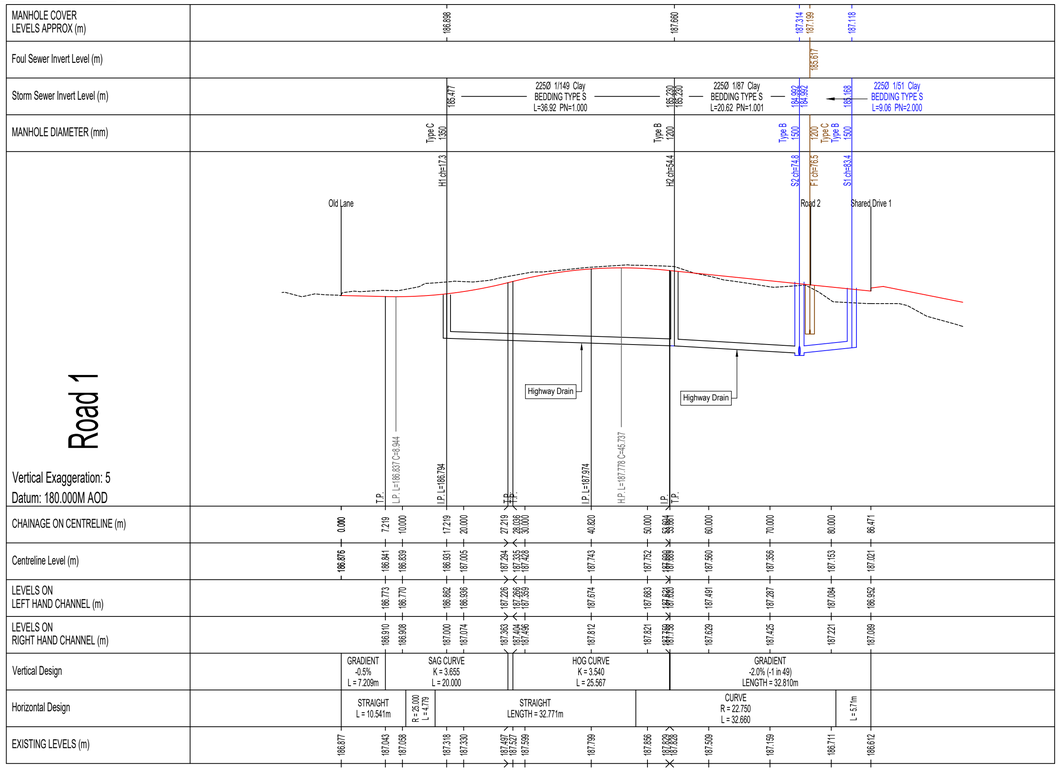
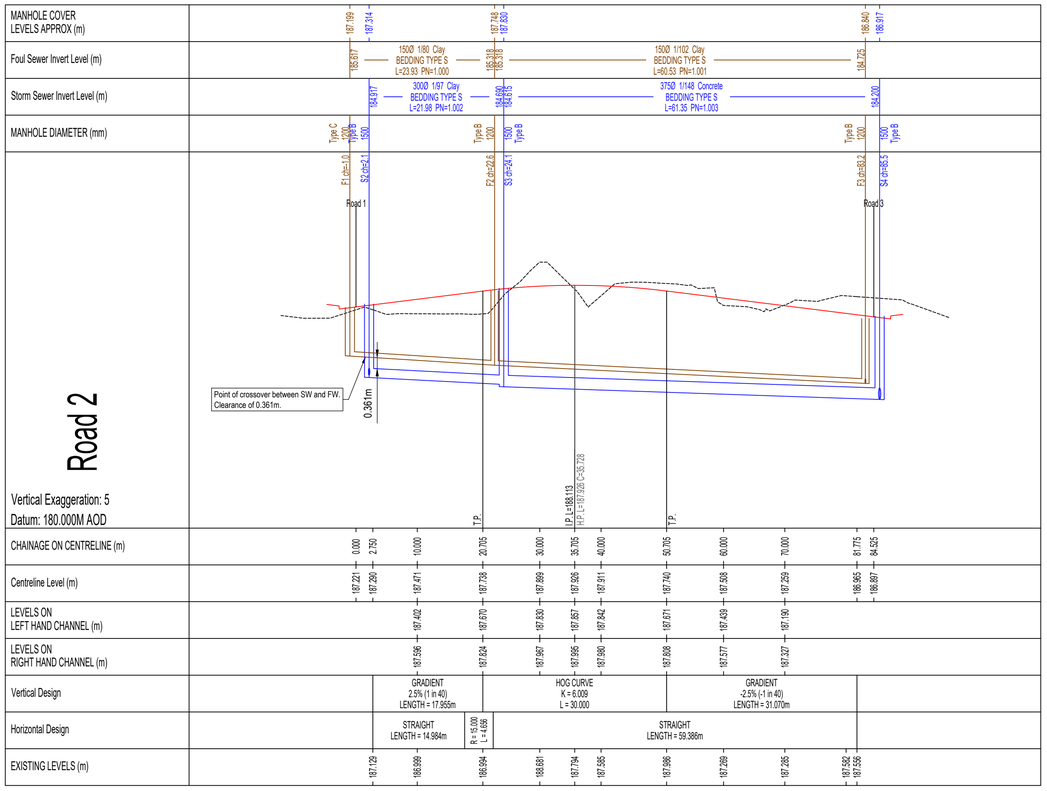
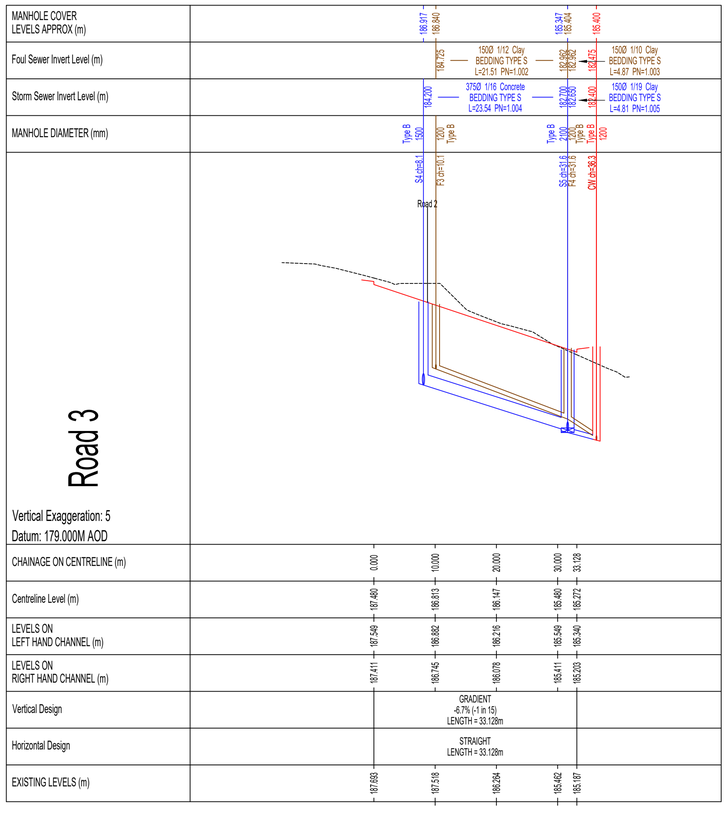
