

Foul Water Drainage												
Manhole Number	Cover Level (m)	Invert Level (m)	Manhole Type and Size	Depth to Invert (m)	Easting	Northing	Incoming Pipe Reference	Incoming Pipe Diameter (mm)	Incoming Pipe Invert Level	Outgoing Pipe Reference	Outgoing Pipe Diameter (mm)	Outgoing Pipe Invert Level (m)
CW01	193.425	188.985m	Manhole Type A Figure B.6 1200mm dia. D400 - 150mm (d) 600mm x 600mm	4.440	412043.898	413039.256	1.011 1.011	225 225	189.060 188.985	1.012	225	188.985
CW02	189.679	188.605m	Manhole Type B Figure B.9 1200mm dia. D400 - 150mm (d) 600mm x 600mm	1.460	412092.480	413053.910	1.012	225	188.605	1.013	225	188.605
EX_CW	190.380	188.580m	Manhole Type B Figure B.9 1200mm dia. D400 - 150mm (d) 600mm x 600mm	2.186	412093.817	413056.402	1.013	225	188.580			
FW01	199.030	196.670m	Manhole Type B Figure B.9 1200mm dia. D400 - 150mm (d) 600mm x 600mm	2.360	411902.298	413168.967	Lateral 02 Lateral 01	150 150	196.670 196.670	1.000	150	196.670
FW02	199.208	196.605m	Manhole Type B Figure B.9 1200mm dia. D400 - 150mm (d) 600mm x 600mm	2.603	411905.524	413160.982	1.000	150	196.605	1.001	150	196.605
FW03	199.546	196.410m	Manhole Type A Figure B.6 1200mm dia. D400 - 150mm (d) 600mm x 600mm	3.136	411914.828	413146.575	1.001	150	196.475	1.002	150	196.475
FW04	199.872	196.285m	Manhole Type B Figure B.9 1200mm dia. D400 - 150mm (d) 600mm x 600mm	3.587	411924.198	413123.384	1.002 Lateral 04	150 150	196.285 196.285	1.003	150	196.285
FW05	199.670	196.195m	Manhole Type A Figure B.6 1200mm dia. D400 - 150mm (d) 600mm x 600mm	3.475	411935.070	413127.777	1.003	150	196.195	1.004	150	196.195
FW06	199.408	196.030m	Manhole Type A Figure B.6 1200mm dia. D400 - 150mm (d) 600mm x 600mm	3.378	411956.506	413132.636	1.004 Lateral 05	150 150	196.030 196.030	1.005	150	196.030
FW07	199.194	195.885m	Manhole Type A Figure B.6 1200mm dia. D400 - 150mm (d) 600mm x 600mm	3.309	411972.033	413138.909	1.005 Lateral 06	150 150	195.885 195.885	1.006	150	195.885
FW08	198.413	195.680m	Manhole Type B Figure B.9 1200mm dia. D400 - 150mm (d) 600mm x 600mm	2.733	411986.273	413103.675	1.006 Lateral 07	150 150	195.680 195.680	1.007	150	195.680
FW09	197.302	195.160m	Manhole Type B Figure B.9 1200mm dia. D400 - 150mm (d) 600mm x 600mm	2.142	411990.183	413071.264	1.007 Lateral 08	150 150	195.160 195.160	1.008	150	195.160
FW10	199.001	197.000m	Manhole Type B Figure B.9 1200mm dia. D400 - 150mm (d) 600mm x 600mm	2.001	411954.370	413001.914	Lateral 09 Lateral 10	150 150	197.000 197.000	2.000	150	197.000
FW11	195.520	192.375m	Manhole Type A Figure B.6 1200mm dia. D400 - 150mm (d) 675mm x 675mm	3.145	412009.245	413024.085	2.000 1.008 Lateral 11 Lateral 12	150 150 150 150	193.875 193.875 193.875 193.875	1.009	150	192.375
FW12	196.538	194.400m	Manhole Type B Figure B.9 1200mm dia. D400 - 150mm (d) 600mm x 600mm	2.138	411961.736	412937.488	Lateral 13	150	194.475	3.000	225	194.400
FW13	192.954	190.605m	Manhole Type B Figure B.9 1200mm dia. D400 - 150mm (d) 600mm x 600mm	2.349	412023.257	412962.344	Lateral 14 3.000	150 225	190.680 190.605	3.001	225	190.605
FW14	191.520	189.700m	Manhole Type B Figure B.9 1200mm dia. D400 - 150mm (d) 600mm x 600mm	1.820	412047.879	412972.292	3.001	225	189.495	3.002	225	189.495
FW15	194.529	189.235m	Manhole Type A Figure B.6 1200mm dia. D400 - 150mm (d) 600mm x 600mm	5.294	412024.469	413030.236	3.002 1.009 Lateral 17	225 150 150	189.180 190.735 190.755	1.010	225	189.180
FW16	193.567	189.085m	Manhole Type A Figure B.6 1200mm dia. D400 - 150mm (d) 600mm x 600mm	4.482	412041.223	413040.691	1.010	225	189.080	1.011	225	189.080

