

P15969: Uxbridge Care Home 100% Hardstanding	Date: 09/07/2024		
	Designed by: SC	Checked by:	Approved By:
Report Details: Type: Junctions Storm Phase: 100% site runoff	Goodson Associates: 4 Lansdowne Crescent, Glasgow , G20 6NQ		



Name	Junction Type	Easting (m)	Northing (m)	Cover Level (m)	Depth (m)	Invert Level (m)	Chamber Shape	Diameter (m)
1	Manhole	507406.559	181960.896	42.787	0.900	41.887	Circular	1.200
2	Manhole	507424.255	181973.684	43.311	1.571	41.740	Circular	1.200
3	Manhole	507433.695	181961.273	42.821	1.275	41.546	Circular	1.200
5	Manhole	507443.073	181948.946	42.752	1.312	41.440	Circular	1.200
7	Manhole	507454.623	181933.763	42.214	0.902	41.312	Circular	1.200
8	Manhole	507450.706	181930.937	42.422	1.143	41.279	Circular	1.200
12	Manhole	507427.280	181903.689	41.839	1.150	40.689	Circular	1.200
13	Manhole	507427.791	181899.823	41.704	1.054	40.650	Circular	1.200
9	Manhole	507401.115	181950.113	42.898	1.000	41.898	Circular	1.200
10	Manhole	507409.600	181936.861	42.643	1.022	41.621	Circular	1.200
6	Manhole	507433.736	181941.811	42.638	1.000	41.638	Circular	1.200
4	Manhole	507424.880	181954.275	42.630	1.000	41.630	Circular	1.200
11	Manhole	507424.700	181914.653	42.149	1.050	41.099	Circular	1.200
Connection	Manhole	507424.494	181896.376	41.349	0.789	40.560	Circular	1.200

Name	Lock
1	None
2	None
3	None
5	None
7	None
8	None
12	None
13	None
9	None
10	None
6	None
4	None
11	None
Connection	None

Inlets

Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
1	Inlet	Catchment Area	(None)	No Restriction
2	Inlet	1.000	(None)	No Restriction
3	Inlet	Catchment Area (1) 1.001 2.000	(None)	No Restriction
5	Inlet	1.002 3.000	(None)	No Restriction
7	Inlet	1.003	(None)	No Restriction
8	Inlet	1.004 Catchment Area (2)	(None)	No Restriction
12	Inlet	1.006	(None)	No Restriction
13	Inlet	1.007	(None)	No Restriction
10	Inlet	4.000 Catchment Area (3)	(None)	No Restriction
11	Inlet	4.001	(None)	No Restriction
Connection	Inlet	1.008	(None)	No Restriction

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Outlets

Junction	Outlet Name	Outgoing Connection	Outlet Type
1	Outlet	1.000	Free Discharge
2	Outlet	1.001	Free Discharge
3	Outlet	1.002	Free Discharge
5	Outlet	1.003	Free Discharge
7	Outlet	1.004	Free Discharge
8	Outlet	1.005	Orifice
	Diameter (m)	0.300	
	Coefficient of Discharge	0.600	
	Invert Level (m)	41.279	
12	Outlet	1.007	Hydro-Brake®
	Invert Level (m)	40.689	
	Design Depth (m)	1.100	
	Design Flow (L/s)	1.0	
	Objective	Minimise Upstream Storage Requirements	
	Application	Surface Water Only	
	Sump Available	☐	
	Unit Reference	CHE-0044-1000-1100-1000	
13	Outlet	1.008	Orifice
	Diameter (m)	0.150	
	Coefficient of Discharge	0.600	
	Invert Level (m)	40.650	
9	Outlet	4.000	Free Discharge
10	Outlet	4.001	Free Discharge
6	Outlet	3.000	Free Discharge
4	Outlet	2.000	Free Discharge
11	Outlet	4.002	Orifice
	Diameter (m)	0.150	
	Coefficient of Discharge	0.600	
	Invert Level (m)	41.099	

