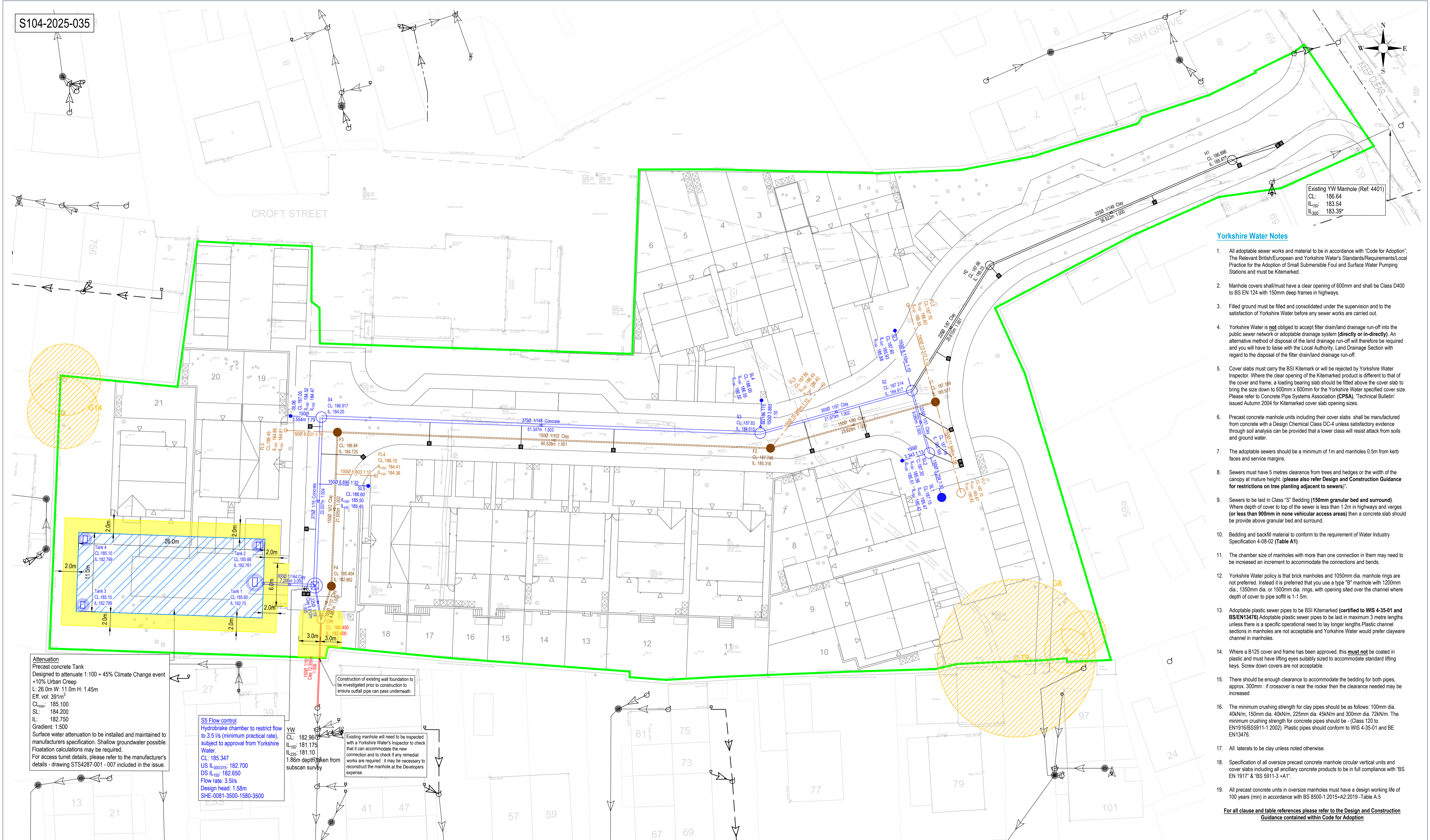


S104-2025-035



Existing YW Manhole (Ref. 4401)  
 CL: 186.64  
 IL<sub>150</sub>: 183.54  
 IL<sub>300</sub>: 183.39\*

