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Firth Buildings 99-101 Leeds Road Dewsbury WF12 7BU	Ms R. Carr Clough House, Birstall Prelim SWS1	
Date 16/11/2020 08:53 File 6960 Prelim SWS1.MDX	Designed by HH Checked by	
Micro Drainage	Network 2020.1	

STORM SEWER DESIGN by the Modified Rational Method

Design Criteria for Storm







Pipe Sizes STANDARD Manhole Sizes STANDARD

FSR Rainfall Model - England and Wales

Return Period (years)	2	PIMP (%)	100
M5-60 (mm)	19.000	Add Flow / Climate Change (%)	0
Ratio R	0.350	Minimum Backdrop Height (m)	0.200
Maximum Rainfall (mm/hr)	75	Maximum Backdrop Height (m)	0.000
Maximum Time of Concentration (mins)	30	Min Design Depth for Optimisation (m)	0.000
Foul Sewage (l/s/ha)	0.000	Min Vel for Auto Design only (m/s)	1.00
Volumetric Runoff Coeff.	0.750	Min Slope for Optimisation (1:X)	500


Designed with Level Soffits

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S1.000	32.000	2.133	15.0	0.165	4.00	0.0	0.600	o	225	Pipe/Conduit	
S1.001	41.000	2.050	20.0	0.153	0.00	0.0	0.600	o	300	Pipe/Conduit	
S1.002	24.500	2.142	11.4	0.061	0.00	0.0	0.600	o	300	Pipe/Conduit	
S1.003	8.000	0.016	500.0	0.105	0.00	0.0	0.600	[]	-9	Pipe/Conduit	
S1.004	2.500	0.025	100.0	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S1.005	10.500	0.130	80.8	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S1.000	66.92	4.16	149.650	0.165	0.0	0.0	0.0	3.40	135.0	29.9
S1.001	65.79	4.35	147.442	0.318	0.0	0.0	0.0	3.53	249.6	56.7
S1.002	65.29	4.44	145.392	0.379	0.0	0.0	0.0	4.67	330.4	67.0
S1.003	65.03	4.49	142.050	0.484	0.0	0.0	0.0	2.81	105527.8	85.2
S1.004	67.67	4.03	141.980	0.000	6.1	0.0	0.0	1.31	52.0	6.1
S1.005	66.95	4.15	141.955	0.000	6.1	0.0	0.0	1.46	57.9	6.1

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PIPELINE SCHEDULES for Storm

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S1.000	o	225	S1	151.100	149.650	1.225	Open Manhole	1200
S1.001	o	300	S2	149.150	147.442	1.408	Open Manhole	1200
S1.002	o	300	S3	147.000	145.392	1.308	Open Manhole	1200
S1.003	[]	-9	S4	144.650	142.050	1.100	Open Manhole	1200
S1.004	o	225	S6	144.400	141.980	2.195	Open Manhole	3000
S1.005	o	225	S7	144.250	141.955	2.070	Open Manhole	1500

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S1.000	32.000	15.0	S2	149.150	147.517	1.408	Open Manhole	1200
S1.001	41.000	20.0	S3	147.000	145.392	1.308	Open Manhole	1200
S1.002	24.500	11.4	S4	144.650	143.250	1.100	Open Manhole	1200
S1.003	8.000	500.0	S6	144.400	142.034	0.866	Open Manhole	3000
S1.004	2.500	100.0	S7	144.250	141.955	2.070	Open Manhole	1500
S1.005	10.500	80.8	S8	144.100	141.825	2.050	Open Manhole	1200


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Area Summary for Storm

Pipe Number	PIMP Type	PIMP Name	PIMP (%)	Gross Area (ha)	Imp. Area (ha)	Pipe Total (ha)
1.000	-	-	100	0.165	0.165	0.165
1.001	-	-	100	0.153	0.153	0.153
1.002	-	-	100	0.061	0.061	0.061
1.003	-	-	100	0.105	0.105	0.105
1.004	-	-	100	0.000	0.000	0.000
1.005	-	-	100	0.000	0.000	0.000
				Total	Total	Total
				0.484	0.484	0.484

Free Flowing Outfall Details for Storm

Outfall Pipe Number	Outfall Name	C. Level (m)	I. Level (m)	Min I. Level (m)	D,L (mm)	W (mm)
S1.005	S8	144.100	141.825	141.825	1200	0

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Online Controls for Storm

Hydro-Brake® Optimum Manhole: S6, DS/PN: S1.004, Volume (m³): 238.4

Unit Reference	MD-SHE-0106-6100-1700-6100
Design Head (m)	1.700
Design Flow (l/s)	6.1
Flush-Flo™	Calculated
Objective	Minimise upstream storage
Application	Surface
Sump Available	Yes
Diameter (mm)	106
Invert Level (m)	141.980
Minimum Outlet Pipe Diameter (mm)	150
Suggested Manhole Diameter (mm)	1200

Control Points	Head (m)	Flow (l/s)	Control Points	Head (m)	Flow (l/s)
Design Point (Calculated)	1.700	6.1	Kick-Flo®	0.943	4.6
Flush-Flo™	0.461	5.8	Mean Flow over Head Range	-	5.2

