Design Settings

Rainfall Methodology	FSR
Return Period (years)	100
Additional Flow (%)	40
FSR Region	England and Wales
M5-60 (mm)	17.000
Ratio-R	0.400
CV	1.000
Time of Entry (mins)	5.00
Maximum Time of Concentration (mins)	30.00
Maximum Rainfall (mm/hr)	50.0
Minimum Velocity (m/s)	1.00
Connection Type	Level Soffits
Minimum Backdrop Height (m)	0.200
Preferred Cover Depth (m)	1.200
Include Intermediate Ground	✓
Enforce best practice design rules	x

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Width (mm)	Easting (m)	Northing (m)	Depth (m)	Invert Level (m)
OU-08	0.017	5.00	64.159	350	350	388224.815	396784.079	1.000	63.159
OU-01	0.003	5.00	64.420	350	350	388204.601	396773.900	1.000	63.420
OU-02	0.068	5.00	64.063	350	350	388193.388	396777.976	1.000	63.063
S01			64.150	600		388191.908	396776.688	1.172	62.978
OU-07	0.040	5.00	64.345	350	350	388197.166	396791.687	1.350	62.995
S09			64.430	1500		388187.528	396795.319	1.830	62.600
OU-04	0.130	5.00	64.093	350	350	388149.305	396788.915	1.000	63.093
OU-03	0.055	5.00	64.252	350	350	388164.599	396784.686	1.000	63.252
S03			64.291	1500		388166.728	396786.723	1.343	62.948
S04			64.433	1500		388171.539	396798.394	2.061	62.372
OU-05	0.060	5.00	64.417	350	350	388157.495	396819.066	1.000	63.417
RG-05	0.013	5.00	64.531	450		388196.518	396814.994	0.731	63.800
OU-06	0.030	5.00	64.592	350	350	388173.489	396817.213	1.000	63.592
S05			64.620	1500		388177.568	396820.189	2.473	62.147
RG-17A	0.013	5.00	64.676	450		388200.834	396830.772	0.700	63.976
S17A			64.822	1500		388181.897	396835.980	2.722	62.100
RE PP1	0.054	5.00	64.228	1050		388217.969	396792.564	0.728	63.500
BEND PP2	0.015	5.00	64.190			388222.636	396809.328	0.806	63.384
BEND PP3	0.017	5.00	64.173			388227.222	396811.236	0.822	63.351
BEND PP4	0.010	5.00	64.201			388228.707	396816.433	0.886	63.315
BEND PP5	0.036	5.00	64.226			388227.505	396819.384	0.932	63.294
BEND PP6	0.012	5.00	64.224			388230.577	396830.686	1.008	63.216
S13b			64.240	1500		388233.850	396833.005	1.051	63.189
S13a			64.340	600		388235.913	396840.504	1.540	62.800
OU-11	0.080	5.00	64.306	350	350	388236.173	396848.221	0.846	63.460
JUN S13C			64.475			388222.564	396851.580	1.848	62.627
OU-23	0.060	5.00	64.573	350	350	388229.757	396871.909	1.000	63.573
S13			64.740	1500		388215.386	396857.536	2.200	62.540
OU-25	0.073	5.00	64.312	350	350	388211.947	396875.699	0.805	63.507
JUN S17A			64.652			388200.818	396862.879	2.215	62.437
OU-15	0.087	5.00	64.232	350	350	388134.099	396812.930	1.000	63.232
S15	0.020	5.00	64.337	1500		388139.128	396813.380	1.155	63.182
OU-16	0.054	5.00	64.189	350	350	388143.485	396846.718	0.891	63.298
JUN-03			64.298			388148.482	396847.344	1.468	62.830
OU-12	0.140	5.00	64.076	350	350	388161.927	396916.150	1.000	63.076
OU-13	0.126	5.00	64.031	350	350	388160.669	396911.323	1.000	63.031
S14			64.109	1500		388161.619	396906.443	1.449	62.660
OU-14	0.061	5.00	64.083	350	350	388154.700	396888.867	1.000	63.083
JUN-02			64.198			388157.755	396886.834	1.595	62.603

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Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Width (mm)	Easting (m)	Northing (m)	Depth (m)	Invert Level (m)
OU-17	0.067	5.00	64.136	350	350	388149.095	396867.801	1.000	63.136
S16			64.280	1500		388153.752	396866.521	1.800	62.480
OU-18	0.020	5.00	64.610	350	350	388162.166	396859.305	1.000	63.610
JUN-04			64.663			388169.376	396866.553	2.309	62.354
S17			64.680	1500		388188.257	396867.644	2.930	61.750
OU-19	0.081	5.00	64.640	350	350	388257.958	396935.573	1.000	63.640
S18			64.560	1500		388236.014	396932.498	1.240	63.320
OU-20	0.073	5.00	64.507	350	350	388223.207	396917.885	1.000	63.507
OU-21	0.060	5.00	64.564	350	350	388239.483	396908.335	1.000	63.564
S19			64.480	1500		388230.077	396910.923	1.250	63.230
KO-01	0.033	5.00	64.202	350	350	388262.984	396869.222	0.790	63.412
OU-22	0.047	5.00	64.496	350	350	388265.455	396876.733	0.881	63.615
S20			64.630	1500		388261.407	396877.847	1.469	63.161
OU-24	0.060	5.00	64.528	350	350	388234.487	396890.122	1.000	63.528
JUN S22A			64.576			388229.800	396886.545	1.634	62.942
OU-26	0.073	5.00	64.279	350	350	388215.721	396889.840	0.817	63.462
S22			64.330	1500		388213.557	396891.015	1.580	62.750
OU-27	0.090	5.00	64.473	350	350	388192.039	396926.186	1.350	63.123
S23			64.499	600		388189.987	396910.486	1.843	62.656
OU-28	0.118	5.00	64.457	350	350	388185.887	396903.148	1.000	63.457
JUN-05			64.483			388187.729	396902.281	1.861	62.622
OU-29	0.061	5.00	64.500	350	350	388181.023	396884.928	1.000	63.500
S24			64.530	1500		388182.786	396884.320	1.983	62.547
OU-30	0.052	5.00	64.198	350	350	388203.533	396881.236	1.350	62.848
S25			64.637	1500		388191.349	396882.020	2.730	61.907
S26			64.660	1500		388188.359	396874.610	2.994	61.666
PI			64.577	600		388181.875	396876.751	3.027	61.550
S27			64.754	1800		388170.636	396879.830	3.499	61.255
TANK			64.540			388177.005	396903.633	3.370	61.170
S28			64.536	1500		388179.853	396906.968	3.384	61.152
S29			64.553	1800		388191.433	396939.763	4.003	60.550

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.000	OU-08	S09	38.944	0.600	63.159	62.750	0.409	95.2	150	5.63	50.0
2.000	OU-01	S01	12.996	0.600	63.420	63.053	0.367	35.4	225	5.10	50.0
3.000	OU-02	S01	1.962	0.600	63.063	62.978	0.085	23.1	300	5.01	50.0
2.001	S01	S09	19.139	0.600	62.978	62.675	0.303	63.2	225	5.29	50.0
4.000	OU-07	S09	10.300	0.600	62.995	62.750	0.245	42.0	150	5.11	50.0
1.001	S09	S04	16.282	0.600	62.600	62.520	0.080	203.5	300	5.88	50.0
5.000	OU-04	S04	24.170	0.600	63.093	62.522	0.571	42.3	300	5.17	50.0
6.000	OU-03	S03	2.947	0.600	63.252	62.948	0.304	9.7	150	5.02	50.0
6.001	S03	S04	12.624	0.600	62.948	62.672	0.276	45.7	150	5.16	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.000	1.030	18.2	4.3	0.850	1.530	0.017	0.0	50	0.844
2.000	2.205	87.7	0.8	0.775	0.872	0.003	0.0	15	0.669
3.000	3.286	232.3	17.2	0.700	0.872	0.068	0.0	55	1.950
2.001	1.648	65.5	18.0	0.947	1.530	0.071	0.0	80	1.411
4.000	1.556	27.5	10.1	1.200	1.530	0.040	0.0	63	1.440
1.001	1.098	77.6	32.4	1.530	1.613	0.128	0.0	135	1.050
5.000	2.423	171.3	32.9	0.700	1.611	0.130	0.0	89	1.886
6.000	3.255	57.5	13.9	0.850	1.193	0.055	0.0	50	2.688
6.001	1.491	26.4	13.9	1.193	1.611	0.055	0.0	78	1.513

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Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.002	S04	S05	22.614	0.600	62.372	62.297	0.075	300.0	450	6.20	50.0
7.000	OU-05	S05	20.104	0.600	63.417	63.000	0.417	48.2	225	5.18	50.0
1.004	RG-05	S05	9.581	0.600	63.800	63.000	0.800	12.0	150	5.05	50.0
9.000	OU-06	S05	5.049	0.600	63.592	63.000	0.592	8.5	150	5.02	50.0
1.003	S05	S17A	16.374	0.600	62.147	62.100	0.047	350.0	600	6.41	50.0
10.000	RG-17A	S17A	19.640	0.600	63.976	62.450	1.526	12.9	150	5.12	50.0
1.004_1	S17A	S17	32.296	0.600	62.100	62.000	0.100	323.0	600	6.81	50.0
11.000	RE PP1	BEND PP2	17.402	0.600	63.500	63.384	0.116	150.0	225	5.27	50.0
11.001	BEND PP2	BEND PP3	4.967	0.600	63.384	63.351	0.033	150.0	225	5.35	50.0
11.002	BEND PP3	BEND PP4	5.405	0.600	63.351	63.315	0.036	150.0	225	5.43	50.0
11.003	BEND PP4	BEND PP5	3.186	0.600	63.315	63.294	0.021	150.0	225	5.48	50.0
11.004	BEND PP5	BEND PP6	11.712	0.600	63.294	63.216	0.078	150.0	225	5.67	50.0
11.005	BEND PP6	S13b	4.011	0.600	63.216	63.189	0.027	150.0	225	5.73	50.0
11.006	S13b	S13a	7.778	0.600	63.189	62.800	0.389	20.0	225	5.77	50.0
11.007	S13a	JUN S13C	17.346	0.600	62.800	62.627	0.173	100.0	225	6.00	50.0
12.000	OU-11	JUN S13C	14.017	0.600	63.460	62.702	0.758	18.5	150	5.10	50.0
11.008	JUN S13C	S13	9.327	0.600	62.627	62.540	0.087	107.2	300	6.10	50.0
13.000	OU-23	S13	20.325	0.600	63.573	63.370	0.203	100.0	225	5.26	50.0
11.009	S13	JUN S17A	15.517	0.600	62.540	62.437	0.103	150.0	300	6.30	50.0
14.000	OU-25	JUN S17A	16.977	0.600	63.507	62.587	0.920	18.5	150	5.12	50.0
11.010	JUN S17A	S17	13.434	0.600	62.437	62.160	0.277	48.5	300	6.40	50.0
15.000	OU-15	S15	5.049	0.600	63.232	63.182	0.050	100.0	300	5.05	50.0
15.001	S15	JUN-03	35.229	0.600	63.182	62.830	0.352	100.0	300	5.43	50.0
16.000	OU-16	JUN-03	5.036	0.600	63.298	62.980	0.318	15.8	150	5.03	50.0
15.002	JUN-03	S16	19.888	0.600	62.830	62.631	0.199	100.0	300	5.64	50.0
17.000	OU-12	S14	9.712	0.600	63.076	62.960	0.116	83.7	225	5.11	50.0
18.000	OU-13	S14	4.972	0.600	63.031	62.960	0.071	70.0	225	5.05	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.002	1.168	185.8	79.2	1.611	1.873	0.313	0.0	205	1.124
7.000	1.888	75.1	15.2	0.775	1.395	0.060	0.0	68	1.484
1.004	2.927	51.7	3.3	0.581	1.470	0.013	0.0	25	1.641
9.000	3.471	61.3	7.6	0.850	1.470	0.030	0.0	35	2.369
1.003	1.296	366.3	105.2	1.873	2.122	0.416	0.0	219	1.126
10.000	2.823	49.9	3.3	0.550	2.222	0.013	0.0	26	1.605
1.004_1	1.349	381.5	108.5	2.122	2.080	0.429	0.0	218	1.170
11.000	1.065	42.3	13.7	0.503	0.581	0.054	0.0	87	0.950
11.001	1.065	42.3	17.5	0.581	0.597	0.069	0.0	101	1.015
11.002	1.065	42.3	21.8	0.597	0.661	0.086	0.0	115	1.073
11.003	1.065	42.3	24.3	0.661	0.707	0.096	0.0	123	1.102
11.004	1.065	42.3	33.4	0.707	0.783	0.132	0.0	151	1.176
11.005	1.065	42.3	36.4	0.783	0.826	0.144	0.0	161	1.193
11.006	2.939	116.9	36.4	0.826	1.315	0.144	0.0	86	2.599
11.007	1.307	52.0	36.4	1.315	1.623	0.144	0.0	139	1.412
12.000	2.353	41.6	20.2	0.696	1.623	0.080	0.0	74	2.334
11.008	1.518	107.3	56.7	1.548	1.900	0.224	0.0	155	1.538
13.000	1.307	52.0	15.2	0.775	1.145	0.060	0.0	83	1.137
11.009	1.281	90.6	71.8	1.900	1.915	0.284	0.0	202	1.416
14.000	2.355	41.6	18.5	0.655	1.915	0.073	0.0	70	2.287
11.010	2.263	159.9	90.3	1.915	2.220	0.357	0.0	161	2.329
15.000	1.572	111.1	22.0	0.700	0.855	0.087	0.0	90	1.231
15.001	1.572	111.1	27.1	0.855	1.168	0.107	0.0	100	1.304
16.000	2.544	44.9	13.7	0.741	1.168	0.054	0.0	57	2.234
15.002	1.572	111.1	40.7	1.168	1.349	0.161	0.0	126	1.455
17.000	1.430	56.8	35.4	0.775	0.924	0.140	0.0	129	1.505
18.000	1.565	62.2	31.9	0.775	0.924	0.126	0.0	114	1.572

