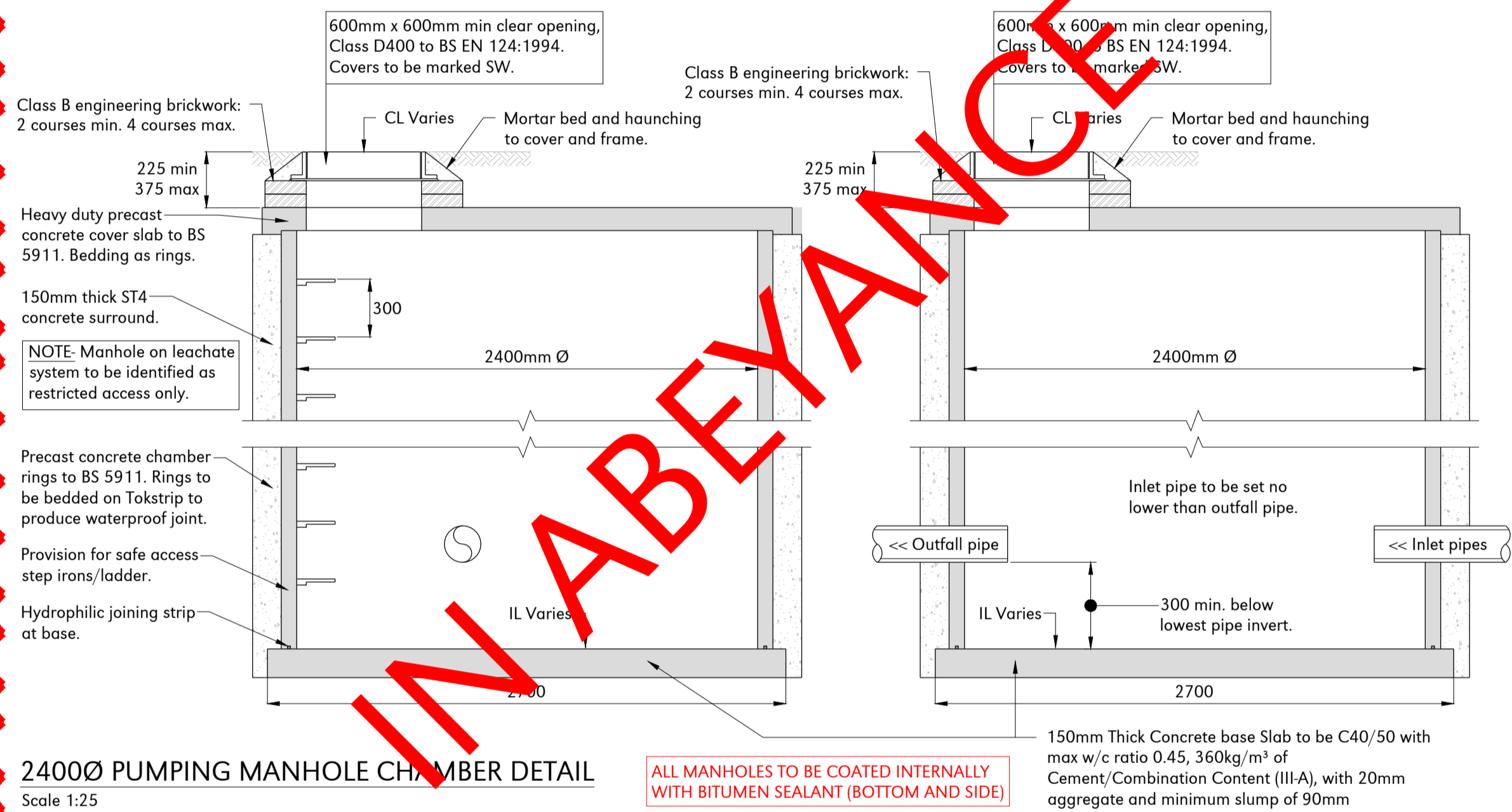


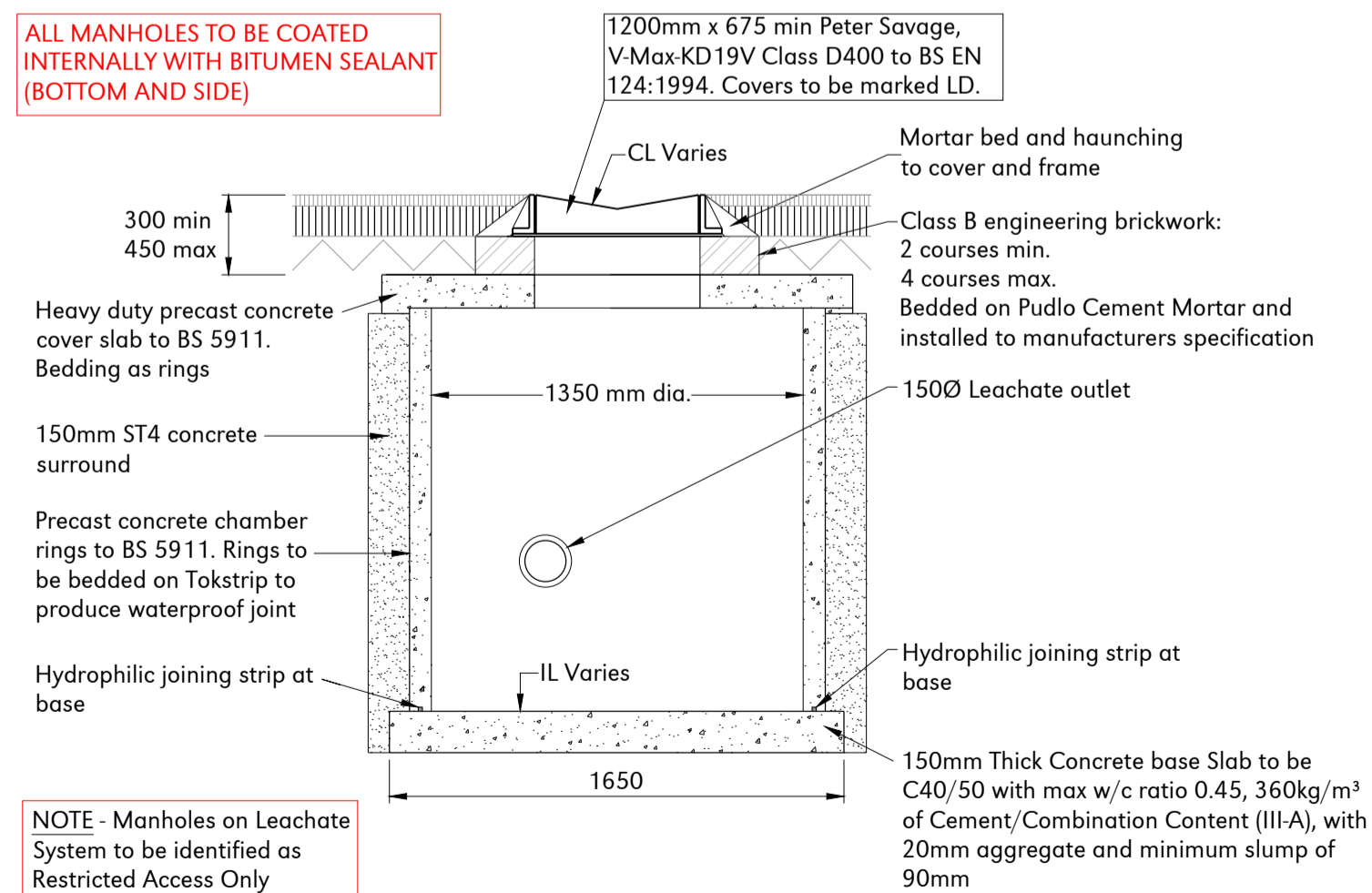
**1350Ø MANHOLE