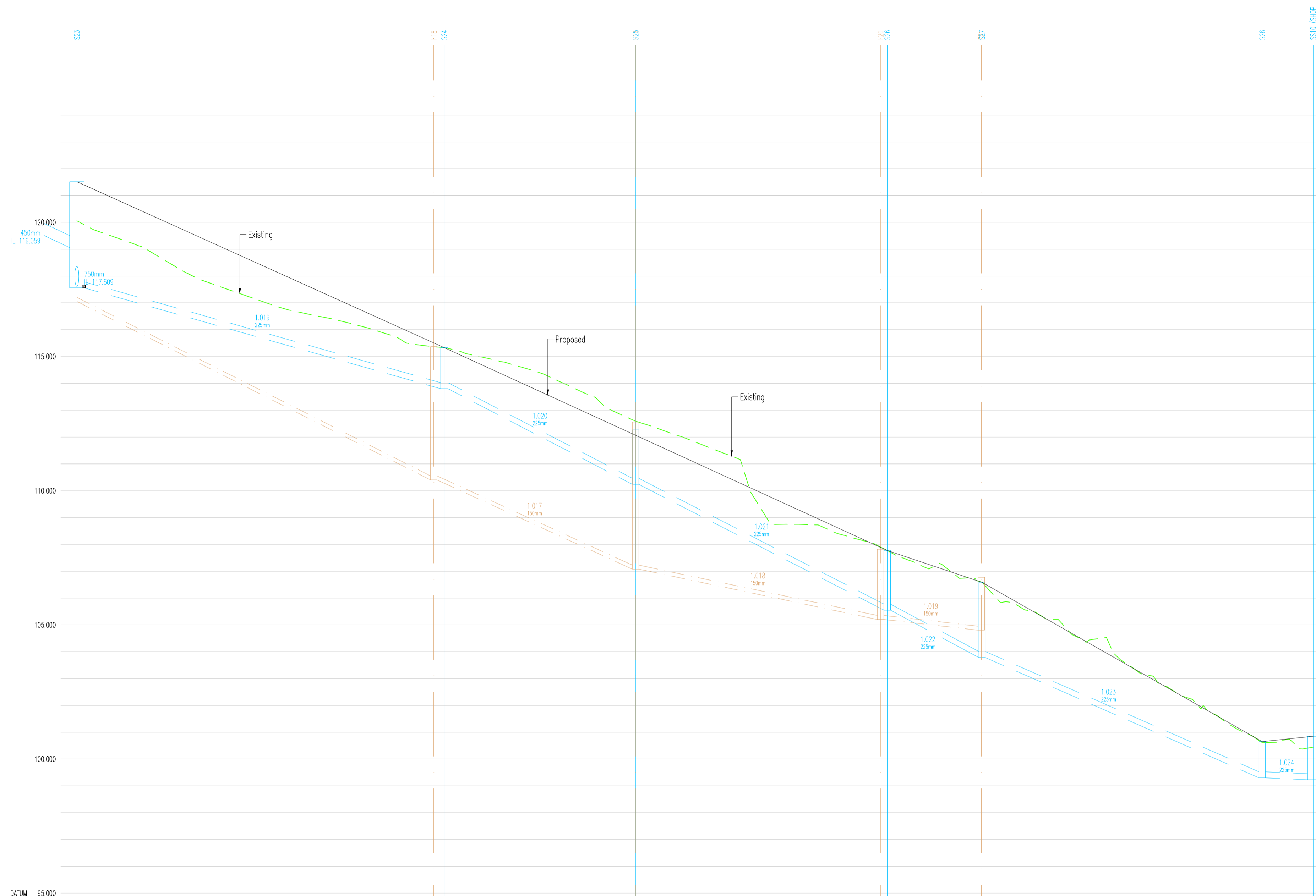


ATTENTION IS DRAWN TO THE REQUIREMENTS OF THE CONSTRUCTION DESIGN AND MANAGEMENT REGULATIONS 2015 AND THE DUTIES AND RESPONSIBILITIES CONTAINED THEREIN

