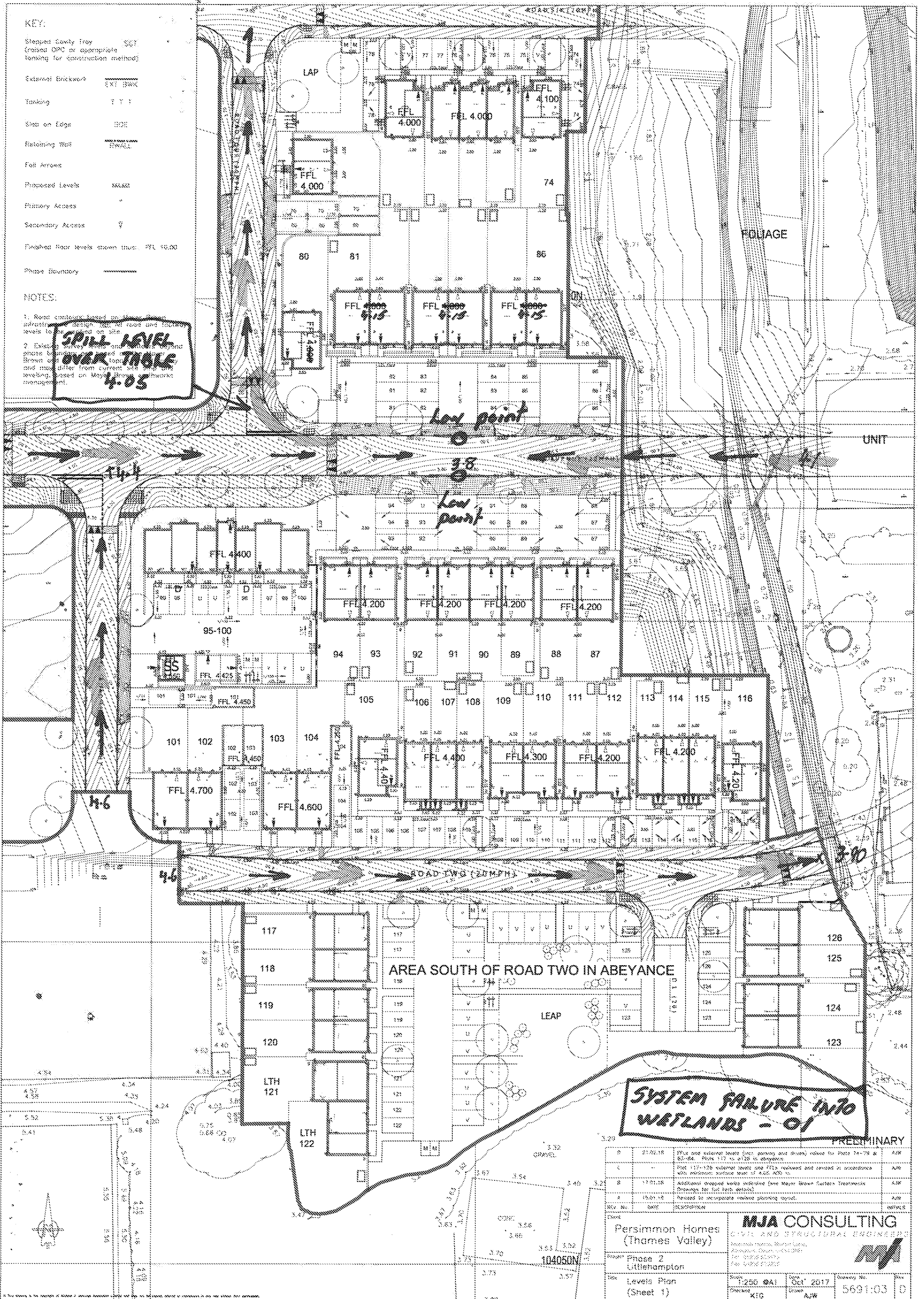
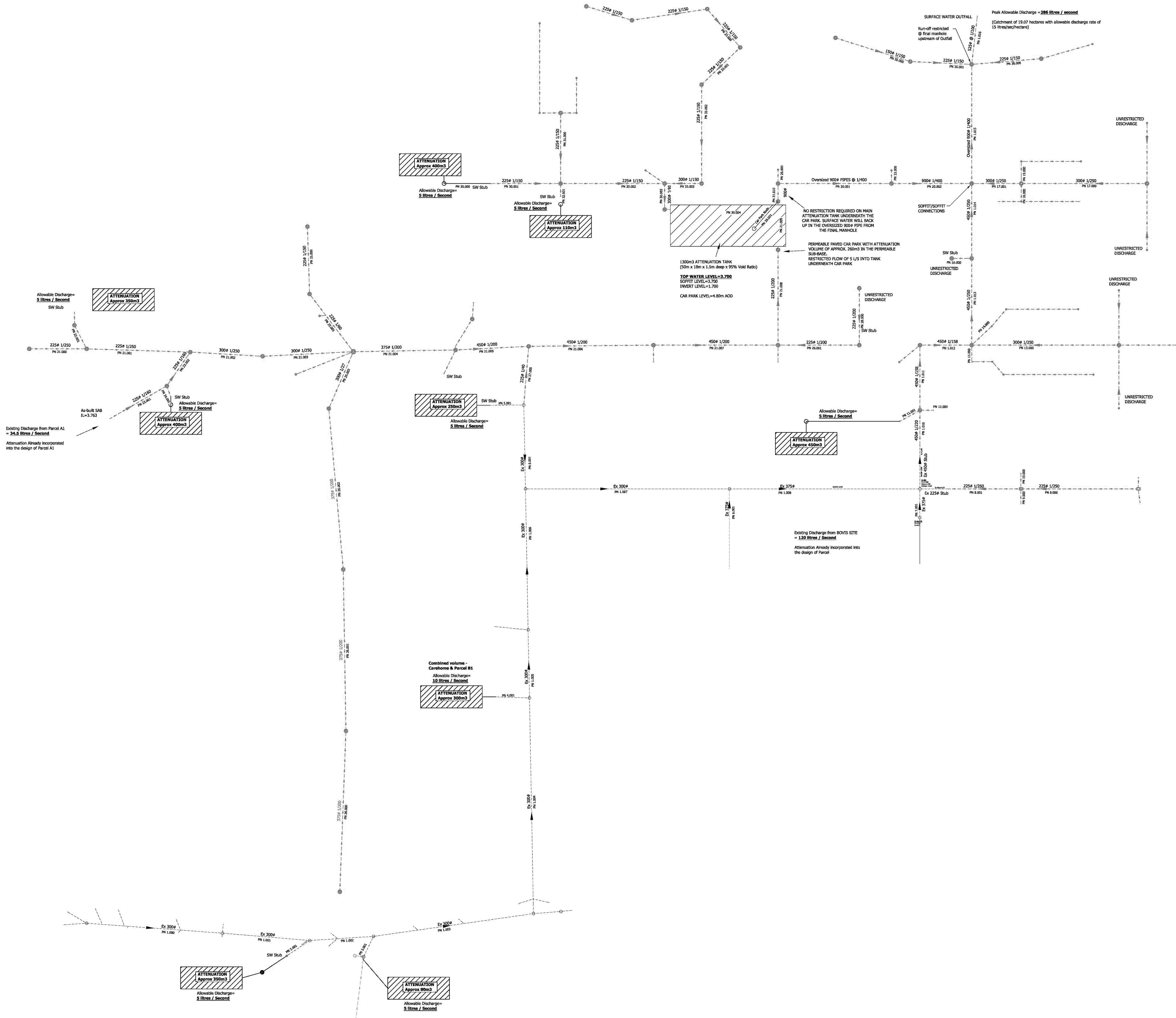