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Cellular Storage

Type : Cellular Storage

Dimensions

Exceedance Level (m)	41.850
Depth (m)	0.610
Base Level (m)	40.900
Number of Crates Long	27
Number of Crates Wide	16
Number of Crates High	1
Porosity (%)	95
Crate Length (m)	1.2
Crate Width (m)	0.6
Crate Height (m)	0.61
Total Volume (m³)	180.587

Inlets

Inlet

Inlet Type	Point Inflow
Incoming Item(s)	1.005
Bypass Destination	(None)
Capacity Type	No Restriction

Inlet (1)

Inlet Type	Point Inflow
Incoming Item(s)	4.002
Bypass Destination	(None)
Capacity Type	No Restriction

Outlets

Outlet

Outgoing Connection	1.006
Outlet Type	Orifice
Diameter (m)	0.225
Coefficient of Discharge	0.600
Invert Level (m)	40.900

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Report Details: Type: Connections Storm Phase: 100% site runoff	Goodson Associates: 4 Lansdowne Crescent, Glasgow , G20 6NQ		



Name	Length (m)	Connection Type	Slope (1:X)	Manning's n	Colebrook-White Roughness (mm)	Diameter / Base Width (mm)	Upstream Cover Level (m)	Upstream Invert Level (m)
1.000	21.833	Pipe	148.385		0.6	225	42.787	41.887
1.001	15.593	Pipe	80.375		0.6	225	43.311	41.740
1.002	15.489	Pipe	145.652		0.6	300	42.821	41.546
1.003	19.077	Pipe	149.436		0.6	300	42.752	41.440
1.004	4.829	Pipe	146.348		0.6	300	42.214	41.312
1.007	3.900	Pipe	98.947		0.6	150	41.839	40.689
4.000	15.736	Pipe	103.293		0.6	150	42.898	41.898
2.000	11.256	Pipe	133.994		0.6	150	42.630	41.630
3.000	11.751	Pipe	59.169		0.6	150	42.638	41.638
1.005	9.689	No Delay						
1.006	27.793	No Delay						
4.001	26.855	Pipe	51.452		0.6	225	42.643	41.621
4.002	24.891	No Delay						
1.008	4.770	Pipe	53.074		0.6	150	41.704	40.650

Name	Downstream Cover Level (m)	Downstream Invert Level (m)	Part Family	Lock	Flow Restriction (L/s)
1.000	43.311	41.740		None	
1.001	42.821	41.546		None	
1.002	42.752	41.440		None	
1.003	42.214	41.312		None	
1.004	42.422	41.279		None	
1.007	41.704	40.650		None	1.02
4.000	42.643	41.746		None	
2.000	42.821	41.546		None	
3.000	42.752	41.440		None	
1.005					
1.006					
4.001	42.149	41.099		None	
4.002					
1.008	41.349	40.560		None	46.47

P15969: Uxbridge Care Home 100% Hardstanding	Date: 09/07/2024		
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Report Details: Type: Inflow Summary Storm Phase: 100% site runoff	Goodson Associates: 4 Lansdowne Crescent, Glasgow , G20 6NQ		



Inflow Label	Connected To	Flow (L/s)	Runoff Method	Area (ha)	Percentage Impervious (%)	Urban Creep (%)	Adjusted Percentage Impervious (%)	Area Analysed (ha)
Catchment Area	1		Time of Concentration	0.022	100	0	100	0.022
Catchment Area (1)	3		Time of Concentration	0.084	100	0	100	0.084
Catchment Area (2)	8		Time of Concentration	0.067	100	0	100	0.067
Catchment Area (3)	10		Time of Concentration	0.077	100	0	100	0.077
TOTAL		0.0		0.250				0.250

P15969: Uxbridge Care Home 100% Hardstanding	Date: 09/07/2024		
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Report Details: Type: Outfall Details Storm Phase: 100% site runoff	Goodson Associates: 4 Lansdowne Crescent, Glasgow , G20 6NQ		



Goodson Associates
civil structural infrastructure transportation

Outfalls

Outfall	Outfall Type	Fixed Surcharged Level (m)	Level Curve
Connection	Free Discharge		

