


David R Murray and Associates LLP		Page 1
150-156 St Johns Road Edinburgh RH12 8AY		
Date 21/09/2015 12:26 File swl opt.mdx	Designed by Checked by	
XP Solutions Network 2015.1		

Summary Wizard of 15 minute 200 year Winter I+0% for SW1.SWS

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	20.000
Hot Start (mins)	0	MADD Factor * 10m³/ha Storage	2.000
Hot Start Level (mm)	0	Inlet Coefficient	0.800
Manhole Headloss Coeff (Global)	0.500	Flow per Person per Day (l/per/day)	0.000
Foul Sewage per hectare (l/s)	0.000		

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

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.300
Region	Scotland and Ireland Cv (Summer) 0.750		
M5-60 (mm)	14.000	Cv (Winter)	0.840


Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	OFF

Profile(s)	Winter
Duration(s) (mins)	15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years)	30, 100, 200
Climate Change (%)	0, 0, 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	1	1	135.799	1.023	0.000	1.35	32.0	FLOOD RISK	
1.001	2	1	133.499	-0.080	0.000	0.72	55.1	OK	
1.002	3	1	132.719	0.167	0.000	0.83	58.5	SURCHARGED	
2.000	44	1	132.551	0.176	0.000	0.62	28.8	SURCHARGED	
1.003	4	1	132.505	0.323	0.000	1.18	85.0	SURCHARGED	
3.000	46	1	134.421	-0.079	0.000	0.45	11.1	OK	
3.001	47	1	133.885	-0.070	0.000	0.54	18.1	OK	
3.002	48	1	133.439	0.126	0.000	1.01	37.3	SURCHARGED	
1.004	5	1	132.412	0.387	0.000	0.83	127.5	SURCHARGED	
1.005	6	2	132.071	0.800	0.000	0.86	133.9	SURCHARGED	
4.000	50	1	134.408	-0.066	0.000	0.59	21.5	OK	
4.001	51	1	133.285	0.541	0.000	0.94	65.5	SURCHARGED	
4.002	52	1	132.499	0.824	0.000	0.93	77.1	SURCHARGED	
4.003	53	1	132.367	0.962	0.000	1.35	82.9	SURCHARGED	
4.004	54	2	132.230	0.903	0.000	0.98	114.6	SURCHARGED	
1.006	7	2	131.792	0.954	0.000	1.00	239.4	FLOOD RISK	
1.007	8	2	131.649	1.142	0.000	1.60	242.1	FLOOD RISK	
1.008	9	2	131.520	1.082	0.000	1.59	248.6	SURCHARGED	
1.009	10	2	131.365	1.010	0.000	1.68	252.6	SURCHARGED	

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N	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Flow / Cap.	Overflow (1/s)	Pipe	Status
			Level (m)	Depth (m)	Volume (m³)			Flow (1/s)	
000	100	1	137.841	1.215	0.000	1.14		20.9	FLOOD RISK
001	101	1	136.784	0.958	0.000	1.39		33.6	SURCHARGED
000	105	1	134.252	0.863	0.000	0.65		37.6	SURCHARGED
001	106	1	133.978	1.225	0.000	1.53		59.1	FLOOD RISK
002	102	1	133.156	0.748	0.000	1.76		94.6	SURCHARGED
003	103	1	133.019	0.645	0.000	1.52		107.1	SURCHARGED
003	92	1	132.493	0.342	0.000	1.70		183.0	SURCHARGED
004	93	1	132.168	0.126	0.000	1.24		200.1	SURCHARGED
005	94	1	131.999	0.061	0.000	1.36		214.4	SURCHARGED
006	95	1	131.736	-0.113	0.000	0.90		245.7	OK
007	96	1	131.233	-0.250	0.000	0.40		261.8	OK
000	108	1	133.054	0.598	0.000	0.72		47.0	SURCHARGED
001	109	1	132.888	0.973	0.000	0.72		49.9	SURCHARGED
002	110	1	132.547	1.370	0.000	1.33		88.9	FLOOD RISK
003	111	1	130.581	0.496	0.000	0.87		97.0	SURCHARGED
004	112	1	130.339	0.584	0.000	1.80		101.6	SURCHARGED
005	113	1	130.183	0.473	0.000	1.67		123.6	SURCHARGED
000	117	1	129.668	0.205	0.000	0.83		14.1	SURCHARGED
000	119	1	131.431	-0.056	0.000	0.70		21.7	OK
006	114	1	129.491	0.385	0.000	1.94		148.9	SURCHARGED
007	115	1	129.356	0.267	0.000	0.93		162.9	SURCHARGED
008	97	1	128.891	0.324	0.000	1.62		423.3	SURCHARGED
009	98	1	128.240	-0.111	0.000	0.91		438.1	OK
032	33	5	126.709	-0.280	0.000	0.64		672.4	OK
033	34	5	126.020	-0.290	0.000	0.62		674.4	OK
000	121	1	128.968	0.934	0.000	0.97		37.3	SURCHARGED
001	122	1	127.300	1.029	0.000	1.52		45.9	SURCHARGED
034	35	5	125.442	-0.045	0.000	0.90		717.2	OK
035	36	7	125.244	0.000	0.000	1.53		717.6	OK
000	124	1	133.373	-0.032	0.000	0.95		29.0	OK
001	125	1	132.082	-0.059	0.000	0.88		91.7	OK
002	126	1	129.599	-0.097	0.000	0.77		156.3	OK
003	127	1	127.839	1.032	0.000	1.72		180.7	SURCHARGED
000	138	1	135.100	0.000	0.000	0.98		23.2	SURCHARGED
001	139	1	133.938	0.044	0.000	0.95		86.7	SURCHARGED
000	144	1	135.631	-0.069	0.000	0.55		13.3	OK
001	145	1	135.329	0.608	0.000	1.10		40.3	SURCHARGED
000	148	1	135.220	0.265	0.000	1.01		33.2	SURCHARGED
002	146	1	133.270	0.239	0.000	0.96		100.1	SURCHARGED
002	140	1	131.606	0.353	0.000	0.98		198.9	SURCHARGED
003	141	1	130.371	0.485	0.000	1.12		208.7	SURCHARGED
004	142	1	129.605	0.330	0.000	1.17		212.9	SURCHARGED
004	128	1	127.436	0.770	0.000	1.79		406.5	SURCHARGED
000	150	1	137.721	1.046	0.000	1.23		21.2	FLOOD RISK
001	151	1	137.023	0.860	0.000				

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150-156 St Johns Road Edinburgh RH12 8AY		
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Summary Wizard of 15 minute 200 year Winter I+0% for SW1.SWS

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status
27.000	157	1	129.763	0.246	0.000	1.30	50.3	SURCHARGED	
21.006	130	1	126.687	0.125	0.000	1.07	595.1	SURCHARGED	
28.000	159	1	125.485	0.810	0.000	0.19	75.8	FLOOD RISK	
28.001	160	1	125.478	0.904	0.000	0.38	166.1	SURCHARGED	
21.007	131	1	125.473	1.287	0.000	1.43	597.6	SURCHARGED	
21.008	132	2	125.245	1.178	0.000	1.34	598.8	SURCHARGED	
21.009	133	2	124.967	1.055	0.000	1.28	600.3	SURCHARGED	
29.000	162	1	133.414	-0.049	0.000	0.94	60.0	OK	
29.001	163	1	132.446	-0.075	0.000	0.75	91.7	OK	
29.002	164	1	129.605	0.344	0.000	1.76	99.9	SURCHARGED	
30.000	168	1	132.018	0.682	0.000	1.20	76.7	SURCHARGED	
30.001	169	1	129.952	-0.075	0.000	0.89	118.7	OK	
29.003	165	1	129.100	-0.073	0.000	0.91	245.6	OK	
31.000	171	1	128.337	-0.059	0.000	0.86	45.1	OK	
31.001	172	1	127.738	-0.054	0.000	0.87	89.6	OK	
29.004	166	1	125.739	0.433	0.000	2.16	353.0	SURCHARGED	
21.010	134	2	124.636	0.996	0.000	2.93	857.0	SURCHARGED	
21.011	135	2	124.358	0.735	0.000	1.94	844.0	SURCHARGED	
21.012	136	2	124.073	0.504	0.000	1.62	834.5	SURCHARGED	
1.036	37	2	123.720	0.289	0.000	2.19	1539.7	SURCHARGED	
1.037	38	2	123.467	0.072	0.000	1.29	1518.9	SURCHARGED	
1.038	39	33	122.748	-0.474	0.000	0.09	109.8	OK	
1.039	40	33	122.736	-0.320	0.000	0.05	44.5	OK	
1.040	41	29	122.093	-0.914	0.000	0.04	44.5	OK	

David R Murray and Associates LLP		Page 5
150-156 St Johns Road Edinburgh RH12 8AY		
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Summary Wizard of 30 minute 200 year Winter I+0% for SW1.SWS

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 20.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

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

Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.300
 Region Scotland and Ireland Cv (Summer) 0.750
 M5-60 (mm) 14.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
 Analysis Timestep 2.5 Second Increment (Extended)
 DTS Status ON
 DVD Status ON
 Inertia Status OFF

Profile(s) Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600,
 720, 960, 1440
 Return Period(s) (years) 30, 100, 200
 Climate Change (%) 0, 0, 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	1	2	135.488	0.712	0.000	1.26	29.9	SURCHARGED	
1.001	2	3	133.487	-0.092	0.000	0.64	49.4	OK	
1.002	3	2	132.604	0.052	0.000	0.76	53.7	SURCHARGED	
2.000	44	2	132.459	0.084	0.000	0.53	24.6	SURCHARGED	
1.003	4	2	132.428	0.246	0.000	1.10	79.1	SURCHARGED	
3.000	46	3	134.413	-0.087	0.000	0.37	9.3	OK	
3.001	47	3	133.875	-0.080	0.000	0.45	14.8	OK	
3.002	48	3	133.272	-0.041	0.000	0.87	32.2	OK	
1.004	5	2	132.334	0.309	0.000	0.75	115.4	SURCHARGED	
1.005	6	1	132.097	0.826	0.000	0.79	122.8	SURCHARGED	
4.000	50	3	134.398	-0.076	0.000	0.49	17.9	OK	
4.001	51	2	132.931	0.187	0.000	0.89	61.6	SURCHARGED	
4.002	52	2	132.435	0.760	0.000	0.86	70.9	SURCHARGED	
4.003	53	2	132.333	0.928	0.000	1.26	77.5	SURCHARGED	
4.004	54	1	132.240	0.913	0.000	0.90	105.6	SURCHARGED	
1.006	7	1	131.867	1.029	0.000	0.93	222.6	FLOOD RISK	
1.007	8	1	131.723	1.216	0.000	1.48	224.3	FLOOD RISK	
1.008	9	1	131.606	1.168	0.000	1.47	228.7	SURCHARGED	
1.009	10	1	131.467	1.112	0.000	1.55	232.6	SURCHARGED	