→ Direction of fall of road → overland flow route in case of system failure

APPENDIX H: Condition 10, Windes – Network Details



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Lion House Oriental Road Woking GU22 8AR	Littlehampton Overall Surface Network West of Wetlands									
Date January 2018	Designed by S Foley									
File West Catchment Model_...	Checked by									
XP Solutions	Network 2013.1									
Existing Network Details for Storm										
* - Indicates pipe has been modified outside of System 1										
	PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	k (mm)	HYD SECT	DIA (mm)	
	* 1.000	59.000	0.251	235.1	0.066	2.00	0.600	o	300	
	* 1.001	38.000	0.163	233.1	0.040	0.00	0.600	o	300	
	* 2.000	12.808	0.200	64.0	0.534	5.00	0.600	o	300	
	* 2.001	12.001	0.080	150.0	0.000	2.00	0.600	o	150	
	* 1.002	27.675	0.121	228.7	0.045	0.00	0.600	o	300	
	* 3.000	19.930	0.200	99.7	0.198	5.00	0.600	o	300	
	* 3.001	10.000	0.067	149.3	0.000	2.00	0.600	o	150	
	* 1.003	70.062	0.300	233.5	0.047	0.00	0.600	o	300	
	* 1.004	94.210	0.425	221.7	0.153	0.00	0.600	o	300	
	* 4.000	20.000	0.065	307.7	0.438	5.00	0.600	o	300	
	* 4.001	14.532	0.097	149.8	0.000	2.00	0.600	o	150	
	* 1.005	30.500	0.140	217.9	0.046	0.00	0.600	o	300	
	* 1.006	59.368	0.270	219.9	0.088	0.00	0.600	o	300	
	* 5.000	19.999	0.595	33.6	0.392	5.00	0.600	o	300	
	* 5.001	14.532	0.105	138.4	0.000	2.00	0.600	o	150	
	* 5.002	36.500	0.150	243.3	0.070	0.00	0.600	o	300	
	* 1.007	88.421	0.300	294.7	0.077	0.00	0.600	o	300	
	* 6.000	20.006	0.100	200.1	0.700	5.00	0.600	o	375	
	* 6.001	14.650	0.875	16.7	0.000	5.00	0.600	o	375	
	* 1.008	77.584	0.400	194.0	0.077	0.00	0.600	o	375	
	PN	US/MH Name	US/CL (m)	US/IL (m)	US C.Depth (m)	DS/CL (m)	DS/IL (m)	DS C.Depth (m)	Ctrl	US/MH (mm)
	* 1.000	TL_SW01	6.380	5.170	0.910	6.790	4.919	1.571		1050
	* 1.001	TL_SW02	6.790	4.919	1.571	6.800	4.756	1.744		1200
	* 2.000	Parcel A2_1	6.800	5.200	1.300	6.900	5.000	1.600		1200
	* 2.001	Parcel A2_2	6.900	5.000	1.750	6.800	4.920	1.730	Hydro-Brake®	1200
	* 1.002	TL_SW03	6.800	4.756	1.744	6.780	4.635	1.845		1200
	* 3.000	Parcel B6_1	6.900	5.000	1.600	6.900	4.800	1.800		1200
	* 3.001	Parcel B6_2	6.900	4.800	1.950	6.780	4.733	1.897	Hydro-Brake®	1200
	* 1.003	TL_SW04	6.780	4.635	1.845	6.380	4.335	1.745		1200
	* 1.004	TL_SW05	6.380	4.335	1.745	7.055	3.910	2.845		1200
	* 4.000	Parcel B1&CH_1	7.220	4.200	2.720	7.220	4.135	2.785		1200
	* 4.001	Parcel B1&CH 2	7.220	4.135	2.935	7.055	4.038	2.867	Hydro-Brake®	1200
	* 1.005	Ex. SB10	7.055	3.910	2.845	6.900	3.770	2.830		1200
	* 1.006	Ex. SB9	6.900	3.770	2.830	6.570	3.500	2.770		1200
	* 5.000	Block B_1	6.380	4.500	1.580	6.380	3.905	2.175		1200
	* 5.001	Block B_2	6.380	3.905	2.325	6.360	3.800	2.410	Hydro-Brake®	1200
	* 5.002	Ex. SB17	6.360	3.650	2.410	6.570	3.500	2.770		1200
	* 1.007	Ex. SB8	6.570	3.500	2.770	5.810	3.200	2.310		1350
	* 6.000	BovisA_1	5.600	4.100	1.125	5.600	4.000	1.225		1200
	* 6.001	BovisA_2	5.600	4.000	1.225	5.810	3.125	2.310	Hydro-Brake®	1200
	* 1.008	Ex SB7	5.810	3.125	2.310	4.700	2.725	1.600		1350
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Mayer Brown Ltd		Page 2								
Lion House Oriental Road Woking GU22 8AR	Littlehampton Overall Surface Network West of Wetlands									
Date January 2018 File West Catchment Model_...	Designed by S Foley Checked by									
XP Solutions	Network 2013.1									
Existing Network Details for Storm										
	PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	k (mm)	HYD SECT	DIA (mm)	
	* 7.000	20.000	0.175	114.3	0.700	5.00	0.600	o	375	
	* 7.001	13.401	0.425	31.5	0.000	5.00	0.600	o	375	
	* 1.009	4.916	0.025	196.6	0.000	0.00	0.600	o	450	
	* 8.000	24.849	0.200	124.2	0.054	5.00	0.600	o	150	
	* 8.001	43.097	0.210	205.2	0.060	2.00	0.600	o	225	
	* 9.000	33.343	0.297	112.3	0.053	5.00	0.600	o	150	
	* 9.001	6.800	0.038	178.9	0.053	2.00	0.600	o	225	
	* 10.000	6.800	0.100	68.0	0.146	2.00	0.600	o	225	
	* 8.002	43.824	0.130	337.1	0.029	0.00	0.600	o	225	
	* 1.010	34.073	0.155	219.8	0.000	0.00	0.600	o	450	
	* 11.000	40.643	0.100	406.4	0.567	5.00	0.600	o	300	
	* 11.001	9.903	0.130	76.2	0.000	2.00	0.600	o	150	
	* 12.000	6.000	0.103	58.3	0.064	2.00	0.600	o	225	
	* 1.011	28.223	0.180	156.8	0.042	0.00	0.600	o	450	
	* 1.012	22.432	0.140	160.2	0.038	0.00	0.600	o	450	
	* 13.000	63.816	0.260	245.4	0.275	2.00	0.600	o	300	
	* 14.000	12.624	0.250	50.5	0.089	2.00	0.600	o	225	
	* 15.000	7.200	0.250	28.8	0.102	2.00	0.600	o	225	
	PN	US/MH Name	US/CL (m)	US/IL (m)	US C.Depth (m)	DS/CL (m)	DS/IL (m)	DS C.Depth (m)	Ctrl	US/MH (mm)
	* 7.000	BovisB_1	4.650	3.400	0.875	4.650	3.225	1.050		1200
	* 7.001	BovisB_2	4.650	3.225	1.050	4.700	2.800	1.525	Hydro-Brake®	1200
	* 1.009	Dummy Node	4.700	2.725	1.525	4.700	2.700	1.550		1200
	* 8.000	Plots 123 - 126	4.050	3.320	0.580	3.850	3.120	0.580		450
	* 8.001	SW01, G01&G02	3.850	3.040	0.585	4.360	2.830	1.305		1200
	* 9.000	Plots 117 - 122	4.050	3.165	0.735	4.300	2.868	1.282		450
	* 9.001	Stub SW02/2	4.300	2.868	1.207	4.360	2.830	1.305		450
	* 10.000	Plots 101-116	4.300	3.000	1.075	4.360	2.900	1.235		450
	* 8.002	SW02	4.360	2.830	1.305	4.700	2.700	1.775		1200
	* 1.010	Ex SB6	4.700	2.625	1.625	4.600	2.470	1.680		1500
	* 11.000	Ret Block A	4.700	3.000	1.400	4.600	2.900	1.400		1200
	* 11.001	Ret Block A	4.600	2.900	1.550	4.600	2.770	1.680	Hydro-Brake®	1050
	* 12.000	Plots 95-100	4.600	3.000	1.375	4.600	2.897	1.478		450
	* 1.011	SW03	4.600	2.470	1.680	4.400	2.290	1.660		1500
	* 1.012	SW04	4.400	2.290	1.660	4.100	2.150	1.500		1500
	* 13.000	SW-FUT-01	4.000	2.560	1.140	4.100	2.300	1.500		1200
	* 14.000	Plots 80-86	3.800	2.550	1.025	4.100	2.300	1.575		450
	* 15.000	Plots 87-94	3.800	2.550	1.025	4.100	2.300	1.575		450
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Lion House Oriental Road Woking GU22 8AR	Littlehampton Overall Surface Network West of Wetlands									
Date January 2018 File West Catchment Model_...	Designed by S Foley Checked by									
XP Solutions	Network 2013.1									
Existing Network Details for Storm										
	PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	k (mm)	HYD SECT	DIA (mm)	
	*	1.013	37.575	0.160	234.8	0.038	0.00	0.600	o 450	
	*	16.000	8.659	0.221	39.2	0.143	2.00	0.600	o 225	
	*	1.014	32.449	0.130	249.6	0.036	0.00	0.600	o 450	
	*	17.000	54.502	0.220	247.7	0.186	2.00	0.600	o 300	
	*	18.000	7.800	0.150	52.0	0.061	2.00	0.600	o 225	
	*	19.000	9.600	0.150	64.0	0.071	2.00	0.600	o 225	
	*	17.001	21.498	0.090	238.9	0.011	0.00	0.600	o 300	
		20.000	6.005	0.785	7.6	0.080	5.00	0.600	o 225	
		21.000	24.867	0.100	248.7	0.056	2.00	0.600	o 225	
	*	22.000	39.317	0.280	140.4	0.567	5.00	0.600	o 450	
	*	22.001	13.808	0.080	172.6	0.000	5.00	0.600	o 225	
		21.001	44.896	0.215	208.8	0.045	0.00	0.600	o 225	
	*	23.000	39.613	0.237	167.1	0.600	5.00	0.600	o 450	
		23.001	28.513	0.193	147.7	0.000	5.00	0.600	o 225	
	*	24.000	34.498	0.360	95.8	0.637	5.00	0.600	o 450	
	*	24.001	5.111	0.070	73.0	0.000	5.00	0.600	o 225	
		23.002	16.877	0.145	116.4	0.000	5.00	0.600	o 225	
	PN	US/MH Name	US/CL (m)	US/IL (m)	US C.Depth (m)	DS/CL (m)	DS/IL (m)	DS C.Depth (m)	Ctrl	US/MH (mm)
	*	1.013	SW05	4.100	2.150	1.500	3.700	1.990	1.260	1500
	*	16.000	C2 Resiblock A	4.300	2.275	1.800	3.700	2.054	1.421	450
	*	1.014	SW06	3.700	1.990	1.260	3.710	1.860	1.400	1500
	*	17.000	SW-FUT-02	4.280	2.320	1.660	3.700	2.100	1.300	1200
	*	18.000	Plots 60-73	3.700	2.600	0.875	3.700	2.450	1.025	450
	*	19.000	Plots 74-78	3.700	2.600	0.875	3.700	2.450	1.025	450
	*	17.001	SW07	3.700	2.100	1.300	3.710	2.010	1.400	1200
		20.000	Plots 39-46	4.710	3.090	1.395	4.300	2.305	1.770	1200
		21.000	SW-LYM 01	5.040	3.740	1.075	5.500	3.640	1.635	1200
	*	22.000	Non resi	5.200	4.000	0.750	5.200	3.720	1.030	1200
	*	22.001	Non resi	5.200	3.720	1.255	5.500	3.640	1.635 Hydro-Brake®	1200
		21.001	SW-LYM 02	5.500	3.640	1.635	6.300	3.425	2.650	1200
	*	23.000	Parcel A1	7.000	4.000	2.550	6.000	3.763	1.787	1200
		23.001	As-built SA8	6.000	3.763	2.012	5.920	3.570	2.125 Hydro-Brake®	1200
	*	24.000	Non Resi	6.000	4.000	1.550	6.000	3.640	1.910	1200
	*	24.001	SW Stub 02	6.000	3.640	2.135	5.920	3.570	2.125 Hydro-Brake®	1200
		23.002	SW-LYM 03/1	5.920	3.570	2.125	6.300	3.425	2.650	1200
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Lion House Oriental Road Woking GU22 8AR			Littlehampton Overall Surface Network West of Wetlands							
Date January 2018			Designed by S Foley							
File West Catchment Model_...			Checked by							
XP Solutions			Network 2013.1							
Existing Network Details for Storm										
	PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	k (mm)	HYD SECT	DIA (mm)	
	21.002	25.768	0.125	206.1	0.045	0.00	0.600	o	225	
	21.003	43.680	0.160	273.0	0.033	0.00	0.600	o	300	
	25.000	25.335	0.200	126.7	0.057	2.00	0.600	o	225	
	25.001	34.164	0.530	64.5	0.102	0.00	0.600	o	225	
	26.000	69.723	1.800	38.7	0.108	2.00	0.600	o	225	
	26.001	70.010	3.200	21.9	0.108	0.00	0.600	o	225	
	26.002	64.700	1.580	40.9	0.108	0.00	0.600	o	225	
	26.003	30.927	1.000	30.9	0.023	0.00	0.600	o	300	
	21.004	45.590	0.230	198.2	0.038	0.00	0.600	o	375	
	21.005	38.840	0.160	242.7	0.231	0.00	0.600	o	450	
	* 27.000	26.634	0.540	49.3	0.000	5.00	0.600	o	225	
	21.006	37.201	0.280	132.9	0.040	0.00	0.600	o	450	
	* 21.007	63.944	0.270	236.8	0.040	0.00	0.600	o	450	
	* 28.000	24.684	0.120	205.7	0.161	5.00	0.600	o	225	
	* 28.001	35.227	0.180	195.7	0.043	5.00	0.600	o	225	
	* 21.008	19.302	0.170	113.5	0.043	0.00	0.600	o	450	
	* 21.009	42.970	0.140	306.9	0.000	0.00	0.600	o	525	
	29.000	7.262	0.100	72.6	0.343	5.00	0.600	o	450	
	* 29.001	27.748	1.690	16.4	0.000	5.00	0.600	o	150	
	* 30.000	20.005	0.100	200.1	0.630	5.00	0.600	o	450	
	* 30.001	30.526	0.200	152.6	0.000	0.00	0.600	o	225	
	PN	US/MH Name	US/CL (m)	US/IL (m)	US C.Depth (m)	DS/CL (m)	DS/IL (m)	DS C.Depth (m)	Ctrl	US/MH (mm)
	21.002	SW-LYM 03	6.300	3.350	2.725	6.640	3.225	3.190		1200
	21.003	SW-LYM 04	6.640	3.225	3.115	6.640	3.065	3.275		1200
	25.000	SW-LYM 07	5.370	3.870	1.275	6.140	3.670	2.245		1200
	25.001	SW-LYM 08	6.140	3.670	2.245	6.640	3.140	3.275		1200
	26.000	PBA 01	13.700	12.200	1.275	11.900	10.400	1.275		1200
	26.001	PBA 02	11.900	10.400	1.275	8.700	7.200	1.275		1200
	26.002	PBA 03	8.700	7.200	1.275	7.200	5.620	1.355		1200
	26.003	SW-LYM 05	7.200	5.540	1.360	6.640	4.540	1.800		1200
	21.004	SW-LYM 10	6.640	2.990	3.275	5.900	2.760	2.765		1500
	21.005	SW-LYM11	5.900	2.680	2.770	6.380	2.520	3.410		1350
	* 27.000	ExSB17_Dum Node	6.360	3.700	2.435	6.380	3.160	2.995		1200
	21.006	SW-LYM 12	6.380	2.520	3.410	6.260	2.240	3.570		1350
	* 21.007	SW-FUT-03	6.260	2.240	3.570	5.100	1.970	2.680		1350
	* 28.000	Stub SW18/1	4.300	2.500	1.575	4.680	2.380	2.075		1200
	* 28.001	SW18	4.680	2.380	2.075	5.100	2.200	2.675		1200
	* 21.008	SW19	5.100	1.970	2.680	5.000	1.800	2.750		1350
	* 21.009	SW20	5.000	1.800	2.675	5.000	1.660	2.815		1800
	29.000	Car Park	5.000	3.500	1.050	5.000	3.400	1.150		1200
	* 29.001	Car Park	5.000	3.400	1.450	5.000	1.710	3.140	Hydro-Brake®	1200
	* 30.000	Non Resi	5.300	2.700	2.150	5.300	2.600	2.250		1200
	* 30.001	Stub SW9/1	5.300	2.600	2.475	5.000	2.400	2.375	Hydro-Brake®	1200
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Lion House Oriental Road Woking GU22 8AR			Littlehampton Overall Surface Network West of Wetlands							
Date January 2018 File West Catchment Model_...			Designed by S Foley Checked by							
XP Solutions			Network 2013.1							
Existing Network Details for Storm										
	PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	k (mm)	HYD SECT	DIA (mm)	
	* 31.000	30.576	1.150	26.6	0.096	5.00	0.600	o	225	
	* 32.000	22.482	0.200	112.4	0.224	5.00	0.600	o	450	
	* 32.001	5.638	0.100	56.4	0.000	5.00	0.600	o	225	
	* 30.002	45.139	0.300	150.5	0.084	0.00	0.600	o	225	
	* 33.000	21.924	0.110	199.3	0.071	5.00	0.600	o	225	
	* 33.001	23.225	0.160	145.2	0.071	5.00	0.600	o	225	
	* 33.002	42.860	0.290	147.8	0.071	5.00	0.600	o	225	
	* 33.003	16.004	0.130	123.1	0.071	5.00	0.600	o	300	
	* 30.003	7.752	0.300	25.8	0.068	0.00	0.600	o	300	
	* 30.004	49.146	0.140	351.0	0.000	0.00	0.600	o	450	
	* 21.010	7.734	0.030	257.8	0.000	0.00	0.600	o	900	
	* 20.001	49.171	0.135	364.2	0.064	0.00	0.600	o	900	
	34.000	5.695	0.100	57.0	0.080	5.00	0.600	o	225	
	* 20.002	34.760	0.085	408.9	0.020	0.00	0.600	o	900	
	* 1.015	51.616	0.130	397.0	0.064	0.00	0.600	o	900	
	* 35.000	34.385	0.230	149.5	0.055	5.00	0.600	o	225	
	* 35.001	26.630	0.180	147.9	0.055	0.00	0.600	o	225	
	* 36.000	30.249	0.200	151.2	0.094	2.00	0.600	o	225	
	PN	US/MH Name	US/CL (m)	US/IL (m)	US C.Depth (m)	DS/CL (m)	DS/IL (m)	DS C.Depth (m)	Ctrl	US/MH (mm)
	* 31.000	SW08	5.100	3.550	1.325	5.000	2.400	2.375		1200
	* 32.000	Non Resi	5.100	2.700	1.950	5.100	2.500	2.150		1200
	* 32.001	Stub SW9/2	5.100	2.500	2.375	5.000	2.400	2.375	Hydro-Brake®	1200
	* 30.002	SW09	5.000	2.400	2.375	4.640	2.100	2.315		1200
	* 33.000	SW12	4.320	2.790	1.305	4.020	2.680	1.115		1200
	* 33.001	SW13	4.020	2.680	1.115	4.020	2.520	1.275		1200
	* 33.002	SW14	4.020	2.520	1.275	4.600	2.230	2.145		1200
	* 33.003	SW15	4.600	2.230	2.070	4.640	2.100	2.240		1200
	* 30.003	SW16	4.640	2.100	2.240	5.000	1.800	2.900		1200
	* 30.004	SW17	5.000	1.800	2.750	5.000	1.660	2.890		1200
	* 21.010	SW21	5.000	1.660	2.440	4.300	1.630	1.770		1800
	* 20.001	SW22	4.300	1.630	1.770	3.900	1.495	1.505		1800
	34.000	Plots 47-55	4.100	2.600	1.275	3.900	2.500	1.175		1200
	* 20.002	SW23	3.900	1.495	1.505	3.710	1.410	1.400		1800
	* 1.015	SW24	3.710	1.410	1.400	3.600	1.280	1.420		1800
	* 35.000	Plots	3.700	2.370	1.105	3.700	2.140	1.335		1200
	* 35.001	Stub SW25/1	3.700	2.140	1.335	3.600	1.960	1.415		1200
	* 36.000	Stub SW25/2	3.600	2.160	1.215	3.600	1.960	1.415		1200
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File West Catchment Model_...				Checked by									
XP Solutions				Network 2013.1									
Existing Network Details for Storm													
PN Length Fall Slope I.Area T.E. k HYD DIA													
(m) (m) (1:X) (ha) (mins) (mm) SECT (mm)													
* 1.016 21.220 0.200 106.1 0.030 0.00 0.600 o 525													
PN	US/MH	US/CL	US/IL	US	DS/CL	DS/IL	DS		Ctrl	US/MH			
	Name	(m)	(m)	C.Depth	(m)	(m)	C.Depth			(mm)			
				(m)			(m)						
* 1.016 SW25 3.600 1.200 1.875 1.750 1.000 0.225 Hydro-Brake® 1800													
Surcharged Outfall Details for Storm													
Outfall Outfall C. Level I. Level Min D,L W													
Pipe Number Name (m) (m) I. Level (m) (mm) (mm)													
1.016 Outfall B 1.750 1.000 1.000 0 0													
Datum (m) 0.000 Offset (mins) 0													
Time	Depth	Time	Depth	Time	Depth	Time	Depth	Time	Depth	Time	Depth	Time	Depth
(mins)	(m)	(mins)	(m)	(mins)	(m)	(mins)	(m)	(mins)	(m)	(mins)	(m)	(mins)	(m)
1	0.000	44	0.000	87	0.000	130	0.000	173	0.000	216	0.000	259	0.000
2	0.000	45	0.000	88	0.000	131	0.000	174	0.000	217	0.000	260	0.000
3	0.000	46	0.000	89	0.000	132	0.000	175	0.000	218	0.000	261	0.000
4	0.000	47	0.000	90	0.000	133	0.000	176	0.000	219	0.000	262	0.000
5	0.000	48	0.000	91	0.000	134	0.000	177	0.000	220	0.000	263	0.000
6	0.000	49	0.000	92	0.000	135	0.000	178	0.000	221	0.000	264	0.000
7	0.000	50	0.000	93	0.000	136	0.000	179	0.000	222	0.000	265	0.000
8	0.000	51	0.000	94	0.000	137	0.000	180	0.000	223	0.000	266	0.000
9	0.000	52	0.000	95	0.000	138	0.000	181	0.000	224	0.000	267	0.000
10	0.000	53	0.000	96	0.000	139	0.000	182	0.000	225	0.000	268	0.000
11	0.000	54	0.000	97	0.000	140	0.000	183	0.000	226	0.000	269	0.000
12	0.000	55	0.000	98	0.000	141	0.000	184	0.000	227	0.000	270	0.000
13	0.000	56	0.000	99	0.000	142	0.000	185	0.000	228	0.000	271	0.000
14	0.000	57	0.000	100	0.000	143	0.000	186	0.000	229	0.000	272	0.000
15	0.000	58	0.000	101	0.000	144	0.000	187	0.000	230	0.000	273	0.000
16	0.000	59	0.000	102	0.000	145	0.000	188	0.000	231	0.000	274	0.000
17	0.000	60	0.000	103	0.000	146	0.000	189	0.000	232	0.000	275	0.000
18	0.000	61	0.000	104	0.000	147	0.000	190	0.000	233	0.000	276	0.000
19	0.000	62	0.000	105	0.000	148	0.000	191	0.000	234	0.000	277	0.000
20	0.000	63	0.000	106	0.000	149	0.000	192	0.000	235	0.000	278	0.000
21	0.000	64	0.000	107	0.000	150	0.000	193	0.000	236	0.000	279	0.000
22	0.000	65	0.000	108	0.000	151	0.000	194	0.000	237	0.000	280	0.000
23	0.000	66	0.000	109	0.000	152	0.000	195	0.000	238	0.000	281	0.000
24	0.000	67	0.000	110	0.000	153	0.000	196	0.000	239	0.000	282	0.000
25	0.000	68	0.000	111	0.000	154	0.000	197	0.000	240	0.000	283	0.000
26	0.000	69	0.000	112	0.000	155	0.000	198	0.000	241	0.000	284	0.000
27	0.000	70	0.000	113	0.000	156	0.000	199	0.000	242	0.000	285	0.000
28	0.000	71	0.000	114	0.000	157	0.000	200	0.000	243	0.000	286	0.000
29	0.000	72	0.000	115	0.000	158	0.000	201	0.000	244	0.000	287	0.000
30	0.000	73	0.000	116	0.000	159	0.000	202	0.000	245	0.000	288	0.000
31	0.000	74	0.000	117	0.000	160	0.000	203	0.000	246	0.000	289	0.000
32	0.000	75	0.000	118	0.000	161	0.000	204	0.000	247	0.000	290	0.000
33	0.000	76	0.000	119	0.000	162	0.000	205	0.000	248	0.000	291	0.000
34	0.000	77	0.000	120	0.000	163	0.000	206	0.000	249	0.000	292	0.000
35	0.000	78	0.000	121	0.000	164	0.000	207	0.000	250	0.000	293	0.000
36	0.000	79	0.000	122	0.000	165	0.000	208	0.000	251	0.000	294	0.000
37	0.000	80	0.000	123	0.000	166	0.000	209	0.000	252	0.000	295	0.000
38	0.000	81	0.000	124	0.000	167	0.000	210	0.000	253	0.000	296	0.000
39	0.000	82	0.000	125	0.000	168	0.000	211	0.000	254	0.000	297	0.000
40	0.000	83	0.000	126	0.000	169	0.000	212	0.000	255	0.000	298	0.000
41	0.000	84	0.000	127	0.000	170	0.000	213	0.000	256	0.000	299	0.000
42	0.000	85	0.000	128	0.000	171	0.000	214	0.000	257	0.000	300	0.000
43	0.000	86	0.000	129	0.000	172	0.000	215	0.000	258	0.000	301	0.000
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<u>Online Controls for Storm</u>									
<u>Hydro-Brake® Manhole: Parcel A2_2, DS/PN: 2.001, Volume (m³): 3.0</u>									
Design Head (m) 1.200 Hydro-Brake® Type Md4 Invert Level (m) 5.000									
Design Flow (l/s) 5.0 Diameter (mm) 76									
Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	2.3	0.800	4.0	2.000	6.4	4.000	9.0	7.000	11.9
0.200	3.0	1.000	4.5	2.200	6.7	4.500	9.5	7.500	12.3
0.300	2.6	1.200	4.9	2.400	7.0	5.000	10.1	8.000	12.7
0.400	2.9	1.400	5.3	2.600	7.3	5.500	10.6	8.500	13.1
0.500	3.2	1.600	5.7	3.000	7.8	6.000	11.0	9.000	13.5
0.600	3.5	1.800	6.0	3.500	8.4	6.500	11.5	9.500	13.9
<u>Hydro-Brake® Manhole: Parcel B6_2, DS/PN: 3.001, Volume (m³): 3.7</u>									
Design Head (m) 0.800 Hydro-Brake® Type Md4 Invert Level (m) 4.800									
Design Flow (l/s) 5.0 Diameter (mm) 84									
Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	2.6	0.800	4.9	2.000	7.8	4.000	11.0	7.000	14.5
0.200	4.0	1.000	5.5	2.200	8.2	4.500	11.7	7.500	15.1
0.300	3.4	1.200	6.0	2.400	8.5	5.000	12.3	8.000	15.6
0.400	3.5	1.400	6.5	2.600	8.9	5.500	12.9	8.500	16.0
0.500	3.9	1.600	7.0	3.000	9.5	6.000	13.5	9.000	16.5
0.600	4.3	1.800	7.4	3.500	10.3	6.500	14.0	9.500	16.9
<u>Hydro-Brake® Manhole: Parcel B1&CH 2, DS/PN: 4.001, Volume (m³): 4.8</u>									
Design Head (m) 1.000 Hydro-Brake® Type Md4 Invert Level (m) 4.135									
Design Flow (l/s) 10.0 Diameter (mm) 113									
Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	3.3	0.800	8.9	2.000	14.1	4.000	19.9	7.000	26.3
0.200	8.2	1.000	10.0	2.200	14.8	4.500	21.1	7.500	27.3
0.300	8.0	1.200	10.9	2.400	15.4	5.000	22.2	8.000	28.1
0.400	7.1	1.400	11.8	2.600	16.0	5.500	23.3	8.500	29.0
0.500	7.2	1.600	12.6	3.000	17.2	6.000	24.4	9.000	29.9
0.600	7.8	1.800	13.3	3.500	18.6	6.500	25.4	9.500	30.7
<u>Hydro-Brake® Manhole: Block B_2, DS/PN: 5.001, Volume (m³): 4.1</u>									
Design Head (m) 1.000 Hydro-Brake® Type Md4 Invert Level (m) 3.905									
Design Flow (l/s) 5.0 Diameter (mm) 80									
Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	2.4	0.800	4.5	2.000	7.1	4.000	10.0	7.000	13.2
0.200	3.5	1.000	5.0	2.200	7.4	4.500	10.6	7.500	13.7
0.300	3.0	1.200	5.5	2.400	7.7	5.000	11.2	8.000	14.1
0.400	3.2	1.400	5.9	2.600	8.0	5.500	11.7	8.500	14.5
0.500	3.5	1.600	6.3	3.000	8.6	6.000	12.2	9.000	15.0
0.600	3.9	1.800	6.7	3.500	9.3	6.500	12.7	9.500	15.4
<u>Hydro-Brake® Manhole: BovisA_2, DS/PN: 6.001, Volume (m³): 3.9</u>									
Design Head (m) 1.200 Hydro-Brake® Type Md5 SW Only Invert Level (m) 4.000									
Design Flow (l/s) 60.0 Diameter (mm) 293									
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<u>Hydro-Brake® Manhole: BovisA_2, DS/PN: 6.001, Volume (m³): 3.9</u>									
Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	10.6	0.800	57.7	2.000	73.3	4.000	103.3	7.000	136.7
0.200	27.7	1.000	57.8	2.200	76.7	4.500	109.6	7.500	141.5
0.300	43.3	1.200	59.7	2.400	80.1	5.000	115.5	8.000	146.1
0.400	52.6	1.400	62.7	2.600	83.3	5.500	121.2	8.500	150.6
0.500	56.9	1.600	66.1	3.000	89.5	6.000	126.6	9.000	155.0
0.600	58.3	1.800	69.7	3.500	96.7	6.500	131.7	9.500	159.3
<u>Hydro-Brake® Manhole: BovisB_2, DS/PN: 7.001, Volume (m³): 3.7</u>									
Design Head (m)		1.200	Hydro-Brake® Type		Md5 SW Only	Invert Level (m)		3.225	
Design Flow (l/s)		60.0	Diameter (mm)		293				
Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	10.6	0.800	57.7	2.000	73.3	4.000	103.3	7.000	136.7
0.200	27.7	1.000	57.8	2.200	76.7	4.500	109.6	7.500	141.5
0.300	43.3	1.200	59.7	2.400	80.1	5.000	115.5	8.000	146.1
0.400	52.6	1.400	62.7	2.600	83.3	5.500	121.2	8.500	150.6
0.500	56.9	1.600	66.1	3.000	89.5	6.000	126.6	9.000	155.0
0.600	58.3	1.800	69.7	3.500	96.7	6.500	131.7	9.500	159.3
<u>Hydro-Brake® Manhole: Ret Block A, DS/PN: 11.001, Volume (m³): 4.3</u>									
Design Head (m)		1.000	Hydro-Brake® Type		Md4	Invert Level (m)		2.900	
Design Flow (l/s)		5.0	Diameter (mm)		80				
Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	2.4	0.800	4.5	2.000	7.1	4.000	10.0	7.000	13.2
0.200	3.5	1.000	5.0	2.200	7.4	4.500	10.6	7.500	13.7
0.300	3.0	1.200	5.5	2.400	7.7	5.000	11.2	8.000	14.1
0.400	3.2	1.400	5.9	2.600	8.0	5.500	11.7	8.500	14.5
0.500	3.5	1.600	6.3	3.000	8.6	6.000	12.2	9.000	15.0
0.600	3.9	1.800	6.7	3.500	9.3	6.500	12.7	9.500	15.4
<u>Hydro-Brake® Manhole: Non resi, DS/PN: 22.001, Volume (m³): 7.7</u>									
Design Head (m)		1.000	Hydro-Brake® Type		Md4	Invert Level (m)		3.720	
Design Flow (l/s)		5.0	Diameter (mm)		80				
Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	2.4	0.800	4.5	2.000	7.1	4.000	10.0	7.000	13.2
0.200	3.5	1.000	5.0	2.200	7.4	4.500	10.6	7.500	13.7
0.300	3.0	1.200	5.5	2.400	7.7	5.000	11.2	8.000	14.1
0.400	3.2	1.400	5.9	2.600	8.0	5.500	11.7	8.500	14.5
0.500	3.5	1.600	6.3	3.000	8.6	6.000	12.2	9.000	15.0
0.600	3.9	1.800	6.7	3.500	9.3	6.500	12.7	9.500	15.4
<u>Hydro-Brake® Manhole: As-built SA8, DS/PN: 23.001, Volume (m³): 8.6</u>									
Design Head (m)		2.000	Hydro-Brake® Type		Md4	Invert Level (m)		3.763	
Design Flow (l/s)		34.5	Diameter (mm)		176				
Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	4.2	0.800	22.1	2.000	34.1	4.000	48.3	7.000	63.9
0.200	15.1	1.000	24.2	2.200	35.8	4.500	51.2	7.500	66.1
0.300	24.2	1.200	26.5	2.400	37.4	5.000	54.0	8.000	68.3
0.400	25.7	1.400	28.6	2.600	38.9	5.500	56.6	8.500	70.4
0.500	23.3	1.600	30.5	3.000	41.8	6.000	59.1	9.000	72.4
0.600	21.6	1.800	32.4	3.500	45.2	6.500	61.5	9.500	74.4
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Hydro-Brake® Manhole: SW Stub 02, DS/PN: 24.001, Volume (m³): 8.0									
Design Head (m) 1.000 Hydro-Brake® Type Md4 Invert Level (m) 3.640									
Design Flow (l/s) 5.0 Diameter (mm) 80									
Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	2.4	0.800	4.5	2.000	7.1	4.000	10.0	7.000	13.2
0.200	3.5	1.000	5.0	2.200	7.4	4.500	10.6	7.500	13.7
0.300	3.0	1.200	5.5	2.400	7.7	5.000	11.2	8.000	14.1
0.400	3.2	1.400	5.9	2.600	8.0	5.500	11.7	8.500	14.5
0.500	3.5	1.600	6.3	3.000	8.6	6.000	12.2	9.000	15.0
0.600	3.9	1.800	6.7	3.500	9.3	6.500	12.7	9.500	15.4
Hydro-Brake® Manhole: Car Park, DS/PN: 29.001, Volume (m³): 2.8									
Design Head (m) 1.500 Hydro-Brake® Type Md4 Invert Level (m) 3.400									
Design Flow (l/s) 5.0 Diameter (mm) 72									
Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	2.1	0.800	3.6	2.000	5.7	4.000	8.1	7.000	10.7
0.200	2.5	1.000	4.0	2.200	6.0	4.500	8.6	7.500	11.1
0.300	2.3	1.200	4.4	2.400	6.3	5.000	9.0	8.000	11.4
0.400	2.6	1.400	4.8	2.600	6.5	5.500	9.5	8.500	11.8
0.500	2.9	1.600	5.1	3.000	7.0	6.000	9.9	9.000	12.1
0.600	3.1	1.800	5.4	3.500	7.6	6.500	10.3	9.500	12.5
Hydro-Brake® Manhole: Stub SW9/1, DS/PN: 30.001, Volume (m³): 6.0									
Design Head (m) 1.000 Hydro-Brake® Type Md4 Invert Level (m) 2.600									
Design Flow (l/s) 5.0 Diameter (mm) 80									
Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	2.4	0.800	4.5	2.000	7.1	4.000	10.0	7.000	13.2
0.200	3.5	1.000	5.0	2.200	7.4	4.500	10.6	7.500	13.7
0.300	3.0	1.200	5.5	2.400	7.7	5.000	11.2	8.000	14.1
0.400	3.2	1.400	5.9	2.600	8.0	5.500	11.7	8.500	14.5
0.500	3.5	1.600	6.3	3.000	8.6	6.000	12.2	9.000	15.0
0.600	3.9	1.800	6.7	3.500	9.3	6.500	12.7	9.500	15.4
Hydro-Brake® Manhole: Stub SW9/2, DS/PN: 32.001, Volume (m³): 6.3									
Design Head (m) 1.000 Hydro-Brake® Type Md4 Invert Level (m) 2.500									
Design Flow (l/s) 5.0 Diameter (mm) 80									
Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	2.4	0.800	4.5	2.000	7.1	4.000	10.0	7.000	13.2
0.200	3.5	1.000	5.0	2.200	7.4	4.500	10.6	7.500	13.7
0.300	3.0	1.200	5.5	2.400	7.7	5.000	11.2	8.000	14.1
0.400	3.2	1.400	5.9	2.600	8.0	5.500	11.7	8.500	14.5
0.500	3.5	1.600	6.3	3.000	8.6	6.000	12.2	9.000	15.0
0.600	3.9	1.800	6.7	3.500	9.3	6.500	12.7	9.500	15.4
Hydro-Brake® Manhole: SW25, DS/PN: 1.016, Volume (m³): 39.9									
Design Head (m) 2.000 Hydro-Brake® Type Md10 Invert Level (m) 1.200									
Design Flow (l/s) 280.0 Diameter (mm) 376									
Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	13.7	0.500	107.9	1.200	216.0	2.000	278.9	3.000	341.6
0.200	34.9	0.600	131.0	1.400	233.4	2.200	292.5	3.500	369.0
0.300	58.8	0.800	170.5	1.600	249.5	2.400	305.5	4.000	394.4
0.400	83.5	1.000	197.2	1.800	264.6	2.600	318.0	4.500	418.4
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Lion House		Littlehampton							
Oriental Road		Overall Surface Network							
Woking GU22 8AR		West of Wetlands							
Date January 2018		Designed by S Foley							
File West Catchment Model_...		Checked by							
XP Solutions		Network 2013.1							
<u>Hydro-Brake® Manhole: SW25, DS/PN: 1.016, Volume (m³): 39.9</u>									
Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
5.000	441.0	6.000	483.1	7.000	521.8	8.000	557.8	9.000	591.7
5.500	462.5	6.500	502.8	7.500	540.1	8.500	575.0	9.500	607.9