P15969: Uxbridge Care Home 100% Hardstanding	Date: 09/07/2024		
	Designed by: SC	Checked by:	Approved By:
Report Title: Rainfall Analysis Criteria	Goodson Associates: 4 Lansdowne Crescent, Glasgow , G20 6NQ		



Runoff Type	Dynamic
Output Interval (mins)	1
Time Step	Shortest
Urban Creep	Apply Global Value
Urban Creep Global Value (%)	0
Junction Flood Risk Margin (mm)	300
Perform No Discharge Analysis	☐

Rainfall		
FEH - Uxbridge		Type: FEH
Site Location	GB 507432 181932 TQ 07432 81932	
Rainfall Version	2013	
Data Type	Point	
Summer	☒	
Winter	☒	

Return Period

Return Period (years)	Increase Rainfall (%)
2.0	40.000
30.0	40.000
100.0	40.000

Storm Durations

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

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FEH - Uxbridge: 2 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
1	FEH - Uxbridge: 2 years: +40 %: 15 mins: Winter	42.787	41.887	41.942	0.055	5.2	0.062	0.000	5.1	2.387	OK
2	FEH - Uxbridge: 2 years: +40 %: 15 mins: Winter	43.311	41.740	41.784	0.044	5.1	0.049	0.000	5.0	2.377	OK
3	FEH - Uxbridge: 2 years: +40 %: 15 mins: Winter	42.821	41.546	41.658	0.112	24.5	0.127	0.000	23.9	11.446	OK
5	FEH - Uxbridge: 2 years: +40 %: 15 mins: Winter	42.752	41.440	41.546	0.107	23.9	0.121	0.000	24.1	11.386	OK
7	FEH - Uxbridge: 2 years: +40 %: 15 mins: Winter	42.214	41.312	41.484	0.172	24.1	0.195	0.000	24.2	11.364	OK
8	FEH - Uxbridge: 2 years: +40 %: 15 mins: Winter	42.422	41.279	41.476	0.197	38.7	0.223	0.000	38.7	18.489	OK
12	FEH - Uxbridge: 2 years: +40 %: 480 mins: Winter	41.839	40.689	41.162	0.473	3.1	0.535	0.000	0.6	32.641	Surcharged
13	FEH - Uxbridge: 2 years: +40 %: 1440 mins: Summer	41.704	40.650	40.675	0.025	0.6	0.029	0.000	0.6	89.173	OK
9	FEH - Uxbridge: 2 years: +40 %: 15 mins: Summer	42.898	41.898	41.898	0.000	0.0	0.000	0.000	0.0	0.000	OK
10	FEH - Uxbridge: 2 years: +40 %: 15 mins: Winter	42.643	41.621	41.695	0.074	17.7	0.084	0.000	17.6	8.206	OK
6	FEH - Uxbridge: 2 years: +40 %: 15 mins: Summer	42.638	41.638	41.638	0.000	0.0	0.000	0.000	0.0	0.000	OK
4	FEH - Uxbridge: 2 years: +40 %: 15 mins: Winter	42.630	41.630	41.658	0.028	0.6	0.032	0.000	0.3	0.047	OK
11	FEH - Uxbridge: 2 years: +40 %: 15 mins: Winter	42.149	41.099	41.304	0.205	17.6	0.232	0.000	17.0	8.195	OK
Connection	FEH - Uxbridge: 2 years: +40 %: 1440 mins: Summer	41.349	40.560	40.577	0.017	0.6	0.000	0.000	0.6	89.139	OK

