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Raven House 29 Linkfield Lane Surrey RH1 1SS	Sea Point	
Date 16/11/2017 File 12198 SW South Rev01.mdx	Designed by CampbellReith Checked by	
XP Solutions	Network 2016.1.1	

STORM SEWER DESIGN by the Modified Rational Method

Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S1.000	4.292	0.058	74.0	0.008	5.00	0.0	0.600	o	150	Pipe/Conduit	
S1.001	7.547	0.102	74.0	0.000	0.00	0.0	0.600	o	150	Pipe/Conduit	
S1.002	12.709	0.110	115.5	0.005	0.00	0.0	0.600	o	150	Pipe/Conduit	
S1.003	10.048	0.070	143.5	0.008	0.00	0.0	0.600	o	150	Pipe/Conduit	
S1.004	7.599	0.015	506.6	0.008	0.00	0.0	0.600	o	150	Pipe/Conduit	
S2.000	14.675	0.345	42.5	0.009	5.00	0.0	0.600	o	150	Pipe/Conduit	
S1.005	13.171	0.100	131.7	0.005	0.00	0.0	0.600	o	225	Pipe/Conduit	
S1.006	13.257	0.080	165.7	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	
S1.007	7.818	2.390	3.3	0.000	0.00	0.0	0.600	o	225	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S1.000	50.00	5.06	48.990	0.008	0.0	0.0	0.0	1.17	20.7	1.1
S1.001	50.00	5.17	48.932	0.008	0.0	0.0	0.0	1.17	20.7	1.1
S1.002	50.00	5.40	48.830	0.013	0.0	0.0	0.0	0.93	16.5	1.8
S1.003	50.00	5.60	48.720	0.021	0.0	0.0	0.0	0.84	14.8	2.8
S1.004	50.00	5.88	48.650	0.029	0.0	0.0	0.0	0.44	7.8	3.9
S2.000	50.00	5.16	48.980	0.009	0.0	0.0	0.0	1.55	27.3	1.2
S1.005	50.00	6.08	48.560	0.043	0.0	0.0	0.0	1.14	45.2	5.8
S1.006	50.00	6.29	48.460	0.043	0.0	0.0	0.0	1.01	40.3	5.8
S1.007	50.00	6.31	48.380	0.043	0.0	0.0	0.0	7.29	289.7	5.8

Surcharged Outfall Details for Storm

Outfall Pipe Number	Outfall Name	C. Level (m)	I. Level (m)	Min I. Level (m)	D,L (mm)	W (mm)
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S1.007 S8651X 49.660 45.990 45.990 1200 0

Datum (m) 45.990 Offset (mins) 0

Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
1	1.830	5	1.830	9	1.830	13	1.830	17	1.830	21	1.830
2	1.830	6	1.830	10	1.830	14	1.830	18	1.830	22	1.830
3	1.830	7	1.830	11	1.830	15	1.830	19	1.830	23	1.830
4	1.830	8	1.830	12	1.830	16	1.830	20	1.830	24	1.830

