Ref	Eastings	Northings	Cover level	Depth	Type	Size	Pipes in			Pipe out		Backdrop Invert	Cover	Comments
							From	Invert	Dia	Invert	Dia			
FW01	509965.059	188873.715	56.500	0.55	PPIC	450min	FG	52.750	150	55.950	150		D400	Double sealed, recessed lid
FW02	509950.545	188869.108	56.520	0.67	PPIC	450min	FW01 SVP	55.850 55.925	150 100	55.850	150		B125	Double sealed, recessed lid, lockable
FW03	509946.748	188867.892	56.520	0.72	PPIC	450min	FW02 SVP	55.800 55.875	150 100	51.940	150		B125	Double sealed, recessed lid, lockable
FW04	509938.942	188865.359	56.520	0.82	PPIC	450min	FW03 SVP	55.700 55.775	150 100	55.700	150		B125	Double sealed, recessed lid, lockable
FW05	509938.050	188865.069	56.520	0.83	PPIC	450min	FW04 SVP	55.690 55.765	150 100	55.690	150		B125	Double sealed, recessed lid, lockable
FW06	509936.342	188864.512	56.520	0.84	PPIC	450min	FW05 SVP	55.680 55.755	150 100	55.680	150		B125	Double sealed, recessed lid, lockable
FW07	509930.767	188859.922	56.600	0.81	PPIC	450min	2xSVP	55.795	100	55.720	150		B125	Double sealed, recessed lid, lockable
FW08	509929.862	188862.400	56.520	0.89	PPIC	450min	FW07	55.705	150	55.630	150		B125	Double sealed, recessed lid, lockable
FW09	509923.643	188860.223	56.520	0.94	PPIC	450min	FW08 SVP	55.580 55.655	150 100	55.580	150		B125	Double sealed, recessed lid, lockable
FW10	509918.779	188858.476	56.520	0.98	PPIC	450min	FW09 SVP	55.540 55.615	150 100	55.540	150		B125	Double sealed, recessed lid, lockable
FW11	509914.973	188854.640	56.600	1.00	PPIC	450min	2xSVP	55.675	150	55.600	150		B125	Double sealed, recessed lid, lockable
FW12	509914.144	188856.836	56.520	1.02	PPIC	450min	FW10 FW11	55.500 55.575	150 150	55.500	150		B125	Double sealed, recessed lid, lockable
FW13	509909.977	188849.041	56.600	0.89	PPIC	450min	SVP FG	55.785 55.785	100 100	55.710	150		B125	Double sealed, recessed lid, lockable
FW14	509911.438	188849.536	56.600	0.98	PPIC	450min	FW13 2xSVP FG	55.695 55.695 55.670	150 100 100	55.620	150		B125	Double sealed, recessed lid, lockable
FW15	509909.950	188855.351	56.520	1.05	PPIC	450min	FW12 FW14	55.470 55.545	150 150	55.470	150		B125	Double sealed, recessed lid, lockable
FW17	509905.110	188853.436	56.520	1.09	PPIC	450min	FW15 SVP	55.430 55.505	150 100	55.430	150		B125	Double sealed, recessed lid, lockable
FW18	509900.945	188846.545	56.600	1.10	PPIC	450min	2xSVP	55.575	100	55.500	150		B125	Double sealed, recessed lid, lockable
FW19	509899.663	188850.016	56.500	1.12	PPIC	450min	FW17 FW18	55.380 55.455	150 150	55.380	150		B125	Double sealed, recessed lid, lockable
FW20	509893.973	188848.164	56.520	1.18	PPIC	450min	FW19 SVP FG	55.340 55.415 55.415	150 100 100	55.340	150		B125	Double sealed, recessed lid, lockable
FW21	509887.384	188845.948	56.520	1.23	PPIC	450min	FW20 2xSVP	55.290 55.365	150 100	55.290	150		B125	Double sealed, recessed lid, restricted access, lockable
FW22	509879.073	188843.171	56.550	1.32	PPIC	450min	FW21 SVP	55.230 55.305	150 100	55.230	150		B125	Double sealed, recessed lid, restricted access, lockable
FW23	509875.140	188841.681	56.550	1.35	PPIC	450min	FW22	55.200	150	55.200	150		B125	Double sealed, recessed lid, restricted access, lockable
FW24	509868.104	188834.011	56.540	1.41	PPIC	450min	FW23	55.130	150	55.130	150		B125	Double sealed, recessed lid, restricted access, lockable
FW25	509877.232	188835.410	56.550	1.21	PPIC	450min	SVP SVP FG	55.390 55.415 55.415	100 100 100	55.340	150		B125	Double sealed, recessed lid, restricted access, lockable
FW26	509868.698	188831.931	56.540	1.38	PPIC	450min	FW24 FW25	55.160 55.235	150 150	55.160	150		B125	Double sealed, recessed lid, restricted access, lockable
FW27	509870.014	188825.975	56.520	1.44	PPIC	450min	FW26 2xSVP	55.080 55.155	150 100	55.080	150		B125	Double sealed, recessed lid, restricted access, lockable
FW28	509867.161	188824.171	56.520	1.47	PPIC	450min	FW27	55.050	150	55.050	150		B125	Double sealed, recessed lid, restricted access, lockable
FW29	509870.559	188813.135	56.540	1.57	PPIC	450min	FW28 SVP	54.970 55.045	150 100	54.970	150		B125	Double sealed, recessed lid, restricted access, lockable
FW30	509871.607	188809.888	56.540	1.59	PPIC	450min	FW29 SVP	54.950 55.025	150 100	54.950	150		B125	Double sealed, recessed lid, restricted access, lockable
FW31	509873.547	188803.528	56.540	1.64	PPIC	450min	FW30 2xSVP	54.900 54.975	150 100	54.900	150		B125	Double sealed, recessed lid, restricted access, lockable
FW32	509875.184	188798.159	56.540	1.68	PPIC	450min	FW31 SVP	54.860 54.935	150 100	54.860	150		B125	Double sealed, recessed lid, restricted access, lockable
FW33	509876.964	188792.325	56.550	1.73	PPIC	450min	FW32 2xSVP	54.820 54.895	150 100	54.820	150		B125	Double sealed, recessed lid, restricted access, lockable
FW34	509877.425	188790.811	56.550	1.74	PPIC	450min	FW33	54.810	150	54.810	150		B125	Double sealed, recessed lid, restricted access, lockable
FW35	509881.722	188785.859	56.500	1.74	Type 2	1200	FW35	54.760	150	54.760	150		B125	Double sealed, recessed lid, lockable
FW36	509897.764	188791.919	56.500	1.85	PPIC	450min	FW35	54.650	150	54.650	150		B125	Double sealed, recessed lid, restricted access, lockable
FW37	509897.420	188795.483	56.570	1.94	PPIC	450min	FW36 SVP	54.630 54.705	150 100	54.630	150		B125	Double sealed, recessed lid, restricted access, lockable

Ref	Eastings	Northings	Cover level	Depth	Type	Size	Pipes in			Pipe out		Backdrop Invert	Cover	Comments
							From	Invert	Dia	Invert	Dia			
FW38	509907.536	188798.871	56.500	1.94	PPIC	450min	FW37 SVP FG	54.560 54.635 54.635	150 100 100	54.560	150		B125	Double sealed, recessed lid, restricted access, lockable
FW39	509910.851	188799.923	56.550	2.02	PPIC	450min	FW38 2xSVP	54.530 54.605	150 100	54.530	150		B125	Double sealed, recessed lid, restricted access, lockable
FW40	509974.554	188824.443	56.550	1.27	PPIC	450min	FG	55.330	100	55.280	150		D400	Double sealed, recessed lid, restricted access, lockable
FW41	509957.889	188818.946	56.600	1.54	PPIC	450min	FW40 SVP	55.060 55.135	150 100	55.060	150		B125	Double sealed, recessed lid, restricted access, lockable
FW42	509944.837	188836.774	56.500	0.84	PPIC	450min	2xSVP	55.735	100	55.660	150		B125	Double sealed, recessed lid, lockable
FW43	509944.201	188839.173	56.500	0.95	PPIC	450min	FW42 SVP FG	55.625 55.600 55.625	150 100 100	55.550	150		B125	Double sealed, recessed lid, lockable
FW44	509942.619	188845.125	56.500	0.99	PPIC	450min	SVP	55.560	100	55.510	150		B125	Double sealed, recessed lid, lockable
FW45	509943.891	188842.187	56.500	1.03	PPIC	450min	FW44 SVP FG	55.470 55.545 55.545	150 100 100	55.470	150		B125	Double sealed, recessed lid, lockable
FW46	509948.975	188840.872	56.490	1.08	PPIC	450min	FW43 FW45 2xSVP	55.485 55.410 55.485	150 150 100	55.410	150		B125	Double sealed, recessed lid, lockable
FW47	509950.140	188838.130	56.590	1.21	PPIC	450min	FW46	55.380	150	55.380	150		B125	Double sealed, recessed lid, restricted access, lockable
FW48	509956.917	188818.625	56.600	1.55	PPIC	450min	FW41 SVP	55.050 55.125	150 100	55.050	150		B125	Double sealed, recessed lid, restricted access, lockable
FW49	509955.699	188818.217	56.600	1.56	PPIC	450min	FW48 SVP	55.040 55.115	150 100	55.040	150		B125	Double sealed, recessed lid, restricted access, lockable
FW50	509951.891	188816.941	56.600	1.59	PPIC	450min	FW49 2xSVP	55.010 55.085	150 100	55.010	150		B125	Double sealed, recessed lid, restricted access, lockable
FW51	509947.553	188815.490	56.600	1.62	PPIC	450min	FW50 OF FG	54.980 55.055 55.055	150 100 100	54.980	150		B125	Double sealed, recessed lid, restricted access, overflow pipe connection from pool balance tank, lockable
FW52	509943.864	188813.565	56.600	1.65	PPIC	450min	FW51 BW SU	54.950 55.025 55.025	150 150 100	54.950	150		B125	Double sealed, recessed lid, restricted access, backwash drain from pool plant 12.6l/s, connection from pool channel drainage, lockable
FW53	509939.685	188812.173	56.600	1.71	PPIC	450min	FW52 FG SU	54.890 54.965 54.965	150 100 100	54.890	150		B125	Double sealed, recessed lid, restricted access, connection from pool channel drainage, lockable
FW54	509938.605	188811.663	56.600	1.72	PPIC	450min	FW53 SVP FG	54.880 54.955 54.955	150 100 100	54.880	150		B125	Double sealed, recessed lid, restricted access, lockable
FW55	509931.907	188813.797	56.600	1.55	PPIC	450min	FG FG SVP	55.100 55.125 55.125	100 100 100	55.050	150		B125	Double sealed, recessed lid, restricted access, lockable
FW56	509933.788	188809.389	56.570	1.76	PPIC	450min	FW54 FW55	54.810 54.895	150 150	54.810	150		B125	Double sealed, recessed lid, restricted access, lockable
FW57a	509925.182	188837.032	56.550	0.83	PPIC	450min	SVP SVP	55.770 55.975	100 100	55.720	150		B125	Double sealed, recessed lid, restricted access, lockable
FW57	509925.273	188837.096	56.550	0.85	PPIC	450min	SVP 3xSVP	55.750 55.775	100 100	55.700	150		B125	Double sealed, recessed lid, lockable
FW58a	509927.473	188829.883	56.550	0.85	PPIC	450min	FW57a 2xSVP	55.700 55.775	100 100	55.700	150		B125	Double sealed, recessed lid, lockable
FW58	509927.790	188828.917	56.550	0.95	PPIC	450min	FW57 SVP 2xFG	55.675 55.650 55.675	150 100 100	55.600	150		B125	Double sealed, recessed lid, lockable
FW59	509916.110	188832.902	56.550	0.78	PPIC	450min	FG 2xSVP	55.820 55.845	100 100	55.770	150		B125	Double sealed, recessed lid, lockable
FW60a	509925.523	188824.822	56.550	1.00	PPIC	450min	FW58 FW59	55.550 55.625	100 100	55.550	150		B125	Double sealed, recessed lid, lockable
FW60	509925.882	188823.695	56.520	0.99	PPIC	450min	FW58 FW59 SVP	55.530 55.605 55.605	150 150 100	55.530	150		B125	Double sealed, recessed lid, lockable
FW61	509928.848	188807.161	56.570	1.83	PPIC	450min	FW56 FW60	54.740 54.815	150 150	54.740	150		B125	Double sealed, recessed lid, restricted access, lockable
FW62	509919.941	188803.327	56.570	1.95	PPIC	450min	FW61 SVP FG	54.620 54.695 54.695	150 100 100	54.620	150		B125	Double sealed, recessed lid, restricted access, lockable
FW63	509914.877	188801.147	56.550	2.05	Type 2	1200	FW39 FW62 2xSVP	54.500 54.500 54.550	150 150 100	54.500	150		B125	Double sealed, recessed lid, lockable

GENERAL NOTES:

