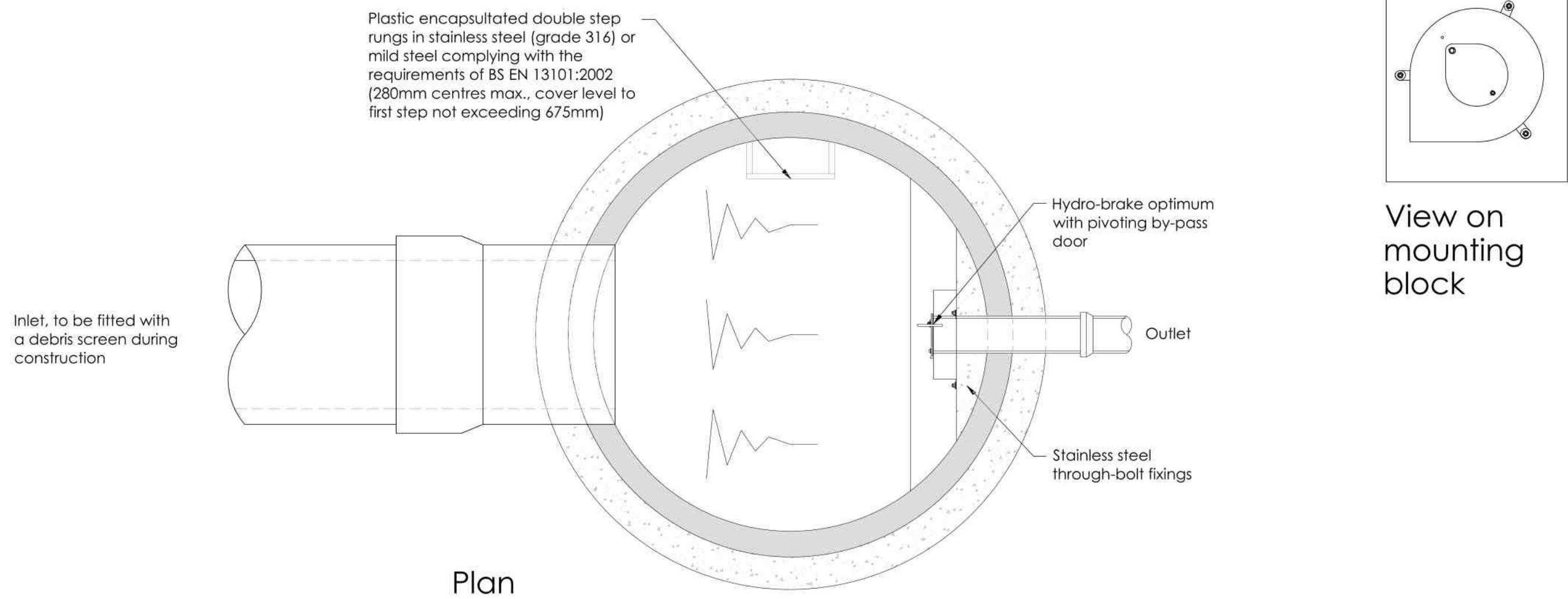
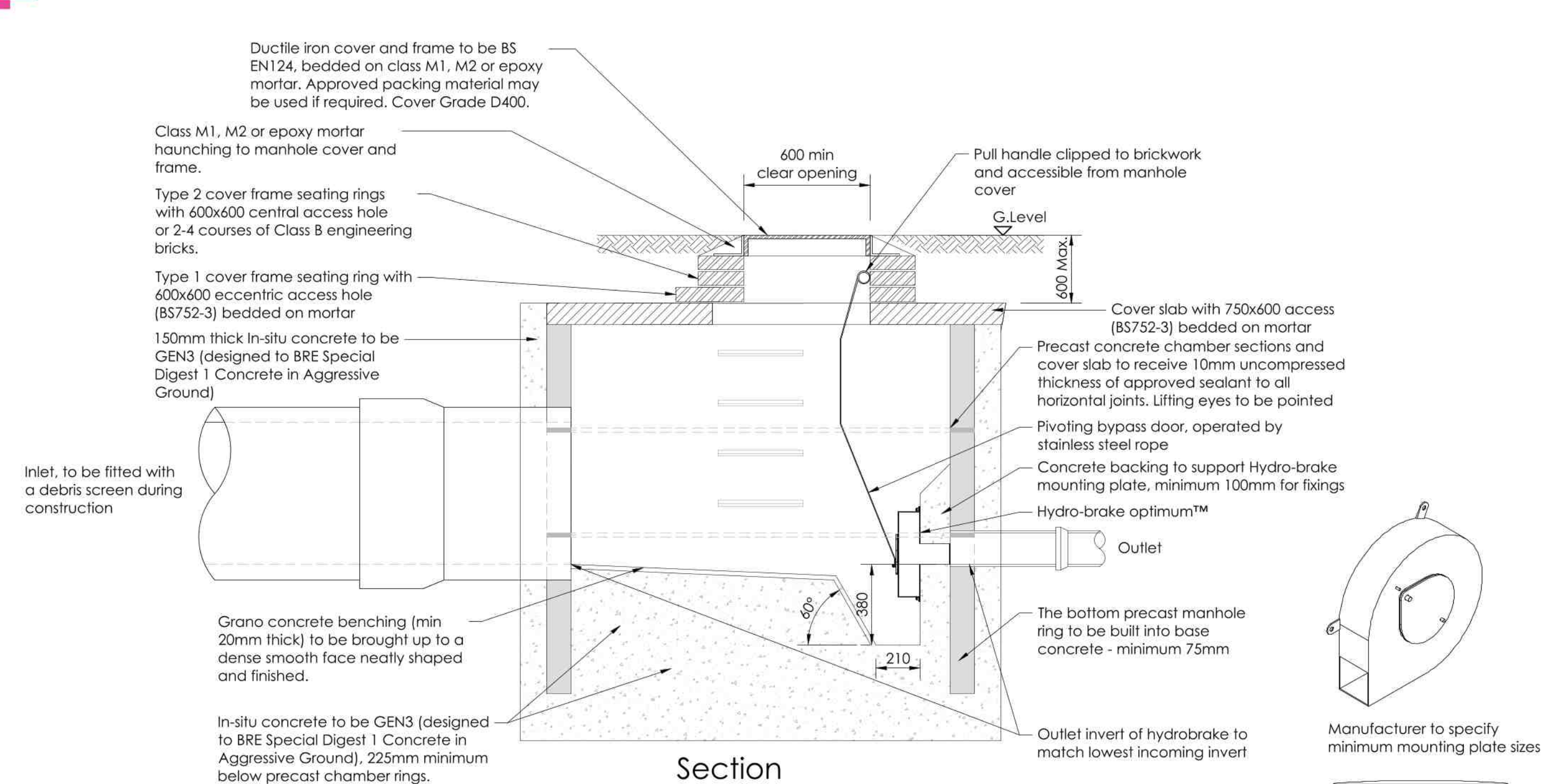