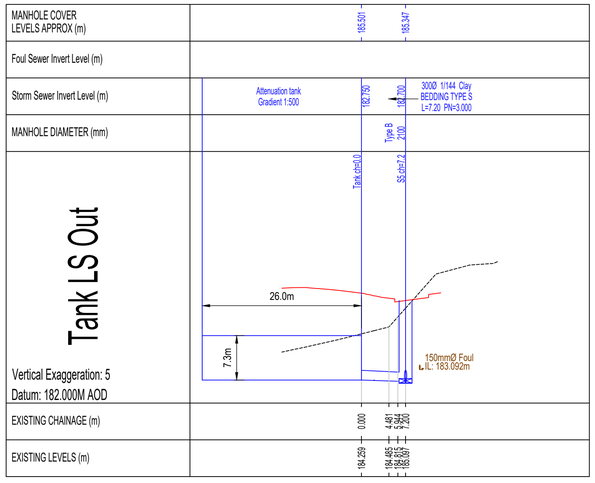
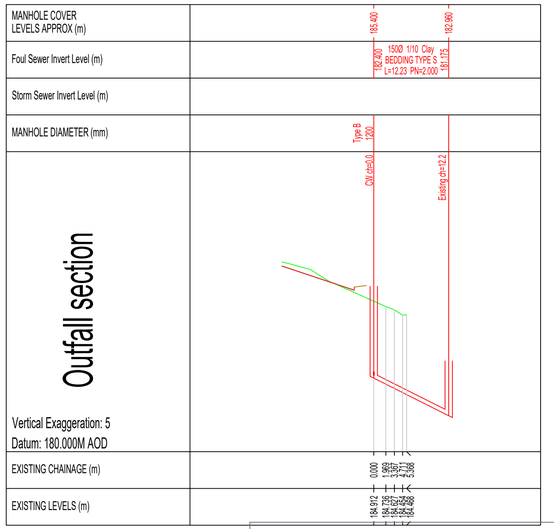
S104-2025-035