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Rev:	Description:	Date:	By:	Chkd:
P03	UPDATED TO SUIT REVISED HYDROTHERAPY POOL LAYOUT, MEP LAYOUTS & STRUCTURAL LAYOUTS	21.06.23	CRR	LG
P02	UPDATED TO SUIT CLIENT COMMENTS	27.04.23	CRR	MCS
P01	STAGE 4a ISSUE	17.03.23	CRR	MCS

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Status:
SUITABLE FOR AUTHORIZATION S4

Project:
PINN RIVER SCHOOL

Drg Title:
PROPOSED DRAINAGE
FOUL WATER MANHOLE
SCHEDULE

Drawn By	Designed By	Checked By
CRR	CRR	MCS
	Date: 17.03.2023	Scales @ A1: NTS

Project No - Originator - Function - Spatial - Form - Discipline - Number: FS0728 - CUR - XX - XX - DR - C - 0502

Revision: P03

Ref	Eastings	Northings	Cover level	Depth	Type	Size	Pipes in			Pipe out		Backdrop Invert Level	Cover	Comments
							From	Invert	Dia	Invert	Dia			
SW01	510004.169	188875.366	56.000	0.90	Type 2	1200	2xRG	55.250	150	55.100	300		D400	recessed lid
SW02	509988.008	188887.421	56.800	1.80	Type 2	1200	SW01	55.000	300	55.000	300		D400	recessed lid
							RG	55.150	150					
SW03	509968.886	188870.546	56.650	1.74	Type 2	1200	SW02	54.910	300	54.910	300		D400	recessed lid
							RG	55.060	150					
SW04	509945.948	188837.327	56.580	1.48	PPIC	min600	RE01	55.100	225	55.100	225		B125	recessed lid,reduced access
SW05	509951.554	188840.271	56.580	1.54	Type 2	1200	SW04	55.040	225	55.040	225		B125	recessed lid
							2xRWP	55.165	100					
SW07	509976.005	188827.568	56.380	1.00	PPIC	min450	2xSU	55.455	100	55.380	150		D400	recessed lid
SW08	509967.407	188856.143	56.500	1.12	PPIC	min450	SU	55.430	100	55.380	150		D400	recessed lid
							SU	55.455	100					
SW09	509970.063	188847.581	56.500	1.41	PPIC	min450	SW07	55.165	150	55.090	150		D400	recessed lid, reduced access
							SW08	55.165	150					
							SU	55.165	100					
SW10	509966.514	188846.414	56.580	1.61	Type 2	1200	SW05	54.970	225	54.970	225		D400	recessed lid
							SW09	55.020	150					
							RWP	55.095	100					
SW11	509960.878	188862.834	56.800	1.91	Type 2	1200	SW10	54.965	225	54.890	300		D400	recessed lid
							RWP	55.090	100					
SW12	509957.955	188870.290	56.950	2.09	Type 2	1200	SW03	54.860	300	54.860	300		C250	recessed lid
							SW11	54.860	300					
							SU	55.060	100					
SW13	509932.415	188861.954	56.520	1.90	Type 2	1200	SW12	54.695	300	54.620	375		B125	recessed lid
							SU	54.820	100					
							RWP	54.820	100					
SW14	509922.274	188858.388	56.520	1.94	Type 2	1200	SW13	54.580	375	54.580	375		B125	recessed lid
SW15	509912.566	188855.020	56.520	1.98	Type 2	1200	SW14	54.540	375	54.540	375		B125	recessed lid
							RWP	54.815	100					
SW16	509907.528	188852.918	56.480	1.96	Type 2	1200	SW15	54.520	375	54.520	375		B125	recessed lid
							SU	54.795	100					
							RWP	54.795	100					
SW17	509891.825	188844.928	56.520	2.04	Type 2	1200	SW16	54.480	375	54.480	375		B125	recessed lid
							SU	54.755	100					
							2xRWP	54.755	100					
SW18	509876.915	188839.435	56.520	2.10	Type 2	1200	SW17	54.420	375	54.420	375		B125	recessed lid
SW19	509876.627	188836.670	56.540	2.13	Type 2	1200	SW18	54.410	375	54.410	375		B125	recessed lid
SW22	509868.422	188823.462	56.520	2.18	Type 2	1200	SW21	54.340	375	54.340	375		B125	recessed lid
SW23	509873.334	188808.949	56.540	2.25	Type 2	1200	SW22	54.290	375	54.290	375		B125	recessed lid
SW24	509879.543	188790.182	56.550	2.33	Type 2	1200	SW23	54.220	375	54.220	375		B125	recessed lid
SW25	509883.174	188787.407	56.480	2.34	Type 2	1200	SW24	54.140	375	54.140	375		B125	recessed lid, outlet to attenaution tank
SW26	509932.278	188810.085	56.570	1.32	PPIC	min450	SU	55.300	100	55.250	150		B125	recessed lid, resticted access
SW27	509921.958	188820.185	56.550	1.36	Type 2	1200	SW26	55.340	150	55.190	300		B125	recessed lid
							2xRWP	55.390	100					
							2xYG	55.390	100					
SW28	509890.519	188820.126	56.550	1.15	PPIC	min600	YG	55.525	100	55.400	225		B125	recessed lid
							RWP	55.525	100					
SW29	509895.191	188811.038	56.500	1.49	Type 2	1200	SW27	55.010	300	55.010	300		B125	recessed lid
							SW28	55.085	225					
							RWP	55.210	100					
SW30	509899.989	188810.933	56.550	1.35	PPIC	min450	RWP	55.250	100	55.200	150		B125	recessed lid, resticted access
SW31	509898.800	188801.733	56.570	1.58	Type 2	1200	SW29	54.990	300	54.990	300			recessed lid
							RWP	55.190	100					
							RWP	55.760	100			770		
FW32	509899.073	188797.287	56.570	2.43	Type 2	1200	SW31	54.970	300	54.140	300	830	B125	recessed lid, outlet to attenuation tank
							RWP	54.340	100					
							2xYG	54.340	100					
SW33	509883.754	188765.557	56.600	1.15	PPIC	min450	SU	55.500	100	55.450	150		B125	recessed lid
SW34	509918.595	188783.955	56.100	1.98	Type 2	1200	TANK	54.120	375	54.120	375		C250	recessed lid, hydro-brake manhole 2.9l/s flow rate. Ref:SHE-0700-2900-1900-

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Rev:	Description:	Date:	By:	Chkd:
P04	UPDATED TO SUIT REVISED HYDROTHERAPY POOL LAYOUT, MEP LAYOUTS & STRUCTURAL LAYOUTS	21.06.23	CRR	LG
P03	UPDATED TO SUIT CLIENT COMMENTS	27.04.23	CRR	MCS
P02	DRAWING NUMBER UPDATED	22.03.23	CRR	MCS
P01	STAGE 4a ISSUE	17.03.23	CRR	MCS

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Status: SUITABLE FOR AUTHORIZATION — S4

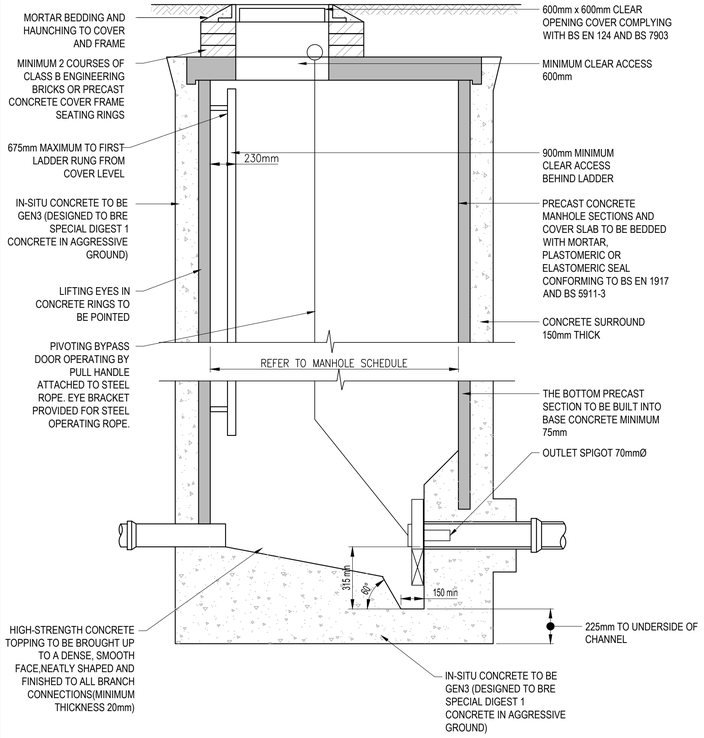
Project: PINN RIVER SCHOOL

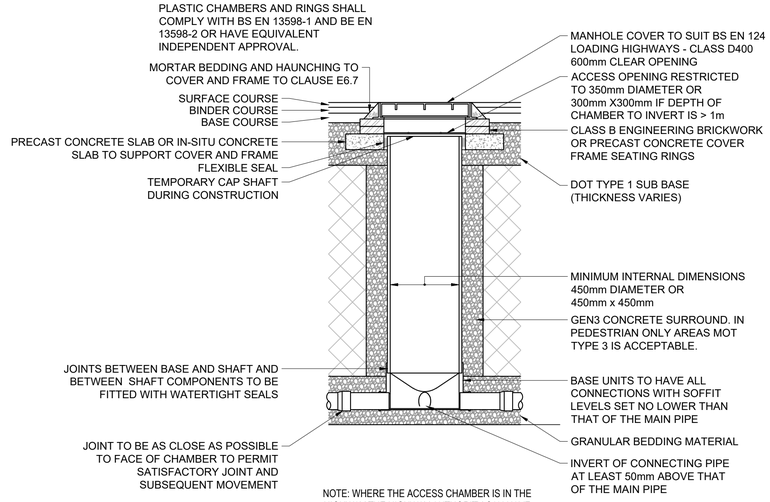
Drg Title: PROPOSED DRAINAGE SURFACE WATER MANHOLE SCHEDULE

Drawn By	Designed By	Checked By
CRR	CRR	MCS
	Date: 17.03.2023	Scales @ A1: NTS

Project No - Originator - Function - Spatial - Form - Discipline - Number: FS0728 - CUR - XX - XX - DR - C - 0503

Revision: P04

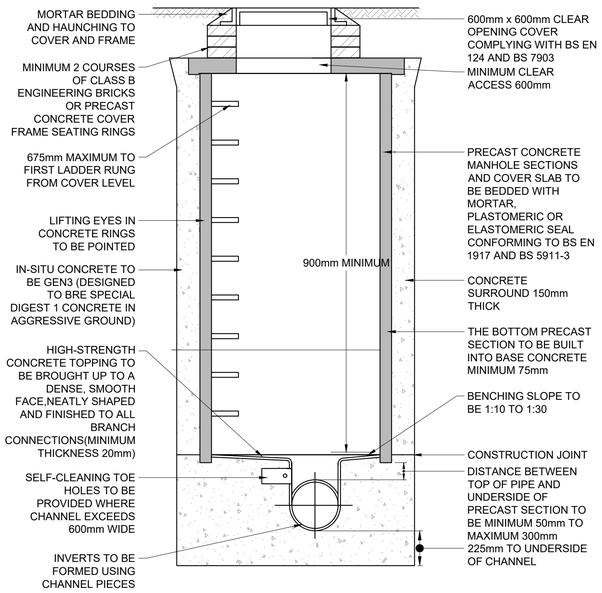


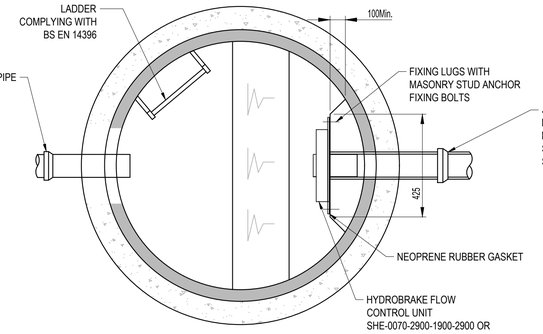


NOTE: WHERE THE ACCESS CHAMBER IS IN THE HIGHWAY THE HIGHWAY AUTHORITY CAN HAVE SPECIFIC REQUIREMENTS

TYPICAL INSPECTION CHAMBER DETAIL - TYPE 3
(FLEXIBLE MATERIAL DETAIL)
MAXIMUM DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE 3m IN AREAS SUBJECT TO VEHICLE LOADING , NON-ENTRY