Foul Water Drainage Laterals												
Manhole Number	Cover Level (m)	Invert Level (m)	Manhole Type and Size	Depth to Invert (m)	Easting	Northing	Incoming Pipe Reference	Incoming Pipe Diameter (mm)	Incoming Pipe Invert Level	Outgoing Pipe Reference	Outgoing Pipe Diameter (mm)	Outgoing Pipe Invert Level (m)
LFW01	199.211	196.705m	Manhole Type B Figure B.37 450mm dia. D400 - 150mm (d) 450mm x 450mm	2.506	411898.243	413168.758				Lateral 01	150	196.705
LFW02	199.067	196.710m	Manhole Type B Figure B.37 450mm dia. D400 - 150mm (d) 450mm x 450mm	2.357	411906.702	413170.746				Lateral 02	150	196.710
LFW03	200.150	196.695m	Manhole Type B Figure B.37 450mm dia. D400 - 150mm (d) 450mm x 450mm	2.509	411918.582	413127.542				Lateral 03	150	196.695
LFW04	200.191	196.345m	Manhole Type B Figure B.37 450mm dia. D400 - 150mm (d) 450mm x 450mm	3.250	411924.879	413115.438				Lateral 04	150	196.345
LFW05	199.561	196.085m	Manhole Type B Figure B.37 450mm dia. D400 - 150mm (d) 450mm x 450mm	3.250	411958.173	413126.037				Lateral 05	150	196.085
LFW06	199.188	195.940m	Manhole Type B Figure B.37 450mm dia. D400 - 150mm (d) 450mm x 450mm	3.248	411969.410	413145.401				Lateral 06	150	195.940
LFW07	198.499	195.730m	Manhole Type B Figure B.37 450mm dia. D400 - 150mm (d) 450mm x 450mm	2.769	411992.397	413104.414				Lateral 07	150	195.730
LFW08	197.241	195.215m	Manhole Type B Figure B.37 450mm dia. D400 - 150mm (d) 450mm x 450mm	2.026	411996.409	413074.428				Lateral 08	150	195.215
LFW09	199.840	197.050m	Manhole Type B Figure B.37 450mm dia. D400 - 150mm (d) 450mm x 450mm	2.790	411951.895	413008.041				Lateral 09	150	197.050
LFW10	198.903	197.090m	Manhole Type B Figure B.37 450mm dia. D400 - 150mm (d) 450mm x 450mm	1.813	411958.744	412991.090				Lateral 10	150	197.090
LFW11	196.382	193.980m	Manhole Type B Figure B.37 450mm dia. D400 - 150mm (d) 450mm x 450mm	2.402	411995.461	413026.500				Lateral 11	150	193.980
LFW12	195.464	193.965m	Manhole Type B Figure B.37 450mm dia. D400 - 150mm (d) 450mm x 450mm	1.499	412013.693	413013.075				Lateral 12	150	193.965
LFW13	196.689	194.525m	Manhole Type B Figure B.37 450mm dia. D400 - 150mm (d) 450mm x 450mm	2.164	411960.653	412940.168				Lateral 13	150	194.525
LFW14	193.023	190.710m	Manhole Type B Figure B.37 450mm dia. D400 - 150mm (d) 450mm x 450mm	2.313	412021.845	412965.839				Lateral 14	150	190.710
LFW15	191.562	189.780m	Manhole Type B Figure B.37 450mm dia. D400 - 150mm (d) 450mm x 450mm	1.695	412051.007	412981.388				Lateral 15	150	189.780
LFW16	193.951	189.867m	Manhole Type B Figure B.37 450mm dia. D400 - 150mm (d) 450mm x 450mm	3.250	412034.707	413021.711				Lateral 16	150	190.185
LFW17	194.707	191.355m	Manhole Type B Figure B.37 450mm dia. D400 - 150mm (d) 450mm x 450mm	3.250	412021.269	413035.364				Lateral 17	150	191.355