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Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
17.001	S14	JUN-02	19.986	0.600	62.660	62.603	0.057	350.0	450	5.42	50.0
19.000	OU-14	JUN-02	3.670	0.600	63.083	62.903	0.180	20.4	225	5.02	50.0
17.002	JUN-02	S16	20.704	0.600	62.603	62.480	0.123	168.3	450	5.64	50.0
20.000	OU-17	S16	4.830	0.600	63.136	63.104	0.032	150.0	225	5.08	50.0
15.003	S16	JUN-04	15.624	0.600	62.480	62.369	0.111	140.7	450	5.79	50.0
21.000	OU-18	JUN-04	10.223	0.600	63.610	62.676	0.934	10.9	150	5.06	50.0
15.004	JUN-04	S17	18.912	0.600	62.354	62.160	0.194	97.5	450	5.95	50.0
1.005	S17	S26	6.967	0.600	61.750	61.735	0.015	450.0	600	6.91	50.0
22.000	OU-19	S18	22.158	0.600	63.640	63.357	0.283	78.3	225	5.25	50.0
22.001	S18	S19	22.377	0.600	63.320	63.230	0.090	250.0	300	5.63	50.0
23.000	OU-20	S19	9.781	0.600	63.507	63.300	0.207	47.3	150	5.11	50.0
24.000	OU-21	S19	9.756	0.600	63.564	63.300	0.264	37.0	225	5.08	50.0
22.002	S19	S22	25.870	0.600	63.230	63.127	0.103	250.0	300	6.06	50.0
25.000	KO-01	S20	8.768	0.600	63.412	63.237	0.175	50.0	225	5.08	50.0
26.000	OU-22	S20	4.198	0.600	63.615	63.236	0.379	11.1	150	5.02	50.0
25.001	S20	JUN S22A	32.782	0.600	63.161	62.942	0.219	150.0	225	5.59	50.0
27.000	OU-24	JUN S22A	5.896	0.600	63.528	62.942	0.586	10.1	225	5.02	50.0
25.002	JUN S22A	S22	16.847	0.600	62.942	62.830	0.112	150.0	225	5.86	50.0
28.000	OU-26	S22	2.462	0.600	63.462	63.273	0.189	13.0	225	5.01	50.0
22.003	S22	S25	23.960	0.600	62.750	62.205	0.545	44.0	450	6.19	50.0
29.000	OU-27	S23	15.834	0.600	63.123	62.731	0.392	40.4	225	5.13	50.0
29.001	S23	JUN-05	8.510	0.600	62.656	62.622	0.034	250.0	300	5.27	50.0
30.000	OU-28	JUN-05	2.036	0.600	63.457	62.697	0.760	2.7	225	5.00	50.0
29.002	JUN-05	S24	18.629	0.600	62.622	62.547	0.075	250.0	300	5.58	50.0
31.000	OU-29	S24	1.865	0.600	63.500	63.481	0.019	100.0	150	5.03	50.0
29.003	S24	S25	8.867	0.600	62.547	62.207	0.340	26.1	300	5.63	50.0
32.000	OU-30	S25	12.209	0.600	62.848	62.780	0.068	179.5	150	5.27	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
17.001	1.081	171.9	67.3	0.999	1.145	0.266	0.0	196	1.018
19.000	2.911	115.7	15.4	0.775	1.070	0.061	0.0	55	2.034
17.002	1.564	248.7	82.7	1.145	1.350	0.327	0.0	178	1.411
20.000	1.065	42.3	16.9	0.775	0.951	0.067	0.0	99	1.007
15.003	1.712	272.2	140.4	1.350	1.844	0.555	0.0	229	1.724
21.000	3.062	54.1	5.1	0.850	1.837	0.020	0.0	31	1.923
15.004	2.059	327.5	145.5	1.859	2.070	0.575	0.0	210	1.999
1.005	1.141	322.7	344.3	2.330	2.325	1.361	0.0	553	1.263
22.000	1.479	58.8	20.5	0.775	0.978	0.081	0.0	92	1.352
22.001	0.990	70.0	20.5	0.940	0.950	0.081	0.0	111	0.863
23.000	1.467	25.9	18.5	0.850	1.030	0.073	0.0	93	1.590
24.000	2.159	85.8	15.2	0.775	0.955	0.060	0.0	64	1.637
22.002	0.990	70.0	54.1	0.950	0.903	0.214	0.0	199	1.089
25.000	1.854	73.7	8.3	0.565	1.168	0.033	0.0	51	1.234
26.000	3.044	53.8	11.9	0.731	1.244	0.047	0.0	48	2.451
25.001	1.065	42.3	20.2	1.244	1.409	0.080	0.0	109	1.053
27.000	4.149	165.0	15.2	0.775	1.409	0.060	0.0	46	2.624
25.002	1.065	42.3	35.4	1.409	1.275	0.140	0.0	158	1.188
28.000	3.644	144.9	18.5	0.592	0.832	0.073	0.0	54	2.524
22.003	3.071	488.4	108.0	1.130	1.982	0.427	0.0	143	2.486
29.000	2.064	82.1	22.8	1.125	1.543	0.090	0.0	80	1.768
29.001	0.990	70.0	22.8	1.543	1.561	0.090	0.0	117	0.887
30.000	8.053	320.2	29.9	0.775	1.561	0.118	0.0	46	5.098
29.002	0.990	70.0	52.6	1.561	1.683	0.208	0.0	195	1.083
31.000	1.005	17.8	15.4	0.850	0.899	0.061	0.0	108	1.129
29.003	3.091	218.5	68.1	1.683	2.130	0.269	0.0	115	2.739
32.000	0.747	13.2	13.2	1.200	1.707	0.052	0.0	123	0.849

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Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
22.004	S25	S26	7.991	0.600	61.907	61.666	0.241	33.2	600	6.22	50.0
1.006	S26	PI	6.828	0.600	61.666	61.651	0.015	450.0	600	7.01	50.0
1.009	PI	S27	5.432	0.600	61.550	61.260	0.290	18.7	600	7.03	50.0
1.010	S27	TANK	21.145	0.600	61.255	61.170	0.085	248.8	375	7.34	50.0
1.011	TANK	S28	2.452	0.600	61.170	61.161	0.009	272.4	375	7.37	50.0
1.012	S28	S29	37.587	0.600	61.152	60.550	0.602	62.4	300	7.69	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
22.004	4.238	1198.3	189.2	2.130	2.394	0.748	0.0	160	3.135
1.006	1.141	322.7	533.5	2.394	2.326	2.109	0.0	600	1.151
1.009	5.643	1595.6	533.5	2.427	2.894	2.109	0.0	238	5.106
1.010	1.144	379.0	533.5	3.124	2.995	2.109	0.0	375	1.159
1.011	1.093	120.7	533.5	2.995	3.000	2.109	0.0	375	1.107
1.012	1.993	140.9	533.5	3.084	3.703	2.109	0.0	300	2.018

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.000	38.944	95.2	150	1 STANDARD	64.159	63.159	0.850	64.430	62.750	1.530
2.000	12.996	35.4	225	1 STANDARD	64.420	63.420	0.775	64.150	63.053	0.872
3.000	1.962	23.1	300	1 STANDARD	64.063	63.063	0.700	64.150	62.978	0.872
2.001	19.139	63.2	225	1 STANDARD	64.150	62.978	0.947	64.430	62.675	1.530
4.000	10.300	42.0	150	1 STANDARD	64.345	62.995	1.200	64.430	62.750	1.530
1.001	16.282	203.5	300	1 STANDARD	64.430	62.600	1.530	64.433	62.520	1.613
5.000	24.170	42.3	300	1 STANDARD	64.093	63.093	0.700	64.433	62.522	1.611
6.000	2.947	9.7	150	1 STANDARD	64.252	63.252	0.850	64.291	62.948	1.193
6.001	12.624	45.7	150	1 STANDARD	64.291	62.948	1.193	64.433	62.672	1.611
1.002	22.614	300.0	450	1 STANDARD	64.433	62.372	1.611	64.620	62.297	1.873
7.000	20.104	48.2	225	1 STANDARD	64.417	63.417	0.775	64.620	63.000	1.395
1.004	9.581	12.0	150	1 STANDARD	64.531	63.800	0.581	64.620	63.000	1.470
9.000	5.049	8.5	150	1 STANDARD	64.592	63.592	0.850	64.620	63.000	1.470
1.003	16.374	350.0	600	1 STANDARD	64.620	62.147	1.873	64.822	62.100	2.122
10.000	19.640	12.9	150	1 STANDARD	64.676	63.976	0.550	64.822	62.450	2.222
1.004_1	32.296	323.0	600	1 STANDARD	64.822	62.100	2.122	64.680	62.000	2.080
11.000	17.402	150.0	225	1 STANDARD	64.228	63.500	0.503	64.190	63.384	0.581

Link	US Node	Dia (mm)	Width (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	OU-08	350	350	Manhole	1 STANDARD	S09	1500	Manhole	1 STANDARD
2.000	OU-01	350	350	Manhole	1 STANDARD	S01	600	Manhole	1 STANDARD
3.000	OU-02	350	350	Manhole	1 STANDARD	S01	600	Manhole	1 STANDARD
2.001	S01	600		Manhole	1 STANDARD	S09	1500	Manhole	1 STANDARD
4.000	OU-07	350	350	Manhole	1 STANDARD	S09	1500	Manhole	1 STANDARD
1.001	S09	1500		Manhole	1 STANDARD	S04	1500	Manhole	1 STANDARD
5.000	OU-04	350	350	Manhole	1 STANDARD	S04	1500	Manhole	1 STANDARD
6.000	OU-03	350	350	Manhole	1 STANDARD	S03	1500	Manhole	1 STANDARD
6.001	S03	1500		Manhole	1 STANDARD	S04	1500	Manhole	1 STANDARD
1.002	S04	1500		Manhole	1 STANDARD	S05	1500	Manhole	1 STANDARD
7.000	OU-05	350	350	Manhole	1 STANDARD	S05	1500	Manhole	1 STANDARD
1.004	RG-05	450		Manhole	1 STANDARD	S05	1500	Manhole	1 STANDARD
9.000	OU-06	350	350	Manhole	1 STANDARD	S05	1500	Manhole	1 STANDARD
1.003	S05	1500		Manhole	1 STANDARD	S17A	1500	Manhole	1 STANDARD
10.000	RG-17A	450		Manhole	1 STANDARD	S17A	1500	Manhole	1 STANDARD
1.004_1	S17A	1500		Manhole	1 STANDARD	S17	1500	Manhole	1 STANDARD
11.000	RE PP1	1050		Manhole	1 STANDARD	BEND PP2		Junction	