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PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Flow / Cap.	Overflow (l/s)	Pipe	Status
			Level (m)	Depth (m)	Volume (m³)			Flow (l/s)	
5.000	56	3	131.698	0.298	0.000	1.64		27.1	SURCHARGED
5.001	57	1	131.462	0.241	0.000	0.81		44.8	SURCHARGED
1.010	11	1	131.327	1.038	0.000	1.36		287.1	SURCHARGED
1.011	12	1	130.956	0.916	0.000	1.21		279.6	SURCHARGED
1.012	13	1	130.833	0.887	0.000	1.29		282.8	SURCHARGED
1.013	14	1	130.704	0.826	0.000	0.76		285.0	SURCHARGED
6.000	59	3	133.489	0.044	0.000	1.07		17.9	SURCHARGED
6.001	60	3	133.261	0.039	0.000	0.71		40.0	SURCHARGED
7.000	66	3	133.170	-0.030	0.000	0.55		9.2	OK
6.002	61	3	133.129	0.211	0.000	0.85		54.2	SURCHARGED
6.003	62	3	132.890	0.322	0.000	1.11		70.1	SURCHARGED
8.000	68	3	133.917	-0.061	0.000	0.66		25.9	OK
6.004	63	3	131.947	0.132	0.000	1.20		96.1	SURCHARGED
9.000	70	3	131.805	-0.113	0.000	0.49		23.9	OK
6.005	64	3	131.470	-0.095	0.000	0.80		155.3	OK
1.014	15	1	130.537	0.961	0.000	1.36		417.2	SURCHARGED
1.015	16	1	130.382	0.884	0.000	1.19		427.6	SURCHARGED
1.016	17	1	130.079	0.823	0.000	1.49		427.6	SURCHARGED
1.017	18	1	129.911	0.711	0.000	1.44		427.4	SURCHARGED
1.018	19	1	129.740	0.605	0.000	1.77		426.1	SURCHARGED
0.000	72	3	131.862	-0.058	0.000	0.69		12.5	OK
0.001	73	3	131.644	-0.056	0.000	0.71		12.5	OK
1.019	20	1	129.576	0.470	0.000	1.98		432.3	SURCHARGED
1.020	21	1	129.408	0.325	0.000	1.38		435.1	SURCHARGED
1.021	22	1	129.246	0.252	0.000	1.36		433.8	SURCHARGED
1.000	75	3	134.273	-0.105	0.000	0.56		31.9	OK
1.001	76	2	134.143	0.301	0.000	0.55		34.8	SURCHARGED
1.002	77	2	134.052	0.494	0.000	1.05		38.0	SURCHARGED
1.003	78	2	133.929	0.489	0.000	0.92		51.4	SURCHARGED
1.004	79	2	133.594	0.554	0.000	1.11		61.8	SURCHARGED
1.005	80	2	133.300	0.509	0.000	1.45		82.3	SURCHARGED
1.022	23	1	129.081	0.179	0.000	1.17		506.3	SURCHARGED
1.023	24	1	128.945	0.151	0.000	1.05		501.2	SURCHARGED
2.000	82	3	134.272	-0.036	0.000	0.93		28.2	OK
2.001	83	3	133.523	-0.086	0.000	0.69		63.7	OK
2.002	84	3	131.366	0.169	0.000	1.95		65.8	SURCHARGED
1.024	25	1	128.757	0.176	0.000	1.08		511.8	SURCHARGED
1.025	26	1	128.561	0.175	0.000	1.17		506.8	SURCHARGED
1.026	27	1	128.415	0.136	0.000	1.14		500.7	SURCHARGED
1.027	28	1	128.270	0.105	0.000	1.01		496.8	SURCHARGED
1.028	29	1	128.000	0.118	0.000	1.28		489.1	SURCHARGED
3.000	86	3	129.748	0.103	0.000	1.11		22.2	SURCHARGED
3.001	87	3	129.202	0.008	0.000	1.02		24.7	SURCHARGED
1.029	30	1	127.853	0.029	0.000	1.12		494.0	SURCH


Summary Wizard of 30 minute 200 year Winter I+0% for SW1.SWS

			Water	Surcharged	Flooded				Pipe
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(l/s)	Status
15.000	100	2	137.591	0.965	0.000	1.08		19.8	SURCHARGED
15.001	101	2	136.651	0.825	0.000	1.35		32.5	SURCHARGED
16.000	105	2	134.013	0.624	0.000	0.61		35.2	SURCHARGED
16.001	106	2	133.794	1.041	0.000	1.44		55.7	FLOOD RISK
15.002	102	2	133.063	0.655	0.000	1.68		90.2	SURCHARGED
15.003	103	2	132.937	0.564	0.000	1.47		103.8	SURCHARGED
14.003	92	2	132.450	0.298	0.000	1.64		176.6	SURCHARGED
14.004	93	2	132.152	0.109	0.000	1.22		196.0	SURCHARGED
14.005	94	2	131.992	0.055	0.000	1.35		212.5	SURCHARGED
14.006	95	2	131.735	-0.115	0.000	0.90		246.8	OK
14.007	96	2	131.233	-0.250	0.000	0.41		263.2	OK
17.000	108	2	132.676	0.220	0.000	0.65		42.4	SURCHARGED
17.001	109	2	132.543	0.628	0.000	0.68		46.7	SURCHARGED
17.002	110	2	132.238	1.061	0.000	1.27		84.6	SURCHARGED
17.003	111	2	130.469	0.384	0.000	0.83		92.6	SURCHARGED
17.004	112	2	130.245	0.490	0.000	1.73		97.4	SURCHARGED
17.005	113	2	130.101	0.390	0.000	1.60		118.5	SURCHARGED
18.000	117	2	129.577	0.114	0.000	0.75		12.8	SURCHARGED
19.000	119	3	131.419	-0.068	0.000	0.58		17.9	OK
17.006	114	2	129.447	0.341	0.000	1.85		142.3	SURCHARGED
17.007	115	2	129.319	0.229	0.000	0.91		158.1	SURCHARGED
14.008	97	2	128.886	0.319	0.000	1.60		419.4	SURCHARGED
14.009	98	2	128.238	-0.113	0.000	0.91		436.4	OK
1.032	33	1	126.760	-0.229	0.000	0.77		801.8	OK
1.033	34	1	126.095	-0.215	0.000	0.74		804.1	OK
20.000	121	2	128.589	0.555	0.000	0.91		35.0	SURCHARGED
20.001	122	2	127.131	0.859	0.000	1.45		43.7	SURCHARGED
1.034	35	1	125.645	0.158	0.000	1.05		840.3	SURCHARGED
1.035	36	1	125.373	0.129	0.000	1.80		841.1	SURCHARGED
21.000	124	3	133.356	-0.049	0.000	0.79		24.3	OK
21.001	125	3	132.058	-0.083	0.000	0.71		74.1	OK
21.002	126	3	129.570	-0.126	0.000	0.63		127.5	OK
21.003	127	3	127.487	0.680	0.000	1.48		155.6	SURCHARGED
22.000	138	3	135.056	-0.044	0.000	0.83		19.8	OK
22.001	139	3	133.826	-0.068	0.000	0.82		74.7	OK
23.000	144	3	135.622	-0.078	0.000	0.46		11.1	OK
23.001	145	3	134.912	0.191	0.000	1.05		38.5	SURCHARGED
24.000	148	3	134.922	-0.033	0.000	0.97		31.9	OK
23.002	146	3	132.978	-0.053	0.000	0.93		96.9	OK
22.002	140	3	131.242	-0.011	0.000	0.92		187.8	OK
22.003	141	3	130.161	0.275	0.000	1.06		197.1	SURCHARGED
22.004	142	3	129.476	0.201	0.000	1.11		202.1	SURCHARGED
21.004	128	3	127.177	0.511	0.000	1.64		372.1	SURCHARGED
25.000	150	2	137.321	0.646	0.000	1.14		19.6	SURCHARGED
25.001	151	2	136.667	0.504	0.000	1.07		47.2	SURCHARGED
26.000	155	2	133.290	0.469	0.000	1.43		24.6	SURCHARGED
25.002	152	2	132.418	0.016	0.000	1.03		78.6	SURCHARGED
25.003	153	3	131.948	-0.045	0.000	1.00		112.7	OK
21.005	129	3	126.938	0.357	0.000	3.08		484.1	SURCHARGED

David R Murray and Associates LLP		Page 8
150-156 St Johns Road Edinburgh RH12 8AY		
Date 21/09/2015 12:26 File swl opt.mdx	Designed by Checked by	
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Summary Wizard of 30 minute 200 year Winter I+0% for SW1.SWS

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status
27.000	157	3	129.594	0.077	0.000	1.10		42.6	SURCHARGED
21.006	130	3	126.455	-0.106	0.000	0.99		551.2	OK
28.000	159	2	125.472	0.797	0.000	0.16		62.0	FLOOD RISK
28.001	160	2	125.464	0.890	0.000	0.28		125.9	SURCHARGED
21.007	131	2	125.457	1.271	0.000	1.35		565.9	SURCHARGED
21.008	132	1	125.252	1.185	0.000	1.30		577.1	SURCHARGED
21.009	133	1	124.992	1.080	0.000	1.26		587.5	SURCHARGED
29.000	162	3	133.390	-0.073	0.000	0.79		50.1	OK
29.001	163	3	132.426	-0.095	0.000	0.63		76.9	OK
29.002	164	3	129.438	0.177	0.000	1.45		82.7	SURCHARGED
30.000	168	3	131.626	0.290	0.000	1.09		70.0	SURCHARGED
30.001	169	3	129.932	-0.095	0.000	0.80		106.4	OK
29.003	165	3	129.076	-0.097	0.000	0.79		211.7	OK
31.000	171	3	128.314	-0.082	0.000	0.72		37.6	OK
31.001	172	3	127.711	-0.081	0.000	0.73		75.1	OK
29.004	166	3	125.588	0.282	0.000	1.87		305.0	SURCHARGED
21.010	134	1	124.677	1.036	0.000	2.85		834.1	SURCHARGED
21.011	135	1	124.401	0.779	0.000	1.92		834.3	SURCHARGED
21.012	136	1	124.122	0.552	0.000	1.61		831.2	SURCHARGED
1.036	37	1	123.781	0.350	0.000	2.31		1621.6	SURCHARGED
1.037	38	1	123.500	0.105	0.000	1.37		1611.7	SURCHARGED
1.038	39	30	122.909	-0.312	0.000	0.09		108.8	OK
1.039	40	29	122.895	-0.161	0.000	0.05		44.5	OK
1.040	41	35	122.093	-0.914	0.000	0.04		44.5	OK