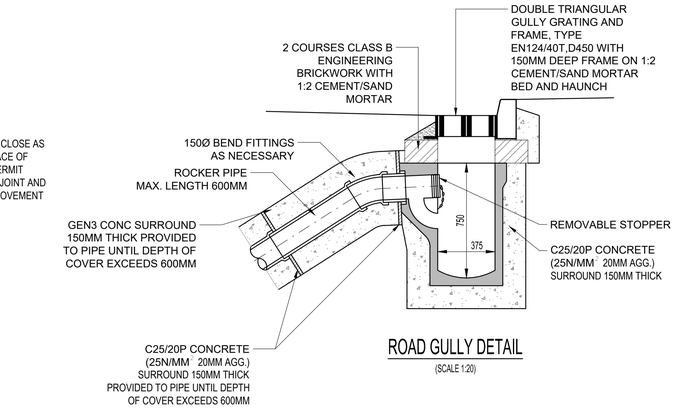
(SCALE 1:20)





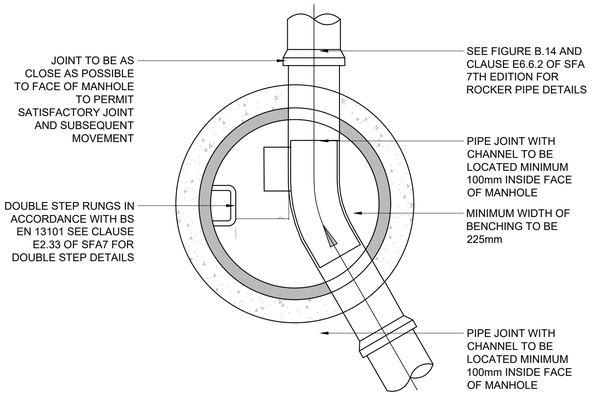
HYDRO-BRAKE OPTIMUM MANHOLE DETAIL

(SCALE 1:20)



ROAD GULLY DETAIL

(SCALE 1:20)

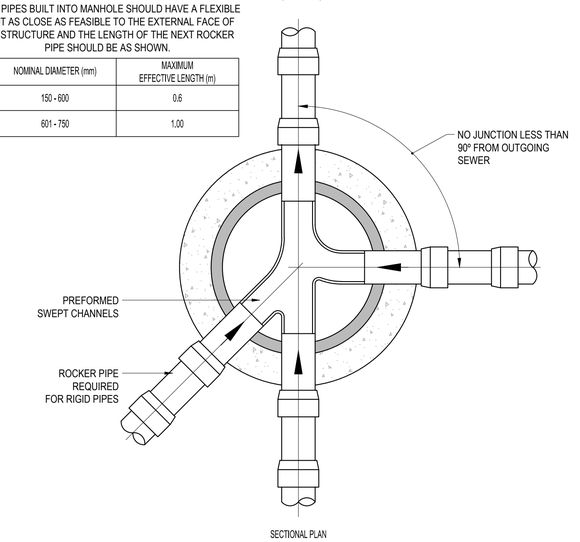


TYPICAL MANHOLE DETAIL - TYPE 2
MAXIMUM DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE 3m

(SCALE 1:20)

RIGID PIPES BUILT INTO MANHOLE SHOULD HAVE A FLEXIBLE JOINT AS CLOSE AS FEASIBLE TO THE EXTERNAL FACE OF THE STRUCTURE AND THE LENGTH OF THE NEXT ROCKER PIPE SHOULD BE AS SHOWN.

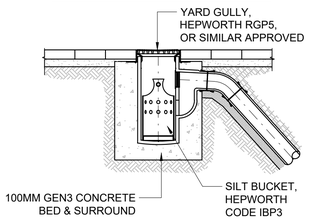
NOMINAL DIAMETER (mm)	MAXIMUM EFFECTIVE LENGTH (m)
150 - 600	0.6
601 - 750	1.00



TYPICAL ARRANGEMENT OF PIPE JUNCTIONS WITHIN MANHOLES

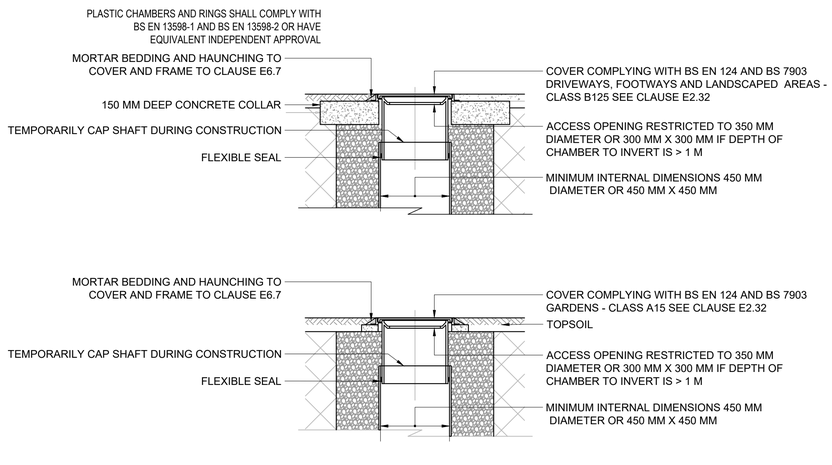
(SCALE 1:20)

NOTE:
THE DEPTH OF THE GULLY CAN BE INREASED BY UPTO 300mm BY FITTING A 225mm COUPLING, HEPWORTH CODE VC1/3 AND A 300mm HIGH RAISING PIECE, HEPWORTH CODE SIC3/1 BETWEEN THE FRAME AND THE GULLY BODY.



YARD GULLY DETAIL

(SCALE 1:20)



ALTERNATIVE TOP DETAILS FOR LIGHT VEHICLE LOADING AND LANDSCAPED AREAS - TYPE 3
(SITED IN DOMESTIC DRIVEWAYS/FOOTWAYS/LANDSCAPE AREAS)

(SCALE 1:20)

GENERAL NOTES:

1. FOR DRAINAGE CONSTRUCTION NOTES, REFER TO DRAWING FS0728-CUR-XX-XX-DR-C-9284

Rev:	Description:	Date:	By:	Chkd:
P02	STAGE 4a ISSUE	17.03.23	CRR	MCS
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Status: SUITABLE FOR INTERNAL REVIEW / COMMENT — S3

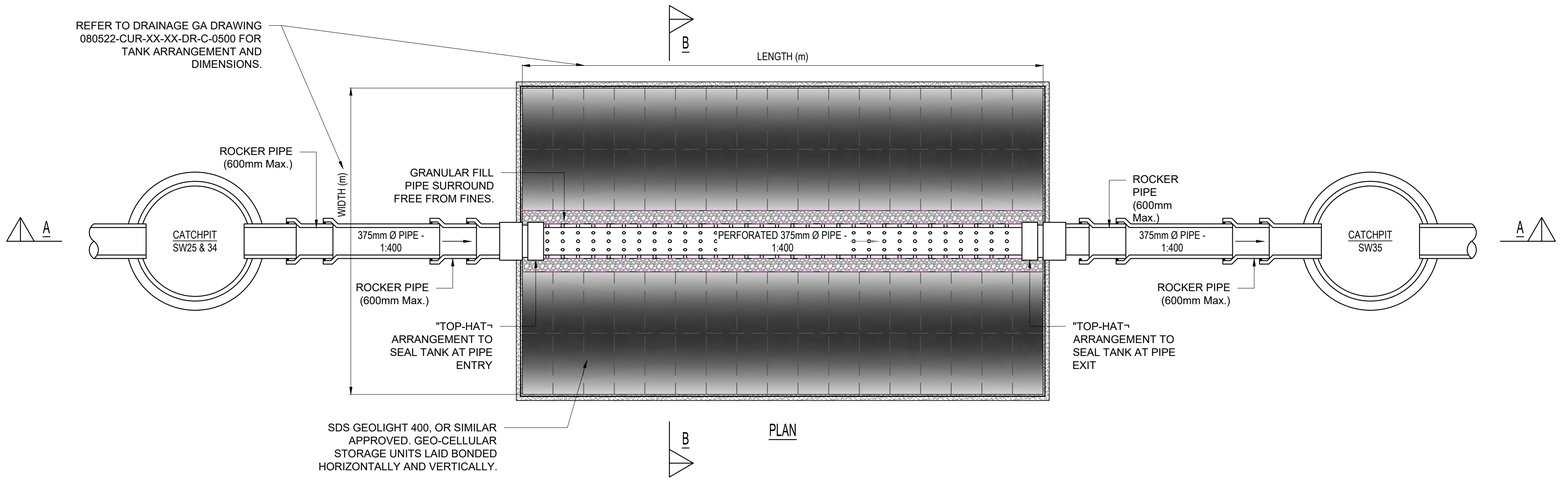
Project: PINN RIVER SCHOOL

Drg Title: PROPOSED DRAINAGE CONSTRUCTION DETAILS SHEET 1 OF 3

Drawn By	Designed By	Checked By
BPC	BPC	MCS
	Date: 15.09.2022	Scales @ A1: N/A

Project No - Originator - Function - Spatial - Form - Discipline - Number: FS0728 - CUR - XX - XX - DR - C - 9280

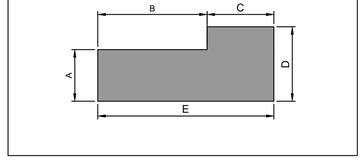
Revision: P02

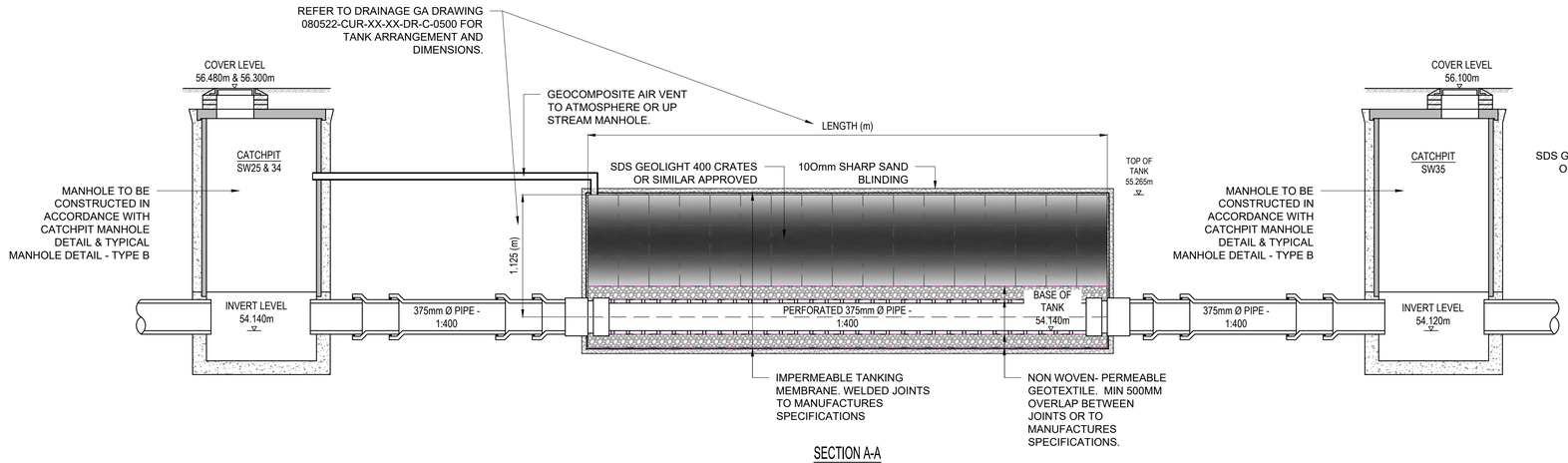


PLAN

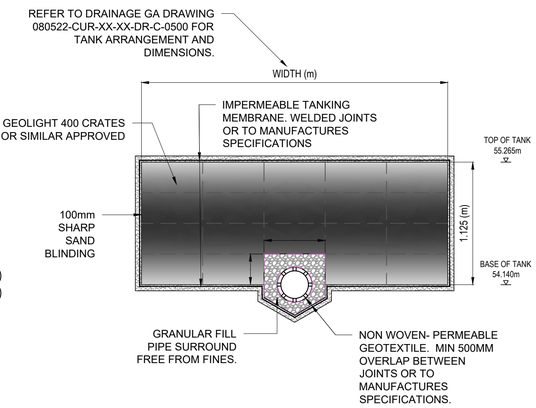
TANK PLAN

INVERT LEVEL	DIMENSION "A"	DIMENSION "B"	DIMENSION "C"	DIMENSION "D"	DIMENSION "E"
34.141mAOD	11m	22.5m	16.5m	15m	39m





SECTION A-A



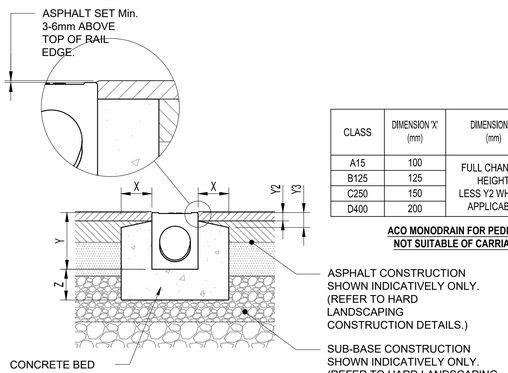
SECTION B-B

GEOCELLULAR TANK DETAIL

(SCALE 1:50)

