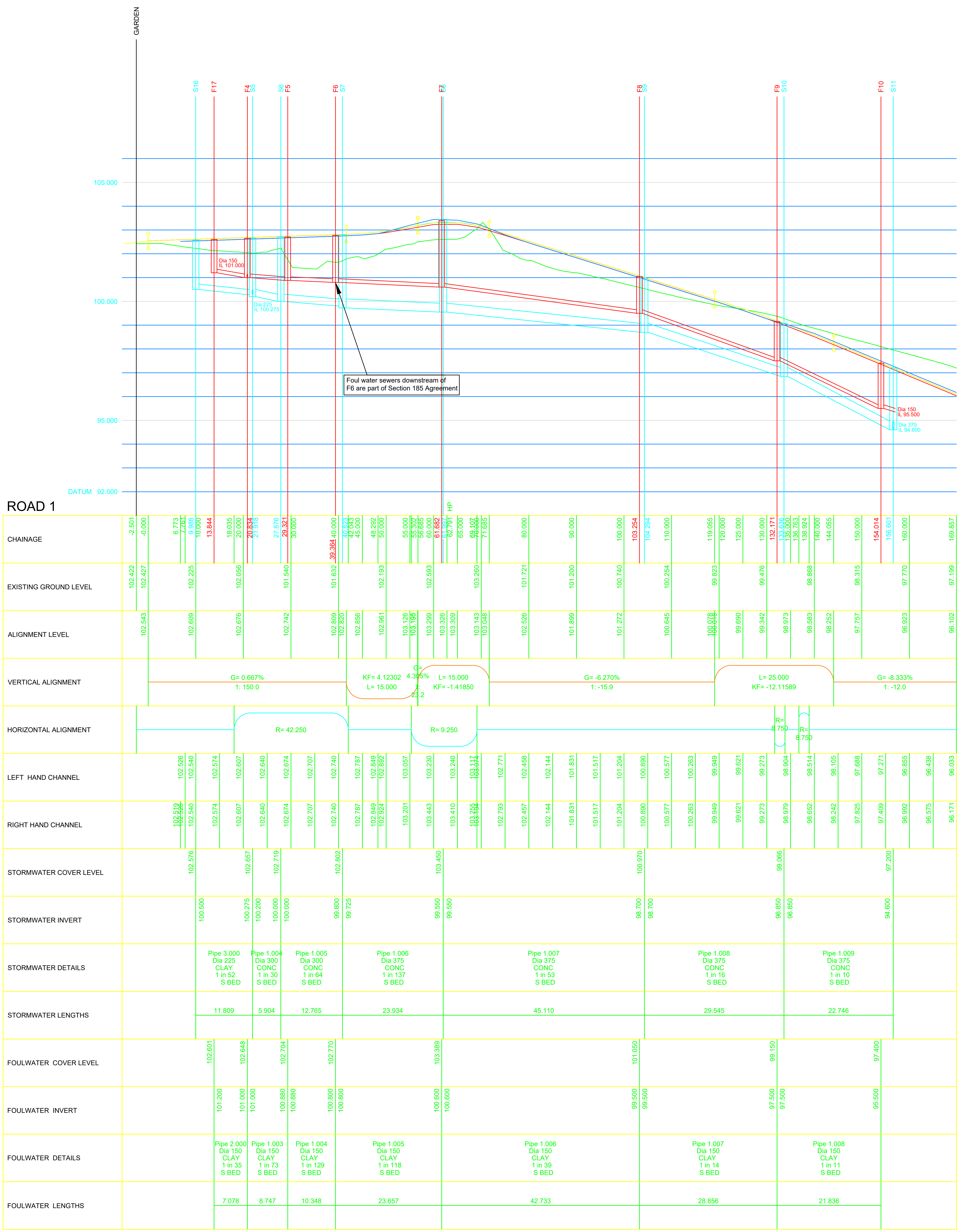
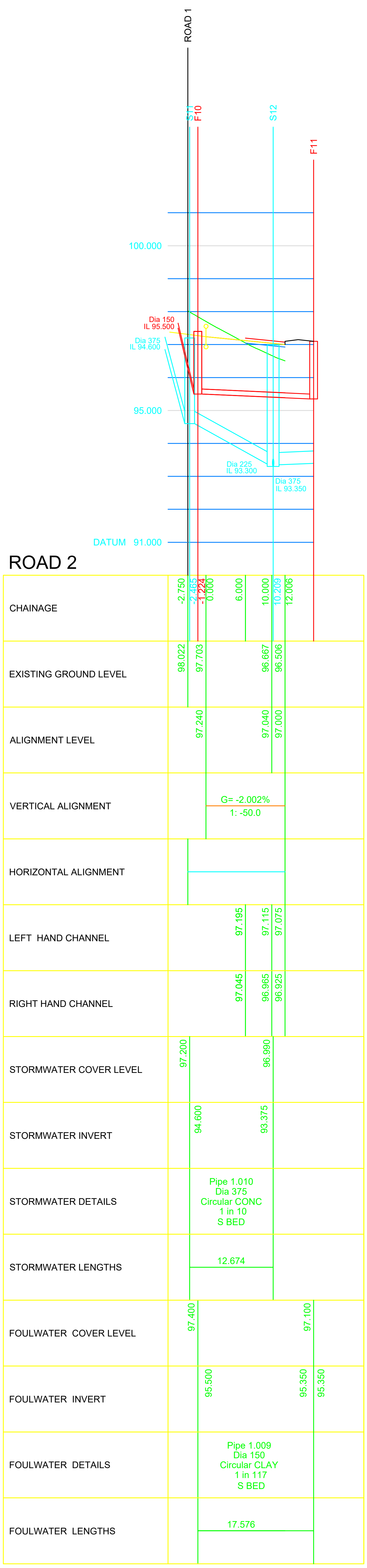
ROAD 1