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Lion House Oriental Road Woking GU22 8AR		Littlehampton Overall Surface Network West of Wetlands						
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File West Catchment Model_...		Checked by						
XP Solutions		Network 2013.1						
<u>Storage Structures for Storm</u>								
<u>Cellular Storage Manhole: Parcel A2_1, DS/PN: 2.000</u>								
Invert Level (m) 5.200 Safety Factor 2.0 Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95 Infiltration Coefficient Side (m/hr) 0.00000								
Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	402.1	349.7	1.000	402.2	424.5	1.100	0.0	424.5
<u>Cellular Storage Manhole: Parcel B6_1, DS/PN: 3.000</u>								
Invert Level (m) 5.000 Safety Factor 2.0 Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95 Infiltration Coefficient Side (m/hr) 0.00000								
Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	92.0	80.0	1.000	92.0	128.0	1.100	0.0	128.0
<u>Cellular Storage Manhole: Parcel B1&CH_1, DS/PN: 4.000</u>								
Invert Level (m) 4.200 Safety Factor 2.0 Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95 Infiltration Coefficient Side (m/hr) 0.00000								
Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	345.0	300.0	1.000	345.0	380.0	1.100	0.0	380.0
<u>Cellular Storage Manhole: Block B_1, DS/PN: 5.000</u>								
Invert Level (m) 4.500 Safety Factor 2.0 Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95 Infiltration Coefficient Side (m/hr) 0.00000								
Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	310.5	270.0	1.000	310.5	344.0	1.100	0.0	344.0
<u>Cellular Storage Manhole: BovisA_1, DS/PN: 6.000</u>								
Invert Level (m) 4.100 Safety Factor 2.0 Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95 Infiltration Coefficient Side (m/hr) 0.00000								
Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	258.8	225.0	1.200	258.8	297.0	1.300	0.0	297.0
<u>Cellular Storage Manhole: BovisB_1, DS/PN: 7.000</u>								
Invert Level (m) 3.400 Safety Factor 2.0 Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95 Infiltration Coefficient Side (m/hr) 0.00000								
Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	258.8	225.0	1.200	258.8	297.0	1.300	0.0	297.0
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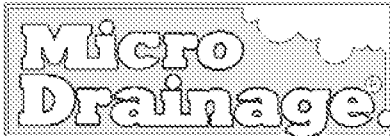
Mayer Brown Ltd		Page 14																																																																																										
Lion House Oriental Road Woking GU22 8AR	Littlehampton Overall Surface Network West of Wetlands																																																																																											
Date January 2018 File West Catchment Model_...	Designed by S Foley Checked by																																																																																											
XP Solutions	Network 2013.1																																																																																											
<u>Cellular Storage Manhole: Ret Block A, DS/PN: 11.000</u> Invert Level (m) 3.000 Safety Factor 2.0 Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95 Infiltration Coefficient Side (m/hr) 0.00000 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Inf. Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Inf. Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Inf. Area (m²)</th></tr><tr><td>0.000</td><td>517.5</td><td>450.0</td><td>1.000</td><td>517.5</td><td>560.0</td><td>1.100</td><td>0.0</td><td>560.0</td></tr></table> <u>Cellular Storage Manhole: Non resi, DS/PN: 22.000</u> Invert Level (m) 4.000 Safety Factor 2.0 Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95 Infiltration Coefficient Side (m/hr) 0.00000 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Inf. Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Inf. Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Inf. Area (m²)</th></tr><tr><td>0.000</td><td>414.0</td><td>360.0</td><td>1.000</td><td>414.0</td><td>452.0</td><td>1.100</td><td>0.0</td><td>452.0</td></tr></table> <u>Cellular Storage Manhole: Parcel A1, DS/PN: 23.000</u> Invert Level (m) 4.000 Safety Factor 2.0 Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95 Infiltration Coefficient Side (m/hr) 0.00000 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Inf. Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Inf. Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Inf. Area (m²)</th></tr><tr><td>0.000</td><td>575.0</td><td>500.0</td><td>1.000</td><td>575.0</td><td>590.0</td><td>1.100</td><td>0.0</td><td>590.0</td></tr></table> <u>Cellular Storage Manhole: Non Resi, DS/PN: 24.000</u> Invert Level (m) 4.000 Safety Factor 2.0 Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95 Infiltration Coefficient Side (m/hr) 0.00000 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Inf. Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Inf. Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Inf. Area (m²)</th></tr><tr><td>0.000</td><td>506.0</td><td>400.0</td><td>1.000</td><td>506.0</td><td>500.0</td><td>1.100</td><td>0.0</td><td>500.0</td></tr></table> <u>Porous Car Park Manhole: Car Park, DS/PN: 29.000</u> Infiltration Coefficient Base (m/hr) 0.00000 Width (m) 50.0 Membrane Percolation (mm/hr) 1000 Length (m) 50.0 Max Percolation (l/s) 694.4 Slope (1:X) 0.0 Safety Factor 2.0 Depression Storage (mm) 5 Porosity 0.30 Evaporation (mm/day) 3 Invert Level (m) 4.500 Cap Volume Depth (m) 0.000 <u>Cellular Storage Manhole: Non Resi, DS/PN: 30.000</u> Invert Level (m) 2.700 Safety Factor 2.0 Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95 Infiltration Coefficient Side (m/hr) 0.00000 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Inf. Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Inf. Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Inf. Area (m²)</th></tr><tr><td>0.000</td><td>506.0</td><td>400.0</td><td>1.000</td><td>506.0</td><td>500.0</td><td>1.100</td><td>0.0</td><td>500.0</td></tr></table> <u>Cellular Storage Manhole: Non Resi, DS/PN: 32.000</u> Invert Level (m) 2.700 Safety Factor 2.0 Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95 Infiltration Coefficient Side (m/hr) 0.00000			Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	0.000	517.5	450.0	1.000	517.5	560.0	1.100	0.0	560.0	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	0.000	414.0	360.0	1.000	414.0	452.0	1.100	0.0	452.0	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	0.000	575.0	500.0	1.000	575.0	590.0	1.100	0.0	590.0	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	0.000	506.0	400.0	1.000	506.0	500.0	1.100	0.0	500.0	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	0.000	506.0	400.0	1.000	506.0	500.0	1.100	0.0	500.0
Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)																																																																																				
0.000	517.5	450.0	1.000	517.5	560.0	1.100	0.0	560.0																																																																																				
Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)																																																																																				
0.000	414.0	360.0	1.000	414.0	452.0	1.100	0.0	452.0																																																																																				
Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)																																																																																				
0.000	575.0	500.0	1.000	575.0	590.0	1.100	0.0	590.0																																																																																				
Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)																																																																																				
0.000	506.0	400.0	1.000	506.0	500.0	1.100	0.0	500.0																																																																																				
Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)																																																																																				
0.000	506.0	400.0	1.000	506.0	500.0	1.100	0.0	500.0																																																																																				
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Lion House Oriental Road Woking GU22 8AR		Littlehampton Overall Surface Network West of Wetlands																																							
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File West Catchment Model_...		Checked by																																							
XP Solutions		Network 2013.1																																							
Cellular Storage Manhole: Non Resi, DS/PN: 32.000 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Inf. Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Inf. Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Inf. Area (m²)</th></tr><tr><td>0.000</td><td>126.5</td><td>110.0</td><td>1.000</td><td>126.5</td><td>152.0</td><td>1.100</td><td>0.0</td><td>152.0</td></tr></table> Cellular Storage Manhole: SW21, DS/PN: 21.010 Invert Level (m) 1.710 Safety Factor 2.0 Infiltration Coefficient Base (m/hr) 0.00000 Porosity 0.95 Infiltration Coefficient Side (m/hr) 0.00000 <table><tr><th>Depth (m)</th><th>Area (m²)</th><th>Inf. Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Inf. Area (m²)</th><th>Depth (m)</th><th>Area (m²)</th><th>Inf. Area (m²)</th></tr><tr><td>0.000</td><td>1050.0</td><td>1050.0</td><td>1.500</td><td>1050.0</td><td>1263.0</td><td>1.600</td><td>0.0</td><td>1263.0</td></tr></table>						Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	0.000	126.5	110.0	1.000	126.5	152.0	1.100	0.0	152.0	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	0.000	1050.0	1050.0	1.500	1050.0	1263.0	1.600	0.0	1263.0
Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)																																	
0.000	126.5	110.0	1.000	126.5	152.0	1.100	0.0	152.0																																	
Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)																																	
0.000	1050.0	1050.0	1.500	1050.0	1263.0	1.600	0.0	1263.0																																	
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APPENDIX I: Condition 10, Windes -- 1in100yr Simulation Results

