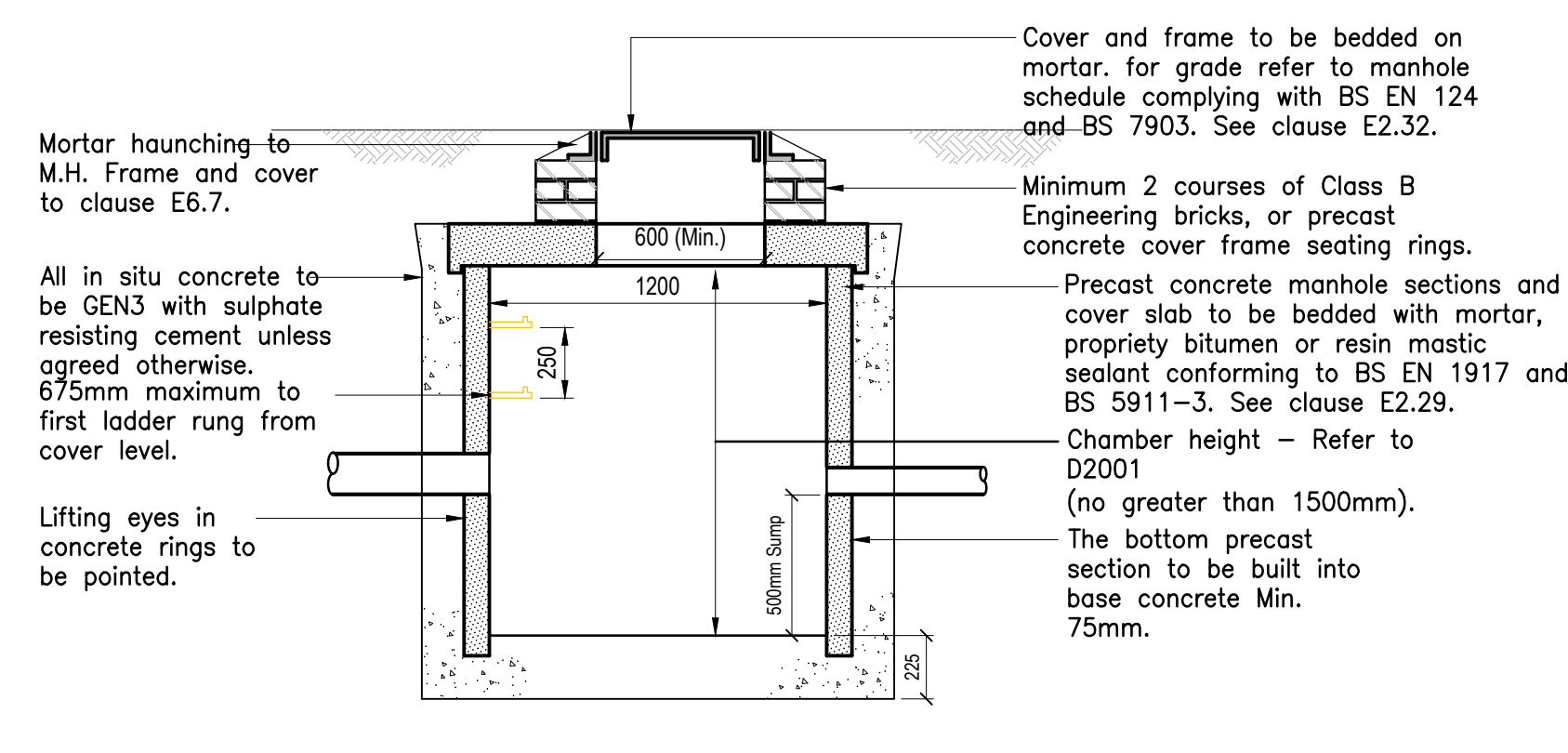
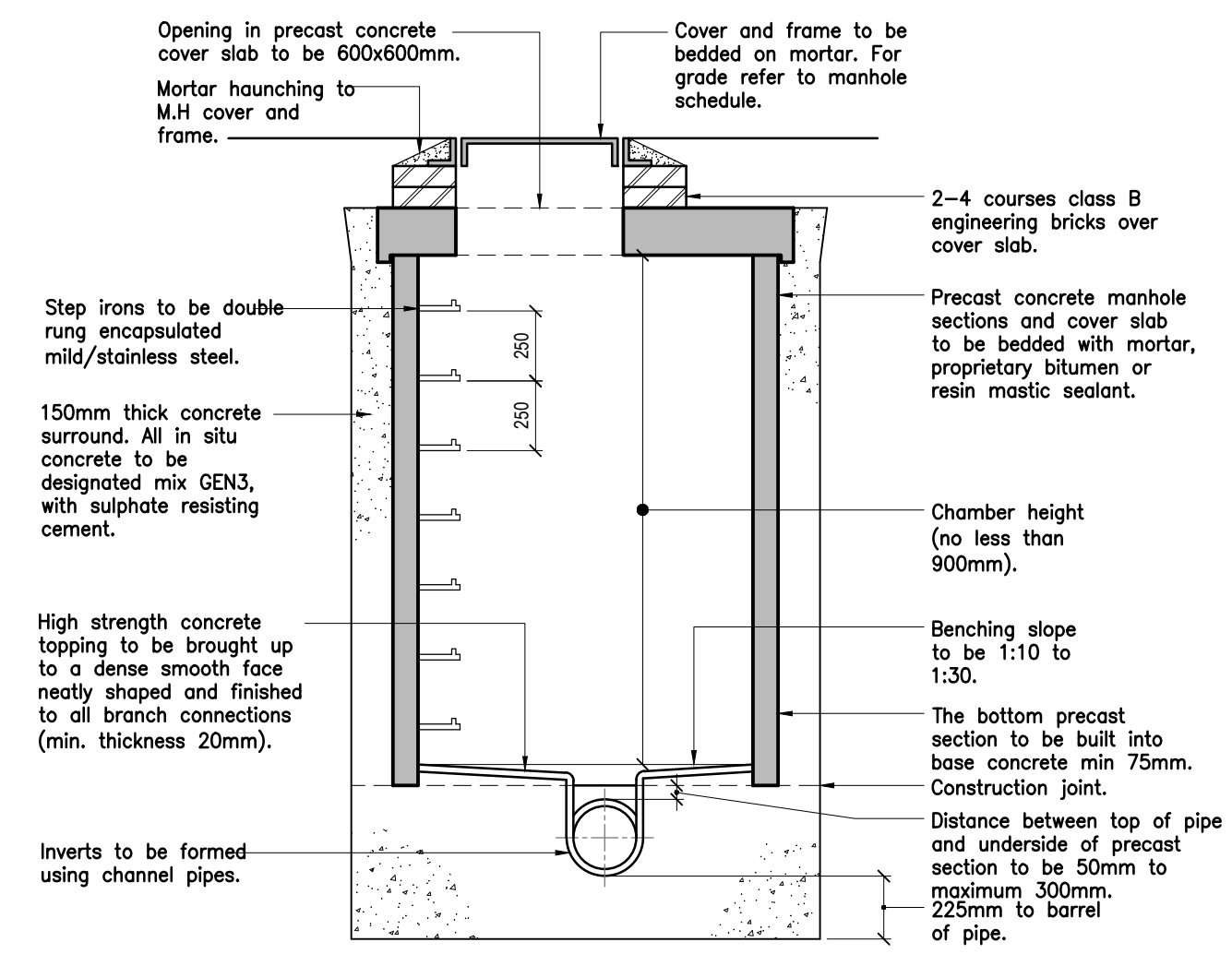
