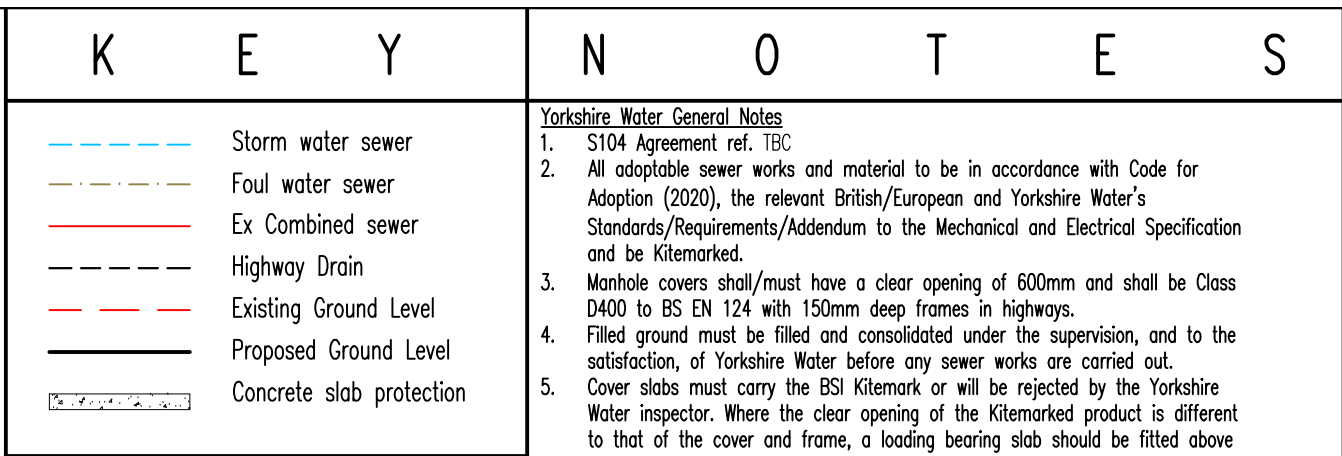
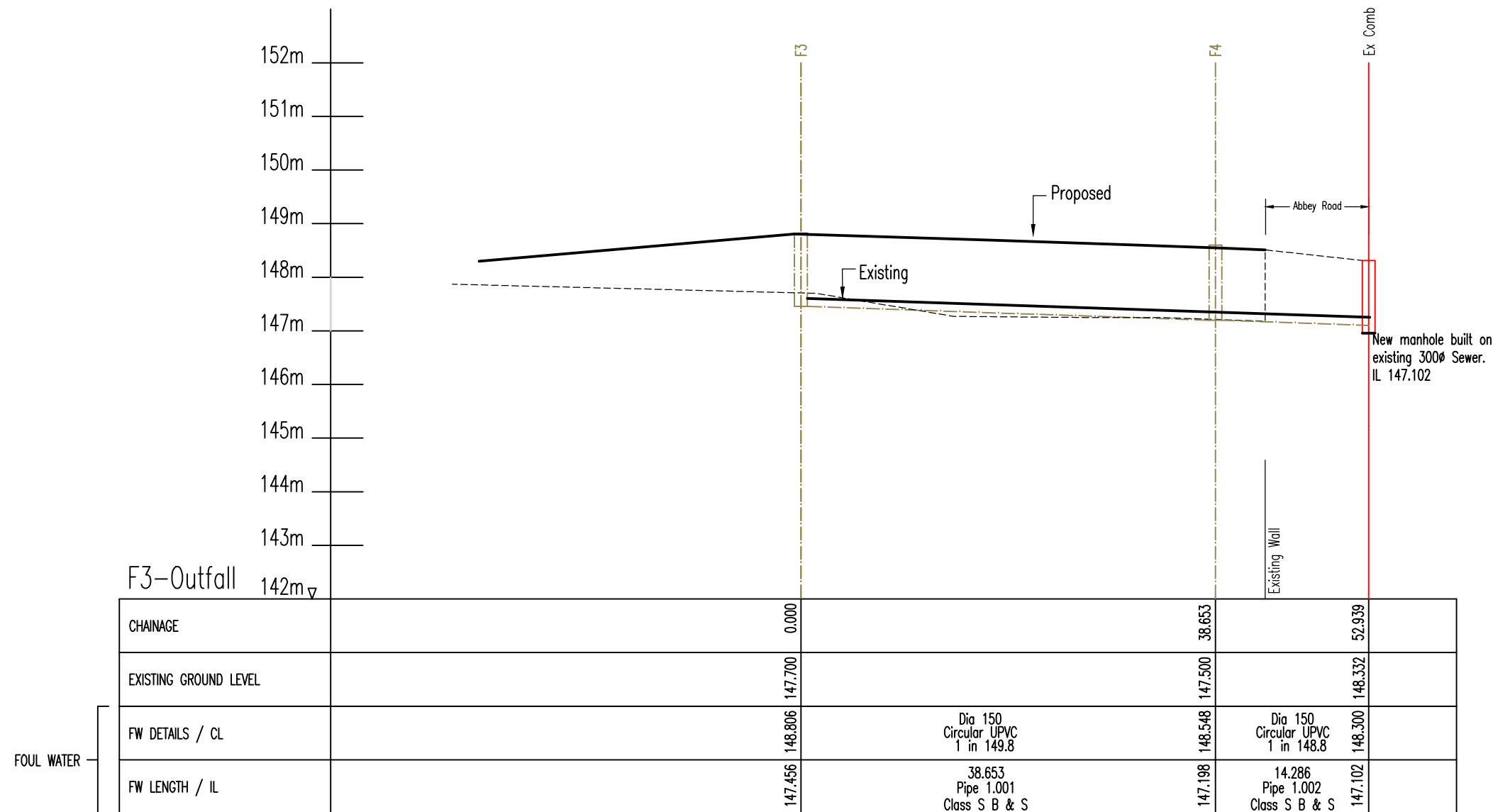
