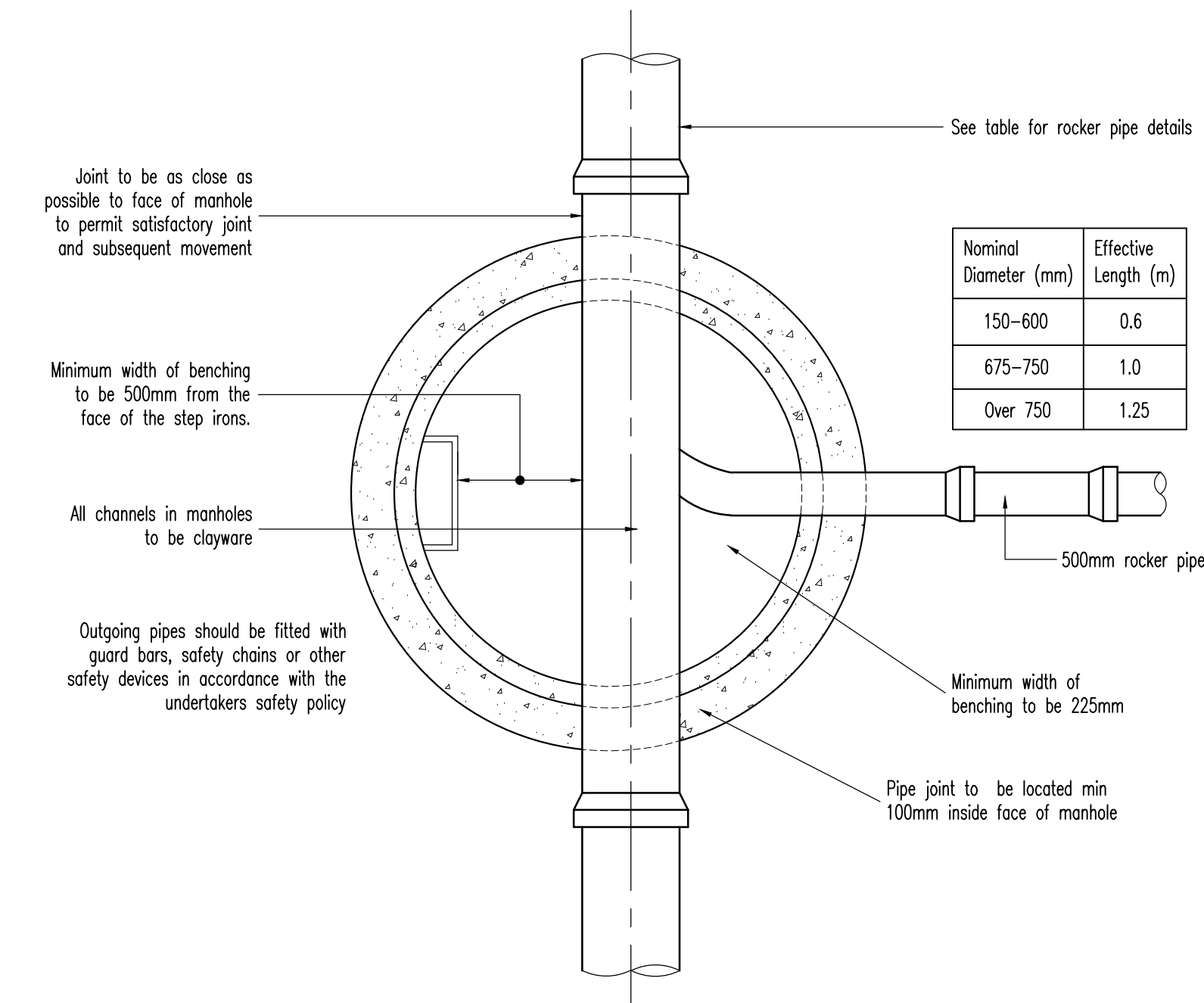