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Lion House		Littlehampton						
Oriental Road		Overall Surface Network						
Woking GU22 8AR		West of Wetlands						
Date January 2018		Designed by S Foley						
File West Catchment Model_...		Checked by						
XP Solutions		Network 2013.1						
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 Offline Controls		2			
Number of Online Controls		14	Number of Storage Structures		14			
				Number of Time/Area Diagrams		0		
				Number of Real Time Controls		0		
Synthetic Rainfall Details								
Rainfall Model		FEH		D3 (1km)	0.407			
Site Location		GB 502850 104400 TQ 02850 04400		E (1km)	0.314			
C (1km)		-0.027		F (1km)	2.329			
D1 (1km)		0.393		Cv (Summer)	0.750			
D2 (1km)		0.274		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		ON						
Profile(s)		Winter						
Duration(s) (mins)		120, 240, 360						
Return Period(s) (years)		100						
Climate Change (%)		30						
PN	Storm	Return Period	Climate Change	First X Surchage	First Y Flood	First Z Overflow	O/F Act.	Lvl Exc.
1.000	120 Winter	100	+30%					
1.001	120 Winter	100	+30%	100/120 Winter				
2.000	360 Winter	100	+30%	100/120 Winter				
2.001	360 Winter	100	+30%	100/120 Winter				
1.002	120 Winter	100	+30%	100/120 Winter				
3.000	120 Winter	100	+30%	100/120 Winter				
3.001	120 Winter	100	+30%	100/120 Winter				
1.003	120 Winter	100	+30%	100/120 Winter				
1.004	120 Winter	100	+30%	100/120 Winter				
4.000	120 Winter	100	+30%	100/120 Winter				
4.001	240 Winter	100	+30%	100/120 Winter				
1.005	120 Winter	100	+30%	100/120 Winter				
1.006	120 Winter	100	+30%	100/120 Winter				
5.000	360 Winter	100	+30%	100/120 Winter				
5.001	360 Winter	100	+30%	100/120 Winter				
5.002	120 Winter	100	+30%	100/120 Winter		100/120 Winter	3	
1.007	120 Winter	100	+30%	100/120 Winter				
6.000	120 Winter	100	+30%	100/120 Winter				
6.001	120 Winter	100	+30%	100/120 Winter				
1.008	120 Winter	100	+30%	100/120 Winter				
7.000	120 Winter	100	+30%	100/120 Winter				
7.001	120 Winter	100	+30%	100/120 Winter				
1.009	120 Winter	100	+30%	100/120 Winter				
8.000	120 Winter	100	+30%	100/120 Winter				
8.001	120 Winter	100	+30%	100/120 Winter		100/120 Winter	3	
9.000	120 Winter	100	+30%	100/120 Winter				
9.001	120 Winter	100	+30%	100/120 Winter				
10.000	120 Winter	100	+30%	100/120 Winter				
8.002	120 Winter	100	+30%	100/120 Winter				
1.010	120 Winter	100	+30%	100/120 Winter				
11.000	360 Winter	100	+30%	100/120 Winter				
11.001	360 Winter	100	+30%	100/120 Winter				
12.000	120 Winter	100	+30%	100/120 Winter				
1.011	120 Winter	100	+30%	100/120 Winter				
1.012	120 Winter	100	+30%	100/120 Winter				
13.000	120 Winter	100	+30%	100/120 Winter				
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XP Solutions			Network 2013.1					
Summary of Critical Results by Maximum Level (Rank 1) for Storm								
PN	Storm	Return Period	Climate Change	First X Surcharge	First Y Flood	First Z Overflow	O/F Act.	Lvl Exc.
14.000	120 Winter	100	+30%	100/120 Winter				
15.000	120 Winter	100	+30%	100/120 Winter				
1.012	120 Winter	100	+30%	100/120 Winter				
16.000	120 Winter	100	+30%	100/120 Winter				
1.014	120 Winter	100	+30%	100/120 Winter				
17.000	120 Winter	100	+30%	100/120 Winter				
18.000	120 Winter	100	+30%	100/120 Winter				
19.000	120 Winter	100	+30%	100/120 Winter				
17.001	120 Winter	100	+30%	100/120 Winter				
20.000	240 Winter	100	+30%	100/240 Winter				
21.000	120 Winter	100	+30%	100/120 Winter				
22.000	360 Winter	100	+30%	100/120 Winter				
22.001	360 Winter	100	+30%	100/120 Winter	100/360 Winter			
21.001	120 Winter	100	+30%	100/120 Winter				
23.000	120 Winter	100	+30%	100/120 Winter				
23.001	120 Winter	100	+30%	100/120 Winter				
24.000	360 Winter	100	+30%	100/120 Winter				
24.001	360 Winter	100	+30%	100/120 Winter				
23.002	240 Winter	100	+30%	100/120 Winter				
21.002	240 Winter	100	+30%	100/120 Winter				
21.003	240 Winter	100	+30%	100/120 Winter				
25.000	240 Winter	100	+30%	100/120 Winter				
25.001	240 Winter	100	+30%	100/120 Winter				
26.000	120 Winter	100	+30%					
26.001	120 Winter	100	+30%					
26.002	120 Winter	100	+30%					
26.003	120 Winter	100	+30%					
21.004	240 Winter	100	+30%	100/120 Winter				
21.005	240 Winter	100	+30%	100/120 Winter				
27.000	120 Winter	100	+30%	100/120 Winter				
21.006	240 Winter	100	+30%	100/120 Winter				
21.007	240 Winter	100	+30%	100/120 Winter				
28.000	240 Winter	100	+30%	100/120 Winter				
28.001	240 Winter	100	+30%	100/120 Winter				
21.008	240 Winter	100	+30%	100/120 Winter				
21.009	240 Winter	100	+30%	100/120 Winter				
29.000	360 Winter	100	+30%	100/120 Winter				
29.001	360 Winter	100	+30%	100/120 Winter				
30.000	360 Winter	100	+30%	100/120 Winter				
30.001	360 Winter	100	+30%	100/120 Winter				
31.000	120 Winter	100	+30%					
32.000	240 Winter	100	+30%	100/120 Winter				
32.001	240 Winter	100	+30%	100/120 Winter				
30.002	240 Winter	100	+30%	100/120 Winter				
33.000	240 Winter	100	+30%	100/120 Winter				
33.001	240 Winter	100	+30%	100/120 Winter				
33.002	240 Winter	100	+30%	100/120 Winter				
33.003	240 Winter	100	+30%	100/120 Winter				
30.003	240 Winter	100	+30%	100/120 Winter				
30.004	240 Winter	100	+30%	100/120 Winter				
21.010	240 Winter	100	+30%	100/120 Winter				
20.001	240 Winter	100	+30%	100/120 Winter				
34.000	120 Winter	100	+30%	100/120 Winter				
20.002	120 Winter	100	+30%	100/120 Winter				
1.015	120 Winter	100	+30%	100/120 Winter				
35.000	120 Winter	100	+30%	100/120 Winter				
35.001	120 Winter	100	+30%	100/120 Winter				
35.003	120 Winter	100	+30%	100/120 Winter				
1.016	120 Winter	100	+30%	100/120 Winter				
PN	US/MH Name	Water Level (m)	Surch'd Depth (m)	Flooded Volume (m³)	Flow / Cap.	O'flow (l/s)	Pipe Flow (l/s)	Status
1.000	TL_SW01	5.363	-0.107	0.000	0.19	0.0	13.2	OK
1.001	TL_SW02	5.346	0.127	0.000	0.33	0.0	22.1	SURCHARGED
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Lion House Oriental Road Woking GU22 8AR			Littlehampton Overall Surface Network West of Wetlands					
Date January 2018			Designed by S Foley					
File West Catchment Model_...			Checked by					
XP Solutions			Network 2013.1					
Summary of Critical Results by Maximum Level (Rank 1) for Storm								
	US/MH	Water		Flooded		Pipe		
PN	Name	Level (m)	Surch'ed Depth (m)	Volume (m³)	Flow / Cap.	O'flow (l/s)	Flow (l/s)	Status
2.000	Parcel A2_1	6.059	0.559	0.000	0.04	0.0	5.0	SURCHARGED
2.001	Parcel A2_2	6.068	0.918	0.000	0.35	0.0	4.6	SURCHARGED
1.002	TL_SW03	5.329	0.273	0.000	0.50	0.0	32.8	SURCHARGED
3.000	Parcel B6_1	5.905	0.605	0.000	0.06	0.0	6.3	SURCHARGED
3.001	Parcel B6_2	5.908	0.958	0.000	0.45	0.0	5.8	SURCHARGED
1.003	TL_SW04	5.253	0.318	0.000	0.59	0.0	40.7	SURCHARGED
1.004	TL_SW05	5.163	0.528	0.000	0.87	0.0	62.7	SURCHARGED
4.000	Parcel B1&CH_1	4.880	0.380	0.000	0.19	0.0	10.6	SURCHARGED
4.001	Parcel B1&CH 2	4.998	0.713	0.000	0.62	0.0	8.3	SURCHARGED
1.005	Ex. SB10	4.851	0.641	0.000	1.00	0.0	68.1	SURCHARGED
1.006	Ex. SB9	4.739	0.669	0.000	1.13	0.0	80.3	SURCHARGED
5.000	Block B_1	5.186	0.386	0.000	0.04	0.0	6.2	SURCHARGED
5.001	Block B_2	5.192	1.137	0.000	0.41	0.0	5.6	SURCHARGED
5.002	Ex. SB17	4.331	0.381	0.000	0.17	59.3	11.0	SURCHARGED
1.007	Ex. SB8	4.435	0.635	0.000	1.11	0.0	69.2	SURCHARGED
6.000	BovisA_1	4.856	0.381	0.000	0.50	0.0	59.2	SURCHARGED
6.001	BovisA_2	5.286	0.911	0.000	0.16	0.0	58.1	SURCHARGED
1.008	Ex SB7	4.272	0.772	0.000	0.88	0.0	120.4	SURCHARGED
7.000	BovisB_1	4.272	0.497	0.000	0.34	0.0	53.1	SURCHARGED
7.001	BovisB_2	4.252	0.652	0.000	0.21	0.0	52.8	SURCHARGED
1.009	Dummy Node	4.040	0.865	0.000	1.23	0.0	158.3	SURCHARGED
8.000	Plots 123 - 126	3.850	0.380	0.000	0.71	0.0	10.8	FLOOD RISK
8.001	SW01, G01&G02	3.769	0.504	0.000	0.29	50.4	10.0	FLOOD RISK
9.000	Plots 117 - 122	4.046	0.731	0.000	0.67	0.0	10.9	FLOOD RISK
9.001	Stub SW02/2	4.037	0.944	0.000	0.69	0.0	20.6	FLOOD RISK
10.000	Plots 101-116	4.070	0.845	0.000	0.66	0.0	29.3	FLOOD RISK
8.002	SW02	4.021	0.766	0.000	1.43	0.0	33.6	SURCHARGED
1.010	Ex SB6	4.014	0.939	0.000	0.92	0.0	174.0	SURCHARGED
11.000	Ret Block A	3.781	0.481	0.000	0.27	0.0	13.5	SURCHARGED
11.001	Ret Block A	4.046	0.996	0.000	0.26	0.0	4.7	SURCHARGED
12.000	Plots 95-100	3.922	0.697	0.000	0.35	0.0	16.0	SURCHARGED
1.011	SW03	3.918	0.998	0.000	0.84	0.0	185.5	SURCHARGED
1.012	SW04	3.812	1.072	0.000	0.90	0.0	189.4	SURCHARGED
13.000	SW-FUT-01	3.753	0.893	0.000	0.80	0.0	53.8	FLOOD RISK
14.000	Plots 80-86	3.708	0.933	0.000	0.39	0.0	24.8	FLOOD RISK
15.000	Plots 87-94	3.708	0.933	0.000	0.40	0.0	28.0	FLOOD RISK
1.013	SW05	3.710	1.110	0.000	1.53	0.0	264.3	SURCHARGED
16.000	C2 Resiblock A	3.646	1.146	0.000	0.54	0.0	35.7	SURCHARGED
1.014	SW06	3.694	1.154	0.000	1.79	0.0	316.9	FLOOD RISK
17.000	SW-FUT-02	3.413	0.793	0.000	0.57	0.0	38.0	SURCHARGED
18.000	Plots 60-73	3.449	0.624	0.000	0.44	0.0	23.9	FLOOD RISK
19.000	Plots 74-78	3.453	0.628	0.000	0.52	0.0	28.3	FLOOD RISK
17.001	SW07	3.431	1.031	0.000	1.35	0.0	85.2	FLOOD RISK
20.000	Plots 39-46	3.383	0.068	0.000	0.08	0.0	9.7	SURCHARGED
21.000	SW-LYM 01	4.407	0.442	0.000	0.33	0.0	9.9	SURCHARGED
22.000	Non resi	4.883	0.433	0.000	0.08	0.0	18.4	SURCHARGED
22.001	Non resi	5.176	1.231	0.001	0.14	0.0	4.8	FLOOD
21.001	SW-LYM 02	4.388	0.523	0.000	0.56	0.0	19.1	SURCHARGED
23.000	Parcel A1	4.463	0.013	0.000	0.12	0.0	26.9	SURCHARGED
23.001	As-built SA8	4.473	0.485	0.000	0.60	0.0	23.8	SURCHARGED
24.000	Non Resi	4.825	0.375	0.000	0.04	0.0	10.8	SURCHARGED
24.001	SW Stub 02	5.125	1.260	0.000	0.13	0.0	4.7	SURCHARGED
23.002	SW-LYM 03/1	4.334	0.539	0.000	0.68	0.0	29.2	SURCHARGED
21.002	SW-LYM 03	4.320	0.745	0.000	1.44	0.0	48.0	SURCHARGED
21.003	SW-LYM 04	4.287	0.762	0.000	0.83	0.0	51.8	SURCHARGED
25.000	SW-LYM 07	4.288	0.193	0.000	0.16	0.0	6.9	SURCHARGED
25.001	SW-LYM 08	4.284	0.389	0.000	0.32	0.0	19.3	SURCHARGED
26.000	PBA 01	12.279	-0.146	0.000	0.27	0.0	21.7	OK
26.001	PBA 02	10.498	-0.127	0.000	0.40	0.0	43.2	OK
26.002	PBA 03	7.356	-0.069	0.000	0.82	0.0	64.8	OK
26.003	SW-LYM 05	5.668	-0.172	0.000	0.38	0.0	69.4	OK
21.004	SW-LYM 10	4.258	0.893	0.000	0.88	0.0	114.0	SURCHARGED
21.005	SW-LYM11	4.191	1.061	0.000	0.74	0.0	135.7	SURCHARGED
27.000	ExSB17_Dum Node	4.160	0.235	0.000	0.85	0.0	58.4	SURCHARGED
21.006	SW-LYM 12	4.154	1.184	0.000	0.73	0.0	181.5	SURCHARGED
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Lion House Oriental Road Woking GU22 8AR			Littlehampton Overall Surface Network West of Wetlands					
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File West Catchment Model_...			Checked by					
XP Solutions			Network 2013.1					
<u>Summary of Critical Results by Maximum Level (Rank 1) for Storm</u>								
PN	US/MH Name	Water Level (m)	Surch'd Depth (m)	Flooded Volume (m³)	Flow / Cap.	O'flow (l/s)	Pipe Flow (l/s)	Status
21.007	SW-FUT-03	4.041	1.351	0.000	0.96	0.0	185.3	SURCHARGED
28.000	Stub SW18/1	3.747	1.022	0.000	0.55	0.0	18.4	SURCHARGED
28.001	SW18	3.884	1.279	0.000	0.66	0.0	22.9	SURCHARGED
21.008	SW19	3.924	1.504	0.000	0.91	0.0	211.8	SURCHARGED
21.009	SW20	3.696	1.371	0.000	0.87	0.0	210.1	SURCHARGED
29.000	Car Park	4.719	0.769	0.000	0.03	0.0	5.7	FLOOD RISK
29.001	Car Park	4.758	1.208	0.000	0.11	0.0	4.6	FLOOD RISK
30.000	Non Resi	3.602	0.452	0.000	0.05	0.0	9.2	SURCHARGED
30.001	Stub SW9/1	3.809	0.984	0.000	0.11	0.0	4.4	SURCHARGED
31.000	SW08	3.618	-0.157	0.000	0.20	0.0	19.1	OK
32.000	Non Resi	3.606	0.456	0.000	0.02	0.0	5.0	SURCHARGED
32.001	Stub SW9/2	3.626	0.901	0.000	0.09	0.0	4.2	SURCHARGED
30.002	SW09	3.587	0.962	0.000	0.67	0.0	26.9	SURCHARGED
33.000	SW12	3.495	0.480	0.000	0.23	0.0	7.9	SURCHARGED
33.001	SW13	3.536	0.631	0.000	0.39	0.0	15.4	SURCHARGED
33.002	SW14	3.595	0.850	0.000	0.57	0.0	23.0	SURCHARGED
33.003	SW15	3.629	1.099	0.000	0.36	0.0	30.8	SURCHARGED
30.003	SW16	3.529	1.129	0.000	0.47	0.0	64.5	SURCHARGED
30.004	SW17	3.456	1.206	0.000	0.41	0.0	63.7	SURCHARGED
21.010	SW21	3.435	0.875	0.000	0.34	0.0	204.1	SURCHARGED
20.001	SW22	3.354	0.824	0.000	0.19	0.0	162.9	SURCHARGED
34.000	Plots 47-55	3.440	0.615	0.000	0.70	0.0	31.0	SURCHARGED
20.002	SW23	3.387	0.992	0.000	0.23	0.0	170.4	SURCHARGED
1.015	SW24	3.482	1.172	0.000	0.40	0.0	328.1	FLOOD RISK
35.000	Plots	3.342	0.747	0.000	0.60	0.0	23.8	SURCHARGED
38.001	Stub SW25/1	3.426	1.041	0.000	1.03	0.0	40.5	SURCHARGED
38.006	Stub SW25/2	3.426	1.041	0.000	1.03	0.0	40.5	FLOOD RISK
1.016	SW25	3.461	1.736	0.000	0.82	0.0	281.7	FLOOD RISK
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APPENDIX J: Condition 10, Windes -- 1in30yr & 1in1yr Simulation Results