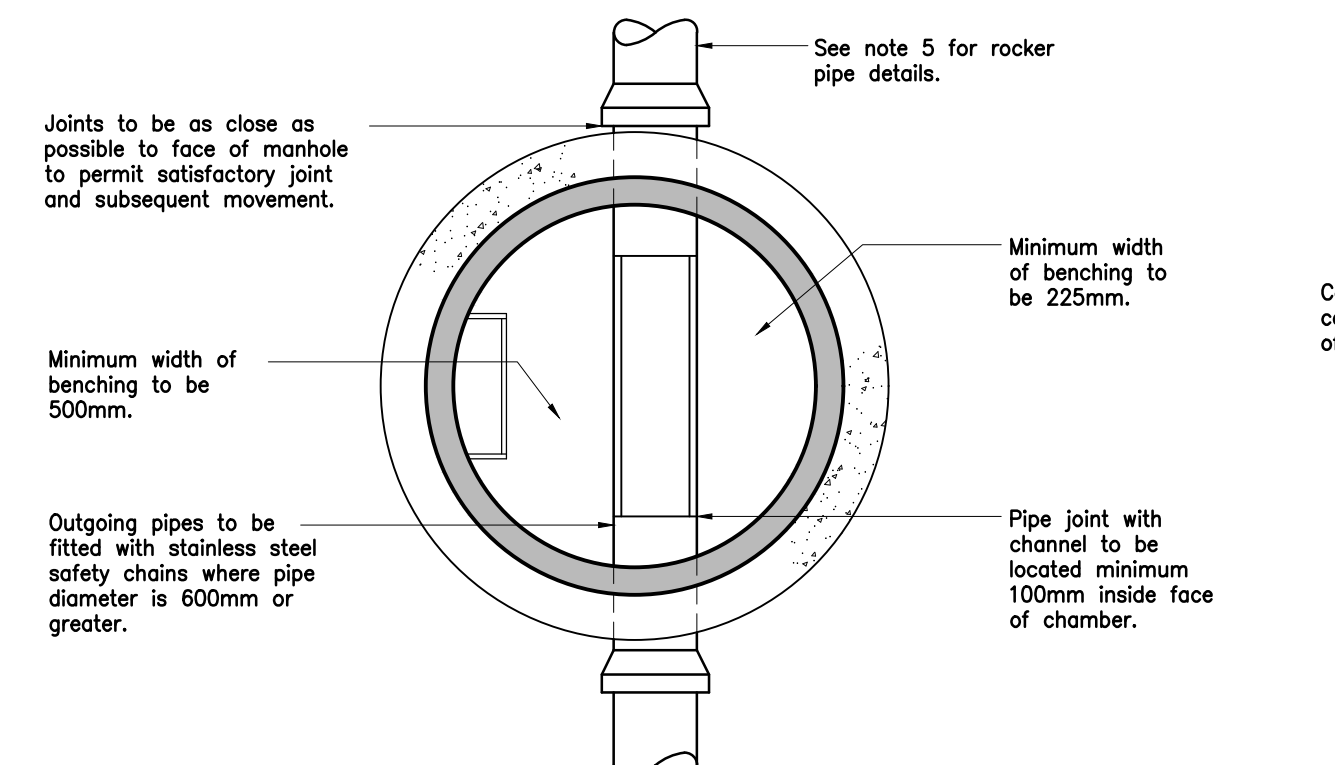