GENERAL NOTES:

1. FOR DRAINAGE CONSTRUCTION NOTES, REFER TO DRAWING FS0728-CUR-XX-XX-DR-C-9284

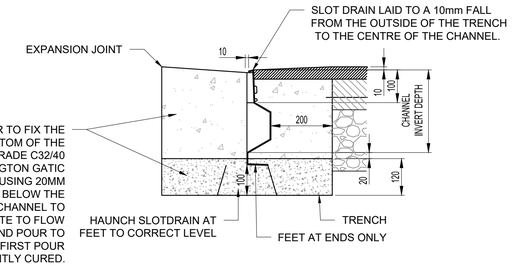


CLASS	DIMENSION 'X' (mm)	DIMENSION 'Y' (mm)	DIMENSION 'Z' (mm)	DIMENSION 'Y2' (mm)	DIMENSION 'Y3' (mm)
A15	100	FULL CHANNEL HEIGHT LESS Y2 WHERE APPLICABLE	100	35 (Max)	60 (Max)
B125	125		125	35 (Max)	60 (Max)
C250	150		150	35 (Max)	60 (Max)
D400	200		200	35 (Max)	60 (Max)

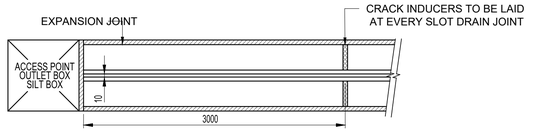
ACO MONODRAIN FOR PEDESTRIAN AND CAR PARKING AREAS. NOT SUITABLE OF CARRIAGEWAYS AND INDUSTRIAL AREAS

ACO MONODRAIN P100D 0.0 DETAIL (ASPHALT CONSTRUCTION)

(SCALE 1:10)



1. ACCESS BOXES TO BE PROVIDED AT JUNCTIONS. TO BE INSTALLED TO MANUFACTURERS REQUIREMENT.
2. IF CHEMICAL SPILLAGE IS TO EXCEED MANUFACTURERS RECOMMENDED CHEMICAL CONCENTRATIONS, AREA TO BE BUNDED AND COPIOUS AMOUNT OF WATER TO BE AVAILABLE FOR WASHDOWN.



BSI CERTIFIED TO D400 LOADING WITHOUT ADDITIONAL CONCRETE REINFORCEMENT

GATIC FACADESLOT SLOT DRAIN

(SCALE 1:10)

Rev:	Description:	Date:	By:	Chkd:
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Status: SUITABLE FOR INTERNAL REVIEW / COMMENT — S3

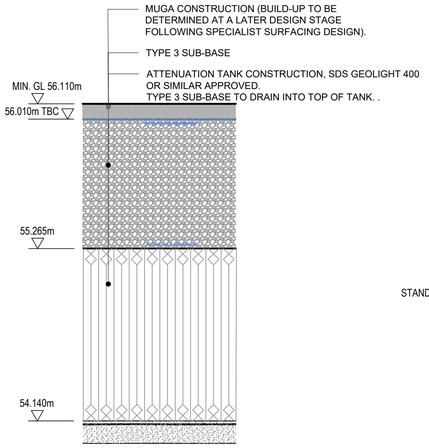
Project: PINN RIVER SCHOOL

Drg Title: PROPOSED DRAINAGE CONSTRUCTION DETAILS SHEET 2 OF 3

Drawn By	Designed By	Checked By
BPC	BPC	MCS
	Date: 15.09.2022	Scales @ A1: N/A

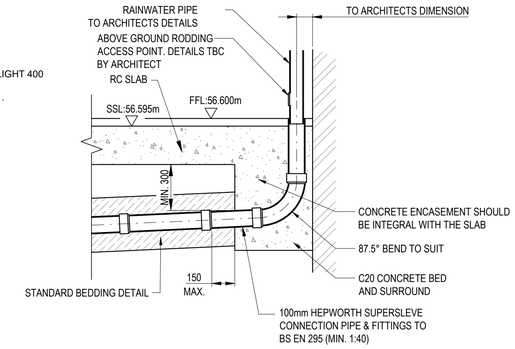
Project No - Originator - Function - Spatial - Form - Discipline - Number: FS0728 - CUR - XX - XX - DR - C - 9281

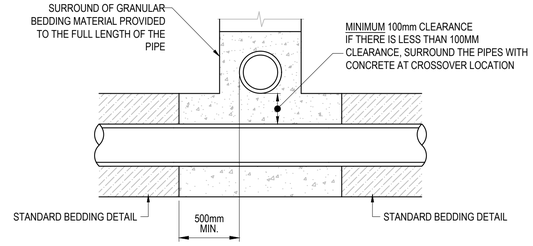
Revision: P02



PERMEABLE MUGA PAVING TO DRAIN INTO ATTENUATION TANK B

(SCALE 1:20)

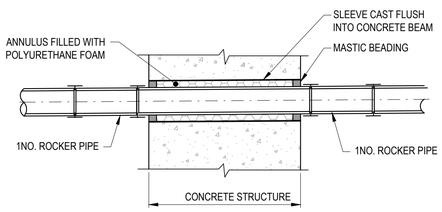




NOTE: FOR ALL PIPE CROSSING WITH 250mm CLEARANCE OR LESS BETWEEN PIPES.

PIPE CROSSOVER

(SCALE 1:20)



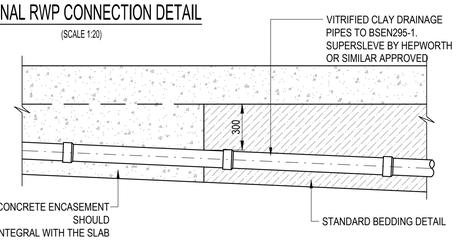
REINFORCING BAR DISPLACED LOCALLY AROUND OPENING. ADDITIONAL DIAGONAL REINFORCING BARS SHALL BE PROVIDED TO THE CORNER OF EACH FACE

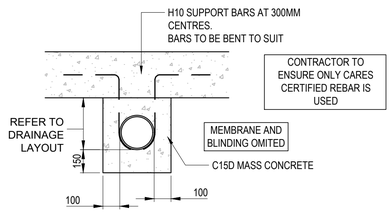
PIPE THROUGH STRUCTURE

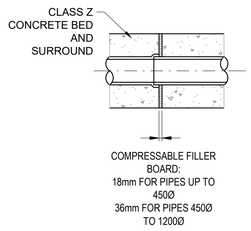
(SCALE 1:20)

INTERNAL RWP CONNECTION DETAIL

(SCALE 1:20)







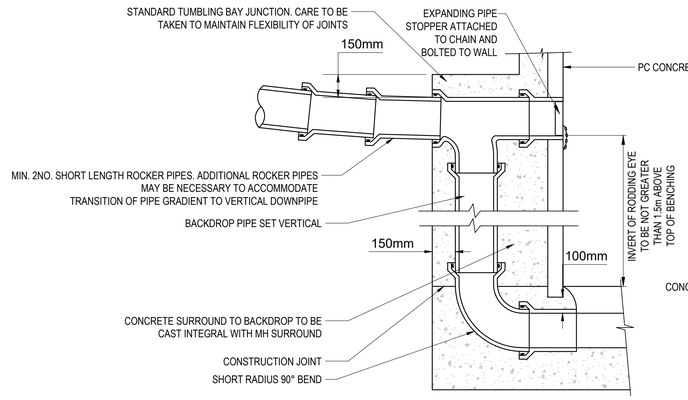
NOTE:
AT EACH FLEXIBLE JOINT A JOINT FILLER (E.G FIBREBOARD OR POLYSTYRENE) SHALL BE USED AND SHALL EXTEND THROUGH THE FULL THICKNESS OF ANY CONCRETE IN CONTACT WITH THE PIPE. THE CONCRETE BED SHALL BE CUT AWAY AT EACH JOINT TO GIVE CLEARANCE OF AT LEAST 50mm, SO THAT THE JOINT DOES NOT BEAR ON THE BED.

COMPRESSIBLE FILLER AND PACKING FOR PIPELINES

NOMINAL DIAMETER OF PIPE (mm)	THICKNESS OF COMPRESSIBLE FILLER (mm)
LESS THAN 450Ø	LESS THAN 450Ø
450Ø - 1200Ø	450Ø - 1200Ø
EXCEEDING 1200Ø	EXCEEDING 1200Ø

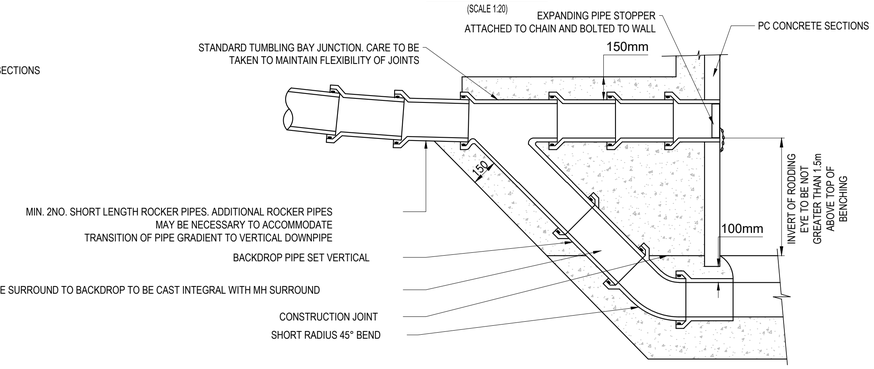
PIPE BEDDING UNDER BUILDING

(SCALE 1:20)



VERTICAL BACKDROP DETAIL

(SCALE 1:20)



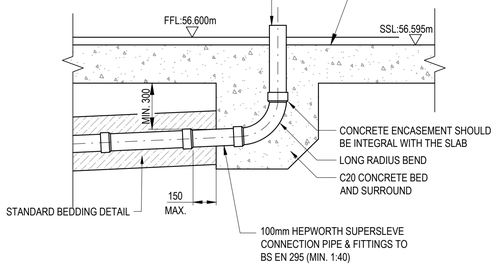
CONCRETE BED AND SURROUND PIPE JOINT DETAIL

(SCALE 1:20)

RAMPED BACKDROP DETAIL

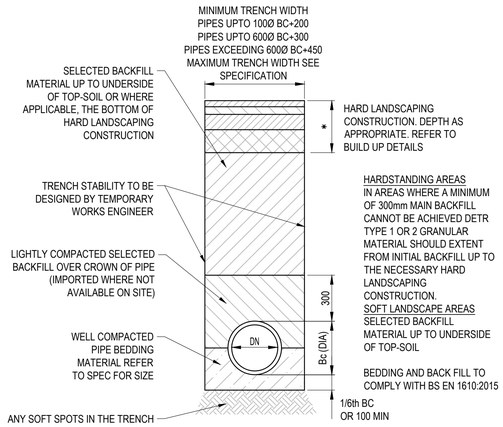
(SCALE 1:20)

NOTE:
WHERE STACK IS CONVEYING OVER 3 STOREYS, TAIL OF BEND TO BE MIN. 750mm BELOW FFL. IF GROUND FLOOR AND FLOORS ABOVE ARE SEPARATE, TAIL OF BEND TO BE MIN. 450mm BELOW FFL.