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Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
11.001	4.967	150.0	225	1 STANDARD	64.190	63.384	0.581	64.173	63.351	0.597
11.002	5.405	150.0	225	1 STANDARD	64.173	63.351	0.597	64.201	63.315	0.661
11.003	3.186	150.0	225	1 STANDARD	64.201	63.315	0.661	64.226	63.294	0.707
11.004	11.712	150.0	225	1 STANDARD	64.226	63.294	0.707	64.224	63.216	0.783
11.005	4.011	150.0	225	1 STANDARD	64.224	63.216	0.783	64.240	63.189	0.826
11.006	7.778	20.0	225	1 STANDARD	64.240	63.189	0.826	64.340	62.800	1.315
11.007	17.346	100.0	225	1 STANDARD	64.340	62.800	1.315	64.475	62.627	1.623
12.000	14.017	18.5	150	1 STANDARD	64.306	63.460	0.696	64.475	62.702	1.623
11.008	9.327	107.2	300	1 STANDARD	64.475	62.627	1.548	64.740	62.540	1.900
13.000	20.325	100.0	225	1 STANDARD	64.573	63.573	0.775	64.740	63.370	1.145
11.009	15.517	150.0	300	1 STANDARD	64.740	62.540	1.900	64.652	62.437	1.915
14.000	16.977	18.5	150	1 STANDARD	64.312	63.507	0.655	64.652	62.587	1.915
11.010	13.434	48.5	300	1 STANDARD	64.652	62.437	1.915	64.680	62.160	2.220
15.000	5.049	100.0	300	1 STANDARD	64.232	63.232	0.700	64.337	63.182	0.855
15.001	35.229	100.0	300	1 STANDARD	64.337	63.182	0.855	64.298	62.830	1.168
16.000	5.036	15.8	150	1 STANDARD	64.189	63.298	0.741	64.298	62.980	1.168
15.002	19.888	100.0	300	1 STANDARD	64.298	62.830	1.168	64.280	62.631	1.349
17.000	9.712	83.7	225	1 STANDARD	64.076	63.076	0.775	64.109	62.960	0.924
18.000	4.972	70.0	225	1 STANDARD	64.031	63.031	0.775	64.109	62.960	0.924
17.001	19.986	350.0	450	1 STANDARD	64.109	62.660	0.999	64.198	62.603	1.145
19.000	3.670	20.4	225	1 STANDARD	64.083	63.083	0.775	64.198	62.903	1.070
17.002	20.704	168.3	450	1 STANDARD	64.198	62.603	1.145	64.280	62.480	1.350
20.000	4.830	150.0	225	1 STANDARD	64.136	63.136	0.775	64.280	63.104	0.951
15.003	15.624	140.7	450	1 STANDARD	64.280	62.480	1.350	64.663	62.369	1.844
21.000	10.223	10.9	150	1 STANDARD	64.610	63.610	0.850	64.663	62.676	1.837
15.004	18.912	97.5	450	1 STANDARD	64.663	62.354	1.859	64.680	62.160	2.070
1.005	6.967	450.0	600	1 STANDARD	64.680	61.750	2.330	64.660	61.735	2.325
22.000	22.158	78.3	225	1 STANDARD	64.640	63.640	0.775	64.560	63.357	0.978

Link	US Node	Dia (mm)	Width (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
11.001	BEND PP2			Junction		BEND PP3		Junction	
11.002	BEND PP3			Junction		BEND PP4		Junction	
11.003	BEND PP4			Junction		BEND PP5		Junction	
11.004	BEND PP5			Junction		BEND PP6		Junction	
11.005	BEND PP6			Junction		S13b	1500	Manhole	1 STANDARD
11.006	S13b	1500		Manhole	1 STANDARD	S13a	600	Manhole	1 STANDARD
11.007	S13a	600		Manhole	1 STANDARD	JUN S13C		Junction	
12.000	OU-11	350	350	Manhole	1 STANDARD	JUN S13C		Junction	
11.008	JUN S13C			Junction		S13	1500	Manhole	1 STANDARD
13.000	OU-23	350	350	Manhole	1 STANDARD	S13	1500	Manhole	1 STANDARD
11.009	S13	1500		Manhole	1 STANDARD	JUN S17A		Junction	
14.000	OU-25	350	350	Manhole	1 STANDARD	JUN S17A		Junction	
11.010	JUN S17A			Junction		S17	1500	Manhole	1 STANDARD
15.000	OU-15	350	350	Manhole	1 STANDARD	S15	1500	Manhole	1 STANDARD
15.001	S15	1500		Manhole	1 STANDARD	JUN-03		Junction	
16.000	OU-16	350	350	Manhole	1 STANDARD	JUN-03		Junction	
15.002	JUN-03			Junction		S16	1500	Manhole	1 STANDARD
17.000	OU-12	350	350	Manhole	1 STANDARD	S14	1500	Manhole	1 STANDARD
18.000	OU-13	350	350	Manhole	1 STANDARD	S14	1500	Manhole	1 STANDARD
17.001	S14	1500		Manhole	1 STANDARD	JUN-02		Junction	
19.000	OU-14	350	350	Manhole	1 STANDARD	JUN-02		Junction	
17.002	JUN-02			Junction		S16	1500	Manhole	1 STANDARD
20.000	OU-17	350	350	Manhole	1 STANDARD	S16	1500	Manhole	1 STANDARD
15.003	S16	1500		Manhole	1 STANDARD	JUN-04		Junction	
21.000	OU-18	350	350	Manhole	1 STANDARD	JUN-04		Junction	
15.004	JUN-04			Junction		S17	1500	Manhole	1 STANDARD
1.005	S17	1500		Manhole	1 STANDARD	S26	1500	Manhole	1 STANDARD
22.000	OU-19	350	350	Manhole	1 STANDARD	S18	1500	Manhole	1 STANDARD

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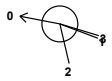
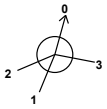
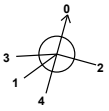
Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
22.001	22.377	250.0	300	1 STANDARD	64.560	63.320	0.940	64.480	63.230	0.950
23.000	9.781	47.3	150	1 STANDARD	64.507	63.507	0.850	64.480	63.300	1.030
24.000	9.756	37.0	225	1 STANDARD	64.564	63.564	0.775	64.480	63.300	0.955
22.002	25.870	250.0	300	1 STANDARD	64.480	63.230	0.950	64.330	63.127	0.903
25.000	8.768	50.0	225	1 STANDARD	64.202	63.412	0.565	64.630	63.237	1.168
26.000	4.198	11.1	150	1 STANDARD	64.496	63.615	0.731	64.630	63.236	1.244
25.001	32.782	150.0	225	1 STANDARD	64.630	63.161	1.244	64.576	62.942	1.409
27.000	5.896	10.1	225	1 STANDARD	64.528	63.528	0.775	64.576	62.942	1.409
25.002	16.847	150.0	225	1 STANDARD	64.576	62.942	1.409	64.330	62.830	1.275
28.000	2.462	13.0	225	1 STANDARD	64.279	63.462	0.592	64.330	63.273	0.832
22.003	23.960	44.0	450	1 STANDARD	64.330	62.750	1.130	64.637	62.205	1.982
29.000	15.834	40.4	225	1 STANDARD	64.473	63.123	1.125	64.499	62.731	1.543
29.001	8.510	250.0	300	1 STANDARD	64.499	62.656	1.543	64.483	62.622	1.561
30.000	2.036	2.7	225	1 STANDARD	64.457	63.457	0.775	64.483	62.697	1.561
29.002	18.629	250.0	300	1 STANDARD	64.483	62.622	1.561	64.530	62.547	1.683
31.000	1.865	100.0	150	1 STANDARD	64.500	63.500	0.850	64.530	63.481	0.899
29.003	8.867	26.1	300	1 STANDARD	64.530	62.547	1.683	64.637	62.207	2.130
32.000	12.209	179.5	150	1 STANDARD	64.198	62.848	1.200	64.637	62.780	1.707
22.004	7.991	33.2	600	1 STANDARD	64.637	61.907	2.130	64.660	61.666	2.394
1.006	6.828	450.0	600	1 STANDARD	64.660	61.666	2.394	64.577	61.651	2.326
1.009	5.432	18.7	600	1 STANDARD	64.577	61.550	2.427	64.754	61.260	2.894
1.010	21.145	248.8	375	Tank Connection X 3	64.754	61.255	3.124	64.540	61.170	2.995
1.011	2.452	272.4	375	1 STANDARD	64.540	61.170	2.995	64.536	61.161	3.000
1.012	37.587	62.4	300	1 STANDARD	64.536	61.152	3.084	64.553	60.550	3.703

Link	US Node	Dia (mm)	Width (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
22.001	S18	1500		Manhole	1 STANDARD	S19	1500	Manhole	1 STANDARD
23.000	OU-20	350	350	Manhole	1 STANDARD	S19	1500	Manhole	1 STANDARD
24.000	OU-21	350	350	Manhole	1 STANDARD	S19	1500	Manhole	1 STANDARD
22.002	S19	1500		Manhole	1 STANDARD	S22	1500	Manhole	1 STANDARD
25.000	KO-01	350	350	Manhole	1 STANDARD	S20	1500	Manhole	1 STANDARD
26.000	OU-22	350	350	Manhole	1 STANDARD	S20	1500	Manhole	1 STANDARD
25.001	S20	1500		Manhole	1 STANDARD	JUN S22A		Junction	
27.000	OU-24	350	350	Manhole	1 STANDARD	JUN S22A		Junction	
25.002	JUN S22A			Junction		S22	1500	Manhole	1 STANDARD
28.000	OU-26	350	350	Manhole	1 STANDARD	S22	1500	Manhole	1 STANDARD
22.003	S22	1500		Manhole	1 STANDARD	S25	1500	Manhole	1 STANDARD
29.000	OU-27	350	350	Manhole	1 STANDARD	S23	600	Manhole	1 STANDARD
29.001	S23	600		Manhole	1 STANDARD	JUN-05		Junction	
30.000	OU-28	350	350	Manhole	1 STANDARD	JUN-05		Junction	
29.002	JUN-05			Junction		S24	1500	Manhole	1 STANDARD
31.000	OU-29	350	350	Manhole	1 STANDARD	S24	1500	Manhole	1 STANDARD
29.003	S24	1500		Manhole	1 STANDARD	S25	1500	Manhole	1 STANDARD
32.000	OU-30	350	350	Manhole	1 STANDARD	S25	1500	Manhole	1 STANDARD
22.004	S25	1500		Manhole	1 STANDARD	S26	1500	Manhole	1 STANDARD
1.006	S26	1500		Manhole	1 STANDARD	PI	600	Manhole	1 STANDARD
1.009	PI	600		Manhole	1 STANDARD	S27	1800	Manhole	1 STANDARD
1.010	S27	1800		Manhole	1 STANDARD	TANK		Junction	
1.011	TANK			Junction		S28	1500	Manhole	1 STANDARD
1.012	S28	1500		Manhole	1 STANDARD	S29	1800	Manhole	1 STANDARD

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Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Width (mm)	Connections	Link	IL (m)	Dia (mm)
OU-08	388224.815	396784.079	64.159	1.000	350	350				
							0	1.000	63.159	150
OU-01	388204.601	396773.900	64.420	1.000	350	350				
							0	2.000	63.420	225
OU-02	388193.388	396777.976	64.063	1.000	350	350				
							0	3.000	63.063	300
S01	388191.908	396776.688	64.150	1.172	600					
							1	3.000	62.978	300
							2	2.000	63.053	225
							0	2.001	62.978	225
OU-07	388197.166	396791.687	64.345	1.350	350	350				
							0	4.000	62.995	150
S09	388187.528	396795.319	64.430	1.830	1500					
							1	4.000	62.750	150
							2	2.001	62.675	225
							3	1.000	62.750	150
							0	1.001	62.600	300
OU-04	388149.305	396788.915	64.093	1.000	350	350				
							0	5.000	63.093	300
OU-03	388164.599	396784.686	64.252	1.000	350	350				
							0	6.000	63.252	150
S03	388166.728	396786.723	64.291	1.343	1500					
							1	6.000	62.948	150
							0	6.001	62.948	150
S04	388171.539	396798.394	64.433	2.061	1500					
							1	6.001	62.672	150
							2	5.000	62.522	300
							3	1.001	62.520	300
							0	1.002	62.372	450
OU-05	388157.495	396819.066	64.417	1.000	350	350				
							0	7.000	63.417	225
RG-05	388196.518	396814.994	64.531	0.731	450					
							0	1.004	63.800	150
OU-06	388173.489	396817.213	64.592	1.000	350	350				
							0	9.000	63.592	150
S05	388177.568	396820.189	64.620	2.473	1500					
							1	9.000	63.000	150
							2	1.004	63.000	150
							3	7.000	63.000	225
							4	1.002	62.297	450
							0	1.003	62.147	600