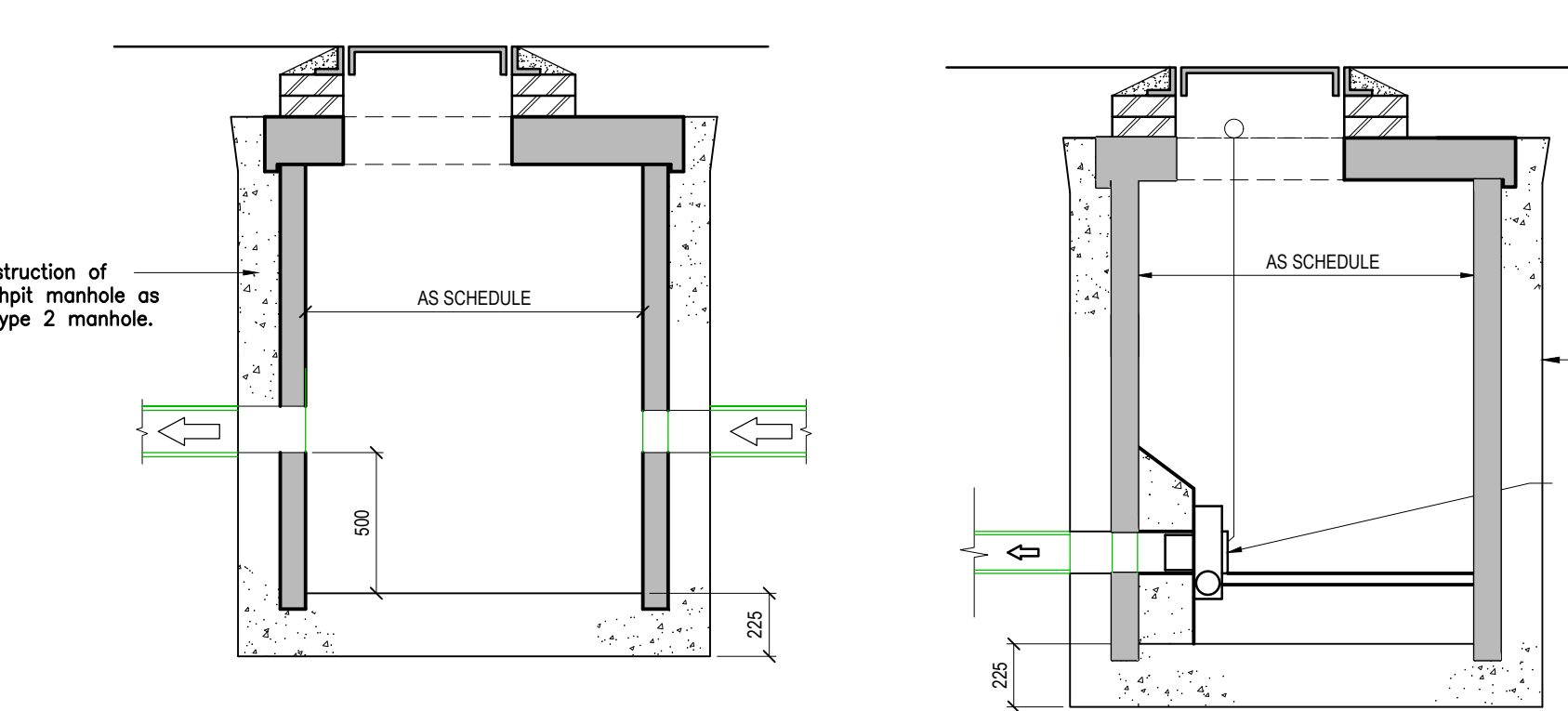
- DRAINAGE**
- All drain runs constructed with less than 600mm cover between finished ground level and crown of the pipe are to be encased with a minimum of 150mm Grade ST4 concrete. The casing concrete is to be jointed at every pipe joint position with 20mm Flexcell board to form joint and provide joint flexibility.
 - All pipework 300mmØ or below to be vitrified clay, Hepworth Superseve/Superseal or similar approved. All pipework greater than 300mm Ø to be Class H concrete.
 - All SVP/SS and RWP building spurs to be 100Ø pipework laid at 1:40 for foul water and 1:80 for surface water.
 - Refer to architect's drawings for above-ground drainage locations.
 - All building drainage to be installed and tested in compliance with the building regulations approved document H, 2015 edition.
 - In situ concrete for use in general drainage works shall be in accordance with BS:8500 and in accordance with the recommendations of the site investigation report, and in accordance with BRE digest 1 "concrete in aggressive ground" to meet any expected sulphate conditions.
 - All gullies, channels and manhole covers are to be set 5mm lower than indicated on the drawing (i.e. 5mm lower than the adjacent surface). All drain and sewer pipes are to be laid soffit to soffit, unless shown otherwise.
 - All above-ground drainage to incorporate rodding access facilities.
 - All manhole covers and frames shall be manufactured from ductile iron and comply with BSEN:124 and be marked 'FW' or 'SW'. They shall be non-ventilating type and have closed keyways. The minimum frame depth shall be 100mm.
 - Small lightweight access covers should be secured (e.g. with screws) to deter unauthorised access.
 - Manholes deeper than 1m to have galvanised steel step irons or fixed ladders.
 - Manhole covers within paved areas are to be recessed with paving to match.
 - Contractor to undertake a pre-construction CCTV drainage survey to confirm that no existing third party connections require maintaining or diverting through the development site.
 - All earthworks to be undertaken in accordance with the specification for highway works, including laying, tolerances, compaction, site preparation and material selection and grading