David R Murray and Associates LLP		Page 9
150-156 St Johns Road Edinburgh RH12 8AY		
Date 21/09/2015 12:26	Designed by XXXXXXXXXX	
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Summary Wizard of 60 minute 200 year Winter I+0% for SW1.SWS

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	20.000
Hot Start (mins)	0	MADD Factor * 10m³/ha Storage	2.000
Hot Start Level (mm)	0	Inlet Coefficient	0.800
Manhole Headloss Coeff (Global)	0.500	Flow per Person per Day (l/per/day)	0.000
Foul Sewage per hectare (l/s)	0.000		

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

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.300
Region	Scotland and Ireland Cv (Summer) 0.750		
M5-60 (mm)	14.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	OFF

Profile(s)	Winter
Duration(s) (mins)	15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years)	30, 100, 200
Climate Change (%)	0, 0, 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	1	6	134.818	0.042	0.000	1.02	24.2		SURCHARGED
1.001	2	6	133.468	-0.111	0.000	0.51	39.2		OK
1.002	3	6	132.453	-0.099	0.000	0.60	42.3		OK
2.000	44	6	132.244	-0.131	0.000	0.37	17.1		OK
1.003	4	6	132.093	-0.089	0.000	0.84	60.3		OK
3.000	46	6	134.401	-0.099	0.000	0.26	6.4		OK
3.001	47	6	133.862	-0.093	0.000	0.31	10.2		OK
3.002	48	6	133.247	-0.066	0.000	0.60	22.3		OK
1.004	5	6	131.890	-0.135	0.000	0.59	90.6		OK
1.005	6	5	131.412	0.141	0.000	0.68	105.3		SURCHARGED
4.000	50	6	134.384	-0.090	0.000	0.34	12.5		OK
4.001	51	6	132.650	-0.094	0.000	0.64	44.1		OK
4.002	52	5	131.604	-0.071	0.000	0.70	57.9		OK
4.003	53	5	131.548	0.143	0.000	1.13	69.8		SURCHARGED
4.004	54	5	131.465	0.138	0.000	0.77	89.5		SURCHARGED
1.006	7	5	131.204	0.366	0.000	0.77	184.9		SURCHARGED
1.007	8	5	131.060	0.553	0.000	1.25	188.8		SURCHARGED
1.008	9	5	130.969	0.531	0.000	1.26	196.7		SURCHARGED
1.009	10	5	130.863	0.508	0.000	1.36	204.2		SURCHARGED


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			Water	Surcharged	Flooded			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(l/s)	Status
5.000	100	6	136.870	0.244	0.000	0.92		16.8	SURCHARGED
5.001	101	5	136.195	0.369	0.000	1.17		28.3	SURCHARGED
6.000	105	6	133.320	-0.069	0.000	0.52		30.2	OK
6.001	106	5	133.178	0.425	0.000	1.20		46.5	SURCHARGED
5.002	102	5	132.690	0.282	0.000	1.42		75.9	SURCHARGED
5.003	103	5	132.599	0.226	0.000	1.25		88.0	SURCHARGED
4.003	92	5	132.251	0.099	0.000	1.37		146.6	SURCHARGED
4.004	93	5	132.047	0.005	0.000	1.01		162.7	SURCHARGED
4.005	94	5	131.939	0.001	0.000	1.12		176.6	SURCHARGED
4.006	95	5	131.691	-0.158	0.000	0.75		205.2	OK
4.007	96	5	131.213	-0.270	0.000	0.34		218.8	OK
7.000	108	6	132.338	-0.118	0.000	0.46		30.0	OK
7.001	109	6	131.812	-0.103	0.000	0.57		39.2	OK
7.002	110	6	131.425	0.248	0.000	1.07		71.7	SURCHARGED
7.003	111	6	130.164	0.079	0.000	0.70		77.8	SURCHARGED
7.004	112	6	130.004	0.249	0.000	1.45		81.8	SURCHARGED
7.005	113	6	129.898	0.187	0.000	1.34		99.6	SURCHARGED
8.000	117	6	129.393	-0.070	0.000	0.56		9.5	OK
9.000	119	6	131.403	-0.084	0.000	0.40		12.5	OK
7.006	114	6	129.165	0.059	0.000	1.57		120.3	SURCHARGED
7.007	115	5	129.041	-0.048	0.000	0.79		137.7	OK
4.008	97	5	128.724	0.157	0.000	1.35		354.0	SURCHARGED
4.009	98	5	128.199	-0.152	0.000	0.77		368.4	OK
1.032	33	2	126.753	-0.236	0.000	0.75		785.6	OK
1.033	34	2	126.065	-0.245	0.000	0.73		792.7	OK
0.000	121	6	127.983	-0.051	0.000	0.77		29.6	OK
0.001	122	6	126.634	0.363	0.000	1.21		36.6	SURCHARGED
1.034	35	2	125.630	0.143	0.000	1.04		827.6	SURCHARGED
1.035	36	2	125.367	0.123	0.000	1.77		827.6	SURCHARGED
1.000	124	6	133.335	-0.070	0.000	0.55		16.9	OK
1.001	125	6	132.028	-0.113	0.000	0.49		51.3	OK
1.002	126	6	129.534	-0.162	0.000	0.43		88.1	OK
1.003	127	6	127.046	0.239	0.000	1.05		110.4	SURCHARGED
2.000	138	6	135.033	-0.067	0.000	0.59		13.9	OK
2.001	139	6	133.791	-0.103	0.000	0.57		52.0	OK
3.000	144	6	135.608	-0.092	0.000	0.32		7.8	OK
3.001	145	6	134.673	-0.048	0.000	0.80		29.2	OK
4.000	148	6	134.895	-0.060	0.000	0.67		22.2	OK
3.002	146	6	132.942	-0.089	0.000	0.68		70.3	OK
2.002	140	6	131.133	-0.120	0.000	0.67		136.5	OK
2.003	141	6	129.786	-0.100	0.000	0.78		145.1	OK
2.004	142	6	129.182	-0.093	0.000	0.82		149.0	OK
1.004	128	6	126.888	0.222	0.000	1.20		271.9	SURCHARGED
5.000	150	6	136.644	-0.031	0.000	0.99			

David R Murray and Associates LLP		Page 12
150-156 St Johns Road Edinburgh RH12 8AY		
Date 21/09/2015 12:26 File swl opt.mdx	Designed by Checked by	
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Summary Wizard of 60 minute 200 year Winter I+0% for SW1.SWS

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status
27.000	157	6	129.443	-0.074	0.000	0.79		30.5	OK
21.006	130	6	126.375	-0.186	0.000	0.74		413.5	OK
28.000	159	5	124.675	0.000	0.000	0.12		45.9	OK
28.001	160	5	124.602	0.028	0.000	0.25		110.7	SURCHARGED
21.007	131	5	124.594	0.408	0.000	1.02		427.1	SURCHARGED
21.008	132	5	124.482	0.415	0.000	1.00		446.7	SURCHARGED
21.009	133	5	124.346	0.434	0.000	0.97		453.4	SURCHARGED
29.000	162	6	133.357	-0.106	0.000	0.55		35.0	OK
29.001	163	6	132.400	-0.121	0.000	0.44		53.7	OK
29.002	164	6	129.261	0.000	0.000	1.01		57.5	OK
30.000	168	6	131.268	-0.068	0.000	0.83		52.9	OK
30.001	169	6	129.896	-0.131	0.000	0.60		80.4	OK
29.003	165	6	129.036	-0.137	0.000	0.57		154.0	OK
31.000	171	6	128.284	-0.112	0.000	0.51		26.4	OK
31.001	172	6	127.681	-0.111	0.000	0.51		52.4	OK
29.004	166	6	125.379	0.073	0.000	1.34		218.4	SURCHARGED
21.010	134	5	124.170	0.530	0.000	2.21		647.0	SURCHARGED
21.011	135	5	124.015	0.392	0.000	1.48		645.9	SURCHARGED
21.012	136	4	123.857	0.288	0.000	1.26		648.9	SURCHARGED
1.036	37	3	123.657	0.226	0.000	2.07		1451.6	SURCHARGED
1.037	38	7	123.433	0.038	0.000	1.23		1444.7	SURCHARGED
1.038	39	19	123.066	-0.156	0.000	0.07		84.9	OK
1.039	40	19	123.045	-0.011	0.000	0.05		44.5	OK
1.040	41	34	122.093	-0.914	0.000	0.04		44.5	OK

David R Murray and Associates LLP		Page 13
150-156 St Johns Road Edinburgh RH12 8AY		
Date 21/09/2015 12:26 File swl_opt.mdx	Designed by Checked by	
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Summary Wizard of 120 minute 200 year Winter I+0% for SW1.SWS

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	20.000
Hot Start (mins)	0	MADD Factor * 10m³/ha Storage	2.000
Hot Start Level (mm)	0	Inlet Coefficient	0.800
Manhole Headloss Coeff (Global)	0.500	Flow per Person per Day (l/per/day)	0.000
Foul Sewage per hectare (l/s)	0.000		

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

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.300
Region	Scotland and Ireland Cv (Summer) 0.750		
M5-60 (mm)	14.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	OFF

Profile(s)	Winter
Duration(s) (mins)	15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years)	30, 100, 200
Climate Change (%)	0, 0, 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Pipe Flow / Cap. (l/s)	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	1	10	134.716	-0.060	0.000	0.67		16.0	OK
1.001	2	10	133.444	-0.135	0.000	0.34		25.8	OK
1.002	3	10	132.425	-0.127	0.000	0.39		27.7	OK
2.000	44	10	132.223	-0.152	0.000	0.23		10.9	OK
1.003	4	10	132.040	-0.142	0.000	0.55		39.2	OK
3.000	46	10	134.390	-0.110	0.000	0.16		4.1	OK
3.001	47	10	133.850	-0.105	0.000	0.20		6.5	OK
3.002	48	10	133.227	-0.086	0.000	0.38		14.2	OK
1.004	5	10	131.853	-0.172	0.000	0.38		58.4	OK
1.005	6	10	131.110	-0.161	0.000	0.44		68.6	OK
4.000	50	10	134.371	-0.103	0.000	0.22		7.9	OK
4.001	51	10	132.618	-0.126	0.000	0.40		28.1	OK
4.002	52	10	131.515	-0.160	0.000	0.45		36.8	OK
4.003	53	10	131.296	-0.109	0.000	0.73		44.9	OK
4.004	54	10	131.182	-0.145	0.000	0.53		61.7	OK
1.006	7	10	130.625	-0.213	0.000	0.55		131.0	OK
1.007	8	10	130.398	-0.109	0.000	0.89		134.8	OK
1.008	9	10	130.334	-0.104	0.000	0.90		141.0	OK
1.009	10	10	130.259	-0.096	0.000	0.98		147.0	OK