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

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	3.6	1.200	5.2	3.000	8.0	7.000	11.9
0.200	5.2	1.400	5.6	3.500	8.6	7.500	12.3
0.300	5.6	1.600	5.9	4.000	9.1	8.000	12.7
0.400	5.8	1.800	6.3	4.500	9.6	8.500	13.0
0.500	5.8	2.000	6.6	5.000	10.1	9.000	13.4
0.600	5.8	2.200	6.9	5.500	10.6	9.500	13.8
0.800	5.4	2.400	7.2	6.000	11.1		
1.000	4.8	2.600	7.4	6.500	11.5		

Firth Buildings
99-101 Leeds Road
Dewsbury WF12 7BU



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Network 2020.1

Conduits

Section		Input	Depth (%)	Wetted Area (m ²)	Wetted Perimeter (m)	Base X (m)	Coordinates Y (m)	Cover X (m)	Coordinates Y (m)
1	Symbol	[]	10	1.848000	15.640	0.000	1.200	0.000	1.200
	Width (mm)	15400	30	5.544000	16.120	0.001	0.000	15.400	1.200
	Height (mm)	1200	50	9.240000	16.600	15.399	0.000		
	C.Height (mm)	1200	70	12.936000	17.080	15.400	1.200		
	Side Angle (°)	90.0	90	16.632000	17.560				
	Splay (mm)	0	100	18.480000	33.200				
	Open Section	No							
2	Symbol	[]	10	0.504000	2.820	0.000	2.100	0.000	2.100
	Width (mm)	2400	30	1.512000	3.660	0.001	0.000	2.400	2.100
	Height (mm)	2100	50	2.520000	4.500	2.399	0.000		
	C.Height (mm)	2100	70	3.528000	5.340	2.400	2.100		
	Side Angle (°)	90.0	90	4.536000	6.180				
	Splay (mm)	0	100	5.040000	9.000				
	Open Section	No							
3	Symbol	[]	10	0.182000	1.620	0.000	1.350	0.000	1.350
	Width (mm)	1350	30	0.547000	2.160	0.001	0.000	1.350	1.350
	Height (mm)	1350	50	0.911000	2.700	1.349	0.000		
	C.Height (mm)	1350	70	1.276000	3.240	1.350	1.350		
	Side Angle (°)	90.0	90	1.640000	3.780				
	Splay (mm)	45	100	1.823000	5.400				
	Open Section	No							
4	Symbol	oo	10	0.066218	1.158	0.000	0.600	0.000	0.600
	Width (mm)	1800	30	0.321032	2.087	0.001	0.300	0.450	0.900
	Height (mm)	900	50	0.636172	2.827	0.450	0.000	0.900	0.601
	C.Height (mm)	900	70	0.951312	3.568	0.900	0.300	1.350	0.900
	Side Angle (°)	0.0	90	1.206127	4.497	1.350	0.000	1.800	0.600
	Splay (mm)	0	100	1.272345	5.655	1.799	0.300		
	Open Section	No				1.800	0.600		
5	Symbol	[]	10	3.300000	22.300	0.000	1.500	0.000	1.500
	Width (mm)	22000	30	9.900000	22.900	0.001	0.000	22.000	1.500
	Height (mm)	1500	50	16.500000	23.500	21.999	0.000		
	C.Height (mm)	1500	70	23.100000	24.100	22.000	1.500		
	Side Angle (°)	90.0	90	29.700000	24.700				
	Splay (mm)	0	100	33.000000	47.000				
	Open Section	No							
6	Symbol	[]	10	2.640000	22.240	0.000	1.200	0.000	1.200
	Width (mm)	22000	30	7.920000	22.720	0.001	0.000	22.000	1.200
	Height (mm)	1200	50	13.200000	23.200	21.999	0.000		
	C.Height (mm)	1200	70	18.480000	23.680	22.000	1.200		
	Side Angle (°)	90.0	90	23.760000	24.160				
	Splay (mm)	0	100	26.400000	46.400				
	Open Section	No							
7	Symbol	[]	10	3.450000	23.300	0.000	1.500	0.000	1.500
	Width (mm)	23500	30	10.350000	23.900	0.001	0.000	23.000	1.500
	Height (mm)	1500	50	17.250000	24.500	22.999	0.000		
	C.Height (mm)	1500	70	24.150000	25.100	23.000	1.500		
	Side Angle (°)	90.0	90	31.050000	25.700				
	Splay (mm)	0	100	34.500000	49.000				
	Open Section	No							
8	Symbol	[]	10	3.600000	24.300	0.000	1.500	0.000	1.500
	Width (mm)	24000	30	10.800000	24.900	0.001	0.000	24.000	1.500
	Height (mm)	1500	50	18.000000	25.500	23.999	0.000		
	C.Height (mm)	1500	70	25.200000	26.100	24.000	1.500		