Typical Catchpit Detail (1:25)

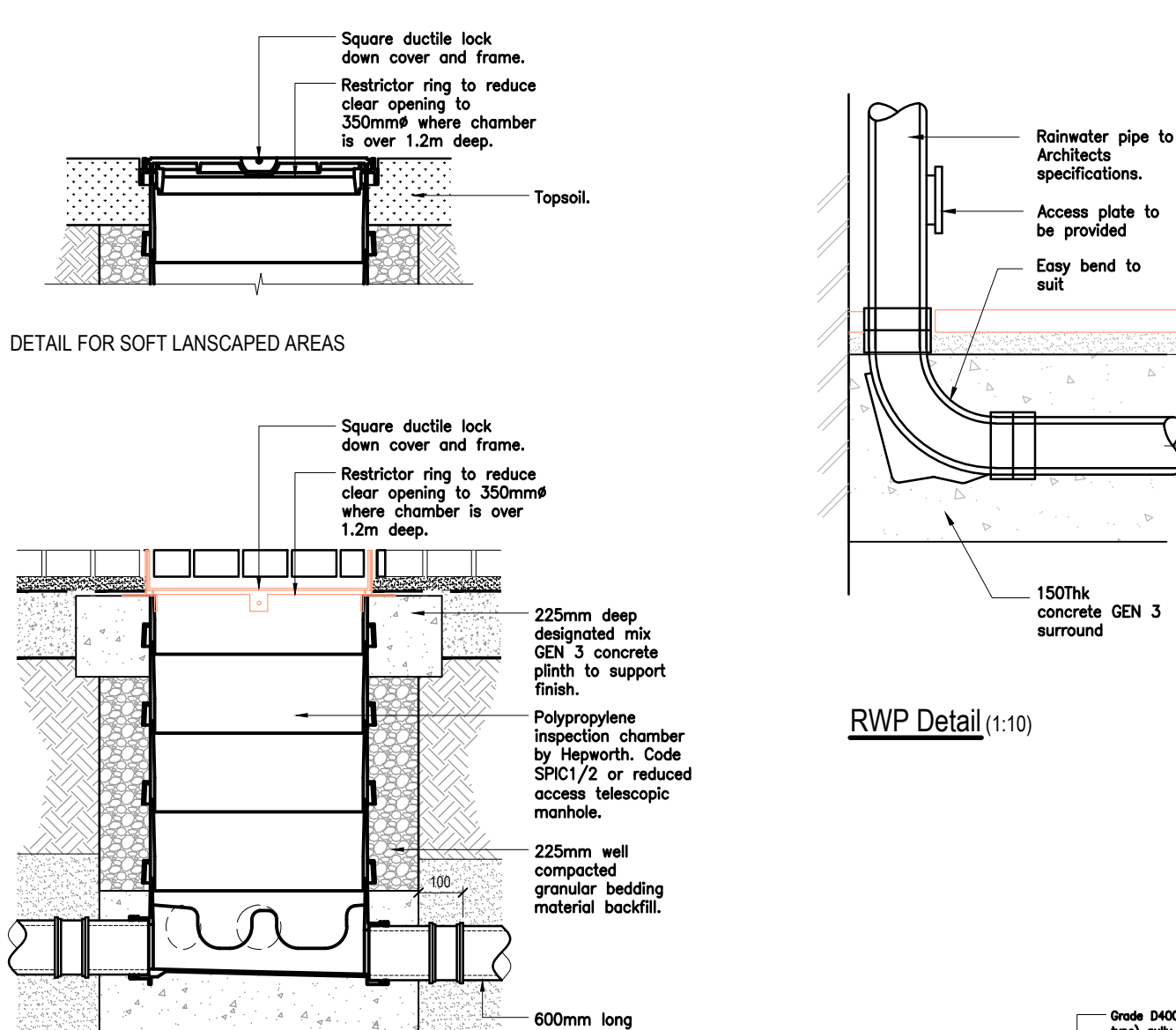


Typical Manhole Detail - Type 2 (1:25)
Non-adopted
(Max depth from cover level to soffit of pipe of 3.0m)
All manhole construction shall comply with Sewers for Adoption 7th Edition or as currently revised