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FEH - Uxbridge: 30 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
1	FEH - Uxbridge: 30 years: +40 %: 15 mins: Winter	42.787	41.887	41.975	0.088	12.7	0.099	0.000	12.6	5.884	OK
2	FEH - Uxbridge: 30 years: +40 %: 15 mins: Winter	43.311	41.740	41.809	0.069	12.6	0.078	0.000	12.4	5.871	OK
3	FEH - Uxbridge: 30 years: +40 %: 15 mins: Winter	42.821	41.546	41.795	0.249	60.5	0.281	0.000	57.8	28.401	OK
5	FEH - Uxbridge: 30 years: +40 %: 15 mins: Winter	42.752	41.440	41.750	0.310	57.8	0.350	0.000	56.0	28.309	Surcharged
7	FEH - Uxbridge: 30 years: +40 %: 15 mins: Winter	42.214	41.312	41.688	0.376	56.0	0.425	0.000	56.9	28.087	Surcharged
8	FEH - Uxbridge: 30 years: +40 %: 15 mins: Winter	42.422	41.279	41.662	0.383	90.8	0.433	0.000	90.7	45.665	OK
12	FEH - Uxbridge: 30 years: +40 %: 960 mins: Winter	41.839	40.689	41.453	0.764	2.9	0.864	0.000	0.8	80.754	Surcharged
13	FEH - Uxbridge: 30 years: +40 %: 960 mins: Winter	41.704	40.650	40.679	0.029	0.8	0.033	0.000	0.8	80.694	OK
9	FEH - Uxbridge: 30 years: +40 %: 15 mins: Winter	42.898	41.898	41.996	0.097	1.1	0.110	0.000	1.7	0.209	OK
10	FEH - Uxbridge: 30 years: +40 %: 15 mins: Winter	42.643	41.621	41.989	0.368	43.8	0.417	0.000	38.7	20.403	Surcharged
6	FEH - Uxbridge: 30 years: +40 %: 15 mins: Winter	42.638	41.638	41.750	0.112	2.7	0.126	0.000	2.4	0.191	OK
4	FEH - Uxbridge: 30 years: +40 %: 15 mins: Winter	42.630	41.630	41.798	0.168	1.1	0.190	0.000	1.7	0.281	Surcharged
11	FEH - Uxbridge: 30 years: +40 %: 15 mins: Winter	42.149	41.099	41.827	0.728	38.7	0.823	0.000	38.0	20.184	OK
Connection	FEH - Uxbridge: 30 years: +40 %: 960 mins: Winter	41.349	40.560	40.579	0.019	0.8	0.000	0.000	0.8	80.646	OK

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FEH - Uxbridge: 100 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
1	FEH - Uxbridge: 100 years: +40 %: 15 mins: Winter	42.78 7	41.88 7	42.050	0.163	16.6	0.184	0.000	16.7	7.696	OK
2	FEH - Uxbridge: 100 years: +40 %: 15 mins: Winter	43.31 1	41.74 0	42.031	0.291	16.7	0.329	0.000	21.2	7.691	Surcharged
3	FEH - Uxbridge: 100 years: +40 %: 15 mins: Winter	42.82 1	41.54 6	42.014	0.468	72.9	0.530	0.000	68.6	37.308	Surcharged
5	FEH - Uxbridge: 100 years: +40 %: 15 mins: Winter	42.75 2	41.44 0	41.932	0.492	69.5	0.557	0.000	70.5	37.183	Surcharged
7	FEH - Uxbridge: 100 years: +40 %: 960 mins: Winter	42.21 4	41.31 2	41.868	0.556	5.0	0.628	0.000	5.0	115.235	Surcharged
8	FEH - Uxbridge: 100 years: +40 %: 960 mins: Winter	42.42 2	41.27 9	41.868	0.589	8.1	0.666	0.000	8.1	183.494	OK
12	FEH - Uxbridge: 100 years: +40 %: 960 mins: Winter	41.83 9	40.68 9	41.868	1.178	6.7	29.719	28.419	1.0	96.355	Flood
13	FEH - Uxbridge: 100 years: +40 %: 960 mins: Winter	41.70 4	40.65 0	40.683	0.034	1.0	0.038	0.000	1.0	96.290	OK
9	FEH - Uxbridge: 100 years: +40 %: 15 mins: Winter	42.89 8	41.89 8	42.449	0.551	8.5	0.623	0.000	7.1	0.772	Surcharged
10	FEH - Uxbridge: 100 years: +40 %: 15 mins: Winter	42.64 3	41.62 1	42.440	0.819	57.2	0.926	0.000	51.4	27.134	Flood Risk
6	FEH - Uxbridge: 100 years: +40 %: 15 mins: Winter	42.63 8	41.63 8	41.931	0.293	4.8	0.331	0.000	2.6	0.419	Surcharged
4	FEH - Uxbridge: 100 years: +40 %: 15 mins: Winter	42.63 0	41.63 0	42.009	0.379	3.3	0.429	0.000	3.0	0.551	Surcharged
11	FEH - Uxbridge: 100 years: +40 %: 15 mins: Winter	42.14 9	41.09 9	42.149	1.050	51.4	1.556	0.369	46.4	26.180	Flood
Connection	FEH - Uxbridge: 100 years: +40 %: 960 mins: Winter	41.34 9	40.56 0	40.581	0.021	1.0	0.000	0.000	1.0	96.239	OK

