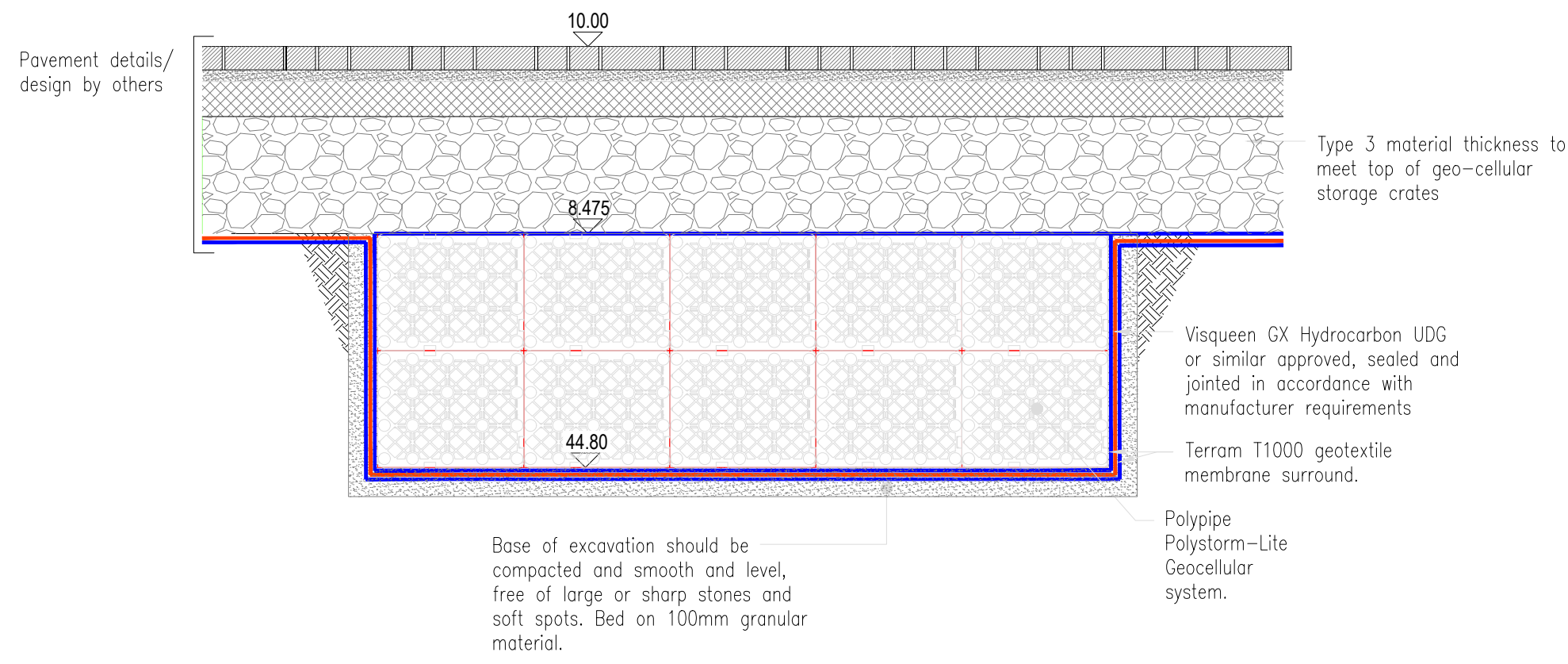


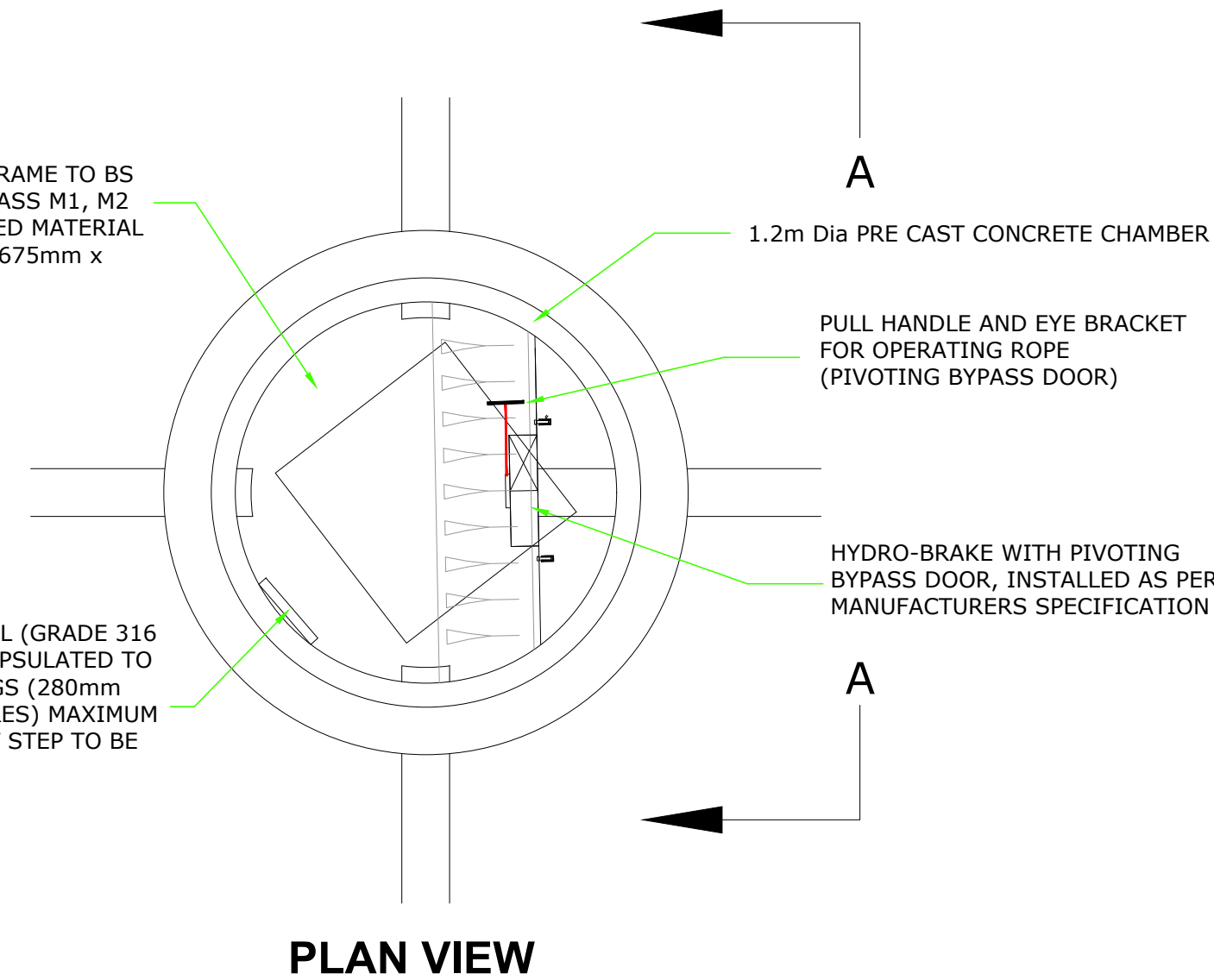
**HYDRO BRAKE CHAMBER
DETAIL**
MD-SHE-0042-1000-1544-1000
42MM Dia HYDRO BRAKE 1.0L/S
FLOW WITH 1.5m HEAD



