16.819	4.508
100 year +30% 1440 minute winter	11.303	4.508

Results for 30 year +30% Critical Storm Duration. Lowest mass balance: 99.93%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	S1	8	83.677	0.077	12.3	0.0870	0.0000	OK	3.000	S2	11.1	0.359	0.146	0.8265	
15 minute summer	S2	8	83.670	0.195	59.4	0.2208	0.0000	OK	3.001	S7	49.5	1.140	0.651	0.9546	
15 minute summer	S3	9	83.328	0.228	41.5	0.2579	0.0000	OK	2.000	S4	38.5	0.838	0.541	0.9648	
15 minute summer	S4	9	83.286	0.327	94.8	0.5774	0.0000	OK	2.001	S5	82.6	0.973	0.743	1.7373	
15 minute summer	S5	9	83.255	0.423	99.4	0.7482	0.0000	OK	2.002	S6	91.8	0.586	0.574	2.4635	
15 minute summer	S6	9	83.239	0.446	162.5	0.7882	0.0000	OK	2.003	S7	148.6	0.940	0.931	6.0232	
15 minute summer	S7	9	83.143	0.444	227.0	0.7841	0.0000	OK	2.004	Soakaway 1	230.5	1.575	1.424	1.1831	
120 minute winter	Soakaway 1	116	82.741	0.063	64.1	129.8146	0.0000	OK	Infiltration		9.6				
15 minute summer	S8	8	83.778	0.253	86.6	0.4474	0.0000	OK	1.000	S9	77.9	1.059	0.702	2.7449	
15 minute summer	S9	8	83.631	0.222	121.3	0.3921	0.0000	OK	1.001	S10	113.4	1.468	0.599	3.0224	
15 minute summer	S10	9	83.387	0.312	113.4	0.5518	0.0000	OK	1.002	Soakaway 2	108.7	1.251	0.984	3.2373	
120 minute winter	Soakaway 2	114	82.624	-0.336	27.4	53.0099	0.0000	OK	Infiltration		4.6				

Results for 100 year +30% Critical Storm Duration. Lowest mass balance: 99.93%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	S1	9	83.709	0.109	16.1	0.1232	0.0000	OK	3.000	S2	16.2	0.411	0.212	1.0316	
15 minute summer	S2	8	83.707	0.232	73.1	0.2626	0.0000	OK	3.001	S7	63.3	1.212	0.832	1.1348	
15 minute summer	S3	9	83.558	0.458	53.7	0.5182	0.0000	SURCHARGED	2.000	S4	45.8	0.841	0.645	1.1268	
15 minute summer	S4	9	83.530	0.571	93.0	1.0089	0.0000	SURCHARGED	2.001	S5	103.0	0.974	0.927	1.8361	
15 minute summer	S5	9	83.471	0.639	117.0	1.1298	0.0000	SURCHARGED	2.002	S6	128.8	0.813	0.806	2.4945	
15 minute summer	S6	9	83.436	0.643	199.2	1.1364	0.0000	SURCHARGED	2.003	S7	207.4	1.309	1.299	6.0356	
15 minute summer	S7	9	83.261	0.562	307.5	0.9923	0.0000	SURCHARGED	2.004	Soakaway 1	313.2	1.986	1.935	1.2568	
180 minute winter	Soakaway 1	168	83.014	0.336	63.0	177.9577	0.0000	OK	Infiltration		10.5				
15 minute summer	S8	8	83.831	0.306	112.2	0.5410	0.0000	OK	1.000	S9	100.6	1.109	0.907	3.3776	
15 minute summer	S9	8	83.678	0.269	156.7	0.4753	0.0000	OK	1.001	S10	142.1	1.536	0.751	3.5048	
15 minute summer	S10	9	83.490	0.415	142.1	0.7339	0.0000	SURCHARGED	1.002	Soakaway 2	143.4	1.348	1.298	3.7016	
120 minute winter	Soakaway 2	116	82.885	-0.075	36.2	75.2448	0.0000	OK	Infiltration		5.1				

Results for 30 year +30% 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 99.95%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	S1	8	83.677	0.077	12.3	0.0870	0.0000	OK	3.000	S2	11.1	0.359	0.146	0.8265	
15 minute summer	S2	8	83.670	0.195	59.4	0.2208	0.0000	OK	3.001	S7	49.5	1.140	0.651	0.9546	
15 minute summer	S3	9	83.328	0.228	41.5	0.2579	0.0000	OK	2.000	S4	38.5	0.838	0.541	0.9648	
15 minute summer	S4	9	83.286	0.327	94.8	0.5774	0.0000	OK	2.001	S5	82.6	0.973	0.743	1.7373	
15 minute summer	S5	9	83.255	0.423	99.4	0.7482	0.0000	OK	2.002	S6	91.8	0.586	0.574	2.4635	
15 minute summer	S6	9	83.239	0.446	162.5	0.7882	0.0000	OK	2.003	S7	148.6	0.940	0.931	6.0232	
15 minute summer	S7	9	83.143	0.444	227.0	0.7841	0.0000	OK	2.004	Soakaway 1	230.5	1.575	1.424	1.1831	
15 minute summer	Soakaway 1	18	82.398	-0.280	230.5	69.6138	0.0000	OK	Infiltration		8.5				
15 minute summer	S8	8	83.778	0.253	86.6	0.4474	0.0000	OK	1.000	S9	77.9	1.059	0.702	2.7449	
15 minute summer	S9	8	83.631	0.222	121.3	0.3921	0.0000	OK	1.001	S10	113.4	1.468	0.599	3.0224	
15 minute summer	S10	9	83.387	0.312	113.4	0.5518	0.0000	OK	1.002	Soakaway 2	108.7	1.251	0.984	3.2373	
15 minute summer	Soakaway 2	18	82.344	-0.616	108.7	29.2715	0.0000	OK	Infiltration		4.1				

Results for 30 year +30% 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 99.97%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	S1	8	83.670	0.070	9.8	0.0796	0.0000	OK	3.000	S2	9.4	0.342	0.123	0.7343	
15 minute winter	S2	8	83.652	0.177	47.4	0.2001	0.0000	OK	3.001	S7	44.4	1.096	0.584	0.8654	
15 minute winter	S3	8	83.258	0.158	32.7	0.1792	0.0000	OK	2.000	S4	31.7	0.833	0.446	0.7144	
15 minute winter	S4	9	83.240	0.281	76.1	0.4967	0.0000	OK	2.001	S5	70.3	0.941	0.632	1.5374	
15 minute winter	S5	9	83.212	0.380	83.5	0.6718	0.0000	OK	2.002	S6	80.0	0.563	0.500	2.3057	
15 minute winter	S6	9	83.197	0.404	140.3	0.7141	0.0000	OK	2.003	S7	138.8	0.912	0.870	5.7966	
15 minute winter	S7	9	83.121	0.422	213.6	0.7448	0.0000	OK	2.004	Soakaway 1	215.1	1.526	1.328	1.1488	
15 minute winter	Soakaway 1	18	82.451	-0.227	215.1	78.8974	0.0000	OK	Infiltration		8.7				
15 minute winter	S8	8	83.745	0.220	68.4	0.3894	0.0000	OK	1.000	S9	65.7	1.031	0.592	2.3848	
15 minute winter	S9	8	83.611	0.202	99.8	0.3567	0.0000	OK	1.001	S10	98.1	1.364	0.518	2.7384	
15 minute winter	S10	9	83.354	0.279	98.1	0.4936	0.0000	OK	1.002	Soakaway 2	95.6	1.216	0.865	2.9440	
15 minute winter	Soakaway 2	18	82.391	-0.569	95.6	33.2207	0.0000	OK	Infiltration		4.2				

Results for 30 year +30% 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	S1	16	83.666	0.066	8.3	0.0747	0.0000	OK	3.000	S2	8.3	0.332	0.109	0.6730	
30 minute summer	S2	16	83.640	0.165	40.6	0.1865	0.0000	OK	3.001	S7	40.3	1.063	0.529	0.8011	
30 minute summer	S3	16	83.243	0.143	27.8	0.1622	0.0000	OK	2.000	S4	27.7	0.820	0.389	0.5836	
30 minute summer	S4	16	83.199	0.240	65.3	0.4242	0.0000	OK	2.001	S5	63.3	0.947	0.569	1.2849	
30 minute summer	S5	16	83.162	0.330	74.5	0.5834	0.0000	OK	2.002	S6	70.4	0.561	0.440	2.0401	
30 minute summer	S6	16	83.149	0.356	126.8	0.6290	0.0000	OK	2.003	S7	121.8	0.879	0.763	5.3071	
30 minute summer	S7	16	83.083	0.384	191.9	0.6788	0.0000	OK	2.004	Soakaway 1	187.4	1.439	1.157	1.0692	
30 minute summer	Soakaway 1	32	82.510	-0.168	187.4	89.3139	0.0000	OK	Infiltration		8.8				
30 minute summer	S8	16	83.726	0.201	58.0	0.3550	0.0000	OK	1.000	S9	58.3	1.008	0.525	2.1578	
30 minute summer	S9	16	83.598	0.189	87.2	0.3334	0.0000	OK	1.001	S10	87.3	1.320	0.461	2.4631	
30 minute summer	S10	17	83.327	0.252	87.3	0.4458	0.0000	OK	1.002	Soakaway 2	84.5	1.177	0.765	2.6764	
30 minute summer	Soakaway 2	33	82.440	-0.520	84.5	37.4305	0.0000	OK	Infiltration		4.3				

Results for 30 year +30% 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	S1	16	83.659	0.059	6.5	0.0662	0.0000	OK	3.000	S2	6.5	0.314	0.085	0.5603	
30 minute winter	S2	16	83.617	0.142	31.9	0.1609	0.0000	OK	3.001	S7	31.8	1.007	0.418	0.6683	
30 minute winter	S3	16	83.222	0.122	21.8	0.1380	0.0000	OK	2.000	S4	21.8	0.830	0.306	0.4361	
30 minute winter	S4	16	83.158	0.199	51.4	0.3524	0.0000	OK	2.001	S5	51.0	0.924	0.458	0.9956	
30 minute winter	S5	16	83.108	0.276	59.8	0.4875	0.0000	OK	2.002	S6	58.7	0.551	0.367	1.6918	
30 minute winter	S6	16	83.095	0.302	102.9	0.5334	0.0000	OK	2.003	S7	101.2	0.841	0.634	4.5883	
30 minute winter	S7	16	83.037	0.338	156.4	0.5978	0.0000	OK	2.004	Soakaway 1	154.9	1.344	0.957	0.9509	
30 minute winter	Soakaway 1	32	82.582	-0.096	154.9	101.7680	0.0000	OK	Infiltration		9.1				
30 minute winter	S8	16	83.698	0.173	45.6	0.3064	0.0000	OK	1.000	S9	45.7	0.961	0.412	1.7745	
30 minute winter	S9	16	83.570	0.161	68.5	0.2848	0.0000	OK	1.001	S10	68.5	1.233	0.362	2.0780	
30 minute winter	S10	17	83.294	0.219	68.5	0.3866	0.0000	OK	1.002	Soakaway 2	67.7	1.104	0.613	2.2867	
30 minute winter	Soakaway 2	32	82.503	-0.457	67.7	42.7246	0.0000	OK	Infiltration		4.4				