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 Dewsbury WF12 7BU




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Conduits

Section	Input Depth (%)	Wetted Area (m ²)	Wetted Perimeter (m)	Base X (m)	Coordinates Y (m)	Cover X (m)	Coordinates Y (m)
Side Angle (°)	90.0	90 32.400000	26.700				
Splay (mm)	0	100 36.000000	51.000				
Open Section	No						
9 Symbol	[]	10 3.750000	25.300	0.000	1.500	0.000	1.500
Width (mm)	25000	30 11.250000	25.900	0.001	0.000	25.000	1.500
Height (mm)	1500	50 18.750000	26.500	24.999	0.000		
C.Height (mm)	1500	70 26.250000	27.100	25.000	1.500		
Side Angle (°)	90.0	90 33.750000	27.700				
Splay (mm)	0	100 37.500000	53.000				
Open Section	No						

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Summary Wizard of 15 minute 2 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 2 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	1	149.722	-0.153	0.000	0.23		28.9		OK
S1.001	S2	1	147.536	-0.206	0.000	0.22		50.2		OK
S1.002	S3	1	145.483	-0.209	0.000	0.20		58.5		OK
S1.003	S4	7	142.380	-1.170	0.000	0.00		71.5		OK
S1.004	S6	7	142.380	0.175	0.000	0.19		5.7		SURCHARGED
S1.005	S7	7	142.006	-0.174	0.000	0.12		5.7		OK

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Summary Wizard of 30 minute 2 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 2 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	2	149.713	-0.162	0.000	0.17		21.9		OK
S1.001	S2	2	147.525	-0.217	0.000	0.17		40.0		OK
S1.002	S3	2	145.472	-0.220	0.000	0.16		47.3		OK
S1.003	S4	5	142.432	-1.118	0.000	0.00		59.0		OK
S1.004	S6	5	142.432	0.227	0.000	0.19		5.8		SURCHARGED
S1.005	S7	5	142.006	-0.174	0.000	0.12		5.8		OK

Summary Wizard of 60 minute 2 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 2 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	3	149.701	-0.174	0.000	0.12		14.6		OK
S1.001	S2	3	147.510	-0.232	0.000	0.12		27.3		OK
S1.002	S3	3	145.458	-0.234	0.000	0.11		32.5		OK
S1.003	S4	2	142.467	-1.083	0.000	0.00		41.0		OK
S1.004	S6	2	142.467	0.262	0.000	0.19		5.8		SURCHARGED
S1.005	S7	2	142.006	-0.174	0.000	0.12		5.8		OK

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Summary Wizard of 120 minute 2 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 2 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	4	149.690	-0.185	0.000	0.07		9.2		OK
S1.001	S2	4	147.496	-0.246	0.000	0.08		17.7		OK
S1.002	S3	4	145.444	-0.248	0.000	0.07		21.0		OK
S1.003	S4	1	142.472	-1.078	0.000	0.00		26.5		OK
S1.004	S6	1	142.472	0.267	0.000	0.19		5.8		SURCHARGED
S1.005	S7	1	142.006	-0.174	0.000	0.12		5.8		OK

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Summary Wizard of 180 minute 2 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 2 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	5	149.684	-0.191	0.000	0.06		7.0		OK
S1.001	S2	5	147.489	-0.253	0.000	0.06		13.5		OK
S1.002	S3	5	145.437	-0.255	0.000	0.05		16.1		OK
S1.003	S4	3	142.460	-1.090	0.000	0.00		20.3		OK
S1.004	S6	3	142.460	0.255	0.000	0.19		5.8		SURCHARGED
S1.005	S7	3	142.006	-0.174	0.000	0.12		5.8		OK

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Summary Wizard of 240 minute 2 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 2 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	6	149.681	-0.194	0.000	0.05		5.8		OK
S1.001	S2	6	147.484	-0.258	0.000	0.05		11.1		OK
S1.002	S3	6	145.433	-0.259	0.000	0.04		13.2		OK
S1.003	S4	4	142.443	-1.107	0.000	0.00		16.7		OK
S1.004	S6	4	142.443	0.238	0.000	0.19		5.8		SURCHARGED
S1.005	S7	4	142.006	-0.174	0.000	0.12		5.8		OK

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Summary Wizard of 360 minute 2 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 2 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	7	149.677	-0.198	0.000	0.03			4.3	OK
S1.001	S2	7	147.479	-0.263	0.000	0.04			8.4	OK
S1.002	S3	7	145.428	-0.264	0.000	0.03			10.0	OK
S1.003	S4	6	142.403	-1.147	0.000	0.00			12.6	OK
S1.004	S6	6	142.403	0.198	0.000	0.19			5.8	SURCHARGED
S1.005	S7	6	142.006	-0.174	0.000	0.12			5.8	OK

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Summary Wizard of 480 minute 2 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 2 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	8	149.675	-0.200	0.000	0.03		3.5		OK
S1.001	S2	8	147.476	-0.266	0.000	0.03		6.8		OK
S1.002	S3	8	145.425	-0.267	0.000	0.03		8.1		OK
S1.003	S4	8	142.366	-1.184	0.000	0.00		10.3		OK
S1.004	S6	8	142.366	0.161	0.000	0.19		5.7		SURCHARGED
S1.005	S7	8	142.006	-0.174	0.000	0.12		5.7		OK

