

ECMWF: Proposed SW Drainage Network Car Park + Eastern Road Catchment	Date: 07/08/2025			
	Designed by: COB	Checked by: LJ	Approved By: CHF	
Report Details: Type: Junctions Summary Storm Phase: Catchment 4 (Car Park and Eastern	Company: BDP			



Design Criteria FSR: 100 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
SWMH25	Design Criteria FSR: 100 years: +40 %: 30 mins: Winter	66.96 3	65.83 8	66.625	0.787	8.9	0.890	0.000	9.2	7.749	Surcharged
SWMH26	Design Criteria FSR: 100 years: +40 %: 30 mins: Winter	66.91 7	65.63 8	66.621	0.983	17.0	1.112	0.000	8.7	8.865	Surcharged
SWMH27	Design Criteria FSR: 100 years: +40 %: 30 mins: Winter	66.79 9	65.45 2	66.616	1.164	22.0	0.329	0.000	21.1	19.446	Surcharged
SWMH28	Design Criteria FSR: 100 years: +40 %: 30 mins: Winter	66.64 1	65.51 6	66.628	1.112	14.2	0.315	0.000	16.4	12.319	Flood Risk
SW.03	Design Criteria FSR: 100 years: +40 %: 30 mins: Winter	66.82 7	65.32 5	66.560	1.235	55.6	1.396	0.000	55.2	49.632	Surcharged
SW.26	Design Criteria FSR: 100 years: +40 %: 30 mins: Winter	66.70 5	65.58 5	66.386	0.801	28.1	0.906	0.000	16.4	30.010	Surcharged
SW.01	Design Criteria FSR: 100 years: +40 %: 30 mins: Winter	66.70 4	65.57 9	66.629	1.050	19.9	0.297	0.000	20.2	17.467	Flood Risk
SW.02	Design Criteria FSR: 100 years: +40 %: 30 mins: Winter	66.58 8	65.47 2	66.588	1.116	24.6	0.381	0.065	19.9	20.012	Flood Risk
SW.31	Design Criteria FSR: 100 years: +40 %: 480 mins: Winter	66.86 4	64.89 1	66.292	1.401	6.8	2.475	0.000	6.1	297.259	Surcharged
SW.24	Design Criteria FSR: 100 years: +40 %: 30 mins: Winter	66.94 3	65.17 3	66.340	1.167	73.6	1.320	0.000	72.9	87.175	Surcharged
SW.27	Design Criteria FSR: 100 years: +40 %: 480 mins: Winter	66.62 9	65.49 2	66.293	0.801	0.8	0.227	0.000	0.6	15.038	Surcharged
SW.28	Design Criteria FSR: 100 years: +40 %: 480 mins: Winter	66.67 4	65.33 1	66.293	0.962	2.2	0.272	0.000	1.7	56.762	Surcharged
SW.29	Design Criteria FSR: 100 years: +40 %: 480 mins: Winter	66.93 1	65.09 0	66.292	1.203	17.5	1.360	0.000	17.5	338.336	Surcharged
SW.30	Design Criteria FSR: 100 years: +40 %: 480 mins: Winter	66.93 1	65.04 7	66.292	1.245	17.5	1.408	0.000	9.3	391.910	Surcharged
SWMH33	Design Criteria FSR: 100 years: +40 %: 480 mins: Winter		65.47 9	66.292	0.813	10.5			0.7	95.062	Surcharged

ECMWF: Proposed SW Drainage Network Car Park + Eastern Road Catchment				Date: 07/08/2025					
Report Details: Type: Junctions Summary Storm Phase: Catchment 4 (Car Park and Easten				Designed by: COB	Checked by: LJ	Approved By: CHF			
				Company: BDP					