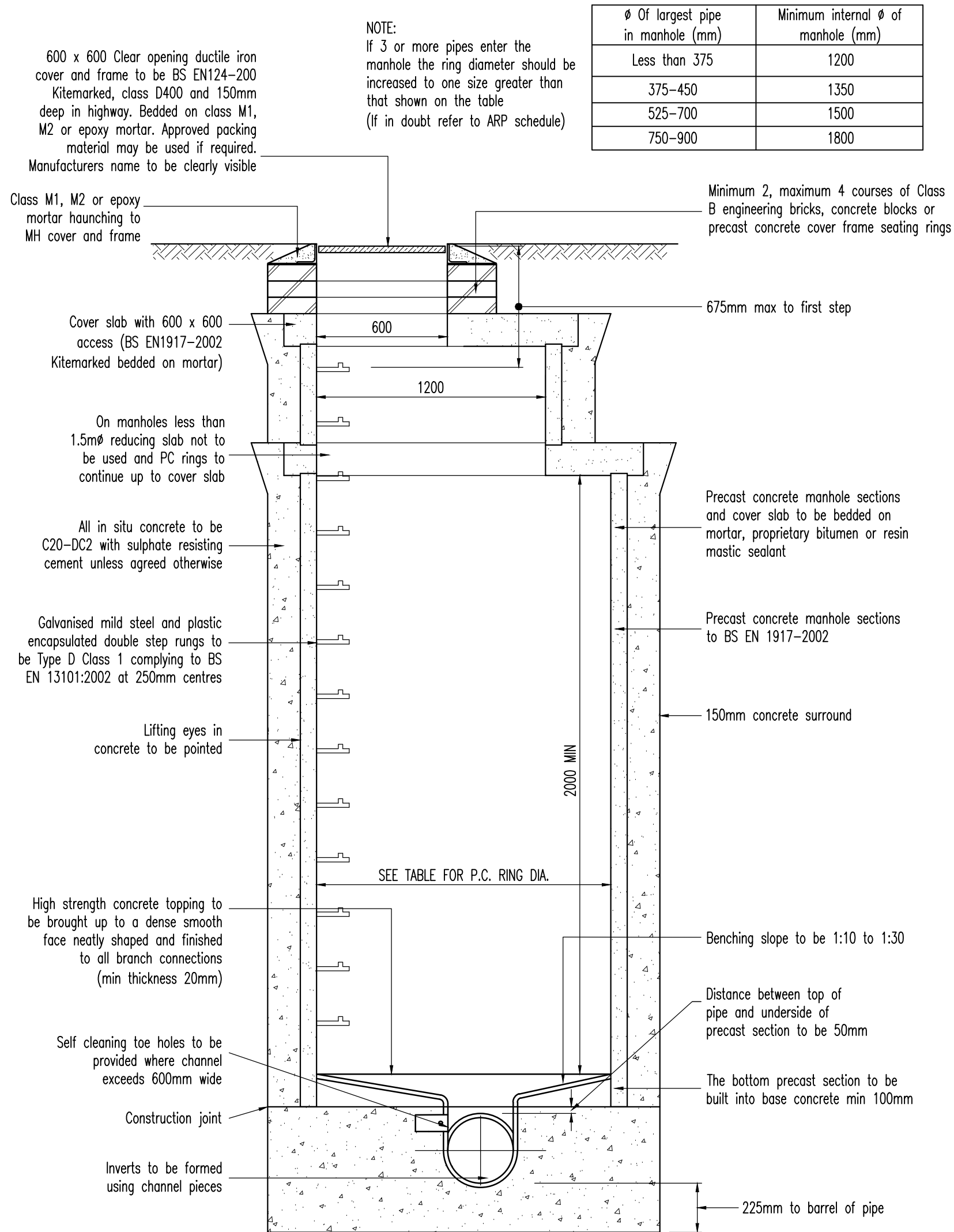