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Surcharged Outfall Details for Storm							
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
25	1.830	75	1.830	125	1.830	175	1.830
26	1.830	76	1.830	126	1.830	176	1.830
27	1.830	77	1.830	127	1.830	177	1.830
28	1.830	78	1.830	128	1.830	178	1.830
29	1.830	79	1.830	129	1.830	179	1.830
30	1.830	80	1.830	130	1.830	180	1.830
31	1.830	81	1.830	131	1.830	181	1.830
32	1.830	82	1.830	132	1.830	182	1.830
33	1.830	83	1.830	133	1.830	183	1.830
34	1.830	84	1.830	134	1.830	184	1.830
35	1.830	85	1.830	135	1.830	185	1.830
36	1.830	86	1.830	136	1.830	186	1.830
37	1.830	87	1.830	137	1.830	187	1.830
38	1.830	88	1.830	138	1.830	188	1.830
39	1.830	89	1.830	139	1.830	189	1.830
40	1.830	90	1.830	140	1.830	190	1.830
41	1.830	91	1.830	141	1.830	191	1.830
42	1.830	92	1.830	142	1.830	192	1.830
43	1.830	93	1.830	143	1.830	193	1.830
44	1.830	94	1.830	144	1.830	194	1.830
45	1.830	95	1.830	145	1.830	195	1.830
46	1.830	96	1.830	146	1.830	196	1.830
47	1.830	97	1.830	147	1.830	197	1.830
48	1.830	98	1.830	148	1.830	198	1.830
49	1.830	99	1.830	149	1.830	199	1.830
50	1.830	100	1.830	150	1.830	200	1.830
51	1.830	101	1.830	151	1.830	201	1.830
52	1.830	102	1.830	152	1.830	202	1.830
53	1.830	103	1.830	153	1.830	203	1.830
54	1.830	104	1.830	154	1.830	204	1.830
55	1.830	105	1.830	155	1.830	205	1.830
56	1.830	106	1.830	156	1.830	206	1.830
57	1.830	107	1.830	157	1.830	207	1.830
58	1.830	108	1.830	158	1.830	208	1.830
59	1.830	109	1.830	159	1.830	209	1.830
60	1.830	110	1.830	160	1.830	210	1.830
61	1.830	111	1.830	161	1.830	211	1.830
62	1.830	112	1.830	162	1.830	212	1.830
63	1.830	113	1.830	163	1.830	213	1.830
64	1.830	114	1.830	164	1.830	214	1.830
65	1.830	115	1.830	165	1.830	215	1.830
66	1.830	116	1.830	166	1.830	216	1.830
67	1.830	117	1.830	167	1.830	217	1.830
68	1.830	118	1.830	168	1.830	218	1.830
69	1.830	119	1.830	169	1.830	219	1.830
70	1.830	120	1.830	170	1.830	220	1.830
71	1.830	121	1.830	171	1.830	221	1.830
72	1.830	122	1.830	172	1.830	222	1.830
73	1.830	123	1.830	173	1.830	223	1.830
74	1.830	124	1.830	174	1.830	224	1.830
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Surcharged Outfall Details for Storm											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
325	1.830	375	1.830	425	1.830	475	1.830	525	1.830	575	1.830
326	1.830	376	1.830	426	1.830	476	1.830	526	1.830	576	1.830
327	1.830	377	1.830	427	1.830	477	1.830	527	1.830	577	1.830
328	1.830	378	1.830	428	1.830	478	1.830	528	1.830	578	1.830
329	1.830	379	1.830	429	1.830	479	1.830	529	1.830	579	1.830
330	1.830	380	1.830	430	1.830	480	1.830	530	1.830	580	1.830
331	1.830	381	1.830	431	1.830	481	1.830	531	1.830	581	1.830
332	1.830	382	1.830	432	1.830	482	1.830	532	1.830	582	1.830
333	1.830	383	1.830	433	1.830	483	1.830	533	1.830	583	1.830
334	1.830	384	1.830	434	1.830	484	1.830	534	1.830	584	1.830
335	1.830	385	1.830	435	1.830	485	1.830	535	1.830	585	1.830
336	1.830	386	1.830	436	1.830	486	1.830	536	1.830	586	1.830
337	1.830	387	1.830	437	1.830	487	1.830	537	1.830	587	1.830
338	1.830	388	1.830	438	1.830	488	1.830	538	1.830	588	1.830
339	1.830	389	1.830	439	1.830	489	1.830	539	1.830	589	1.830
340	1.830	390	1.830	440	1.830	490	1.830	540	1.830	590	1.830
341	1.830	391	1.830	441	1.830	491	1.830	541	1.830	591	1.830
342	1.830	392	1.830	442	1.830	492	1.830	542	1.830	592	1.830
343	1.830	393	1.830	443	1.830	493	1.830	543	1.830	593	1.830
344	1.830	394	1.830	444	1.830	494	1.830	544	1.830	594	1.830
345	1.830	395	1.830	445	1.830	495	1.830	545	1.830	595	1.830
346	1.830	396	1.830	446	1.830	496	1.830	546	1.830	596	1.830
347	1.830	397	1.830	447	1.830	497	1.830	547	1.830	597	1.830
348	1.830	398	1.830	448	1.830	498	1.830	548	1.830	598	1.830
349	1.830	399	1.830	449	1.830	499	1.830	549	1.830	599	1.830
350	1.830	400	1.830	450	1.830	500	1.830	550	1.830	600	1.830
351	1.830	401	1.830	451	1.830	501	1.830	551	1.830	601	1.830
352	1.830	402	1.830	452	1.830	502	1.830	552	1.830	602	1.830