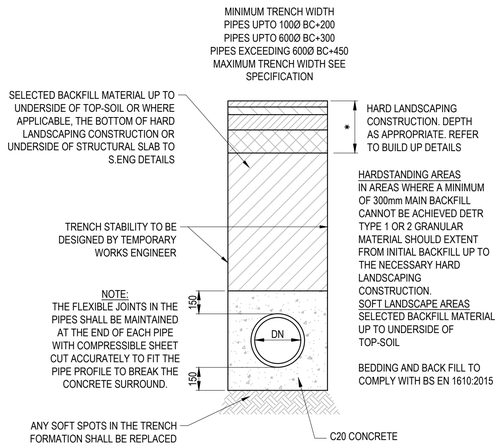
TYPICAL FOUL WASTE WATER PIPE CONNECTION

(SCALE 1:20)



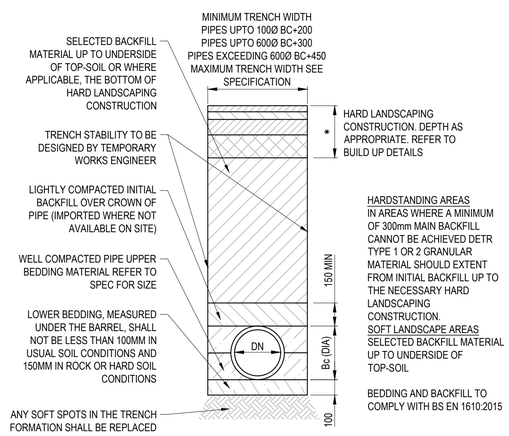
CLASS B
180° GRANULAR BED PIPE BEDDING DETAIL

(SCALE 1:20)



CLASS Z
CONCRETE BED AND SURROUND PIPE BEDDING DETAIL

(SCALE 1:20)



CLASS S
360° GRANULAR SURROUND PIPE BEDDING DETAIL

(SCALE 1:20)

GENERAL NOTES:

1. FOR DRAINAGE CONSTRUCTION NOTES, REFER TO DRAWING FS0728-CUR-XX-XX-DR-C-9284

Rev:	Description:	Date:	By:	Chkd:
P02	STAGE 4a ISSUE	17.03.23	CRR	MCS
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Status: SUITABLE FOR INTERNAL REVIEW / COMMENT — S3

Project: PINN RIVER SCHOOL

Drg Title: PROPOSED DRAINAGE CONSTRUCTION DETAILS SHEET 3 OF 3

Drawn By	Designed By	Checked By
BPC	BPC	MCS
	Date: 15.09.2022	Scales @ A1: N/A

Project No - Originator - Function - Spatial - Form - Discipline - Number: FS0728 - CUR - XX - XX - DR - C - 9282

Revision: P02

Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	100	Maximum Rainfall (mm/hr)	50.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	20.000	Minimum Backdrop Height (m)	0.200
Ratio-R	0.400	Preferred Cover Depth (m)	0.900
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	5.00	Enforce best practice design rules	x

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
SW01	0.010	5.00	56.450	1200	510012.509	188869.174	1.350
SW02	0.025	5.00	56.800	1200	509987.951	188887.922	1.803
SW03	0.040	5.00	56.650	1200	509968.961	188870.546	1.739
RWP01	0.030	5.00	56.600		509935.864	188834.916	1.050
SW04	0.009	5.00	56.580	600	509945.948	188837.327	1.174
RWP02	0.020	5.00	56.600		509953.825	188831.533	1.050
SW05	0.010	5.00	56.580	600	509951.554	188840.271	1.216
SW10	0.014	5.00	56.580	1200	509966.515	188846.410	1.363
SW11	0.042	5.00	56.800	1200	509960.878	188862.834	1.686
SW12	0.008	5.00	56.950	1200	509957.955	188870.290	2.076
SW13	0.005	5.00	56.520	1200	509932.415	188861.954	1.825
SW16	0.044	5.00	56.260	1200	509907.528	188852.918	1.674
SW17	0.014	5.00	56.290	1200	509891.825	188844.928	1.763
SW18	0.010	5.00	56.270	1200	509876.915	188839.435	1.796
SW19	0.035	5.00	56.300	1200	509876.627	188836.670	1.835
SW20	0.006	5.00	56.200	1200	509870.874	188833.990	1.756
SW21	0.005	5.00	56.200	1200	509873.726	188826.192	1.784
SW22			56.130	1200	509868.422	188823.462	1.734
SW23	0.018	5.00	56.330	1200	509873.334	188808.949	1.985
SW24	0.005	5.00	56.550	1200	509879.543	188790.182	2.329
SW25	0.139	5.00	56.480	1200	509883.174	188787.346	2.340
SW26	0.017	5.00	56.350	1200	509932.278	188810.085	1.125
SW27	0.059	5.00	56.400	1200	509921.958	188820.185	1.346
RWP09	0.024	5.00	56.600		509887.082	188819.377	1.000
SW28			56.350	600	509890.519	188820.126	0.785
SW29	0.066	5.00	56.320	1200	509895.191	188811.038	1.360
RWP11	0.031	5.00	56.600		509912.241	188808.676	1.050
SW31	0.004	5.00	56.310	1200	509898.800	188801.733	1.383
RWP12	0.032	5.00	56.600		509893.800	188797.524	1.000
SW32			56.300	1200	509899.073	188797.287	2.160
SW33	0.040	5.00	56.100		509913.464	188784.215	1.960
SW34 OUTFALL			56.100	1200	509918.595	188783.955	1.980
SW15			56.520	1200	509912.566	188855.020	1.911
SW14			56.520	1200	509922.274	188858.388	1.869

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.017	SW33	SW34 OUTFALL	5.138	0.600	54.140	54.120	0.020	256.9	150	9.42	50.0
1.016	SW25	SW33	30.451	0.600	54.140	54.140	0.000	0.0	300	9.28	50.0
4.004	SW32	SW33	19.442	0.600	54.140	54.140	0.000	0.0	300	6.34	50.0
7.000	RWP12	SW32	5.278	0.600	55.600	55.547	0.053	100.0	100	5.11	50.0
4.003	SW31	SW32	4.454	0.600	54.927	54.912	0.015	300.0	300	6.02	50.0
6.000	RWP11	SW31	15.128	0.600	55.550	55.399	0.151	100.0	150	5.25	50.0
4.002	SW29	SW31	9.980	0.600	54.960	54.927	0.033	300.0	300	5.93	50.0
5.001	SW28	SW29	10.219	0.600	55.565	55.497	0.068	150.0	100	5.35	50.0
4.001	SW27	SW29	28.287	0.600	55.054	54.960	0.094	300.0	300	5.75	50.0
4.000	SW26	SW27	14.440	0.600	55.225	55.129	0.096	150.0	225	5.23	50.0
5.000	RWP09	SW28	3.518	0.600	55.600	55.565	0.035	100.0	100	5.08	50.0
1.015	SW24	SW25	4.607	0.600	54.221	54.140	0.081	56.9	300	8.77	50.0
1.014	SW23	SW24	19.767	0.600	54.345	54.279	0.066	300.0	300	8.74	50.0
1.013	SW22	SW23	15.322	0.600	54.396	54.345	0.051	300.0	300	8.37	50.0
1.012	SW21	SW22	5.965	0.600	54.416	54.396	0.020	300.0	300	8.09	50.0
1.011	SW20	SW21	8.303	0.600	54.444	54.416	0.028	300.0	300	7.98	50.0
1.010	SW19	SW20	6.347	0.600	54.465	54.444	0.021	300.0	300	7.83	50.0
1.009	SW18	SW19	2.780	0.600	54.474	54.465	0.009	300.0	300	7.71	50.0
1.008	SW17	SW18	15.890	0.600	54.527	54.474	0.053	300.0	300	7.66	50.0
1.007	SW16	SW17	17.619	0.600	54.586	54.527	0.059	300.0	300	7.36	50.0
1.006	SW15	SW16	5.459	0.600	54.609	54.586	0.023	237.3	300	7.04	50.0
1.005	SW14	SW15	10.276	0.600	54.651	54.609	0.042	244.7	300	6.95	50.0
1.004	SW13	SW14	10.750	0.600	54.695	54.651	0.044	244.3	300	6.78	50.0
1.003	SW12	SW13	26.866	0.600	54.874	54.695	0.179	150.0	300	6.60	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.017	0.622	11.0	103.2	1.810	1.830	0.761	0.0	150	0.634
1.016	1.000	70.7	66.3	2.040	1.660	0.489	0.0	0	∞
4.004	1.000	70.7	31.5	1.860	1.660	0.232	0.0	0	∞
7.000	0.769	6.0	4.4	0.900	0.653	0.032	0.0	63	0.837
4.003	0.902	63.8	27.1	1.083	1.088	0.200	0.0	136	0.866
6.000	1.005	17.8	4.1	0.900	0.761	0.031	0.0	49	0.818
4.002	0.902	63.8	22.5	1.060	1.083	0.166	0.0	123	0.826
5.001	0.625	4.9	3.3	0.685	0.723	0.024	0.0	61	0.673
4.001	0.902	63.8	10.2	1.046	1.060	0.076	0.0	81	0.667
4.000	1.065	42.3	2.3	0.900	1.046	0.017	0.0	35	0.564
5.000	0.769	6.0	3.3	0.900	0.685	0.024	0.0	53	0.786
1.015	2.088	147.6	47.4	2.029	2.040	0.350	0.0	116	1.864
1.014	0.902	63.8	46.7	1.685	1.971	0.344	0.0	191	0.983
1.013	0.902	63.8	44.2	1.434	1.685	0.326	0.0	184	0.972
1.012	0.902	63.8	44.2	1.484	1.434	0.326	0.0	184	0.972
1.011	0.902	63.8	43.6	1.456	1.484	0.322	0.0	183	0.969
1.010	0.902	63.8	42.8	1.535	1.456	0.316	0.0	180	0.965
1.009	0.902	63.8	38.1	1.496	1.535	0.281	0.0	167	0.941
1.008	0.902	63.8	36.7	1.463	1.496	0.271	0.0	163	0.933
1.007	0.902	63.8	34.8	1.374	1.463	0.257	0.0	158	0.922
1.006	1.016	71.8	28.8	1.611	1.374	0.213	0.0	132	0.962
1.005	1.000	70.7	28.8	1.569	1.611	0.213	0.0	133	0.951
1.004	1.001	70.8	28.8	1.525	1.569	0.213	0.0	133	0.952
1.003	1.281	90.6	28.2	1.776	1.525	0.208	0.0	115	1.135

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.002	SW03	SW12	11.009	0.600	54.911	54.874	0.037	300.0	300	6.25	50.0
2.004	SW11	SW12	8.008	0.600	55.114	55.087	0.027	300.0	300	6.01	50.0
2.003	SW10	SW11	17.364	0.600	55.217	55.114	0.103	168.6	300	5.86	50.0
2.002	SW05	SW10	16.172	0.600	55.364	55.292	0.072	225.0	225	5.62	50.0
3.000	RWP02	SW05	9.028	0.600	55.550	55.490	0.060	150.0	150	5.18	50.0
2.001	SW04	SW05	6.332	0.600	55.406	55.364	0.042	150.0	225	5.31	50.0
2.000	RWP01	SW04	10.368	0.600	55.550	55.481	0.069	150.0	150	5.21	50.0
1.001	SW02	SW03	25.740	0.600	54.997	54.911	0.086	300.0	300	6.05	50.0
1.000	SW01	SW02	30.896	0.600	55.100	54.997	0.103	300.0	300	5.57	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.002	0.902	63.8	10.2	1.439	1.776	0.075	0.0	81	0.665
2.004	0.902	63.8	16.9	1.386	1.563	0.124	0.0	105	0.766
2.003	1.208	85.4	11.2	1.063	1.386	0.083	0.0	73	0.843
2.002	0.867	34.5	9.3	0.991	1.063	0.069	0.0	80	0.738
3.000	0.818	14.5	2.7	0.900	0.940	0.020	0.0	44	0.626
2.001	1.065	42.3	5.3	0.949	0.991	0.039	0.0	53	0.728
2.000	0.818	14.5	4.1	0.900	0.949	0.030	0.0	54	0.702
1.001	0.902	63.8	4.7	1.503	1.439	0.035	0.0	55	0.532
1.000	0.902	63.8	1.4	1.050	1.503	0.010	0.0	30	0.366

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.017	5.138	256.9	150	Circular	56.100	54.140	1.810	56.100	54.120	1.830
1.016	30.451	0.0	300	Circular	56.480	54.140	2.040	56.100	54.140	1.660
4.004	19.442	0.0	300	Circular	56.300	54.140	1.860	56.100	54.140	1.660
7.000	5.278	100.0	100	Circular	56.600	55.600	0.900	56.300	55.547	0.653
4.003	4.454	300.0	300	Circular	56.310	54.927	1.083	56.300	54.912	1.088
6.000	15.128	100.0	150	Circular	56.600	55.550	0.900	56.310	55.399	0.761
4.002	9.980	300.0	300	Circular	56.320	54.960	1.060	56.310	54.927	1.083
5.001	10.219	150.0	100	Circular	56.350	55.565	0.685	56.320	55.497	0.723
4.001	28.287	300.0	300	Circular	56.400	55.054	1.046	56.320	54.960	1.060
4.000	14.440	150.0	225	Circular	56.350	55.225	0.900	56.400	55.129	1.046
5.000	3.518	100.0	100	Circular	56.600	55.600	0.900	56.350	55.565	0.685

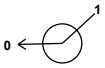
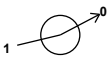
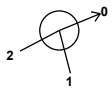
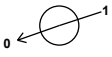
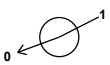
Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.017	SW33		Junction		SW34 OUTFALL	1200	Manhole	Adoptable
1.016	SW25	1200	Manhole	Adoptable	SW33		Junction	
4.004	SW32	1200	Manhole	Adoptable	SW33		Junction	
7.000	RWP12		Junction		SW32	1200	Manhole	Adoptable
4.003	SW31	1200	Manhole	Adoptable	SW32	1200	Manhole	Adoptable
6.000	RWP11		Junction		SW31	1200	Manhole	Adoptable
4.002	SW29	1200	Manhole	Adoptable	SW31	1200	Manhole	Adoptable
5.001	SW28	600	Manhole	Adoptable	SW29	1200	Manhole	Adoptable
4.001	SW27	1200	Manhole	Adoptable	SW29	1200	Manhole	Adoptable
4.000	SW26	1200	Manhole	Adoptable	SW27	1200	Manhole	Adoptable
5.000	RWP09		Junction		SW28	600	Manhole	Adoptable