Mayer Brown Ltd		Page 1						
Lion House	Littlehampton							
Oriental Road	Overall Surface Network							
Woking GU22 8AR	West of Wetlands							
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File West Catchment Model_...	Checked by							
XP Solutions	Network 2013.1							
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 Offline Controls 2	Number of Time/Area Diagrams 0					
Number of Online Controls 14		Number of Storage Structures 14	Number of Real Time Controls 0					
Synthetic Rainfall Details								
Rainfall Model		FEH	D3 (1km) 0.407					
Site Location GB 502850 104400 TQ 02850 04400			E (1km) 0.314					
C (1km)		-0.027	F (1km) 2.329					
D1 (1km)		0.393	Cv (Summer) 0.750					
D2 (1km)		0.274	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		ON						
Profile(s)		Winter						
Duration(s) (mins)		15, 30, 60, 120, 240, 360, 480						
Return Period(s) (years)		30						
Climate Change (%)		0						
PN	Storm	Return Period	Climate Change	First X Surchage	First Y Flood	First Z Overflow	O/F Act.	Lvl Exc.
1.000	15 Winter	30	0%					
1.001	15 Winter	30	0%	30/15 Winter				
2.000	480 Winter	30	0%	30/60 Winter				
2.001	480 Winter	30	0%	30/15 Winter				
1.002	15 Winter	30	0%	30/15 Winter				
3.000	120 Winter	30	0%	30/15 Winter				
3.001	120 Winter	30	0%	30/15 Winter				
1.003	15 Winter	30	0%	30/15 Winter				
1.004	15 Winter	30	0%	30/15 Winter				
4.000	240 Winter	30	0%					
4.001	240 Winter	30	0%	30/15 Winter				
1.005	15 Winter	30	0%	30/15 Winter				
1.006	15 Winter	30	0%	30/15 Winter				
5.000	240 Winter	30	0%	30/120 Winter				
5.001	240 Winter	30	0%	30/15 Winter				
5.002	15 Winter	30	0%	30/15 Winter		30/15 Winter	4	
1.007	15 Winter	30	0%	30/15 Winter				
6.000	30 Winter	30	0%					
6.001	30 Winter	30	0%	30/15 Winter				
1.008	30 Winter	30	0%	30/15 Winter				
7.000	30 Winter	30	0%	30/30 Winter				
7.001	30 Winter	30	0%	30/15 Winter				
1.009	30 Winter	30	0%	30/15 Winter				
8.000	15 Winter	30	0%	30/15 Winter	30/15 Winter			1
8.001	15 Winter	30	0%	30/15 Winter		30/15 Winter	4	
9.000	15 Winter	30	0%	30/15 Winter				
9.001	15 Winter	30	0%	30/15 Winter				
10.000	15 Winter	30	0%	30/15 Winter				
8.002	15 Winter	30	0%	30/15 Winter				
1.010	30 Winter	30	0%	30/15 Winter				
11.000	480 Winter	30	0%	30/120 Winter				
11.001	480 Winter	30	0%	30/15 Winter				
12.000	30 Winter	30	0%	30/15 Winter				
1.011	30 Winter	30	0%	30/15 Winter				
1.012	30 Winter	30	0%	30/15 Winter				
13.000	15 Winter	30	0%	30/15 Winter				

