

- Cover levels are approximate only and may vary on site. Covers to suit finished levels.
- Contractor is responsible for positioning MHs so they do not compromise line or level of kerbing or other delineation at the juncture of two surface materials.
- PPIC manhole diameters may vary and are dependant on manufactures specification and diameter of incoming / outgoing pipes.
- Concrete manhole diameters are dependant on nominal internal diameter of largest pipe in manhole. See Table A on Typical Manhole Details drawing.

Surface Water Drainage Manhole Schedule - LUF2											
MH Ref.	Cover Level	Invert Level	MH Type	MH Dia. (m)	Cover Type	D/S Pipe Length	Depth to Invert	Pipe Size (m)	Depth to Soffit	Gradient	Comments
S1	83.150	81.950	Conc.	1.200	D400	75.398	1.200	0.300	0.900	1:249.7	
S2	83.180	81.648	Conc.	1.200	D400	60.543	1.532	0.300	1.232	1:275.2	
S3	83.680	81.203	Conc.	1.800	D400	34.837	2.477	0.525	1.952	1:452.4	
S4	83.680	80.976	Conc.	2.100	D400	9.433	2.704	0.675	2.029	1:393.0	
S5	83.520	80.952	Conc.	1.800	D400	84.895	2.568	0.675	1.893	1:400.4	
S6	83.100	80.740	Conc.	2.100	D400	5.605	2.360	0.375	1.985	1:100.1	Hydrobrake @ 87.0/s
S7	83.100	80.684	Conc.	2.100	D400	9.620	2.416	0.375	2.041	1:25.1	
S8	83.750	82.100	Conc.	1.500	D400	75.449	1.650	0.450	1.200	1:91.8	
S9	83.680	81.126	Conc.	1.800	D400	36.117	2.554	0.675	1.879	1:361.2	300mm Silt Trap Sump 3 no. 225mm Outlets
S10	83.680	81.026	Conc.	1.800	D400	3.330	2.654	0.675	1.979	1:66.6	300mm Silt Trap Sump 3 no. 225mm Outlets
S11	83.190	81.765	Conc.	1.200	D400	57.271	1.425	0.225	1.200	1:157.8	
S12	83.020	81.516	Conc.	1.500	D400	50.523	1.504	0.600	0.904	1:300.7	
S13	83.420	81.348	Conc.	1.500	D400	75.879	2.072	0.600	1.472	1:299.9	
S14	83.350	81.095	Conc.	1.500	D400	50.998	2.255	0.600	1.655	1:300.0	
S15	83.150	80.850	Conc.	2.100	D400	10.422	2.300	0.675	1.625	1:297.8	
S16	83.200	81.850	Conc.	1.200	D400	64.427	1.350	0.300	1.050	1:115.0	
S17	83.100	81.290	Conc.	1.200	D400	6.440	1.810	0.300	1.510	1:99.1	

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- Concrete manhole diameters are dependant on nominal internal diameter of largest pipe in manhole. See Table A on Typical Manhole Details drawing.

Surface Water Drainage Silt Trap Manhole Schedule - LUF2						
MH Ref.	Cover Level	Inlet Invert Level	MH Type	MH Dia. (m)	Cover Type	Comments
S18	83.750	83.050	PPIC	0.600	D400	300mm Silt Trap
S19	83.700	83.000	PPIC	0.600	D400	300mm Silt Trap
S20	83.550	82.850	PPIC	0.600	D400	300mm Silt Trap
S21	83.450	82.750	PPIC	0.600	D400	300mm Silt Trap
S22	83.480	82.780	PPIC	0.600	D400	300mm Silt Trap
S23	83.340	82.640	PPIC	0.600	D400	300mm Silt Trap
S24	83.460	82.760	PPIC	0.600	D400	300mm Silt Trap
S25	83.550	82.850	PPIC	0.600	D400	300mm Silt Trap
S26	83.450	82.750	PPIC	0.600	D400	300mm Silt Trap
S27	83.500	82.800	PPIC	0.600	D400	300mm Silt Trap

- Cover levels are approximate only and may vary on site. Covers to suit finished levels.
- Contractor is responsible for positioning MHs so they do not compromise line or level of kerbing or other delineation at the juncture of two surface materials.
- PPIC manhole diameters may vary and are dependant on manufactures specification and diameter of incoming / outgoing pipes.
- Concrete manhole diameters are dependant on nominal internal diameter of largest pipe in manhole. See Table A on Typical Manhole Details drawing.