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Summary Wizard of 600 minute 2 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 2 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	9	149.673	-0.202	0.000	0.02		3.0		OK
S1.001	S2	9	147.474	-0.268	0.000	0.03		5.8		OK
S1.002	S3	9	145.423	-0.269	0.000	0.02		6.9		OK
S1.003	S4	9	142.329	-1.221	0.000	0.00		8.8		OK
S1.004	S6	9	142.329	0.124	0.000	0.19		5.7		SURCHARGED
S1.005	S7	9	142.006	-0.174	0.000	0.12		5.7		OK

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Summary Wizard of 720 minute 2 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 2 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	10	149.672	-0.203	0.000	0.02		2.7		OK
S1.001	S2	10	147.472	-0.270	0.000	0.02		5.1		OK
S1.002	S3	10	145.421	-0.271	0.000	0.02		6.1		OK
S1.003	S4	10	142.297	-1.253	0.000	0.00		7.7		OK
S1.004	S6	10	142.297	0.092	0.000	0.19		5.6		SURCHARGED
S1.005	S7	10	142.006	-0.174	0.000	0.12		5.6		OK

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Summary Wizard of 960 minute 2 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 2 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	11	149.668	-0.207	0.000	0.02		2.2		OK
S1.001	S2	11	147.468	-0.274	0.000	0.02		4.2		OK
S1.002	S3	11	145.416	-0.276	0.000	0.02		5.0		OK
S1.003	S4	11	142.235	-1.315	0.000	0.00		6.3		OK
S1.004	S6	11	142.235	0.030	0.000	0.18		5.3		SURCHARGED
S1.005	S7	11	142.004	-0.176	0.000	0.11		5.3		OK

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Summary Wizard of 1440 minute 2 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 2 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	12	149.664	-0.211	0.000	0.01			1.6	OK
S1.001	S2	12	147.461	-0.281	0.000	0.01			3.1	OK
S1.002	S3	12	145.410	-0.282	0.000	0.01			3.7	OK
S1.003	S4	12	142.166	-1.384	0.000	0.00			4.8	OK
S1.004	S6	12	142.166	-0.039	0.000	0.15			4.6	OK
S1.005	S7	12	142.001	-0.179	0.000	0.09			4.6	OK

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Summary Wizard of 2160 minute 2 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 2 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	13	149.660	-0.215	0.000	0.01			1.2	OK
S1.001	S2	13	147.456	-0.286	0.000	0.01			2.4	OK
S1.002	S3	13	145.406	-0.286	0.000	0.01			2.8	OK
S1.003	S4	13	142.102	-1.448	0.000	0.00			3.6	OK
S1.004	S6	13	142.102	-0.103	0.000	0.13			3.8	OK
S1.005	S7	13	141.995	-0.185	0.000	0.08			3.8	OK

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Summary Wizard of 15 minute 30 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 30 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	1	149.753	-0.122	0.000	0.43		54.7		OK
S1.001	S2	1	147.583	-0.159	0.000	0.45		105.4		OK
S1.002	S3	1	145.529	-0.163	0.000	0.43		125.7		OK
S1.003	S4	10	142.591	-0.959	0.000	0.01		158.2		OK
S1.004	S6	10	142.591	0.386	0.000	0.19		5.8		SURCHARGED
S1.005	S7	9	142.006	-0.174	0.000	0.12		5.8		OK

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Summary Wizard of 30 minute 30 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 30 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	2	149.739	-0.136	0.000	0.33		41.7		OK
S1.001	S2	2	147.564	-0.178	0.000	0.35		80.1		OK
S1.002	S3	2	145.510	-0.182	0.000	0.32		95.2		OK
S1.003	S4	8	142.711	-0.839	0.000	0.00		119.8		OK
S1.004	S6	8	142.711	0.506	0.000	0.19		5.8		SURCHARGED
S1.005	S7	8	142.006	-0.174	0.000	0.12		5.8		OK

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Summary Wizard of 60 minute 30 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 30 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	3	149.721	-0.154	0.000	0.22		27.8		OK
S1.001	S2	3	147.539	-0.203	0.000	0.23		53.4		OK
S1.002	S3	3	145.486	-0.206	0.000	0.22		63.5		OK
S1.003	S4	5	142.818	-0.732	0.000	0.00		79.9		OK
S1.004	S6	5	142.818	0.613	0.000	0.19		5.8		SURCHARGED
S1.005	S7	7	142.006	-0.174	0.000	0.12		5.8		OK

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Summary Wizard of 120 minute 30 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 30 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	4	149.705	-0.170	0.000	0.14		17.3		OK
S1.001	S2	4	147.517	-0.225	0.000	0.14		33.3		OK
S1.002	S3	4	145.465	-0.227	0.000	0.13		39.7		OK
S1.003	S4	2	142.890	-0.660	0.000	0.00		50.1		OK
S1.004	S6	2	142.890	0.685	0.000	0.19		5.8		SURCHARGED
S1.005	S7	10	142.006	-0.174	0.000	0.12		5.8		OK