Pipeline Schedule

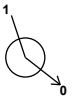
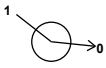
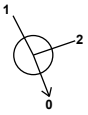
Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.015	4.607	56.9	300	Circular	56.550	54.221	2.029	56.480	54.140	2.040
1.014	19.767	300.0	300	Circular	56.330	54.345	1.685	56.550	54.279	1.971
1.013	15.322	300.0	300	Circular	56.130	54.396	1.434	56.330	54.345	1.685
1.012	5.965	300.0	300	Circular	56.200	54.416	1.484	56.130	54.396	1.434
1.011	8.303	300.0	300	Circular	56.200	54.444	1.456	56.200	54.416	1.484
1.010	6.347	300.0	300	Circular	56.300	54.465	1.535	56.200	54.444	1.456
1.009	2.780	300.0	300	Circular	56.270	54.474	1.496	56.300	54.465	1.535
1.008	15.890	300.0	300	Circular	56.290	54.527	1.463	56.270	54.474	1.496
1.007	17.619	300.0	300	Circular	56.260	54.586	1.374	56.290	54.527	1.463
1.006	5.459	237.3	300	Circular	56.520	54.609	1.611	56.260	54.586	1.374
1.005	10.276	244.7	300	Circular	56.520	54.651	1.569	56.520	54.609	1.611
1.004	10.750	244.3	300	Circular	56.520	54.695	1.525	56.520	54.651	1.569
1.003	26.866	150.0	300	Circular	56.950	54.874	1.776	56.520	54.695	1.525
1.002	11.009	300.0	300	Circular	56.650	54.911	1.439	56.950	54.874	1.776
2.004	8.008	300.0	300	Circular	56.800	55.114	1.386	56.950	55.087	1.563
2.003	17.364	168.6	300	Circular	56.580	55.217	1.063	56.800	55.114	1.386
2.002	16.172	225.0	225	Circular	56.580	55.364	0.991	56.580	55.292	1.063
3.000	9.028	150.0	150	Circular	56.600	55.550	0.900	56.580	55.490	0.940
2.001	6.332	150.0	225	Circular	56.580	55.406	0.949	56.580	55.364	0.991
2.000	10.368	150.0	150	Circular	56.600	55.550	0.900	56.580	55.481	0.949
1.001	25.740	300.0	300	Circular	56.800	54.997	1.503	56.650	54.911	1.439
1.000	30.896	300.0	300	Circular	56.450	55.100	1.050	56.800	54.997	1.503

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.015	SW24	1200	Manhole	Adoptable	SW25	1200	Manhole	Adoptable
1.014	SW23	1200	Manhole	Adoptable	SW24	1200	Manhole	Adoptable
1.013	SW22	1200	Manhole	Adoptable	SW23	1200	Manhole	Adoptable
1.012	SW21	1200	Manhole	Adoptable	SW22	1200	Manhole	Adoptable
1.011	SW20	1200	Manhole	Adoptable	SW21	1200	Manhole	Adoptable
1.010	SW19	1200	Manhole	Adoptable	SW20	1200	Manhole	Adoptable
1.009	SW18	1200	Manhole	Adoptable	SW19	1200	Manhole	Adoptable
1.008	SW17	1200	Manhole	Adoptable	SW18	1200	Manhole	Adoptable
1.007	SW16	1200	Manhole	Adoptable	SW17	1200	Manhole	Adoptable
1.006	SW15	1200	Manhole	Adoptable	SW16	1200	Manhole	Adoptable
1.005	SW14	1200	Manhole	Adoptable	SW15	1200	Manhole	Adoptable
1.004	SW13	1200	Manhole	Adoptable	SW14	1200	Manhole	Adoptable
1.003	SW12	1200	Manhole	Adoptable	SW13	1200	Manhole	Adoptable
1.002	SW03	1200	Manhole	Adoptable	SW12	1200	Manhole	Adoptable
2.004	SW11	1200	Manhole	Adoptable	SW12	1200	Manhole	Adoptable
2.003	SW10	1200	Manhole	Adoptable	SW11	1200	Manhole	Adoptable
2.002	SW05	600	Manhole	Adoptable	SW10	1200	Manhole	Adoptable
3.000	RWP02		Junction		SW05	600	Manhole	Adoptable
2.001	SW04	600	Manhole	Adoptable	SW05	600	Manhole	Adoptable
2.000	RWP01		Junction		SW04	600	Manhole	Adoptable
1.001	SW02	1200	Manhole	Adoptable	SW03	1200	Manhole	Adoptable
1.000	SW01	1200	Manhole	Adoptable	SW02	1200	Manhole	Adoptable

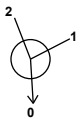
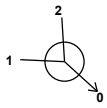
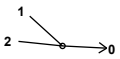
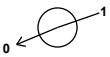
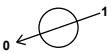
Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
SW01	510012.509	188869.174	56.450	1.350	1200				
						0	1.000	55.100	300
SW02	509987.951	188887.922	56.800	1.803	1200	1	1.000	54.997	300
									
						0	1.001	54.997	300
SW03	509968.961	188870.546	56.650	1.739	1200	1	1.001	54.911	300
									
						0	1.002	54.911	300
RWP01	509935.864	188834.916	56.600	1.050					
						0	2.000	55.550	150
SW04	509945.948	188837.327	56.580	1.174	600	1	2.000	55.481	150
									
						0	2.001	55.406	225
RWP02	509953.825	188831.533	56.600	1.050					
						0	3.000	55.550	150
SW05	509951.554	188840.271	56.580	1.216	600	1	3.000	55.490	150
						2	2.001	55.364	225
									
						0	2.002	55.364	225
SW10	509966.515	188846.410	56.580	1.363	1200	1	2.002	55.292	225
									
						0	2.003	55.217	300
SW11	509960.878	188862.834	56.800	1.686	1200	1	2.003	55.114	300
									
						0	2.004	55.114	300
SW12	509957.955	188870.290	56.950	2.076	1200	1	2.004	55.087	300
						2	1.002	54.874	300
									
						0	1.003	54.874	300
SW13	509932.415	188861.954	56.520	1.825	1200	1	1.003	54.695	300
									
						0	1.004	54.695	300
SW16	509907.528	188852.918	56.260	1.674	1200	1	1.006	54.586	300
									
						0	1.007	54.586	300
SW17	509891.825	188844.928	56.290	1.763	1200	1	1.007	54.527	300
									
						0	1.008	54.527	300

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
SW18	509876.915	188839.435	56.270	1.796	1200	1	1.008	54.474	300
									
						0	1.009	54.474	300
SW19	509876.627	188836.670	56.300	1.835	1200	1	1.009	54.465	300
									
						0	1.010	54.465	300
SW20	509870.874	188833.990	56.200	1.756	1200	1	1.010	54.444	300
									
						0	1.011	54.444	300
SW21	509873.726	188826.192	56.200	1.784	1200	1	1.011	54.416	300
									
						0	1.012	54.416	300
SW22	509868.422	188823.462	56.130	1.734	1200	1	1.012	54.396	300
									
						0	1.013	54.396	300
SW23	509873.334	188808.949	56.330	1.985	1200	1	1.013	54.345	300
									
						0	1.014	54.345	300
SW24	509879.543	188790.182	56.550	2.329	1200	1	1.014	54.279	300
									
						0	1.015	54.221	300
SW25	509883.174	188787.346	56.480	2.340	1200	1	1.015	54.140	300
									
						0	1.016	54.140	300
SW26	509932.278	188810.085	56.350	1.125	1200				
						0	4.000	55.225	225
SW27	509921.958	188820.185	56.400	1.346	1200	1	4.000	55.129	225
									
						0	4.001	55.054	300
RWP09	509887.082	188819.377	56.600	1.000					
						0	5.000	55.600	100
SW28	509890.519	188820.126	56.350	0.785	600	1	5.000	55.565	100
									
						0	5.001	55.565	100
SW29	509895.191	188811.038	56.320	1.360	1200	1	5.001	55.497	100
						2	4.001	54.960	300
									
						0	4.002	54.960	300

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
RWP11	509912.241	188808.676	56.600	1.050			0	6.000	55.550	150
SW31	509898.800	188801.733	56.310	1.383	1200		1	6.000	55.399	150
							2	4.002	54.927	300
							0	4.003	54.927	300
RWP12	509893.800	188797.524	56.600	1.000			0	7.000	55.600	100
SW32	509899.073	188797.287	56.300	2.160	1200		1	7.000	55.547	100
							2	4.003	54.912	300
							0	4.004	54.140	300
SW33	509913.464	188784.215	56.100	1.960			1	4.004	54.140	300
							2	1.016	54.140	300
							0	1.017	54.140	150
SW34 OUTFALL	509918.595	188783.955	56.100	1.980	1200		1	1.017	54.120	150
SW15	509912.566	188855.020	56.520	1.911	1200		1	1.005	54.609	300
							0	1.006	54.609	300
SW14	509922.274	188858.388	56.520	1.869	1200		1	1.004	54.651	300
							0	1.005	54.651	300

Simulation Settings

Rainfall Methodology	FSR	Analysis Speed	Detailed
FSR Region	England and Wales	Skip Steady State	✓
M5-60 (mm)	20.000	Drain Down Time (mins)	240
Ratio-R	0.400	Additional Storage (m³/ha)	20.0
Summer CV	0.750	Check Discharge Rate(s)	x
Winter CV	0.840	Check Discharge Volume	x

Storm Durations

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

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
1	0	0	0
30	35	0	0
100	40	0	0

Node SW34 OUTFALL Online Hydro-Brake® Control

Flap Valve	✓	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	✓	Sump Available	x
Invert Level (m)	54.120	Product Number	CTL-CHE-0066-2900-1900-2900
Design Depth (m)	1.900	Min Outlet Diameter (m)	0.100
Design Flow (l/s)	2.9	Min Node Diameter (mm)	1200

Node SW33 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	54.140
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	490.0	0.0	1.125	490.0	0.0	1.126	0.0	0.0

Node SW33 Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	55.265	Slope (1:X)	500.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)	0	Depth (m)	
Safety Factor	2.0	Width (m)	25.000	Inf Depth (m)	
Porosity	0.30	Length (m)	19.600		

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)	Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
1 year 15 minute summer	109.521	30.991	30 year +35% CC 60 minute summer	157.395	41.595
1 year 15 minute winter	76.857	30.991	30 year +35% CC 60 minute winter	104.570	41.595
1 year 30 minute summer	71.439	20.215	30 year +35% CC 120 minute summer	95.091	25.130
1 year 30 minute winter	50.133	20.215	30 year +35% CC 120 minute winter	63.176	25.130
1 year 60 minute summer	48.435	12.800	30 year +35% CC 180 minute summer	71.952	18.516
1 year 60 minute winter	32.179	12.800	30 year +35% CC 180 minute winter	46.771	18.516
1 year 120 minute summer	30.053	7.942	30 year +35% CC 240 minute summer	56.165	14.843
1 year 120 minute winter	19.966	7.942	30 year +35% CC 240 minute winter	37.315	14.843
1 year 180 minute summer	23.233	5.979	30 year +35% CC 360 minute summer	42.149	10.846
1 year 180 minute winter	15.102	5.979	30 year +35% CC 360 minute winter	27.398	10.846
1 year 240 minute summer	18.475	4.882	30 year +35% CC 480 minute summer	32.837	8.678
1 year 240 minute winter	12.274	4.882	30 year +35% CC 480 minute winter	21.816	8.678
1 year 360 minute summer	14.169	3.646	30 year +35% CC 600 minute summer	26.670	7.295
1 year 360 minute winter	9.210	3.646	30 year +35% CC 600 minute winter	18.223	7.295
1 year 480 minute summer	11.185	2.956	30 year +35% CC 720 minute summer	23.611	6.328
1 year 480 minute winter	7.431	2.956	30 year +35% CC 720 minute winter	15.868	6.328
1 year 600 minute summer	9.182	2.511	30 year +35% CC 960 minute summer	19.190	5.053
1 year 600 minute winter	6.274	2.511	30 year +35% CC 960 minute winter	12.712	5.053
1 year 720 minute summer	8.203	2.199	30 year +35% CC 1440 minute summer	13.717	3.676
1 year 720 minute winter	5.513	2.199	30 year +35% CC 1440 minute winter	9.219	3.676
1 year 960 minute summer	6.768	1.782	100 year +40% CC 15 minute summer	488.233	138.153
1 year 960 minute winter	4.483	1.782	100 year +40% CC 15 minute winter	342.620	138.153
1 year 1440 minute summer	4.949	1.326	100 year +40% CC 30 minute summer	320.551	90.705
1 year 1440 minute winter	3.326	1.326	100 year +40% CC 30 minute winter	224.948	90.705
30 year +35% CC 15 minute summer	362.754	102.647	100 year +40% CC 60 minute summer	214.603	56.713
30 year +35% CC 15 minute winter	254.564	102.647	100 year +40% CC 60 minute winter	142.577	56.713
30 year +35% CC 30 minute summer	236.154	66.823	100 year +40% CC 120 minute summer	129.587	34.246
30 year +35% CC 30 minute winter	165.722	66.823	100 year +40% CC 120 minute winter	86.094	34.246