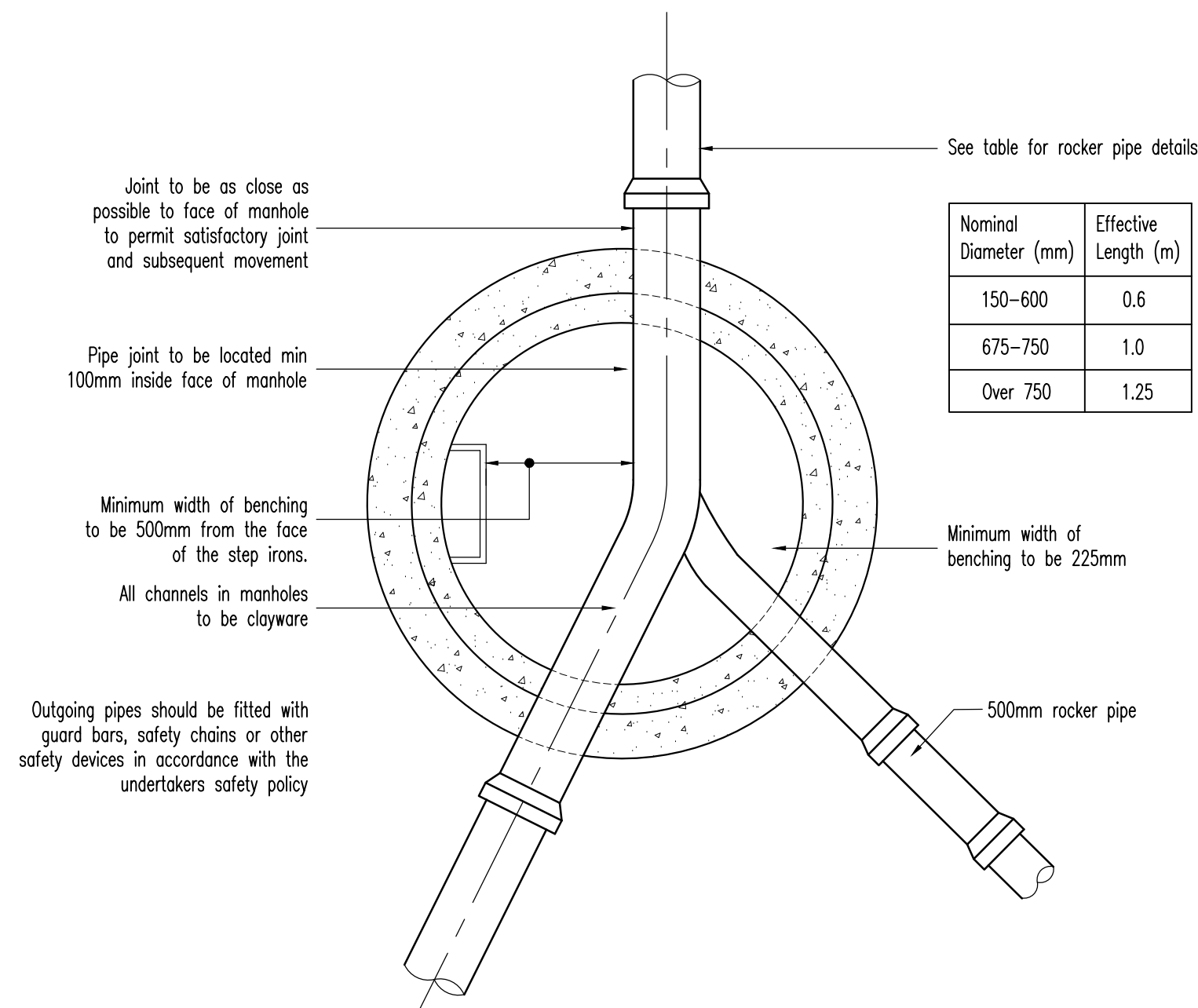