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Summary Wizard of 180 minute 30 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 30 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	5	149.698	-0.177	0.000	0.10		13.1		OK
S1.001	S2	5	147.508	-0.234	0.000	0.11		25.2		OK
S1.002	S3	5	145.456	-0.236	0.000	0.10		30.0		OK
S1.003	S4	1	142.897	-0.653	0.000	0.00		37.9		OK
S1.004	S6	1	142.897	0.692	0.000	0.19		5.8		SURCHARGED
S1.005	S7	3	142.006	-0.174	0.000	0.12		5.8		OK

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Summary Wizard of 240 minute 30 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 30 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	6	149.693	-0.182	0.000	0.08		10.6		OK
S1.001	S2	6	147.502	-0.240	0.000	0.09		20.4		OK
S1.002	S3	6	145.449	-0.243	0.000	0.08		24.4		OK
S1.003	S4	3	142.878	-0.672	0.000	0.00		30.8		OK
S1.004	S6	3	142.878	0.673	0.000	0.19		5.8		SURCHARGED
S1.005	S7	2	142.006	-0.174	0.000	0.12		5.8		OK

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Summary Wizard of 360 minute 30 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 30 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	7	149.686	-0.189	0.000	0.06			7.8	OK
S1.001	S2	7	147.492	-0.250	0.000	0.07			15.1	OK
S1.002	S3	7	145.440	-0.252	0.000	0.06			18.0	OK
S1.003	S4	4	142.830	-0.720	0.000	0.00			22.8	OK
S1.004	S6	4	142.830	0.625	0.000	0.19			5.8	SURCHARGED
S1.005	S7	6	142.006	-0.174	0.000	0.12			5.8	OK

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Summary Wizard of 480 minute 30 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 30 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	8	149.682	-0.193	0.000	0.05		6.3		OK
S1.001	S2	8	147.486	-0.256	0.000	0.05		12.2		OK
S1.002	S3	8	145.435	-0.257	0.000	0.05		14.6		OK
S1.003	S4	6	142.778	-0.772	0.000	0.00		18.4		OK
S1.004	S6	6	142.778	0.573	0.000	0.19		5.8		SURCHARGED
S1.005	S7	4	142.006	-0.174	0.000	0.12		5.8		OK

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Summary Wizard of 600 minute 30 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 30 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	9	149.680	-0.195	0.000	0.04			5.4	OK
S1.001	S2	9	147.482	-0.260	0.000	0.04			10.3	OK
S1.002	S3	9	145.431	-0.261	0.000	0.04			12.3	OK
S1.003	S4	7	142.726	-0.824	0.000	0.00			15.6	OK
S1.004	S6	7	142.726	0.521	0.000	0.19			5.8	SURCHARGED
S1.005	S7	5	142.006	-0.174	0.000	0.12			5.8	OK

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Summary Wizard of 720 minute 30 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 30 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	10	149.678	-0.197	0.000	0.04			4.7	OK
S1.001	S2	10	147.480	-0.262	0.000	0.04			9.0	OK
S1.002	S3	10	145.429	-0.263	0.000	0.04			10.7	OK
S1.003	S4	9	142.676	-0.874	0.000	0.00			13.6	OK
S1.004	S6	9	142.676	0.471	0.000	0.19			5.8	SURCHARGED
S1.005	S7	1	142.006	-0.174	0.000	0.12			5.8	OK

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Summary Wizard of 960 minute 30 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 30 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	11	149.675	-0.200	0.000	0.03			3.8	OK
S1.001	S2	11	147.477	-0.265	0.000	0.03			7.3	OK
S1.002	S3	11	145.426	-0.266	0.000	0.03			8.7	OK
S1.003	S4	11	142.576	-0.974	0.000	0.00			11.0	OK
S1.004	S6	11	142.576	0.371	0.000	0.19			5.8	SURCHARGED
S1.005	S7	11	142.006	-0.174	0.000	0.12			5.8	OK

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Summary Wizard of 1440 minute 30 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 30 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	12	149.673	-0.202	0.000	0.02		2.8		OK
S1.001	S2	12	147.473	-0.269	0.000	0.02		5.3		OK
S1.002	S3	12	145.422	-0.270	0.000	0.02		6.4		OK
S1.003	S4	12	142.411	-1.139	0.000	0.00		8.1		OK
S1.004	S6	12	142.411	0.206	0.000	0.19		5.8		SURCHARGED
S1.005	S7	12	142.006	-0.174	0.000	0.12		5.8		OK

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Summary Wizard of 2160 minute 30 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 30 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	13	149.667	-0.208	0.000	0.02		2.0		OK
S1.001	S2	13	147.466	-0.276	0.000	0.02		3.9		OK
S1.002	S3	13	145.415	-0.277	0.000	0.02		4.7		OK
S1.003	S4	13	142.252	-1.298	0.000	0.00		6.0		OK
S1.004	S6	13	142.252	0.047	0.000	0.18		5.4		SURCHARGED
S1.005	S7	13	142.005	-0.175	0.000	0.11		5.4		OK