Results for 30 year +30% 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	S1	31	83.655	0.055	5.7	0.0621	0.0000	OK	3.000	S2	5.7	0.306	0.075	0.5050	
60 minute summer	S2	31	83.606	0.131	27.8	0.1482	0.0000	OK	3.001	S7	27.6	0.972	0.363	0.6015	
60 minute summer	S3	31	83.211	0.111	19.0	0.1259	0.0000	OK	2.000	S4	19.0	0.834	0.268	0.3652	
60 minute summer	S4	31	83.137	0.178	44.8	0.3153	0.0000	OK	2.001	S5	44.6	0.935	0.401	0.8325	
60 minute summer	S5	31	83.077	0.244	52.3	0.4320	0.0000	OK	2.002	S6	50.9	0.547	0.318	1.4745	
60 minute summer	S6	31	83.063	0.270	89.4	0.4773	0.0000	OK	2.003	S7	87.7	0.813	0.550	4.1092	
60 minute summer	S7	31	83.009	0.310	135.7	0.5476	0.0000	OK	2.004	Soakaway 1	133.6	1.275	0.825	0.8666	
60 minute summer	Soakaway 1	61	82.600	-0.078	133.6	104.9335	0.0000	OK	Infiltration		9.1				
60 minute summer	S8	31	83.685	0.160	39.7	0.2827	0.0000	OK	1.000	S9	39.8	0.935	0.359	1.5913	
60 minute summer	S9	31	83.557	0.148	59.6	0.2617	0.0000	OK	1.001	S10	59.6	1.205	0.315	1.8493	
60 minute summer	S10	32	83.275	0.200	59.6	0.3533	0.0000	OK	1.002	Soakaway 2	58.5	1.060	0.530	2.0590	
60 minute summer	Soakaway 2	62	82.512	-0.448	58.5	43.5444	0.0000	OK	Infiltration		4.4				

Results for 30 year +30% 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	S1	31	83.647	0.047	4.2	0.0536	0.0000	OK	3.000	S2	4.2	0.284	0.055	0.4044	
60 minute winter	S2	31	83.586	0.111	20.6	0.1253	0.0000	OK	3.001	S7	20.6	0.901	0.270	0.4828	
60 minute winter	S3	31	83.195	0.095	14.1	0.1069	0.0000	OK	2.000	S4	14.1	0.770	0.199	0.2931	
60 minute winter	S4	31	83.106	0.147	33.3	0.2597	0.0000	OK	2.001	S5	33.3	0.897	0.299	0.6186	
60 minute winter	S5	31	83.029	0.197	39.0	0.3486	0.0000	OK	2.002	S6	38.9	0.537	0.243	1.1422	
60 minute winter	S6	31	83.016	0.223	67.6	0.3937	0.0000	OK	2.003	S7	67.2	0.767	0.421	3.3387	
60 minute winter	S7	31	82.964	0.265	103.0	0.4681	0.0000	OK	2.004	Soakaway 1	102.7	1.171	0.634	0.7253	
60 minute winter	Soakaway 1	60	82.690	0.012	102.7	120.7702	0.0000	OK	Infiltration		9.4				
60 minute winter	S8	31	83.660	0.135	29.5	0.2392	0.0000	OK	1.000	S9	29.5	0.873	0.266	1.2622	
60 minute winter	S9	31	83.533	0.124	44.3	0.2194	0.0000	OK	1.001	S10	44.3	1.112	0.234	1.4925	
60 minute winter	S10	32	83.245	0.170	44.3	0.2997	0.0000	OK	1.002	Soakaway 2	44.1	0.980	0.400	1.6813	
60 minute winter	Soakaway 2	61	82.591	-0.369	44.1	50.2594	0.0000	OK	Infiltration		4.6				

Results for 30 year +30% 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	S1	62	83.643	0.043	3.5	0.0490	0.0000	OK	3.000	S2	3.5	0.270	0.046	0.3543	
120 minute summer	S2	62	83.575	0.100	17.2	0.1136	0.0000	OK	3.001	S7	17.2	0.860	0.226	0.4233	
120 minute summer	S3	62	83.186	0.086	11.8	0.0972	0.0000	OK	2.000	S4	11.8	0.734	0.166	0.2573	
120 minute summer	S4	62	83.092	0.133	27.8	0.2352	0.0000	OK	2.001	S5	27.8	0.854	0.250	0.5421	
120 minute summer	S5	62	83.004	0.172	32.6	0.3045	0.0000	OK	2.002	S6	32.6	0.533	0.204	0.9657	
120 minute summer	S6	62	82.990	0.197	56.4	0.3487	0.0000	OK	2.003	S7	56.3	0.738	0.353	2.9080	
120 minute summer	S7	62	82.939	0.240	86.2	0.4235	0.0000	OK	2.004	Soakaway 1	86.0	1.108	0.531	0.6424	
120 minute summer	Soakaway 1	104	82.635	-0.043	86.0	111.1920	0.0000	OK	Infiltration		9.3				
120 minute summer	S8	62	83.648	0.123	24.6	0.2168	0.0000	OK	1.000	S9	24.6	0.837	0.222	1.0980	
120 minute summer	S9	62	83.521	0.112	36.9	0.1976	0.0000	OK	1.001	S10	36.9	1.066	0.195	1.3024	
120 minute summer	S10	62	83.228	0.153	36.9	0.2704	0.0000	OK	1.002	Soakaway 2	36.7	0.930	0.332	1.4713	
120 minute summer	Soakaway 2	100	82.537	-0.423	36.7	45.6636	0.0000	OK	Infiltration		4.5				

Results for 30 year +30% 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	S1	62	83.638	0.038	2.6	0.0426	0.0000	OK	3.000	S2	2.6	0.250	0.034	0.2851	
120 minute winter	S2	62	83.561	0.086	12.8	0.0969	0.0000	OK	3.001	S7	12.8	0.794	0.168	0.3410	
120 minute winter	S3	62	83.174	0.074	8.8	0.0833	0.0000	OK	2.000	S4	8.8	0.679	0.124	0.2075	
120 minute winter	S4	62	83.073	0.114	20.7	0.2009	0.0000	OK	2.001	S5	20.7	0.789	0.186	0.4373	
120 minute winter	S5	62	82.971	0.139	24.2	0.2453	0.0000	OK	2.002	S6	24.2	0.520	0.151	0.7333	
120 minute winter	S6	62	82.956	0.163	42.0	0.2875	0.0000	OK	2.003	S7	42.0	0.693	0.263	2.3110	
120 minute winter	S7	62	82.903	0.204	64.2	0.3599	0.0000	OK	2.004	Soakaway 1	64.1	1.015	0.396	0.5229	
120 minute winter	Soakaway 1	116	82.741	0.063	64.1	129.8146	0.0000	OK	Infiltration		9.6				
120 minute winter	S8	62	83.630	0.105	18.3	0.1855	0.0000	OK	1.000	S9	18.3	0.776	0.165	0.8814	
120 minute winter	S9	62	83.504	0.095	27.5	0.1685	0.0000	OK	1.001	S10	27.5	0.988	0.145	1.0461	
120 minute winter	S10	62	83.205	0.130	27.5	0.2304	0.0000	OK	1.002	Soakaway 2	27.4	0.859	0.248	1.1914	
120 minute winter	Soakaway 2	114	82.624	-0.336	27.4	53.0099	0.0000	OK	Infiltration		4.6				

Results for 30 year +30% 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	S1	92	83.638	0.038	2.7	0.0430	0.0000	OK	3.000	S2	2.7	0.252	0.035	0.2891	
180 minute summer	S2	92	83.562	0.087	13.2	0.0979	0.0000	OK	3.001	S7	13.0	0.795	0.170	0.3450	
180 minute summer	S3	92	83.175	0.075	9.1	0.0844	0.0000	OK	2.000	S4	9.0	0.682	0.126	0.2109	
180 minute summer	S4	92	83.074	0.115	21.3	0.2030	0.0000	OK	2.001	S5	21.0	0.790	0.189	0.4428	
180 minute summer	S5	92	82.972	0.139	24.7	0.2465	0.0000	OK	2.002	S6	24.4	0.522	0.153	0.7370	
180 minute summer	S6	92	82.956	0.163	42.8	0.2883	0.0000	OK	2.003	S7	42.0	0.693	0.263	2.3111	
180 minute summer	S7	92	82.902	0.203	64.7	0.3592	0.0000	OK	2.004	Soakaway 1	63.7	1.012	0.394	0.5210	
180 minute summer	Soakaway 1	140	82.634	-0.044	63.7	110.9035	0.0000	OK	Infiltration		9.3				
180 minute summer	S8	92	83.631	0.106	18.9	0.1880	0.0000	OK	1.000	S9	18.7	0.780	0.168	0.8938	
180 minute summer	S9	92	83.505	0.096	28.1	0.1696	0.0000	OK	1.001	S10	27.7	0.997	0.147	1.0432	
180 minute summer	S10	92	83.204	0.129	27.7	0.2286	0.0000	OK	1.002	Soakaway 2	26.9	0.852	0.243	1.1767	
180 minute summer	Soakaway 2	132	82.531	-0.429	26.9	45.1485	0.0000	OK	Infiltration		4.4				

Results for 30 year +30% 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	S1	92	83.633	0.033	2.0	0.0375	0.0000	OK	3.000	S2	2.0	0.234	0.026	0.2328	
180 minute winter	S2	92	83.549	0.074	9.7	0.0836	0.0000	OK	3.001	S7	9.6	0.734	0.127	0.2779	
180 minute winter	S3	92	83.163	0.063	6.6	0.0717	0.0000	OK	2.000	S4	6.6	0.628	0.093	0.1676	
180 minute winter	S4	92	83.057	0.098	15.6	0.1728	0.0000	OK	2.001	S5	15.5	0.730	0.140	0.3542	
180 minute winter	S5	92	82.946	0.114	18.2	0.2022	0.0000	OK	2.002	S6	18.2	0.506	0.114	0.5668	
180 minute winter	S6	92	82.929	0.136	31.6	0.2402	0.0000	OK	2.003	S7	31.4	0.650	0.197	1.8463	
180 minute winter	S7	92	82.873	0.174	48.2	0.3078	0.0000	OK	2.004	Soakaway 1	48.0	0.934	0.297	0.4254	
180 minute winter	Soakaway 1	148	82.735	0.057	48.0	128.8020	0.0000	OK	Infiltration		9.6				
180 minute winter	S8	92	83.616	0.091	13.8	0.1604	0.0000	OK	1.000	S9	13.8	0.716	0.124	0.7176	
180 minute winter	S9	92	83.492	0.083	20.7	0.1458	0.0000	OK	1.001	S10	20.6	0.913	0.109	0.8466	
180 minute winter	S10	92	83.187	0.112	20.6	0.1972	0.0000	OK	1.002	Soakaway 2	20.4	0.793	0.185	0.9624	
180 minute winter	Soakaway 2	144	82.616	-0.344	20.4	52.3532	0.0000	OK	Infiltration		4.6				

Results for 30 year +30% 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	S1	124	83.634	0.034	2.1	0.0385	0.0000	OK	3.000	S2	2.1	0.235	0.028	0.2450	
240 minute summer	S2	124	83.552	0.077	10.4	0.0869	0.0000	OK	3.001	S7	10.4	0.750	0.137	0.2935	
240 minute summer	S3	124	83.166	0.066	7.2	0.0750	0.0000	OK	2.000	S4	7.2	0.643	0.101	0.1792	
240 minute summer	S4	124	83.061	0.102	16.9	0.1805	0.0000	OK	2.001	S5	16.9	0.748	0.152	0.3766	
240 minute summer	S5	124	82.953	0.121	19.8	0.2139	0.0000	OK	2.002	S6	19.8	0.511	0.124	0.6113	
240 minute summer	S6	124	82.936	0.143	34.3	0.2532	0.0000	OK	2.003	S7	34.3	0.663	0.215	1.9752	
240 minute summer	S7	124	82.882	0.183	52.4	0.3227	0.0000	OK	2.004	Soakaway 1	52.4	0.957	0.324	0.4533	
240 minute summer	Soakaway 1	172	82.621	-0.057	52.4	108.6275	0.0000	OK	Infiltration		9.2				
240 minute summer	S8	124	83.620	0.095	15.0	0.1675	0.0000	OK	1.000	S9	15.0	0.734	0.135	0.7639	
240 minute summer	S9	124	83.495	0.086	22.5	0.1524	0.0000	OK	1.001	S10	22.5	0.938	0.119	0.9050	
240 minute summer	S10	124	83.192	0.117	22.5	0.2072	0.0000	OK	1.002	Soakaway 2	22.5	0.815	0.204	1.0302	
240 minute summer	Soakaway 2	168	82.518	-0.442	22.5	43.9945	0.0000	OK	Infiltration		4.4				