DETAIL**

Scale 1:25



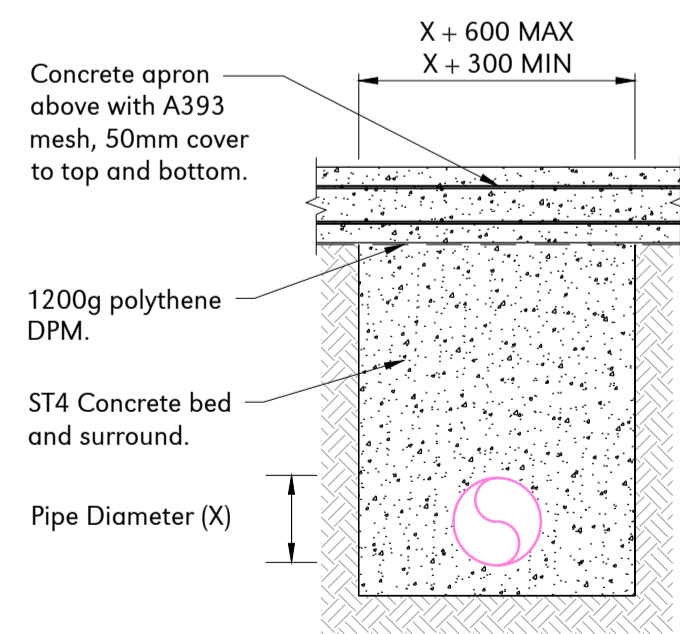
**2400Ø PUMPING MANHOLE CHAMBER DETAIL**