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Summary Wizard of 15 minute 100 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	3	149.770	-0.105	0.000	0.56		70.7		OK
S1.001	S2	3	147.607	-0.135	0.000	0.59		136.3		OK
S1.002	S3	3	145.552	-0.140	0.000	0.55		162.5		OK
S1.003	S4	24	142.721	-0.829	0.000	0.01		204.7		OK
S1.004	S6	24	142.721	0.516	0.000	0.19		5.8		SURCHARGED
S1.005	S7	12	142.006	-0.174	0.000	0.12		5.8		OK

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Summary Wizard of 30 minute 100 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	4	149.753	-0.122	0.000	0.43		54.5		OK
S1.001	S2	4	147.584	-0.158	0.000	0.45		104.7		OK
S1.002	S3	4	145.529	-0.163	0.000	0.42		124.3		OK
S1.003	S4	21	142.892	-0.658	0.000	0.01		156.4		OK
S1.004	S6	21	142.892	0.687	0.000	0.19		5.8		SURCHARGED
S1.005	S7	21	142.006	-0.174	0.000	0.12		5.8		OK

Summary Wizard of 60 minute 100 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	6	149.732	-0.143	0.000	0.29		36.5		OK
S1.001	S2	6	147.555	-0.187	0.000	0.30		70.2		OK
S1.002	S3	6	145.501	-0.191	0.000	0.28		83.4		OK
S1.003	S4	18	143.058	-0.492	0.000	0.00		105.0		OK
S1.004	S6	18	143.058	0.853	0.000	0.19		5.8		SURCHARGED
S1.005	S7	18	142.006	-0.174	0.000	0.12		5.8		OK

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Summary Wizard of 120 minute 100 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	8	149.714	-0.161	0.000	0.18		22.7		OK
S1.001	S2	8	147.530	-0.212	0.000	0.19		43.8		OK
S1.002	S3	8	145.477	-0.215	0.000	0.18		52.2		OK
S1.003	S4	12	143.183	-0.367	0.000	0.00		65.9		OK
S1.004	S6	12	143.182	0.977	0.000	0.19		5.8		SURCHARGED
S1.005	S7	25	142.006	-0.174	0.000	0.12		5.8		OK

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Summary Wizard of 180 minute 100 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	11	149.705	-0.170	0.000	0.14		17.2		OK
S1.001	S2	11	147.517	-0.225	0.000	0.14		33.1		OK
S1.002	S3	11	145.465	-0.227	0.000	0.13		39.4		OK
S1.003	S4	10	143.216	-0.334	0.000	0.00		49.7		OK
S1.004	S6	10	143.216	1.011	0.000	0.19		5.8		SURCHARGED
S1.005	S7	14	142.006	-0.174	0.000	0.12		5.8		OK

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Summary Wizard of 240 minute 100 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	12	149.699	-0.176	0.000	0.11		13.8		OK
S1.001	S2	12	147.509	-0.233	0.000	0.11		26.7		OK
S1.002	S3	12	145.457	-0.235	0.000	0.11		31.8		OK
S1.003	S4	11	143.210	-0.340	0.000	0.00		40.1		OK
S1.004	S6	11	143.210	1.005	0.000	0.19		5.8		SURCHARGED
S1.005	S7	20	142.006	-0.174	0.000	0.12		5.8		OK

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Summary Wizard of 360 minute 100 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	15	149.692	-0.183	0.000	0.08		10.2		OK
S1.001	S2	15	147.500	-0.242	0.000	0.08		19.6		OK
S1.002	S3	15	145.448	-0.244	0.000	0.08		23.4		OK
S1.003	S4	13	143.161	-0.389	0.000	0.00		29.5		OK
S1.004	S6	13	143.161	0.956	0.000	0.19		5.8		SURCHARGED
S1.005	S7	10	142.006	-0.174	0.000	0.12		5.8		OK

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Summary Wizard of 480 minute 100 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	17	149.687	-0.188	0.000	0.06			8.2	OK
S1.001	S2	17	147.493	-0.249	0.000	0.07			15.8	OK
S1.002	S3	17	145.441	-0.251	0.000	0.06			18.8	OK
S1.003	S4	16	143.114	-0.436	0.000	0.00			23.7	OK
S1.004	S6	16	143.114	0.909	0.000	0.19			5.8	SURCHARGED
S1.005	S7	15	142.006	-0.174	0.000	0.12			5.8	OK

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Summary Wizard of 600 minute 100 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	19	149.684	-0.191	0.000	0.05			6.9	OK
S1.001	S2	19	147.488	-0.254	0.000	0.06			13.3	OK
S1.002	S3	19	145.437	-0.255	0.000	0.05			15.8	OK
S1.003	S4	17	143.061	-0.489	0.000	0.00			20.0	OK
S1.004	S6	17	143.061	0.856	0.000	0.19			5.8	SURCHARGED
S1.005	S7	8	142.006	-0.174	0.000	0.12			5.8	OK