353	1.830	403	1.830	453	1.830	503	1.830	553	1.830	603	1.830
354	1.830	404	1.830	454	1.830	504	1.830	554	1.830	604	1.830
355	1.830	405	1.830	455	1.830	505	1.830	555	1.830	605	1.830
356	1.830	406	1.830	456	1.830	506	1.830	556	1.830	606	1.830
357	1.830	407	1.830	457	1.830	507	1.830	557	1.830	607	1.830
358	1.830	408	1.830	458	1.830	508	1.830	558	1.830	608	1.830
359	1.830	409	1.830	459	1.830	509	1.830	559	1.830	609	1.830
360	1.830	410	1.830	460	1.830	510	1.830	560	1.830	610	1.830
361	1.830	411	1.830	461	1.830	511	1.830	561	1.830	611	1.830
362	1.830	412	1.830	462	1.830	512	1.830	562	1.830	612	1.830
363	1.830	413	1.830	463	1.830	513	1.830	563	1.830	613	1.830
364	1.830	414	1.830	464	1.830	514	1.830	564	1.830	614	1.830
365	1.830	415	1.830	465	1.830	515	1.830	565	1.830	615	1.830
366	1.830	416	1.830	466	1.830	516	1.830	566	1.830	616	1.830
367	1.830	417	1.830	467	1.830	517	1.830	567	1.830	617	1.830
368	1.830	418	1.830	468	1.830	518	1.830	568	1.830	618	1.830
369	1.830	419	1.830	469	1.830	519	1.830	569	1.830	619	1.830
370	1.830	420	1.830	470	1.830	520	1.830	570	1.830	620	1.830
371	1.830	421	1.830	471	1.830	521	1.830	571	1.830	621	1.830
372	1.830	422	1.830	472	1.830	522	1.830	572	1.830	622	1.830
373	1.830	423	1.830	473	1.830	523	1.830	573	1.830	623	1.830
374	1.830	424	1.830	474	1.830	524	1.830	574	1.830	624	1.830
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Surcharged Outfall Details for Storm											
Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
625	1.830	675	1.830	725	1.830	775	1.830	825	1.830	875	1.830
626	1.830	676	1.830	726	1.830	776	1.830	826	1.830	876	1.830
627	1.830	677	1.830	727	1.830	777	1.830	827	1.830	877	1.830
628	1.830	678	1.830	728	1.830	778	1.830	828	1.830	878	1.830
629	1.830	679	1.830	729	1.830	779	1.830	829	1.830	879	1.830
630	1.830	680	1.830	730	1.830	780	1.830	830	1.830	880	1.830
631	1.830	681	1.830	731	1.830	781	1.830	831	1.830	881	1.830
632	1.830	682	1.830	732	1.830	782	1.830	832	1.830	882	1.830
633	1.830	683	1.830	733	1.830	783	1.830	833	1.830	883	1.830
634	1.830	684	1.830	734	1.830	784	1.830	834	1.830	884	1.830
635	1.830	685	1.830	735	1.830	785	1.830	835	1.830	885	1.830
636	1.830	686	1.830	736	1.830	786	1.830	836	1.830	886	1.830
637	1.830	687	1.830	737	1.830	787	1.830	837	1.830	887	1.830
638	1.830	688	1.830	738	1.830	788	1.830	838	1.830	888	1.830
639	1.830	689	1.830	739	1.830	789	1.830	839	1.830	889	1.830
640	1.830	690	1.830	740	1.830	790	1.830	840	1.830	890	1.830
641	1.830	691	1.830	741	1.830	791	1.830	841	1.830	891	1.830
642	1.830	692	1.830	742	1.830	792	1.830	842	1.830	892	1.830
643	1.830	693	1.830	743	1.830	793	1.830	843	1.830	893	1.830
644	1.830	694	1.830	744	1.830	794	1.830	844	1.830	894	1.830
645	1.830	695	1.830	745	1.830	795	1.830	845	1.830	895	1.830
646	1.830	696	1.830	746	1.830	796	1.830	846	1.830	896	1.830
647	1.830	697	1.830	747	1.830	797	1.830	847	1.830	897	1.830
648	1.830	698	1.830	748	1.830	798	1.830	848	1.830	898	1.830
649	1.830	699	1.830	749	1.830	799	1.830	849	1.830	899	1.830
650	1.830	700	1.830	750	1.830	800	1.830	850	1.830	900	1.830
651	1.830	701	1.830	751	1.830	801	1.830	851	1.830	901	1.830
652	1.830	702	1.830	752	1.830	802	1.830	852	1.830	902	1.830
653	1.830	703	1.830	753	1.830	803	1.830	853	1.830	903	1.830
654	1.830	704	1.830	754	1.830	804	1.830	854	1.830	904	1.830
655	1.830	705	1.830	755	1.830	805	1.830	855	1.830	905	1.830
656	1.830	706	1.830	756	1.830	806	1.830	856	1.830	906	1.830
657	1.830	707	1.830	757	1.830	807	1.830	857	1.830	907	1.830
658	1.830	708	1.830	758	1.830	808	1.830	858	1.830	908	1.830
659	1.830	709	1.830	759	1.830	809	1.830	859	1.830	909	1.830
660	1.830	710	1.830	760	1.830	810	1.830	860	1.830	910	1.830
661	1.830	711	1.830	761	1.830	811	1.830	861	1.830	911	1.830
662	1.830	712	1.830	762	1.830	812	1.830	862	1.830	912	1.830
663	1.830	713	1.830	763	1.830	813	1.830	863	1.830	913	1.830
664	1.830	714	1.830	764	1.830	814	1.830	864	1.830	914	1.830
665	1.830	715	1.830	765	1.830	815	1.830	865	1.830	915	1.830