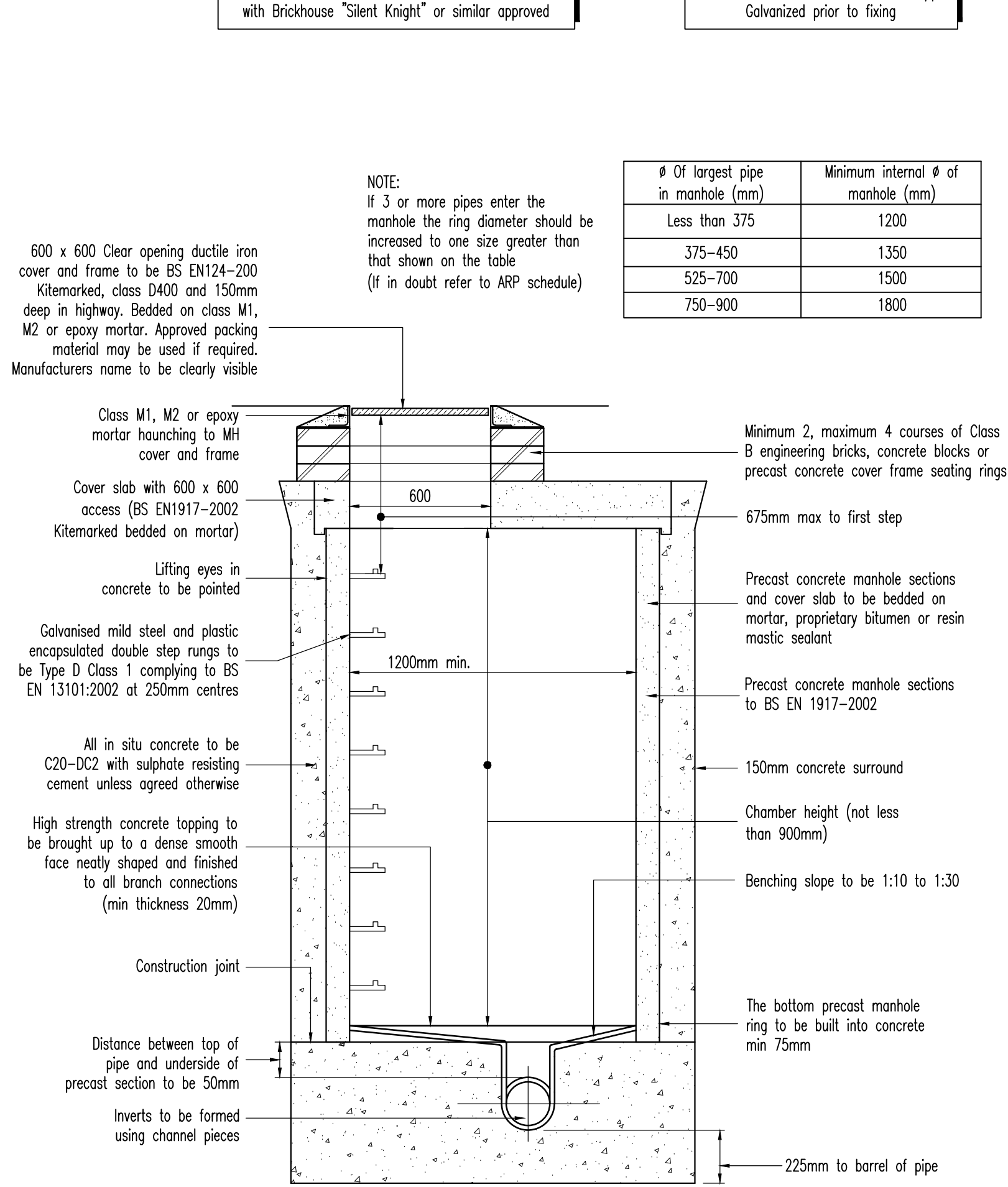