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			Water	Surcharged	Flooded		Pipe	
PN	US/MH	Storm	Level	Depth	Volume	Flow / Overflow	Flow	Status
	Name	Rank	(m)	(m)	(m ³)	Cap. (l/s)	(l/s)	

5.000	56	10	131.347	-0.053	0.000	0.75	12.5	OK
5.001	57	10	131.091	-0.130	0.000	0.38	20.8	OK
1.010	11	10	130.162	-0.127	0.000	0.86	181.3	OK
1.011	12	10	129.888	-0.152	0.000	0.80	185.6	OK
1.012	13	10	129.804	-0.142	0.000	0.88	193.0	OK
1.013	14	10	129.624	-0.253	0.000	0.53	199.4	OK
6.000	59	10	133.369	-0.076	0.000	0.49	8.2	OK
6.001	60	10	133.086	-0.136	0.000	0.33	18.6	OK
7.000	66	10	133.100	-0.100	0.000	0.24	4.1	OK
6.002	61	10	132.796	-0.122	0.000	0.43	27.4	OK
6.003	62	10	132.466	-0.102	0.000	0.58	36.3	OK
8.000	68	10	133.883	-0.095	0.000	0.29	11.5	OK
6.004	63	10	131.717	-0.098	0.000	0.61	48.7	OK
9.000	70	10	131.764	-0.154	0.000	0.22	10.6	OK
6.005	64	10	131.395	-0.170	0.000	0.39	76.1	OK
1.014	15	9	129.483	-0.093	0.000	0.89	273.3	OK
1.015	16	9	129.422	-0.076	0.000	0.80	287.1	OK
1.016	17	9	129.268	0.013	0.000	1.01	289.4	SURCHARGED
1.017	18	9	129.211	0.011	0.000	0.98	290.7	SURCHARGED
1.018	19	9	129.149	0.014	0.000	1.21	291.4	SURCHARGED
10.000	72	10	131.826	-0.094	0.000	0.30	5.5	OK
10.001	73	10	131.607	-0.093	0.000	0.31	5.5	OK
1.019	20	9	129.106	0.000	0.000	1.36	296.8	OK
1.020	21	9	128.949	-0.135	0.000	0.96	303.0	OK
1.021	22	9	128.859	-0.136	0.000	0.96	304.8	OK
11.000	75	10	134.229	-0.149	0.000	0.25	14.2	OK
11.001	76	10	133.697	-0.145	0.000	0.28	17.4	OK
11.002	77	10	133.453	-0.105	0.000	0.56	20.2	OK
11.003	78	10	133.329	-0.110	0.000	0.52	28.7	OK
11.004	79	10	132.945	-0.095	0.000	0.63	34.9	OK
11.005	80	10	132.721	-0.070	0.000	0.82	46.5	OK
1.022	23	8	128.690	-0.212	0.000	0.81	352.4	OK
1.023	24	8	128.560	-0.234	0.000	0.76	361.6	OK
12.000	82	10	134.225	-0.083	0.000	0.41	12.5	OK
12.001	83	10	133.469	-0.140	0.000	0.30	28.1	OK
12.002	84	10	131.133	-0.064	0.000	0.86	29.1	OK
1.024	25	7	128.378	-0.202	0.000	0.83	394.0	OK
1.025	26	7	128.229	-0.157	0.000	0.92	399.5	OK
1.026	27	6	128.141	-0.138	0.000	0.91	400.5	OK
1.027	28	6	128.056	-0.108	0.000	0.82	401.8	OK
1.028	29	3	127.882	0.000	0.000	1.02	388.3	OK
13.000	86	10	129.571	-0.074	0.000	0.52	10.3	OK
13.001	87	10	129.118	-0.076	0.000	0.49	11.7	OK
1.029	30	6	127.649	-0.175	0.000	0.90	397.4	OK
1.030	31	6	127.516	-0.188	0.000	0.87	402.8	OK
1.031	32	6	127.242	-0.294	0.000	0.61	409.2	OK
14.000	89	10	133.719	-0.118	0.000	0.46	17.8	OK
14.001	90	10	133.305	-0.077	0.000	0.76	28.9	OK
14.002	91	10	133.109	-0.051	0.000	0.95	31.5	OK

Summary Wizard of 120 minute 200 year Winter I+0% for SW1.SWS

PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Pipe		Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	
15.000	100	10	136.565	-0.061	0.000	0.66	12.1	OK
15.001	101	10	135.784	-0.042	0.000	0.86	20.9	OK
16.000	105	10	133.253	-0.136	0.000	0.33	19.3	OK
16.001	106	10	132.688	-0.065	0.000	0.85	32.9	OK
15.002	102	10	132.386	-0.022	0.000	1.00	53.6	OK
15.003	103	10	132.295	-0.078	0.000	0.90	63.2	OK
14.003	92	10	132.070	-0.082	0.000	0.97	104.0	OK
14.004	93	9	131.884	-0.158	0.000	0.72	116.3	OK
14.005	94	9	131.796	-0.142	0.000	0.81	126.9	OK
14.006	95	9	131.635	-0.214	0.000	0.54	148.3	OK
14.007	96	9	131.183	-0.300	0.000	0.24	158.5	OK
17.000	108	10	132.314	-0.142	0.000	0.29	19.1	OK
17.001	109	10	131.783	-0.132	0.000	0.36	24.9	OK
17.002	110	10	131.095	-0.082	0.000	0.73	48.6	OK
17.003	111	10	129.930	-0.155	0.000	0.47	52.8	OK
17.004	112	10	129.693	-0.062	0.000	0.99	55.6	OK
17.005	113	10	129.636	-0.074	0.000	0.92	68.3	OK
18.000	117	10	129.375	-0.088	0.000	0.36	6.1	OK
19.000	119	10	131.388	-0.099	0.000	0.26	7.9	OK
17.006	114	9	129.106	0.000	0.000	1.07	82.2	OK
17.007	115	10	128.911	-0.178	0.000	0.54	94.6	OK
14.008	97	9	128.468	-0.099	0.000	0.96	252.8	OK
14.009	98	9	128.139	-0.212	0.000	0.55	263.9	OK
1.032	33	6	126.698	-0.291	0.000	0.62	645.7	OK
1.033	34	6	126.012	-0.298	0.000	0.60	651.0	OK
20.000	121	10	127.958	-0.076	0.000	0.49	18.8	OK
20.001	122	10	126.223	-0.049	0.000	0.79	23.9	OK
1.034	35	6	125.421	-0.066	0.000	0.85	680.8	OK
1.035	36	8	125.244	0.000	0.000	1.46	680.7	OK
21.000	124	10	133.316	-0.089	0.000	0.35	10.8	OK
21.001	125	10	132.002	-0.139	0.000	0.31	32.6	OK
21.002	126	10	129.503	-0.193	0.000	0.28	56.0	OK
21.003	127	10	126.730	-0.077	0.000	0.67	70.9	OK
22.000	138	10	135.013	-0.087	0.000	0.37	8.9	OK
22.001	139	10	133.763	-0.131	0.000	0.36	33.1	OK
23.000	144	10	135.596	-0.104	0.000	0.20	5.0	OK
23.001	145	10	134.647	-0.074	0.000	0.51	18.6	OK
24.000	148	10	134.874	-0.081	0.000	0.43	14.2	OK
23.002	146	10	132.909	-0.122	0.000	0.43	44.8	OK
22.002	140	10	131.090	-0.163	0.000	0.43	87.0	OK
22.003	141	10	129.735	-0.151	0.000	0.50	92.5	OK
22.004	142	10	129.129	-0.146	0.000	0.52	95.0	OK
21.004	128	10	126.666	0.000	0.000	0.77	174.4	OK
25.000	150	10	136.612	-0.063	0.000	0.63	10.9	OK
25.001	151	10	136.098	-0.065	0.000	0.62	27.2	OK
26.000	155	10	132.765	-0.056	0.000	0.71	12.2	OK
25.002	152	10	132.298	-0.104	0.000	0.57	43.2	OK
25.003	153	10	131.883	-0.110	0.000	0.52	59.1	OK
21.005	129	10	126.582	0.000	0.000	1.49	234.4	OK

David R Murray and Associates LLP		Page 17
150-156 St Johns Road Edinburgh RH12 8AY		
Date 21/09/2015 12:26 File sw1 opt.mdx	Designed by <div></div> Checked by	
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Summary Wizard of 180 minute 200 year Winter I+0% for SW1.SWS

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	20.000
Hot Start (mins)	0	MADD Factor * 10m³/ha Storage	2.000
Hot Start Level (mm)	0	Inlet Coefficient	0.800
Manhole Headloss Coeff (Global)	0.500	Flow per Person per Day (l/per/day)	0.000
Foul Sewage per hectare (l/s)	0.000		

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


Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.300
Region	Scotland and Ireland	Cv (Summer)	0.750
M5-60 (mm)	14.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	OFF

Profile(s)	Winter
Duration(s) (mins)	15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years)	30, 100, 200
Climate Change (%)	0, 0, 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Pipe Flow / Cap. (l/s)	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	1	12	134.702	-0.074	0.000	0.51		12.1	OK
1.001	2	12	133.431	-0.148	0.000	0.25		19.5	OK
1.002	3	12	132.411	-0.141	0.000	0.30		21.0	OK
2.000	44	12	132.213	-0.162	0.000	0.18		8.3	OK
1.003	4	12	132.016	-0.166	0.000	0.41		29.7	OK
3.000	46	12	134.385	-0.115	0.000	0.12		3.1	OK
3.001	47	12	133.843	-0.112	0.000	0.15		4.9	OK
3.002	48	12	133.218	-0.095	0.000	0.29		10.7	OK
1.004	5	12	131.834	-0.191	0.000	0.29		44.2	OK
1.005	6	12	131.090	-0.181	0.000	0.33		51.9	OK
4.000	50	12	134.364	-0.110	0.000	0.16		6.0	OK
4.001	51	12	132.604	-0.140	0.000	0.31		21.2	OK
4.002	52	12	131.495	-0.180	0.000	0.34		27.9	OK
4.003	53	12	131.264	-0.141	0.000	0.55		34.0	OK
4.004	54	12	131.158	-0.169	0.000	0.40		46.7	OK
1.006	7	12	130.589	-0.249	0.000	0.41		99.2	OK
1.007	8	12	130.335	-0.172	0.000	0.68		102.1	OK
1.008	9	12	130.271	-0.167	0.000	0.69		106.9	OK
1.009	10	12	130.195	-0.160	0.000	0.74		111.5	OK