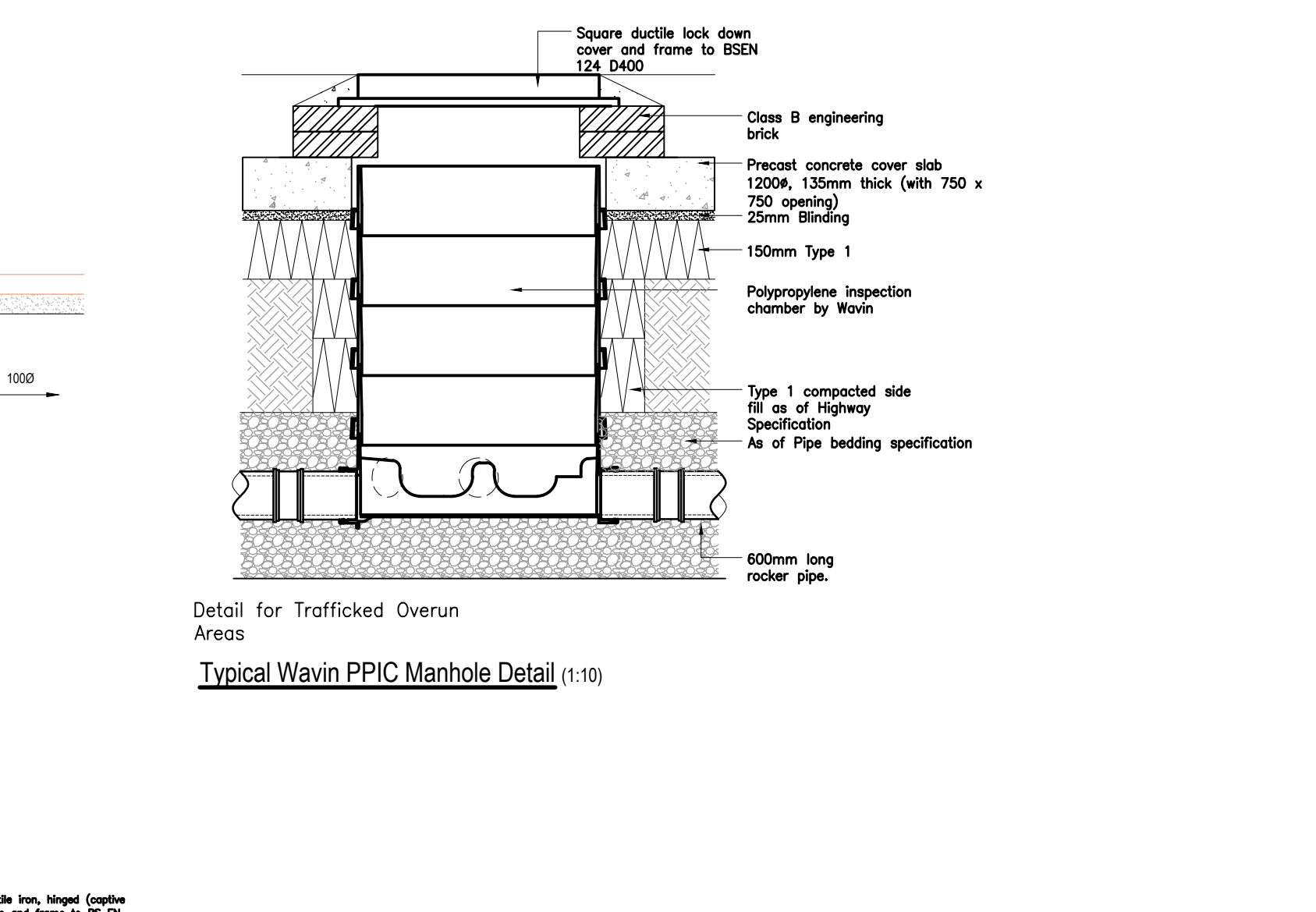


Typical Catchpit Detail - Type 2 (1:25)
(Max depth from cover level to soffit of pipe of 3.0m)
Manhole construction shall comply with Sewers for Adoption 7th Edition

Control Chamber (1:25)