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Lion House		Littlehampton						
Oriental Road		Overall Surface Network						
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File West Catchment Model_...		Checked by						
XP Solutions		Network 2013.1						
Summary of Critical Results by Maximum Level (Rank 1) for Storm								
PN	Storm	Return Period	Climate Change	First X Surcharge	First Y Flood	First Z Overflow	O/F Act.	Lvl Exc.
14.000	30 Winter	30	0%	30/15 Winter				
15.000	30 Winter	30	0%	30/15 Winter				
1.013	30 Winter	30	0%	30/15 Winter				
16.000	30 Winter	30	0%	30/15 Winter				
1.014	30 Winter	30	0%	30/15 Winter				
17.000	15 Winter	30	0%	30/15 Winter				
18.000	15 Winter	30	0%					
19.000	15 Winter	30	0%					
17.001	15 Winter	30	0%	30/15 Winter				
20.000	15 Winter	30	0%					
21.000	15 Winter	30	0%	30/15 Winter				
22.000	480 Winter	30	0%					
22.001	480 Winter	30	0%	30/15 Winter				
21.001	15 Winter	30	0%	30/15 Winter				
23.000	60 Winter	30	0%					
23.001	30 Winter	30	0%	30/15 Winter				
24.000	480 Winter	30	0%					
24.001	480 Winter	30	0%	30/15 Winter				
23.002	15 Winter	30	0%	30/15 Winter				
21.002	15 Winter	30	0%	30/15 Winter				
21.003	15 Winter	30	0%	30/15 Winter				
25.000	15 Winter	30	0%	30/15 Winter				
25.001	15 Winter	30	0%	30/15 Winter				
26.000	15 Winter	30	0%					
26.001	15 Winter	30	0%					
26.002	15 Winter	30	0%	30/15 Winter				
26.003	15 Winter	30	0%					
21.004	15 Winter	30	0%	30/15 Winter				
21.005	15 Winter	30	0%	30/15 Winter				
27.000	15 Winter	30	0%	30/15 Winter				
21.006	15 Winter	30	0%	30/15 Winter				
21.007	15 Winter	30	0%	30/15 Winter				
28.000	15 Winter	30	0%	30/15 Winter				
28.001	15 Winter	30	0%	30/15 Winter				
21.008	240 Winter	30	0%	30/15 Winter				
21.009	240 Winter	30	0%	30/15 Winter				
29.000	240 Winter	30	0%	30/15 Winter				
29.001	15 Winter	30	0%	30/15 Winter				
30.000	480 Winter	30	0%					
30.001	480 Winter	30	0%	30/15 Winter				
31.000	15 Winter	30	0%					
32.000	120 Winter	30	0%					
32.001	120 Winter	30	0%	30/15 Winter				
30.002	15 Winter	30	0%	30/15 Winter				
33.000	15 Winter	30	0%	30/15 Winter				
33.001	15 Winter	30	0%	30/15 Winter				
33.002	15 Winter	30	0%	30/15 Winter				
33.003	15 Winter	30	0%	30/15 Winter				
30.003	240 Winter	30	0%	30/15 Winter				
30.004	240 Winter	30	0%	30/30 Winter				
21.010	240 Winter	30	0%					
20.001	240 Winter	30	0%					
34.000	15 Winter	30	0%					
20.002	120 Winter	30	0%	30/15 Winter				
1.015	30 Winter	30	0%	30/15 Winter				
35.000	15 Winter	30	0%					
35.001	30 Winter	30	0%	30/15 Winter				
36.000	30 Winter	30	0%	30/15 Winter				
1.016	30 Winter	30	0%	30/15 Winter				
PN	US/MH Name	Water Level (m)	Surch'd Depth (m)	Flooded Volume (m³)	Flow / Cap.	O'flow (l/s)	Pipe Flow (l/s)	Status
1.000	TL_SW01	5.302	-0.168	0.000	0.37	0.0	25.5	OK
1.001	TL_SW02	5.278	0.059	0.000	0.58	0.0	38.7	SURCHARGED
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File West Catchment Model_...			Checked by					
XP Solutions			Network 2013.1					
Summary of Critical Results by Maximum Level (Rank 1) for Storm								
PN	US/MH Name	Water Level (m)	Surch'd Depth (m)	Flooded Volume (m³)	Flow / Cap.	O'flow (l/s)	Pipe Flow (l/s)	Status
2.000	Parcel A2_1	5.636	0.136	0.000	0.03	0.0	3.9	SURCHARGED
2.001	Parcel A2_2	5.642	0.492	0.000	0.27	0.0	3.6	SURCHARGED
1.002	TL_SW03	5.275	0.219	0.000	0.73	0.0	47.9	SURCHARGED
3.000	Parcel B6_1	5.402	0.102	0.000	0.05	0.0	5.2	SURCHARGED
3.001	Parcel B6_2	5.405	0.455	0.000	0.33	0.0	4.2	SURCHARGED
1.003	TL_SW04	5.236	0.301	0.000	0.73	0.0	50.4	SURCHARGED
1.004	TL_SW05	5.146	0.511	0.000	1.04	0.0	74.0	SURCHARGED
4.000	Parcel B1&CH_1	4.496	-0.004	0.000	0.16	0.0	8.5	OK
4.001	Parcel B1&CH 2	4.476	0.191	0.000	0.61	0.0	8.2	SURCHARGED
1.005	Ex. SB10	4.758	0.548	0.000	1.05	0.0	71.9	SURCHARGED
1.006	Ex. SB9	4.603	0.533	0.000	1.13	0.0	83.6	SURCHARGED
5.000	Block B_1	4.816	0.016	0.000	0.04	0.0	6.3	SURCHARGED
5.001	Block B_2	4.811	0.756	0.000	0.34	0.0	4.7	SURCHARGED
5.002	Ex. SB17	4.103	0.153	0.000	0.32	56.2	21.1	SURCHARGED
1.007	Ex. SB8	4.211	0.411	0.000	1.15	0.0	71.6	SURCHARGED
6.000	BovisA_1	4.452	-0.023	0.000	0.45	0.0	53.6	OK
6.001	BovisA_2	4.411	0.036	0.000	0.14	0.0	52.6	SURCHARGED
1.008	Ex SB7	3.961	0.461	0.000	0.91	0.0	124.3	SURCHARGED
7.000	BovisB_1	3.787	0.012	0.000	0.31	0.0	48.7	SURCHARGED
7.001	BovisB_2	3.750	0.150	0.000	0.19	0.0	47.3	SURCHARGED
1.009	Dummy Node	3.613	0.438	0.000	1.31	0.0	169.1	SURCHARGED
8.000	Plots 120 - 126	4.050	0.530	0.185	1.22	0.0	18.5	FLOOD
8.001	SW01, G01&G02	3.835	0.570	0.000	0.34	58.8	11.9	FLOOD RISK
9.000	Plots 117 - 123	4.049	0.734	0.000	1.13	0.0	13.2	FLOOD RISK
9.001	Stub SW02/2	4.037	0.944	0.000	0.83	0.0	24.8	FLOOD RISK
10.000	Plots 101-116	4.128	0.903	0.000	1.17	0.0	52.2	FLOOD RISK
8.002	SW02	3.982	0.927	0.000	2.53	0.0	67.7	SURCHARGED
1.010	Ex SB6	3.537	0.512	0.000	1.00	0.0	195.3	SURCHARGED
11.000	Ret Block A	3.380	0.080	0.000	0.20	0.0	10.2	SURCHARGED
11.001	Ret Block A	3.551	0.501	0.000	0.20	0.0	3.6	SURCHARGED
12.000	Plots 95-100	3.474	0.249	0.000	0.39	0.0	17.7	SURCHARGED
1.011	SW03	3.464	0.544	0.000	0.93	0.0	204.4	SURCHARGED
1.012	SW04	3.329	0.589	0.000	0.99	0.0	207.5	SURCHARGED
13.000	SW-PVT-01	3.411	0.551	0.000	1.35	0.0	91.1	SURCHARGED
14.000	Plots 80-86	3.226	0.451	0.000	0.34	0.0	21.7	SURCHARGED
15.000	Plots 87-94	3.219	0.444	0.000	0.36	0.0	25.3	SURCHARGED
1.013	SW05	3.198	0.598	0.000	1.46	0.0	276.5	SURCHARGED
16.000	C2 Resiblock A	2.915	0.415	0.000	0.57	0.0	37.7	SURCHARGED
1.014	SW06	2.865	0.425	0.000	1.70	0.0	300.7	SURCHARGED
17.000	SW-PVT-02	2.915	0.285	0.000	1.03	0.0	63.3	SURCHARGED
18.000	Plots 60-73	2.708	-0.117	0.000	0.47	0.0	25.7	OK
19.000	Plots 74-78	2.720	-0.105	0.000	0.56	0.0	29.9	OK
17.001	SW07	2.646	0.246	0.000	1.94	0.0	122.2	SURCHARGED
20.000	Plots 39-46	3.162	-0.153	0.000	0.23	0.0	28.2	OK
21.000	SW-LYM 01	4.344	0.379	0.000	0.74	0.0	22.5	SURCHARGED
22.000	Non resi	4.414	-0.036	0.000	0.02	0.0	5.3	OK
22.001	Non resi	4.410	0.465	0.000	0.12	0.0	4.1	SURCHARGED
21.001	SW-LYM 02	4.330	0.465	0.000	0.87	0.0	29.9	SURCHARGED
23.000	Parcel A1	4.181	-0.269	0.000	0.13	0.0	29.2	OK
23.001	As-built SA8	4.162	0.174	0.000	0.62	0.0	24.8	SURCHARGED
24.000	Non Resi	4.403	-0.047	0.000	0.02	0.0	5.4	OK
24.001	SW Stub 02	4.417	0.552	0.000	0.12	0.0	4.3	SURCHARGED
23.002	SW-LYM 03/1	4.267	0.472	0.000	0.74	0.0	31.8	SURCHARGED
21.002	SW-LYM 03	4.235	0.720	0.000	1.51	0.0	50.5	SURCHARGED
21.003	SW-LYM 04	4.259	0.734	0.000	0.83	0.0	52.0	SURCHARGED
25.000	SW-LYM 07	4.299	0.204	0.000	0.56	0.0	23.9	SURCHARGED
25.001	SW-LYM 08	4.284	0.389	0.000	0.85	0.0	52.1	SURCHARGED
26.000	PBA 01	12.320	-0.105	0.000	0.55	0.0	44.5	OK
26.001	PBA 02	10.552	-0.073	0.000	0.77	0.0	83.8	OK
26.002	PBA 03	8.611	1.136	0.000	1.31	0.0	103.3	FLOOD RISK
26.003	SW-LYM 05	5.709	-0.131	0.000	0.60	0.0	109.3	OK
21.004	SW-LYM 10	4.186	0.821	0.000	1.43	0.0	135.7	SURCHARGED
21.005	SW-LYM11	3.850	0.720	0.000	1.31	0.0	240.6	SURCHARGED
27.000	ExSB17_Dum Node	3.939	0.014	0.000	0.80	0.0	54.9	SURCHARGED
21.006	SW-LYM 12	3.649	0.679	0.000	1.15	0.0	233.2	SURCHARGED
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Summary of Critical Results by Maximum Level (Rank 1) for Storm								
PN	US/MH Name	Water Level (m)	Surch'd Depth (m)	Flooded Volume (m³)	Flow / Cap.	O'flow (l/s)	Pipe Flow (l/s)	Status
21.007	SW-PWT-03	3.325	0.835	0.000	1.42	0.0	275.1	SURCHARGED
28.000	Stub SW18/1	3.290	0.565	0.000	1.48	0.0	49.1	SURCHARGED
28.001	SW18	3.087	0.482	0.000	1.74	0.0	60.9	SURCHARGED
21.008	SW19	2.803	0.383	0.000	0.47	0.0	108.1	SURCHARGED
21.009	SW20	2.662	0.337	0.000	0.44	0.0	105.2	SURCHARGED
29.000	Car Park	4.588	0.638	0.000	0.03	0.0	5.5	SURCHARGED
29.001	Car Park	4.709	1.159	0.000	0.10	0.0	4.3	FLOOD RISK
30.000	Non Resi	3.134	-0.016	0.000	0.02	0.0	4.2	OK
30.001	Stub SW9/1	3.141	0.316	0.000	0.09	0.0	3.6	SURCHARGED
31.000	SW08	3.643	-0.132	0.000	0.36	0.0	33.8	OK
32.000	Non Resi	3.060	-0.090	0.000	0.02	0.0	5.2	OK
32.001	Stub SW9/2	3.059	0.334	0.000	0.08	0.0	3.6	SURCHARGED
33.000	SW03	3.010	0.385	0.000	1.35	0.0	54.8	SURCHARGED
33.000	SW12	3.372	0.357	0.000	0.57	0.0	19.2	SURCHARGED
33.001	SW13	3.321	0.416	0.000	0.96	0.0	38.1	SURCHARGED
33.002	SW14	3.179	0.425	0.000	1.40	0.0	58.8	SURCHARGED
33.003	SW15	2.586	0.056	0.000	0.89	0.0	75.3	SURCHARGED
30.003	SW16	2.571	0.171	0.000	0.30	0.0	41.3	SURCHARGED
30.004	SW17	2.563	0.313	0.000	0.26	0.0	40.6	SURCHARGED
21.010	SW21	2.555	-0.005	0.000	0.18	0.0	105.7	OK
20.001	SW22	2.528	-0.002	0.000	0.13	0.0	107.4	OK
34.000	Plots 47-55	2.731	-0.094	0.000	0.63	0.0	28.0	OK
20.002	SW23	2.464	0.069	0.000	0.16	0.0	116.8	SURCHARGED
1.015	SW24	2.492	0.182	0.000	0.25	0.0	200.8	SURCHARGED
35.000	Plots	2.573	-0.022	0.000	0.47	0.0	18.9	OK
35.001	Stub SW25/1	2.540	0.175	0.000	0.70	0.0	27.6	SURCHARGED
36.000	Stub SW25/2	2.534	0.149	0.000	0.65	0.0	25.7	SURCHARGED
1.016	SW25	2.472	0.747	0.000	0.65	0.0	222.6	SURCHARGED
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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 Offline Controls	2	Number of Time/Area Diagrams	0
Number of Online Controls	14	Number of Storage Structures	14	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FEH	D3 (1km)	0.407
Site Location	GB 502850 104400 TQ 02850 04400	E (1km)	0.314
C (1km)	-0.027	F (1km)	2.329
D1 (1km)	0.393	Cv (Summer)	0.750
D2 (1km)	0.274	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	ON