Results for 30 year +30% 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	S1	124	83.630	0.030	1.6	0.0338	0.0000	OK	3.000	S2	1.6	0.220	0.021	0.1993	
240 minute winter	S2	124	83.541	0.066	7.8	0.0749	0.0000	OK	3.001	S7	7.8	0.692	0.102	0.2384	
240 minute winter	S3	124	83.157	0.057	5.3	0.0642	0.0000	OK	2.000	S4	5.3	0.591	0.075	0.1434	
240 minute winter	S4	124	83.046	0.087	12.5	0.1545	0.0000	OK	2.001	S5	12.5	0.689	0.112	0.3024	
240 minute winter	S5	124	82.932	0.100	14.6	0.1761	0.0000	OK	2.002	S6	14.6	0.490	0.091	0.4697	
240 minute winter	S6	124	82.912	0.119	25.4	0.2111	0.0000	OK	2.003	S7	25.4	0.620	0.159	1.5669	
240 minute winter	S7	124	82.855	0.156	38.9	0.2751	0.0000	OK	2.004	Soakaway 1	38.9	0.881	0.240	0.3658	
240 minute winter	Soakaway 1	184	82.715	0.037	38.9	125.2030	0.0000	OK	Infiltration		9.5				
240 minute winter	S8	124	83.606	0.081	11.1	0.1438	0.0000	OK	1.000	S9	11.1	0.672	0.100	0.6165	
240 minute winter	S9	124	83.483	0.074	16.7	0.1314	0.0000	OK	1.001	S10	16.7	0.859	0.088	0.7301	
240 minute winter	S10	124	83.175	0.100	16.7	0.1774	0.0000	OK	1.002	Soakaway 2	16.7	0.751	0.151	0.8293	
240 minute winter	Soakaway 2	184	82.595	-0.365	16.7	50.5985	0.0000	OK	Infiltration		4.6				

Results for 30 year +30% 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	S1	184	83.630	0.030	1.6	0.0337	0.0000	OK	3.000	S2	1.6	0.218	0.021	0.1993	
360 minute summer	S2	184	83.541	0.066	7.9	0.0750	0.0000	OK	3.001	S7	7.8	0.692	0.102	0.2385	
360 minute summer	S3	184	83.157	0.057	5.4	0.0647	0.0000	OK	2.000	S4	5.4	0.593	0.075	0.1447	
360 minute summer	S4	184	83.047	0.088	12.8	0.1558	0.0000	OK	2.001	S5	12.7	0.691	0.114	0.3058	
360 minute summer	S5	184	82.932	0.100	14.9	0.1774	0.0000	OK	2.002	S6	14.8	0.492	0.093	0.4739	
360 minute summer	S6	184	82.913	0.120	25.8	0.2121	0.0000	OK	2.003	S7	25.5	0.621	0.160	1.5712	
360 minute summer	S7	184	82.855	0.156	39.1	0.2750	0.0000	OK	2.004	Soakaway 1	38.8	0.880	0.240	0.3654	
360 minute summer	Soakaway 1	240	82.583	-0.095	38.8	101.9768	0.0000	OK	Infiltration		9.1				
360 minute summer	S8	184	83.607	0.082	11.4	0.1454	0.0000	OK	1.000	S9	11.3	0.677	0.102	0.6238	
360 minute summer	S9	184	83.484	0.075	17.0	0.1321	0.0000	OK	1.001	S10	16.9	0.866	0.089	0.7306	
360 minute summer	S10	184	83.175	0.100	16.9	0.1769	0.0000	OK	1.002	Soakaway 2	16.6	0.749	0.150	0.8251	
360 minute summer	Soakaway 2	240	82.480	-0.480	16.6	40.8184	0.0000	OK	Infiltration		4.4				

Results for 30 year +30% 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	S1	184	83.626	0.026	1.2	0.0295	0.0000	OK	3.000	S2	1.2	0.203	0.016	0.1608	
360 minute winter	S2	184	83.532	0.057	5.8	0.0643	0.0000	OK	3.001	S7	5.8	0.635	0.076	0.1923	
360 minute winter	S3	184	83.149	0.049	4.0	0.0557	0.0000	OK	2.000	S4	4.0	0.550	0.056	0.1162	
360 minute winter	S4	184	83.035	0.076	9.4	0.1335	0.0000	OK	2.001	S5	9.4	0.636	0.084	0.2456	
360 minute winter	S5	184	82.916	0.084	11.0	0.1484	0.0000	OK	2.002	S6	11.0	0.462	0.069	0.3745	
360 minute winter	S6	184	82.896	0.103	19.0	0.1816	0.0000	OK	2.003	S7	18.9	0.572	0.119	1.2655	
360 minute winter	S7	184	82.832	0.133	29.0	0.2356	0.0000	OK	2.004	Soakaway 1	28.9	0.812	0.179	0.2954	
360 minute winter	Soakaway 1	264	82.659	-0.019	28.9	115.3094	0.0000	OK	Infiltration		9.3				
360 minute winter	S8	184	83.595	0.070	8.3	0.1244	0.0000	OK	1.000	S9	8.3	0.619	0.075	0.5002	
360 minute winter	S9	184	83.473	0.064	12.4	0.1135	0.0000	OK	1.001	S10	12.4	0.789	0.065	0.5881	
360 minute winter	S10	184	83.161	0.086	12.4	0.1518	0.0000	OK	1.002	Soakaway 2	12.3	0.691	0.111	0.6650	
360 minute winter	Soakaway 2	256	82.534	-0.426	12.3	45.3708	0.0000	OK	Infiltration		4.4				

Results for 30 year +30% 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	S1	248	83.627	0.027	1.3	0.0307	0.0000	OK	3.000	S2	1.3	0.208	0.017	0.1710	
480 minute summer	S2	248	83.534	0.059	6.3	0.0672	0.0000	OK	3.001	S7	6.3	0.652	0.083	0.2045	
480 minute summer	S3	248	83.151	0.051	4.3	0.0578	0.0000	OK	2.000	S4	4.3	0.560	0.061	0.1228	
480 minute summer	S4	248	83.037	0.078	10.1	0.1385	0.0000	OK	2.001	S5	10.1	0.651	0.091	0.2588	
480 minute summer	S5	248	82.920	0.088	11.8	0.1550	0.0000	OK	2.002	S6	11.8	0.469	0.074	0.3973	
480 minute summer	S6	248	82.900	0.107	20.5	0.1890	0.0000	OK	2.003	S7	20.5	0.584	0.128	1.3412	
480 minute summer	S7	248	82.838	0.139	31.4	0.2459	0.0000	OK	2.004	Soakaway 1	31.4	0.830	0.194	0.3135	
480 minute summer	Soakaway 1	312	82.545	-0.133	31.4	95.3212	0.0000	OK	Infiltration		9.0				
480 minute summer	S8	248	83.598	0.073	8.9	0.1288	0.0000	OK	1.000	S9	8.9	0.630	0.080	0.5275	
480 minute summer	S9	248	83.476	0.067	13.4	0.1181	0.0000	OK	1.001	S10	13.4	0.808	0.071	0.6241	
480 minute summer	S10	248	83.165	0.090	13.4	0.1585	0.0000	OK	1.002	Soakaway 2	13.4	0.706	0.121	0.7086	
480 minute summer	Soakaway 2	304	82.442	-0.518	13.4	37.5513	0.0000	OK	Infiltration		4.3				

Results for 30 year +30% 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	S1	248	83.624	0.024	1.0	0.0271	0.0000	OK	3.000	S2	1.0	0.196	0.013	0.1395	
480 minute winter	S2	248	83.526	0.051	4.7	0.0580	0.0000	OK	3.001	S7	4.7	0.599	0.062	0.1660	
480 minute winter	S3	248	83.144	0.044	3.2	0.0499	0.0000	OK	2.000	S4	3.2	0.517	0.045	0.0991	
480 minute winter	S4	248	83.027	0.068	7.5	0.1194	0.0000	OK	2.001	S5	7.5	0.600	0.067	0.2082	
480 minute winter	S5	248	82.906	0.074	8.8	0.1306	0.0000	OK	2.002	S6	8.8	0.438	0.055	0.3176	
480 minute winter	S6	248	82.885	0.092	15.3	0.1633	0.0000	OK	2.003	S7	15.3	0.539	0.096	1.0850	
480 minute winter	S7	248	82.818	0.119	23.4	0.2108	0.0000	OK	2.004	Soakaway 1	23.4	0.767	0.145	0.2527	
480 minute winter	Soakaway 1	336	82.599	-0.079	23.4	104.8848	0.0000	OK	Infiltration		9.1				
480 minute winter	S8	248	83.588	0.063	6.7	0.1121	0.0000	OK	1.000	S9	6.7	0.581	0.060	0.4304	
480 minute winter	S9	248	83.467	0.058	10.0	0.1024	0.0000	OK	1.001	S10	10.0	0.742	0.053	0.5066	
480 minute winter	S10	248	83.152	0.077	10.0	0.1368	0.0000	OK	1.002	Soakaway 2	10.0	0.653	0.091	0.5724	
480 minute winter	Soakaway 2	336	82.475	-0.485	10.0	40.4011	0.0000	OK	Infiltration		4.3				

Results for 30 year +30% 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	S1	315	83.624	0.024	1.0	0.0271	0.0000	OK	3.000	S2	1.0	0.189	0.013	0.1459	
600 minute summer	S2	315	83.528	0.053	5.1	0.0605	0.0000	OK	3.001	S7	5.1	0.613	0.067	0.1760	
600 minute summer	S3	315	83.146	0.046	3.5	0.0522	0.0000	OK	2.000	S4	3.5	0.531	0.049	0.1055	
600 minute summer	S4	315	83.030	0.071	8.3	0.1256	0.0000	OK	2.001	S5	8.3	0.615	0.075	0.2248	
600 minute summer	S5	315	82.910	0.078	9.7	0.1382	0.0000	OK	2.002	S6	9.7	0.449	0.061	0.3413	
600 minute summer	S6	315	82.890	0.097	16.8	0.1711	0.0000	OK	2.003	S7	16.8	0.554	0.105	1.1603	
600 minute summer	S7	315	82.824	0.125	25.7	0.2212	0.0000	OK	2.004	Soakaway 1	25.7	0.787	0.159	0.2703	
600 minute summer	Soakaway 1	390	82.501	-0.177	25.7	87.7474	0.0000	OK	Infiltration		8.8				
600 minute summer	S8	315	83.591	0.066	7.3	0.1169	0.0000	OK	1.000	S9	7.3	0.594	0.066	0.4586	
600 minute summer	S9	315	83.470	0.061	11.0	0.1072	0.0000	OK	1.001	S10	11.0	0.763	0.058	0.5421	
600 minute summer	S10	315	83.156	0.081	11.0	0.1435	0.0000	OK	1.002	Soakaway 2	11.0	0.670	0.100	0.6124	
600 minute summer	Soakaway 2	375	82.404	-0.556	11.0	34.3502	0.0000	OK	Infiltration		4.2				