(Max depth from cover level to soffit of pipe of 3.0m)
Manhole construction shall comply with Sewers for Adoption 7th Edition



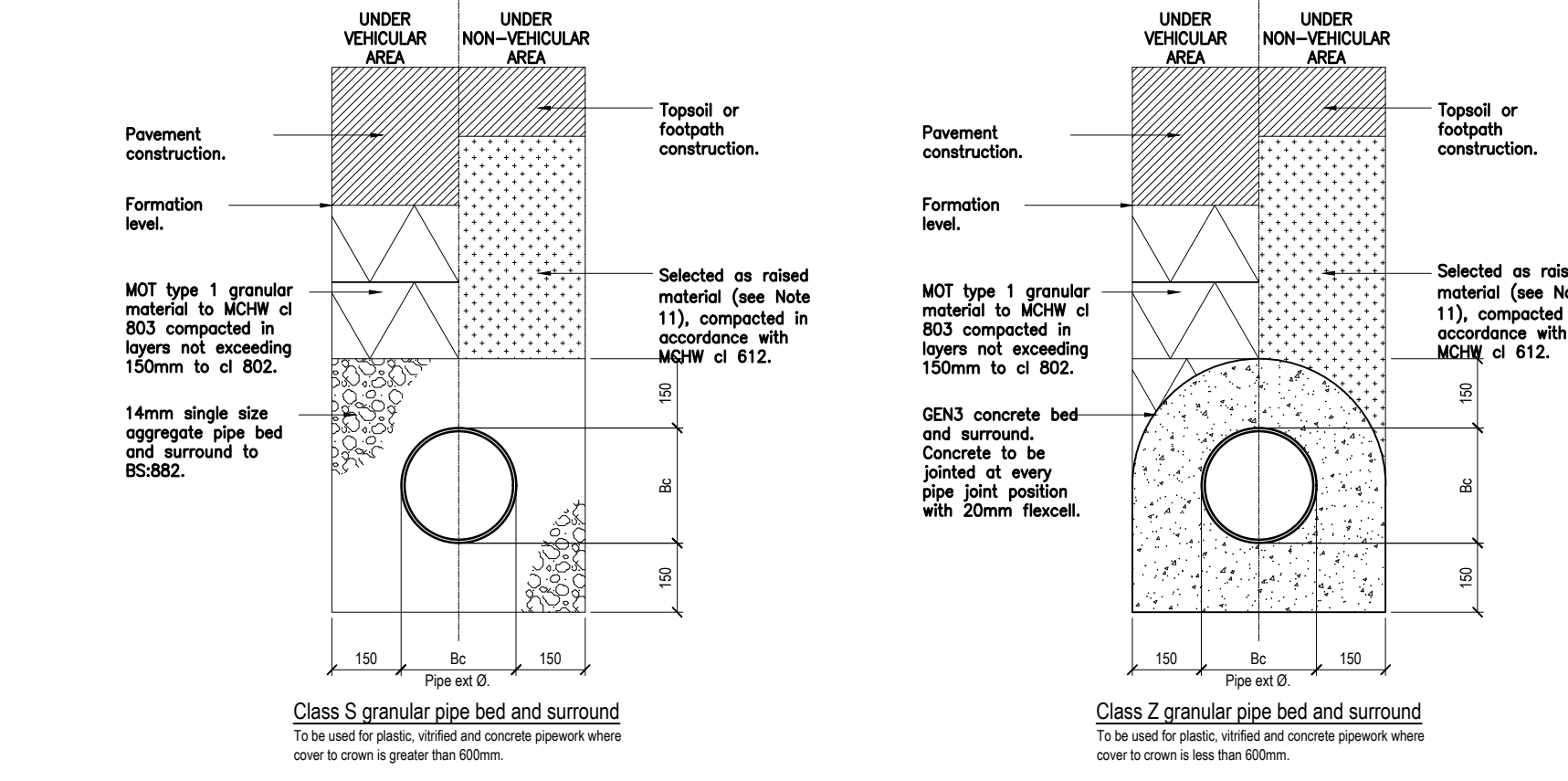
Typical Hepworth PPIC Manhole Detail (1:15)