Adoption General Notes

- All adoptable sewer works and materials to be in accordance with Sewerage Sector Guidance (SSG), the relevant British/European and the adopting Water Authority standards/Requirements/Addendum to the Mechanical and Electrical Specification and Kitemarked.
- 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.
- Filled ground must be filled and consolidated under the supervision, and to the satisfaction, of Yorkshire Water before any sewer works are carried out.
- Cover slabs must carry the BSI Kitemark or may 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 600x600mm for 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.
- 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, (please also refer to Figure 2.3 on page 33 in "Sewers for Adoption" 6th Edition 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 none vehicular access areas) then a concrete slab should be provided above the granular bed and surround.
- Bedding and backfill material to conform to the requirement of Water Industry Specification 4-08-02 (Table A2)
- Adoptable plastic sewer pipes to be BSI Kitemarked (Certified to WIS 4-35-01 and BS/EN13476). Adoptable sewer pipes to be laid in maximum 3 metre lengths unless there is a specific operational need to lay longer.
- Plastic channel sections in 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 bedding.
- 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's policy is not generally to accept Type "C" brick manhole 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 sited over the channel where depth of cover to pipe soffit is 1-1.5m.
- If plastic pipes are to be used then the following should apply:-
  - All adoptable sewers to be BSI Kitemark (certified to WIS 4-35-01).
  - Bedding and backfill material to conform to the requirements of Water Industry Specification 4-08-02 (Table A2)
- 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.
- Where plastic pipes are installed into the ground prior to getting full technical approval, the developer must provide a CCTV survey of the prospectively adoptable sewers and a deflation test (Light-Line test) of the plastic pipes.
- Demarcation chambers to be a min. 450mm dia chamber for 100mm dia foul & 150mm dia surface water pipes up to 1.2m deep. For depths greater than 1.2m, restricted access opening to 350mm is required for safety reasons.
- Maximum depth of demarcation chamber to be 3m, where depth exceeds 3m, manhole to be constructed as type B manhole.
- Where a 5125 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.
- Yorkshire Water is not obliged to accept filter drain/land drainage runoff into the public sewer network or adoptable drainage system (directly or in-directly). An alternative method of disposal of the land drainage runoff will therefore be required and you will have to liaise with the Land Drainage Authority/Land Drainage Section with regard to the disposal of the filter drain/land drainage runoff is required.
- Sulphate resisting cement (C20-DC2) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.
- Strength of vitrified clay pipes (if used) to be 40KN/m for 100#, 40KN/m for 150#, 45KN/m for 225# and 72KN/m for 300#. All concrete pipes to be Class 120 concrete to EN 1916/BS 5911-1:2002.
- All levels of existing drainage to be confirmed prior to work commencing on site.
- The contractor must allow for any fees required for road and sewer opening permits, sewer connections and make the appropriate applications.
- There should be enough clearance to accommodate the bedding for both pipes, approx 300mm: If crossover is near rocker then the clearance needed may be increased.



GROUND LEVEL	122.516	119.243	120.300	117.373	116.713	116.262	116.675	115.262	114.770	114.061	112.965	112.192	111.437	109.642	108.638	107.872	107.219	106.292	104.478	103.108	101.962	100.719	100.431		
STORMWATER COVER LEVEL	121.515							115.329								107.770						100.650	100.650		
STORMWATER INVERT	117.559							113.800	113.800		110.337	110.337				105.546	105.546				103.782	103.782	99.300	99.300	99.275
STORMWATER DETAILS	Pipe 1.019 Dia 225 Circular CLAY 1 in 16 Class S Bed and Surround			Pipe 1.020 Dia 225 Circular CLAY 1 in 10 Class S Bed and Surround			Pipe 1.021 Dia 225 Circular CLAY 1 in 10 Class S Bed and Surround			Pipe 1.022 Dia 225 Circular CLAY 1 in 10 Class S Bed and Surround			Pipe 1.023 Dia 225 Circular CLAY 1 in 12 Class S Bed and Surround			Pipe 1.024 Dia 225 Circular CLAY 1 in 12 Class S Bed and Surround									
STORMWATER LENGTHS	68.456			35.633			46.909			17.642			52.198			9.491									
FOULWATER COVER LEVEL								115.267								107.817									
FOULWATER INVERT								110.001	110.001		107.076	107.076				103.200	103.200					104.800			
FOULWATER DETAILS	Dia 150 Circular CLAY 1 in 10 Class S Bed and Surround			Pipe 1.017 Dia 150 Circular CLAY 1 in 10 Class S Bed and Surround			Pipe 1.018 Dia 150 Circular CLAY 1 in 25 Class S Bed and Surround			Pipe 1.019 Dia 150 Circular CLAY 1 in 44 Class S Bed and Surround															
FOULWATER LENGTHS	67.076			36.577			47.091			17.645															

SUBJECT TO THE APPROVAL OF ALL RELEVANT AUTHORITIES

IC	14.11.25	Preliminary	MI	MI	
Rev	By	Date	Revision	Chk	Apvd.

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TITLE	LONGITUDINAL SECTIONS SHEET 5 OF 5					
PROJECT	COCKLEY HILL, KIRKHEATON					
CLIENT	GLEESON HOMES					
DRAWING STATUS	FOR APPROVAL					
Scale	1:500H	1:100V @ A1	Date	NOV 25	Drawn	IC
			Chk.	MI		
Org. No.	2298/03/06.05		Rev	/		