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)	Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
100 year +40% CC 180 minute summer	97.729	25.149	100 year +40% CC 600 minute summer	35.604	9.738
100 year +40% CC 180 minute winter	63.526	25.149	100 year +40% CC 600 minute winter	24.327	9.738
100 year +40% CC 240 minute summer	75.977	20.078	100 year +40% CC 720 minute summer	31.433	8.424
100 year +40% CC 240 minute winter	50.477	20.078	100 year +40% CC 720 minute winter	21.125	8.424
100 year +40% CC 360 minute summer	56.677	14.585	100 year +40% CC 960 minute summer	25.432	6.697
100 year +40% CC 360 minute winter	36.841	14.585	100 year +40% CC 960 minute winter	16.847	6.697
100 year +40% CC 480 minute summer	43.979	11.622	100 year +40% CC 1440 minute summer	18.055	4.839
100 year +40% CC 480 minute winter	29.219	11.622	100 year +40% CC 1440 minute winter	12.134	4.839

Results for 1 year Critical Storm Duration. Lowest mass balance: 99.19%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	SW01	11	55.130	0.030	1.4	0.0381	0.0000	OK
15 minute winter	SW02	11	55.051	0.054	4.8	0.0761	0.0000	OK
15 minute winter	SW03	11	55.003	0.092	10.0	0.1456	0.0000	OK
15 minute winter	RWP01	10	55.606	0.056	4.2	0.0321	0.0000	OK
15 minute winter	SW04	10	55.464	0.058	5.4	0.0254	0.0000	OK
15 minute winter	RWP02	10	55.595	0.045	2.8	0.0169	0.0000	OK
15 minute winter	SW05	11	55.447	0.083	9.5	0.0373	0.0000	OK
15 minute winter	SW10	11	55.290	0.073	11.4	0.0980	0.0000	OK
15 minute winter	SW11	11	55.225	0.111	16.9	0.1813	0.0000	OK
15 minute winter	SW12	11	54.991	0.117	27.9	0.1423	0.0000	OK
15 minute winter	SW13	12	54.845	0.150	28.6	0.1785	0.0000	OK
15 minute winter	SW16	12	54.757	0.171	33.0	0.2842	0.0000	OK
15 minute winter	SW17	12	54.714	0.187	34.3	0.2405	0.0000	OK
15 minute winter	SW18	13	54.687	0.213	34.7	0.2649	0.0000	OK
15 minute winter	SW19	13	54.671	0.206	38.0	0.3116	0.0000	OK
15 minute winter	SW20	13	54.645	0.201	38.2	0.2401	0.0000	OK
15 minute winter	SW21	13	54.614	0.198	38.5	0.2346	0.0000	OK
15 minute winter	SW22	13	54.582	0.186	38.6	0.2104	0.0000	OK
15 minute winter	SW23	13	54.524	0.179	40.1	0.2359	0.0000	OK
960 minute winter	SW24	915	54.394	0.173	9.6	0.2037	0.0000	OK
720 minute winter	SW25	705	54.394	0.254	15.9	0.5895	0.0000	OK
15 minute winter	SW26	10	55.261	0.036	2.3	0.0511	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	SW01	1.000	SW02	1.3	0.224	0.021	0.1887	
15 minute winter	SW02	1.001	SW03	4.6	0.351	0.072	0.3447	
15 minute winter	SW03	1.002	SW12	9.8	0.454	0.154	0.2407	
15 minute winter	RWP01	2.000	SW04	4.1	0.700	0.286	0.0613	
15 minute winter	SW04	2.001	SW05	5.4	0.506	0.127	0.0678	
15 minute winter	RWP02	3.000	SW05	2.7	0.623	0.189	0.0396	
15 minute winter	SW05	2.002	SW10	9.5	0.731	0.274	0.2094	
15 minute winter	SW10	2.003	SW11	11.4	0.620	0.134	0.3222	
15 minute winter	SW11	2.004	SW12	17.0	0.773	0.266	0.1761	
15 minute winter	SW12	1.003	SW13	27.9	0.924	0.308	0.8115	
15 minute winter	SW13	1.004	SW14	28.1	0.790	0.397	0.3890	
15 minute winter	SW16	1.007	SW17	32.8	0.761	0.514	0.7723	
15 minute winter	SW17	1.008	SW18	33.6	0.676	0.526	0.7910	
15 minute winter	SW18	1.009	SW19	34.4	0.656	0.540	0.1459	
15 minute winter	SW19	1.010	SW20	37.6	0.749	0.590	0.3227	
15 minute winter	SW20	1.011	SW21	38.1	0.772	0.597	0.4137	
15 minute winter	SW21	1.012	SW22	38.6	0.813	0.605	0.2844	
15 minute winter	SW22	1.013	SW23	38.6	0.859	0.605	0.6884	
15 minute winter	SW23	1.014	SW24	39.8	0.992	0.625	0.7942	
960 minute winter	SW24	1.015	SW25	-5.9	0.275	-0.040	0.2431	
720 minute winter	SW25	1.016	SW33	8.5	0.390	0.121	1.9356	
15 minute winter	SW26	4.000	SW27	2.2	0.563	0.053	0.0575	

Results for 1 year Critical Storm Duration. Lowest mass balance: 99.19%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	SW27	10	55.134	0.080	10.5	0.1613	0.0000	OK
15 minute winter	RWP09	10	55.659	0.059	3.5	0.0291	0.0000	OK
15 minute winter	SW28	11	55.629	0.064	3.5	0.0182	0.0000	OK
15 minute winter	SW29	11	55.102	0.142	22.8	0.2972	0.0000	OK
15 minute winter	RWP11	10	55.601	0.051	4.3	0.0295	0.0000	OK
15 minute winter	SW31	11	55.073	0.146	27.2	0.1738	0.0000	OK
15 minute winter	RWP12	10	55.667	0.067	4.5	0.0430	0.0000	OK
960 minute winter	SW32	900	54.394	0.254	2.4	0.2869	0.0000	OK
960 minute winter	SW33	900	54.394	0.254	10.5	118.1657	0.0000	SURCHARGED
960 minute winter	SW34 OUTFALL	900	54.393	0.273	1.8	0.3092	0.0000	OK
15 minute winter	SW15	12	54.777	0.168	28.2	0.1903	0.0000	OK
15 minute winter	SW14	12	54.807	0.156	28.1	0.1765	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	SW27	4.001	SW29	10.2	0.439	0.160	0.6772	
15 minute winter	RWP09	5.000	SW28	3.5	0.687	0.571	0.0177	
15 minute winter	SW28	5.001	SW29	3.4	0.668	0.693	0.0520	
15 minute winter	SW29	4.002	SW31	22.5	0.674	0.353	0.3336	
15 minute winter	RWP11	6.000	SW31	4.2	0.819	0.238	0.0782	
15 minute winter	SW31	4.003	SW32	27.3	0.877	0.428	0.1386	
15 minute winter	RWP12	7.000	SW32	4.4	0.823	0.736	0.0285	
960 minute winter	SW32	4.004	SW33	2.5	0.184	0.035	1.2351	
960 minute winter	SW33	1.017	SW34 OUTFALL	1.8	0.190	0.167	0.0905	
960 minute winter	SW34 OUTFALL	Hydro-Brake®		1.8				68.5
15 minute winter	SW15	1.006	SW16	28.1	0.684	0.391	0.2244	
15 minute winter	SW14	1.005	SW15	28.2	0.731	0.399	0.3991	

Results for 30 year +35% CC Critical Storm Duration. Lowest mass balance: 99.19%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	SW01	13	55.756	0.656	13.8	0.8392	0.0000	SURCHARGED
15 minute winter	SW02	14	55.728	0.731	40.0	1.0296	0.0000	SURCHARGED
15 minute winter	SW03	13	55.727	0.816	38.0	1.2977	0.0000	SURCHARGED
15 minute winter	RWP01	13	55.801	0.251	14.0	0.1432	0.0000	SURCHARGED
15 minute winter	SW04	13	55.779	0.373	18.0	0.1626	0.0000	SURCHARGED
15 minute winter	RWP02	13	55.783	0.233	9.1	0.0871	0.0000	SURCHARGED
15 minute winter	SW05	13	55.769	0.405	31.4	0.1812	0.0000	SURCHARGED
15 minute winter	SW10	13	55.750	0.533	37.4	0.7115	0.0000	SURCHARGED
15 minute winter	SW11	13	55.749	0.635	56.0	1.0339	0.0000	SURCHARGED
15 minute winter	SW12	13	55.733	0.859	71.1	1.0416	0.0000	SURCHARGED
15 minute winter	SW13	13	55.664	0.969	55.8	1.1492	0.0000	SURCHARGED
15 minute winter	SW16	13	55.566	0.980	63.3	1.6261	0.0000	SURCHARGED
15 minute winter	SW17	13	55.491	0.964	65.6	1.2403	0.0000	SURCHARGED
15 minute winter	SW18	13	55.411	0.937	68.9	1.1653	0.0000	SURCHARGED
15 minute winter	SW19	13	55.376	0.911	77.0	1.3805	0.0000	SURCHARGED
15 minute winter	SW20	13	55.314	0.870	79.1	1.0384	0.0000	SURCHARGED
15 minute winter	SW21	13	55.238	0.822	81.0	0.9721	0.0000	SURCHARGED
15 minute winter	SW22	13	55.173	0.777	82.0	0.8793	0.0000	SURCHARGED
15 minute winter	SW23	12	55.058	0.713	86.5	0.9377	0.0000	SURCHARGED
1440 minute winter	SW24	1380	55.014	0.793	6.7	0.9341	0.0000	SURCHARGED
1440 minute winter	SW25	1380	55.014	0.874	16.3	2.0267	0.0000	SURCHARGED
15 minute winter	SW26	11	55.323	0.098	7.8	0.1404	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	SW01	1.000	SW02	-9.1	0.292	-0.143	2.1757	
15 minute winter	SW02	1.001	SW03	-28.3	0.498	-0.444	1.8126	
15 minute winter	SW03	1.002	SW12	33.0	0.682	0.518	0.7752	
15 minute winter	RWP01	2.000	SW04	13.8	0.948	0.952	0.1825	
15 minute winter	SW04	2.001	SW05	17.7	0.592	0.417	0.2518	
15 minute winter	RWP02	3.000	SW05	9.0	0.847	0.621	0.1589	
15 minute winter	SW05	2.002	SW10	31.2	1.017	0.905	0.6432	
15 minute winter	SW10	2.003	SW11	36.5	0.789	0.427	1.2228	
15 minute winter	SW11	2.004	SW12	54.5	1.078	0.854	0.5639	
15 minute winter	SW12	1.003	SW13	54.0	1.067	0.597	1.8919	
15 minute winter	SW13	1.004	SW14	51.7	0.872	0.731	0.7570	
15 minute winter	SW16	1.007	SW17	63.2	0.898	0.991	1.2407	
15 minute winter	SW17	1.008	SW18	67.0	0.952	1.051	1.1190	
15 minute winter	SW18	1.009	SW19	70.3	0.998	1.101	0.1958	
15 minute winter	SW19	1.010	SW20	78.1	1.109	1.224	0.4470	
15 minute winter	SW20	1.011	SW21	80.1	1.137	1.256	0.5847	
15 minute winter	SW21	1.012	SW22	82.0	1.165	1.286	0.4201	
15 minute winter	SW22	1.013	SW23	83.3	1.183	1.306	1.0790	
15 minute winter	SW23	1.014	SW24	87.9	1.248	1.378	1.3920	
1440 minute winter	SW24	1.015	SW25	14.5	0.419	0.098	0.3244	
1440 minute winter	SW25	1.016	SW33	9.6	0.406	0.135	2.1443	
15 minute winter	SW26	4.000	SW27	8.2	0.648	0.193	0.3789	