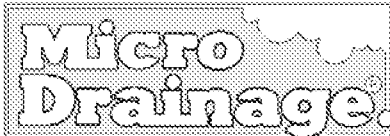
Profile(s)

Duration(s) (mins)	15, 30, 60, 120, 240, 360, 480
Return Period(s) (years)	1
Climate Change (%)	0

PN	Storm	Return Period	Climate Change	First X Surchage	First Y Flood	First Z Overflow	O/F Act.	Lvl Exc.
1.000	15 Winter	1	0%					
1.001	15 Winter	1	0%					
2.000	480 Winter	1	0%					
2.001	480 Winter	1	0%	1/15 Winter				
1.002	15 Winter	1	0%					
3.000	60 Winter	1	0%					
3.001	60 Winter	1	0%	1/15 Winter				
1.003	15 Winter	1	0%					
1.004	15 Winter	1	0%					
4.000	240 Winter	1	0%					
4.001	240 Winter	1	0%					
1.005	15 Winter	1	0%					
1.006	15 Winter	1	0%					
5.000	120 Winter	1	0%					
5.001	120 Winter	1	0%	1/15 Winter				
5.002	30 Winter	1	0%				0	
1.007	30 Winter	1	0%					
6.000	60 Winter	1	0%					
6.001	60 Winter	1	0%					
1.008	30 Winter	1	0%					
7.000	30 Winter	1	0%					
7.001	30 Winter	1	0%					
1.009	30 Winter	1	0%					
8.000	15 Winter	1	0%					
8.001	15 Winter	1	0%					0
9.000	15 Winter	1	0%					
9.001	15 Winter	1	0%	1/15 Winter				
10.000	15 Winter	1	0%					
8.002	15 Winter	1	0%	1/15 Winter				
1.010	30 Winter	1	0%					
11.000	480 Winter	1	0%					
11.001	480 Winter	1	0%	1/60 Winter				
12.000	15 Winter	1	0%					
1.011	30 Winter	1	0%					
1.012	30 Winter	1	0%					
13.000	15 Winter	1	0%					