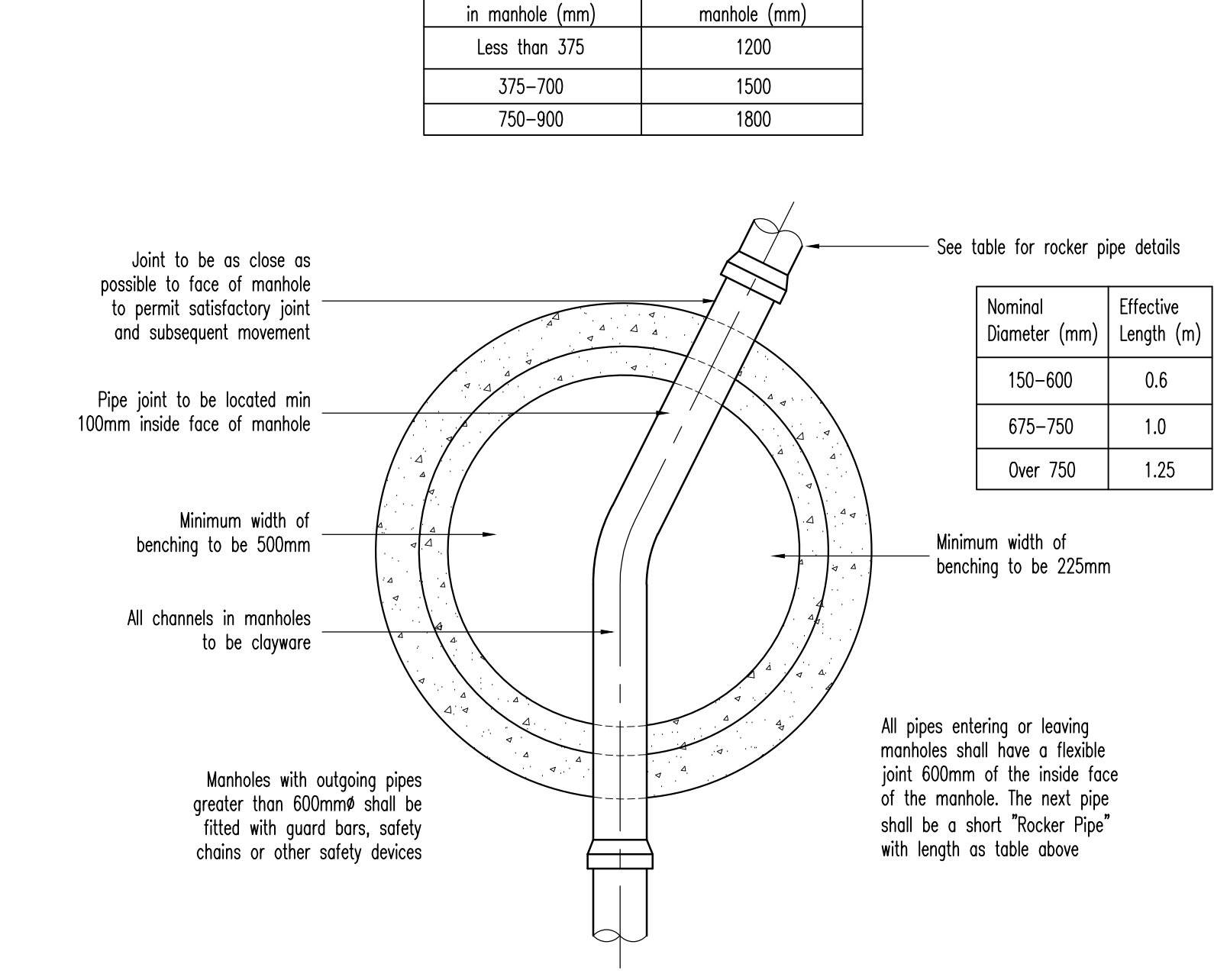