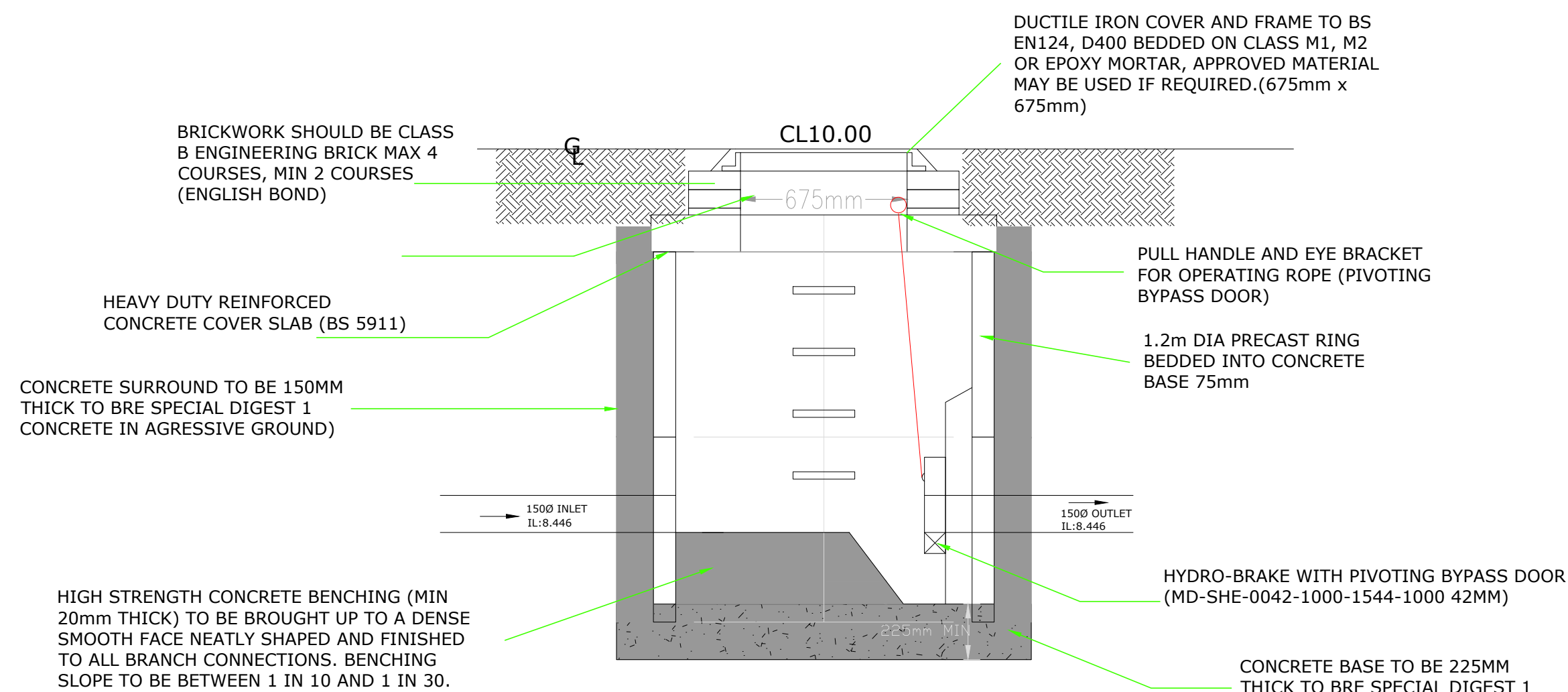
Section A-A - Typical Geo-Cellular Tank Detail (1:20)

DUCTILE IRON COVER AND FRAME TO BS EN124, D400 BEDDED ON CLASS M1, M2 OR EPOXY MORTAR, APPROVED MATERIAL MAY BE USED IF REQUIRED.(675mm x 675mm)