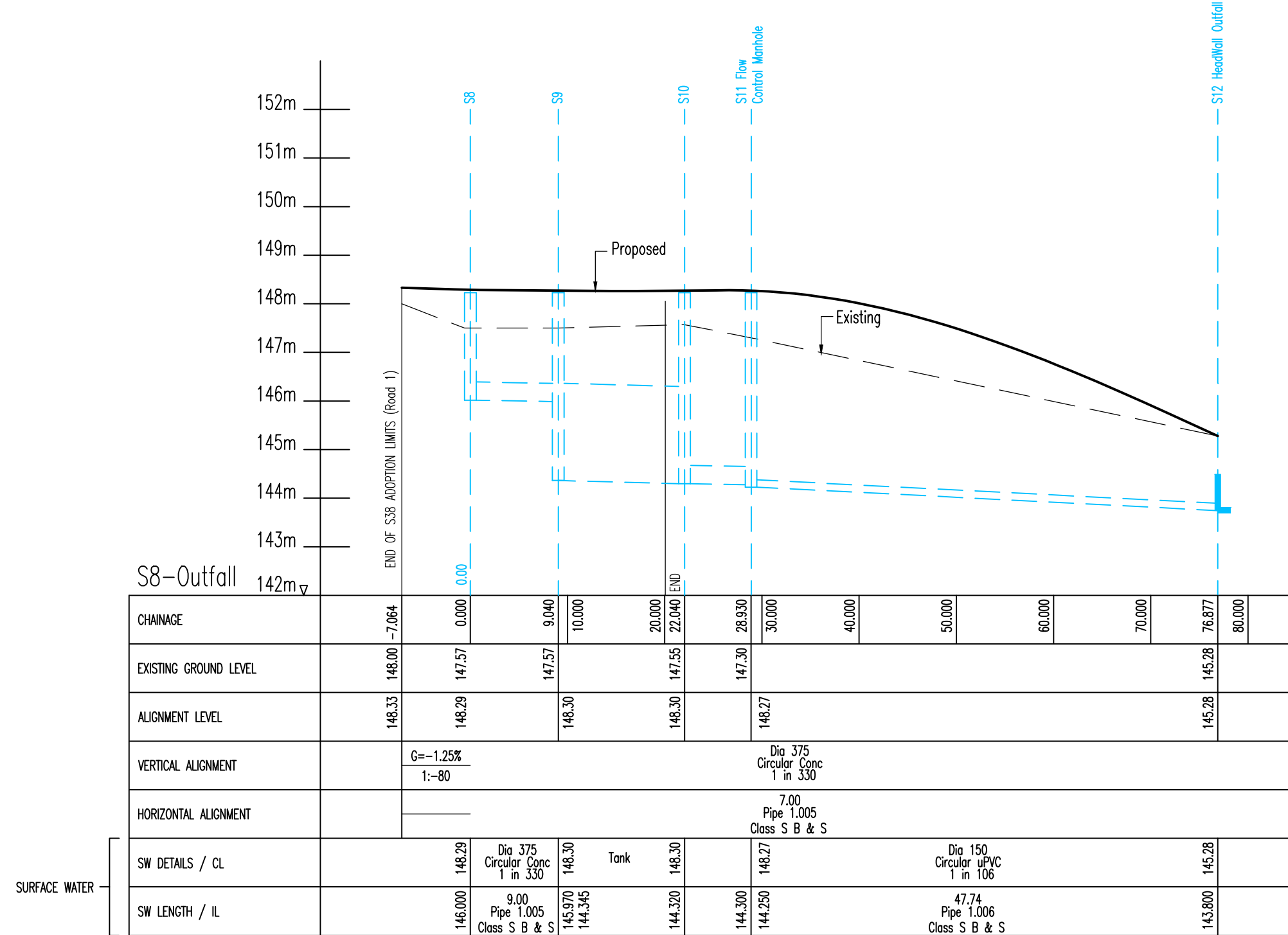