**Yorkshire Water Notes**

- 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.
- Manhole covers shall 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 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 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.
- Precast concrete manhole units including their cover slabs shall be manufactured from concrete with a Design Chemical Class DC-4 unless satisfactory evidence through soil analysis can be provided that a lower class will resist attack from soils and ground water.
- 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. (please also refer Design and Construction Guidance for restrictions on tree planting adjacent to sewers).
- 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 more vehicular 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 A1).
- 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.
- 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.
- 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 Yorkshire Water will prefer clayware channel in manholes.
- 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
- 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.
- All laterals to be clay unless noted otherwise.
- Specification of all oversize precast concrete manhole circular vertical units and cover slabs including all ancillary concrete products to be in full compliance with 'BS EN 1917' & 'BS 5911-3 +A1'.
- All precast concrete units in oversize manholes must have a design working life of 100 years (min) in accordance with BS 8500-1:2015+A2:2019 -Table A.5

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

**Attenuation**  
 Precast concrete Tank  
 Designed to attenuate 1:100 + 45% Climate Change event +10% Urban Creep  
 L: 26.0m W: 11.0m H: 1.45m  
 Eff. vol: 391m<sup>3</sup>  
 CL<sub>top</sub>: 185.100  
 SL: 184.200  
 IL: 182.750  
 Gradient: 1:500  
 Surface water attenuation to be installed and maintained to manufacturers specification. Shallow groundwater possible. Flootation calculations may be required.  
 For access turret details, please refer to the manufacturer's details - drawing STS4287-001 - 007 included in the issue.

**SS Flow control**  
 Hydrobrake chamber to restrict flow to 3.5 l/s (minimum practical rate), subject to approval from Yorkshire Water.  
 CL: 185.347  
 US IL<sub>300/375</sub>: 182.700  
 DS IL<sub>150</sub>: 182.650  
 Flow rate: 3.5 l/s  
 Design head: 1.58m  
 SHE-0081-3500-1580-3500

Construction of existing wall foundation to be investigated prior to construction to ensure outfall pipe can pass underneath

Existing manhole will need to be inspected with a Yorkshire Water's Inspector to check that it can accommodate the new connection and to check if any remedial works are required: it may be necessary to reconstruct the manhole at the Developers expense.

1.86m depth taken from subscan survey

**Combined Water Drainage Legend**  
 (Dimensions are approx. internal sizes)

- Existing Combined Water Sewer
- New Adoptable Combined Water Sewer to be constructed in accordance with Design Construction Guidance
- New Adoptable Combined Water Manhole (size and construction may vary), to be built in accordance with Design Construction Guidance
- Highway Drain
- Highway Gully

**Storm Water Drainage Legend**  
 (Dimensions are approx. internal sizes)

- Existing Storm Water Sewer
- New Adoptable Storm Water Sewer to be constructed in accordance with Design Construction Guidance
- New Adoptable Storm Water Manhole (size and construction may vary), to be built in accordance with Design Construction Guidance

**Foul Water Drainage Legend**  
 (Dimensions are approx. internal sizes)

- Existing Foul Water Sewer
- New Adoptable Foul Water Sewer to be constructed in accordance with Design Construction Guidance
- New Adoptable Foul Water Manhole (size and construction may vary), to be built in accordance with Design Construction Guidance

**Key**

- Site Boundary
  - Sewer Easement
  - Existing Tree RPA
- \*All existing trees to be removed except those indicated as retained. All planting to be min 5m away from drainage assets, unless specialist protection provided.

- All levels of the existing sewers have been checked on site and are correct as shown.
- Existing sewers will need to be inspected by a Yorkshire Water inspector to ensure it can accommodate the proposed connection and to check if any remedial works are required (it may be necessary to reconstruct the manhole at your client's expense).

REV	DESCRIPTION	SIG	CHK	DATE
P07	Notes amended to suit Kirklees highways requirements.	RJ	GH	01/04/2026
P06	Notes added to suit Kirklees highways requirements	RJ	GH	26/03/2026
P05	Updated to suit S104 comments	EL	GH	19/11/2025
P04	Updated to suit Yorkshire Water comments	EL	GH	03/10/2025
P03	Tank size amended.	MA	-	02/05/2025
P02	Site extents updated to suit client comments.	MA	CH	25/02/2025
P01	First issue.	MA	GH	21/02/2025

RIVA HOMES

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S104 AGREEMENT PLAN

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ECE PROJECT No	SCALE AT A1	STATUS	SUITABLE FOR
48785	1:250	S3	Comment

DRAWING NUMBER  
**48785 - ECE - XX - XX - DR - C - 0010** P07

Project Originator Zone Level Type Role Number