Foul Water Drainage Manhole Schedule - LUF2											
MH Ref.	Cover Level	Invert Level	MH Type	MH Dia. (m)	Cover Type	D/S Pipe Length	Depth to Invert	Pipe Size (m)	Depth to Soffit	Comments	
F1	80.850	80.550	PPIC	0.450	B125	27.000	0.700	0.450	0.550		
F2	83.250	82.000	Conc.	1.200	B125	77.000	1.250	0.150	1.100		
F3	83.250	81.000	Conc.	1.200	B125	9.145	2.250	0.150	2.100		
F4	83.250	80.900	Conc.	1.200	B125	4.250	2.350	0.225	2.125	Backdrop = 82.000	
▲ F5	83.250	80.800 (Inlet)	Specialist	2.600	D400	183.000	N/A	0.09 OD HDPE Pipework	N/A	Dual Standby/Duty FW Pumping Station at 5.0 l/s with 24hr breakdown storage.	
F6	83.450	82.100	Conc.	1.200	D400	76.000	1.350	0.150	1.200		
F7	83.000	80.100	Conc.	1.200	D400	3.500	2.900	0.225	2.675	Backdrop = 81.200	
F8	83.375	82.100	PPIC	0.600	B125	3.000	1.275	0.150	1.125		
F9	83.375	82.100	PPIC	0.600	B125	3.000	1.275	0.150	1.125		
F10	83.375	82.000	PPIC	0.600	B125	3.000	1.375	0.150	1.225		
F11	83.375	80.960	Conc.	1.200	B125	5.000	2.415	0.150	2.265		
F12	83.375	82.000	PPIC	0.600	B125	3.000	1.375	0.150	1.225		
F13	83.375	82.000	PPIC	0.600	B125	3.000	1.375	0.150	1.225		
F14	83.375	82.000	PPIC	0.600	B125	3.000	1.375	0.150	1.225		
F15	83.400	82.100	Conc.	0.900	D400	26.750	1.300	0.150	1.150	Stainless steel, double sealed, lockable internal recessed cover. Peter Savage 4500 series heavy duty cover or similar approved. 350mm reducer to prevent man entry to be installed on deep PPIC chamber.	
F16	83.400	81.655	Conc.	1.200	D400	47.270	1.745	0.150	1.595	Stainless steel, double sealed, lockable internal recessed cover. Peter Savage 4500 series heavy duty cover or similar approved. 350mm reducer to prevent man entry to be installed on deep PPIC chamber.	
F17	83.400	82.315	Conc.	0.900	D400	13.000	1.085	0.150	0.935	Stainless steel, double sealed, lockable internal recessed cover. Peter Savage 4500 series heavy duty cover or similar approved. 350mm reducer to prevent man entry to be installed on deep PPIC chamber.	
F18	83.350	82.650	PPIC	0.450	B125	10.850	0.700	0.150	0.550		
F19	83.350	82.375	PPIC	0.600	B125	4.250	0.975	0.150	0.825		
F20	83.350	81.065	Conc.	1.200	B125	8.640	2.285	0.150	2.135	Backdrop = 82.260	
F21	83.400	82.100	Conc.	0.900	D400	46.285	1.300	0.150	1.150	Stainless steel, double sealed, lockable internal recessed cover. Peter Savage 4500 series heavy duty cover or similar approved. 350mm reducer to prevent man entry to be installed on deep PPIC chamber.	
F22	83.650	81.450 (Inlet)	Conc.	1.500	D400	See F5 for total rising main length. Rising Main positioned at mid-point.	N/A	0.09 OD HDPE Pipework	N/A	Foul Water Rising Main Wash Out Chamber	
F23	83.250	82.550	PPIC	0.450	B125	16.250	0.700	0.150	0.550		
F24	83.250	82.280	PPIC	0.600	B125	8.275	0.970	0.150	0.820		
F25	83.250	82.140	PPIC	0.600	B125	14.500	1.110	0.150	0.960		
F26	83.250	81.955	Conc.	1.200	B125	6.450	1.295	0.150	1.145		
F27	83.250	81.895	Conc.	1.200	B125	11.180	1.355	0.150	1.205		
F28	83.250	81.750	Conc.	1.200	B125	3.440	1.500	0.150	1.350		
F29	83.250	81.700	Conc.	1.200	B125	10.800	1.550	0.150	1.400		
F30	83.250	81.565	Conc.	1.200	B125	4.600	1.685	0.150	1.535		
F31	83.250	81.500	Conc.	1.200	B125	16.370	1.750	0.150	1.600		
F32	83.150	81.330	Conc.	1.200	B125	8.800	1.820	0.150	1.670		
F33	83.200	80.000	Conc.	1.350	D400	N/A	3.200	0.225	2.975	Manhole to be constructed on line of existing 225mm diameter sewer. Invert level to be investigated and confirmed to the engineer prior to any site works.	
F34	83.250	82.550	PPIC	0.450	B125	19.700	0.700	0.150	0.550		
F35	83.250	82.550	PPIC	0.450	B125	2.500	0.700	0.150	0.550		
F36	83.300	82.200	Conc.	0.900	D400	23.000	1.100	0.150	0.950	Stainless steel, double sealed, lockable internal recessed cover. Peter Savage 4500 series heavy duty cover or similar approved. 350mm reducer to prevent man entry to be installed on deep PPIC chamber.	
F37	83.300	82.200	Conc.	0.900	D400	23.000	1.100	0.150	0.950	Stainless steel, double sealed, lockable internal recessed cover. Peter Savage 4500 series heavy duty cover or similar approved. 350mm reducer to prevent man entry to be installed on deep PPIC chamber.	
F38	83.300	82.200	Conc.	0.900	D400	23.000	1.100	0.150	0.950	Stainless steel, double sealed, lockable internal recessed cover. Peter Savage 4500 series heavy duty cover or similar approved. 350mm reducer to prevent man entry to be installed on deep PPIC chamber.	