SWMH34	Design Criteria FSR: 100 years: +40 %: 480 mins: Winter		65.41 3	66.292	0.879	11.4			1.7	132.154	Surcharged
SWMH35	Design Criteria FSR: 100 years: +40 %: 480 mins: Winter		65.38 4	66.292	0.908	13.0			2.0	162.405	Surcharged
SWMH12	Design Criteria FSR: 100 years: +40 %: 480 mins: Winter		65.57 5	66.293	0.718	0.6			0.6	15.340	Surcharged
SWMH14	Design Criteria FSR: 100 years: +40 %: 480 mins: Winter		65.45 5	66.293	0.838	3.0			1.0	39.084	Surcharged
SWMH15	Design Criteria FSR: 100 years: +40 %: 480 mins: Winter		65.39 0	66.293	0.903	3.0			1.3	44.928	Surcharged
SWMH18	Design Criteria FSR: 100 years: +40 %: 480 mins: Winter		65.29 7	66.293	0.996	2.3			1.9	70.112	Surcharged
SWMH19	Design Criteria FSR: 100 years: +40 %: 480 mins: Winter		65.28 6	66.293	1.007	2.8			2.7	99.627	Surcharged
SWMH20	Design Criteria FSR: 100 years: +40 %: 480 mins: Winter		65.18 4	66.293	1.109	2.9			2.7	109.935	Surcharged
SWMH21	Design Criteria FSR: 100 years: +40 %: 480 mins: Winter		65.19 7	66.293	1.096	3.9			3.8	138.426	Surcharged
SWMH37	Design Criteria FSR: 100 years: +40 %: 480 mins: Winter		65.58 6	66.292	0.706	1.6			1.5	27.905	Surcharged
SWMH16	Design Criteria FSR: 100 years: +40 %: 480 mins: Winter		65.35 8	66.293	0.935	2.8			1.7	59.929	Surcharged
SW.33	Design Criteria FSR: 100 years: +40 %: 15 mins: Winter	66.55 3	65.62 8	66.554	0.926	13.9	2.306	1.260	14.3	7.424	Flood
SW.34	Design Criteria FSR: 100 years: +40 %: 15 mins: Winter	66.72 5	65.53 4	66.529	0.995	20.1	1.125	0.000	20.2	16.587	Surcharged
SW.35	Design Criteria FSR: 100 years: +40 %: 15 mins: Winter	66.68 2	65.35 4	66.456	1.102	31.0	1.246	0.000	25.8	23.307	Surcharged
SW.36	Design Criteria FSR: 100 years: +40 %: 15 mins: Winter	66.50 8	65.19 2	66.358	1.166	27.7	1.319	0.000	29.3	26.509	Flood Risk
SW.37	Design Criteria FSR: 100 years: +40 %: 30 mins: Winter	66.48 7	65.13 2	66.310	1.178	43.1	1.332	0.000	40.7	51.610	Surcharged
SW.38	Design Criteria FSR: 100 years: +40 %: 15 mins: Winter	66.40 9	64.92 9	66.059	1.131	43.5	1.279	0.000	42.3	42.548	Surcharged

ECMWF: Proposed SW Drainage Network Car Park + Eastern Road Catchment				Date: 07/08/2025				I DRN					
Report Details: Type: Junctions Summary Storm Phase: Catchment 4 (Car Park and Eastern)				Designed by:		Checked by:						Approved By:	
				COB		LJ						CHF	
				Company: BDP									
SW.39	Design Criteria FSR: 100 years: +40 %: 15 mins: Winter	66.33 1	64.86 4	65.946	1.082	48.2	1.224	0.000	46.5	47.061	Surcharged		
Simple Junction	Design Criteria FSR: 100 years: +40 %: 15 mins: Summer		64.40 0	64.625	0.225	62.0			62.0	57.519	OK		
SW.43	Design Criteria FSR: 100 years: +40 %: 15 mins: Winter	66.72 4	64.67 1	65.443	0.772	63.2	0.873	0.000	63.7	64.152	Surcharged		
SW.32	Design Criteria FSR: 100 years: +40 %: 15 mins: Winter	66.83 0	64.85 8	65.446	0.588	7.1	0.665	0.000	9.4	7.596	Surcharged		
SW.41	Design Criteria FSR: 100 years: +40 %: 15 mins: Winter	66.23 5	64.74 7	65.679	0.932	60.7	1.054	0.000	57.0	56.898	Surcharged		
BYPASS S	Design Criteria FSR: 100 years: +40 %: 15 mins: Winter	66.37 3	64.62 0	65.332	0.712	63.7	0.805	0.000	64.1	63.966	Surcharged		
SW.40	Design Criteria FSR: 100 years: +40 %: 15 mins: Winter	66.15 3	64.76 9	65.757	0.989	52.7	1.118	0.000	50.2	51.179	Surcharged		
SW.41 (1)	Design Criteria FSR: 100 years: +40 %: 15 mins: Winter	66.01 1	65.49 5	65.681	0.186	12.6	0.211	0.000	11.8	5.702	OK		
SW.44	Design Criteria FSR: 100 years: +40 %: 15 mins: Winter	66.34 6	64.60 0	65.210	0.610	64.1	0.690	0.000	64.4	63.682	Surcharged		

ECMWF: Proposed SW Drainage Network Car Park + Eastern Road Catchment		Date: 07/08/2025		
		Designed by:	Checked by:	
Report Details: Type: Stormwater Controls Summary Storm Phase: Catchment 4 (Car Park and Eastern		COB	LJ	Approved By: CHF
		Company: BDP		



