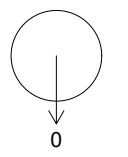
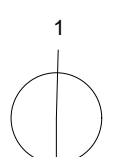
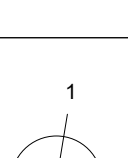
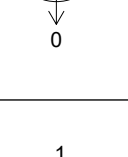
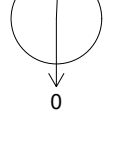
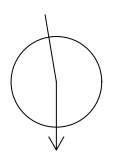
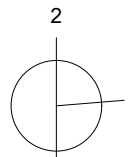
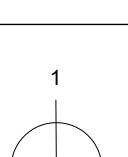
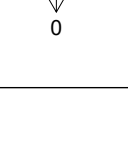
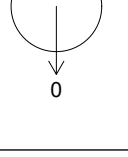
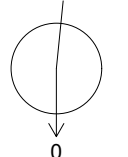
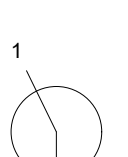
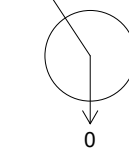
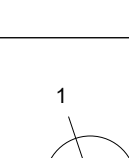
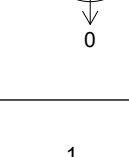
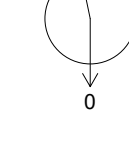
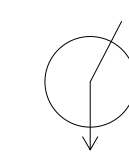
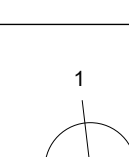
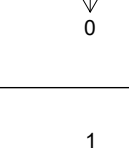
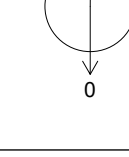
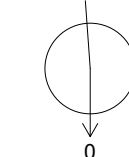
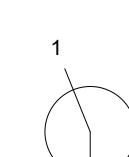
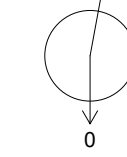
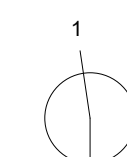
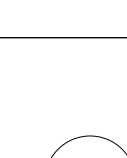
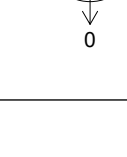
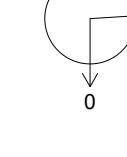
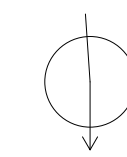


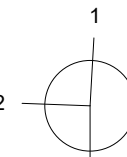
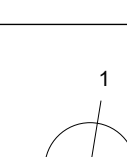
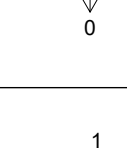
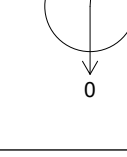
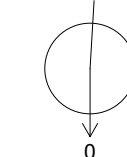
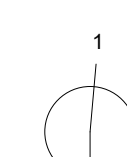
Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types	
Coordinates	Depth To Soffit		Code	Inverts	Diams		Manhole	Cover
F1	44.519							
E. 445321.342	1.777					1200	B	D400
N. 404973.240			0	1.000	42.592	150		
F2	44.061		1	1.000	42.114	150		
E. 445346.675	1.797					1200	B	D400
N. 404972.612			0	1.001	42.114	150		
F3	43.608		1	1.001	41.610	150		
E. 445370.204	1.848					1200	B	D400
N. 404972.680			0	1.002	41.610	150		
F4	43.231		1	1.002	41.197	150		
E. 445394.167	1.884					1200	B	D400
N. 404976.714			0	1.003	41.197	150		
F5	42.773		1	1.003	40.663	150		
E. 445414.228	1.960					1200	B	D400
N. 404981.007			0	1.004	40.663	150		
F6	42.313		1	1.004	40.167	150		
E. 445439.321	1.996					1200	B	D400
N. 404982.131			0	1.005	40.167	150		

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types	
Coordinates	Depth To Soffit		Code	Inverts	Diams		Manhole	Cover
F19	41.102		1 2	1.009 3.003	38.772 38.772	150 150		
E. 445450.861	2.180					1200	B	D400
N. 404883.136			0	1.010	38.772	150		
F20	40.685		1	1.010	38.274	150		
E. 445458.983	2.261					1200	B	D400
N. 404880.806			0	1.011	38.274	150		
F21	41.059							
E. 445542.037	2.084					1200	B	D400
N. 404889.826			0	4.000	38.825	150		
F22	40.367		1	4.000	38.252	150		
E. 445508.455	1.965					1200	B	D400
N. 404883.987			0	4.001	38.252	150		
F23	40.050		1	4.001	37.822	150		
E. 445479.873	2.078					1200	B	D400
N. 404875.982			0	4.002	37.822	150		
F24	40.294		1 2	4.002 1.011	37.600 37.600	150 150		
E. 445467.988	2.544					1200	B	D400
N. 404878.159			0	1.012	37.600	150		

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types	
Coordinates	Depth To Soffit		Code	Inverts	Diams		Manhole	Cover
F7	41.979		1	1.005	39.909	150		
E. 445457.097	1.920					1200	B	D400
N. 404979.546			0	1.006	39.909	150		
F8	43.991							
E. 445567.992	1.770					1200	B	D400
N. 404953.422			0	2.000	42.071	150		
F9	43.615		1	2.000	41.723	150		
E. 445538.119	1.742					1200	B	D400
N. 404950.250			0	2.001	41.723	150		
F10	43.007		1	2.001	40.935	150		
E. 445516.516	1.922					1200	B	D400
N. 404955.028			0	2.002	40.935	150		
F11	41.725		1	2.002	39.468	150		
E. 445470.340	2.107					1200	B	D400
N. 404975.871			0	2.003	39.468	150		
F12	41.803		1 2	2.003 1.006	39.411 39.411	150 150		
E. 445461.760	2.242					1200	B	D400
N. 404975.400			0	1.007	39.411	150		