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Summary Wizard of 720 minute 100 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	21	149.681	-0.194	0.000	0.05		6.0		OK
S1.001	S2	21	147.485	-0.257	0.000	0.05		11.6		OK
S1.002	S3	21	145.433	-0.259	0.000	0.05		13.8		OK
S1.003	S4	19	143.006	-0.544	0.000	0.00		17.4		OK
S1.004	S6	19	143.006	0.801	0.000	0.19		5.8		SURCHARGED
S1.005	S7	17	142.006	-0.174	0.000	0.12		5.8		OK

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Summary Wizard of 960 minute 100 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	22	149.678	-0.197	0.000	0.04		4.8		OK
S1.001	S2	22	147.480	-0.262	0.000	0.04		9.3		OK
S1.002	S3	22	145.429	-0.263	0.000	0.04		11.0		OK
S1.003	S4	22	142.879	-0.671	0.000	0.00		14.0		OK
S1.004	S6	22	142.879	0.674	0.000	0.19		5.8		SURCHARGED
S1.005	S7	16	142.006	-0.174	0.000	0.12		5.8		OK

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Summary Wizard of 1440 minute 100 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	24	149.675	-0.200	0.000	0.03		3.5		OK
S1.001	S2	24	147.476	-0.266	0.000	0.03		6.8		OK
S1.002	S3	24	145.425	-0.267	0.000	0.03		8.1		OK
S1.003	S4	25	142.655	-0.895	0.000	0.00		10.2		OK
S1.004	S6	25	142.655	0.450	0.000	0.19		5.8		SURCHARGED
S1.005	S7	9	142.006	-0.174	0.000	0.12		5.8		OK

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Summary Wizard of 2160 minute 100 year Winter Q+0% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	26	149.672	-0.203	0.000	0.02			2.6	OK
S1.001	S2	26	147.472	-0.270	0.000	0.02			4.9	OK
S1.002	S3	26	145.420	-0.272	0.000	0.02			5.9	OK
S1.003	S4	26	142.412	-1.138	0.000	0.00			7.5	OK
S1.004	S6	26	142.412	0.207	0.000	0.19			5.8	SURCHARGED
S1.005	S7	26	142.006	-0.174	0.000	0.12			5.8	OK

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Summary Wizard of 15 minute 100 year Winter Q+30% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	1	149.793	-0.082	0.000	0.73		92.1		OK
S1.001	S2	1	147.639	-0.103	0.000	0.76		177.6		OK
S1.002	S3	1	145.582	-0.110	0.000	0.72		211.7		OK
S1.003	S4	20	142.896	-0.654	0.000	0.01		266.7		OK
S1.004	S6	20	142.896	0.691	0.000	0.19		5.8		SURCHARGED
S1.005	S7	24	142.006	-0.174	0.000	0.12		5.8		OK

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Summary Wizard of 30 minute 100 year Winter Q+30% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	2	149.771	-0.104	0.000	0.56		71.0		OK
S1.001	S2	2	147.608	-0.134	0.000	0.59		136.4		OK
S1.002	S3	2	145.552	-0.140	0.000	0.55		162.0		OK
S1.003	S4	15	143.128	-0.422	0.000	0.01		203.8		OK
S1.004	S6	15	143.128	0.923	0.000	0.19		5.8		SURCHARGED
S1.005	S7	19	142.006	-0.174	0.000	0.12		5.8		OK

Summary Wizard of 60 minute 100 year Winter Q+30% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	5	149.746	-0.129	0.000	0.38		47.6		OK
S1.001	S2	5	147.573	-0.169	0.000	0.39		91.5		OK
S1.002	S3	5	145.518	-0.174	0.000	0.37		108.7		OK
S1.003	S4	8	143.355	-0.195	0.000	0.00		136.8		OK
S1.004	S6	8	143.355	1.150	0.000	0.19		5.8		SURCHARGED
S1.005	S7	23	142.006	-0.174	0.000	0.12		5.8		OK

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Summary Wizard of 120 minute 100 year Winter Q+30% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	7	149.723	-0.152	0.000	0.23		29.6		OK
S1.001	S2	7	147.542	-0.200	0.000	0.25		57.1		OK
S1.002	S3	7	145.489	-0.203	0.000	0.23		68.0		OK
S1.003	S4	5	143.550	0.000	0.000	0.00		85.8		OK
S1.004	S6	5	143.545	1.340	0.000	0.20		5.9		SURCHARGED
S1.005	S7	5	142.007	-0.173	0.000	0.12		5.9		OK

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Summary Wizard of 180 minute 100 year Winter Q+30% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	9	149.713	-0.162	0.000	0.18		22.4		OK
S1.001	S2	9	147.529	-0.213	0.000	0.19		43.1		OK
S1.002	S3	9	145.476	-0.216	0.000	0.17		51.3		OK
S1.003	S4	2	143.640	0.090	0.000	0.00		64.7		SURCHARGED
S1.004	S6	2	143.640	1.435	0.000	0.20		6.0		SURCHARGED
S1.005	S7	2	142.007	-0.173	0.000	0.12		6.0		OK