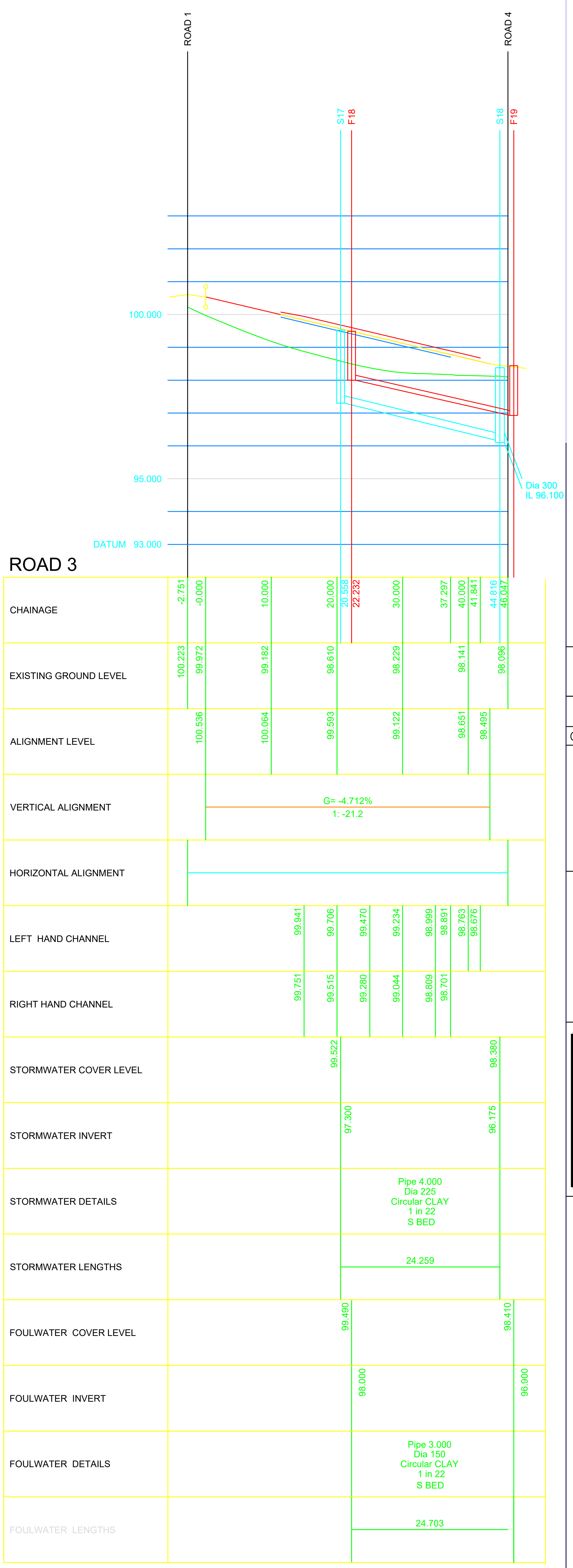
PIPE STRENGTHS 100mm Clay = 40KN/m; 150mm Clay =40KN/m; 300mm Conc. = 36KN/m; 375mm Conc. = 45kn/m.