Existing Ground Profile

Proposed Ground Profile

Yorkshire Water Notes

1. All adoptable sewer works and material to be in accordance with "Code for Adoption", The Relevant British/European and Yorkshire Water's Standards/Requirements/Local Practice for the Adoption of Small Submersible Foul and Surface Water Pumping Stations and must be Kitemarked.
2. 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.
3. Filled ground must be filled and consolidated under the supervision 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 in-directly)**. 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.
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 loading 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 Concrete Pipe Systems Association **(CPSA)**, 'Technical Bulletin' issued Autumn 2004 for Kitemarked cover slab opening sizes.
6. Sulphate resistant cement **(C20-DC2)** and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.
7. The adoptable sewers should be 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 or the width of the canopy at mature height. (**please also refer Design and Construction Guidance for restrictions on tree planting adjacent to sewers**)".
9. 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.
10. Bedding and backfill material to conform to the requirement of Water Industry Specification 4-08-02 **(Table A1)**.
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 that brick manholes and 1050mm dia. manhole rings are not preferred. Instead it is preferred that you use a type "B" manhole with 1200mm dia., 1350mm dia. or 1500mm dia. rings, with 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 4-35-01 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 prefer clayware channel in manholes.
14. 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.
15. 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
16. 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 EN1916/BS5911-1 2002). Plastic pipes should conform to WIS 4-35-01 and BE EN13476.

For all clause and table references please refer to the Design and Construction Guidance contained within Code for Adoption

Pipe Crushing Strength

Material	Diameter (mm)	Min. Crushing Strength (KN/m²)
Clay	100	40
Clay	150	40
Clay	225	45
Clay	300	72
Minimum crushing strength for concrete pipes to 'Class 120 to BS EN1916/BS 5911-1 2002'		
Concrete	375	54
Concrete	450	54
Concrete	525	54
Concrete	600	60
Concrete	675	63
Concrete	750	72
Concrete	825	99
Concrete	900	108
Plastic	0-300	WIS 4-35-01

REV	DESCRIPTION	SIG	CHK	DATE
P06	Updated to suit S104 comments.	EL	GH	19/11/2025
P05	Updated to suit YW comments, updated to suit latest drainage layout.	EL	GH	03/10/2025
P04	YW notes added. Dimension at FW-SW crossover points added. Pipe strength table added. YW reference number added.	GT	MA	01/07/2025
P03	Legend added and line colouring updated.	MA	GH	10/03/2025
P02	Updated to suit revised site layout and detailed design.	MA	GH	21/02/2025
P01	First issue.	RJ	GH	16/12/2024

RIVA HOMES

CROFT ST, BIRKENSHAW, BRADFORD, BD11 2HT

LONGITUDINAL SECTIONS SHEET 1

Eastwood CONSULTING ENGINEERS
St Andrew's House
23 Kingfield Road
Sheffield, S11 9AS
T: 0114 255 4554
E: mail@eastwoodce.com
eastwoodce.com

ECE PROJECT No	SCALE AT A1	STATUS	SUITABLE FOR
48785	1:500h 1:100v	S3	Comment

DRAWING NUMBER: 48785 - ECE - XX - XX - DR - C - 0006 (Project - Originator - Zone - Level - Type - Role - Number) REV P05