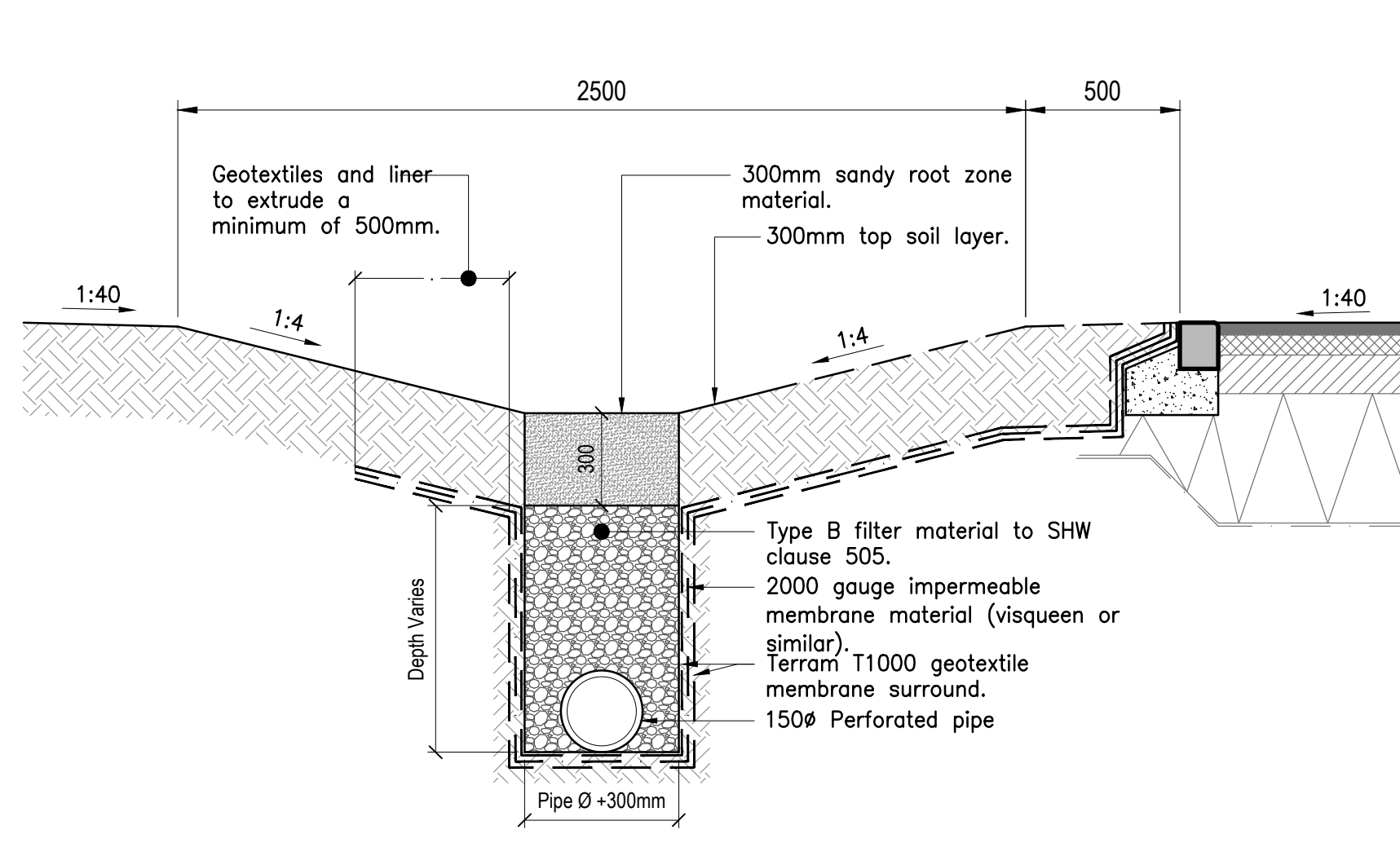
Typical Wavin PPIC Manhole Detail (1:10)