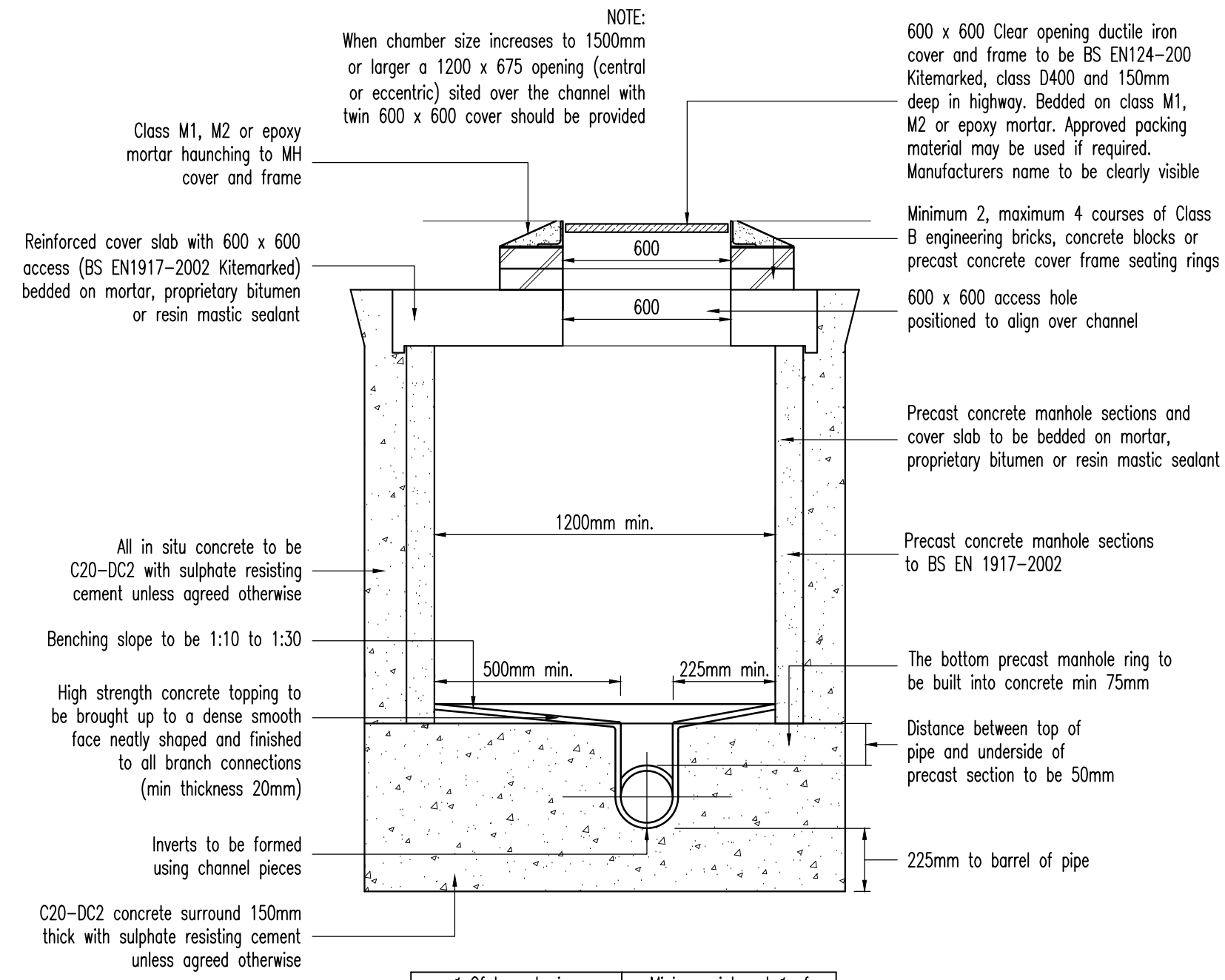
TYPICAL MANHOLE DETAIL-TYPE A