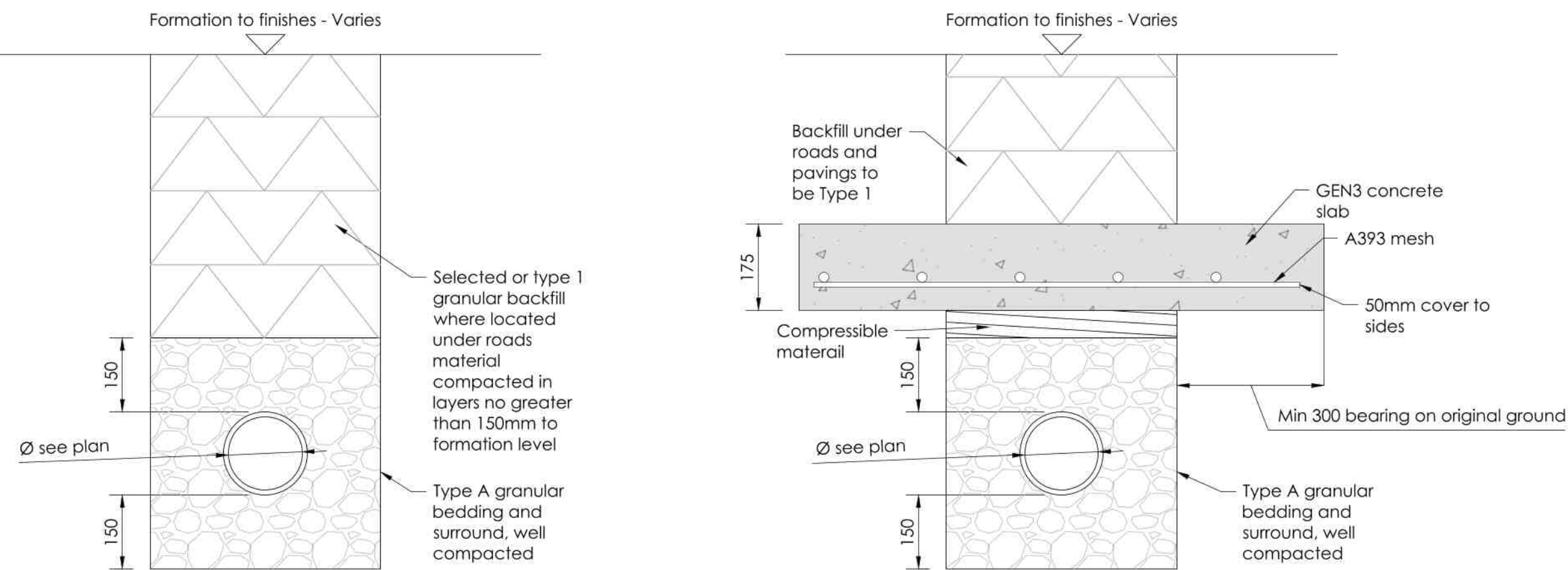