General Notes

- Do not scale this drawing.
- All dimensions are in millimeters unless stated otherwise.
- This drawing is to be read in conjunction with all other relevant drawings & specifications.
- All proprietary items to be installed in strict compliance with manufacturers instructions and recommendations.
- No works shall commence on site until approval has been obtained from all relevant Agencies / Authorities.
- All dimensions referred to in this drawing must be verified.

Yorkshire Water Notes

- All adoptable sewer works and material to be in accordance with "Design and Construction Guidance (DCG)/Code for Adoption". The Relevant British/European and Yorkshire Water's Standards/Requirements/Addendum to the Mechanical and Electrical Specification and Kitemarked.
- Manhole covers shall/must have a clear opening of 600mm and shall be Class D400 to BS EN 124 with 150mm deep frames in highways.
- Filled ground must be filled and consolidated under the supervision and to the satisfaction of Yorkshire Water before any sewer works are carried out.
- Yorkshire Water is not obliged to accept filter drain/land drainage run-off into the public sewer network or adoptable drainage system (directly or indirectly). An alternative method of disposal of the land drainage run-off will therefore be required and you will have to liaise with the Local Authority, Land Drainage Section regarding the disposal of the filter drain/land drainage run-off.
- The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.
- Sewers must have 5 metres clearance from trees and hedges or the width of the canopy at mature height.
- Sewers to be laid in Class "S" Bedding (150mm granular bed and surround). Where depth of cover to top of the sewer is less than 1.2m in highways and verges (or less than 900mm in nonvehicular access areas) then a concrete slab should be provided above granular bed and surround.
- Bedding and backfill material to conform to the requirement of Water Industry Specification 4-08-02 (Table A2).
- Yorkshire Water policy is that brick manholes and Type "C" 1050mm diameter manhole rings are not preferred. Instead, it is preferred that you use a type "B" manhole with 1200mm diameter or 1350mm diameter rings, with the opening sited over the channel where depth of cover to pipe soffit is 1 - 1.5m.
- Adoptable plastic sewer pipes to be BSI Kitemarked (certified to WIS 4-35-01 and BS/EN13476). Adoptable plastic sewer pipes to be laid in maximum 3 metre lengths unless there is a specific operational need to lay longer lengths. Plastic channel sections in manholes are not acceptable and Yorkshire Water would require clay ware channel in manholes.
- The minimum crushing strength for clay pipes should be as follows: 100mm dia. 40KN/m, 150mm dia. 40KN/m, 225mm dia. 45KN/m and 300mm dia. 72KN/m. The minimum crushing strength for concrete pipes should be - (Class 120 to EN 1916/BS5911-1 2002). Plastic pipes should conform to WIS 4-35-01 and BS EN13476.
- Where a B125 cover and frame has been approved, this must not be coated in plastic and must have lifting eyes suitably sized to accommodate standard lifting keys. Screw down covers are not acceptable.
- There must be enough clearance at crossovers to accommodate bedding to both pipes, approx. 300mm; if crossover is near the rocker then the clearance needed may need to be increased".

P3	Drawing revised inline with Yorkshire Water comments	SG	16.03.26
P2	Drawing updated to suit revised site layout plan.	SG	04.11.25
P1	First Issue	SG	29.09.25
rev	description	drawn	date

Preliminary



1 Chapel Farm Close, Elston, Newark, Nottinghamshire, NG23 5PW  
 W: www.elstonengineering.com  
 E: enquiries@elstonengineering.com  
 T: 07931 391372

client:



project:

Land off Roslyn Avenue, Netherton, Huddersfield

drawing title:

Foul Water Manhole Schedules

Drawing Number:	Drawn by:	Checked by:
EE100008-214	SG	SG
Project ref:	scale:	date:
EE100008	NTS	29.09.2025
		original paper size:
		A1