Scale 1:25



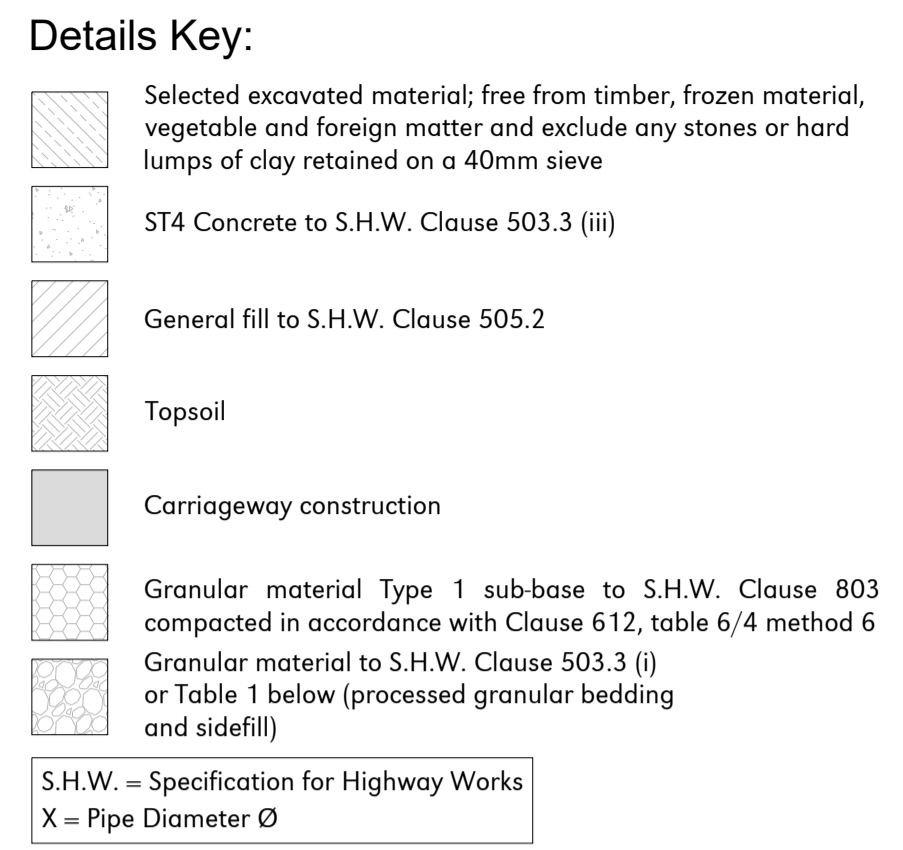
**1350Ø LEACHATE DRAINAGE SUMP**

Scale 1:25



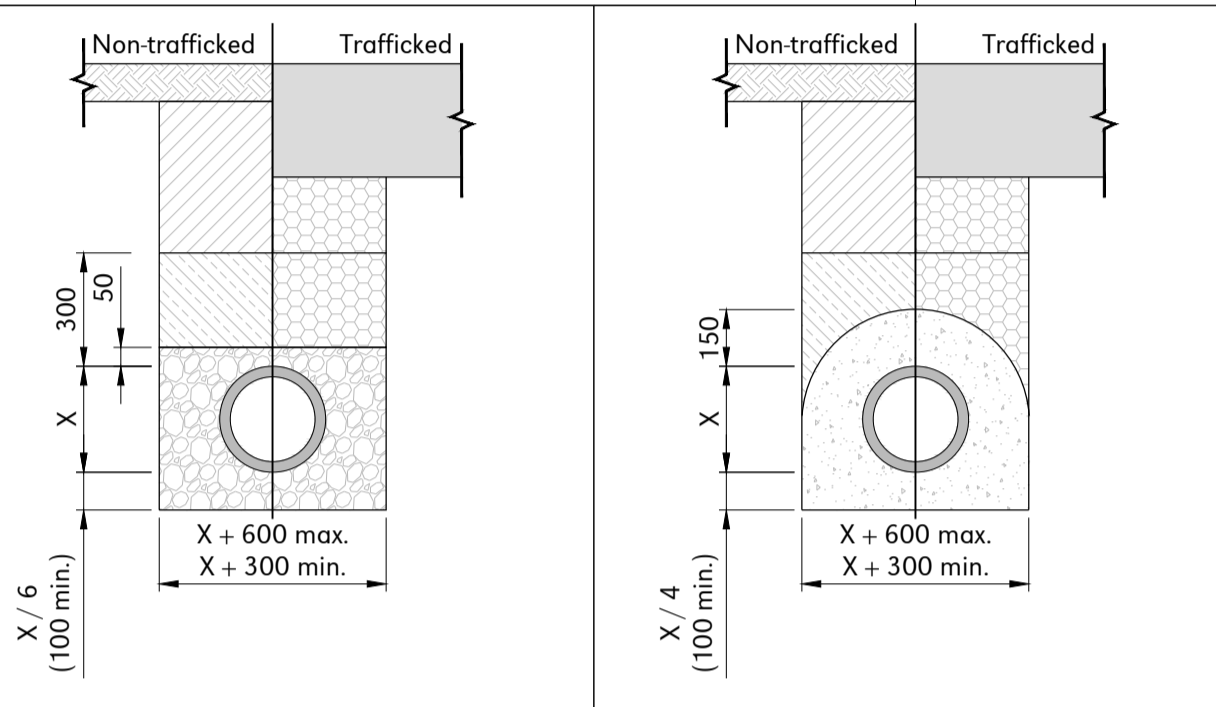
**PIPE BEDDING DETAIL FOR DRAINS WHERE DEPTH TO SOFFIT LESS THAN 0.5M**

Scale 1:20



**Standard Notes:**

- All dimensions are in millimeters unless stated otherwise.
- The joint detail for pipe surround on Type Z drains is for flexible joints only.
- For pipes with nominal diameter below 450mm, the thickness of compressible joint filler board shall be 18mm. For pipes with a nominal diameter of 450mm or greater, but not exceeding 1200mm, the thickness of joint filler board shall be 36mm. For pipes exceeding 1200mm nominal diameter, the thickness of joint filler board shall be 54mm.
- The minimum of maximum width of the trench applies on and below a line 300mm above the outside top of the pipe. Above the 300mm line the trench backfill material shall be as described in Clause 505 of S.H.W.
- The concrete bed or surround may extend to the sides of the trench or be a minimum width. Class 8 material is to be used to fill any voids formed.
- Granular pipe bed and surround material, consisting of natural and/or recycled coarse aggregate or recycled concrete aggregate, should have the following specification (in accordance with clause 503.3 MCDHW).
- For Type Z trench the concrete cover may be formed to a radius batter or horizontal surface. Minimum cover of concrete shall be 150mm.
- Main backfill to be selected excavated material; free from timber, frozen material, vegetable and foreign matter and exclude any stones or hard lumps of clay retained on a 40mm sieve. backfill material should be well graded, readily compactable and consolidated in maximum 300mm layers. No mechanical compaction is to be applied until first 300mm of main backfill is in place. If excavated material is unsuitable, use S.H.W. class 8 recycled aggregate.