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Summary of Critical Results by Maximum Level (Rank 1) for Storm								
PN	Storm	Return Period	Climate Change	First X Surcharge	First Y Flood	First Z Overflow	O/F Act.	Lvl Exc.
14.000	15 Winter	1	0%					
15.000	15 Winter	1	0%					
1.013	60 Winter	1	0%					
16.000	15 Winter	1	0%					
1.014	60 Winter	1	0%					
17.000	15 Winter	1	0%					
18.000	15 Winter	1	0%					
19.000	15 Winter	1	0%					
17.001	15 Winter	1	0%					
20.000	15 Winter	1	0%					
21.000	15 Winter	1	0%					
22.000	360 Winter	1	0%					
22.001	360 Winter	1	0%	1/15 Winter				
21.001	15 Winter	1	0%					
23.000	120 Winter	1	0%					
23.001	120 Winter	1	0%					
24.000	360 Winter	1	0%					
24.001	360 Winter	1	0%	1/15 Winter				
23.002	120 Winter	1	0%					
21.002	120 Winter	1	0%					
21.003	15 Winter	1	0%					
25.000	15 Winter	1	0%					
25.001	15 Winter	1	0%					
26.000	15 Winter	1	0%					
26.001	15 Winter	1	0%					
26.002	15 Winter	1	0%					
26.003	15 Winter	1	0%					
21.004	15 Winter	1	0%					
21.005	15 Winter	1	0%					
27.000	240 Winter	1	0%					
21.006	15 Winter	1	0%					
21.007	15 Winter	1	0%					
28.000	15 Winter	1	0%					
28.001	15 Winter	1	0%					
21.008	15 Winter	1	0%					
21.009	15 Winter	1	0%					
29.000	240 Winter	1	0%	1/30 Winter				
29.001	240 Winter	1	0%	1/15 Winter				
30.000	480 Winter	1	0%					
30.001	480 Winter	1	0%	1/240 Winter				
31.000	15 Winter	1	0%					
32.000	60 Winter	1	0%					
32.001	60 Winter	1	0%	1/15 Winter				
30.002	15 Winter	1	0%					
33.000	15 Winter	1	0%					
33.001	15 Winter	1	0%					
33.002	15 Winter	1	0%					
33.003	15 Winter	1	0%					
30.003	15 Winter	1	0%					
30.004	15 Winter	1	0%					
21.010	120 Winter	1	0%					
20.001	120 Winter	1	0%					
34.000	15 Winter	1	0%					
20.002	60 Winter	1	0%					
1.015	60 Winter	1	0%					
35.000	15 Winter	1	0%					
35.001	15 Winter	1	0%					
36.000	15 Winter	1	0%					
1.016	60 Winter	1	0%	1/15 Winter				
PN	US/MH Name	Water Level (m)	Surch'ed Depth (m)	Flooded Volume (m³)	Flow / Cap.	O'flow (l/s)	Pipe Flow (l/s)	Status
1.000	TL_SW01	5.240	-0.230	0.000	0.11	0.0	7.7	OK
1.001	TL_SW02	5.001	-0.218	0.000	0.16	0.0	11.0	OK
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Summary of Critical Results by Maximum Level (Rank 1) for Storm								
PN	US/MH Name	Water Level (m)	Surch'd Depth (m)	Flooded Volume (m³)	Flow / Cap.	O'flow (l/s)	Pipe Flow (l/s)	Status
2.000	Parcel A2_1	5.335	-0.165	0.000	0.03	0.0	3.7	OK
2.001	Parcel A2_2	5.333	0.183	0.000	0.22	0.0	2.9	SURCHARGED
1.002	TL_SW03	4.861	-0.195	0.000	0.26	0.0	17.2	OK
3.000	Parcel B6_1	5.095	-0.205	0.000	0.07	0.0	6.3	OK
3.001	Parcel B6_2	5.091	0.141	0.000	0.30	0.0	3.9	SURCHARGED
1.003	TL_SW04	4.759	-0.176	0.000	0.34	0.0	23.6	OK
1.004	TL_SW05	4.483	-0.152	0.000	0.46	0.0	32.8	OK
4.000	Parcel B1&CH_1	4.297	-0.203	0.000	0.11	0.0	6.1	OK
4.001	Parcel B1&CH 2	4.283	-0.002	0.000	0.46	0.0	6.1	OK
1.005	Ex. SB10	4.071	-0.139	0.000	0.55	0.0	37.8	OK
1.006	Ex. SB9	3.937	-0.133	0.000	0.58	0.0	41.4	OK
5.000	Block B_1	4.583	-0.217	0.000	0.05	0.0	8.0	OK
5.001	Block B_2	4.579	0.524	0.000	0.30	0.0	4.1	SURCHARGED
5.002	Ex. SB17	3.738	-0.212	0.000	0.13	0.0	8.4	OK
1.007	Ex. SB8	3.712	-0.088	0.000	0.82	0.0	51.0	OK
6.000	BovisA_1	4.220	-0.255	0.000	0.19	0.0	22.8	OK
6.001	BovisA_2	4.172	-0.203	0.000	0.06	0.0	22.8	OK
1.008	Ex SB7	3.325	-0.175	0.000	0.55	0.0	74.8	OK
7.000	BovisB_1	3.506	-0.269	0.000	0.18	0.0	28.1	OK
7.001	BovisB_2	3.427	-0.173	0.000	0.11	0.0	28.1	OK
1.009	Dummy Node	3.028	-0.147	0.000	0.79	0.0	101.9	OK
8.000	Plots 123 - 126	3.385	-0.085	0.000	0.38	0.0	5.7	OK
8.001	SW01, G01&G02	3.162	-0.103	0.000	0.32	0.0	11.0	OK
9.000	Plots 117 - 122	3.227	-0.088	0.000	0.34	0.0	5.6	OK
9.001	Stub SW02/2	3.141	0.048	0.000	0.32	0.0	9.6	SURCHARGED
10.000	Plots 101-116	3.144	-0.081	0.000	0.40	0.0	17.9	OK
8.002	SW02	3.131	0.078	0.000	1.26	0.0	33.7	SURCHARGED
1.010	Ex SB6	2.883	-0.192	0.000	0.62	0.0	118.5	OK
11.000	Ret Block A	3.119	-0.181	0.000	0.07	0.0	3.6	OK
11.001	Ret Block A	3.115	0.065	0.000	0.18	0.0	3.2	SURCHARGED
12.000	Plots 95-100	3.064	-0.161	0.000	0.18	0.0	8.2	OK
1.011	SW03	2.713	-0.207	0.000	0.57	0.0	124.3	OK
1.012	SW04	2.541	-0.199	0.000	0.60	0.0	125.2	OK
13.000	SW-FUT-01	2.714	-0.146	0.000	0.48	0.0	32.6	OK
14.000	Plots 80-86	2.614	-0.161	0.000	0.18	0.0	11.4	OK
15.000	Plots 87-94	2.615	-0.160	0.000	0.19	0.0	13.1	OK
1.013	SW05	2.441	-0.159	0.000	0.75	0.0	138.9	OK
16.000	C2 Resiblock A	2.355	-0.145	0.000	0.28	0.0	18.4	OK
1.014	SW06	2.300	-0.140	0.000	0.81	0.0	144.3	OK
17.000	SW-FUT-02	2.444	-0.176	0.000	0.33	0.0	21.9	OK
18.000	Plots 60-73	2.656	-0.169	0.000	0.14	0.0	7.8	OK
19.000	Plots 74-78	2.662	-0.163	0.000	0.17	0.0	9.1	OK
17.001	SW07	2.273	-0.127	0.000	0.62	0.0	39.2	OK
20.000	Plots 39-46	3.129	-0.186	0.000	0.07	0.0	8.5	OK
21.000	SW-LYM 01	3.814	-0.151	0.000	0.23	0.0	7.0	OK
22.000	Non resi	4.122	-0.328	0.000	0.02	0.0	4.7	OK
22.001	Non resi	4.120	0.175	0.000	0.10	0.0	3.5	SURCHARGED
21.001	SW-LYM 02	3.734	-0.131	0.000	0.35	0.0	12.1	OK
23.000	Parcel A1	4.068	-0.382	0.000	0.06	0.0	12.3	OK
23.001	As-built SA8	3.939	-0.049	0.000	0.31	0.0	12.3	OK
24.000	Non Resi	4.117	-0.333	0.000	0.02	0.0	5.0	OK
24.001	SW Stub 02	4.116	0.251	0.000	0.09	0.0	3.5	SURCHARGED
23.002	SW-LYM 03/1	3.664	-0.131	0.000	0.36	0.0	15.6	OK
21.002	SW-LYM 03	3.484	-0.091	0.000	0.66	0.0	22.0	OK
21.003	SW-LYM 04	3.351	-0.174	0.000	0.36	0.0	22.7	OK
25.000	SW-LYM 07	3.932	-0.163	0.000	0.17	0.0	7.3	OK
25.001	SW-LYM 08	3.748	-0.147	0.000	0.26	0.0	16.2	OK
26.000	PBA 01	12.262	-0.163	0.000	0.17	0.0	13.5	OK
26.001	PBA 02	10.470	-0.155	0.000	0.21	0.0	22.9	OK
26.002	PBA 03	7.300	-0.125	0.000	0.41	0.0	32.2	OK
26.003	SW-LYM 05	5.629	-0.211	0.000	0.19	0.0	34.6	OK
21.004	SW-LYM 10	3.189	-0.176	0.000	0.54	0.0	70.6	OK
21.005	SW-LYM11	2.903	-0.227	0.000	0.48	0.0	88.1	OK
27.000	ExSB17_Dum Node	3.700	-0.225	0.000	0.00	0.0	0.0	OK
21.006	SW-LYM 12	2.709	-0.261	0.000	0.37	0.0	91.1	OK
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PN	US/MH Name	Water Level (m)	Surch'd Depth (m)	Flooded Volume (m³)	Flow / Cap.	O'flow (l/s)	Pipe Flow (l/s)	Status
21.007	SW-FUT-03	2.460	-0.230	0.000	0.47	0.0	91.8	OK
28.000	Stub SW18/1	2.616	-0.109	0.000	0.51	0.0	16.9	OK
28.001	SW18	2.507	-0.098	0.000	0.61	0.0	21.2	OK
21.008	SW19	2.189	-0.231	0.000	0.48	0.0	110.6	OK
21.009	SW20	2.048	-0.277	0.000	0.45	0.0	109.0	OK
29.000	Car Park	4.508	0.558	0.000	0.04	0.0	7.3	SURCHARGED
29.001	Car Park	4.548	0.998	0.000	0.10	0.0	4.2	SURCHARGED
30.000	Non Resi	2.834	-0.316	0.000	0.02	0.0	4.3	OK
30.001	Stub SW9/1	2.836	0.011	0.000	0.08	0.0	3.3	SURCHARGED
31.000	SW08	3.599	-0.176	0.000	0.11	0.0	10.3	OK
32.000	Non Resi	2.785	-0.365	0.000	0.02	0.0	5.8	OK
32.001	Stub SW9/2	2.783	0.058	0.000	0.08	0.0	3.4	SURCHARGED
30.002	SW09	2.517	-0.108	0.000	0.53	0.0	21.3	OK
33.000	SW12	2.863	-0.152	0.000	0.22	0.0	7.5	OK
33.001	SW13	2.777	-0.128	0.000	0.38	0.0	14.9	OK
33.002	SW14	2.638	-0.107	0.000	0.53	0.0	21.5	OK
33.003	SW15	2.351	-0.179	0.000	0.33	0.0	28.2	OK
30.003	SW16	2.233	-0.167	0.000	0.40	0.0	55.4	OK
30.004	SW17	1.985	-0.265	0.000	0.35	0.0	54.0	OK
21.010	SW21	1.913	-0.647	0.000	0.13	0.0	75.4	OK
20.001	SW22	1.910	-0.620	0.000	0.09	0.0	75.6	OK
34.000	Plots 47-55	2.667	-0.158	0.000	0.19	0.0	8.5	OK
20.002	SW23	1.906	-0.489	0.000	0.09	0.0	69.5	OK
1.015	SW24	1.910	-0.400	0.000	0.17	0.0	138.9	OK
35.000	Plots	2.428	-0.167	0.000	0.14	0.0	5.8	OK
35.001	Stub SW25/1	2.220	-0.145	0.000	0.27	0.0	10.7	OK
36.000	Stub SW25/2	2.245	-0.140	0.000	0.31	0.0	12.0	OK
1.016	SW25	1.863	0.138	0.000	0.42	0.0	144.4	SURCHARGED
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APPENDIX K: Condition 10, Pre-Demolition Drainage



NOTES

1. Do not scale.

KEY



Western Area - Former Toddington Nursery. Outfalls to northern floodplain area via pipe connection and overland flow mechanisms.



Central West - former Holland Nursery, discharge to Toddington Ditch.



Central East Area. Outfall to Toddington Ditch.

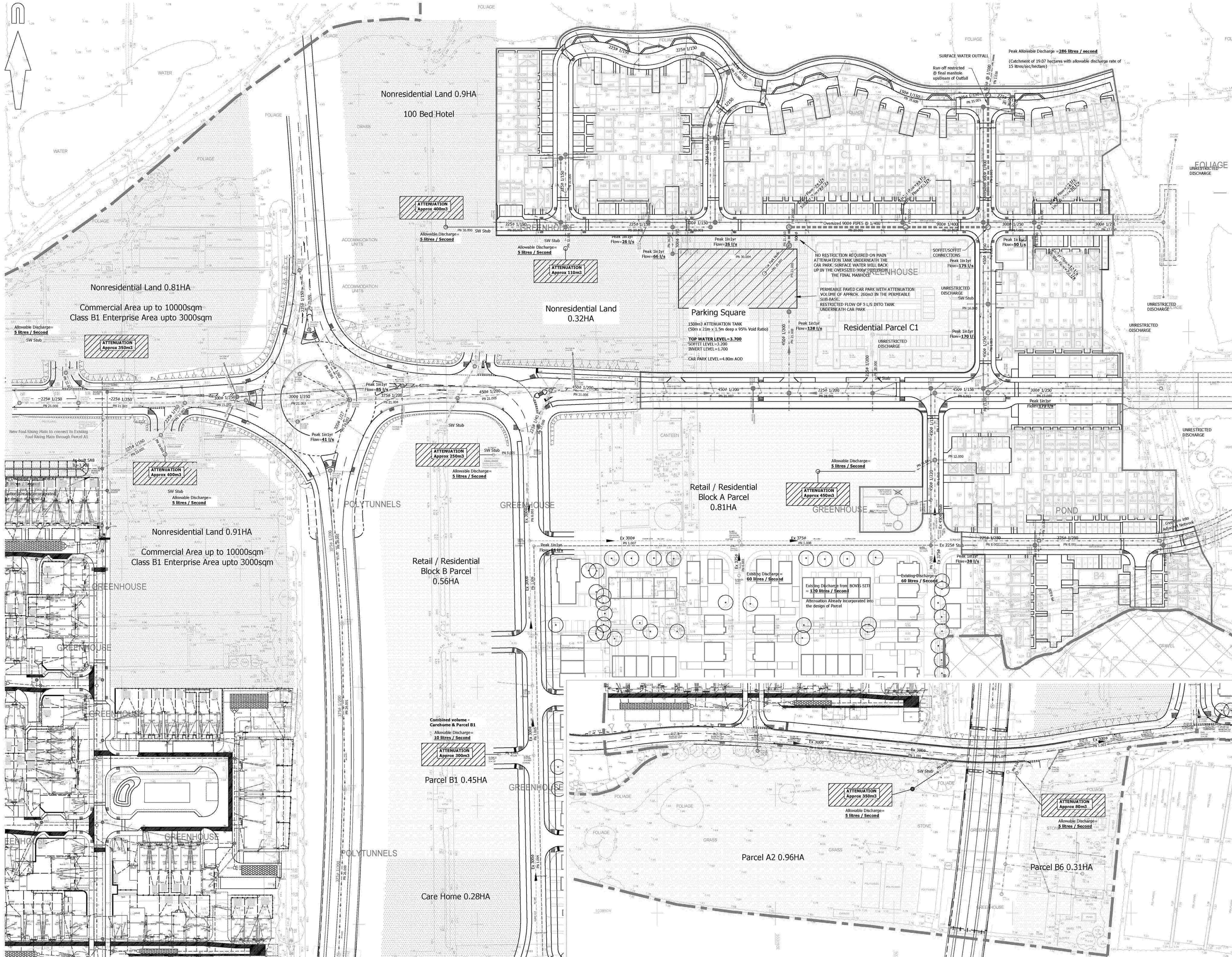


Eastern Area - Former Zuider Zee Nursery. Discharge to existing lake and Norway Ditch.

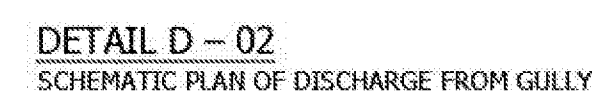
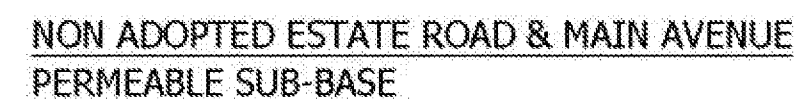
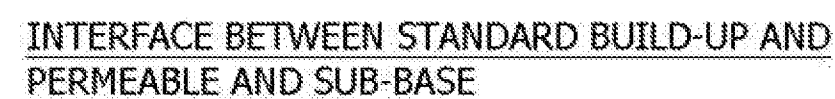
Rev.	Description	Date	Chkd
 Glanville Cornerstone House 82 Foxhall Road, Didcot Oxon, OX11 7AD Tel: (01235) 515550 Fax: (01235) 817799 pres@glanvillegroup.com www.glanvillegroup.com			
Client : Persimmon Homes			
Project : North Littlehampton			
Title : Illustrative Existing Surface Water Regime			
Project Engineer : S. Hudson		Scale : 1:2000	
Project Director : K. Rayner		Date : September 2014	
Status : Preliminary			
Drawing No. 8140927/107			Rev

Glanville Consultants		Page 1
Cornerstone Court 62 Foxhall Road Didcot OX11 7AD		
Date 31/03/2015 15:20 File	Designed by jokelly Checked by	
Micro Drainage Source Control 2015.1		
<u>ICP SUDS Mean Annual Flood</u> Input Return Period (years) 1 Soil 0.500 Area (ha) 1.000 Urban 0.750 SAAR (mm) 739 Region Number Region 7 Results l/s QBAR Rural 5.9 QBAR Urban 15.0 Q1 year 12.7 Q1 year 12.7 Q30 years 26.0 Q100 years 30.4		
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APPENDIX L: Drainage Strategy, West of Wetlands



APPENDIX M: Permeable Sub-base Road & Filter Trenches



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NOTES

1. Carriageway sub-base and capping layer thicknesses are to be determined in accordance with the WSCC detail numbered S278/36/21, unless otherwise agreed.
2. The CBR of the subgrade been assumed to be 2%. The Contractor is responsible for determining the subgrade CBR values prior to commencement of the works via long term laboratory testing. The CBR test locations, values and hence the road foundation thicknesses shall be agreed in writing with the Highway Authority prior to constructing these elements.
3. No material within 450mm of the carriageway surface shall be frost susceptible.
4. Where directed by the Engineer the Contractor shall carry out additional testing in order to prove the CBR value of the sub-grade material.
5. All works and materials shall comply with the Highways Agency Manual of Contract Documents for Highway Works (MCHW) and West Sussex County Council Standard details.

FOR CONSTRUCTION

C1	Construction issue, (C310)	SF	09/02/18
T1	Initial issue, (SF)	SF	06/02/18

rev.	amendment	checked	date
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Mayer Brown Limited
Lion House Oriental Road Woking Surrey GU22 8AR
Telephone 01483 750 506 Fax 01483 750 437
wokingoffice@mayerbrown.co.uk www.mayerbrown.co.uk

client.

PERSIMMON HOMES THAMES VALLEY

project

NORTH LITTLEHAMPTON PHASE 2
PARCEL C1 AND PART PARCEL B2, B4 AND C2

scale	1:20	drawn by	SF	checked by	SF
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date	FEBRUARY 2018	cad file	MBC01.DWG
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PERMEABLE SUB-BASE ROAD
CONSTRUCTION DETAILS

drawing number:	rev.
A/PHLITTLE-INT.2 MB/F/02	C1