666	1.830	716	1.830	766	1.830	816	1.830	866	1.830	916	1.830
667	1.830	717	1.830	767	1.830	817	1.830	867	1.830	917	1.830
668	1.830	718	1.830	768	1.830	818	1.830	868	1.830	918	1.830
669	1.830	719	1.830	769	1.830	819	1.830	869	1.830	919	1.830
670	1.830	720	1.830	770	1.830	820	1.830	870	1.830	920	1.830
671	1.830	721	1.830	771	1.830	821	1.830	871	1.830	921	1.830
672	1.830	722	1.830	772	1.830	822	1.830	872	1.830	922	1.830
673	1.830	723	1.830	773	1.830	823	1.830	873	1.830	923	1.830
674	1.830	724	1.830	774	1.830	824	1.830	874	1.830	924	1.830
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Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
925	1.830	975	1.830	1025	1.830	1075	1.830	1125	1.830	1175	1.830
926	1.830	976	1.830	1026	1.830	1076	1.830	1126	1.830	1176	1.830
927	1.830	977	1.830	1027	1.830	1077	1.830	1127	1.830	1177	1.830
928	1.830	978	1.830	1028	1.830	1078	1.830	1128	1.830	1178	1.830
929	1.830	979	1.830	1029	1.830	1079	1.830	1129	1.830	1179	1.830
930	1.830	980	1.830	1030	1.830	1080	1.830	1130	1.830	1180	1.830
931	1.830	981	1.830	1031	1.830	1081	1.830	1131	1.830	1181	1.830
932	1.830	982	1.830	1032	1.830	1082	1.830	1132	1.830	1182	1.830
933	1.830	983	1.830	1033	1.830	1083	1.830	1133	1.830	1183	1.830
934	1.830	984	1.830	1034	1.830	1084	1.830	1134	1.830	1184	1.830
935	1.830	985	1.830	1035	1.830	1085	1.830	1135	1.830	1185	1.830
936	1.830	986	1.830	1036	1.830	1086	1.830	1136	1.830	1186	1.830
937	1.830	987	1.830	1037	1.830	1087	1.830	1137	1.830	1187	1.830
938	1.830	988	1.830	1038	1.830	1088	1.830	1138	1.830	1188	1.830
939	1.830	989	1.830	1039	1.830	1089	1.830	1139	1.830	1189	1.830
940	1.830	990	1.830	1040	1.830	1090	1.830	1140	1.830	1190	1.830
941	1.830	991	1.830	1041	1.830	1091	1.830	1141	1.830	1191	1.830
942	1.830	992	1.830	1042	1.830	1092	1.830	1142	1.830	1192	1.830
943	1.830	993	1.830	1043	1.830	1093	1.830	1143	1.830	1193	1.830
944	1.830	994	1.830	1044	1.830	1094	1.830	1144	1.830	1194	1.830
945	1.830	995	1.830	1045	1.830	1095	1.830	1145	1.830	1195	1.830
946	1.830	996	1.830	1046	1.830	1096	1.830	1146	1.830	1196	1.830
947	1.830	997	1.830	1047	1.830	1097	1.830	1147	1.830	1197	1.830
948	1.830	998	1.830	1048	1.830	1098	1.830	1148	1.830	1198	1.830
949	1.830	999	1.830	1049	1.830	1099	1.830	1149	1.830	1199	1.830
950	1.830	1000	1.830	1050	1.830	1100	1.830	1150	1.830	1200	1.830
951	1.830	1001	1.830	1051	1.830	1101	1.830	1151	1.830	1201	1.830
952	1.830	1002	1.830	1052	1.830	1102	1.830	1152	1.830	1202	1.830
953	1.830	1003	1.830	1053	1.830	1103	1.830	1153	1.830	1203	1.830
954	1.830	1004	1.830	1054	1.830	1104	1.830	1154	1.830	1204	1.830
955	1.830	1005	1.830	1055	1.830	1105	1.830	1155	1.830	1205	1.830
956	1.830	1006	1.830	1056	1.830	1106	1.830	1156	1.830	1206	1.830
957	1.830	1007	1.830	1057	1.830	1107	1.830	1157	1.830	1207	1.830
958	1.830	1008	1.830	1058	1.830	1108	1.830	1158	1.830	1208	1.830
959	1.830	1009	1.830	1059	1.830	1109	1.830	1159	1.830	1209	1.830
960	1.830	1010	1.830	1060	1.830	1110	1.830	1160	1.830	1210	1.830
961	1.830	1011	1.830	1061	1.830	1111	1.830	1161	1.830	1211	1.830
962	1.830	1012	1.830	1062	1.830	1112	1.830	1162	1.830	1212	1.830
963	1.830	1013	1.830	1063	1.830	1113	1.830	1163	1.830	1213	1.830
964	1.830	1014	1.830	1064	1.830	1114	1.830	1164	1.830	1214	1.830
965	1.830	1015	1.830	1065	1.830	1115	1.830	1165	1.830	1215	1.830
966	1.830	1016	1.830	1066	1.830	1116	1.830	1166	1.830	1216	1.830
967	1.830	1017	1.830	1067	1.830	1117	1.830	1167	1.830	1217	1.830
968	1.830	1018	1.830	1068	1.830	1118	1.830	1168	1.830	1218	1.830
969	1.830	1019	1.830	1069	1.830	1119	1.830	1169	1.830	1219	1.830
970	1.830	1020	1.830	1070	1.830	1120	1.830	1170	1.830	1220	1.830
971	1.830	1021	1.830	1071	1.830	1121	1.830	1171	1.830	1221	1.830
972	1.830	1022	1.830	1072	1.830	1122	1.830	1172	1.830	1222	1.830
973	1.830	1023	1.830	1073	1.830	1123	1.830	1173	1.830	1223	1.830
974	1.830	1024	1.830	1074	1.830	1124	1.830	1174	1.830	1224	1.830
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Surcharged Outfall Details for Storm

Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)	Time (mins)	Depth (m)
1225	1.830	1261	1.830	1297	1.830	1333	1.830	1369	1.830	1405	1.830
1226	1.830	1262	1.830	1298	1.830	1334	1.830	1370	1.830	1406	1.830
1227	1.830	1263	1.830	1299	1.830	1335	1.830	1371	1.830	1407	1.830
1228	1.830	1264	1.830	1300	1.830	1336	1.830	1372	1.830	1408	1.830
1229	1.830	1265	1.830	1301	1.830	1337	1.830	1373	1.830	1409	1.830
1230	1.830	1266	1.830	1302	1.830	1338	1.830	1374	1.830	1410	1.830
1231	1.830	1267	1.830	1303	1.830	1339	1.830	1375	1.830	1411	1.830
1232	1.830	1268	1.830	1304	1.830	1340	1.830	1376	1.830	1412	1.830
1233	1.830	1269	1.830	1305	1.830	1341	1.830	1377	1.830	1413	1.830
1234	1.830	1270	1.830	1306	1.830	1342	1.830	1378	1.830	1414	1.830
1235	1.830	1271	1.830	1307	1.830	1343	1.830	1379	1.830	1415	1.830
1236	1.830	1272	1.830	1308	1.830	1344	1.830	1380	1.830	1416	1.830
1237	1.830	1273	1.830	1309	1.830	1345	1.830	1381	1.830	1417	1.830
1238	1.830	1274	1.830	1310	1.830	1346	1.830	1382	1.830	1418	1.830
1239	1.830	1275	1.830	1311	1.830	1347	1.830	1383	1.830	1419	1.830
1240	1.830	1276	1.830	1312	1.830	1348	1.830	1384	1.830	1420	1.830
1241	1.830	1277	1.830	1313	1.830	1349	1.830	1385	1.830	1421	1.830
1242	1.830	1278	1.830	1314	1.830	1350	1.830	1386	1.830	1422	1.830
1243	1.830	1279	1.830	1315	1.830	1351	1.830	1387	1.830	1423	1.830
1244	1.830	1280	1.830	1316	1.830	1352	1.830	1388	1.830	1424	1.830
1245	1.830	1281	1.830	1317	1.830	1353	1.830	1389	1.830	1425	1.830
1246	1.830	1282	1.830	1318	1.830	1354	1.830	1390	1.830	1426	1.830
1247	1.830	1283	1.830	1319	1.830	1355	1.830	1391	1.830	1427	1.830
1248	1.830	1284	1.830	1320	1.830	1356	1.830	1392	1.830	1428	1.830
1249	1.830	1285	1.830	1321	1.830	1357	1.830	1393	1.830	1429	1.830
1250	1.830	1286	1.830	1322	1.830	1358	1.830	1394	1.830	1430	1.830
1251	1.830	1287	1.830	1323	1.830	1359	1.830	1395	1.830	1431	1.830
1252	1.830	1288	1.830	1324	1.830	1360	1.830	1396	1.830	1432	1.830
1253	1.830	1289	1.830	1325	1.830	1361	1.830	1397	1.830	1433	1.830
1254	1.830	1290	1.830	1326	1.830	1362	1.830	1398	1.830	1434	1.830
1255	1.830	1291	1.830	1327	1.830	1363	1.830	1399	1.830	1435	1.830
1256	1.830	1292	1.830	1328	1.830	1364	1.830	1400	1.830	1436	1.830
1257	1.830	1293	1.830	1329	1.830	1365	1.830	1401	1.830	1437	1.830
1258	1.830	1294	1.830	1330	1.830	1366	1.830	1402	1.830	1438	1.830
1259	1.830	1295	1.830	1331	1.830	1367	1.830	1403	1.830	1439	1.830
1260	1.830	1296	1.830	1332	1.830	1368	1.830	1404	1.830	1440	1.830