**TYPICAL PIPE BEDDING DETAILS**

Note: The above details provided for guidance only, refer to manufacturers technical manual for installation guidance and further details.

Scale 1:20

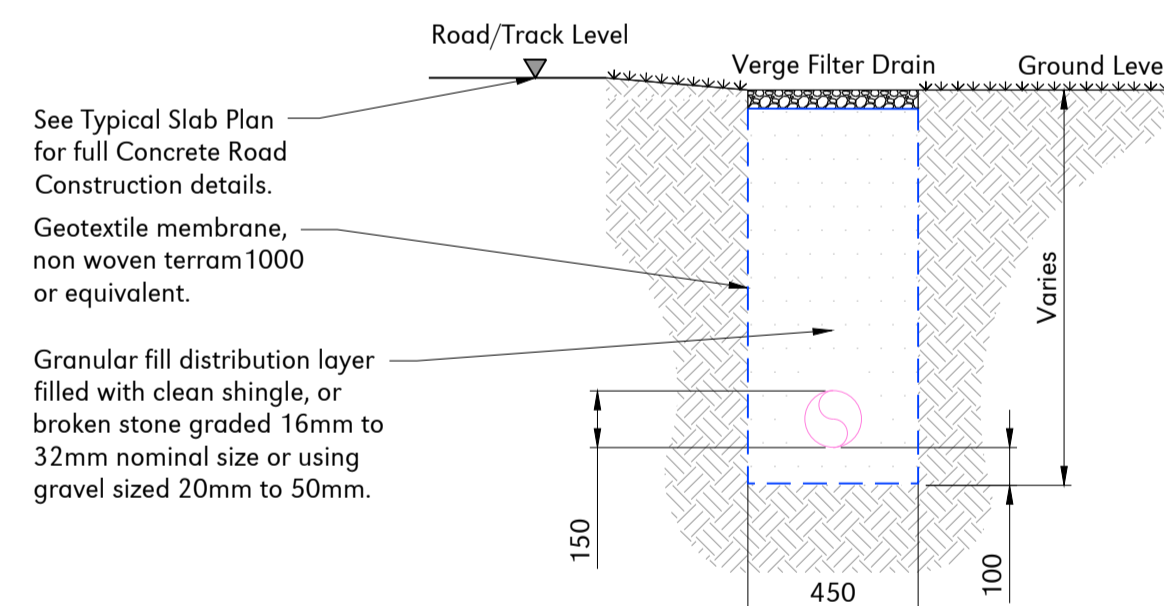
**Table 1 Processed Granular Bedding and Sidefill**

Nominal pipe bore (mm)	Nominal maximum partial size (mm)	Material specification
100	10	10mm nominal single sized
100 TO 150	15	10 or 14mm nominal single sized or 14mm to 5mm graded
150 TO 300	20	10, 14 or 20mm nominal single sized or 14mm to 5mm graded or 20mm to 5mm graded

