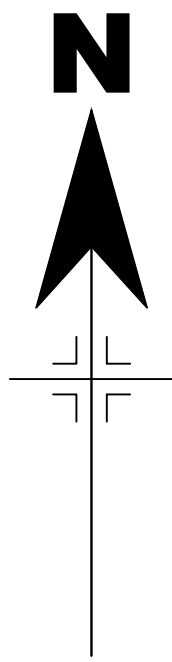


H-3-263-913



SAFETY, HEALTH AND ENVIRONMENTAL (SHE) INFORMATION

- In addition to hazard/risk normally associated with the types of work detailed on this drawing, note the following:
- Construction:-**
1. Adequate shoring of trenches
 2. Open trenches to be fenced off
 3. Heavy and bulky items to be mechanically positioned
 4. Hand protection against wet concrete
 5. Appropriate mechanical excavation plant to be used
- Maintenance/Cleaning:-**
1. Gullies and drainage channels to be cleaned out twice a year
 2. Storm water storage tank to be inspected annually and de-silted as necessary
 3. Flow control to be inspected and cleaned twice a year
- Decommissioning/Demolition:-**
1. Gas, Water, electric and BT pipes/cables below ground and entering building
 2. Concrete and masonry could be crushed and re-used as bulk fill
 3. Granular material could be re-used as bulk fill

- Notes**
Adoptable Drainage Notes
1. Adoptable sewer works and materials to be in accordance with Sewers for Adoption 6th Edition, the Civil Engineering Specification for the Water Industry (CESWI), and Yorkshire Water's Developers Pack and Requirements. Materials are to be suitably Kitemarked.
 - 2a. Manhole covers shall be Class D400 to BS EN124 with 150mm deep frames in highways. Covers shall carry the BSI Kitemark and have the manufactures name clearly visible for the purposes of traceability.
 - 2b. 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 load bearing slab shall be fitted above the cover slab to bring the size down to the specified cover size.
 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. The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.
 5. The chamber size of manholes with more than one connection in them may need to be increased on increment to accommodate connections and bends.
 6. Manhole schedule setting out depicts national pipe intersection points. Manhole chambers are to be positioned in a manner to provide minimum benching/landing requirements.
 7. Sewers must have 5 metres clearance from trees and hedges (also refer to Figure 2.3 on p33 of SFA 6th edition for restrictions on tree planting adjacent to sewers).
 8. Pipes are to be either Extra Strength vitrified clay or Class '120' concrete, with Class 'S' bed and surround, unless noted otherwise. 100ø + 150ø pipes are to have a minimum strength of 40KN/m, 225ø pipes a minimum strength of 45KN/m and 300ø pipes a minimum strength of 72KN/m. Concrete pipes should have a minimum crushing strength class 120 (54KN/m)
 - 8a. Bedding and backfill material is to conform to the requirements of Water Industry Specification 4-08-02 (Table A2)
 9. Where depth of cover to top of sewer is less than 1.2m in highways, and less than 0.9m in non-vehicular areas, then concrete concrete slab protection shall be used.
 10. LOCATION AND LEVEL OF EXISTING SEWERS AND SERVICES, INCLUDING CONNECTION POINTS, THAT ARE TO REMAIN ON LINE OF PROPOSED SEWERS ARE TO BE TRIAL HOLED AND RECORDED PRIOR TO COMMENCEMENT OF DRAINAGE WORKS AND THE PROPOSED SEWER LONG-SECTION VERIFIED.
 11. Yorkshire Water policy is not to accept Type 'C' brick manholes and 1050mm dia manhole rings. Instead it is preferred that a type 'B1/C' manhole with 1200mm dia or 1500mm dia ring is used, with the opening sited over the channel where depth to pipe soffit is < 1.5m
 12. No land drainage, watercourses or drainage from retaining walls should be connected to the adopted sewer either directly or indirectly.
 13. Sulphate resisting cement (C20-DC2) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.
 14. Adoptable sewer pipes are to be laid on maximum 3 metre lengths unless there is a specific operational need to lay longer lengths.
 15. Sewers to be laid in Class "S" bedding (150mm granular bed & surround). Where depth of cover to top of the sewer is less than 1.2m in highways & verges (or less than 900mm in none vehicular access areas) then a concrete slab should be provided above granular bed & surround.
 16. Yorkshire Water is not obliged to accept filter/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 & 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.



C	Updated in accordance with YW comments	03.11.17
B	Road setting out information moved to drawing 029	02.10.17
A	Stormwater Storage revised	27.09.17
Rev.	Content	Date

Client	Cadam Construction Ltd		
Project	Land off, Bellwood Crescent, Hoyland, Barnsley		
Title	Site Plan		
Drawn	RD	Date	06.04.17
Scale	1:200 @ A1	Checked	JL
Drg. No.	6084/020		Rev.
		C	

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