SEWERS FOR ADOPTION - 6TH EDITION
Max depth from ground level to soffit of pipe 3.0m to 6.0
The design of the manhole will need to comply with the undertakers safety policy



TYPICAL MANHOLE DETAIL-TYPE B

SEWERS FOR ADOPTION - 6TH EDITION
Max depth from ground level to soffit of pipe 3.0m
The design of the manhole will need to comply with the undertakers safety policy



TYPICAL MANHOLE DETAIL-TYPE B1 SHALLOW MANHOLE

SEWERS FOR ADOPTION - 6TH EDITION
Max depth from ground level to soffit of pipe 1.0m TO 1.5m
The design of the manhole will need to comply with the undertakers safety policy

NOTES

General Notes

1. All adoptable sewer works and material to be in accordance with "Sewers for Adoption" 6th Edition, and Kitemarked.

2. Manhole covers shall/must have a clear opening of 600mm and shall be Class D400 BS EN 124 with 150mm deep frames in highways.

3. Filled ground must be filled and consolidated appropriately before any sewer works are carried out.

4. Cover slabs must carry the BSI Kitemark. 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 the Authorities specified cover size. Please refer to Concrete Pipe Systems Association (CPSA), Technical Bulletin issued Autumn 2004 for Kitemarked cover slab opening sizes.

5. The adoptable sewers/highway drains should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.

6. Sewers/highway drainage must have 5 metres clearance from trees and hedges, (Also refer to Figure 2.3 on page 33 in "Sewers for Adoption" 6th Edition for restrictions on tree planting adjacent to Sewers).

7. Sewers/highway drainage 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".

8. Adoptable sewer/highway drainage pipes to be laid in maximum 3 metre lengths unless there is a specific operational need to lay longer.

9. 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 benching.

10. 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.

11. Surface water and foul rising mains to be provided with marker tape above the rising mains.

12. If plastic pipes are to be used then the following should apply:-
a. All adoptable sewers to be BSI Kitemark (certified to WIS 4-35-01).
b. Bedding and backfill material to conform to the requirements of Water Industry Specification 4-08-02 (Table A2)

13. Where plastic pipes are proposed for adoptable sewers/highway drainage, 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.

14. 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/highway drainage and a deformation test (Light-Line test) of the plastic pipes.

15. Demarcation chambers to be a min. 450mm² chamber for 100mm² foul & 150mm² surface water pipes up to 1.2m deep. For depths greater than 1.2m, restricted access opening to 350mm is required for safety reasons.

16. Maximum depth of demarcation chamber to be 2m, where depth exceeds 2m, manhole to be constructed as type B manhole.

17. Filter drain/land drainage run-off must not enter the public sewer network or adoptable drainage system (directly or in-directly). 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 regards to the disposal of the filter drain/land drainage run-off.

18. Sulphate resistant cement (C20-DC2) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.

19. Strength of vitrified clay pipes (if used) to be 40KN/m for 100², 40KN/m for 150², 45KN/m for 225² and 72KN/m for 300². All concrete pipes to be Class 120 concrete to EN 1916/BS 5911-1:2002.

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ARP Associates is a trading division of ARP Geotechnical Ltd, a company registered in England and Wales with company number 3773831, whose registered office is at 5/6 Northwest Business Park, Servia Hill, Leeds LS6 2QH

TITLE

TYPICAL MANHOLE
DETAILS SHEET 1 OF 2

PROJECT

MOULTON CHAPEL ROAD
COWPIT

CLIENT

MINSTER PROPERTY
GROUP LTD

DRAWING STATUS

FOR APPROVAL

Scale

NTS @ A1

Date

FEB 19

Drawn

RF

Chk.

SAB

Drg. No.

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