Results for 30 year +30% 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	S1	300	83.622	0.022	0.8	0.0245	0.0000	OK	3.000	S2	0.8	0.183	0.010	0.1214	
600 minute winter	S2	315	83.522	0.047	3.9	0.0529	0.0000	OK	3.001	S7	3.9	0.568	0.051	0.1453	
600 minute winter	S3	315	83.141	0.041	2.7	0.0460	0.0000	OK	2.000	S4	2.7	0.493	0.038	0.0878	
600 minute winter	S4	315	83.021	0.062	6.3	0.1095	0.0000	OK	2.001	S5	6.3	0.573	0.057	0.1832	
600 minute winter	S5	315	82.899	0.067	7.4	0.1182	0.0000	OK	2.002	S6	7.4	0.421	0.046	0.2778	
600 minute winter	S6	315	82.878	0.085	12.8	0.1496	0.0000	OK	2.003	S7	12.8	0.513	0.080	0.9552	
600 minute winter	S7	315	82.808	0.109	19.6	0.1924	0.0000	OK	2.004	Soakaway 1	19.6	0.731	0.121	0.2221	
600 minute winter	Soakaway 1	420	82.537	-0.141	19.6	93.9008	0.0000	OK	Infiltration		8.9				
600 minute winter	S8	315	83.583	0.058	5.6	0.1026	0.0000	OK	1.000	S9	5.6	0.551	0.050	0.3797	
600 minute winter	S9	315	83.462	0.053	8.4	0.0941	0.0000	OK	1.001	S10	8.4	0.704	0.044	0.4481	
600 minute winter	S10	315	83.146	0.071	8.4	0.1255	0.0000	OK	1.002	Soakaway 2	8.4	0.620	0.076	0.5058	
600 minute winter	Soakaway 2	405	82.417	-0.543	8.4	35.4140	0.0000	OK	Infiltration		4.2				

Results for 30 year +30% 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	S1	375	83.623	0.023	0.9	0.0258	0.0000	OK	3.000	S2	0.9	0.185	0.012	0.1339	
720 minute summer	S2	375	83.525	0.050	4.5	0.0568	0.0000	OK	3.001	S7	4.5	0.591	0.059	0.1610	
720 minute summer	S3	375	83.143	0.043	3.1	0.0492	0.0000	OK	2.000	S4	3.1	0.512	0.044	0.0969	
720 minute summer	S4	375	83.026	0.067	7.3	0.1178	0.0000	OK	2.001	S5	7.3	0.596	0.066	0.2040	
720 minute summer	S5	375	82.905	0.073	8.6	0.1289	0.0000	OK	2.002	S6	8.6	0.436	0.054	0.3116	
720 minute summer	S6	375	82.884	0.091	14.9	0.1612	0.0000	OK	2.003	S7	14.9	0.536	0.093	1.0631	
720 minute summer	S7	375	82.816	0.117	22.7	0.2076	0.0000	OK	2.004	Soakaway 1	22.7	0.760	0.140	0.2474	
720 minute summer	Soakaway 1	450	82.466	-0.212	22.7	81.5399	0.0000	OK	Infiltration		8.7				
720 minute summer	S8	375	83.587	0.062	6.5	0.1104	0.0000	OK	1.000	S9	6.5	0.575	0.059	0.4226	
720 minute summer	S9	375	83.466	0.057	9.8	0.1014	0.0000	OK	1.001	S10	9.8	0.739	0.052	0.4994	
720 minute summer	S10	375	83.152	0.077	9.8	0.1354	0.0000	OK	1.002	Soakaway 2	9.8	0.649	0.089	0.5643	
720 minute summer	Soakaway 2	450	82.365	-0.595	9.8	31.0475	0.0000	OK	Infiltration		4.1				

Results for 30 year +30% 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	S1	360	83.620	0.020	0.7	0.0231	0.0000	OK	3.000	S2	0.7	0.177	0.009	0.1102	
720 minute winter	S2	375	83.519	0.044	3.4	0.0494	0.0000	OK	3.001	S7	3.4	0.546	0.045	0.1319	
720 minute winter	S3	360	83.138	0.038	2.3	0.0426	0.0000	OK	2.000	S4	2.3	0.474	0.032	0.0776	
720 minute winter	S4	375	83.017	0.058	5.5	0.1024	0.0000	OK	2.001	S5	5.5	0.550	0.049	0.1664	
720 minute winter	S5	375	82.894	0.062	6.4	0.1087	0.0000	OK	2.002	S6	6.4	0.405	0.040	0.2500	
720 minute winter	S6	375	82.872	0.079	11.2	0.1403	0.0000	OK	2.003	S7	11.2	0.494	0.070	0.8667	
720 minute winter	S7	375	82.801	0.102	17.1	0.1794	0.0000	OK	2.004	Soakaway 1	17.1	0.705	0.106	0.2008	
720 minute winter	Soakaway 1	480	82.484	-0.194	17.1	84.7099	0.0000	OK	Infiltration		8.8				
720 minute winter	S8	375	83.579	0.054	4.9	0.0961	0.0000	OK	1.000	S9	4.9	0.528	0.044	0.3465	
720 minute winter	S9	375	83.459	0.050	7.4	0.0886	0.0000	OK	1.001	S10	7.4	0.679	0.039	0.4099	
720 minute winter	S10	375	83.142	0.067	7.4	0.1180	0.0000	OK	1.002	Soakaway 2	7.4	0.600	0.067	0.4601	
720 minute winter	Soakaway 2	480	82.360	-0.600	7.4	30.5620	0.0000	OK	Infiltration		4.1				

Results for 30 year +30% 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	S1	495	83.622	0.022	0.8	0.0245	0.0000	OK	3.000	S2	0.8	0.184	0.010	0.1196	
960 minute summer	S2	495	83.521	0.046	3.8	0.0522	0.0000	OK	3.001	S7	3.8	0.564	0.050	0.1426	
960 minute summer	S3	495	83.140	0.040	2.6	0.0452	0.0000	OK	2.000	S4	2.6	0.488	0.037	0.0852	
960 minute summer	S4	495	83.020	0.061	6.1	0.1078	0.0000	OK	2.001	S5	6.1	0.568	0.055	0.1791	
960 minute summer	S5	495	82.897	0.065	7.1	0.1154	0.0000	OK	2.002	S6	7.1	0.417	0.044	0.2694	
960 minute summer	S6	495	82.876	0.083	12.3	0.1468	0.0000	OK	2.003	S7	12.3	0.507	0.077	0.9275	
960 minute summer	S7	495	82.806	0.107	18.8	0.1883	0.0000	OK	2.004	Soakaway 1	18.8	0.724	0.116	0.2153	
960 minute summer	Soakaway 1	585	82.399	-0.279	18.8	69.7877	0.0000	OK	Infiltration		8.5				
960 minute summer	S8	495	83.582	0.057	5.3	0.0999	0.0000	OK	1.000	S9	5.3	0.541	0.048	0.3660	
960 minute summer	S9	495	83.461	0.052	8.0	0.0919	0.0000	OK	1.001	S10	8.0	0.695	0.042	0.4331	
960 minute summer	S10	495	83.144	0.069	8.0	0.1226	0.0000	OK	1.002	Soakaway 2	8.0	0.613	0.072	0.4877	
960 minute summer	Soakaway 2	570	82.300	-0.660	8.0	25.5361	0.0000	OK	Infiltration		4.0				

Results for 30 year +30% 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	S1	480	83.619	0.019	0.6	0.0215	0.0000	OK	3.000	S2	0.6	0.170	0.008	0.0966	
960 minute winter	S2	480	83.515	0.040	2.8	0.0449	0.0000	OK	3.001	S7	2.8	0.516	0.037	0.1149	
960 minute winter	S3	480	83.134	0.034	1.9	0.0389	0.0000	OK	2.000	S4	1.9	0.452	0.027	0.0674	
960 minute winter	S4	495	83.012	0.053	4.5	0.0929	0.0000	OK	2.001	S5	4.5	0.522	0.040	0.1439	
960 minute winter	S5	495	82.887	0.055	5.3	0.0977	0.0000	OK	2.002	S6	5.3	0.390	0.033	0.2151	
960 minute winter	S6	495	82.865	0.072	9.1	0.1267	0.0000	OK	2.003	S7	9.1	0.465	0.057	0.7486	
960 minute winter	S7	495	82.791	0.092	13.9	0.1619	0.0000	OK	2.004	Soakaway 1	13.9	0.663	0.086	0.1736	
960 minute winter	Soakaway 1	615	82.375	-0.303	13.9	65.6007	0.0000	OK	Infiltration		8.4				
960 minute winter	S8	495	83.574	0.049	4.0	0.0873	0.0000	OK	1.000	S9	4.0	0.498	0.036	0.3000	
960 minute winter	S9	495	83.454	0.045	6.0	0.0802	0.0000	OK	1.001	S10	6.0	0.637	0.032	0.3540	
960 minute winter	S10	495	83.135	0.060	6.0	0.1066	0.0000	OK	1.002	Soakaway 2	6.0	0.567	0.054	0.3956	
960 minute winter	Soakaway 2	600	82.265	-0.695	6.0	22.5085	0.0000	OK	Infiltration		4.0				

Results for 30 year +30% 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	S1	750	83.619	0.019	0.6	0.0215	0.0000	OK	3.000	S2	0.6	0.170	0.008	0.0966	
1440 minute summer	S2	750	83.515	0.040	2.8	0.0449	0.0000	OK	3.001	S7	2.8	0.516	0.037	0.1149	
1440 minute summer	S3	750	83.134	0.034	1.9	0.0389	0.0000	OK	2.000	S4	1.9	0.452	0.027	0.0674	
1440 minute summer	S4	750	83.011	0.052	4.4	0.0919	0.0000	OK	2.001	S5	4.4	0.519	0.040	0.1414	
1440 minute summer	S5	750	82.886	0.054	5.1	0.0959	0.0000	OK	2.002	S6	5.1	0.383	0.032	0.2108	
1440 minute summer	S6	750	82.864	0.071	8.9	0.1254	0.0000	OK	2.003	S7	8.9	0.461	0.056	0.7394	
1440 minute summer	S7	750	82.790	0.091	13.7	0.1607	0.0000	OK	2.004	Soakaway 1	13.7	0.660	0.085	0.1719	
1440 minute summer	Soakaway 1	840	82.277	-0.401	13.7	48.4883	0.0000	OK	Infiltration		8.1				
1440 minute summer	S8	750	83.574	0.049	3.9	0.0863	0.0000	OK	1.000	S9	3.9	0.495	0.035	0.2941	
1440 minute summer	S9	750	83.454	0.045	5.8	0.0789	0.0000	OK	1.001	S10	5.8	0.631	0.031	0.3456	
1440 minute summer	S10	750	83.134	0.059	5.8	0.1048	0.0000	OK	1.002	Soakaway 2	5.8	0.561	0.053	0.3861	
1440 minute summer	Soakaway 2	810	82.190	-0.770	5.8	16.1832	0.0000	OK	Infiltration		3.8				