Hydrobrake Manhole Detail with Sump
(Scale 1:20)

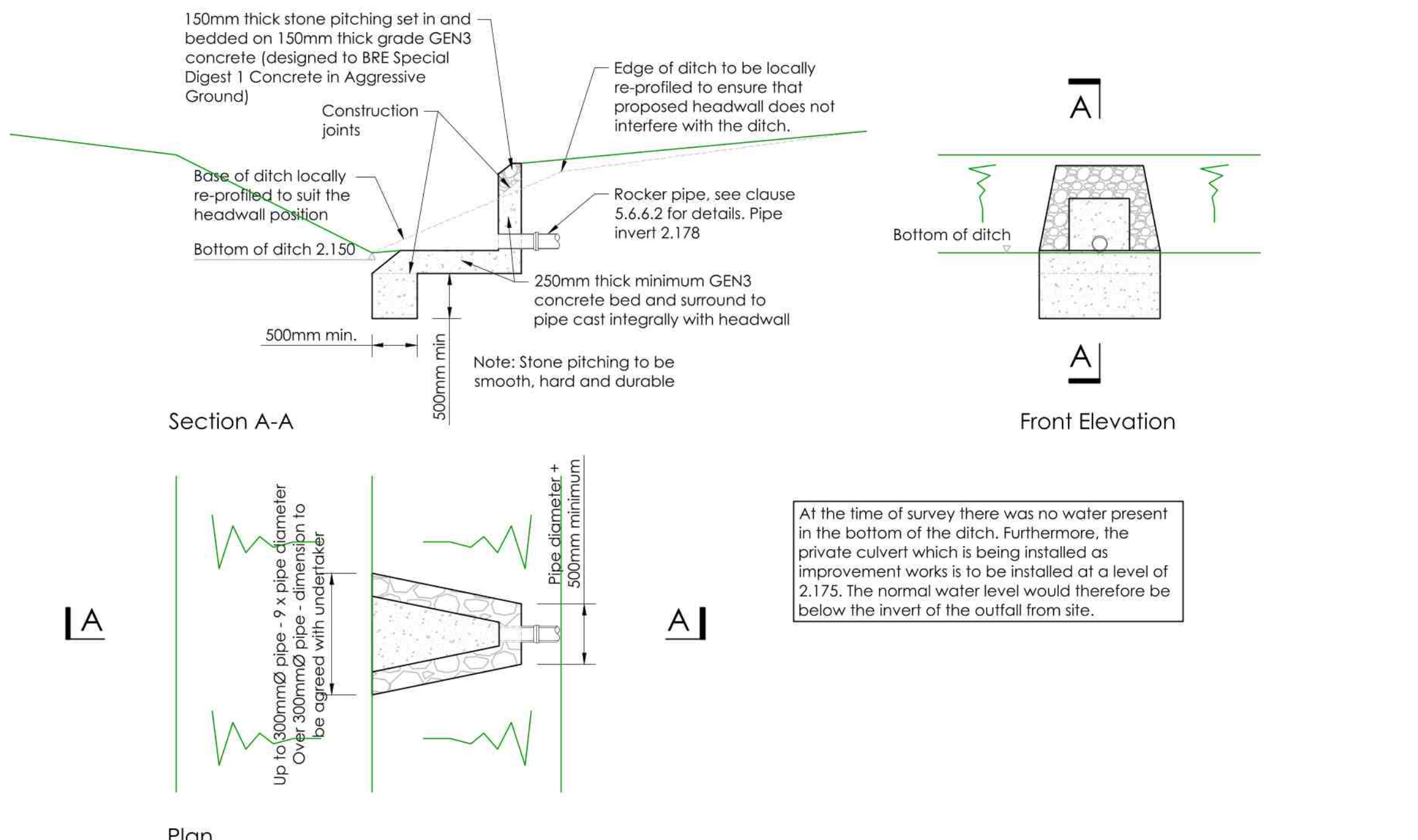


Granular Bed & Surround - Class S
(Scale 1:10)