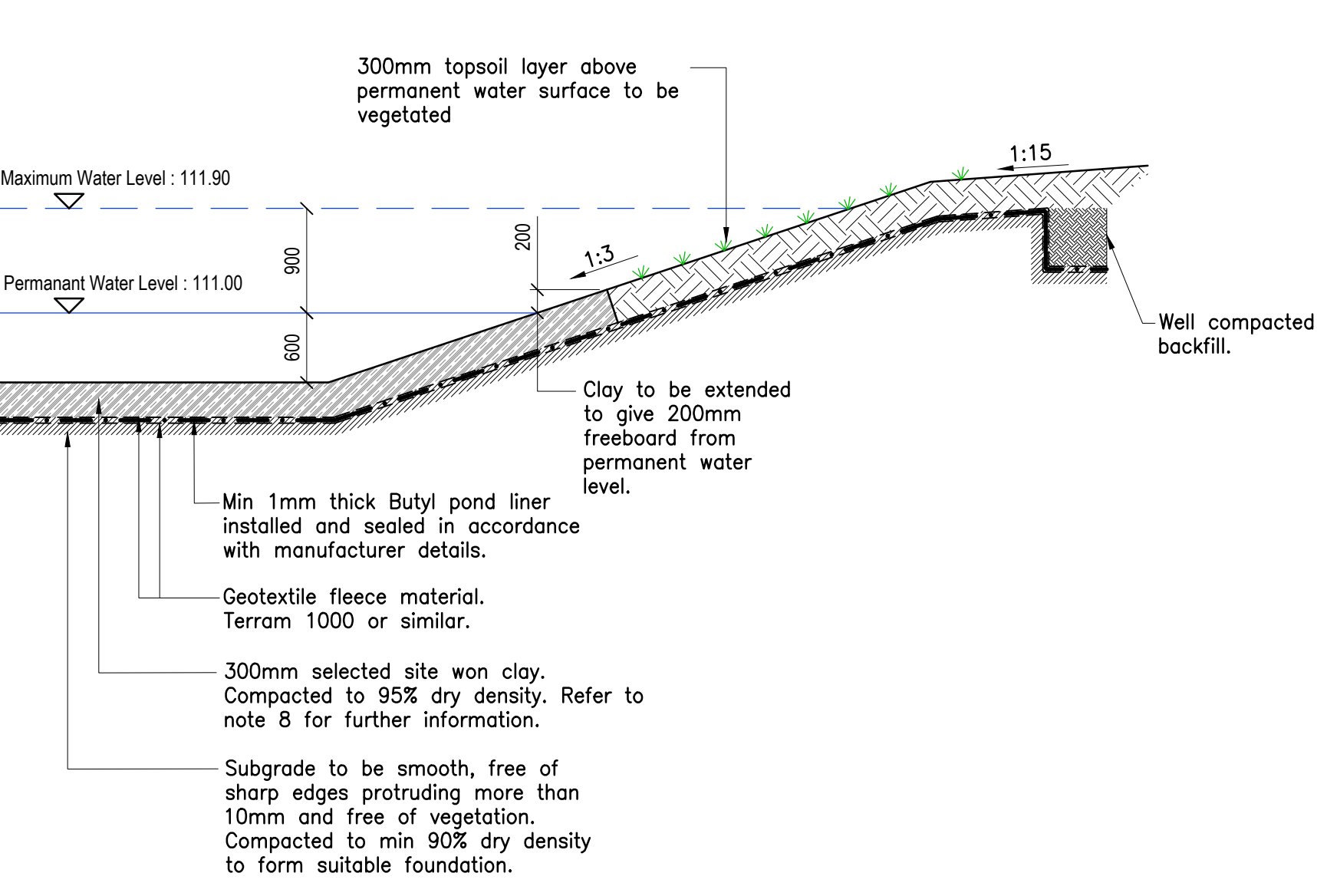
Trapped Gully Detail (1:20)



Pipe Bedding Details Outside Building Footprint (1:20)
Pipe bedding details shall comply with Sewers for Adoption 6th Edition or as currently revised



Section C-C - Typical Dry Swale Detail (1:20)



Typical Pond Detail (1:50)

REV	DATE	BY	SUMMARY OF CHANGE	CHK	APP
P3	18/12/2020	DM	Details amended		DM
P2	26/11/2020	DM	Details amended		DM
P1	29/10/2020	DM			DM

DRAWING STATUS: FOR PLANNING

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CLIENT: LW DEVELOPMENTS

ARCHITECT: BRYANT & MOORE

PROJECT: NORTHAW HOUSE, POTTERS BAR, HATFIELD

DRAWING TITLE: PROPOSED DRAINAGE DETAILS

SCALE @ A1: AS SHOWN CHECKED / APPROVED BY: DM DATE: OCT 2020

PROJECT No: 1-046 DRAWING No: 1-046-CCE-XX-DR-C-004 REV: P3