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Summary Wizard of 240 minute 100 year Winter Q+30% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	10	149.706	-0.169	0.000	0.14		18.0		OK
S1.001	S2	10	147.519	-0.223	0.000	0.15		34.8		OK
S1.002	S3	10	145.466	-0.226	0.000	0.14		41.4		OK
S1.003	S4	1	143.668	0.118	0.000	0.00		52.2		SURCHARGED
S1.004	S6	1	143.668	1.463	0.000	0.20		6.0		SURCHARGED
S1.005	S7	1	142.007	-0.173	0.000	0.12		6.0		OK

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Summary Wizard of 360 minute 100 year Winter Q+30% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	13	149.698	-0.177	0.000	0.10		13.3		OK
S1.001	S2	13	147.508	-0.234	0.000	0.11		25.5		OK
S1.002	S3	13	145.456	-0.236	0.000	0.10		30.4		OK
S1.003	S4	3	143.616	0.066	0.000	0.00		38.4		SURCHARGED
S1.004	S6	3	143.616	1.411	0.000	0.20		5.9		SURCHARGED
S1.005	S7	3	142.007	-0.173	0.000	0.12		5.9		OK

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Summary Wizard of 480 minute 100 year Winter Q+30% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	14	149.694	-0.181	0.000	0.08		10.7		OK
S1.001	S2	14	147.502	-0.240	0.000	0.09		20.5		OK
S1.002	S3	14	145.450	-0.242	0.000	0.08		24.5		OK
S1.003	S4	4	143.550	0.000	0.000	0.00		30.9		OK
S1.004	S6	4	143.549	1.344	0.000	0.20		5.9		SURCHARGED
S1.005	S7	4	142.007	-0.173	0.000	0.12		5.9		OK

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Summary Wizard of 600 minute 100 year Winter Q+30% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	16	149.689	-0.186	0.000	0.07		9.0		OK
S1.001	S2	16	147.496	-0.246	0.000	0.07		17.3		OK
S1.002	S3	16	145.444	-0.248	0.000	0.07		20.6		OK
S1.003	S4	6	143.502	-0.048	0.000	0.00		26.1		OK
S1.004	S6	6	143.500	1.295	0.000	0.20		5.9		SURCHARGED
S1.005	S7	6	142.007	-0.173	0.000	0.12		5.9		OK

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Summary Wizard of 720 minute 100 year Winter Q+30% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	18	149.686	-0.189	0.000	0.06		7.8		OK
S1.001	S2	18	147.491	-0.251	0.000	0.06		15.1		OK
S1.002	S3	18	145.440	-0.252	0.000	0.06		17.9		OK
S1.003	S4	7	143.448	-0.102	0.000	0.00		22.7		OK
S1.004	S6	7	143.447	1.242	0.000	0.19		5.8		SURCHARGED
S1.005	S7	7	142.007	-0.173	0.000	0.12		5.8		OK

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Summary Wizard of 960 minute 100 year Winter Q+30% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	20	149.682	-0.193	0.000	0.05			6.3	OK
S1.001	S2	20	147.486	-0.256	0.000	0.05			12.1	OK
S1.002	S3	20	145.434	-0.258	0.000	0.05			14.4	OK
S1.003	S4	9	143.346	-0.204	0.000	0.00			18.2	OK
S1.004	S6	9	143.345	1.140	0.000	0.19			5.8	SURCHARGED
S1.005	S7	11	142.006	-0.174	0.000	0.12			5.8	OK

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Summary Wizard of 1440 minute 100 year Winter Q+30% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	23	149.678	-0.197	0.000	0.04			4.6	OK
S1.001	S2	23	147.479	-0.263	0.000	0.04			8.8	OK
S1.002	S3	23	145.428	-0.264	0.000	0.04			10.5	OK
S1.003	S4	14	143.138	-0.412	0.000	0.00			13.3	OK
S1.004	S6	14	143.138	0.933	0.000	0.19			5.8	SURCHARGED
S1.005	S7	22	142.006	-0.174	0.000	0.12			5.8	OK

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Summary Wizard of 2160 minute 100 year Winter Q+30% for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Offline Controls 0 Number of Time/Area Diagrams 0
Number of Online Controls 1 Number of Storage Structures 0 Number of Real Time Controls 0

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.350
Return Period (years) 100 Cv (Summer) 0.750
Region England and Wales Cv (Winter) 0.840
M5-60 (mm) 19.000

Margin for Flood Risk Warning (mm) 300.0 DVD Status ON
Analysis Timestep Fine Inertia Status ON
DTS Status ON

Profile(s) Winter
Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600, 720,
960, 1440, 2160
Sensitivity flows(s) (%) 0, +30

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	25	149.674	-0.201	0.000	0.03		3.3		OK
S1.001	S2	25	147.475	-0.267	0.000	0.03		6.4		OK
S1.002	S3	25	145.424	-0.268	0.000	0.03		7.7		OK
S1.003	S4	23	142.778	-0.772	0.000	0.00		9.8		OK
S1.004	S6	23	142.778	0.573	0.000	0.19		5.8		SURCHARGED
S1.005	S7	13	142.006	-0.174	0.000	0.12		5.8		OK