H-3-264-633



- ### Technical Water General Notes
1. S1404 meet or less.
 2. All materials and labor to be in accordance with Code for Adoption (2020), the relevant British/European and Yorkshire Water's Standards/Requirements/Addendum to the Mechanical and Electrical Specification and be Kitemarked.
 3. Manhole covers shall/must have a clear opening of 600mm and shall be Class D400 EN1240 S124 with a depth of 100mm in the highway.
 4. Fitted grates must be fitted in accordance with the supervision, and to the satisfaction, of Yorkshire Water before any sewers works are carried out.
 5. Cover slabs must carry the BS1 Kitemarked and will be rejected by the Yorkshire Water inspector. Where the clear opening of the Kitemarked product is different to the cover opening, the cover must be cut to the required opening size. The cover to the cover slab to bring the size down to 600x600mm for the Yorkshire Water specified cover size. Please refer to the Concrete Systems Association (CPSA), "Technical Bulletin" issued autumn 2004 for kitemarked cover slab opening sizes. The adoptable sewer must be a minimum of 1m and manholes 0.5m from kerbs, trees and service margins.
 6. Sewers must allow 5 metres clearance between trees and hedges.
 7. Sewers to be laid in Class "S" bedding (150mm granular bed and surround), and depths of cover to top of the sewer is less than 1.2m in all highways and verges (or 1.5m in SUDS) to accommodate the corrugations and bedding. Where depth of cover is greater than 1.2m, bedding shall be filled above the corrugations and bedding shall be provided above the granular bed and surround.
 8. Adoptable plastic pipe/sewer to be BS1 Kitemarked (certified to W5 – 4.5–01 and BS EN13476). Adoptable sewer pipes to be laid in maximum 3 metre lengths unless there is a specific operational need to lay longer.
 9. In certain sections the manholes are not acceptable and clayware is preferable. Plastic channels are difficult to set in concrete and a satisfactory finish cannot be obtained on the benching.
 10. The chamber size of manholes with more than one connection in them may be increased to accommodate the connections and bedding.
 11. Yorkshire Water policy is not to accept Type "C" brick manholes and 1050mm dia manhole rings. Instead it is preferred that you use a type "B" manhole with 1200mm dia or 1500mm dia rings, with the opening sized above the channel where depth of cover to pipe soffit is 1 to 1.5m.
 12. Surface water and foul using mains to be provided with manhole type above the rising mains.
 13. If plastic pipes are to be used then the following should apply –
a. All adoptable sewers to be BS1 Kitemarked (certified to W5 – 4.5–01).
b. Bedding and backfill material to conform to the requirements of Water Industry Act 1991, Schedule 4 – 4.20–01 (2003).
 14. Where plastic pipes are proposed for adoptable sewers, structural calculations for the plastic pipes and a site investigation report to prove that the ground condition is suitable for the plastic pipes are to be produced.