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FEH - Uxbridge: 2 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank
By: Max. Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Residant Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Percentage Available (%)	Status
Cellular Storage	FEH - Uxbridge: 2 years: +40 %: 480 mins: Winter	41.162	41.162	0.262	0.262	8.1	77.521	0.000	0.000	3.1	33.125	57.073	OK

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FEH - Uxbridge: 30 years: Increase Rainfall (%): +40: Critical Storm Per Item:
 Rank By: Max. Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Residant Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Percentage Available (%)	Status
Cellular Storage	FEH - Uxbridge: 30 years: +40 %: 960 mins: Winter	41.452	41.452	0.552	0.552	8.7	163.175	0.000	0.000	2.8	81.582	9.642	OK

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FEH - Uxbridge: 100 years: Increase Rainfall (%): +40: Critical Storm Per Item:
 Rank By: Max. Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Residant Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Percentage Available (%)	Status
Cellular Storage	FEH - Uxbridge: 100 years: +40 %: 960 mins: Winter	41.868	41.868	0.968	0.968	11.5	185.671	4.997	0.000	7.4	97.284	-2.815	Flood

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FEH - Uxbridge: 2 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Flow

Connection	Storm Event	Connection Type	From	To	Upstream Cover Level (m)	Max. US Water Level (m)	Max. Flow Depth (m)	Discharge Volume (m³)	Max. Velocity (m/s)	Flow / Capacity	Max. Flow (L/s)	Status
1.000	FEH - Uxbridge: 2 years: +40 %: 15 mins: Winter	Pipe	1	2	42.787	41.942	0.049	2.387	0.8	0.12	5.1	OK
1.001	FEH - Uxbridge: 2 years: +40 %: 15 mins: Winter	Pipe	2	3	43.311	41.784	0.078	2.377	0.4	0.09	5.0	OK
1.002	FEH - Uxbridge: 2 years: +40 %: 15 mins: Winter	Pipe	3	5	42.821	41.658	0.109	11.395	1.0	0.26	23.9	OK
1.003	FEH - Uxbridge: 2 years: +40 %: 15 mins: Winter	Pipe	5	7	42.752	41.546	0.139	11.386	0.8	0.27	24.1	OK
1.004	FEH - Uxbridge: 2 years: +40 %: 15 mins: Winter	Pipe	7	8	42.214	41.484	0.185	11.364	0.6	0.26	24.2	OK
1.007	FEH - Uxbridge: 2 years: +40 %: 960 mins: Summer	Pipe	12	13	41.839	41.124	0.023	62.140	0.4	0.04	0.6	Surcharged
4.000	FEH - Uxbridge: 2 years: +40 %: 15 mins: Summer	Pipe	9	10	42.898	41.898	0.000	0.000	0.0	0	0.0	OK
2.000	FEH - Uxbridge: 2 years: +40 %: 15 mins: Summer	Pipe	4	3	42.630	41.656	0.068	0.000	0.1	0.02	0.4	OK
3.000	FEH - Uxbridge: 2 years: +40 %: 15 mins: Summer	Pipe	6	5	42.638	41.638	0.052	0.000	0.0	0	0.0	OK
1.005	FEH - Uxbridge: 2 years: +40 %: 15 mins: Winter	No Delay	8	Cellular Storage		41.476	0.063	18.489	0.0		38.8	
1.006	FEH - Uxbridge: 2 years: +40 %: 480 mins: Summer	No Delay	Cellular Storage	12		41.129	0.010	32.135	0.0		3.1	