David R Murray and Associates LLP		Page 21
150-156 St Johns Road Edinburgh RH12 8AY		
Date 21/09/2015 12:26 File swl_opt.mdx	Designed by Checked by	
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Summary Wizard of 240 minute 200 year Winter I+0% for SW1.SWS

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 20.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

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


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.300
 Region Scotland and Ireland Cv (Summer) 0.750
 M5-60 (mm) 14.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
 Analysis Timestep 2.5 Second Increment (Extended)
 DTS Status ON
 DVD Status ON
 Inertia Status OFF

Profile(s) Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600,
 720, 960, 1440
 Return Period(s) (years) 30, 100, 200
 Climate Change (%) 0, 0, 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Pipe Flow / Cap. (l/s)	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	1	15	134.693	-0.083	0.000	0.42		9.9	OK
1.001	2	15	133.423	-0.156	0.000	0.21		15.9	OK
1.002	3	15	132.402	-0.150	0.000	0.24		17.1	OK
2.000	44	15	132.207	-0.168	0.000	0.14		6.7	OK
1.003	4	15	132.002	-0.180	0.000	0.34		24.2	OK
3.000	46	15	134.382	-0.118	0.000	0.10		2.5	OK
3.001	47	15	133.840	-0.115	0.000	0.12		4.0	OK
3.002	48	15	133.212	-0.101	0.000	0.24		8.8	OK
1.004	5	15	131.823	-0.202	0.000	0.23		36.1	OK
1.005	6	15	131.077	-0.194	0.000	0.27		42.4	OK
4.000	50	15	134.360	-0.114	0.000	0.13		4.9	OK
4.001	51	15	132.595	-0.149	0.000	0.25		17.3	OK
4.002	52	15	131.482	-0.193	0.000	0.28		22.8	OK
4.003	53	15	131.246	-0.159	0.000	0.45		27.7	OK
4.004	54	15	131.145	-0.182	0.000	0.33		38.1	OK
1.006	7	15	130.568	-0.270	0.000	0.34		81.0	OK
1.007	8	15	130.300	-0.207	0.000	0.55		83.4	OK
1.008	9	15	130.235	-0.203	0.000	0.56		87.4	OK
1.009	10	15	130.158	-0.197	0.000	0.61		91.2	OK

David R Murray and Associates LLP		Page 25
150-156 St Johns Road Edinburgh RH12 8AY		
Date 21/09/2015 12:26 File swl_opt.mdx	Designed by Checked by	
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Summary Wizard of 360 minute 200 year Winter I+0% for SW1.SWS

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	20.000
Hot Start (mins)	0	MADD Factor * 10m³/ha Storage	2.000
Hot Start Level (mm)	0	Inlet Coefficient	0.800
Manhole Headloss Coeff (Global)	0.500	Flow per Person per Day (l/per/day)	0.000
Foul Sewage per hectare (l/s)	0.000		

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

Synthetic Rainfall Details


Rainfall Model	FSR	Ratio R	0.300
Region	Scotland and Ireland Cv (Summer) 0.750		
M5-60 (mm)	14.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	OFF

Profile(s)	Winter
Duration(s) (mins)	15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years)	30, 100, 200
Climate Change (%)	0, 0, 0


PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Pipe Flow / Cap. (l/s)	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	1	18	134.683	-0.093	0.000	0.31		7.4	OK
1.001	2	18	133.413	-0.166	0.000	0.16		11.9	OK
1.002	3	18	132.391	-0.161	0.000	0.18		12.8	OK
2.000	44	18	132.199	-0.176	0.000	0.11		5.0	OK
1.003	4	18	131.984	-0.198	0.000	0.25		18.1	OK
3.000	46	18	134.377	-0.123	0.000	0.08		1.9	OK
3.001	47	18	133.835	-0.120	0.000	0.09		3.0	OK
3.002	48	18	133.205	-0.108	0.000	0.18		6.5	OK
1.004	5	18	131.809	-0.216	0.000	0.17		27.0	OK
1.005	6	18	131.063	-0.208	0.000	0.20		31.7	OK
4.000	50	18	134.356	-0.118	0.000	0.10		3.7	OK
4.001	51	18	132.584	-0.160	0.000	0.19		13.0	OK
4.002	52	18	131.467	-0.208	0.000	0.21		17.0	OK
4.003	53	18	131.225	-0.180	0.000	0.34		20.7	OK
4.004	54	18	131.127	-0.200	0.000	0.24		28.5	OK
1.006	7	18	130.541	-0.297	0.000	0.25		60.6	OK
1.007	8	18	130.261	-0.246	0.000	0.41		62.4	OK
1.008	9	18	130.195	-0.243	0.000	0.42		65.4	OK
1.009	10	18	130.117	-0.238	0.000	0.45		68.3	OK

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David R Murray and Associates LLP		Page 28
150-156 St Johns Road Edinburgh RH12 8AY		
Date 21/09/2015 12:26 File sw1 opt.mdx	Designed by <div></div> Checked by	
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Summary Wizard of 360 minute 200 year Winter I+0% for SW1.SWS

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status
27.000	157	18	129.365	-0.152	0.000	0.23		9.0	OK
21.006	130	18	126.203	-0.358	0.000	0.22		123.0	OK
28.000	159	18	124.087	-0.588	0.000	0.04		14.5	OK
28.001	160	18	123.981	-0.593	0.000	0.04		15.8	OK
21.007	131	23	123.799	-0.387	0.000	0.34		143.1	OK
21.008	132	19	123.762	-0.305	0.000	0.34		151.5	OK
21.009	133	17	123.712	-0.200	0.000	0.33		156.2	OK
29.000	162	18	133.298	-0.165	0.000	0.16		10.3	OK
29.001	163	18	132.350	-0.171	0.000	0.13		15.8	OK
29.002	164	18	129.120	-0.141	0.000	0.30		17.1	OK
30.000	168	18	131.186	-0.150	0.000	0.25		15.7	OK
30.001	169	18	129.812	-0.215	0.000	0.18		23.9	OK
29.003	165	18	128.956	-0.217	0.000	0.17		45.9	OK
31.000	171	18	128.229	-0.167	0.000	0.15		7.8	OK
31.001	172	18	127.625	-0.167	0.000	0.15		15.4	OK
29.004	166	18	125.053	-0.253	0.000	0.40		65.0	OK
21.010	134	19	123.641	0.000	0.000	0.75		220.9	OK
21.011	135	13	123.623	0.000	0.000	0.51		221.1	OK
21.012	136	14	123.569	-0.001	0.000	0.43		223.1	OK
1.036	37	17	123.431	0.000	0.000	0.83		583.0	OK
1.037	38	11	123.398	0.004	0.000	0.49		581.0	SURCHARGED
1.038	39	6	123.395	0.173	0.000	0.15		171.0	SURCHARGED
1.039	40	1	123.634	0.577	0.000	0.05		44.8	SURCHARGED
1.040	41	18	122.093	-0.914	0.000	0.04		44.5	OK

David R Murray and Associates LLP		Page 29
150-156 St Johns Road Edinburgh RH12 8AY		
Date 21/09/2015 12:26 File sw1 opt.mdx	Designed by <div></div> Checked by	
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Summary Wizard of 480 minute 200 year Winter I+0% for SW1.SWS

Simulation Criteria

Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 20.000
 Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000
 Hot Start Level (mm) 0 Inlet Coefficient 0.800
 Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000
 Foul Sewage per hectare (l/s) 0.000

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


Synthetic Rainfall Details

Rainfall Model FSR Ratio R 0.300
 Region Scotland and Ireland Cv (Summer) 0.750
 M5-60 (mm) 14.000 Cv (Winter) 0.840

Margin for Flood Risk Warning (mm) 300.0
 Analysis Timestep 2.5 Second Increment (Extended)
 DTS Status ON
 DVD Status ON
 Inertia Status OFF


Profile(s) Winter
 Duration(s) (mins) 15, 30, 60, 120, 180, 240, 360, 480, 600,
 720, 960, 1440
 Return Period(s) (years) 30, 100, 200
 Climate Change (%) 0, 0, 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Pipe Flow / Cap. (l/s)	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	1	21	134.677	-0.099	0.000	0.25		6.0	OK
1.001	2	21	133.407	-0.172	0.000	0.13		9.7	OK
1.002	3	21	132.384	-0.168	0.000	0.15		10.4	OK
2.000	44	21	132.195	-0.180	0.000	0.09		4.1	OK
1.003	4	21	131.974	-0.208	0.000	0.21		14.7	OK
3.000	46	21	134.374	-0.126	0.000	0.06		1.5	OK
3.001	47	21	133.832	-0.123	0.000	0.07		2.4	OK
3.002	48	21	133.201	-0.112	0.000	0.14		5.3	OK
1.004	5	21	131.800	-0.225	0.000	0.14		21.9	OK
1.005	6	21	131.052	-0.219	0.000	0.17		25.8	OK
4.000	50	21	134.352	-0.122	0.000	0.08		3.0	OK
4.001	51	21	132.577	-0.167	0.000	0.15		10.5	OK
4.002	52	21	131.457	-0.218	0.000	0.17		13.8	OK
4.003	53	21	131.211	-0.194	0.000	0.27		16.8	OK
4.004	54	21	131.117	-0.210	0.000	0.20		23.2	OK
1.006	7	21	130.526	-0.312	0.000	0.21		49.2	OK
1.007	8	21	130.238	-0.269	0.000	0.34		50.7	OK
1.008	9	21	130.172	-0.266	0.000	0.34		53.1	OK
1.009	10	21	130.094	-0.261	0.000	0.37		55.4	OK

David R Murray and Associates LLP		Page 32
150-156 St Johns Road Edinburgh RH12 8AY		
Date 21/09/2015 12:26 File sw1 opt.mdx	Designed by <div></div> Checked by	
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Summary Wizard of 480 minute 200 year Winter I+0% for SW1.SWS