ROAD 2



PIPE STRENGTHS 100mm Clay = 40KN/m; 150mm Clay =40KN/m;
300mm Conc. = 36KN/m; 375mm Conc. = 45kn/m.

ROAD 3



PIPE STRENGTHS 100mm Clay = 40KN/m; 150mm Clay =40KN/m; 300mm Conc. = 36KN/m; 375mm Conc. = 45kn/m.

YORKSHIRE WATER SEWER NOTES

1. All adoptable sewer works and materials to be in accordance with Design and Construction Guidance'. The relevant British/European and Yorkshire Water's Standards/Requirements/Addendum to the Mechanical and Electrical Specification and kitemarked.
2. Manhole covers shall/must have a clear opening of 600mm and shall be Class D400 to BSEN124 with 150mm deep frames in highways.
3. Filled ground must be filled and consolidated under the supervision of and to the satisfaction of Yorkshire Water before any sewer works are carried out.
4. 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 with therefore be required and you will have to liaise with the Local Authority, Land Drainage Section with the regard to the disposal of the filter drain/land drain run-off.
5. Cover slabs must carry the BSI Kitemark or will be rejected by Yorkshire Water Inspector.Where the clear opening of the Kitemarked product is different to that of the cover and frame, a load bearing slab should be fitted above the cover slab to bring the size down to 600mm x 600mm for the Yorkshire Water specified cover size. Please refer to the Concrete Pipe Systems Association (CPSA),' Technical Bulletin' issued autumn 2004 for kitemarked cover slab opening sizes. As an alternative 600mm x 600mm access cover slabs are now available (must must be kitemarked) and Yorkshire Water would accept without the requirement of the reducing piece.
6. Sulphate resisting cement (C20-DC2) and pre-cast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.
7. The adoptable sewers should be located a minimum of 1m and manholes 0.5m from kerb faces and service margins.
8. Sewers must have 5 metres clearance from trees and hedges (please also refer to Figure 2.3 on page 33 in 'Sewers for Adoption' 6th Edition for restrictions on tree planting adjacent to sewers).
9. Sewers to be laid with Class 'S' Bedding (150mm granular bed and surround). Where depth of cover to top of sewer is less than 1.2m in highways and verges (or less than 900mm in none vehicular areas), then a concrete slab should be provided above the granular bed and surround.
10. Bedding and backfilling material to conform to the requirement of Water Industry Specification 4-08-02 (Table A2).
11. 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.
12. Yorkshire water policy is not to accept Type 'c' brick manholes and 1050mm diameter rings. Instead it is preferred that you use a 'type B' manhole with 1200mm dia or 1500mm dia rings with the opening sited over the channel where depth of cover to pipe soffit is 1-1.5m.
13. Adoptable plastic sewer pipes to be BSI Kitemarked (certified to WIS 4-3-01 and BS/EN13476). Adoptable plastic sewer pipes to be laid in 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 prefer clayware channels 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.
14. The minimum crsushing strength for clay pipes should be as follows:- 100mm dia 40KN/m, 150mm dia. 40KN/m, 225mm 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 BSEN13476.
15. 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.

Checked	Rev #	Description	Date
	1	For 104 Agreement appraisal.	23/01/23

Client

BIG CITY CO. MD

Job Title

GARDEN HOUSE CLOSE
MONK BRETTON
BARNSLEY

BRIGHT
YOUNG
Consulting
Limited
The Media Centre, 7 Northumberland
Street, Huddersfield, HD1 1RL
Email: info@brightyoung.co.uk
Web: www.brightyoung.co.uk
Tel: 01484 487950
Fax: 01484 603519

Drawing Title
HIGHWAYS AND DRAINAGE

ROAD AND SEWER
LONG SECTIONS
(1 OF 3)

Scale	Date	Drawn	Checked
1:500H/100V@A1	JAN 2023	HM	JB

Drg No.	Rev
4019/105	1