Design Criteria FSR: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item:
Rank By: Max. Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Residual Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Percentage Available (%)	Status
PP9	Design Criteria FSR: 2 years: +0 %: 30 mins: Winter	66.322	66.084	0.031	0.051	6.9	3.472	0.000	0.000	4.5	5.579	86.382	OK
PP5.2	Design Criteria FSR: 2 years: +0 %: 60 mins: Winter	66.049	66.024	0.072	0.052	4.4	3.676	0.000	0.000	2.4	5.674	89.362	OK
PP1	Design Criteria FSR: 2 years: +0 %: 30 mins: Winter	65.996	65.983	0.044	0.033	2.1	1.010	0.000	0.000	1.2	1.576	88.818	OK
PP2	Design Criteria FSR: 2 years: +0 %: 60 mins: Winter	66.055	66.025	0.038	0.011	2.3	1.858	0.000	0.000	1.4	2.768	91.435	OK
PP3.1	Design Criteria FSR: 2 years: +0 %: 30 mins: Winter	66.005	65.975	0.040	0.012	1.8	0.669	0.000	0.000	1.3	1.401	92.756	OK
PP.8	Design Criteria FSR: 2 years: +0 %: 30 mins: Winter	66.209	66.053	0.025	0.058	4.2	2.172	0.000	0.000	2.8	3.420	92.443	OK
PP4.1	Design Criteria FSR: 2 years: +0 %: 180 mins: Winter	65.982	65.982	0.077	0.079	1.2	1.980	0.000	0.000	0.7	3.707	85.514	OK
PP4.2	Design Criteria FSR: 2 years: +0 %: 60 mins: Winter	66.010	65.982	0.069	0.047	5.2	5.109	0.000	0.000	2.1	6.035	88.060	OK
PP5.1	Design Criteria FSR: 2 years: +0 %: 180 mins: Winter	65.982	65.982	0.036	0.042	0.8	2.207	0.000	0.000	0.4	3.007	93.903	OK
PP6.1	Design Criteria FSR: 2 years: +0 %: 120 mins: Winter	66.033	65.994	0.041	0.008	1.5	2.373	0.000	0.000	0.7	3.190	94.736	OK
PP6.2	Design Criteria FSR: 2 years: +0 %: 180 mins: Winter	65.981	65.981	0.112	0.118	7.7	8.018	0.000	0.000	2.4	12.564	81.815	OK

ECMWF: Proposed SW Drainage Network Car Park + Eastern Road Catchment		Date: 07/08/2025			
Report Details: Type: Stormwater Controls Summary Storm Phase: Catchment 4 (Car Park and Easten		Designed by: COB	Checked by: LJ		Approved By: CHF
		Company: BDP			

PP7	Design Criteria FSR: 2 years: +0 %: 180 mins: Winter	65.982	65.981	0.042	0.047	1.3	4.200	0.000	0.000	0.7	4.276	92.484	OK
Cellular Storage	Design Criteria FSR: 2 years: +0 %: 180 mins: Winter	65.981	65.981	1.051	1.051	13.3	14.311	0.000	0.000	5.8	93.485	6.181	OK
PP3.2	Design Criteria FSR: 2 years: +0 %: 30 mins: Winter	65.988	65.973	0.055	0.042	2.7	1.112	0.000	0.000	1.8	2.154	88.288	OK

ECMWF: Proposed SW Drainage Network Car Park + Eastern Road Catchment		Date: 07/08/2025			
		Designed by:	Checked by:	Approved By:	
Report Details: Type: Stormwater Controls Summary Storm Phase: Catchment 4 (Car Park and Eastern Road)		COB	LJ	CHF	
		Company: BDP			



Design Criteria FSR: 30 years: Increase Rainfall (%): +0: Critical Storm Per Item:
Rank By: Max. Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Residual Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Percentage Available (%)	Status
PP9	Design Criteria FSR: 30 years: +0 %: 15 mins: Winter	66.334	66.117	0.043	0.084	20.3	5.545	0.000	0.000	9.9	7.567	78.257	OK
PP5.2	Design Criteria FSR: 30 years: +0 %: 120 mins: Winter	66.106	66.105	0.130	0.133	5.4	7.157	0.000	0.000	3.4	12.397	79.288	OK
PP1	Design Criteria FSR: 30 years: +0 %: 120 mins: Winter	66.107	66.107	0.155	0.157	2.4	3.935	0.000	0.000	2.2	7.364	56.411	OK
PP2	Design Criteria FSR: 30 years: +0 %: 120 mins: Winter	66.107	66.107	0.091	0.093	4.8	5.703	0.000	0.000	1.9	6.345	73.703	OK
PP3.1	Design Criteria FSR: 30 years: +0 %: 120 mins: Winter	66.107	66.107	0.143	0.145	5.5	3.036	0.000	0.000	1.5	3.470	67.133	OK
PP.8	Design Criteria FSR: 30 years: +0 %: 15 mins: Winter	66.218	66.092	0.034	0.097	12.4	3.460	0.000	0.000	6.3	4.587	87.963	OK
PP4.1	Design Criteria FSR: 30 years: +0 %: 120 mins: Winter	66.107	66.107	0.202	0.204	2.4	5.153	0.000	0.000	0.8	4.156	62.286	OK
PP4.2	Design Criteria FSR: 30 years: +0 %: 120 mins: Winter	66.110	66.108	0.169	0.173	7.2	13.674	0.000	0.000	3.0	12.280	68.048	OK
PP5.1	Design Criteria FSR: 30 years: +0 %: 120 mins: Winter	66.105	66.106	0.159	0.165	3.9	9.235	0.000	0.000	1.2	7.038	74.488	OK
PP6.1	Design Criteria FSR: 30 years: +0 %: 240 mins: Winter	66.103	66.103	0.111	0.116	3.7	8.129	0.000	0.000	1.0	7.922	81.967	OK
PP6.2	Design Criteria FSR: 30 years: +0 %: 240 mins: Winter	66.103	66.103	0.234	0.240	14.0	16.478	0.000	0.000	3.0	15.580	62.629	OK