▲ All Pumping Station information is subject to change upon detailed design stage. The pumping station is to be designed to accommodate 24hr breakdown storage.

Flow Control Details - (S6)
Hydro-Brake® Optimum Flow Control - Surface/Storm Drainage System
1Nr 361mm Type SH (MD5) Hydro-Brake® Flow Control (Horizontal Discharge)
Technical Criteria: Design / Duty Point Flow = 87.0 l/s with Head = 1.935m
Flush-Flo™ Point Flow = 86.700 l/s Head = 0.646m
Kick-Flo® Point Flow = 73.400 l/s Head = 1.365m
Reference: MD-SHE-0361-8700-1935-8700

NOT FOR CONSTRUCTION

Stage 4 Issue	JJH	C03	JC	28.11.2025
Stage 4 Issue	JJH	C02	JC	07.11.2025
Stage 4 Issue	JJH	C01	JC	24.10.2025
Stage 3 Issue	JJH	P06	JC	01.10.2025
Stage 3 Issue	JJH	P05	JC	13.09.2025
Stage 3 Issue	JJH	P04	JC	09.01.2025
Draft Stage 3 Issue	JJH	P03	JC	12.12.2024
Issued for Planning	JJH	P02	JC	23.11.2023
Issued for Planning	JJH	P01	JC	22.09.2023
AMENDMENT	BY	REV	CHK	DATE



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Client Cumberland Council
Project CMIQ Phase 2 LUF - Unit 9 & 12

BGP Project No. 21T2034

Drawing Title Manhole Schedule

Drawn	Date	Checked	Date	Size	Scale	Rev.
JJH	Aug '23	JC	Aug '23	A1	1:500	C03
Location	Originator	Volume	Level	Form	Role	Unique No.
LUF	BGP	09	XX	D	C	09131

File Reference
LUF-BGP-09-XX-D-C-09131

In instances where this drawing completes or partly completes a contract, Billinghurst George & Partners will consider that it's product has been validated, unless in a period not exceeding 90 working days, the client advises to the contrary.