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status
27.000	157	21	129.358	-0.159	0.000	0.19		7.3	OK
21.006	130	21	126.186	-0.376	0.000	0.18		99.9	OK
28.000	159	21	124.079	-0.596	0.000	0.03		11.8	OK
28.001	160	21	123.974	-0.600	0.000	0.03		12.9	OK
21.007	131	22	123.799	-0.387	0.000	0.28		116.2	OK
21.008	132	18	123.762	-0.305	0.000	0.28		123.1	OK
21.009	133	15	123.712	-0.200	0.000	0.27		127.0	OK
29.000	162	21	133.292	-0.171	0.000	0.13		8.4	OK
29.001	163	21	132.344	-0.177	0.000	0.11		12.9	OK
29.002	164	21	129.111	-0.150	0.000	0.24		13.9	OK
30.000	168	21	131.179	-0.157	0.000	0.20		12.7	OK
30.001	169	21	129.803	-0.224	0.000	0.15		19.4	OK
29.003	165	21	128.947	-0.226	0.000	0.14		37.2	OK
31.000	171	21	128.223	-0.173	0.000	0.12		6.3	OK
31.001	172	21	127.619	-0.173	0.000	0.12		12.5	OK
29.004	166	21	125.031	-0.275	0.000	0.32		52.7	OK
21.010	134	16	123.641	0.000	0.000	0.61		179.6	OK
21.011	135	12	123.623	0.000	0.000	0.41		179.7	OK
21.012	136	13	123.569	0.000	0.000	0.35		181.1	OK
1.036	37	10	123.436	0.005	0.000	0.67		473.5	SURCHARGED
1.037	38	6	123.433	0.039	0.000	0.40		471.8	SURCHARGED
1.038	39	4	123.430	0.208	0.000	0.15		170.7	SURCHARGED
1.039	40	3	123.615	0.558	0.000	0.05		49.0	SURCHARGED
1.040	41	1	122.095	-0.913	0.000	0.04		45.2	OK

David R Murray and Associates LLP		Page 33
150-156 St Johns Road Edinburgh RH12 8AY		
Date 21/09/2015 12:26 File swl_opt.mdx	Designed by Checked by	
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Summary Wizard of 600 minute 200 year Winter I+0% for SW1.SWS

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	20.000
Hot Start (mins)	0	MADD Factor * 10m³/ha Storage	2.000
Hot Start Level (mm)	0	Inlet Coefficient	0.800
Manhole Headloss Coeff (Global)	0.500	Flow per Person per Day (l/per/day)	0.000
Foul Sewage per hectare (l/s)	0.000		

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

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.300
Region	Scotland and Ireland	Cv (Summer)	0.750
M5-60 (mm)	14.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	OFF


Profile(s)	Winter
Duration(s) (mins)	15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years)	30, 100, 200
Climate Change (%)	0, 0, 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Pipe Flow / Cap. (l/s)	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	1	23	134.673	-0.103	0.000	0.21		5.1	OK
1.001	2	23	133.403	-0.176	0.000	0.11		8.2	OK
1.002	3	23	132.380	-0.172	0.000	0.13		8.8	OK
2.000	44	23	132.190	-0.185	0.000	0.07		3.5	OK
1.003	4	23	131.966	-0.216	0.000	0.17		12.5	OK
3.000	46	23	134.372	-0.128	0.000	0.05		1.3	OK
3.001	47	23	133.829	-0.126	0.000	0.06		2.1	OK
3.002	48	23	133.198	-0.115	0.000	0.12		4.5	OK
1.004	5	23	131.794	-0.231	0.000	0.12		18.6	OK
1.005	6	23	131.046	-0.225	0.000	0.14		21.9	OK
4.000	50	23	134.350	-0.124	0.000	0.07		2.5	OK
4.001	51	23	132.572	-0.172	0.000	0.13		8.9	OK
4.002	52	23	131.450	-0.225	0.000	0.14		11.7	OK
4.003	53	23	131.203	-0.202	0.000	0.23		14.3	OK
4.004	54	23	131.109	-0.218	0.000	0.17		19.7	OK
1.006	7	23	130.514	-0.324	0.000	0.17		41.8	OK
1.007	8	23	130.222	-0.285	0.000	0.28		43.1	OK
1.008	9	23	130.155	-0.283	0.000	0.29		45.1	OK
1.009	10	23	130.077	-0.278	0.000	0.31		47.1	OK

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Summary Wizard of 600 minute 200 year Winter I+0% for SW1.SWS

			Water	Surcharged	Flooded			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(l/s)	Status
5.000	56	23	131.300	-0.100	0.000	0.24		4.0	OK
5.001	57	23	131.048	-0.174	0.000	0.12		6.6	OK
1.010	11	23	130.000	-0.289	0.000	0.28		58.3	OK
1.011	12	23	129.699	-0.341	0.000	0.26		59.9	OK
1.012	13	23	129.612	-0.335	0.000	0.28		62.4	OK
1.013	14	23	129.498	-0.380	0.000	0.17		64.6	OK
6.000	59	23	133.334	-0.111	0.000	0.16		2.6	OK
6.001	60	23	133.046	-0.176	0.000	0.11		5.9	OK
7.000	66	23	133.078	-0.122	0.000	0.08		1.3	OK
6.002	61	23	132.748	-0.170	0.000	0.14		8.7	OK
6.003	62	23	132.408	-0.160	0.000	0.18		11.6	OK
8.000	68	23	133.859	-0.119	0.000	0.09		3.7	OK
6.004	63	23	131.657	-0.158	0.000	0.19		15.5	OK
9.000	70	23	131.732	-0.186	0.000	0.07		3.4	OK
6.005	64	23	131.335	-0.230	0.000	0.12		24.3	OK
1.014	15	23	129.196	-0.380	0.000	0.29		89.4	OK
1.015	16	23	129.106	-0.392	0.000	0.26		94.5	OK
1.016	17	23	128.904	-0.351	0.000	0.33		95.3	OK
1.017	18	23	128.857	-0.343	0.000	0.32		95.8	OK
1.018	19	23	128.812	-0.324	0.000	0.40		96.1	OK
10.000	72	23	131.801	-0.119	0.000	0.10		1.8	OK
10.001	73	23	131.582	-0.118	0.000	0.10		1.8	OK
1.019	20	23	128.787	-0.319	0.000	0.45		98.0	OK
1.020	21	23	128.714	-0.369	0.000	0.32		100.2	OK
1.021	22	23	128.625	-0.369	0.000	0.32		100.9	OK
11.000	75	23	134.195	-0.183	0.000	0.08		4.5	OK
11.001	76	23	133.662	-0.180	0.000	0.09		5.6	OK
11.002	77	23	133.397	-0.161	0.000	0.18		6.5	OK
11.003	78	23	133.275	-0.164	0.000	0.16		9.2	OK
11.004	79	23	132.883	-0.157	0.000	0.20		11.1	OK
11.005	80	23	132.644	-0.147	0.000	0.26		14.9	OK
1.022	23	23	128.464	-0.437	0.000	0.27		117.6	OK
1.023	24	23	128.348	-0.445	0.000	0.25		121.2	OK
12.000	82	23	134.194	-0.114	0.000	0.13		4.0	OK
12.001	83	23	133.431	-0.178	0.000	0.10		8.9	OK
12.002	84	23	131.052	-0.145	0.000	0.27		9.3	OK
1.024	25	23	128.149	-0.432	0.000	0.28		133.3	OK
1.025	26	23	127.969	-0.417	0.000	0.31		135.6	OK
1.026	27	23	127.860	-0.418	0.000	0.31		136.2	OK
1.027	28	23	127.735	-0.430	0.000	0.29		140.7	OK
1.028	29	23	127.491	-0.391	0.000	0.37		141.6	OK
13.000	86	23	129.535	-0.110	0.000	0.16		3.3	OK
13.001	87	23	129.083	-0.111	0.000	0.16		3.7	OK
1.029	30	23	127.416	-0.408	0.000	0.33		146.7	OK
1.030	31	23	127.292	-0.412	0.000	0.32		149.9	OK
1.031	32	23	127.078	-0.458	0.000	0.23		153.3	OK
14.000	89	23	133.669	-0.168	0.000	0.15		5.7	OK
14.001	90	23	133.232	-0.150	0.000	0.24		9.3	OK
14.002	91	23	133.020	-0.140	0.000	0.31		10.1	OK
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150-156 St Johns Road Edinburgh RH12 8AY		
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Summary Wizard of 600 minute 200 year Winter I+0% for SW1.SWS

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status
27.000	157	23	129.352	-0.165	0.000	0.16		6.2	OK
21.006	130	23	126.173	-0.389	0.000	0.15		84.9	OK
28.000	159	23	124.074	-0.601	0.000	0.03		10.0	OK
28.001	160	23	123.970	-0.604	0.000	0.02		10.9	OK
21.007	131	21	123.799	-0.387	0.000	0.24		98.8	OK
21.008	132	15	123.762	-0.305	0.000	0.23		104.6	OK
21.009	133	13	123.712	-0.200	0.000	0.23		108.0	OK
29.000	162	23	133.288	-0.175	0.000	0.11		7.1	OK
29.001	163	23	132.341	-0.180	0.000	0.09		10.9	OK
29.002	164	23	129.105	-0.156	0.000	0.21		11.8	OK
30.000	168	23	131.173	-0.163	0.000	0.17		10.8	OK
30.001	169	23	129.797	-0.230	0.000	0.12		16.5	OK
29.003	165	23	128.941	-0.232	0.000	0.12		31.6	OK
31.000	171	23	128.219	-0.177	0.000	0.10		5.4	OK
31.001	172	23	127.615	-0.177	0.000	0.10		10.7	OK
29.004	166	23	125.016	-0.290	0.000	0.27		44.8	OK
21.010	134	22	123.641	0.000	0.000	0.52		152.8	OK
21.011	135	11	123.623	0.000	0.000	0.35		152.9	OK
21.012	136	15	123.569	-0.001	0.000	0.30		154.0	OK
1.036	37	9	123.453	0.022	0.000	0.57		402.7	SURCHARGED
1.037	38	5	123.450	0.056	0.000	0.34		400.7	SURCHARGED
1.038	39	3	123.447	0.225	0.000	0.12		143.9	SURCHARGED
1.039	40	2	123.633	0.576	0.000	0.05		44.5	SURCHARGED
1.040	41	16	122.093	-0.914	0.000	0.04		44.5	OK

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150-156 St Johns Road Edinburgh RH12 8AY		
Date 21/09/2015 12:26 File swl opt.mdx	Designed by Checked by	
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Summary Wizard of 720 minute 200 year Winter I+0% for SW1.SWS

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	20.000
Hot Start (mins)	0	MADD Factor * 10m ³ /ha Storage	2.000
Hot Start Level (mm)	0	Inlet Coefficient	0.800
Manhole Headloss Coeff (Global)	0.500	Flow per Person per Day (l/per/day)	0.000
Foul Sewage per hectare (l/s)	0.000		

