

Drainage Notes

CDM Regulations - Drainage

1. All design work has been carried out with health & safety aspects given full consideration. Wherever possible risks have been eliminated from the design, however due to the nature of this type of work it is not possible to remove all risk. The contractor shall provide satisfactory responses via suitable method statements as to the manner in which they propose to carry out the work and deal with any highlighted risk, in particular the following:-

All trench excavations, regardless of depth. Guarding of edges of excavations to prevent injury. Guarding of the site suitable normal working hours. Undermining of adjacent roads or structures.

Confirmed asper operations. Dealing with existing services. Traffic management on existing highways. Procedures to be followed in the event of an emergency. Methods of working where ground contamination may be present. Dealing with existing sewer lines.

The above list is by no means exhaustive, but does highlight operations that present a risk to both contractors and the general public. 1. All adoptable sewer works and material to be in accordance with "Code for Adoption". The relevant British European and Yorkshire Water Standards/Requirements/Handbook to the Mechanism and Electrical Specification and Kitemarked.

2. Manhole covers shall have a clear opening of 600mm and shall be Class D400 to BS EN 24 with 100mm deep kerbs or 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 floor drain/drainage run-off into the public sewer network or adoptable drainage system (directly or indirectly). An alternative method of disposal of the last drainage run-off will therefore be required and you will have to liaise with the Local Authority, Land Drainage Section regarding the disposal of the floor drain/drainage run-off.

5. Cover slabs must carry the BS1 kN load mark or will be rejected by the 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 fixed above the cover slab to bring the size down to 600x600mm 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.

6. The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.

7. Sulphate resistant cement (SR-OC2) and precast concrete products must be used or a laboratory report provided proving that such products are not necessary.

8. Sewers must have 3 metres clearance from trees and hedges or the width of the canopy at mature height.

9. Sewers to be laid in Class "C" bedding (150mm granular bed and surround). Where depth of cover to top of the sewer is less than 1.2m in highways and verges (at less than 900mm non-mechanical access areas) then a concrete slab should be provided above granular bed and surround.

10. Bedding and backfill material to conform to the requirement of Water Industry Specification 6.0.5.7, Table A2.

11. Yorkshire Water policy is that Type "C" brick manholes and 1000mm diameter manhole rings are not permitted. Instead, it is preferred that you use a type "B" manhole with 1000mm diameter or 1000mm diameter ring, with the opening placed over the channel where depth of cover to pipe is less than 1.2m.

12. Adoptable plastic sewer pipes to be BS4 Kitemarked (certified to BS 4343 and BS EN 12475). Adoptable plastic sewer pipes to be laid in maximum 3 metre lengths unless there is a specific operational need for longer lengths. Plastic channel sections in manholes are not acceptable and Yorkshire Water would require clay ware channel in manholes.

13. All sewers must be laid to a minimum cover of 0.75m. Using the OS GPS Network and applying OSGB15 National Grid Model to obtain local area connections.

14. Where a 8125 cover and frame has been approved, this must not be coated in plastic and must have lifting eyes suitable to accommodate standard lifting bars. Some covers are not acceptable.

15. There must be enough clearance at manholes to accommodate bedding to full depth, approx. 300mm. If clearance is less than the distance needed may need to be increased.

16. The minimum crushing strength for clay pipes should be as follows: 1000mm dia. 40kN/m, 1000mm dia. 40kN/m, 225mm dia. 40kN/m and 300mm dia. 72kN/m. The minimum crushing strength for concrete pipes should be: Class C20 to BS EN 12450-1:2003. Plastic pipes should conform to BS 4343 and BS EN 12475.

P2	FFL plots 6 & 7 revised. Drainage revised to suit new site boundary. PN 1.007 1.008 9.000 & 9.001 increased to 375 dia.	MH			13.4.2026
P1	First Issue.	MH			13.3.2026
Rev	Revision	By	CHK	Date	

SCALE @ A0	1:200	ISSUING OFFICE	Leeds	MSJ PROJECT NUMBER	225114
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STATUS	S3	PURPOSE OF ISSUE	For Comment
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PROJECT	Hanging Heaton, Batley
TITLE	Proposed Drainage Plan
CLIENT	Jack Lunn

DRAWING NUMBER	225114-MSJ-ZZ-XX-DR-D-000	REV	P2
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