Results for 30 year +35% CC Critical Storm Duration. Lowest mass balance: 99.19%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	SW27	11	55.319	0.265	34.7	0.5323	0.0000	OK
15 minute winter	RWP09	11	56.025	0.425	11.4	0.2083	0.0000	SURCHARGED
15 minute winter	SW28	12	55.906	0.341	10.2	0.0966	0.0000	SURCHARGED
15 minute winter	SW29	11	55.291	0.331	70.4	0.6934	0.0000	SURCHARGED
15 minute winter	RWP11	10	55.655	0.105	14.3	0.0607	0.0000	OK
15 minute winter	SW31	11	55.225	0.298	85.3	0.3543	0.0000	OK
15 minute winter	RWP12	11	55.995	0.395	15.0	0.2544	0.0000	SURCHARGED
1440 minute winter	SW32	1380	55.014	0.874	5.1	0.9884	0.0000	SURCHARGED
1440 minute winter	SW33	1380	55.014	0.874	15.5	407.1573	0.0000	SURCHARGED
1440 minute winter	SW34 OUTFALL	1380	55.013	0.893	2.0	1.0100	0.0000	OK
15 minute winter	SW15	13	55.590	0.981	53.1	1.1093	0.0000	SURCHARGED
15 minute winter	SW14	13	55.626	0.975	51.7	1.1024	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	SW27	4.001	SW29	32.8	0.497	0.515	1.9277	
15 minute winter	RWP09	5.000	SW28	10.2	1.302	1.688	0.0275	
15 minute winter	SW28	5.001	SW29	9.8	1.251	1.993	0.0790	
15 minute winter	SW29	4.002	SW31	70.0	0.994	1.097	0.7024	
15 minute winter	RWP11	6.000	SW31	14.0	1.097	0.791	0.1938	
15 minute winter	SW31	4.003	SW32	85.2	1.301	1.336	0.2844	
15 minute winter	RWP12	7.000	SW32	14.4	1.836	2.380	0.0409	
1440 minute winter	SW32	4.004	SW33	5.1	0.368	0.072	1.3691	
1440 minute winter	SW33	1.017	SW34 OUTFALL	2.0	0.191	0.183	0.0905	
1440 minute winter	SW34 OUTFALL	Hydro-Brake®		2.0				154.1
15 minute winter	SW15	1.006	SW16	55.0	0.781	0.766	0.3844	
15 minute winter	SW14	1.005	SW15	53.1	0.766	0.750	0.7236	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.19%

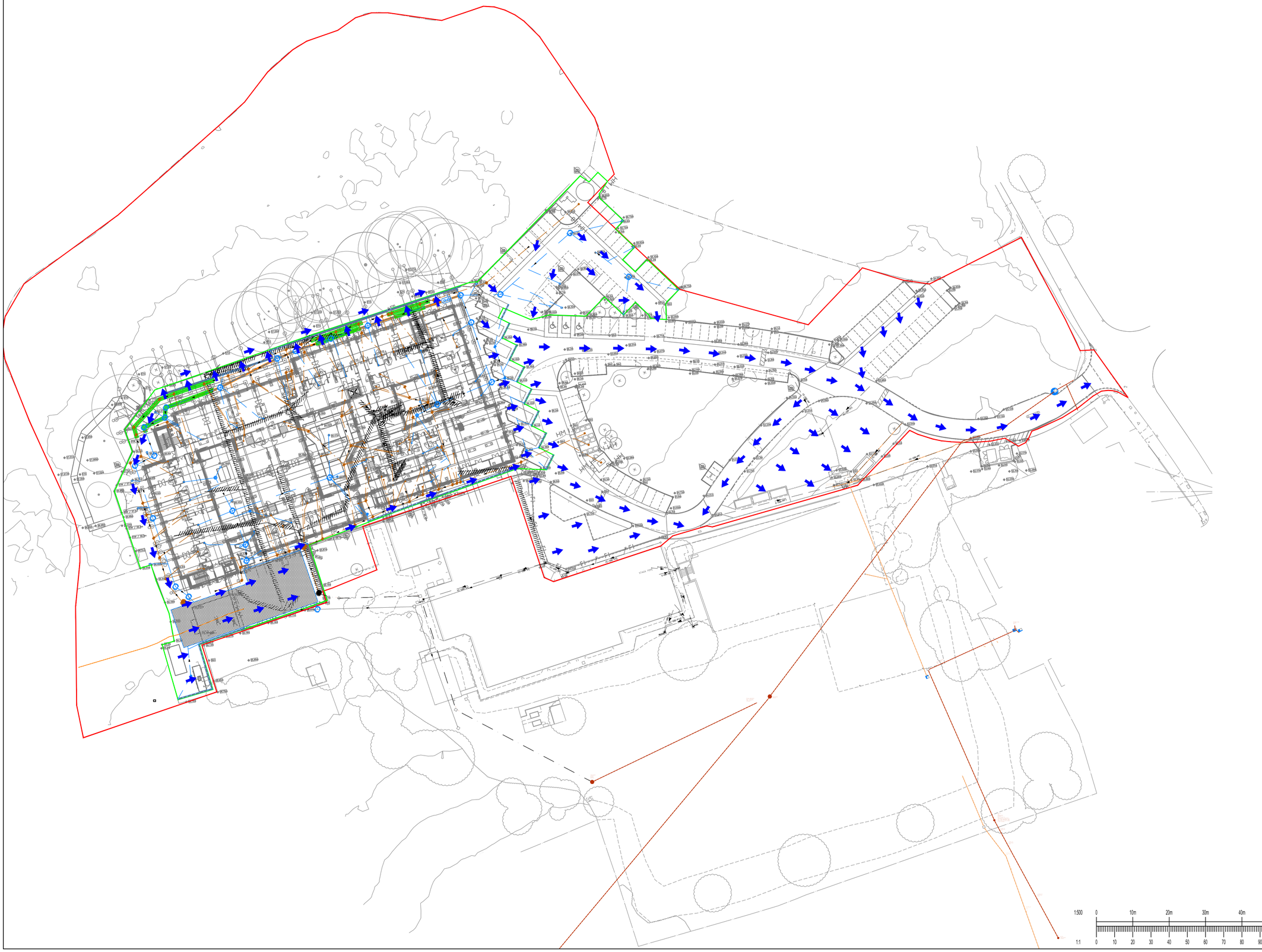
Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	SW01	14	56.450	1.350	19.3	1.7266	0.0000	FLOOD RISK
15 minute winter	SW02	14	56.446	1.449	49.5	2.0396	0.0000	SURCHARGED
15 minute winter	SW03	14	56.441	1.530	42.2	2.4338	0.0000	FLOOD RISK
15 minute winter	RWP01	14	56.529	0.979	18.9	0.5588	0.0000	FLOOD RISK
15 minute winter	SW04	14	56.503	1.097	21.8	0.4782	0.0000	FLOOD RISK
15 minute winter	RWP02	14	56.508	0.958	12.3	0.3574	0.0000	FLOOD RISK
15 minute winter	SW05	14	56.497	1.133	37.8	0.5065	0.0000	FLOOD RISK
15 minute winter	SW10	14	56.462	1.245	43.8	1.6637	0.0000	FLOOD RISK
15 minute winter	SW11	14	56.450	1.336	65.6	2.1732	0.0000	SURCHARGED
15 minute winter	SW12	14	56.434	1.560	76.4	1.8909	0.0000	SURCHARGED
15 minute winter	SW13	14	56.334	1.639	66.4	1.9443	0.0000	FLOOD RISK
15 minute winter	SW16	14	56.185	1.599	74.9	2.6536	0.0000	FLOOD RISK
15 minute winter	SW17	13	56.072	1.545	80.0	1.9885	0.0000	FLOOD RISK
15 minute winter	SW18	13	55.960	1.486	84.1	1.8480	0.0000	SURCHARGED
15 minute winter	SW19	13	55.911	1.446	93.5	2.1905	0.0000	SURCHARGED
15 minute winter	SW20	13	55.821	1.377	96.5	1.6437	0.0000	SURCHARGED
15 minute winter	SW21	13	55.712	1.296	99.0	1.5319	0.0000	SURCHARGED
15 minute winter	SW22	13	55.618	1.222	100.7	1.3821	0.0000	SURCHARGED
15 minute winter	SW23	13	55.449	1.104	106.7	1.4523	0.0000	SURCHARGED
1440 minute winter	SW24	1410	55.426	1.205	8.9	1.4200	0.0000	SURCHARGED
1440 minute winter	SW25	1410	55.426	1.286	14.7	2.9833	0.0000	SURCHARGED
15 minute winter	SW26	11	55.508	0.283	12.3	0.4035	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	SW01	1.000	SW02	-13.4	0.291	-0.211	2.1757	
15 minute winter	SW02	1.001	SW03	-34.7	-0.492	-0.543	1.8126	
15 minute winter	SW03	1.002	SW12	36.5	0.703	0.572	0.7752	
15 minute winter	RWP01	2.000	SW04	16.5	0.972	1.139	0.1825	
15 minute winter	SW04	2.001	SW05	20.8	0.600	0.490	0.2518	
15 minute winter	RWP02	3.000	SW05	11.1	0.882	0.767	0.1589	
15 minute winter	SW05	2.002	SW10	35.5	1.046	1.028	0.6432	
15 minute winter	SW10	2.003	SW11	40.9	0.764	0.479	1.2228	
15 minute winter	SW11	2.004	SW12	64.7	1.055	1.014	0.5639	
15 minute winter	SW12	1.003	SW13	63.9	1.062	0.706	1.8919	
15 minute winter	SW13	1.004	SW14	62.9	0.893	0.888	0.7570	
15 minute winter	SW16	1.007	SW17	77.7	1.104	1.219	1.2407	
15 minute winter	SW17	1.008	SW18	82.4	1.170	1.292	1.1190	
15 minute winter	SW18	1.009	SW19	86.3	1.226	1.353	0.1958	
15 minute winter	SW19	1.010	SW20	95.1	1.351	1.491	0.4470	
15 minute winter	SW20	1.011	SW21	98.0	1.392	1.536	0.5847	
15 minute winter	SW21	1.012	SW22	100.7	1.431	1.579	0.4201	
15 minute winter	SW22	1.013	SW23	102.5	1.456	1.607	1.0790	
15 minute winter	SW23	1.014	SW24	108.9	1.547	1.707	1.3920	
1440 minute winter	SW24	1.015	SW25	13.2	0.507	0.089	0.3244	
1440 minute winter	SW25	1.016	SW33	12.6	0.465	0.179	2.1443	
15 minute winter	SW26	4.000	SW27	10.7	0.635	0.252	0.5743	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 99.19%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	SW27	11	55.501	0.447	45.9	0.8978	0.0000	SURCHARGED
15 minute winter	RWP09	12	56.323	0.723	15.4	0.3545	0.0000	FLOOD RISK
15 minute winter	SW28	12	56.124	0.559	13.4	0.1582	0.0000	FLOOD RISK
15 minute winter	SW29	11	55.441	0.481	96.5	1.0077	0.0000	SURCHARGED
15 minute winter	RWP11	10	55.691	0.141	19.2	0.0822	0.0000	OK
1440 minute winter	SW31	1410	55.426	0.499	5.8	0.5934	0.0000	SURCHARGED
15 minute winter	RWP12	11	56.268	0.668	20.2	0.4301	0.0000	SURCHARGED
1440 minute winter	SW32	1410	55.426	1.286	6.7	1.4550	0.0000	SURCHARGED
1440 minute winter	SW33	1410	55.426	1.286	20.4	545.2119	0.0000	SURCHARGED
1440 minute winter	SW34 OUTFALL	1410	55.425	1.305	2.4	1.4762	0.0000	OK
15 minute winter	SW15	14	56.225	1.616	65.0	1.8273	0.0000	FLOOD RISK
15 minute winter	SW14	14	56.280	1.629	62.9	1.8420	0.0000	FLOOD RISK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	SW27	4.001	SW29	45.5	0.646	0.713	1.9920	
15 minute winter	RWP09	5.000	SW28	13.4	1.710	2.216	0.0275	
15 minute winter	SW28	5.001	SW29	12.7	1.624	2.587	0.0791	
15 minute winter	SW29	4.002	SW31	96.9	1.377	1.520	0.7028	
15 minute winter	RWP11	6.000	SW31	18.6	1.133	1.048	0.2492	
1440 minute winter	SW31	4.003	SW32	5.8	0.574	0.091	0.3136	
15 minute winter	RWP12	7.000	SW32	19.1	2.443	3.166	0.0409	
1440 minute winter	SW32	4.004	SW33	6.7	0.412	0.094	1.3691	
1440 minute winter	SW33	1.017	SW34 OUTFALL	2.4	0.192	0.220	0.0905	
1440 minute winter	SW34 OUTFALL	Hydro-Brake®		2.4				177.7
15 minute winter	SW15	1.006	SW16	67.4	0.957	0.938	0.3844	
15 minute winter	SW14	1.005	SW15	65.0	0.923	0.919	0.7236	



GENERAL NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
2. DO NOT SCALE THIS DRAWING. ANY AMBIGUITIES, OMISSIONS AND ERRORS ON DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. ALL DIMENSIONS MUST BE CHECKED / VERIFIED ON SITE.
3. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE.

Rev:	Description:	Date:	By:	Chkd:
P01	FIRST ISSUE	21.06.23	CRR	LG

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Status:
SUITABLE FOR AUTHORIZATION **S4**

Project:
PINN RIVER SCHOOL

Drg Title:
EXCEEDANCE PLAN

Drawn By	Designed By	Checked By
CRR	CRR	LG
	Date: 21.06.23	Scales @ A1: 1:500

1:500 0 10m 20m 30m 40m 50m
1:1 0 10 20 30 40 50 60 70 80 90 100

Project No - Originator - Function - Spatial - Form - Discipline - Number	Revision
FS0728 - CUR - XX - XX - DR - C - 0504	P01