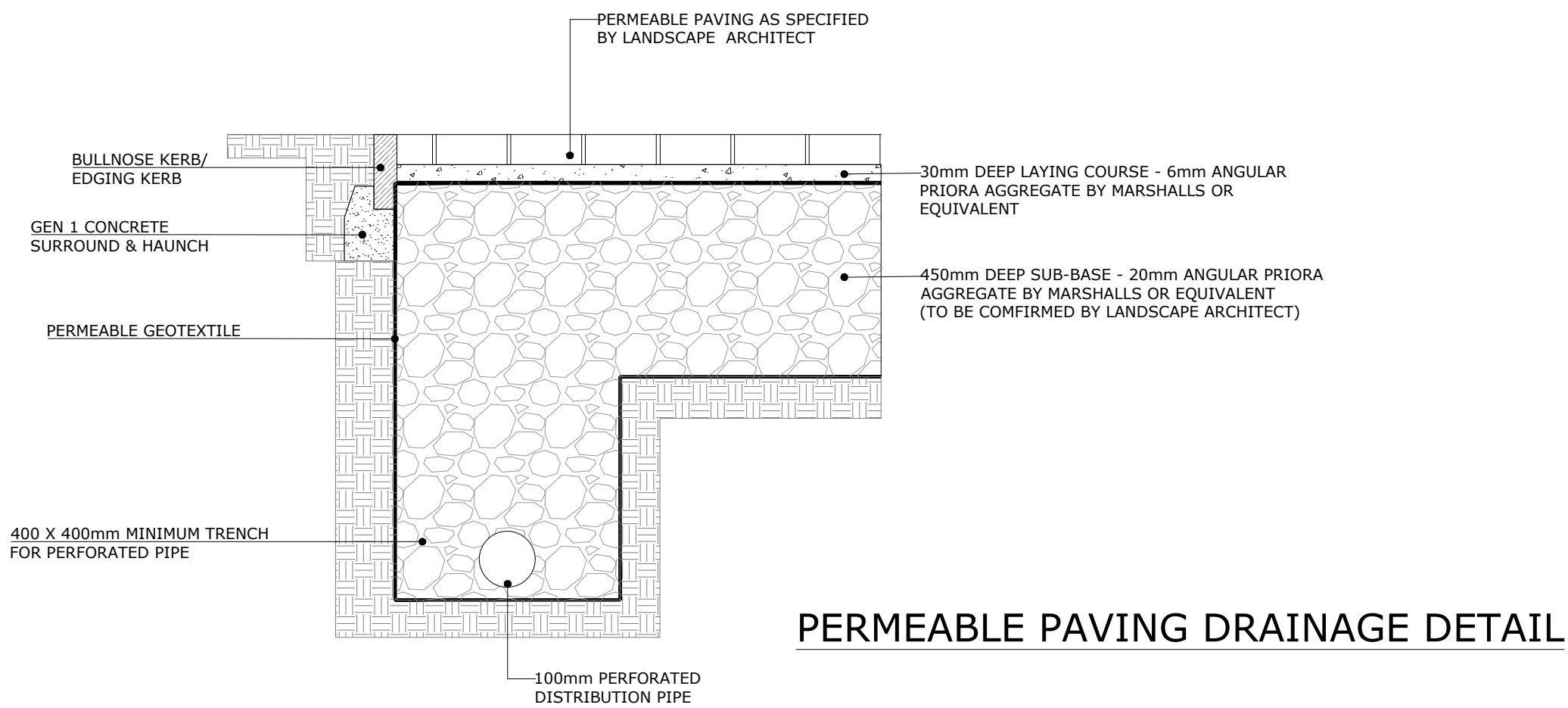
ALL STEP IRONS TO BE STAINLESS STEEL (GRADE 316 S31 BS 5970) OR POLYPROPYLENE ENCAPSULATED TO BS 1247 PARTS 1-2, DOUBLE STEP RUNGS (280mm MIN WIDTH AT 250mm MAXIMUM CENTRES) MAXIMUM DISTANCE FROM COVER LEVEL TO FIRST STEP TO BE 675mm.