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types	
Coordinates	Depth To Soffit		Code	Inverts	Diams		Manhole	Cover
F25	39.066							
E. 445584.422	2.274					1200	B	D400
N. 404839.124			0	5.000	36.642	150		
F26	38.541		1	5.000	36.250	150		
E. 445585.601	2.141					1200	B	D400
N. 404832.219			0	5.001	36.250	150		
F27	37.505		1	5.001	35.522	150		
E. 445528.384	1.833					1200	B	D400
N. 404823.353			0	5.002	35.522	150		
F28	36.718		1	5.002	35.284	150		
E. 445493.724	1.284					1350	C	D400
N. 404814.823			0	5.003	35.284	150		
F29	36.674		1	5.003	35.184	150		
E. 445478.879	1.340					1350	C	D400
N. 404812.287			0	5.004	35.184	150		
F30	36.975		1	5.004	35.061	150		
E. 445460.936	1.764					1200	B	D400
N. 404816.194			0	5.005	35.061	150		

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types	
Coordinates	Depth To Soffit		Code	Inverts	Diams		Manhole	Cover
F13	41.809		1	1.007	39.321	150		
E. 445458.625	2.338					1200	B	D400
N. 404962.230			0	1.008	39.321	150		
F14	41.671		1	1.008	38.959	150		
E. 445455.853	2.562					1200	B	D400
N. 404908.003			0	1.009	38.959	150		
F15	43.938							
E. 445399.401	1.808					1200	B	D400
N. 404936.906			0	3.000	41.980	150		
F16	43.337		1	3.000	41.453	150		
E. 445395.570	1.734					1200	B	D400
N. 404894.894			0	3.001	41.453	150		
F17	42.694		1	3.001	40.848	150		
E. 445415.737	1.696					1200	B	D400
N. 404891.759			0	3.002	40.848	150		
F18	41.542		1	3.002	39.599	150		
E. 445439.599	1.793					1200	B	D400
N. 404886.367			0	3.003	39.599	150		

Manhole Number	Cover Level	Connections	Pipe			Manhole Size	Types	
Coordinates	Depth To Soffit		Code	Inverts	Diams		Manhole	Cover
F31	37.259		1 2	5.005 1.012	34.986 34.986	150 150		
E. 445450.223	2.123					1200	B	D400
N. 404819.678			0	1.013	34.986	150		
F32	38.365		1	1.013	34.646	150		
E. 445400.959	3.569					1200	A	D400
N. 404832.695			0	1.014	34.646	150		
F33	38.155		1	1.014	34.378	150		
E. 445360.989	3.627					1200	A	D400
N. 404836.631			0	1.015	34.378	150		
F34	37.508		1	1.015	34.165	150		
E. 445329.111	3.193					1200	A	D400
N. 404837.449			0	1.016	34.165	150		
F35	37.009		1	1.016	33.996	150		
E. 445304.023	2.863					1200	B	D400
N. 404836.622			0	1.017	33.996	150		
F36	46.123							
E. 445260.284	1.693					1200	B	D400
N. 404966.962			0	6.000	44.280	150		

- All adoptable sewer works and material to be in accordance with "Code for Adoption". The Relevant British/European and Icosa Water's Standards/Requirements/Addendum to the Mechanical and Electrical Specification and Kitemarked.
- Manhole covers shall must have a clear opening of 675mm 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 Icosa Water before any sewer works are carried out.
- Icosa 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 with regard to the disposal of the filter drain/land drainage run-off.
- Cover slabs must carry the BSI Kitemark or will be rejected by Icosa Water Inspector. Where the clear opening of the Kitemarked product is different to that of the cover and frame, a loading bearing slab should be fitted above the cover slab to bring the size down to 375mm x 375mm for the Icosa Water specified cover size. Please refer to Concrete Pipe Systems Association (CPSA), 'Technical Bulletin' issued Autumn 2004 for Kitemarked cover slab opening sizes.
- Sulphate resistant cement (C20-DC2) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.
- Adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.
- Sewers must have 5m clearance from trees and hedges.
- 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 none vehicular access areas) then a concrete slab should be provide above granular bed and surround.
- Bedding and backfill material to conform to the requirement of Water Industry Specification 4-08-02 (Table A2).
- The chamber size of manholes with more than one connection in them may need to be increased an increment to accommodate the connections and bends.
- Icosa Water policy is that Type "C" brick manholes and 1050mm dia manhole rings are not preferred. Instead it is preferred that you use a type "B" manhole with 1200mm dia or 1500mm dia rings, with the opening sized 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 EN 13476). 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 Icosa Water would prefer clayware channel in manholes. We have found that plastic channels are difficult to set in concrete because they float and a satisfactory finish cannot be obtained on the benching.
- 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 should be enough clearance to accommodate the bedding for both pipes, approx 300mm : if crossover is near the rocker then the clearance needed may be increased.

P04	Revised to suit latest drainage design	CTB	GH	28.11.2025
P03	Revised to suit latest drainage design	EL	GH	07.10.2025
P02	Revised to suit latest drainage design	CTB	GH	15.08.2025
P01	First issue.	GT	DAB	25.04.2024
REV	DESCRIPTION	SIG	CHK	DATE

AVANT HOMES

LAND OFF THURNSCOE BRIDGE
LANE, THURNSCOE, ROTHERHAM,
S63 0TX

MANHOLE S