Results for 30 year +30% 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	S1	690	83.616	0.016	0.4	0.0177	0.0000	OK	3.000	S2	0.4	0.149	0.005	0.0755	
1440 minute winter	S2	720	83.509	0.034	2.0	0.0383	0.0000	OK	3.001	S7	2.0	0.472	0.026	0.0897	
1440 minute winter	S3	750	83.130	0.030	1.4	0.0336	0.0000	OK	2.000	S4	1.4	0.411	0.020	0.0545	
1440 minute winter	S4	750	83.004	0.045	3.3	0.0801	0.0000	OK	2.001	S5	3.3	0.482	0.030	0.1143	
1440 minute winter	S5	750	82.880	0.048	3.9	0.0846	0.0000	OK	2.002	S6	3.9	0.355	0.024	0.1736	
1440 minute winter	S6	750	82.855	0.062	6.7	0.1093	0.0000	OK	2.003	S7	6.7	0.428	0.042	0.5996	
1440 minute winter	S7	750	82.777	0.078	10.2	0.1383	0.0000	OK	2.004	Soakaway 1	10.2	0.614	0.063	0.1375	
1440 minute winter	Soakaway 1	870	82.200	-0.478	10.2	35.0369	0.0000	OK	Infiltration		7.8				
1440 minute winter	S8	750	83.567	0.042	2.9	0.0749	0.0000	OK	1.000	S9	2.9	0.451	0.026	0.2406	
1440 minute winter	S9	750	83.448	0.039	4.4	0.0693	0.0000	OK	1.001	S10	4.4	0.580	0.023	0.2851	
1440 minute winter	S10	750	83.127	0.052	4.4	0.0918	0.0000	OK	1.002	Soakaway 2	4.4	0.520	0.040	0.3166	
1440 minute winter	Soakaway 2	840	82.115	-0.845	4.4	9.8094	0.0000	OK	Infiltration		3.7				

Results for 100 year +30% 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 99.93%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	S1	9	83.709	0.109	16.1	0.1232	0.0000	OK	3.000	S2	16.2	0.411	0.212	1.0316	
15 minute summer	S2	8	83.707	0.232	73.1	0.2626	0.0000	OK	3.001	S7	63.3	1.212	0.832	1.1348	
15 minute summer	S3	9	83.558	0.458	53.7	0.5182	0.0000	SURCHARGED	2.000	S4	45.8	0.841	0.645	1.1268	
15 minute summer	S4	9	83.530	0.571	93.0	1.0089	0.0000	SURCHARGED	2.001	S5	103.0	0.974	0.927	1.8361	
15 minute summer	S5	9	83.471	0.639	117.0	1.1298	0.0000	SURCHARGED	2.002	S6	128.8	0.813	0.806	2.4945	
15 minute summer	S6	9	83.436	0.643	199.2	1.1364	0.0000	SURCHARGED	2.003	S7	207.4	1.309	1.299	6.0356	
15 minute summer	S7	9	83.261	0.562	307.5	0.9923	0.0000	SURCHARGED	2.004	Soakaway 1	313.2	1.986	1.935	1.2568	
15 minute summer	Soakaway 1	18	82.523	-0.155	313.2	91.4554	0.0000	OK	Infiltration		8.9				
15 minute summer	S8	8	83.831	0.306	112.2	0.5410	0.0000	OK	1.000	S9	100.6	1.109	0.907	3.3776	
15 minute summer	S9	8	83.678	0.269	156.7	0.4753	0.0000	OK	1.001	S10	142.1	1.536	0.751	3.5048	
15 minute summer	S10	9	83.490	0.415	142.1	0.7339	0.0000	SURCHARGED	1.002	Soakaway 2	143.4	1.348	1.298	3.7016	
15 minute summer	Soakaway 2	19	82.453	-0.507	143.4	38.5344	0.0000	OK	Infiltration		4.3				

Results for 100 year +30% 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 99.96%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	S1	9	83.689	0.089	12.6	0.1009	0.0000	OK	3.000	S2	12.5	0.364	0.164	0.9088	
15 minute winter	S2	8	83.685	0.210	60.0	0.2373	0.0000	OK	3.001	S7	56.8	1.169	0.747	1.0402	
15 minute winter	S3	9	83.483	0.383	42.3	0.4336	0.0000	SURCHARGED	2.000	S4	40.6	0.837	0.571	1.1268	
15 minute winter	S4	9	83.464	0.505	90.0	0.8929	0.0000	SURCHARGED	2.001	S5	92.8	0.971	0.834	1.8361	
15 minute winter	S5	9	83.408	0.576	107.5	1.0185	0.0000	SURCHARGED	2.002	S6	110.4	0.697	0.691	2.4945	
15 minute winter	S6	9	83.382	0.589	184.3	1.0410	0.0000	SURCHARGED	2.003	S7	187.5	1.184	1.175	6.0356	
15 minute winter	S7	9	83.224	0.525	283.5	0.9274	0.0000	SURCHARGED	2.004	Soakaway 1	285.0	1.818	1.760	1.2370	
15 minute winter	Soakaway 1	18	82.591	-0.087	285.0	103.4721	0.0000	OK	Infiltration		9.1				
15 minute winter	S8	8	83.788	0.263	88.4	0.4644	0.0000	OK	1.000	S9	84.7	1.090	0.763	2.9337	
15 minute winter	S9	8	83.650	0.240	128.8	0.4250	0.0000	OK	1.001	S10	126.4	1.445	0.668	3.3134	
15 minute winter	S10	9	83.422	0.347	126.4	0.6134	0.0000	OK	1.002	Soakaway 2	123.7	1.299	1.120	3.5051	
15 minute winter	Soakaway 2	18	82.514	-0.446	123.7	43.6527	0.0000	OK	Infiltration		4.4				

Results for 100 year +30% 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 99.98%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	S1	16	83.675	0.075	10.8	0.0853	0.0000	OK	3.000	S2	10.8	0.349	0.141	0.8263	
30 minute summer	S2	16	83.672	0.197	52.8	0.2223	0.0000	OK	3.001	S7	52.6	1.136	0.690	0.9780	
30 minute summer	S3	16	83.319	0.219	36.2	0.2477	0.0000	OK	2.000	S4	34.1	0.830	0.480	1.0027	
30 minute summer	S4	16	83.331	0.372	83.2	0.6568	0.0000	OK	2.001	S5	78.9	0.929	0.710	1.8339	
30 minute summer	S5	16	83.293	0.461	89.7	0.8154	0.0000	SURCHARGED	2.002	S6	96.5	0.612	0.603	2.4945	
30 minute summer	S6	16	83.283	0.490	152.0	0.8658	0.0000	SURCHARGED	2.003	S7	153.9	0.972	0.964	6.0356	
30 minute summer	S7	16	83.166	0.467	244.5	0.8247	0.0000	SURCHARGED	2.004	Soakaway 1	242.6	1.610	1.498	1.1974	
30 minute summer	Soakaway 1	32	82.683	0.005	242.6	119.5104	0.0000	OK	Infiltration		9.4				
30 minute summer	S8	16	83.764	0.239	75.5	0.4230	0.0000	OK	1.000	S9	75.8	1.060	0.683	2.6664	
30 minute summer	S9	16	83.633	0.224	113.5	0.3955	0.0000	OK	1.001	S10	115.0	1.402	0.608	3.0401	
30 minute summer	S10	17	83.382	0.307	115.0	0.5431	0.0000	OK	1.002	Soakaway 2	110.3	1.268	0.999	3.2255	
30 minute summer	Soakaway 2	33	82.591	-0.369	110.3	50.2553	0.0000	OK	Infiltration		4.6				

Results for 100 year +30% 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	S1	16	83.667	0.067	8.5	0.0757	0.0000	OK	3.000	S2	8.5	0.333	0.111	0.6871	
30 minute winter	S2	16	83.643	0.168	41.6	0.1898	0.0000	OK	3.001	S7	41.5	1.072	0.545	0.8190	
30 minute winter	S3	16	83.249	0.149	28.4	0.1687	0.0000	OK	2.000	S4	28.2	0.833	0.397	0.6417	
30 minute winter	S4	16	83.218	0.259	66.8	0.4574	0.0000	OK	2.001	S5	65.4	0.941	0.588	1.4067	
30 minute winter	S5	16	83.186	0.354	76.9	0.6251	0.0000	OK	2.002	S6	75.7	0.556	0.473	2.1739	
30 minute winter	S6	16	83.172	0.379	133.0	0.6697	0.0000	OK	2.003	S7	131.1	0.900	0.822	5.5615	
30 minute winter	S7	16	83.101	0.402	202.8	0.7109	0.0000	OK	2.004	Soakaway 1	201.1	1.484	1.242	1.1110	
30 minute winter	Soakaway 1	32	82.775	0.097	201.1	135.8113	0.0000	OK	Infiltration		9.7				
30 minute winter	S8	16	83.729	0.204	59.4	0.3602	0.0000	OK	1.000	S9	59.5	1.016	0.536	2.1854	
30 minute winter	S9	16	83.599	0.190	89.2	0.3352	0.0000	OK	1.001	S10	89.7	1.304	0.474	2.5593	
30 minute winter	S10	17	83.336	0.261	89.7	0.4613	0.0000	OK	1.002	Soakaway 2	88.6	1.191	0.802	2.7693	
30 minute winter	Soakaway 2	33	82.673	-0.287	88.6	57.2249	0.0000	OK	Infiltration		4.7				

Results for 100 year +30% 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%																
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)	
60 minute summer	S1	31	83.662	0.062	7.4	0.0706	0.0000	OK	3.000	S2	7.4	0.323	0.097	0.6191		
60 minute summer	S2	31	83.629	0.154	36.4	0.1743	0.0000	OK	3.001	S7	36.2	1.039	0.476	0.7383		
60 minute summer	S3	31	83.233	0.133	24.9	0.1508	0.0000	OK	2.000	S4	24.8	0.833	0.350	0.5174		
60 minute summer	S4	31	83.181	0.222	58.6	0.3930	0.0000	OK	2.001	S5	57.8	0.939	0.519	1.1643		
60 minute summer	S5	31	83.140	0.308	67.8	0.5436	0.0000	OK	2.002	S6	65.8	0.547	0.411	1.9008		
60 minute summer	S6	31	83.127	0.334	116.3	0.5894	0.0000	OK	2.003	S7	113.8	0.864	0.713	5.0264		
60 minute summer	S7	31	83.065	0.366	176.8	0.6459	0.0000	OK	2.004	Soakaway 1	174.4	1.401	1.077	1.0244		
60 minute summer	Soakaway 1	61	82.818	0.140	174.4	143.3449	0.0000	OK	Infiltration		9.9					
60 minute summer	S8	31	83.713	0.188	52.0	0.3320	0.0000	OK	1.000	S9	52.2	0.987	0.471	1.9757		
60 minute summer	S9	31	83.585	0.176	78.2	0.3103	0.0000	OK	1.001	S10	78.2	1.271	0.414	2.2956		
60 minute summer	S10	32	83.313	0.238	78.2	0.4197	0.0000	OK	1.002	Soakaway 2	77.0	1.145	0.697	2.5069		
60 minute summer	Soakaway 2	62	82.706	-0.254	77.0	60.0000	0.0000	OK	Infiltration		4.8					

Results for 100 year +30% 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	S1	31	83.654	0.054	5.5	0.0611	0.0000	OK	3.000	S2	5.5	0.302	0.072	0.4957	
60 minute winter	S2	31	83.604	0.129	27.1	0.1463	0.0000	OK	3.001	S7	27.1	0.968	0.356	0.5918	
60 minute winter	S3	31	83.210	0.110	18.5	0.1240	0.0000	OK	2.000	S4	18.5	0.827	0.260	0.3579	
60 minute winter	S4	31	83.136	0.177	43.7	0.3130	0.0000	OK	2.001	S5	43.6	0.923	0.392	0.8287	
60 minute winter	S5	31	83.077	0.245	51.1	0.4321	0.0000	OK	2.002	S6	50.8	0.543	0.318	1.4759	
60 minute winter	S6	31	83.063	0.270	88.4	0.4779	0.0000	OK	2.003	S7	87.9	0.813	0.551	4.1157	
60 minute winter	S7	31	83.009	0.310	134.9	0.5484	0.0000	OK	2.004	Soakaway 1	134.5	1.278	0.831	0.8691	
60 minute winter	Soakaway 1	60	82.924	0.246	134.5	162.0861	0.0000	OK	Infiltration		10.2				
60 minute winter	S8	31	83.683	0.158	38.7	0.2784	0.0000	OK	1.000	S9	38.7	0.928	0.349	1.5575	
60 minute winter	S9	31	83.555	0.146	58.1	0.2573	0.0000	OK	1.001	S10	58.1	1.180	0.307	1.8414	
60 minute winter	S10	32	83.274	0.199	58.1	0.3515	0.0000	OK	1.002	Soakaway 2	57.9	1.057	0.524	2.0449	
60 minute winter	Soakaway 2	61	82.810	-0.150	57.9	68.8888	0.0000	OK	Infiltration		4.9				