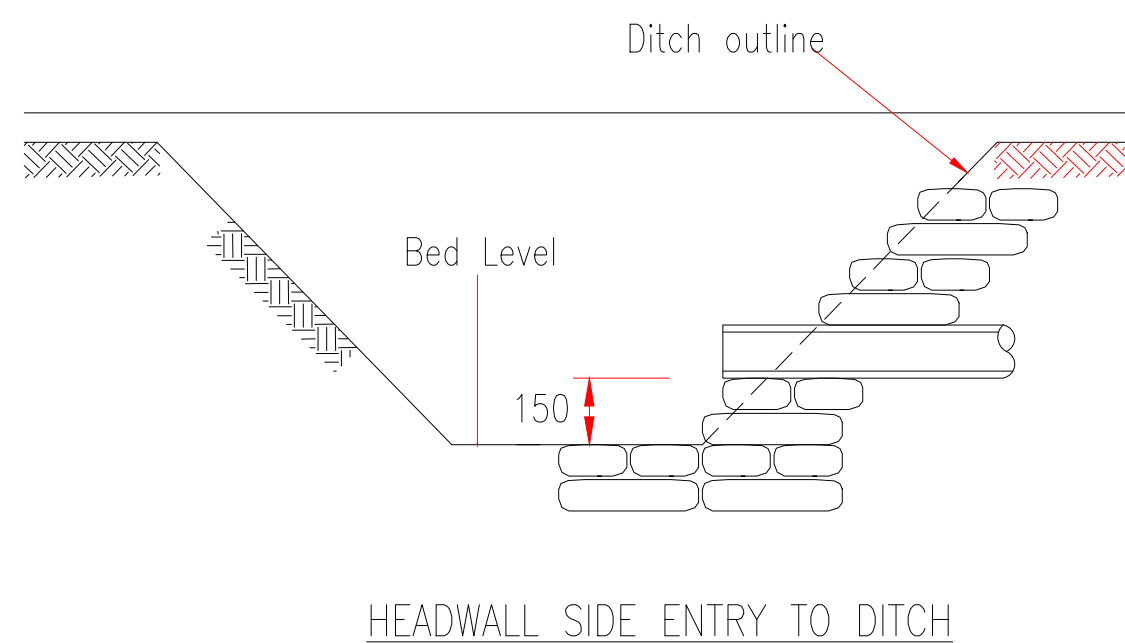
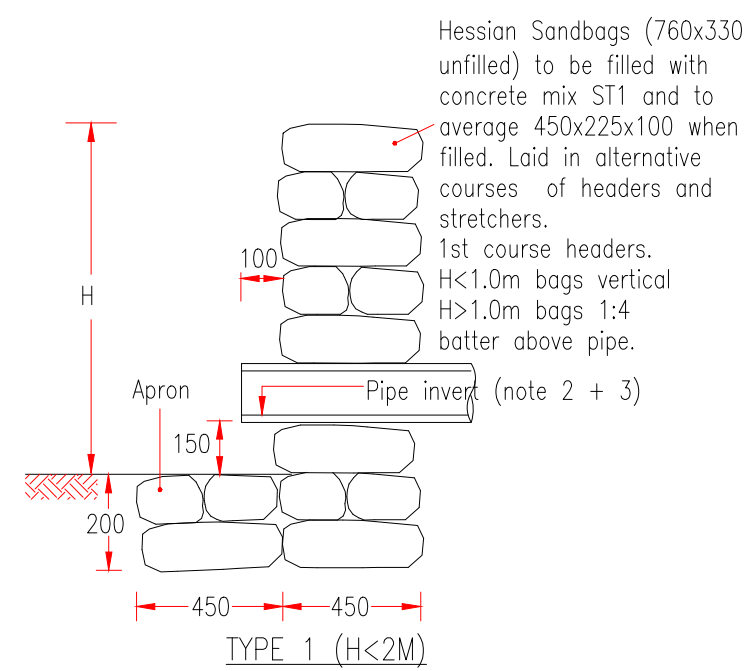
PLAN VIEW



SECTION A-A



PERMEABLE PAVING DRAINAGE DETAIL



HEADWALL SIDE ENTRY TO DITCH

NOTES

- Dimensions H and W as specified by Overseeing Organisation. Side slopes to ditches either as existing or as specified otherwise by Overseeing Organisation.
- The first pipe joint shall be flexible and located not more than 300mm from the back of the headwall.
- Where the ditch outfalls into the pipe the invert of the pipe shall be level with the top of the apron.
- All dimensions in millimetres unless otherwise stated.