**Expansion Joint for Type Z**

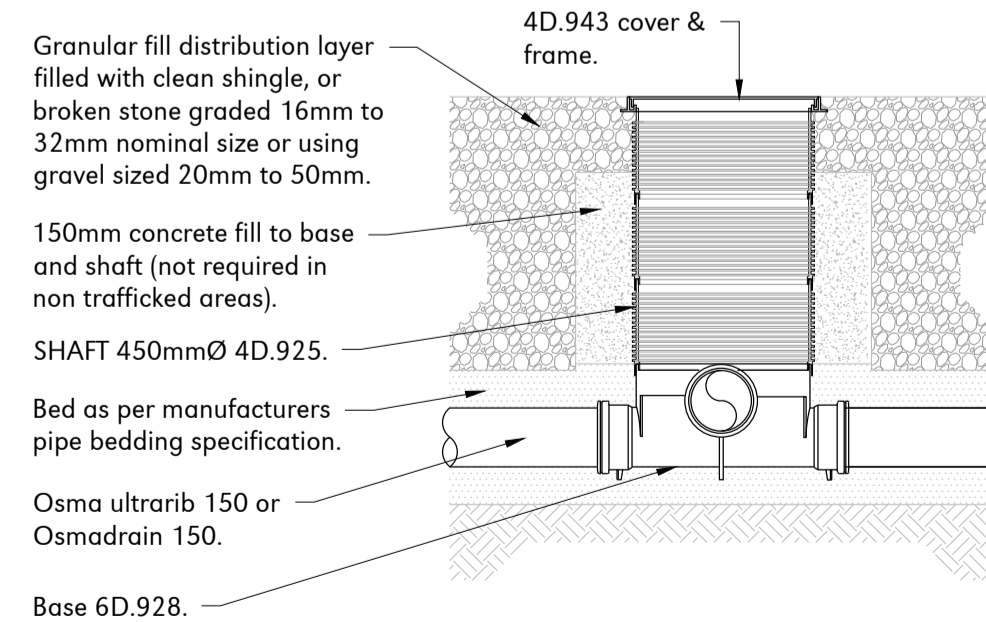
Compressible board or preformed joint filler for full thickness of concrete bed or surround and at intervals not exceeding 8m and to coincide with pipe joints