Results for 100 year +30% 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	S1	62	83.650	0.050	4.6	0.0560	0.0000	OK	3.000	S2	4.6	0.289	0.060	0.4345	
120 minute summer	S2	62	83.592	0.117	22.7	0.1323	0.0000	OK	3.001	S7	22.7	0.925	0.298	0.5191	
120 minute summer	S3	62	83.200	0.100	15.5	0.1125	0.0000	OK	2.000	S4	15.5	0.790	0.218	0.3142	
120 minute summer	S4	62	83.114	0.155	36.6	0.2735	0.0000	OK	2.001	S5	36.6	0.920	0.329	0.6622	
120 minute summer	S5	62	83.045	0.213	42.8	0.3759	0.0000	OK	2.002	S6	42.7	0.540	0.267	1.2518	
120 minute summer	S6	62	83.032	0.239	74.2	0.4215	0.0000	OK	2.003	S7	74.0	0.783	0.464	3.6023	
120 minute summer	S7	62	82.979	0.280	113.4	0.4955	0.0000	OK	2.004	Soakaway 1	113.2	1.207	0.699	0.7753	
120 minute summer	Soakaway 1	118	82.885	0.207	113.2	155.3032	0.0000	OK	Infiltration		10.1				
120 minute summer	S8	62	83.668	0.143	32.4	0.2518	0.0000	OK	1.000	S9	32.4	0.893	0.292	1.3549	
120 minute summer	S9	62	83.540	0.131	48.6	0.2312	0.0000	OK	1.001	S10	48.6	1.136	0.257	1.6079	
120 minute summer	S10	62	83.254	0.179	48.6	0.3166	0.0000	OK	1.002	Soakaway 2	48.4	1.004	0.438	1.7981	
120 minute summer	Soakaway 2	110	82.760	-0.200	48.4	64.5643	0.0000	OK	Infiltration		4.9				

Results for 100 year +30% 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	S1	62	83.643	0.043	3.4	0.0484	0.0000	OK	3.000	S2	3.4	0.270	0.045	0.3479	
120 minute winter	S2	62	83.574	0.099	16.8	0.1121	0.0000	OK	3.001	S7	16.8	0.854	0.221	0.4161	
120 minute winter	S3	62	83.185	0.085	11.5	0.0958	0.0000	OK	2.000	S4	11.5	0.729	0.162	0.2525	
120 minute winter	S4	62	83.091	0.132	27.2	0.2325	0.0000	OK	2.001	S5	27.2	0.849	0.245	0.5337	
120 minute winter	S5	116	83.008	0.176	31.9	0.3117	0.0000	OK	2.002	S6	31.9	0.530	0.199	1.0433	
120 minute winter	S6	116	83.008	0.215	55.3	0.3807	0.0000	OK	2.003	S7	55.3	0.735	0.346	3.6435	
120 minute winter	S7	116	83.009	0.310	84.5	0.5473	0.0000	OK	2.004	Soakaway 1	84.4	1.102	0.521	0.9975	
120 minute winter	Soakaway 1	116	83.009	0.331	84.4	177.0943	0.0000	OK	Infiltration		10.5				
120 minute winter	S8	62	83.646	0.121	24.1	0.2144	0.0000	OK	1.000	S9	24.1	0.833	0.217	1.0814	
120 minute winter	S9	62	83.520	0.111	36.2	0.1954	0.0000	OK	1.001	S10	36.2	1.057	0.191	1.2848	
120 minute winter	S10	62	83.227	0.152	36.2	0.2679	0.0000	OK	1.002	Soakaway 2	36.2	0.927	0.327	1.4551	
120 minute winter	Soakaway 2	116	82.885	-0.075	36.2	75.2448	0.0000	OK	Infiltration		5.1				

Results for 100 year +30% 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	S1	92	83.644	0.044	3.6	0.0494	0.0000	OK	3.000	S2	3.5	0.273	0.047	0.3551	
180 minute summer	S2	92	83.575	0.100	17.4	0.1136	0.0000	OK	3.001	S7	17.1	0.857	0.225	0.4226	
180 minute summer	S3	92	83.186	0.086	11.9	0.0972	0.0000	OK	2.000	S4	11.8	0.732	0.166	0.2571	
180 minute summer	S4	92	83.092	0.133	28.0	0.2352	0.0000	OK	2.001	S5	27.6	0.851	0.249	0.5410	
180 minute summer	S5	92	83.002	0.170	32.4	0.3009	0.0000	OK	2.002	S6	32.1	0.531	0.201	0.9508	
180 minute summer	S6	92	82.988	0.195	56.3	0.3448	0.0000	OK	2.003	S7	55.2	0.734	0.346	2.8654	
180 minute summer	S7	92	82.936	0.237	85.1	0.4186	0.0000	OK	2.004	Soakaway 1	84.0	1.099	0.519	0.6327	
180 minute summer	Soakaway 1	148	82.889	0.211	84.0	155.8945	0.0000	OK	Infiltration		10.1				
180 minute summer	S8	92	83.648	0.123	24.9	0.2175	0.0000	OK	1.000	S9	24.6	0.836	0.222	1.0985	
180 minute summer	S9	92	83.520	0.111	37.0	0.1970	0.0000	OK	1.001	S10	36.5	1.066	0.193	1.2814	
180 minute summer	S10	92	83.225	0.150	36.5	0.2656	0.0000	OK	1.002	Soakaway 2	35.3	0.919	0.320	1.4354	
180 minute summer	Soakaway 2	144	82.757	-0.203	35.3	64.3374	0.0000	OK	Infiltration		4.9				

Results for 100 year +30% 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	S1	92	83.638	0.038	2.6	0.0425	0.0000	OK	3.000	S2	2.6	0.251	0.034	0.2830	
180 minute winter	S2	92	83.560	0.085	12.7	0.0963	0.0000	OK	3.001	S7	12.6	0.791	0.166	0.3379	
180 minute winter	S3	92	83.173	0.073	8.7	0.0827	0.0000	OK	2.000	S4	8.7	0.676	0.122	0.2053	
180 minute winter	S4	92	83.072	0.113	20.5	0.1996	0.0000	OK	2.001	S5	20.4	0.785	0.184	0.4332	
180 minute winter	S5	168	83.014	0.182	23.9	0.3218	0.0000	OK	2.002	S6	23.9	0.520	0.149	1.0827	
180 minute winter	S6	168	83.014	0.221	41.5	0.3905	0.0000	OK	2.003	S7	41.3	0.690	0.259	3.7303	
180 minute winter	S7	168	83.014	0.315	63.2	0.5561	0.0000	OK	2.004	Soakaway 1	63.0	1.010	0.389	1.0141	
180 minute winter	Soakaway 1	168	83.014	0.336	63.0	177.9577	0.0000	OK	Infiltration		10.5				
180 minute winter	S8	92	83.629	0.104	18.1	0.1843	0.0000	OK	1.000	S9	18.1	0.773	0.163	0.8727	
180 minute winter	S9	92	83.504	0.095	27.1	0.1672	0.0000	OK	1.001	S10	27.1	0.984	0.143	1.0326	
180 minute winter	S10	92	83.204	0.129	27.1	0.2280	0.0000	OK	1.002	Soakaway 2	26.9	0.854	0.243	1.1748	
180 minute winter	Soakaway 2	152	82.880	-0.080	26.9	74.8180	0.0000	OK	Infiltration		5.1				

Results for 100 year +30% 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	S1	124	83.639	0.039	2.8	0.0441	0.0000	OK	3.000	S2	2.8	0.256	0.037	0.3000	
240 minute summer	S2	124	83.564	0.089	13.7	0.1005	0.0000	OK	3.001	S7	13.7	0.809	0.180	0.3584	
240 minute summer	S3	124	83.176	0.076	9.4	0.0862	0.0000	OK	2.000	S4	9.4	0.691	0.132	0.2177	
240 minute summer	S4	124	83.077	0.118	22.1	0.2080	0.0000	OK	2.001	S5	22.1	0.803	0.199	0.4583	
240 minute summer	S5	124	82.978	0.146	25.9	0.2575	0.0000	OK	2.002	S6	25.9	0.523	0.162	0.7807	
240 minute summer	S6	124	82.963	0.170	44.9	0.3003	0.0000	OK	2.003	S7	44.9	0.702	0.281	2.4376	
240 minute summer	S7	124	82.911	0.212	68.7	0.3739	0.0000	OK	2.004	Soakaway 1	68.7	1.035	0.424	0.5491	
240 minute summer	Soakaway 1	180	82.876	0.198	68.7	153.7073	0.0000	OK	Infiltration		10.0				
240 minute summer	S8	124	83.634	0.109	19.6	0.1922	0.0000	OK	1.000	S9	19.6	0.791	0.177	0.9253	
240 minute summer	S9	124	83.508	0.099	29.4	0.1743	0.0000	OK	1.001	S10	29.4	1.006	0.155	1.0988	
240 minute summer	S10	124	83.210	0.135	29.4	0.2390	0.0000	OK	1.002	Soakaway 2	29.4	0.877	0.266	1.2516	
240 minute summer	Soakaway 2	176	82.744	-0.216	29.4	63.2565	0.0000	OK	Infiltration		4.8				

Results for 100 year +30% 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	S1	124	83.634	0.034	2.1	0.0385	0.0000	OK	3.000	S2	2.1	0.237	0.028	0.2424	
240 minute winter	S2	124	83.551	0.076	10.2	0.0861	0.0000	OK	3.001	S7	10.2	0.746	0.134	0.2894	
240 minute winter	S3	124	83.165	0.065	7.0	0.0740	0.0000	OK	2.000	S4	7.0	0.639	0.099	0.1754	
240 minute winter	S4	124	83.060	0.101	16.5	0.1783	0.0000	OK	2.001	S5	16.5	0.743	0.148	0.3700	
240 minute winter	S5	192	82.997	0.165	19.3	0.2918	0.0000	OK	2.002	S6	19.3	0.509	0.121	0.9646	
240 minute winter	S6	192	82.997	0.204	33.5	0.3605	0.0000	OK	2.003	S7	33.5	0.659	0.210	3.4501	
240 minute winter	S7	192	82.997	0.298	51.2	0.5262	0.0000	OK	2.004	Soakaway 1	51.2	0.951	0.316	0.9566	
240 minute winter	Soakaway 1	192	82.997	0.319	51.2	174.9568	0.0000	OK	Infiltration		10.4				
240 minute winter	S8	124	83.619	0.094	14.6	0.1652	0.0000	OK	1.000	S9	14.6	0.728	0.132	0.7492	
240 minute winter	S9	124	83.494	0.085	21.9	0.1503	0.0000	OK	1.001	S10	21.9	0.927	0.116	0.8874	
240 minute winter	S10	124	83.191	0.116	21.9	0.2043	0.0000	OK	1.002	Soakaway 2	21.9	0.809	0.198	1.0104	
240 minute winter	Soakaway 2	188	82.862	-0.098	21.9	73.2918	0.0000	OK	Infiltration		5.0				