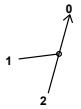
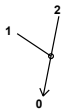
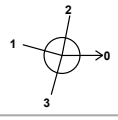
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Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Width (mm)	Connections	Link	IL (m)	Dia (mm)
RG-17A	388200.834	396830.772	64.676	0.700	450					
							0	10.000	63.976	150
S17A	388181.897	396835.980	64.822	2.722	1500			1	10.000	62.450	150
								2	1.003	62.100	600
								0	1.004_1	62.100	600
RE PP1	388217.969	396792.564	64.228	0.728	1050					
							0	11.000	63.500	225
BEND PP2	388222.636	396809.328	64.190	0.806				1	11.000	63.384	225
								0	11.001	63.384	225
BEND PP3	388227.222	396811.236	64.173	0.822				1	11.001	63.351	225
								0	11.002	63.351	225
BEND PP4	388228.707	396816.433	64.201	0.886				1	11.002	63.315	225
								0	11.003	63.315	225
BEND PP5	388227.505	396819.384	64.226	0.932				1	11.003	63.294	225
								0	11.004	63.294	225
BEND PP6	388230.577	396830.686	64.224	1.008				1	11.004	63.216	225
								0	11.005	63.216	225
S13b	388233.850	396833.005	64.240	1.051	1500			1	11.005	63.189	225
								0	11.006	63.189	225
S13a	388235.913	396840.504	64.340	1.540	600			1	11.006	62.800	225
								0	11.007	62.800	225
OU-11	388236.173	396848.221	64.306	0.846	350	350				
							0	12.000	63.460	150
JUN S13C	388222.564	396851.580	64.475	1.848				1	12.000	62.702	150
								2	11.007	62.627	225
								0	11.008	62.627	300
OU-23	388229.757	396871.909	64.573	1.000	350	350				
							0	13.000	63.573	225
S13	388215.386	396857.536	64.740	2.200	1500			1	13.000	63.370	225
								2	11.008	62.540	300
								0	11.009	62.540	300

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Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Width (mm)	Connections	Link	IL (m)	Dia (mm)
OU-25	388211.947	396875.699	64.312	0.805	350	350				
								0	14.000	63.507	150
JUN S17A	388200.818	396862.879	64.652	2.215				1	14.000	62.587	150
								2	11.009	62.437	300
								0	11.010	62.437	300
OU-15	388134.099	396812.930	64.232	1.000	350	350				
								0	15.000	63.232	300
S15	388139.128	396813.380	64.337	1.155	1500			1	15.000	63.182	300
								0	15.001	63.182	300
OU-16	388143.485	396846.718	64.189	0.891	350	350				
								0	16.000	63.298	150
JUN-03	388148.482	396847.344	64.298	1.468				1	16.000	62.980	150
								2	15.001	62.830	300
								0	15.002	62.830	300
OU-12	388161.927	396916.150	64.076	1.000	350	350				
								0	17.000	63.076	225
OU-13	388160.669	396911.323	64.031	1.000	350	350				
								0	18.000	63.031	225
S14	388161.619	396906.443	64.109	1.449	1500			1	18.000	62.960	225
								2	17.000	62.960	225
								0	17.001	62.660	450
OU-14	388154.700	396888.867	64.083	1.000	350	350				
								0	19.000	63.083	225
JUN-02	388157.755	396886.834	64.198	1.595				1	19.000	62.903	225
								2	17.001	62.603	450
								0	17.002	62.603	450
OU-17	388149.095	396867.801	64.136	1.000	350	350				
								0	20.000	63.136	225
S16	388153.752	396866.521	64.280	1.800	1500			1	20.000	63.104	225
								2	17.002	62.480	450
								3	15.002	62.631	300
								0	15.003	62.480	450
OU-18	388162.166	396859.305	64.610	1.000	350	350				
								0	21.000	63.610	150

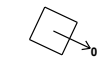
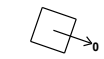
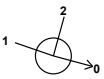
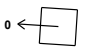
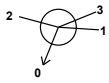
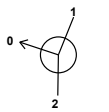
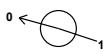
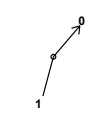
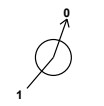
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Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Width (mm)	Connections	Link	IL (m)	Dia (mm)
JUN-04	388169.376	396866.553	64.663	2.309			1	21.000	62.676	150
							2	15.003	62.369	450
							0	15.004	62.354	450
S17	388188.257	396867.644	64.680	2.930	1500		1	15.004	62.160	450
							2	11.010	62.160	300
							3	1.004_1	62.000	600
							0	1.005	61.750	600
OU-19	388257.958	396935.573	64.640	1.000	350	350	0	22.000	63.640	225
S18	388236.014	396932.498	64.560	1.240	1500		1	22.000	63.357	225
							0	22.001	63.320	300
OU-20	388223.207	396917.885	64.507	1.000	350	350	0	23.000	63.507	150
OU-21	388239.483	396908.335	64.564	1.000	350	350	0	24.000	63.564	225
S19	388230.077	396910.923	64.480	1.250	1500		1	24.000	63.300	225
							2	23.000	63.300	150
							3	22.001	63.230	300
							0	22.002	63.230	300
KO-01	388262.984	396869.222	64.202	0.790	350	350	0	25.000	63.412	225
OU-22	388265.455	396876.733	64.496	0.881	350	350	0	26.000	63.615	150
S20	388261.407	396877.847	64.630	1.469	1500		1	26.000	63.236	150
							2	25.000	63.237	225
							0	25.001	63.161	225
OU-24	388234.487	396890.122	64.528	1.000	350	350	0	27.000	63.528	225
JUN S22A	388229.800	396886.545	64.576	1.634			1	27.000	62.942	225
							2	25.001	62.942	225
							0	25.002	62.942	225
OU-26	388215.721	396889.840	64.279	0.817	350	350	0	28.000	63.462	225
S22	388213.557	396891.015	64.330	1.580	1500		1	28.000	63.273	225
							2	25.002	62.830	225
							3	22.002	63.127	300
							0	22.003	62.750	450

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Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Width (mm)	Connections	Link	IL (m)	Dia (mm)
OU-27	388192.039	396926.186	64.473	1.350	350	350		0	29.000	63.123	225
S23	388189.987	396910.486	64.499	1.843	600			1	29.000	62.731	225
								0	29.001	62.656	300
OU-28	388185.887	396903.148	64.457	1.000	350	350		0	30.000	63.457	225
JUN-05	388187.729	396902.281	64.483	1.861				1	30.000	62.697	225
								2	29.001	62.622	300
								0	29.002	62.622	300
OU-29	388181.023	396884.928	64.500	1.000	350	350		0	31.000	63.500	150
S24	388182.786	396884.320	64.530	1.983	1500			1	31.000	63.481	150
								2	29.002	62.547	300
								0	29.003	62.547	300
OU-30	388203.533	396881.236	64.198	1.350	350	350		0	32.000	62.848	150
S25	388191.349	396882.020	64.637	2.730	1500			1	32.000	62.780	150
								2	29.003	62.207	300
								3	22.003	62.205	450
								0	22.004	61.907	600
S26	388188.359	396874.610	64.660	2.994	1500			1	22.004	61.666	600
								2	1.005	61.735	600
								0	1.006	61.666	600
PI	388181.875	396876.751	64.577	3.027	600			1	1.006	61.651	600
								0	1.009	61.550	600
S27	388170.636	396879.830	64.754	3.499	1800			1	1.009	61.260	600
								0	1.010	61.255	375
TANK	388177.005	396903.633	64.540	3.370				1	1.010	61.170	375
								0	1.011	61.170	375
S28	388179.853	396906.968	64.536	3.384	1500			1	1.011	61.161	375
								0	1.012	61.152	300
S29	388191.433	396939.763	64.553	4.003	1800			1	1.012	60.550	300

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Simulation Settings

Rainfall Methodology	FSR	Skip Steady State	x
Rainfall Events	Singular	Drain Down Time (mins)	240
FSR Region	England and Wales	Additional Storage (m³/ha)	20.0
M5-60 (mm)	17.000	Starting Level (m)	
Ratio-R	0.400	Check Discharge Rate(s)	x
Summer CV	1.000	Check Discharge Volume	✓
Winter CV	1.000	100 year 360 minute (m³)	
Analysis Speed	Detailed		

Storm Durations

15	60	180	360	600	960
30	120	240	480	720	1440

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
1	0	0	0
30	0	0	0
100	0	0	0
100	40	0	0

Pre-development Discharge Volume

Site Makeup	Greenfield	Return Period (years)	100
Greenfield Method	FSR/FEH	Climate Change (%)	0
Positively Drained Area (ha)		Storm Duration (mins)	360
Soil Index	1	Betterment (%)	0
SPR	0.10	PR	
CWI		Runoff Volume (m³)	

Node S28 Online Hydro-Brake® Control

Flap Valve	✓
Downstream Link	1.012
Replaces Downstream Link	x
Invert Level (m)	61.152
Design Depth (m)	0.600
Design Flow (l/s)	33.0
Objective	(HE) Minimise upstream storage
Sump Available	✓
Product Number	CTL-SHE-0252-3300-0600-3300
Min Outlet Diameter (m)	0.300
Min Node Diameter (mm)	1500

Node S28 Online Orifice Control

Flap Valve	x	Invert Level (m)	62.170	Discharge Coefficient	0.600
Replaces Downstream Link	x	Diameter (m)	0.190		

Node TANK Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	61.170
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	124

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	323.0	0.0	2.400	323.0	0.0	2.401	0.0	0.0

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Node S13b Link Surround Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	10
Side Inf Coefficient (m/hr)	0.00000	Link	11.005
Safety Factor	2.0	Surround Shape	(Trench)
Porosity	0.30	Diameter (mm)	600
Invert Level (m)	63.189		

Node BEND PP6 Link Surround Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	10
Side Inf Coefficient (m/hr)	0.00000	Link	11.004
Safety Factor	2.0	Surround Shape	(Trench)
Porosity	0.30	Diameter (mm)	600
Invert Level (m)	63.216		

Node BEND PP5 Link Surround Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	8
Side Inf Coefficient (m/hr)	0.00000	Link	11.003
Safety Factor	2.0	Surround Shape	(Trench)
Porosity	0.30	Diameter (mm)	600
Invert Level (m)	63.294		

Node BEND PP4 Link Surround Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	7
Side Inf Coefficient (m/hr)	0.00000	Link	11.002
Safety Factor	2.0	Surround Shape	(Trench)
Porosity	0.30	Diameter (mm)	600
Invert Level (m)	63.315		

Node BEND PP3 Link Surround Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	7
Side Inf Coefficient (m/hr)	0.00000	Link	11.001
Safety Factor	2.0	Surround Shape	(Trench)
Porosity	1.00	Diameter (mm)	600
Invert Level (m)	63.351		

Node BEND PP2 Link Surround Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	7
Side Inf Coefficient (m/hr)	0.00000	Link	11.000
Safety Factor	2.0	Surround Shape	(Trench)
Porosity	0.30	Diameter (mm)	600
Invert Level (m)	63.384		

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Results for 1 year Critical Storm Duration. Lowest mass balance: 99.89%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	OU-08	11	63.197	0.038	2.6	0.0176	0.0000	OK
15 minute summer	OU-01	10	63.432	0.012	0.5	0.0022	0.0000	OK
15 minute summer	OU-02	10	63.114	0.051	10.3	0.0754	0.0000	OK
15 minute summer	S01	10	63.041	0.063	10.7	0.0179	0.0000	OK
15 minute summer	OU-07	10	63.045	0.050	6.0	0.0356	0.0000	OK
15 minute summer	S09	11	62.706	0.106	19.0	0.1869	0.0000	OK
15 minute summer	OU-04	10	63.163	0.070	19.6	0.1907	0.0000	OK
15 minute summer	OU-03	10	63.292	0.040	8.3	0.0492	0.0000	OK
15 minute summer	S03	10	63.008	0.060	8.3	0.1064	0.0000	OK
15 minute summer	S04	11	62.532	0.160	46.1	0.2834	0.0000	OK
15 minute summer	OU-05	10	63.471	0.054	9.1	0.0713	0.0000	OK
15 minute summer	RG-05	10	63.821	0.021	2.0	0.0106	0.0000	OK
15 minute summer	OU-06	10	63.621	0.029	4.5	0.0210	0.0000	OK
15 minute summer	S05	11	62.327	0.180	61.5	0.3173	0.0000	OK
15 minute summer	RG-17A	10	63.997	0.021	2.0	0.0110	0.0000	OK
15 minute summer	S17A	11	62.271	0.171	63.6	0.3021	0.0000	OK
15 minute summer	RE PP1	10	63.568	0.068	8.2	0.1587	0.0000	OK
15 minute summer	BEND PP2	11	63.463	0.079	10.4	0.0924	0.0000	OK
15 minute summer	BEND PP3	11	63.440	0.089	12.8	0.1983	0.0000	OK
15 minute summer	BEND PP4	11	63.414	0.099	14.3	0.0798	0.0000	OK
15 minute summer	BEND PP5	11	63.401	0.107	19.5	0.1227	0.0000	OK
15 minute summer	BEND PP6	11	63.328	0.112	21.3	0.1386	0.0000	OK
15 minute summer	S13b	11	63.255	0.066	21.3	0.1460	0.0000	OK
15 minute summer	S13a	11	62.904	0.104	21.3	0.0293	0.0000	OK
15 minute summer	OU-11	10	63.516	0.056	12.1	0.1138	0.0000	OK
15 minute summer	JUN S13C	11	62.753	0.126	33.0	0.0000	0.0000	OK
15 minute summer	OU-23	10	63.638	0.065	9.1	0.0860	0.0000	OK
15 minute summer	S13	11	62.685	0.145	41.8	0.2566	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	OU-08	1.000	S09	2.5	0.725	0.139	0.1357	
15 minute summer	OU-01	2.000	S01	0.5	0.583	0.005	0.0105	
15 minute summer	OU-02	3.000	S01	10.3	1.102	0.044	0.0183	
15 minute summer	S01	2.001	S09	10.6	1.192	0.162	0.1700	
15 minute summer	OU-07	4.000	S09	6.0	1.207	0.217	0.0509	
15 minute summer	S09	1.001	S04	19.0	0.891	0.245	0.3477	
15 minute summer	OU-04	5.000	S04	19.3	1.590	0.113	0.2941	
15 minute summer	OU-03	6.000	S03	8.3	1.601	0.144	0.0153	
15 minute summer	S03	6.001	S04	8.2	1.277	0.310	0.0807	
15 minute summer	S04	1.002	S05	46.6	0.972	0.251	1.0839	
15 minute summer	OU-05	7.000	S05	9.0	1.256	0.119	0.1434	
15 minute summer	RG-05	1.004	S05	2.0	1.394	0.038	0.0137	
15 minute summer	OU-06	9.000	S05	4.5	1.954	0.073	0.0116	
15 minute summer	S05	1.003	S17A	61.7	0.911	0.168	1.1200	
15 minute summer	RG-17A	10.000	S17A	2.0	1.366	0.040	0.0284	
15 minute summer	S17A	1.004_1	S17	62.9	1.006	0.165	2.0304	
15 minute summer	RE PP1	11.000	BEND PP2	8.1	0.719	0.191	0.1958	
15 minute summer	BEND PP2	11.001	BEND PP3	10.3	0.756	0.242	0.0675	
15 minute summer	BEND PP3	11.002	BEND PP4	12.9	0.819	0.304	0.0849	
15 minute summer	BEND PP4	11.003	BEND PP5	14.3	0.808	0.338	0.0564	
15 minute summer	BEND PP5	11.004	BEND PP6	19.6	1.023	0.463	0.2243	
15 minute summer	BEND PP6	11.005	S13b	21.3	1.465	0.504	0.0588	
15 minute summer	S13b	11.006	S13a	21.3	1.559	0.183	0.1072	
15 minute summer	S13a	11.007	JUN S13C	21.4	1.062	0.411	0.3530	
15 minute summer	OU-11	12.000	JUN S13C	12.0	2.009	0.288	0.0837	
15 minute summer	JUN S13C	11.008	S13	33.0	1.069	0.308	0.2883	
15 minute summer	OU-23	13.000	S13	8.9	0.964	0.172	0.1881	
15 minute summer	S13	11.009	JUN S17A	41.9	1.368	0.463	0.4756	