P15969: Uxbridge Care Home 100% Hardstanding				Date: 09/07/2024			 Goodson Associates civil structural infrastructure transportation					
Report Details: Type: Connections Summary Storm Phase: 100% site runoff				Designed by: SC	Checked by:	Approved By:						
				Goodson Associates: 4 Lansdowne Crescent, Glasgow , G20 6NQ								

4.001	FEH - Uxbridge: 2 years: +40 %: 15 mins: Winter	Pipe	10	11	42.643	41.695	0.139	8.206	0.8	0.24	17.6	OK
4.002	FEH - Uxbridge: 2 years: +40 %: 15 mins: Winter	No Delay	11	Cellular Storage		41.304	0.026	8.195	0.0		17.0	
1.008	FEH - Uxbridge: 2 years: +40 %: 1440 mins: Summer	Pipe	13	Connecti on	41.704	40.675	0.017	89.139	0.6	0.03	0.6	OK

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		Designed by: SC	Checked by:		Approved By:
Report Details: Type: Connections Summary Storm Phase: 100% site runoff		Goodson Associates: 4 Lansdowne Crescent, Glasgow , G20 6NQ			



FEH - Uxbridge: 30 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Flow

Connection	Storm Event	Connection Type	From	To	Upstream Cover Level (m)	Max. US Water Level (m)	Max. Flow Depth (m)	Discharge Volume (m³)	Max. Velocity (m/s)	Flow / Capacity	Max. Flow (L/s)	Status
1.000	FEH - Uxbridge: 30 years: +40 %: 15 mins: Winter	Pipe	1	2	42.787	41.975	0.078	5.884	1.0	0.3	12.6	OK
1.001	FEH - Uxbridge: 30 years: +40 %: 15 mins: Winter	Pipe	2	3	43.311	41.809	0.159	5.871	0.5	0.21	12.4	OK
1.002	FEH - Uxbridge: 30 years: +40 %: 15 mins: Winter	Pipe	3	5	42.821	41.795	0.279	28.117	1.2	0.63	57.8	OK
1.003	FEH - Uxbridge: 30 years: +40 %: 15 mins: Winter	Pipe	5	7	42.752	41.750	0.300	28.120	0.8	0.62	56.0	Surcharged
1.004	FEH - Uxbridge: 30 years: +40 %: 15 mins: Winter	Pipe	7	8	42.214	41.688	0.300	28.087	0.8	0.62	56.9	Surcharged
1.007	FEH - Uxbridge: 30 years: +40 %: 960 mins: Winter	Pipe	12	13	41.839	41.453	0.026	80.729	0.4	0.05	0.8	Surcharged
4.000	FEH - Uxbridge: 30 years: +40 %: 15 mins: Summer	Pipe	9	10	42.898	41.936	0.116	0.000	0.3	0.1	1.7	OK
2.000	FEH - Uxbridge: 30 years: +40 %: 15 mins: Summer	Pipe	4	3	42.630	41.766	0.150	0.000	0.1	0.12	1.9	OK
3.000	FEH - Uxbridge: 30 years: +40 %: 15 mins: Winter	Pipe	6	5	42.638	41.750	0.150	0.001	0.1	0.1	2.4	OK
1.005	FEH - Uxbridge: 30 years: +40 %: 15 mins: Winter	No Delay	8	Cellular Storage		41.662	0.097	45.665	0.0		90.7	
1.006	FEH - Uxbridge: 30 years: +40 %: 15 mins: Summer	No Delay	Cellular Storage	12		41.095	0.011	1.275	0.0		3.6	

P15969: Uxbridge Care Home 100% Hardstanding				Date: 09/07/2024			 Goodson Associates civil structural infrastructure transportation					
Report Details: Type: Connections Summary Storm Phase: 100% site runoff				Designed by: SC	Checked by:	Approved By:						
				Goodson Associates: 4 Lansdowne Crescent, Glasgow , G20 6NQ								