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

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.300
Region	Scotland and Ireland	Cv (Summer)	0.750
M5-60 (mm)	14.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	OFF

Profile(s)	Winter
Duration(s) (mins)	15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years)	30, 100, 200
Climate Change (%)	0, 0, 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Pipe Flow / Cap. (l/s)	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	1	25	134.670	-0.106	0.000	0.19		4.5	OK
1.001	2	25	133.400	-0.179	0.000	0.09		7.2	OK
1.002	3	25	132.376	-0.176	0.000	0.11		7.7	OK
2.000	44	25	132.187	-0.188	0.000	0.07		3.0	OK
1.003	4	25	131.960	-0.222	0.000	0.15		10.9	OK
3.000	46	25	134.370	-0.130	0.000	0.05		1.1	OK
3.001	47	25	133.827	-0.128	0.000	0.05		1.8	OK
3.002	48	25	133.195	-0.118	0.000	0.11		4.0	OK
1.004	5	25	131.790	-0.235	0.000	0.11		16.3	OK
1.005	6	25	131.041	-0.230	0.000	0.12		19.2	OK
4.000	50	25	134.348	-0.126	0.000	0.06		2.2	OK
4.001	51	25	132.569	-0.175	0.000	0.11		7.8	OK
4.002	52	25	131.445	-0.230	0.000	0.12		10.3	OK
4.003	53	25	131.196	-0.209	0.000	0.20		12.5	OK
4.004	54	25	131.103	-0.224	0.000	0.15		17.2	OK
1.006	7	25	130.505	-0.333	0.000	0.15		36.6	OK
1.007	8	25	130.210	-0.297	0.000	0.25		37.7	OK
1.008	9	25	130.143	-0.295	0.000	0.25		39.5	OK
1.009	10	25	130.065	-0.290	0.000	0.27		41.2	OK


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PN	US/MH Name	Storm Rank	Water	Surcharged	Flooded	Pipe		Status
			Level (m)	Depth (m)	Volume (m³)	Flow / Cap.	Overflow (l/s)	
5.0000	56	25	131.296	-0.104	0.000	0.21	3.5	OK
5.001	57	25	131.044	-0.177	0.000	0.10	5.8	OK
1.010	11	25	129.988	-0.301	0.000	0.24	51.0	OK
1.011	12	25	129.686	-0.354	0.000	0.23	52.4	OK
1.012	13	25	129.599	-0.348	0.000	0.25	54.6	OK
1.013	14	25	129.488	-0.390	0.000	0.15	56.5	OK
6.000	59	25	133.332	-0.113	0.000	0.14	2.3	OK
6.001	60	25	133.043	-0.179	0.000	0.09	5.2	OK
7.000	66	25	133.075	-0.125	0.000	0.07	1.1	OK
6.002	61	25	132.744	-0.174	0.000	0.12	7.6	OK
6.003	62	25	132.403	-0.165	0.000	0.16	10.1	OK
8.000	68	25	133.856	-0.122	0.000	0.08	3.2	OK
6.004	63	25	131.652	-0.163	0.000	0.17	13.6	OK
9.000	70	25	131.729	-0.189	0.000	0.06	3.0	OK
6.005	64	25	131.331	-0.234	0.000	0.11	21.3	OK
1.014	15	25	129.180	-0.396	0.000	0.25	78.3	OK
1.015	16	25	129.093	-0.406	0.000	0.23	82.7	OK
1.016	17	25	128.885	-0.370	0.000	0.29	83.5	OK
1.017	18	25	128.838	-0.362	0.000	0.28	83.9	OK
1.018	19	25	128.791	-0.344	0.000	0.35	84.1	OK
10.000	72	25	131.799	-0.121	0.000	0.08	1.5	OK
10.001	73	25	131.580	-0.120	0.000	0.09	1.5	OK
1.019	20	25	128.766	-0.340	0.000	0.39	85.8	OK
1.020	21	25	128.698	-0.386	0.000	0.28	87.8	OK
1.021	22	25	128.609	-0.386	0.000	0.28	88.4	OK
11.000	75	25	134.192	-0.186	0.000	0.07	4.0	OK
11.001	76	25	133.658	-0.184	0.000	0.08	4.9	OK
11.002	77	25	133.392	-0.166	0.000	0.16	5.6	OK
11.003	78	25	133.271	-0.169	0.000	0.14	8.0	OK
11.004	79	25	132.878	-0.162	0.000	0.18	9.8	OK
11.005	80	25	132.639	-0.152	0.000	0.23	13.0	OK
1.022	23	25	128.448	-0.453	0.000	0.24	103.1	OK
1.023	24	25	128.333	-0.460	0.000	0.22	106.2	OK
12.000	82	25	134.192	-0.116	0.000	0.11	3.5	OK
12.001	83	25	133.428	-0.181	0.000	0.08	7.8	OK
12.002	84	25	131.046	-0.151	0.000	0.24	8.1	OK
1.024	25	25	128.132	-0.449	0.000	0.25	116.8	OK
1.025	26	25	127.951	-0.436	0.000	0.27	118.9	OK
1.026	27	25	127.842	-0.437	0.000	0.27	119.4	OK
1.027	28	25	127.718	-0.447	0.000	0.25	123.4	OK
1.028	29	25	127.471	-0.411	0.000	0.33	124.2	OK
13.000	86	25	129.533	-0.112	0.000	0.14	2.9	OK
13.001	87	25	129.081	-0.113	0.000	0.14	3.3	OK
1.029	30	25	127.396	-0.427	0.000	0.29	128.7	OK
1.030	31	25	127.273	-0.431	0.000	0.28	131.5	OK
1.031	32	25	127.065	-0.471	0.000	0.20	134.5	OK
14.000	89	25	133.665	-0.172	0.000	0.13	5.0	OK

David R Murray and Associates LLP		Page 40
150-156 St Johns Road Edinburgh RH12 8AY		
Date 21/09/2015 12:26 File sw1 opt.mdx	Designed by <div></div> Checked by	
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Summary Wizard of 720 minute 200 year Winter I+0% for SW1.SWS

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status
27.000	157	25	129.348	-0.169	0.000	0.14		5.4	OK
21.006	130	25	126.163	-0.398	0.000	0.13		74.3	OK
28.000	159	25	124.071	-0.604	0.000	0.02		8.8	OK
28.001	160	25	123.967	-0.607	0.000	0.02		9.6	OK
21.007	131	19	123.799	-0.387	0.000	0.21		86.4	OK
21.008	132	13	123.762	-0.305	0.000	0.21		91.6	OK
21.009	133	14	123.712	-0.200	0.000	0.20		94.5	OK
29.000	162	25	133.285	-0.178	0.000	0.10		6.2	OK
29.001	163	25	132.338	-0.183	0.000	0.08		9.6	OK
29.002	164	25	129.100	-0.161	0.000	0.18		10.3	OK
30.000	168	25	131.168	-0.168	0.000	0.15		9.5	OK
30.001	169	25	129.792	-0.235	0.000	0.11		14.4	OK
29.003	165	25	128.937	-0.236	0.000	0.10		27.7	OK
31.000	171	25	128.216	-0.180	0.000	0.09		4.7	OK
31.001	172	25	127.612	-0.180	0.000	0.09		9.3	OK
29.004	166	25	125.005	-0.301	0.000	0.24		39.2	OK
21.010	134	14	123.641	0.000	0.000	0.46		133.7	OK
21.011	135	20	123.623	0.000	0.000	0.31		133.8	OK
21.012	136	16	123.569	-0.001	0.000	0.26		134.6	OK
1.036	37	8	123.459	0.028	0.000	0.50		353.2	SURCHARGED
1.037	38	4	123.456	0.062	0.000	0.30		351.5	SURCHARGED
1.038	39	2	123.453	0.232	0.000	0.11		130.6	SURCHARGED
1.039	40	4	123.605	0.548	0.000	0.05		44.5	SURCHARGED
1.040	41	10	122.093	-0.914	0.000	0.04		44.5	OK

David R Murray and Associates LLP		Page 41
150-156 St Johns Road Edinburgh RH12 8AY		
Date 21/09/2015 12:26 File swl opt.mdx	Designed by Checked by	
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Summary Wizard of 960 minute 200 year Winter I+0% for SW1.SWS

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	20.000
Hot Start (mins)	0	MADD Factor * 10m³/ha Storage	2.000
Hot Start Level (mm)	0	Inlet Coefficient	0.800
Manhole Headloss Coeff (Global)	0.500	Flow per Person per Day (l/per/day)	0.000
Foul Sewage per hectare (l/s)	0.000		

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

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.300
Region	Scotland and Ireland Cv (Summer) 0.750		
M5-60 (mm)	14.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	OFF

Profile(s)	Winter
Duration(s) (mins)	15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years)	30, 100, 200
Climate Change (%)	0, 0, 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Pipe Flow / Cap. (l/s)	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	1	29	134.665	-0.111	0.000	0.15		3.6	OK
1.001	2	29	133.395	-0.184	0.000	0.08		5.8	OK
1.002	3	29	132.372	-0.180	0.000	0.09		6.3	OK
2.000	44	29	132.183	-0.192	0.000	0.05		2.5	OK
1.003	4	29	131.952	-0.230	0.000	0.12		8.9	OK
3.000	46	29	134.369	-0.131	0.000	0.04		0.9	OK
3.001	47	29	133.825	-0.130	0.000	0.04		1.5	OK
3.002	48	29	133.192	-0.121	0.000	0.09		3.2	OK
1.004	5	29	131.784	-0.241	0.000	0.09		13.2	OK
1.005	6	29	131.034	-0.237	0.000	0.10		15.5	OK
4.000	50	29	134.345	-0.129	0.000	0.05		1.8	OK
4.001	51	29	132.565	-0.179	0.000	0.09		6.3	OK
4.002	52	29	131.438	-0.237	0.000	0.10		8.3	OK
4.003	53	29	131.186	-0.219	0.000	0.16		10.1	OK
4.004	54	29	131.096	-0.231	0.000	0.12		13.9	OK
1.006	7	29	130.493	-0.345	0.000	0.12		29.6	OK
1.007	8	29	130.194	-0.313	0.000	0.20		30.5	OK
1.008	9	29	130.127	-0.311	0.000	0.21		32.0	OK
1.009	10	29	130.048	-0.307	0.000	0.22		33.4	OK