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Results for 1 year Critical Storm Duration. Lowest mass balance: 99.89%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	OU-25	10	63.560	0.053	11.0	0.1034	0.0000	OK
15 minute summer	JUN S17A	11	62.561	0.124	52.5	0.0000	0.0000	OK
15 minute summer	OU-15	10	63.310	0.078	13.1	0.1454	0.0000	OK
15 minute summer	S15	10	63.258	0.076	16.0	0.1599	0.0000	OK
15 minute summer	OU-16	10	63.343	0.045	8.2	0.0604	0.0000	OK
15 minute summer	JUN-03	11	62.926	0.096	23.9	0.0000	0.0000	OK
15 minute summer	OU-12	10	63.179	0.103	21.2	0.3025	0.0000	OK
15 minute summer	OU-13	10	63.128	0.097	19.0	0.2568	0.0000	OK
15 minute summer	S14	10	62.808	0.148	39.8	0.2624	0.0000	OK
15 minute summer	OU-14	10	63.128	0.045	9.2	0.0607	0.0000	OK
15 minute summer	JUN-02	10	62.743	0.140	48.6	0.0000	0.0000	OK
15 minute summer	OU-17	10	63.218	0.082	10.1	0.1197	0.0000	OK
15 minute summer	S16	11	62.656	0.176	82.3	0.3118	0.0000	OK
15 minute summer	OU-18	10	63.634	0.024	3.0	0.0127	0.0000	OK
15 minute summer	JUN-04	11	62.517	0.163	85.8	0.0000	0.0000	OK
15 minute summer	S17	11	62.154	0.404	201.4	0.7143	0.0000	OK
15 minute summer	OU-19	10	63.711	0.071	12.2	0.1242	0.0000	OK
15 minute summer	S18	11	63.403	0.083	12.0	0.1464	0.0000	OK
15 minute summer	OU-20	10	63.580	0.073	11.0	0.1148	0.0000	OK
15 minute summer	OU-21	10	63.613	0.049	9.1	0.0650	0.0000	OK
15 minute summer	S19	11	63.377	0.147	31.8	0.2606	0.0000	OK
15 minute summer	KO-01	10	63.453	0.041	5.0	0.0396	0.0000	OK
15 minute summer	OU-22	10	63.655	0.040	7.1	0.0477	0.0000	OK
15 minute summer	S20	10	63.242	0.081	12.0	0.1424	0.0000	OK
15 minute summer	OU-24	10	63.564	0.036	9.1	0.0473	0.0000	OK
15 minute summer	JUN S22A	11	63.056	0.114	20.9	0.0000	0.0000	OK
15 minute summer	OU-26	10	63.511	0.049	11.0	0.0935	0.0000	OK
15 minute summer	S22	11	62.864	0.114	62.8	0.2019	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	OU-25	14.000	JUN S17A	10.9	1.965	0.262	0.0942	
15 minute summer	JUN S17A	11.010	S17	52.6	1.984	0.329	0.3562	
15 minute summer	OU-15	15.000	S15	13.0	0.914	0.117	0.0718	
15 minute summer	S15	15.001	JUN-03	15.8	0.952	0.142	0.5860	
15 minute summer	OU-16	16.000	JUN-03	8.2	1.879	0.181	0.0219	
15 minute summer	JUN-03	15.002	S16	23.8	1.251	0.214	0.3788	
15 minute summer	OU-12	17.000	S14	20.9	1.252	0.368	0.1625	
15 minute summer	OU-13	18.000	S14	18.8	1.257	0.303	0.0746	
15 minute summer	S14	17.001	JUN-02	39.5	0.905	0.230	0.8750	
15 minute summer	OU-14	19.000	JUN-02	9.2	1.683	0.079	0.0200	
15 minute summer	JUN-02	17.002	S16	48.7	0.982	0.196	1.0290	
15 minute summer	OU-17	20.000	S16	10.0	0.822	0.237	0.0589	
15 minute summer	S16	15.003	JUN-04	82.9	1.491	0.304	0.8688	
15 minute summer	OU-18	21.000	JUN-04	3.0	1.634	0.055	0.0187	
15 minute summer	JUN-04	15.004	S17	86.0	1.720	0.263	0.9456	
15 minute summer	S17	1.005	S26	201.1	1.041	0.623	1.3461	
15 minute summer	OU-19	22.000	S18	12.0	1.145	0.204	0.2327	
15 minute summer	S18	22.001	S19	12.0	0.485	0.171	0.5626	
15 minute summer	OU-20	23.000	S19	11.0	1.314	0.422	0.0846	
15 minute summer	OU-21	24.000	S19	9.0	1.240	0.105	0.0892	
15 minute summer	S19	22.002	S22	31.5	0.962	0.451	0.8481	
15 minute summer	KO-01	25.000	S20	5.0	1.030	0.067	0.0423	
15 minute summer	OU-22	26.000	S20	7.1	1.986	0.131	0.0150	
15 minute summer	S20	25.001	JUN S22A	11.8	0.725	0.279	0.5388	
15 minute summer	OU-24	27.000	JUN S22A	9.1	1.094	0.055	0.0708	
15 minute summer	JUN S22A	25.002	S22	20.7	1.052	0.490	0.3322	
15 minute summer	OU-26	28.000	S22	10.9	1.922	0.076	0.0140	
15 minute summer	S22	22.003	S25	63.0	2.078	0.129	0.7265	

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Results for 1 year Critical Storm Duration. Lowest mass balance: 99.89%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	OU-27	10	63.187	0.064	13.6	0.0936	0.0000	OK
15 minute summer	S23	10	62.765	0.109	13.5	0.0309	0.0000	OK
15 minute summer	OU-28	10	63.493	0.036	17.8	0.0892	0.0000	OK
15 minute summer	JUN-05	10	62.759	0.137	31.2	0.0000	0.0000	OK
15 minute summer	OU-29	10	63.589	0.089	9.2	0.1195	0.0000	OK
15 minute summer	S24	10	62.644	0.097	40.1	0.1709	0.0000	OK
15 minute summer	OU-30	10	62.936	0.088	7.9	0.0783	0.0000	OK
15 minute summer	S25	11	62.070	0.163	110.3	0.2881	0.0000	OK
15 minute summer	S26	11	62.109	0.443	311.0	0.7822	0.0000	OK
15 minute summer	PI	11	61.795	0.245	310.1	0.0694	0.0000	OK
120 minute summer	S27	92	61.719	0.464	139.1	1.1803	0.0000	SURCHARGED
120 minute summer	TANK	86	61.688	0.518	134.6	159.0934	0.0000	SURCHARGED
120 minute summer	S28	86	61.687	0.535	33.4	0.9456	0.0000	SURCHARGED
120 minute summer	S29	118	60.648	0.098	32.9	0.0000	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	OU-27	29.000	S23	13.5	1.490	0.164	0.1432	
15 minute summer	S23	29.001	JUN-05	13.4	0.496	0.192	0.2316	
15 minute summer	OU-28	30.000	JUN-05	17.8	3.363	0.055	0.0132	
15 minute summer	JUN-05	29.002	S24	31.0	1.221	0.442	0.4741	
15 minute summer	OU-29	31.000	S24	9.1	0.923	0.514	0.0184	
15 minute summer	S24	29.003	S25	39.8	2.199	0.182	0.1609	
15 minute summer	OU-30	32.000	S25	7.8	0.762	0.589	0.1245	
15 minute summer	S25	22.004	S26	109.8	1.006	0.092	1.1377	
15 minute summer	S26	1.006	PI	310.1	1.540	0.961	1.3714	
15 minute summer	PI	1.009	S27	310.0	2.940	0.194	0.5729	
15 minute summer	S27	1.010	TANK	309.4	2.038	0.816	6.1132	
60 minute summer	TANK	1.011	S28	33.5	0.320	0.278	0.2704	
120 minute summer	S28	1.012	S29	32.9	1.614	0.234	0.7673	266.1

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Results for 30 year Critical Storm Duration. Lowest mass balance: 99.03%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	OU-08	11	63.220	0.061	6.3	0.0281	0.0000	OK
15 minute summer	OU-01	11	63.438	0.018	1.1	0.0032	0.0000	OK
15 minute summer	OU-02	10	63.152	0.089	25.1	0.1322	0.0000	OK
15 minute summer	S01	10	63.082	0.104	26.1	0.0293	0.0000	OK
15 minute summer	OU-07	10	63.080	0.085	14.8	0.0607	0.0000	OK
15 minute summer	S09	10	62.780	0.180	46.7	0.3176	0.0000	OK
15 minute summer	OU-04	10	63.206	0.113	48.0	0.3066	0.0000	OK
15 minute summer	OU-03	10	63.323	0.071	20.3	0.0862	0.0000	OK
15 minute summer	S03	10	63.055	0.107	20.2	0.1895	0.0000	OK
15 minute summer	S04	11	62.656	0.284	113.7	0.5025	0.0000	OK
15 minute summer	OU-05	10	63.504	0.087	22.2	0.1155	0.0000	OK
15 minute summer	RG-05	10	63.832	0.032	4.8	0.0164	0.0000	OK
15 minute summer	OU-06	10	63.639	0.047	11.1	0.0342	0.0000	OK
15 minute summer	S05	12	62.601	0.454	149.1	0.8023	0.0000	OK
15 minute summer	RG-17A	10	64.007	0.031	4.8	0.0167	0.0000	OK
15 minute summer	S17A	12	62.591	0.491	145.0	0.8677	0.0000	OK
15 minute summer	RE PP1	10	63.611	0.111	19.9	0.2611	0.0000	OK
15 minute summer	BEND PP2	11	63.528	0.144	25.2	0.2464	0.0000	OK
15 minute summer	BEND PP3	11	63.518	0.167	30.8	0.3792	0.0000	OK
15 minute summer	BEND PP4	11	63.505	0.190	34.5	0.1577	0.0000	OK
15 minute summer	BEND PP5	11	63.496	0.202	47.3	0.2316	0.0000	OK
15 minute summer	BEND PP6	11	63.409	0.193	51.6	0.2706	0.0000	OK
15 minute summer	S13b	12	63.320	0.131	53.0	0.2909	0.0000	OK
15 minute summer	S13a	12	63.152	0.352	51.4	0.0995	0.0000	SURCHARGED
15 minute summer	OU-11	10	63.553	0.093	29.6	0.1878	0.0000	OK
15 minute summer	JUN S13C	12	62.963	0.336	78.4	0.0000	0.0000	SURCHARGED
15 minute summer	OU-23	10	63.680	0.107	22.2	0.1420	0.0000	OK
15 minute summer	S13	12	62.905	0.365	99.1	0.6449	0.0000	SURCHARGED