4.001	FEH - Uxbridge: 30 years: +40 %: 15 mins: Winter	Pipe	10	11	42.643	41.989	0.225	20.198	1.0	0.53	38.7	Surcharged
4.002	FEH - Uxbridge: 30 years: +40 %: 15 mins: Winter	No Delay	11	Cellular Storage		41.827	0.039	20.184	0.0		38.0	
1.008	FEH - Uxbridge: 30 years: +40 %: 960 mins: Winter	Pipe	13	Connecti on	41.704	40.679	0.019	80.646	0.6	0.03	0.8	OK

P15969: Uxbridge Care Home 100% Hardstanding		Date: 09/07/2024		 Goodson Associates civil structural infrastructure transportation	
		Designed by: SC	Checked by:		Approved By:
Report Details: Type: Connections Summary Storm Phase: 100% site runoff		Goodson Associates: 4 Lansdowne Crescent, Glasgow , G20 6NQ			



FEH - Uxbridge: 100 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Flow

Connection	Storm Event	Connection Type	From	To	Upstream Cover Level (m)	Max. US Water Level (m)	Max. Flow Depth (m)	Discharge Volume (m³)	Max. Velocity (m/s)	Flow / Capacity	Max. Flow (L/s)	Status
1.000	FEH - Uxbridge: 100 years: +40 %: 15 mins: Winter	Pipe	1	2	42.787	42.050	0.225	7.696	1.1	0.39	16.7	OK
1.001	FEH - Uxbridge: 100 years: +40 %: 15 mins: Summer	Pipe	2	3	43.311	41.979	0.225	6.866	0.5	0.37	21.3	Surcharged
1.002	FEH - Uxbridge: 100 years: +40 %: 15 mins: Winter	Pipe	3	5	42.821	42.014	0.300	36.755	1.2	0.75	68.6	Surcharged
1.003	FEH - Uxbridge: 100 years: +40 %: 15 mins: Winter	Pipe	5	7	42.752	41.932	0.300	36.770	1.0	0.78	70.5	Surcharged
1.004	FEH - Uxbridge: 100 years: +40 %: 15 mins: Winter	Pipe	7	8	42.214	41.838	0.300	36.731	1.0	0.78	71.4	Surcharged
1.007	FEH - Uxbridge: 100 years: +40 %: 960 mins: Winter	Pipe	12	13	41.839	41.868	0.030	96.328	0.4	0.06	1.0	Flood
4.000	FEH - Uxbridge: 100 years: +40 %: 15 mins: Winter	Pipe	9	10	42.898	42.449	0.150	0.035	0.4	0.41	7.1	Surcharged
2.000	FEH - Uxbridge: 100 years: +40 %: 15 mins: Summer	Pipe	4	3	42.630	41.974	0.150	0.000	0.2	0.23	3.5	Surcharged
3.000	FEH - Uxbridge: 100 years: +40 %: 15 mins: Summer	Pipe	6	5	42.638	41.897	0.150	0.007	0.2	0.14	3.3	Surcharged
1.005	FEH - Uxbridge: 100 years: +40 %: 15 mins: Winter	No Delay	8	Cellular Storage		41.798	0.108	59.703	0.0		114.1	
1.006	FEH - Uxbridge: 100 years: +40 %: 480 mins: Winter	No Delay	Cellular Storage	12		41.865	0.018	51.637	0.0		9.8	

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	Designed by:	Checked by:	Approved By:	
	SC			
Report Details: Type: Connections Summary Storm Phase: 100% site runoff	Goodson Associates: 4 Lansdowne Crescent, Glasgow , G20 6NQ			

4.001	FEH - Uxbridge: 100 years: +40 %: 15 mins: Winter	Pipe	10	11	42.643	42.440	0.225	26.397	1.3	0.71	51.4	Flood Risk
4.002	FEH - Uxbridge: 100 years: +40 %: 15 mins: Winter	No Delay	11	Cellular Storage		42.149	0.043	26.179	0.0		46.4	
1.008	FEH - Uxbridge: 100 years: +40 %: 960 mins: Winter	Pipe	13	Connecti on	41.704	40.683	0.021	96.239	0.7	0.04	1.0	OK