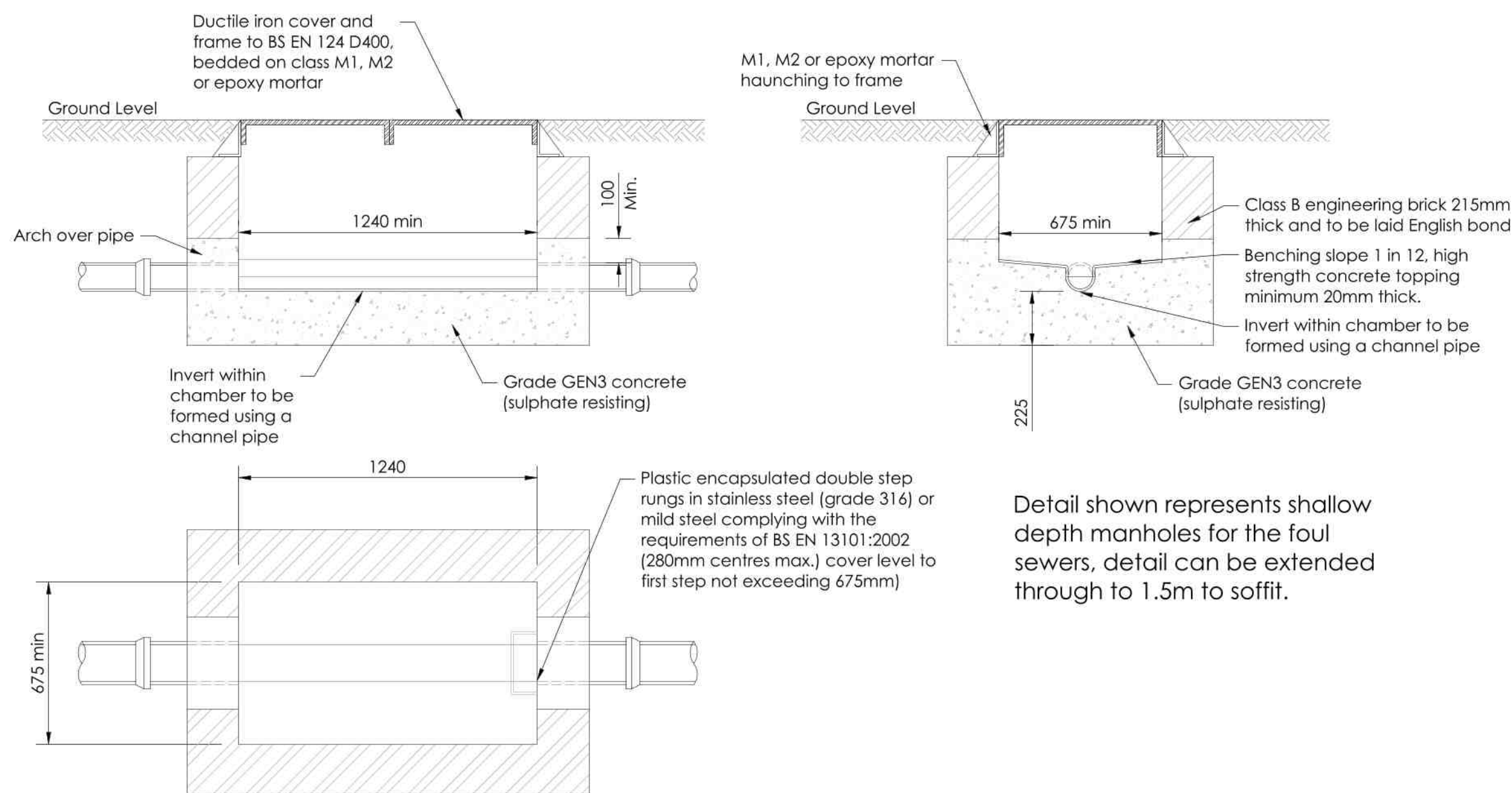
Concrete Slab Pipe Protection
(Class S bed and surround)
(Scale 1:10)

Notes

1. Class 'S' granular bed and surround preferred with the additional of a reinforced concrete protection slab where the depth of cover beneath the highway is less than 1.2m or less than 0.9m in non trafficked areas.
2. See WIS 4-08-02 for bedding material specification
3. Refer to IGN 4-11-02 for trench width details.