NOTES

- The contractor shall check all tie-ins for line and level with existing before commencing any works. The Engineer shall be notified immediately, in writing, should any errors be found.
- Any discrepancies, of whatever nature, must be reported to the Engineer prior to the commencement or continuance of any further works.
- All private drainage works to be in accordance with the requirements of Building Regulations 2010, Part H, 'Drainage and waste disposal' (01st October 2015).
- All pipes to be bedded and backfilled in accordance with Part H, Diagram 10. Shallow pipes shall be protected in accordance with Part H, Diagram 11.
- Unless otherwise stated, all private drainage to be 100mm diameter. Gradients have been shown where there are pipe capacity issues and these should be regarded as minimums. Unless there are constraints dictating otherwise, gradients shall generally be 1 in 60. 100mm diameter pipes shall not be laid flatter than 1 in 80, 150mm diameter pipes shall not be laid flatter than 1 in 150.
- All pipes, chambers and fittings to be installed strictly in accordance with the manufacturers instructions.
- Pipes which run adjacent to buildings shall be installed in strict accordance with Part H, Clauses 2.23 to 2.25 and Diagram 8.
- All private manholes, inspection chambers and drainage channels to comply with BS EN124. Cover strengths to be:
Class D400 in heavy trafficked areas (access roads, service yards etc.)
Class C250 in lightly trafficked areas (car parks, driveways etc)
Class B125 in Non trafficked areas
Class A15 in landscaping areas
- All drains in the vicinity of existing or proposed trees to be constructed in accordance with the requirements of NHBC Practice Note 3.
- Private drainage frames must be tied to manhole risers by use of manufacturers ties (e.g. Polypipe ref. FRK500 fixing kit and FRK501 black ties). The ground works contractor will be held fully responsible for any accidents due to incorrect fitting or failure to use the correct manufacturers fixing equipment.
- All existing land drains encountered on site during construction to be re-connected.
- Should any departure from the slab level be considered, agreement shall be sought from the Engineer immediately and prior to commencement or continuance of any works, and should take full account of all restrictions to the slab level.
- Garage slabs relate to the finished level of the concrete at the front entrance of the garage.
- Where a drive slopes towards a garage there is to be a 75mm ramp up to the garage slab.
- Maximum gradients of gardens to be 1 in 6 (unless stated otherwise), except for designed banking works.
- All dimensions in metres unless otherwise stated.
- As underlying ground conditions may be variable across the site the Contractor shall undertake onsite porosity tests at the location and depth of each soakaway. Tests should be undertaken in accordance with BRE365 and results forwarded to the Engineers to allow verification of designs.
- All existing services, sewers and drains indicated on this drawing and any other related drawings are shown only indicatively, and shall have their positions and level confirmed on site by the Contractor.
- The invert levels of all existing sewers, drains, ditches, tanks or other features and apparatus where a new connection is to be made shall have their precise position and level confirmed on site by the Contractor prior to commencement of any construction work. The results of the investigations shall be confirmed to MTC Engineering (Cambridge) Ltd so that the design can be verified.

FOR APPROVAL

REV	DATE	DESCRIPTION/REASON FOR ISSUE	APPR
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PROJECT
**Monks Green Farm, Brickendon
Hertford, Hertfordshire**

TITLE
Drainage Specification

ORIG	JTC	DATE	30.11.23
CHKD		SCALE	1:200 @ A1
APPR		DRAWING NO	3218-03

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