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	OU-08	1.000	S09	6.1	0.926	0.336	0.2575	
15 minute summer	OU-01	2.000	S01	1.1	0.707	0.013	0.0283	
15 minute summer	OU-02	3.000	S01	25.0	1.283	0.108	0.0383	
15 minute summer	S01	2.001	S09	26.0	1.466	0.397	0.3437	
15 minute summer	OU-07	4.000	S09	14.7	1.506	0.534	0.1005	
15 minute summer	S09	1.001	S04	46.4	1.109	0.597	0.6806	
15 minute summer	OU-04	5.000	S04	47.8	1.971	0.279	0.6440	
15 minute summer	OU-03	6.000	S03	20.2	1.876	0.352	0.0318	
15 minute summer	S03	6.001	S04	20.0	1.561	0.759	0.1616	
15 minute summer	S04	1.002	S05	111.3	1.231	0.599	2.4454	
15 minute summer	OU-05	7.000	S05	22.0	1.599	0.292	0.2762	
15 minute summer	RG-05	1.004	S05	4.8	1.792	0.092	0.0256	
15 minute summer	OU-06	9.000	S05	11.1	2.478	0.180	0.0226	
15 minute summer	S05	1.003	S17A	140.4	1.038	0.383	3.8946	
15 minute summer	RG-17A	10.000	S17A	4.8	1.730	0.096	0.1914	
15 minute winter	S17A	1.004_1	S17	138.6	0.914	0.363	7.7656	
15 minute summer	RE PP1	11.000	BEND PP2	19.7	0.864	0.466	0.3990	
15 minute summer	BEND PP2	11.001	BEND PP3	24.8	0.864	0.587	0.1455	
15 minute summer	BEND PP3	11.002	BEND PP4	31.0	0.938	0.732	0.1823	
15 minute summer	BEND PP4	11.003	BEND PP5	34.6	0.957	0.817	0.1169	
15 minute summer	BEND PP5	11.004	BEND PP6	47.4	1.283	1.119	0.4324	
15 minute summer	BEND PP6	11.005	S13b	53.0	1.840	1.252	0.1184	
15 minute summer	S13b	11.006	S13a	51.4	1.736	0.440	0.2478	
15 minute summer	S13a	11.007	JUN S13C	50.0	1.290	0.963	0.6899	
15 minute summer	OU-11	12.000	JUN S13C	29.4	2.254	0.708	0.2040	
15 minute summer	JUN S13C	11.008	S13	77.2	1.225	0.719	0.6568	
15 minute summer	OU-23	13.000	S13	21.9	1.217	0.421	0.3654	
15 minute summer	S13	11.009	JUN S17A	96.7	1.547	1.068	1.0927	

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Results for 30 year Critical Storm Duration. Lowest mass balance: 99.03%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	OU-25	10	63.598	0.091	27.0	0.1754	0.0000	OK
15 minute summer	JUN S17A	12	62.767	0.330	123.5	0.0000	0.0000	SURCHARGED
15 minute summer	OU-15	10	63.363	0.131	32.1	0.2438	0.0000	OK
15 minute summer	S15	10	63.304	0.122	39.3	0.2582	0.0000	OK
15 minute summer	OU-16	10	63.373	0.075	19.9	0.1003	0.0000	OK
15 minute summer	JUN-03	10	62.990	0.160	58.8	0.0000	0.0000	OK
15 minute summer	OU-12	10	63.270	0.194	51.7	0.5659	0.0000	OK
15 minute summer	OU-13	10	63.206	0.175	46.5	0.4613	0.0000	OK
15 minute summer	S14	10	62.911	0.251	97.1	0.4439	0.0000	OK
15 minute summer	OU-14	10	63.156	0.073	22.5	0.0984	0.0000	OK
15 minute summer	JUN-02	10	62.845	0.242	118.7	0.0000	0.0000	OK
15 minute summer	OU-17	10	63.275	0.139	24.8	0.2031	0.0000	OK
15 minute summer	S16	11	62.787	0.307	200.2	0.5417	0.0000	OK
15 minute summer	OU-18	10	63.648	0.038	7.4	0.0200	0.0000	OK
15 minute summer	JUN-04	11	62.659	0.305	208.8	0.0000	0.0000	OK
15 minute summer	S17	12	62.579	0.829	462.6	1.4649	0.0000	SURCHARGED
15 minute summer	OU-19	10	63.758	0.118	29.9	0.2057	0.0000	OK
15 minute summer	S18	11	63.517	0.197	29.7	0.3484	0.0000	OK
15 minute summer	OU-20	11	63.779	0.272	27.0	0.4305	0.0000	SURCHARGED
15 minute summer	OU-21	9	63.642	0.078	22.2	0.1038	0.0000	OK
15 minute summer	S19	11	63.502	0.272	75.2	0.4813	0.0000	OK
15 minute summer	KO-01	10	63.478	0.066	12.2	0.0635	0.0000	OK
15 minute summer	OU-22	10	63.683	0.068	17.4	0.0803	0.0000	OK
15 minute summer	S20	10	63.296	0.135	29.5	0.2391	0.0000	OK
15 minute summer	OU-24	10	63.584	0.056	22.2	0.0734	0.0000	OK
15 minute summer	JUN S22A	11	63.194	0.252	51.2	0.0000	0.0000	SURCHARGED
15 minute summer	OU-26	10	63.546	0.084	27.0	0.1605	0.0000	OK
15 minute summer	S22	11	62.929	0.179	150.5	0.3170	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	OU-25	14.000	JUN S17A	26.8	2.457	0.643	0.2376	
15 minute summer	JUN S17A	11.010	S17	123.0	2.088	0.769	0.9460	
15 minute summer	OU-15	15.000	S15	31.9	1.132	0.287	0.1425	
15 minute summer	S15	15.001	JUN-03	39.0	1.197	0.351	1.1475	
15 minute summer	OU-16	16.000	JUN-03	19.8	2.353	0.441	0.0424	
15 minute summer	JUN-03	15.002	S16	58.1	1.566	0.523	0.7437	
15 minute summer	OU-12	17.000	S14	51.0	1.507	0.897	0.3275	
15 minute summer	OU-13	18.000	S14	46.1	1.540	0.741	0.1483	
15 minute summer	S14	17.001	JUN-02	96.3	1.081	0.560	1.7791	
15 minute summer	OU-14	19.000	JUN-02	22.4	2.130	0.194	0.0387	
15 minute summer	JUN-02	17.002	S16	118.3	1.175	0.476	2.0915	
15 minute summer	OU-17	20.000	S16	24.6	1.031	0.581	0.1152	
15 minute summer	S16	15.003	JUN-04	201.8	1.832	0.741	1.7406	
15 minute summer	OU-18	21.000	JUN-04	7.4	2.117	0.136	0.0356	
15 minute summer	JUN-04	15.004	S17	209.4	2.010	0.640	2.4879	
15 minute summer	S17	1.005	S26	455.0	1.616	1.410	1.9624	
15 minute summer	OU-19	22.000	S18	29.7	1.365	0.504	0.5604	
15 minute summer	S18	22.001	S19	28.2	0.527	0.403	1.3013	
15 minute summer	OU-20	23.000	S19	25.8	1.467	0.996	0.1722	
15 minute summer	OU-21	24.000	S19	22.1	1.234	0.258	0.2409	
15 minute summer	S19	22.002	S22	74.2	1.217	1.061	1.5602	
15 minute summer	KO-01	25.000	S20	12.1	1.310	0.164	0.0811	
15 minute summer	OU-22	26.000	S20	17.4	2.427	0.323	0.0300	
15 minute summer	S20	25.001	JUN S22A	29.1	0.859	0.686	1.0605	
15 minute summer	OU-24	27.000	JUN S22A	22.1	1.248	0.134	0.1396	
15 minute summer	JUN S22A	25.002	S22	50.5	1.284	1.193	0.6320	
15 minute summer	OU-26	28.000	S22	26.9	2.338	0.186	0.0284	
15 minute summer	S22	22.003	S25	150.7	2.439	0.309	2.0499	

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Results for 30 year Critical Storm Duration. Lowest mass balance: 99.03%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	OU-27	10	63.226	0.103	33.2	0.1500	0.0000	OK
15 minute summer	S23	10	62.864	0.208	33.0	0.0590	0.0000	OK
15 minute summer	OU-28	10	63.515	0.058	43.6	0.1435	0.0000	OK
15 minute summer	JUN-05	10	62.855	0.233	76.3	0.0000	0.0000	OK
15 minute summer	OU-29	10	63.694	0.194	22.5	0.2612	0.0000	SURCHARGED
15 minute summer	S24	11	62.719	0.172	98.1	0.3038	0.0000	OK
15 minute summer	OU-30	10	63.072	0.224	19.2	0.2000	0.0000	SURCHARGED
15 minute summer	S25	12	62.513	0.606	265.5	1.0712	0.0000	SURCHARGED
15 minute summer	S26	12	62.486	0.820	719.2	1.4483	0.0000	SURCHARGED
120 minute summer	PI	84	62.465	0.915	318.3	0.2589	0.0000	SURCHARGED
120 minute summer	S27	84	62.462	1.207	316.3	3.0723	0.0000	SURCHARGED
120 minute summer	TANK	84	62.458	1.288	312.9	395.2119	0.0000	SURCHARGED
120 minute summer	S28	84	62.448	1.296	77.0	2.2901	0.0000	SURCHARGED
120 minute summer	S29	84	60.706	0.156	77.0	0.0000	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	OU-27	29.000	S23	33.0	1.692	0.403	0.3343	
15 minute summer	S23	29.001	JUN-05	32.8	0.589	0.468	0.4725	
15 minute summer	OU-28	30.000	JUN-05	43.5	3.485	0.136	0.0386	
15 minute summer	JUN-05	29.002	S24	75.8	1.520	1.084	0.9283	
15 minute summer	OU-29	31.000	S24	22.3	1.269	1.257	0.0319	
15 minute summer	S24	29.003	S25	97.0	2.619	0.444	0.4927	
15 minute summer	OU-30	32.000	S25	18.8	1.078	1.426	0.2039	
15 minute summer	S25	22.004	S26	264.2	0.972	0.220	2.2508	
15 minute summer	S26	1.006	PI	718.6	2.554	2.227	1.9233	
15 minute summer	PI	1.009	S27	712.7	3.219	0.447	1.5301	
15 minute summer	S27	1.010	TANK	703.0	2.151	1.855	6.9967	
120 minute summer	TANK	1.011	S28	77.0	0.698	0.638	0.2704	
120 minute summer	S28	1.012	S29	77.0	1.996	0.546	1.4494	641.6

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Results for 100 year Critical Storm Duration. Lowest mass balance: 99.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	OU-08	10	63.229	0.070	8.1	0.0324	0.0000	OK
15 minute summer	OU-01	11	63.440	0.020	1.4	0.0036	0.0000	OK
15 minute summer	OU-02	10	63.169	0.106	32.4	0.1568	0.0000	OK
15 minute summer	S01	12	63.101	0.123	33.7	0.0348	0.0000	OK
15 minute summer	OU-07	12	63.155	0.160	19.1	0.1146	0.0000	SURCHARGED
15 minute summer	S09	12	63.068	0.468	60.3	0.8266	0.0000	SURCHARGED
15 minute summer	OU-04	9	63.219	0.126	61.9	0.3421	0.0000	OK
15 minute summer	OU-03	12	63.349	0.097	26.2	0.1186	0.0000	OK
15 minute summer	S03	12	63.236	0.288	26.1	0.5082	0.0000	SURCHARGED
30 minute summer	S04	20	63.040	0.668	130.6	1.1801	0.0000	SURCHARGED
15 minute summer	OU-05	10	63.518	0.101	28.6	0.1338	0.0000	OK
15 minute summer	RG-05	10	63.836	0.036	6.2	0.0188	0.0000	OK
15 minute summer	OU-06	10	63.647	0.055	14.3	0.0395	0.0000	OK
30 minute summer	S05	20	63.005	0.858	167.6	1.5157	0.0000	SURCHARGED
15 minute summer	RG-17A	10	64.012	0.036	6.2	0.0189	0.0000	OK
30 minute summer	S17A	20	62.997	0.897	154.8	1.5849	0.0000	SURCHARGED
15 minute summer	RE PP1	12	63.746	0.246	25.7	0.5774	0.0000	SURCHARGED
15 minute summer	BEND PP2	13	63.721	0.337	32.2	0.7927	0.0000	SURCHARGED
15 minute summer	BEND PP3	13	63.714	0.363	34.9	0.9848	0.0000	SURCHARGED
15 minute summer	BEND PP4	13	63.699	0.384	36.5	0.3783	0.0000	SURCHARGED
15 minute summer	BEND PP5	13	63.688	0.394	52.5	0.4866	0.0000	SURCHARGED
15 minute summer	BEND PP6	13	63.621	0.405	56.5	0.7272	0.0000	SURCHARGED
15 minute summer	S13b	13	63.577	0.388	56.0	0.9075	0.0000	SURCHARGED
15 minute summer	S13a	12	63.482	0.682	55.6	0.1931	0.0000	SURCHARGED
15 minute summer	OU-11	12	63.847	0.387	38.1	0.7791	0.0000	SURCHARGED
15 minute summer	JUN S13C	12	63.357	0.730	82.4	0.0000	0.0000	SURCHARGED
15 minute summer	OU-23	10	63.699	0.126	28.6	0.1662	0.0000	OK
15 minute summer	S13	12	63.304	0.764	105.6	1.3494	0.0000	SURCHARGED