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Page 42

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Micro Drainage

Summary Wizard of 960 minute 200 year Winter I+0% for SW1.SWS


			Water	Surcharged	Flooded			Pipe	
	US/MH	Storm	Level	Depth	Volume	Flow /	Overflow	Flow	
PN	Name	Rank	(m)	(m)	(m³)	Cap.	(l/s)	(l/s)	Status
5.000	56	29	131.291	-0.109	0.000	0.17		2.8	OK
5.001	57	29	131.040	-0.181	0.000	0.08		4.7	OK
1.010	11	29	129.974	-0.315	0.000	0.20		41.3	OK
1.011	12	29	129.669	-0.371	0.000	0.18		42.4	OK
1.012	13	29	129.581	-0.366	0.000	0.20		44.2	OK
1.013	14	29	129.474	-0.404	0.000	0.12		45.8	OK
6.000	59	29	133.328	-0.117	0.000	0.11		1.9	OK
6.001	60	29	133.037	-0.185	0.000	0.07		4.2	OK
7.000	66	29	133.073	-0.127	0.000	0.06		0.9	OK
6.002	61	29	132.740	-0.178	0.000	0.10		6.2	OK
6.003	62	29	132.397	-0.171	0.000	0.13		8.2	OK
8.000	68	29	133.853	-0.125	0.000	0.07		2.6	OK
6.004	63	29	131.645	-0.170	0.000	0.14		11.0	OK
9.000	70	29	131.725	-0.193	0.000	0.05		2.4	OK
6.005	64	29	131.325	-0.240	0.000	0.09		17.2	OK
1.014	15	29	129.160	-0.416	0.000	0.21		63.4	OK
1.015	16	29	129.073	-0.426	0.000	0.19		67.0	OK
1.016	17	29	128.859	-0.397	0.000	0.24		67.6	OK
1.017	18	29	128.810	-0.390	0.000	0.23		68.0	OK
1.018	19	29	128.762	-0.373	0.000	0.28		68.1	OK
10.000	72	29	131.796	-0.124	0.000	0.07		1.2	OK
10.001	73	29	131.576	-0.124	0.000	0.07		1.2	OK
1.019	20	29	128.737	-0.368	0.000	0.32		69.5	OK
1.020	21	29	128.675	-0.408	0.000	0.22		71.1	OK
1.021	22	29	128.586	-0.408	0.000	0.22		71.6	OK
11.000	75	29	134.187	-0.191	0.000	0.06		3.2	OK
11.001	76	29	133.653	-0.189	0.000	0.06		3.9	OK
11.002	77	29	133.386	-0.172	0.000	0.13		4.6	OK
11.003	78	29	133.265	-0.174	0.000	0.12		6.5	OK
11.004	79	29	132.871	-0.169	0.000	0.14		7.9	OK
11.005	80	29	132.631	-0.160	0.000	0.18		10.5	OK
1.022	23	29	128.426	-0.475	0.000	0.19		83.6	OK
1.023	24	29	128.311	-0.483	0.000	0.18		86.1	OK
12.000	82	29	134.189	-0.119	0.000	0.09		2.8	OK
12.001	83	29	133.422	-0.187	0.000	0.07		6.3	OK
12.002	84	29	131.039	-0.158	0.000	0.19		6.6	OK
1.024	25	29	128.110	-0.471	0.000	0.20		94.8	OK
1.025	26	29	127.926	-0.460	0.000	0.22		96.4	OK
1.026	27	29	127.818	-0.461	0.000	0.22		96.8	OK
1.027	28	29	127.695	-0.469	0.000	0.20		100.1	OK
1.028	29	29	127.442	-0.440	0.000	0.26		100.7	OK
13.000	86	29	129.529	-0.116	0.000	0.12		2.3	OK
13.001	87	29	129.077	-0.117	0.000	0.11		2.7	OK
1.029	30	29	127.370	-0.454	0.000	0.24		104.4	OK
1.030	31	29	127.248	-0.457	0.000	0.23		106.7	OK
1.031	32	29	127.042	-0.494	0.000	0.16		109.2	OK
14.000	89	29	133.660	-0.177	0.000	0.10		4.0	OK
14.001	90	29	133.220	-0.162	0.000	0.17		6.6	OK
14.002	91	29	133.006	-0.154	0.000	0.22		7.2	OK

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Summary Wizard of 960 minute 200 year Winter I+0% for SW1.SWS

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status
27.000	157	29	129.342	-0.175	0.000	0.11		4.4	OK
21.006	130	29	126.151	-0.410	0.000	0.11		60.2	OK
28.000	159	29	124.062	-0.613	0.000	0.02		7.1	OK
28.001	160	29	123.955	-0.619	0.000	0.02		7.7	OK
21.007	131	18	123.799	-0.387	0.000	0.17		70.0	OK
21.008	132	14	123.762	-0.305	0.000	0.17		74.1	OK
21.009	133	16	123.712	-0.200	0.000	0.16		76.5	OK
29.000	162	29	133.280	-0.183	0.000	0.08		5.1	OK
29.001	163	29	132.333	-0.188	0.000	0.06		7.7	OK
29.002	164	29	129.093	-0.168	0.000	0.15		8.4	OK
30.000	168	29	131.162	-0.174	0.000	0.12		7.7	OK
30.001	169	29	129.787	-0.240	0.000	0.09		11.7	OK
29.003	165	29	128.931	-0.242	0.000	0.08		22.4	OK
31.000	171	29	128.211	-0.185	0.000	0.07		3.8	OK
31.001	172	29	127.607	-0.185	0.000	0.07		7.5	OK
29.004	166	29	124.990	-0.316	0.000	0.19		31.8	OK
21.010	134	13	123.641	0.000	0.000	0.37		108.3	OK
21.011	135	14	123.623	0.000	0.000	0.25		108.3	OK
21.012	136	18	123.568	-0.001	0.000	0.21		109.0	OK
1.036	37	7	123.461	0.030	0.000	0.41		286.7	SURCHARGED
1.037	38	3	123.459	0.064	0.000	0.24		285.3	SURCHARGED
1.038	39	1	123.456	0.234	0.000	0.12		136.1	SURCHARGED
1.039	40	5	123.555	0.498	0.000	0.05		44.5	SURCHARGED
1.040	41	9	122.093	-0.914	0.000	0.04		44.5	OK

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Summary Wizard of 1440 minute 200 year Winter I+0% for SW1.SWS

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	20.000
Hot Start (mins)	0	MADD Factor * 10m³/ha Storage	2.000
Hot Start Level (mm)	0	Inlet Coefficient	0.800
Manhole Headloss Coeff (Global)	0.500	Flow per Person per Day (l/per/day)	0.000
Foul Sewage per hectare (l/s)	0.000		

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

Synthetic Rainfall Details


Rainfall Model	FSR	Ratio R	0.300
Region	Scotland and Ireland Cv (Summer) 0.750		
M5-60 (mm)	14.000	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	ON
Inertia Status	OFF

Profile(s)	Winter
Duration(s) (mins)	15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440
Return Period(s) (years)	30, 100, 200
Climate Change (%)	0, 0, 0

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Pipe Flow / Cap. (l/s)	Overflow (l/s)	Pipe Flow (l/s)	Status
1.000	1	33	134.659	-0.117	0.000	0.11		2.7	OK
1.001	2	33	133.388	-0.191	0.000	0.06		4.3	OK
1.002	3	33	132.364	-0.188	0.000	0.07		4.6	OK
2.000	44	33	132.179	-0.196	0.000	0.04		1.8	OK
1.003	4	33	131.943	-0.239	0.000	0.09		6.6	OK
3.000	46	33	134.366	-0.134	0.000	0.03		0.7	OK
3.001	47	33	133.823	-0.132	0.000	0.03		1.1	OK
3.002	48	33	133.188	-0.125	0.000	0.06		2.4	OK
1.004	5	33	131.774	-0.251	0.000	0.06		9.8	OK
1.005	6	33	131.025	-0.246	0.000	0.07		11.5	OK
4.000	50	33	134.342	-0.132	0.000	0.04		1.3	OK
4.001	51	33	132.557	-0.187	0.000	0.07		4.7	OK
4.002	52	33	131.429	-0.246	0.000	0.07		6.2	OK
4.003	53	33	131.174	-0.231	0.000	0.12		7.5	OK
4.004	54	33	131.087	-0.240	0.000	0.09		10.3	OK
1.006	7	33	130.479	-0.359	0.000	0.09		22.0	OK
1.007	8	33	130.173	-0.334	0.000	0.15		22.6	OK
1.008	9	33	130.106	-0.332	0.000	0.15		23.7	OK
1.009	10	33	130.027	-0.328	0.000	0.16		24.8	OK

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Summary Wizard of 1440 minute 200 year Winter I+0% for SW1.SWS

PN	US/MH Name	Storm Rank	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status
27.000	157	33	129.336	-0.181	0.000	0.08		3.2	OK
21.006	130	33	126.135	-0.426	0.000	0.08		44.6	OK
28.000	159	33	124.047	-0.628	0.000	0.01		5.3	OK
28.001	160	33	123.940	-0.634	0.000	0.01		5.7	OK
21.007	131	20	123.799	-0.387	0.000	0.12		51.9	OK
21.008	132	17	123.762	-0.305	0.000	0.12		55.0	OK
21.009	133	19	123.712	-0.200	0.000	0.12		56.7	OK
29.000	162	33	133.273	-0.190	0.000	0.06		3.7	OK
29.001	163	33	132.327	-0.194	0.000	0.05		5.7	OK
29.002	164	33	129.085	-0.176	0.000	0.11		6.2	OK
30.000	168	33	131.156	-0.180	0.000	0.09		5.7	OK
30.001	169	33	129.776	-0.251	0.000	0.06		8.7	OK
29.003	165	33	128.921	-0.252	0.000	0.06		16.6	OK
31.000	171	33	128.205	-0.191	0.000	0.05		2.8	OK
31.001	172	33	127.601	-0.191	0.000	0.05		5.6	OK
29.004	166	33	124.969	-0.337	0.000	0.14		23.6	OK
21.010	134	17	123.641	0.000	0.000	0.27		80.3	OK
21.011	135	15	123.623	0.000	0.000	0.18		80.3	OK
21.012	136	19	123.568	-0.002	0.000	0.16		80.9	OK
1.036	37	11	123.431	0.000	0.000	0.31		215.6	SURCHARGED
1.037	38	9	123.425	0.031	0.000	0.18		214.9	SURCHARGED
1.038	39	5	123.422	0.201	0.000	0.08		95.5	SURCHARGED
1.039	40	7	123.462	0.406	0.000	0.05		44.5	SURCHARGED
1.040	41	4	122.093	-0.914	0.000	0.04		44.5	OK