Results for 100 year +30% 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	S1	184	83.634	0.034	2.1	0.0384	0.0000	OK	3.000	S2	2.1	0.236	0.027	0.2420	
360 minute summer	S2	184	83.551	0.076	10.3	0.0860	0.0000	OK	3.001	S7	10.2	0.744	0.134	0.2891	
360 minute summer	S3	184	83.166	0.066	7.1	0.0743	0.0000	OK	2.000	S4	7.0	0.639	0.099	0.1765	
360 minute summer	S4	184	83.060	0.101	16.6	0.1787	0.0000	OK	2.001	S5	16.5	0.743	0.149	0.3710	
360 minute summer	S5	184	82.951	0.119	19.3	0.2100	0.0000	OK	2.002	S6	19.2	0.508	0.120	0.5966	
360 minute summer	S6	184	82.934	0.141	33.6	0.2490	0.0000	OK	2.003	S7	33.3	0.659	0.209	1.9297	
360 minute summer	S7	184	82.878	0.179	51.1	0.3171	0.0000	OK	2.004	Soakaway 1	50.7	0.948	0.313	0.4426	
360 minute summer	Soakaway 1	248	82.835	0.157	50.7	146.4795	0.0000	OK	Infiltration		9.9				
360 minute summer	S8	184	83.619	0.094	14.8	0.1660	0.0000	OK	1.000	S9	14.7	0.730	0.132	0.7525	
360 minute summer	S9	184	83.494	0.085	22.1	0.1505	0.0000	OK	1.001	S10	21.9	0.932	0.116	0.8832	
360 minute summer	S10	184	83.190	0.115	21.9	0.2030	0.0000	OK	1.002	Soakaway 2	21.6	0.804	0.195	1.0006	
360 minute summer	Soakaway 2	248	82.700	-0.260	21.6	59.5178	0.0000	OK	Infiltration		4.7				

Results for 100 year +30% 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	S1	184	83.629	0.029	1.5	0.0328	0.0000	OK	3.000	S2	1.5	0.217	0.020	0.1928	
360 minute winter	S2	184	83.540	0.065	7.5	0.0733	0.0000	OK	3.001	S7	7.5	0.684	0.098	0.2314	
360 minute winter	S3	184	83.156	0.056	5.1	0.0630	0.0000	OK	2.000	S4	5.1	0.584	0.072	0.1395	
360 minute winter	S4	184	83.045	0.086	12.1	0.1518	0.0000	OK	2.001	S5	12.1	0.683	0.109	0.2948	
360 minute winter	S5	272	82.946	0.114	14.2	0.2017	0.0000	OK	2.002	S6	14.2	0.489	0.089	0.6219	
360 minute winter	S6	272	82.946	0.153	24.6	0.2701	0.0000	OK	2.003	S7	24.5	0.615	0.154	2.5951	
360 minute winter	S7	272	82.945	0.246	37.5	0.4354	0.0000	OK	2.004	Soakaway 1	37.5	0.872	0.231	0.7728	
360 minute winter	Soakaway 1	272	82.945	0.267	37.5	165.8651	0.0000	OK	Infiltration		10.3				
360 minute winter	S8	184	83.605	0.080	10.8	0.1418	0.0000	OK	1.000	S9	10.8	0.667	0.097	0.6034	
360 minute winter	S9	184	83.482	0.073	16.2	0.1293	0.0000	OK	1.001	S10	16.2	0.852	0.085	0.7120	
360 minute winter	S10	184	83.174	0.099	16.2	0.1741	0.0000	OK	1.002	Soakaway 2	16.1	0.744	0.146	0.8074	
360 minute winter	Soakaway 2	264	82.798	-0.163	16.1	67.7874	0.0000	OK	Infiltration		4.9				

Results for 100 year +30% 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	S1	248	83.631	0.031	1.7	0.0348	0.0000	OK	3.000	S2	1.7	0.226	0.022	0.2057	
480 minute summer	S2	248	83.543	0.068	8.1	0.0764	0.0000	OK	3.001	S7	8.1	0.700	0.106	0.2449	
480 minute summer	S3	248	83.158	0.058	5.5	0.0654	0.0000	OK	2.000	S4	5.5	0.598	0.077	0.1472	
480 minute summer	S4	248	83.048	0.089	13.0	0.1577	0.0000	OK	2.001	S5	13.0	0.695	0.117	0.3115	
480 minute summer	S5	248	82.934	0.102	15.2	0.1805	0.0000	OK	2.002	S6	15.2	0.493	0.095	0.4859	
480 minute summer	S6	248	82.915	0.122	26.4	0.2160	0.0000	OK	2.003	S7	26.4	0.625	0.165	1.6144	
480 minute summer	S7	248	82.858	0.159	40.4	0.2808	0.0000	OK	2.004	Soakaway 1	40.4	0.889	0.250	0.3762	
480 minute summer	Soakaway 1	320	82.794	0.116	40.4	139.2081	0.0000	OK	Infiltration		9.8				
480 minute summer	S8	248	83.608	0.083	11.6	0.1470	0.0000	OK	1.000	S9	11.6	0.682	0.105	0.6355	
480 minute summer	S9	248	83.485	0.076	17.4	0.1341	0.0000	OK	1.001	S10	17.4	0.871	0.092	0.7521	
480 minute summer	S10	248	83.178	0.103	17.4	0.1812	0.0000	OK	1.002	Soakaway 2	17.4	0.760	0.158	0.8549	
480 minute summer	Soakaway 2	312	82.657	-0.303	17.4	55.8499	0.0000	OK	Infiltration		4.7				

Results for 100 year +30% 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	S1	240	83.626	0.026	1.2	0.0296	0.0000	OK	3.000	S2	1.2	0.202	0.016	0.1643	
480 minute winter	S2	248	83.533	0.058	6.0	0.0656	0.0000	OK	3.001	S7	6.0	0.642	0.079	0.1976	
480 minute winter	S3	248	83.150	0.050	4.1	0.0565	0.0000	OK	2.000	S4	4.1	0.554	0.058	0.1185	
480 minute winter	S4	248	83.036	0.077	9.7	0.1358	0.0000	OK	2.001	S5	9.7	0.643	0.087	0.2514	
480 minute winter	S5	248	82.918	0.086	11.4	0.1519	0.0000	OK	2.002	S6	11.4	0.465	0.071	0.3869	
480 minute winter	S6	248	82.898	0.105	19.8	0.1857	0.0000	OK	2.003	S7	19.8	0.580	0.124	1.6954	
480 minute winter	S7	344	82.889	0.190	30.2	0.3361	0.0000	OK	2.004	Soakaway 1	30.2	0.820	0.187	0.5641	
480 minute winter	Soakaway 1	344	82.888	0.210	30.2	155.8559	0.0000	OK	Infiltration		10.1				
480 minute winter	S8	248	83.597	0.072	8.6	0.1267	0.0000	OK	1.000	S9	8.6	0.624	0.078	0.5143	
480 minute winter	S9	248	83.475	0.066	12.9	0.1159	0.0000	OK	1.001	S10	12.9	0.797	0.068	0.6074	
480 minute winter	S10	248	83.163	0.088	12.9	0.1555	0.0000	OK	1.002	Soakaway 2	12.9	0.699	0.117	0.6888	
480 minute winter	Soakaway 2	344	82.731	-0.229	12.9	62.1416	0.0000	OK	Infiltration		4.8				

Results for 100 year +30% 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	S1	315	83.627	0.027	1.3	0.0307	0.0000	OK	3.000	S2	1.3	0.204	0.017	0.1755	
600 minute summer	S2	315	83.536	0.061	6.6	0.0688	0.0000	OK	3.001	S7	6.6	0.660	0.087	0.2115	
600 minute summer	S3	315	83.152	0.052	4.5	0.0592	0.0000	OK	2.000	S4	4.5	0.567	0.063	0.1271	
600 minute summer	S4	315	83.039	0.080	10.6	0.1420	0.0000	OK	2.001	S5	10.6	0.659	0.095	0.2678	
600 minute summer	S5	315	82.922	0.090	12.4	0.1597	0.0000	OK	2.002	S6	12.4	0.474	0.078	0.4133	
600 minute summer	S6	315	82.903	0.110	21.6	0.1940	0.0000	OK	2.003	S7	21.6	0.594	0.135	1.3907	
600 minute summer	S7	315	82.842	0.143	33.0	0.2522	0.0000	OK	2.004	Soakaway 1	33.0	0.842	0.204	0.3246	
600 minute summer	Soakaway 1	390	82.750	0.072	33.0	131.4384	0.0000	OK	Infiltration		9.6				
600 minute summer	S8	315	83.600	0.075	9.4	0.1323	0.0000	OK	1.000	S9	9.4	0.641	0.085	0.5476	
600 minute summer	S9	315	83.477	0.068	14.1	0.1210	0.0000	OK	1.001	S10	14.1	0.819	0.075	0.6472	
600 minute summer	S10	315	83.167	0.092	14.1	0.1627	0.0000	OK	1.002	Soakaway 2	14.1	0.716	0.128	0.7348	
600 minute summer	Soakaway 2	390	82.611	-0.349	14.1	51.9379	0.0000	OK	Infiltration		4.6				

Results for 100 year +30% 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	S1	300	83.624	0.024	1.0	0.0271	0.0000	OK	3.000	S2	1.0	0.194	0.013	0.1443	
600 minute winter	S2	315	83.528	0.053	5.0	0.0599	0.0000	OK	3.001	S7	5.0	0.610	0.066	0.1735	
600 minute winter	S3	315	83.146	0.046	3.5	0.0522	0.0000	OK	2.000	S4	3.5	0.531	0.049	0.1055	
600 minute winter	S4	315	83.030	0.071	8.2	0.1248	0.0000	OK	2.001	S5	8.2	0.614	0.074	0.2228	
600 minute winter	S5	315	82.910	0.078	9.6	0.1373	0.0000	OK	2.002	S6	9.6	0.448	0.060	0.3384	
600 minute winter	S6	315	82.889	0.096	16.6	0.1700	0.0000	OK	2.003	S7	16.6	0.553	0.104	1.1486	
600 minute winter	S7	420	82.829	0.130	25.3	0.2304	0.0000	OK	2.004	Soakaway 1	25.3	0.784	0.156	0.3470	
600 minute winter	Soakaway 1	420	82.827	0.149	25.3	145.0218	0.0000	OK	Infiltration		9.9				
600 minute winter	S8	315	83.591	0.066	7.2	0.1161	0.0000	OK	1.000	S9	7.2	0.593	0.065	0.4535	
600 minute winter	S9	315	83.469	0.060	10.8	0.1063	0.0000	OK	1.001	S10	10.8	0.758	0.057	0.5351	
600 minute winter	S10	315	83.155	0.080	10.8	0.1422	0.0000	OK	1.002	Soakaway 2	10.8	0.667	0.098	0.6045	
600 minute winter	Soakaway 2	420	82.662	-0.298	10.8	56.2449	0.0000	OK	Infiltration		4.7				