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	OU-08	1.000	S09	7.8	0.982	0.430	0.4954	
15 minute summer	OU-01	2.000	S01	1.4	0.629	0.016	0.0495	
15 minute summer	OU-02	3.000	S01	32.3	1.383	0.139	0.0476	
15 minute summer	S01	2.001	S09	33.5	1.454	0.511	0.5926	
15 minute summer	OU-07	4.000	S09	19.0	1.586	0.690	0.1813	
15 minute summer	S09	1.001	S04	58.6	1.120	0.755	1.1466	
15 minute summer	OU-04	5.000	S04	62.1	1.959	0.362	1.1717	
15 minute summer	OU-03	6.000	S03	26.1	1.921	0.454	0.0437	
15 minute summer	S03	6.001	S04	25.3	1.584	0.961	0.2222	
15 minute winter	S04	1.002	S05	127.9	1.234	0.688	3.5830	
15 minute summer	OU-05	7.000	S05	28.3	1.704	0.377	0.3342	
15 minute summer	RG-05	1.004	S05	6.2	1.923	0.119	0.0307	
15 minute summer	OU-06	9.000	S05	14.3	2.636	0.232	0.0273	
15 minute winter	S05	1.003	S17A	154.0	1.040	0.420	4.6122	
15 minute summer	RG-17A	10.000	S17A	6.2	1.737	0.124	0.2043	
15 minute summer	S17A	1.004_1	S17	153.4	0.943	0.402	9.0970	
15 minute summer	RE PP1	11.000	BEND PP2	25.1	0.891	0.593	0.6921	
15 minute summer	BEND PP2	11.001	BEND PP3	27.3	0.855	0.644	0.1975	
15 minute summer	BEND PP3	11.002	BEND PP4	33.9	0.976	0.802	0.2150	
15 minute summer	BEND PP4	11.003	BEND PP5	38.2	1.033	0.903	0.1267	
15 minute winter	BEND PP5	11.004	BEND PP6	51.5	1.296	1.216	0.4658	
15 minute summer	BEND PP6	11.005	S13b	56.0	1.847	1.321	0.1595	
15 minute summer	S13b	11.006	S13a	55.6	1.719	0.476	0.3093	
15 minute summer	S13a	11.007	JUN S13C	59.2	1.488	1.139	0.6899	
15 minute summer	OU-11	12.000	JUN S13C	35.3	2.193	0.850	0.2468	
15 minute summer	JUN S13C	11.008	S13	79.7	1.175	0.743	0.6568	
15 minute summer	OU-23	13.000	S13	28.2	1.293	0.543	0.4439	
15 minute summer	S13	11.009	JUN S17A	100.9	1.550	1.114	1.0927	

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Results for 100 year Critical Storm Duration. Lowest mass balance: 99.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	OU-25	11	63.630	0.123	34.8	0.2384	0.0000	OK
15 minute summer	JUN S17A	12	63.165	0.728	133.7	0.0000	0.0000	SURCHARGED
15 minute summer	OU-15	10	63.386	0.154	41.5	0.2862	0.0000	OK
15 minute summer	S15	10	63.325	0.143	50.8	0.3014	0.0000	OK
15 minute summer	OU-16	12	63.389	0.091	25.7	0.1214	0.0000	OK
15 minute summer	JUN-03	12	63.239	0.409	75.9	0.0000	0.0000	SURCHARGED
15 minute summer	OU-12	10	63.393	0.317	66.7	0.9267	0.0000	SURCHARGED
15 minute summer	OU-13	12	63.291	0.260	60.0	0.6882	0.0000	SURCHARGED
15 minute summer	S14	12	63.219	0.559	123.8	0.9869	0.0000	SURCHARGED
15 minute summer	OU-14	12	63.191	0.108	29.1	0.1447	0.0000	OK
15 minute summer	JUN-02	12	63.195	0.592	151.1	0.0000	0.0000	SURCHARGED
15 minute summer	OU-17	10	63.303	0.167	31.9	0.2437	0.0000	OK
15 minute summer	S16	12	63.159	0.679	254.1	1.2005	0.0000	SURCHARGED
15 minute summer	OU-18	10	63.653	0.043	9.5	0.0223	0.0000	OK
15 minute summer	JUN-04	12	63.068	0.714	250.8	0.0000	0.0000	SURCHARGED
30 minute summer	S17	20	62.982	1.232	459.9	2.1763	0.0000	SURCHARGED
15 minute summer	OU-19	9	63.775	0.135	38.6	0.2353	0.0000	OK
15 minute summer	S18	11	63.645	0.325	39.3	0.5750	0.0000	SURCHARGED
15 minute summer	OU-20	11	64.058	0.551	34.8	0.8710	0.0000	SURCHARGED
15 minute summer	OU-21	10	63.653	0.089	28.6	0.1175	0.0000	OK
15 minute summer	S19	11	63.613	0.383	96.7	0.6764	0.0000	SURCHARGED
15 minute summer	KO-01	9	63.486	0.073	15.7	0.0704	0.0000	OK
15 minute summer	OU-22	11	63.697	0.082	22.4	0.0974	0.0000	OK
15 minute summer	S20	11	63.488	0.327	37.6	0.5780	0.0000	SURCHARGED
15 minute summer	OU-24	10	63.591	0.063	28.6	0.0834	0.0000	OK
15 minute summer	JUN S22A	11	63.313	0.371	63.3	0.0000	0.0000	SURCHARGED
15 minute summer	OU-26	10	63.561	0.099	34.8	0.1890	0.0000	OK
15 minute summer	S22	12	62.973	0.223	192.9	0.3936	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	OU-25	14.000	JUN S17A	33.8	2.540	0.812	0.2808	
15 minute summer	JUN S17A	11.010	S17	130.9	2.219	0.819	0.9460	
15 minute summer	OU-15	15.000	S15	41.3	1.192	0.372	0.1750	
15 minute summer	S15	15.001	JUN-03	50.3	1.238	0.452	1.7421	
15 minute summer	OU-16	16.000	JUN-03	25.6	2.491	0.569	0.0725	
15 minute summer	JUN-03	15.002	S16	74.2	1.549	0.668	1.4005	
15 minute summer	OU-12	17.000	S14	65.1	1.638	1.145	0.3863	
15 minute summer	OU-13	18.000	S14	58.7	1.585	0.944	0.1977	
15 minute summer	S14	17.001	JUN-02	122.1	1.096	0.711	3.1667	
15 minute summer	OU-14	19.000	JUN-02	29.0	2.271	0.251	0.1074	
15 minute summer	JUN-02	17.002	S16	148.3	1.198	0.596	3.2804	
15 minute summer	OU-17	20.000	S16	31.7	1.085	0.747	0.1407	
15 minute summer	S16	15.003	JUN-04	241.3	1.854	0.887	2.4755	
15 minute summer	OU-18	21.000	JUN-04	9.5	2.234	0.175	0.1104	
15 minute winter	JUN-04	15.004	S17	235.0	1.958	0.718	2.9965	
15 minute summer	S17	1.005	S26	500.5	1.777	1.551	1.9624	
15 minute summer	OU-19	22.000	S18	39.3	1.383	0.669	0.7119	
15 minute summer	S18	22.001	S19	36.6	0.521	0.524	1.5758	
15 minute summer	OU-20	23.000	S19	32.7	1.857	1.261	0.1722	
15 minute summer	OU-21	24.000	S19	28.5	1.220	0.332	0.2650	
15 minute summer	S19	22.002	S22	96.3	1.392	1.376	1.6955	
15 minute summer	KO-01	25.000	S20	15.7	1.285	0.213	0.2218	
15 minute summer	OU-22	26.000	S20	22.0	2.437	0.409	0.0576	
15 minute summer	S20	25.001	JUN S22A	35.9	0.903	0.848	1.3038	
15 minute summer	OU-24	27.000	JUN S22A	28.5	1.260	0.173	0.1441	
15 minute summer	JUN S22A	25.002	S22	63.3	1.592	1.494	0.6532	
15 minute summer	OU-26	28.000	S22	34.7	2.458	0.239	0.0348	
15 minute summer	S22	22.003	S25	190.0	2.354	0.389	2.8352	

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Results for 100 year Critical Storm Duration. Lowest mass balance: 99.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	OU-27	11	63.246	0.123	42.9	0.1786	0.0000	OK
15 minute summer	S23	12	63.147	0.491	43.8	0.1391	0.0000	SURCHARGED
15 minute summer	OU-28	11	63.530	0.073	56.2	0.1812	0.0000	OK
15 minute summer	JUN-05	12	63.137	0.515	98.6	0.0000	0.0000	SURCHARGED
15 minute summer	OU-29	10	63.747	0.247	29.1	0.3321	0.0000	SURCHARGED
15 minute summer	S24	12	63.026	0.479	126.5	0.8456	0.0000	SURCHARGED
15 minute summer	OU-30	10	63.198	0.350	24.8	0.3127	0.0000	SURCHARGED
30 minute summer	S25	20	62.922	1.015	292.7	1.7941	0.0000	SURCHARGED
30 minute summer	S26	20	62.891	1.225	731.4	2.1643	0.0000	SURCHARGED
120 minute summer	PI	82	62.802	1.252	386.3	0.3544	0.0000	SURCHARGED
120 minute summer	S27	84	62.797	1.542	385.4	3.9251	0.0000	SURCHARGED
120 minute summer	TANK	84	62.790	1.620	382.9	497.1566	0.0000	SURCHARGED
120 minute summer	S28	84	62.772	1.620	103.5	2.8630	0.0000	SURCHARGED
120 minute summer	S29	84	60.739	0.189	103.5	0.0000	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	OU-27	29.000	S23	43.8	1.620	0.534	0.4900	
15 minute summer	S23	29.001	JUN-05	42.7	0.607	0.611	0.5993	
15 minute summer	OU-28	30.000	JUN-05	55.8	3.397	0.174	0.0518	
15 minute summer	JUN-05	29.002	S24	97.6	1.545	1.396	1.3118	
15 minute summer	OU-29	31.000	S24	28.8	1.637	1.623	0.0325	
15 minute summer	S24	29.003	S25	119.0	2.565	0.545	0.6244	
15 minute summer	OU-30	32.000	S25	24.1	1.372	1.830	0.2108	
15 minute summer	S25	22.004	S26	319.3	1.134	0.266	2.2509	
15 minute summer	S26	1.006	PI	803.9	2.854	2.492	1.9233	
15 minute summer	PI	1.009	S27	801.8	3.201	0.503	1.5301	
15 minute summer	S27	1.010	TANK	795.4	2.404	2.098	6.9967	
120 minute summer	TANK	1.011	S28	103.5	0.939	0.858	0.2704	
120 minute summer	S28	1.012	S29	103.5	2.122	0.735	1.8338	846.0