Plan
Outfall Detail to Watercourse
Suitable for outfall pipes of less than 350mm
(Scale 1:50)



Note:
Internal dimensions of manhole normally 1240 x 675 (as clear opening), but manhole width should be increased for pipes larger than 225mm dia. (max. 525mm dia.) to give a min. 225mm benching each side, with the brickwork corbelled down to 675.

All pipes up to and including 525mm dia. entering or leaving manholes shall have a flexible joint within 600mm of the inside face of the manhole. The next pipe shall be a 600mm long rocker pipe,

Typical Manhole Detail - Type C
Depth to soffit upto 1.50m
(Scale 1:20)

Do not scale directly from this drawing. All discrepancies are to be brought to the attention of the below office.

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The General Contractor is to check all dimensions on site and report discrepancies to the designer.

The details and information shown hereon relating to existing underground drains, main services, cables, etc., and existing structural details, are as obtained by normal survey observation method. Although all reasonable effort has been made, no guarantee can be made or given for the completeness or accuracy of this information.

Note:

1. All drawings to be read in conjunction with Structural Engineers Drawings.
2. All plans are drawn in meters unless noted otherwise.
3. Drainage design in accordance with Sewers for Adoption 6th edition.
4. Road design in accordance with 'Lincolnshire County Council - Development Road and Sustainable Drainage Specification and Construction', and any specific requirements of the approving highway officer.
5. Estate road materials to be in accordance with Lincolnshire County Council specifications.
6. All manholes located in the adoptable highways to have a minimum cover grades of D400, be 150mm thick and to me marked FW and SW to denote foul water and surface water, respectively.
7. It is proposed that all laterals from plots are to be adopted.
8. Final connection point levels and locations need to be confirmed prior to commencement of construction.
9. All proprietary items to be installed in strict accordance with the manufacturers instructions and recommendations.
10. All works to be carried out in accordance with the current British Standards, Codes for practice and Building Regulations.
11. Manholes and coordinates are given to the centre of manholes. Groundworker to ensure offsets allow minimum benching requirements and offsets from kerbs.
12. Generally the first inspection chamber located in the private areas is a demarcation chamber for the AW adoptable lateral. Cover grades to be:
 - D400 - adoptable areas and the main access way.
 - C250 - shared parking areas
 - B125 - private domestic car parking (single dwelling)
 - A15 - soft landscaped and non-vehicle areas.
13. All drawings need to be read in conjunction with each other, any discrepancies must be reported back to the engineer immediately.
14. Any sewer pipes with less than 1.2m of cover to the top of pipe in the adopted carriageway, less than 1.2m under adopted vehicular crossovers are to receive a concrete cover slab. Where there is very little cover, the pipe is to be ductile iron - refer to longsections for material type. Concrete cover to be confirmed on site.
15. Outside of manhole construction and outside of pipelines to be at least 0.5m and 1.0m respectively, from the kerbface. Sewers might need to be offset in the manholes to achieve - to be confirmed on site.
16. All details are to be read in conjunction with Anglian Water's standard adoptable drainage details - available from Anglian Water upon request.
17. Contractor to ensure that all items are sufficiently protected during construction.
18. Connections into the box culvert are to be set at 200mm above the invert of the box culvert. This is to ensure that the incoming pipe junction is below/above the internal chamber of the box culvert. See manhole schedule.
19. Cover levels are approximate only, and should be adjusted to suit the final road levels.
20. All PPIC's deeper than 1.2m are to be fitted with non-accessible covers.
21. All junction nodes are approximate only and are to be confirmed using the final main pipe invert/soffit and location.

C	09.03.2020	S11	Client details updated, Hydro-Brake manhole updated.
B	12.12.2019	S11	Drawing generally updated.
A	18.03.2019	S11	First Issue
REVISION	DATE	DRAWN	DESCRIPTION



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CLIENT Belmont Contractors

PROJECT Residential Development @ Land off
Old Main Road, Fleet Hargate

DRAWING Section 104 - Anglian Water
Drainage Details
Sheet 2 of 3

DRAWN	PROJECT DESIGNER	PROJECT DIRECTOR
S11	LAR	KB
DATE	SCALE	PAPER SIZE
Nov' 2019	As Shown	A1

DRAWING NUMBER 356.FH.203

Working in partnership with Ralph Charman Associates & Eleven Consultants