Results for 100 year +30% 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	S1	375	83.626	0.026	1.2	0.0296	0.0000	OK	3.000	S2	1.2	0.202	0.016	0.1628	
720 minute summer	S2	375	83.532	0.057	5.9	0.0650	0.0000	OK	3.001	S7	5.9	0.639	0.078	0.1953	
720 minute summer	S3	375	83.149	0.049	4.0	0.0558	0.0000	OK	2.000	S4	4.0	0.550	0.056	0.1163	
720 minute summer	S4	375	83.035	0.076	9.4	0.1337	0.0000	OK	2.001	S5	9.4	0.637	0.085	0.2459	
720 minute summer	S5	375	82.916	0.084	11.0	0.1487	0.0000	OK	2.002	S6	11.0	0.461	0.069	0.3764	
720 minute summer	S6	375	82.896	0.103	19.1	0.1824	0.0000	OK	2.003	S7	19.1	0.573	0.120	1.2754	
720 minute summer	S7	375	82.833	0.134	29.3	0.2371	0.0000	OK	2.004	Soakaway 1	29.3	0.814	0.181	0.2981	
720 minute summer	Soakaway 1	465	82.709	0.031	29.3	124.1398	0.0000	OK	Infiltration		9.5				
720 minute summer	S8	375	83.596	0.071	8.4	0.1252	0.0000	OK	1.000	S9	8.4	0.620	0.076	0.5059	
720 minute summer	S9	375	83.474	0.065	12.6	0.1146	0.0000	OK	1.001	S10	12.6	0.793	0.067	0.5973	
720 minute summer	S10	375	83.162	0.087	12.6	0.1536	0.0000	OK	1.002	Soakaway 2	12.6	0.695	0.114	0.6769	
720 minute summer	Soakaway 2	450	82.574	-0.386	12.6	48.7638	0.0000	OK	Infiltration		4.5				

Results for 100 year +30% 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	S1	360	83.623	0.023	0.9	0.0258	0.0000	OK	3.000	S2	0.9	0.189	0.012	0.1323	
720 minute winter	S2	375	83.525	0.050	4.4	0.0561	0.0000	OK	3.001	S7	4.4	0.588	0.058	0.1584	
720 minute winter	S3	375	83.143	0.043	3.0	0.0484	0.0000	OK	2.000	S4	3.0	0.507	0.042	0.0947	
720 minute winter	S4	375	83.025	0.066	7.1	0.1162	0.0000	OK	2.001	S5	7.1	0.592	0.064	0.1998	
720 minute winter	S5	375	82.904	0.072	8.3	0.1263	0.0000	OK	2.002	S6	8.3	0.432	0.052	0.3034	
720 minute winter	S6	375	82.883	0.090	14.4	0.1585	0.0000	OK	2.003	S7	14.4	0.530	0.090	1.0390	
720 minute winter	S7	375	82.815	0.116	22.0	0.2043	0.0000	OK	2.004	Soakaway 1	22.0	0.753	0.136	0.2420	
720 minute winter	Soakaway 1	495	82.763	0.085	22.0	133.7565	0.0000	OK	Infiltration		9.7				
720 minute winter	S8	375	83.587	0.062	6.3	0.1088	0.0000	OK	1.000	S9	6.3	0.571	0.057	0.4121	
720 minute winter	S9	375	83.465	0.056	9.4	0.0993	0.0000	OK	1.001	S10	9.4	0.729	0.050	0.4848	
720 minute winter	S10	375	83.150	0.075	9.4	0.1327	0.0000	OK	1.002	Soakaway 2	9.4	0.640	0.085	0.5479	
720 minute winter	Soakaway 2	495	82.596	-0.364	9.4	50.6781	0.0000	OK	Infiltration		4.6				

Results for 100 year +30% 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	S1	495	83.624	0.024	1.0	0.0271	0.0000	OK	3.000	S2	1.0	0.194	0.013	0.1411	
960 minute summer	S2	495	83.527	0.052	4.8	0.0587	0.0000	OK	3.001	S7	4.8	0.602	0.063	0.1686	
960 minute summer	S3	495	83.145	0.045	3.3	0.0507	0.0000	OK	2.000	S4	3.3	0.522	0.046	0.1012	
960 minute summer	S4	495	83.027	0.068	7.7	0.1210	0.0000	OK	2.001	S5	7.7	0.604	0.069	0.2124	
960 minute summer	S5	495	82.907	0.075	9.0	0.1323	0.0000	OK	2.002	S6	9.0	0.441	0.056	0.3226	
960 minute summer	S6	495	82.886	0.093	15.6	0.1649	0.0000	OK	2.003	S7	15.6	0.542	0.098	1.1010	
960 minute summer	S7	495	82.820	0.121	23.9	0.2131	0.0000	OK	2.004	Soakaway 1	23.9	0.772	0.148	0.2565	
960 minute summer	Soakaway 1	600	82.628	-0.050	23.9	109.9266	0.0000	OK	Infiltration		9.2				
960 minute summer	S8	495	83.589	0.064	6.8	0.1129	0.0000	OK	1.000	S9	6.8	0.583	0.061	0.4356	
960 minute summer	S9	495	83.468	0.058	10.2	0.1034	0.0000	OK	1.001	S10	10.2	0.746	0.054	0.5138	
960 minute summer	S10	495	83.153	0.078	10.2	0.1382	0.0000	OK	1.002	Soakaway 2	10.2	0.656	0.092	0.5805	
960 minute summer	Soakaway 2	585	82.491	-0.469	10.2	41.7702	0.0000	OK	Infiltration		4.4				

Results for 100 year +30% 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	S1	465	83.620	0.020	0.7	0.0231	0.0000	OK	3.000	S2	0.7	0.177	0.009	0.1119	
960 minute winter	S2	480	83.519	0.044	3.5	0.0501	0.0000	OK	3.001	S7	3.5	0.550	0.046	0.1346	
960 minute winter	S3	480	83.138	0.038	2.4	0.0434	0.0000	OK	2.000	S4	2.4	0.479	0.034	0.0802	
960 minute winter	S4	495	83.018	0.059	5.7	0.1042	0.0000	OK	2.001	S5	5.7	0.557	0.051	0.1706	
960 minute winter	S5	495	82.895	0.063	6.7	0.1116	0.0000	OK	2.002	S6	6.7	0.411	0.042	0.2578	
960 minute winter	S6	495	82.874	0.081	11.6	0.1427	0.0000	OK	2.003	S7	11.6	0.499	0.073	0.8886	
960 minute winter	S7	495	82.802	0.103	17.7	0.1825	0.0000	OK	2.004	Soakaway 1	17.7	0.712	0.109	0.2059	
960 minute winter	Soakaway 1	630	82.643	-0.035	17.7	112.5190	0.0000	OK	Infiltration		9.3				
960 minute winter	S8	495	83.581	0.056	5.1	0.0981	0.0000	OK	1.000	S9	5.1	0.536	0.046	0.3550	
960 minute winter	S9	495	83.460	0.051	7.6	0.0897	0.0000	OK	1.001	S10	7.6	0.684	0.040	0.4177	
960 minute winter	S10	495	83.143	0.068	7.6	0.1196	0.0000	OK	1.002	Soakaway 2	7.6	0.605	0.069	0.4693	
960 minute winter	Soakaway 2	630	82.482	-0.478	7.6	40.9885	0.0000	OK	Infiltration		4.4				

Results for 100 year +30% 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	S1	750	83.620	0.020	0.7	0.0231	0.0000	OK	3.000	S2	0.7	0.175	0.009	0.1102	
1440 minute summer	S2	750	83.519	0.044	3.4	0.0494	0.0000	OK	3.001	S7	3.4	0.546	0.045	0.1319	
1440 minute summer	S3	750	83.138	0.038	2.3	0.0426	0.0000	OK	2.000	S4	2.3	0.474	0.032	0.0776	
1440 minute summer	S4	750	83.017	0.058	5.5	0.1024	0.0000	OK	2.001	S5	5.5	0.550	0.049	0.1664	
1440 minute summer	S5	750	82.894	0.062	6.4	0.1087	0.0000	OK	2.002	S6	6.4	0.405	0.040	0.2500	
1440 minute summer	S6	750	82.872	0.079	11.2	0.1403	0.0000	OK	2.003	S7	11.2	0.494	0.070	0.8667	
1440 minute summer	S7	750	82.801	0.102	17.1	0.1794	0.0000	OK	2.004	Soakaway 1	17.1	0.705	0.106	0.2008	
1440 minute summer	Soakaway 1	870	82.477	-0.201	17.1	83.4812	0.0000	OK	Infiltration		8.7				
1440 minute summer	S8	750	83.579	0.054	4.9	0.0961	0.0000	OK	1.000	S9	4.9	0.528	0.044	0.3465	
1440 minute summer	S9	750	83.459	0.050	7.4	0.0886	0.0000	OK	1.001	S10	7.4	0.679	0.039	0.4099	
1440 minute summer	S10	750	83.142	0.067	7.4	0.1180	0.0000	OK	1.002	Soakaway 2	7.4	0.600	0.067	0.4601	
1440 minute summer	Soakaway 2	840	82.355	-0.605	7.4	30.1720	0.0000	OK	Infiltration		4.1				

Results for 100 year +30% 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%															
Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	S1	690	83.617	0.017	0.5	0.0197	0.0000	OK	3.000	S2	0.5	0.160	0.007	0.0901	
1440 minute winter	S2	750	83.513	0.038	2.6	0.0433	0.0000	OK	3.001	S7	2.6	0.504	0.034	0.1091	
1440 minute winter	S3	750	83.134	0.034	1.8	0.0379	0.0000	OK	2.000	S4	1.8	0.445	0.025	0.0649	
1440 minute winter	S4	750	83.010	0.051	4.2	0.0899	0.0000	OK	2.001	S5	4.2	0.513	0.038	0.1364	
1440 minute winter	S5	750	82.885	0.053	4.9	0.0941	0.0000	OK	2.002	S6	4.9	0.379	0.031	0.2044	
1440 minute winter	S6	750	82.862	0.069	8.5	0.1226	0.0000	OK	2.003	S7	8.5	0.456	0.053	0.7125	
1440 minute winter	S7	750	82.787	0.088	13.0	0.1563	0.0000	OK	2.004	Soakaway 1	13.0	0.652	0.080	0.1650	
1440 minute winter	Soakaway 1	900	82.424	-0.254	13.0	74.1463	0.0000	OK	Infiltration		8.6				
1440 minute winter	S8	750	83.573	0.048	3.7	0.0841	0.0000	OK	1.000	S9	3.7	0.487	0.033	0.2836	
1440 minute winter	S9	750	83.453	0.044	5.5	0.0770	0.0000	OK	1.001	S10	5.5	0.621	0.029	0.3327	
1440 minute winter	S10	750	83.133	0.058	5.5	0.1021	0.0000	OK	1.002	Soakaway 2	5.5	0.552	0.050	0.3719	
1440 minute winter	Soakaway 2	870	82.284	-0.676	5.5	24.1009	0.0000	OK	Infiltration		4.0				

Adoptable						
Max Width (mm)	Diameter (mm)	Width (mm)		Max Depth (m)	Diameter (mm)	Width (mm)
225	450			1.500	1200	
374	1200			99.999	1200	
749	1500					
900	1800					
>900	Link+900 mm					
Plastic						
Max Width (mm)	Diameter (mm)	Width (mm)		Max Depth (m)	Diameter (mm)	Width (mm)
225	450			1.500	450	
>225	Link+225 mm					

Circular						
Shape	Circular		Dia (mm)			
Barrels	1		150			
Height (mm)			225			
Width (mm)						
Side Slope (1:X)						
Auto Increment (mm)	75					
Preferred Cover (m)						
Steep Slope (1:X)						
Follow Ground	x					
Velocity	Default					
ks (mm) / n						
Storage						
Shape	Circular		Dia (mm)			
Barrels	9		600			
Height (mm)						
Width (mm)						
Side Slope (1:X)						
Auto Increment (mm)	75					
Preferred Cover (m)						
Steep Slope (1:X)	1000					
Follow Ground	x					
Velocity	Default					
ks (mm) / n						