Flexible pipe joint



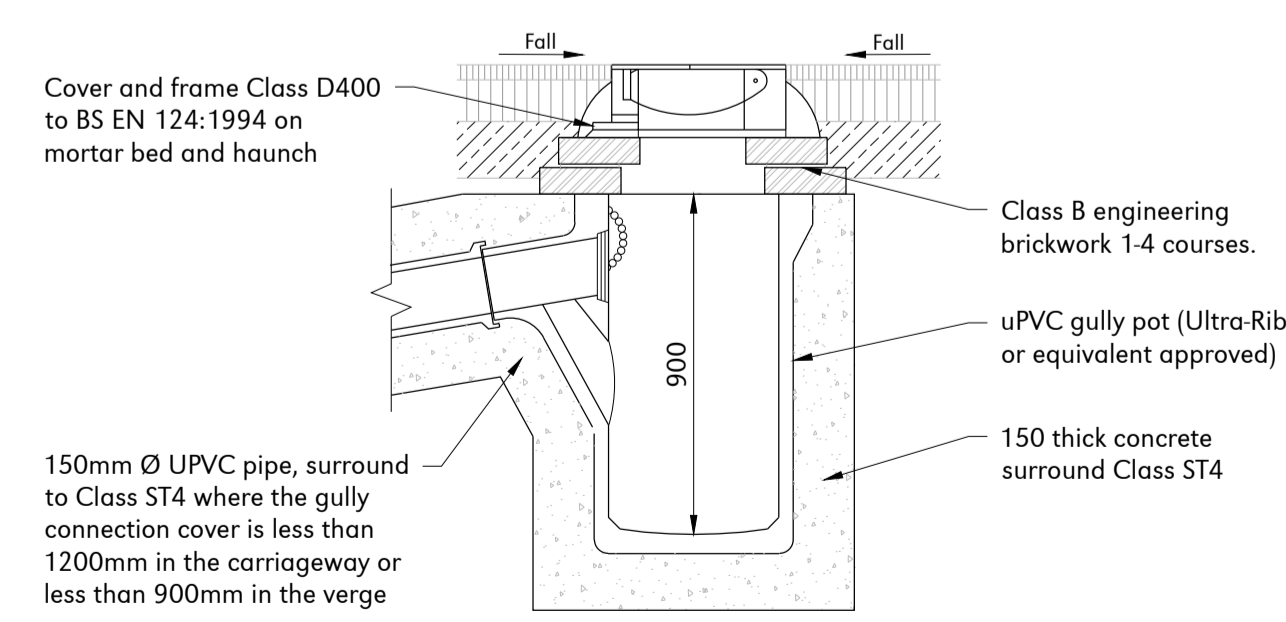
**TYPICAL VERGE FILTER DRAIN CROSS SECTION**

Scale 1:20



**450Ø INSPECTION CHAMBER DETAIL**

Not to Scale



**TYPICAL GULLY DETAIL**

Scale 1:20

**NOTES:**

- All dimensions noted are in millimetres unless stated otherwise.
- All levels to be above Ordnance Survey Datum defined levels (A.O.Dm) unless noted otherwise.
- Do not scale from this drawing, if dimensions are not clear ask.
- This document has been created in accordance with Plandescil Ltd. Terms & Conditions along with the scope of works provided by the client to Plandescil Ltd. Any use of this document other than for its original purpose is prohibited. Plandescil Ltd. accept no liability for any third party uses of this document.
- Plandescil Ltd. to be informed immediately of and alterations/deviations identified on site from the information shown on the engineering drawings.
- This drawing is to be read in conjunction with all other relevant documents relating to the project.
- All setting out to be coordinated by the Contractor and to be checked onsite prior to construction.
- To be read in conjunction with the following Plandescil Ltd Drawings, schedules and documents:  
27951/007 - Proposed Site Layout  
27951/008 - Proposed Site Levels  
27951/120 - Containment Bund Slab & Joint Details  
27951/121 - Hardstanding & Kerbing Details

**DRAINAGE NOTES:**

- All drainage pipes to be laid invert to invert.
- All levels are indicative only.
- All proprietary materials to be fixed strictly in accordance with manufacturer's recommendations using materials approved by the manufacturer.
- All levels and dimensions should be checked on site by contractors and relevant sub-contractors.
- Existing public utility services and private apparatus are not necessarily shown on the drawings. The contractor shall liaise with the utility provider to determine precise location of existing services. Existing services to be marked out on site prior to any excavation works. All utility company guidelines & health and safety procedures must be strictly followed.
- Where surface water drains to ground, the existing ground should be broken up prior to laying the subgrade to aid infiltration.
- All Leachate manholes to be coated internally with bitumen sealant (bottom and sides).

**MATERIAL NOTE:**

- Materials must NOT contain limestone, including D.F.T Type 1 and concrete aggregate.
- All Asphalt to be made with Granite or other acid resistant aggregate (No Limestone filler allowed).
- All pipes to be UPVC twin wall or foul water push fit orange pipe, NOT Concrete or Foul water pipe.
- All Asphalt to be made with Granite or other acid resistant aggregate (No Limestone Filler Allowed)
- All Leachate Manholes to be coated internally with bitumen sealant (Sides and Bottom)
- Sludge clamps and drainage design to comply with latest SSAFO and CIRIA C759 guidance.
- Designed for Matize, Rye, and Grass only, not Beet or Beet pulp.

ALL PROPRIETARY MATERIALS TO BE FIXED STRICTLY IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS USING MATERIALS APPROVED BY THE MANUFACTURER.

**NOT TO BE USED FOR CONSTRUCTION**

**PROVISIONAL FOR TENDER PURPOSES ONLY**

Rev	Date	Rev By	Chkd	Description
B	03-05-24	MJP	OAJ	Minor Amendments
A	19-12-23	JIM	OAJ	Pumping Chamber & Filter Drain Added
O	15-12-22		OAJ	First Issue

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civil / structural / environmental / surveying

Client  
**Streety Hall Estate**

Project  
**AD Plant, Streety Hall Estate, West Wickham, CB21 4RP**

Drawing Title  
**Typical Drainage Details Kerbing Details**

Scale	U.N.O.	Date	Drawn By
As Noted (A1)		December 2022	MJP
Drawing No.	27951/122	Rev	B