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Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.87%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	OU-08	20	63.887	0.728	10.2	0.3365	0.0000	FLOOD RISK
30 minute summer	OU-01	20	63.897	0.477	8.6	0.0872	0.0000	SURCHARGED
30 minute summer	OU-02	20	63.904	0.841	40.9	1.2470	0.0000	FLOOD RISK
30 minute summer	S01	20	63.898	0.920	38.3	0.2604	0.0000	FLOOD RISK
30 minute summer	OU-07	20	63.952	0.957	24.1	0.6845	0.0000	SURCHARGED
30 minute summer	S09	20	63.822	1.222	66.8	2.1584	0.0000	SURCHARGED
30 minute summer	OU-04	20	63.848	0.755	78.3	2.0547	0.0000	FLOOD RISK
15 minute summer	OU-03	12	64.112	0.860	36.7	1.0521	0.0000	FLOOD RISK
30 minute summer	S03	20	64.010	1.062	29.4	1.8770	0.0000	FLOOD RISK
30 minute summer	S04	20	63.770	1.398	156.9	2.4699	0.0000	SURCHARGED
30 minute summer	OU-05	20	63.774	0.357	36.1	0.4719	0.0000	SURCHARGED
15 minute summer	RG-05	9	63.842	0.042	8.7	0.0218	0.0000	OK
30 minute summer	OU-06	20	63.757	0.165	18.1	0.1190	0.0000	SURCHARGED
30 minute summer	S05	20	63.716	1.569	197.3	2.7731	0.0000	SURCHARGED
15 minute summer	RG-17A	10	64.018	0.042	8.7	0.0225	0.0000	OK
30 minute summer	S17A	20	63.698	1.598	177.5	2.8231	0.0000	SURCHARGED
15 minute summer	RE PP1	12	64.228	0.728	36.0	1.7101	0.3133	FLOOD
15 minute summer	BEND PP2	12	64.190	0.806	38.3	2.4346	0.1729	FLOOD
30 minute summer	BEND PP3	20	64.173	0.822	36.1	2.5435	2.5709	FLOOD
15 minute summer	BEND PP4	12	64.175	0.860	37.5	0.9496	0.0000	FLOOD RISK
15 minute summer	BEND PP5	12	64.173	0.879	57.8	1.1390	0.0000	FLOOD RISK
30 minute summer	BEND PP6	20	64.133	0.917	59.2	1.9311	0.0000	FLOOD RISK
30 minute summer	S13b	21	64.105	0.916	56.1	2.2225	0.0000	FLOOD RISK
30 minute summer	S13a	21	64.056	1.256	49.9	0.3554	0.0000	FLOOD RISK
15 minute summer	OU-11	10	64.306	0.846	53.4	1.7038	2.8510	FLOOD
30 minute summer	JUN S13C	21	63.974	1.347	80.3	0.0000	0.0000	SURCHARGED
30 minute summer	OU-23	20	63.992	0.419	36.1	0.5540	0.0000	SURCHARGED
30 minute summer	S13	21	63.937	1.397	102.9	2.4681	0.0000	SURCHARGED

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	OU-08	1.000	S09	10.4	0.942	0.574	0.6856	
30 minute summer	OU-01	2.000	S01	-6.8	0.689	-0.078	0.5169	
15 minute summer	OU-02	3.000	S01	42.7	1.356	0.184	0.1382	
15 minute summer	S01	2.001	S09	43.2	1.497	0.659	0.7612	
15 minute summer	OU-07	4.000	S09	24.6	1.634	0.896	0.1813	
15 minute summer	S09	1.001	S04	68.1	1.106	0.878	1.1466	
15 minute summer	OU-04	5.000	S04	84.4	2.040	0.493	1.7020	
15 minute summer	OU-03	6.000	S03	32.8	1.969	0.571	0.0519	
15 minute summer	S03	6.001	S04	27.4	1.574	1.040	0.2222	
30 minute summer	S04	1.002	S05	142.6	1.215	0.768	3.5830	
15 minute summer	OU-05	7.000	S05	40.6	1.805	0.541	0.7996	
15 minute summer	RG-05	1.004	S05	8.7	2.072	0.168	0.1034	
15 minute summer	OU-06	9.000	S05	20.0	2.812	0.326	0.0755	
15 minute summer	S05	1.003	S17A	189.3	1.014	0.517	4.6122	
15 minute summer	RG-17A	10.000	S17A	8.7	1.909	0.174	0.2129	
15 minute summer	S17A	1.004_1	S17	192.2	0.942	0.504	9.0970	
15 minute summer	RE PP1	11.000	BEND PP2	28.3	0.925	0.667	0.6921	
30 minute summer	BEND PP2	11.001	BEND PP3	28.4	0.864	0.671	0.1975	
15 minute winter	BEND PP3	11.002	BEND PP4	35.8	0.974	0.845	0.2150	
15 minute winter	BEND PP4	11.003	BEND PP5	39.4	1.032	0.932	0.1267	
15 minute summer	BEND PP5	11.004	BEND PP6	54.6	1.372	1.289	0.4658	
15 minute summer	BEND PP6	11.005	S13b	56.6	1.876	1.337	0.1595	
15 minute winter	S13b	11.006	S13a	57.5	1.722	0.492	0.3093	
15 minute summer	S13a	11.007	JUN S13C	60.8	1.530	1.171	0.6899	
15 minute summer	OU-11	12.000	JUN S13C	39.0	2.248	0.938	0.2468	
15 minute summer	JUN S13C	11.008	S13	82.4	1.218	0.768	0.6568	
15 minute summer	OU-23	13.000	S13	39.5	1.386	0.760	0.8083	
15 minute winter	S13	11.009	JUN S17A	101.8	1.512	1.124	1.0927	

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Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.87%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	OU-25	11	64.312	0.805	48.7	1.5585	1.2596	FLOOD
30 minute summer	JUN S17A	21	63.835	1.398	130.7	0.0000	0.0000	SURCHARGED
15 minute summer	OU-15	12	64.102	0.870	58.0	1.6209	0.0000	FLOOD RISK
15 minute summer	S15	12	64.084	0.902	67.1	1.9052	0.0000	FLOOD RISK
15 minute summer	OU-16	12	64.152	0.854	36.0	1.1402	0.0000	FLOOD RISK
30 minute summer	JUN-03	20	63.995	1.165	83.9	0.0000	0.0000	SURCHARGED
15 minute summer	OU-12	11	64.076	1.000	93.4	2.9230	2.4363	FLOOD
30 minute summer	OU-13	19	64.031	1.000	75.9	2.6420	0.9496	FLOOD
30 minute summer	S14	20	63.950	1.290	134.1	2.2789	0.0000	FLOOD RISK
30 minute summer	OU-14	20	63.944	0.861	36.7	1.1558	0.0000	FLOOD RISK
30 minute summer	JUN-02	20	63.928	1.325	160.3	0.0000	0.0000	FLOOD RISK
30 minute summer	OU-17	20	63.922	0.786	40.3	1.1493	0.0000	FLOOD RISK
30 minute summer	S16	20	63.892	1.412	264.9	2.4956	0.0000	SURCHARGED
30 minute summer	OU-18	20	63.819	0.209	12.0	0.1091	0.0000	SURCHARGED
30 minute summer	JUN-04	20	63.792	1.438	256.3	0.0000	0.0000	SURCHARGED
30 minute summer	S17	21	63.672	1.922	524.8	3.3960	0.0000	SURCHARGED
15 minute summer	OU-19	12	64.182	0.542	54.0	0.9441	0.0000	SURCHARGED
30 minute summer	S18	20	64.000	0.680	46.9	1.2011	0.0000	SURCHARGED
15 minute summer	OU-20	11	64.507	1.000	48.7	1.5820	0.9263	FLOOD
15 minute summer	OU-21	12	64.006	0.442	40.0	0.5842	0.0000	SURCHARGED
30 minute summer	S19	20	63.968	0.738	117.0	1.3047	0.0000	SURCHARGED
15 minute summer	KO-01	12	64.171	0.759	22.0	0.7275	0.0000	FLOOD RISK
15 minute summer	OU-22	12	64.284	0.669	31.4	0.7957	0.0000	FLOOD RISK
15 minute summer	S20	12	64.159	0.998	45.7	1.7634	0.0000	SURCHARGED
15 minute summer	OU-24	12	63.993	0.465	40.0	0.6151	0.0000	SURCHARGED
30 minute summer	JUN S22A	20	63.973	1.031	73.2	0.0000	0.0000	SURCHARGED
30 minute summer	OU-26	20	63.737	0.275	44.0	0.5247	0.0000	SURCHARGED
30 minute summer	S22	20	63.712	0.962	220.6	1.7002	0.0000	SURCHARGED

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	OU-25	14.000	JUN S17A	36.8	2.511	0.885	0.2989	
15 minute winter	JUN S17A	11.010	S17	132.1	2.245	0.826	0.9460	
15 minute summer	OU-15	15.000	S15	54.4	1.256	0.489	0.3555	
15 minute summer	S15	15.001	JUN-03	64.9	1.270	0.584	2.4808	
15 minute summer	OU-16	16.000	JUN-03	33.8	2.619	0.752	0.0887	
15 minute winter	JUN-03	15.002	S16	86.3	1.540	0.777	1.4005	
15 minute summer	OU-12	17.000	S14	82.2	2.068	1.446	0.3863	
15 minute summer	OU-13	18.000	S14	76.6	1.926	1.231	0.1977	
15 minute summer	S14	17.001	JUN-02	152.0	1.099	0.885	3.1667	
15 minute summer	OU-14	19.000	JUN-02	38.4	2.425	0.331	0.1460	
15 minute summer	JUN-02	17.002	S16	161.3	1.204	0.649	3.2804	
15 minute summer	OU-17	20.000	S16	41.3	1.153	0.976	0.1921	
15 minute summer	S16	15.003	JUN-04	261.3	1.822	0.960	2.4755	
15 minute summer	OU-18	21.000	JUN-04	13.1	2.308	0.243	0.1800	
15 minute summer	JUN-04	15.004	S17	269.4	1.855	0.823	2.9965	
15 minute summer	S17	1.005	S26	563.0	1.999	1.745	1.9624	
15 minute summer	OU-19	22.000	S18	49.8	1.391	0.847	0.8812	
15 minute summer	S18	22.001	S19	45.9	0.651	0.656	1.5758	
15 minute summer	OU-20	23.000	S19	42.1	2.393	1.624	0.1722	
15 minute summer	OU-21	24.000	S19	37.3	1.243	0.435	0.3880	
15 minute summer	S19	22.002	S22	119.7	1.702	1.711	1.8217	
15 minute summer	KO-01	25.000	S20	18.5	1.261	0.252	0.3487	
15 minute summer	OU-22	26.000	S20	28.8	2.362	0.535	0.0739	
15 minute winter	S20	25.001	JUN S22A	39.8	1.000	0.939	1.3038	
15 minute summer	OU-24	27.000	JUN S22A	38.2	1.257	0.232	0.2345	
15 minute winter	JUN S22A	25.002	S22	72.5	1.822	1.711	0.6700	
15 minute summer	OU-26	28.000	S22	48.5	2.618	0.335	0.0953	
15 minute summer	S22	22.003	S25	220.3	2.284	0.451	3.7963	

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Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.87%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	OU-27	12	64.141	1.018	60.0	1.4824	0.0000	SURCHARGED
15 minute summer	S23	12	63.969	1.313	51.7	0.3716	0.0000	SURCHARGED
15 minute summer	OU-28	12	64.007	0.550	78.7	1.3659	0.0000	SURCHARGED
15 minute summer	JUN-05	12	63.948	1.326	116.6	0.0000	0.0000	SURCHARGED
30 minute summer	OU-29	20	63.888	0.388	36.7	0.5213	0.0000	SURCHARGED
30 minute summer	S24	20	63.781	1.234	139.5	2.1806	0.0000	SURCHARGED
15 minute summer	OU-30	12	63.869	1.021	34.7	0.9122	0.0000	SURCHARGED
30 minute summer	S25	21	63.602	1.695	364.5	2.9949	0.0000	SURCHARGED
180 minute summer	S26	120	63.589	1.923	390.5	3.3981	0.0000	SURCHARGED
180 minute summer	PI	120	63.581	2.031	388.9	0.5748	0.0000	SURCHARGED
180 minute summer	S27	120	63.573	2.318	388.0	5.8997	0.0000	SURCHARGED
180 minute summer	TANK	120	63.561	2.391	385.6	733.7334	0.0000	SURCHARGED
180 minute summer	S28	120	63.535	2.383	124.2	4.2114	0.0000	SURCHARGED
15 minute summer	S29	1	61.850	1.300	87.2	0.0000	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	OU-27	29.000	S23	51.7	1.649	0.630	0.6297	
15 minute summer	S23	29.001	JUN-05	47.8	0.679	0.684	0.5993	
15 minute summer	OU-28	30.000	JUN-05	72.9	3.429	0.228	0.0810	
15 minute summer	JUN-05	29.002	S24	109.5	1.556	1.566	1.3118	
15 minute summer	OU-29	31.000	S24	40.2	2.282	2.262	0.0328	
15 minute summer	S24	29.003	S25	141.9	2.494	0.650	0.6244	
15 minute summer	OU-30	32.000	S25	30.2	1.718	2.292	0.2149	
15 minute summer	S25	22.004	S26	385.6	1.369	0.322	2.2509	
15 minute summer	S26	1.006	PI	936.6	3.325	2.903	1.9233	
15 minute summer	PI	1.009	S27	933.1	3.313	0.585	1.5301	
15 minute summer	S27	1.010	TANK	924.9	2.795	2.440	6.9967	
180 minute summer	TANK	1.011	S28	124.2	1.126	1.029	0.2704	
180 minute summer	S28	1.012	S29	124.1	1.763	0.881	2.6469	1129.3

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