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Raven House 29 Linkfield Lane Surrey RH1 1SS			Sea Point						
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2 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm									
Simulation Criteria									
Areal Reduction Factor 1.000 Additional Flow - % of Total Flow 0.000									
Hot Start (mins) 0 MADD Factor * 10m³/ha Storage 2.000									
Hot Start Level (mm) 0 Inlet Coefficient 0.800									
Manhole Headloss Coeff (Global) 0.500 Flow per Person per Day (l/per/day) 0.000									
Foul Sewage per hectare (l/s) 0.000									
Number of Input Hydrographs 0 Number of Storage Structures 0									
Number of Online Controls 0 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 0.350									
Region England and Wales Cv (Summer) 0.750									
M5-60 (mm) 19.000 Cv (Winter) 0.840									
Margin for Flood Risk Warning (mm) 300.0 DVD Status OFF									
Analysis Timestep Fine Inertia Status OFF									
DTS Status ON									
Profile(s) Summer and Winter									
Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440									
Return Period(s) (years) 2, 30, 100									
Climate Change (%) 0, 0, 20									
PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
S1.000	S1	15 Winter	2	+0%					49.020
S1.001	S2	15 Winter	2	+0%					48.957
S1.002	S3	15 Winter	2	+0%					48.866
S1.003	S4	15 Winter	2	+0%	100/15 Summer				48.769
S1.004	S5	15 Winter	2	+0%	30/15 Summer				48.735
S2.000	S6	15 Winter	2	+0%					49.003
S1.005	S6	15 Winter	2	+0%					48.620
S1.006	S7	15 Winter	2	+0%					48.524
S1.007	S8	15 Winter	2	+0%					48.405