 15. Where the above technical specifications are not sufficient in getting full technical approval, the developer must provide a CCTV survey of the prospectively adoptable sewers and a deformation test (Light–Line test) of the plastic pipes. Demarcation chambers to be a min. 450mm chamber for 100mm dia pipe & 150mm surface water pipes up to 1.2m depth, for depths greater than 1.2m, the diameter of the chamber to be 600mm.
 16. Maximum depth of demarcation chamber to be 2m, where depth exceeds 2m, manhole to be constructed as type B manhole.
 17. Yorkshire Water is not obliged to accept drain/land drainage runoff from the public sewer network or adoptable drainage system (directly or in-directly). If the developer is not satisfied with the above, they will need to get full agreement from the council and you will have to liaise with the Land Drainage Authority/Land Drainage Section to provide for the disposal of the drain/land drainage runoff is required.
 18. Sulphate resisting cement (C20–02) and precast concrete products must be used to avoid a laboratory report proving that such precautions are not necessary.
 19. Strength of vitrified clay pipes (S1404) to be 400kN/m for 100mm, 400kN/m for 150mm, 450kN/m for 225mm and 720kN/m for 300k. All concrete pipes to be Class 120 concrete to EN 1916/BS EN1191–12002.
 20. For all concrete pipes, a minimum strength is required for safety reasons. The nominal 50 mm stiffness is not less than 3 kN/m.
 21. All levels of bedding/gravel to be confirmed prior to work commencing on site.
 22. The standard dimension ratio (SDR) of a plain wall pipe of equivalent wall thickness is not greater than 11.
 23. The standard short term stiffness is not less than 8 kNm.
 24. The nominal 50 mm stiffness is not less than 3 kN/m.
 25. All levels of bedding/gravel to be confirmed prior to work commencing on site.
 26. The contractor must allow for any fees required for road and sewer opening permits, sewer connections and make the appropriate applications.
 27. All existing sewer levels have been checked on site and are shown correct.



SUBJECT TO THE
APPROVAL OF
ALL RELEVANT
AUTHORITIES

K	MI	20.12.21	Foul section added		RJ	MI
J	MI	24.11.21	Foul drainage omitted		RJ	MI
J	BHB	12.10.21	Revised for Construction Issue		RJ	MI
G	UMC	23.09.21	FW outfall location amended		RJ	MI
F	BHB	09.08.21	Revised to YW comments 23.07.21		RJ	MI
E	UMC	01.06.21	Revised to YW comments 20.04.21		RJ	MI
D	RF	24.3.21	Code for Adoption (2020) to be used			
C	RF	09.3.21	Updated following drainage review			
B	UMC	15.07.20	Drainage design revised, Tank added	ARP	ARP	
A	JF	05.6.20	Proposed road and F3-Outfall amended			
	RF	01.6.20	Issued for approval			
Rev	By	Date	Revision	Chk	Apvd	

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TITLE OFFSITE
LONGITUDINAL SECTIONS

PROJECT

ABBNEY ROAD NORTH,
SHEPLEY

CLIENT
CAMSTEAD

DRAWING STATUS

FOR CONSTRUCTION

Scale	Date	Drawn	RF
1:500H 1:100V @ A1	MAY 20	Chk.	MI
Drg. No. 1305/11/06.02			Rev K