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<u>2 year Return Period Summary of Critical Results by Maximum Level (Rank 1)</u> <u>for Storm</u>							

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30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

Simulation Criteria

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

Number of Input Hydrographs 0 Number of Storage Structures 0
 Number of Online Controls 0 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 0.350
 Region England and Wales Cv (Summer) 0.750
 M5-60 (mm) 19.000 Cv (Winter) 0.840

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

Profile(s)

Duration(s) (mins) 15, 30, 60, 120, 240, 360, 480, 960, 1440
 Return Period(s) (years) 2, 30, 100
 Climate Change (%) 0, 0, 20

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)
S1.000	S1	15 Winter	30	+0%					49.031
S1.001	S2	15 Winter	30	+0%					48.967
S1.002	S3	15 Winter	30	+0%					48.884
S1.003	S4	15 Winter	30	+0%	100/15 Summer				48.830
S1.004	S5	15 Winter	30	+0%	30/15 Summer				48.807
S2.000	S6	15 Winter	30	+0%					49.013
S1.005	S6	15 Winter	30	+0%					48.652
S1.006	S7	15 Winter	30	+0%					48.558
S1.007	S8	15 Winter	30	+0%					48.417

PN	US/MH Name	Surcharged Depth (m)	Flooded Volume (m ³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status	Level Exceeded
S1.000	S1	-0.109	0.000	0.16		2.5	OK	
S1.001	S2	-0.115	0.000	0.12		2.4	OK*	
S1.002	S3	-0.096	0.000	0.27		4.1	OK	
S1.003	S4	-0.040	0.000	0.50		6.6	OK	
S1.004	S5	0.007	0.000	1.32		9.1	SURCHARGED	
S2.000	S6	-0.117	0.000	0.11		2.8	OK	

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<u>100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm</u>										
Simulation Criteria										
Areal Reduction Factor		1.000		Additional Flow - % of Total Flow		0.000				
Hot Start (mins)		0		MADD Factor * 10m³/ha Storage		2.000				
Hot Start Level (mm)		0		Inlet Coefficient		0.800				
Manhole Headloss Coeff (Global)		0.500		Flow per Person per Day (l/per/day)		0.000				
Foul Sewage per hectare (l/s)		0.000								
Number of Input Hydrographs		0		Number of Storage Structures		0				
Number of Online Controls		0		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		0.350				
Region England and Wales Cv (Summer)		0.750								
M5-60 (mm)		19.000		Cv (Winter)		0.840				
Margin for Flood Risk Warning (mm)		300.0		DVD Status		OFF				
Analysis Timestep		Fine		Inertia Status		OFF				
DTS Status		ON								
Profile(s)				Summer and Winter						
Duration(s) (mins)		15, 30, 60, 120, 240, 360, 480, 960, 1440								
Return Period(s) (years)		2, 30, 100								
Climate Change (%)		0, 0, 20								
PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surge	First (Y) Flood	First (Z) Overflow	Overflow Act.	Water Level (m)	
S1.000	S1	15 Winter	100	+20%					49.041	
S1.001	S2	15 Winter	100	+20%					48.977	
S1.002	S3	15 Winter	100	+20%					48.913	
S1.003	S4	15 Winter	100	+20%	100/15 Summer				48.888	
S1.004	S5	15 Winter	100	+20%	30/15 Summer				48.845	
S2.000	S6	15 Winter	100	+20%					49.022	
S1.005	S6	15 Winter	100	+20%					48.678	
S1.006	S7	15 Winter	100	+20%					48.586	
S1.007	S8	15 Winter	100	+20%					48.426	
PN	US/MH Name	Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Pipe Flow (l/s)	Status	Level Exceeded		
S1.000	S1	-0.099	0.000	0.26		3.8	OK			
S1.001	S2	-0.105	0.000	0.19		3.8	OK*			
S1.002	S3	-0.067	0.000	0.41		6.2	OK			
S1.003	S4	0.018	0.000	0.77		10.1	SURCHARGED			
S1.004	S5	0.045	0.000	2.01		13.9	SURCHARGED			
S2.000	S6	-0.108	0.000	0.17		4.3	OK			
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