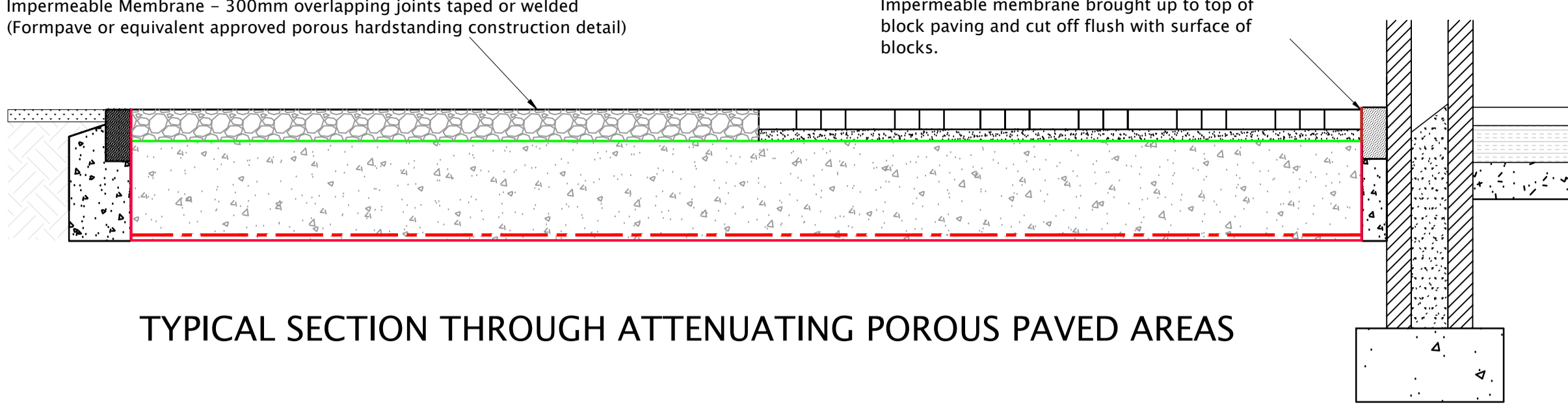


Surface Course – 80mm Permeable Paving Blocks or Paving Slabs or Clean Gravel
 Block bedding – 50mm 2-6mm washed stone or clean gravel
 Permeable Geotextile – 300mm overlapping joints
 Sub-base – 0.375m 4-40mm Type 3 washed stone. Laid 100-150mm compacted layers.
 SC Intergrid/Terram 1000 – 300mm overlapping joints
 Impermeable Membrane – 300mm overlapping joints taped or welded
 (Formpave or equivalent approved porous hardstanding construction detail)

Impermeable membrane brought up to top of block paving and cut off flush with surface of blocks.



TYPICAL SECTION THROUGH ATTENUATING POROUS PAVED AREAS

Recommended BSEN 12620 aggregate grading (mm)	Type 3 Sub-Base Material	Laying Course & Joint Filling Material
	4/40	2/6.3
Recommended BSEN 12620 grading	Gc80 / 20 GTC20 / 15	Gc80 / 20 GTC20 / 15

Grading Details	
Sieve size (mm)	% by mass passing ISO656 sieve
80	100
40	80 to 99
20	50 to 78
14	100
10	31 to 60
6.3	98 to 100
4	80 to 99
2	18 to 46
1	10 to 35
0.500	0 to 20
0.063	0 to 5

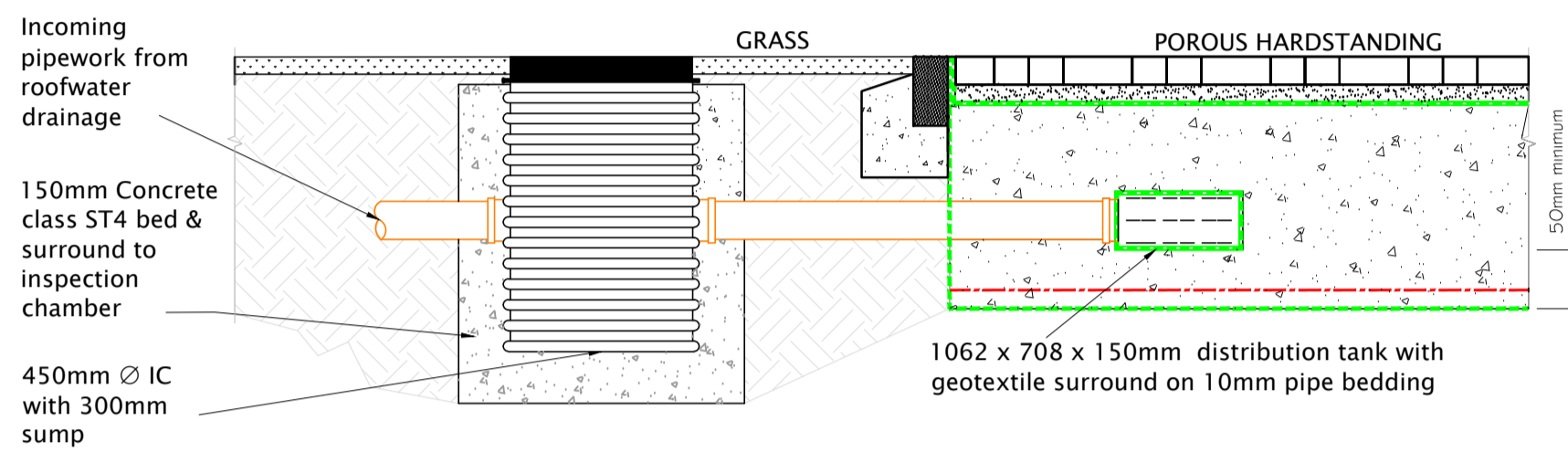
TABLE 1 – AGGREGATE GRADING

Subgrade CBR (%)	Adjustment to thickness of open graded crushed rock course (mm).
>5	use 250
5	use 250
4	250+100
3	250+125
2	250+175
1	250+300

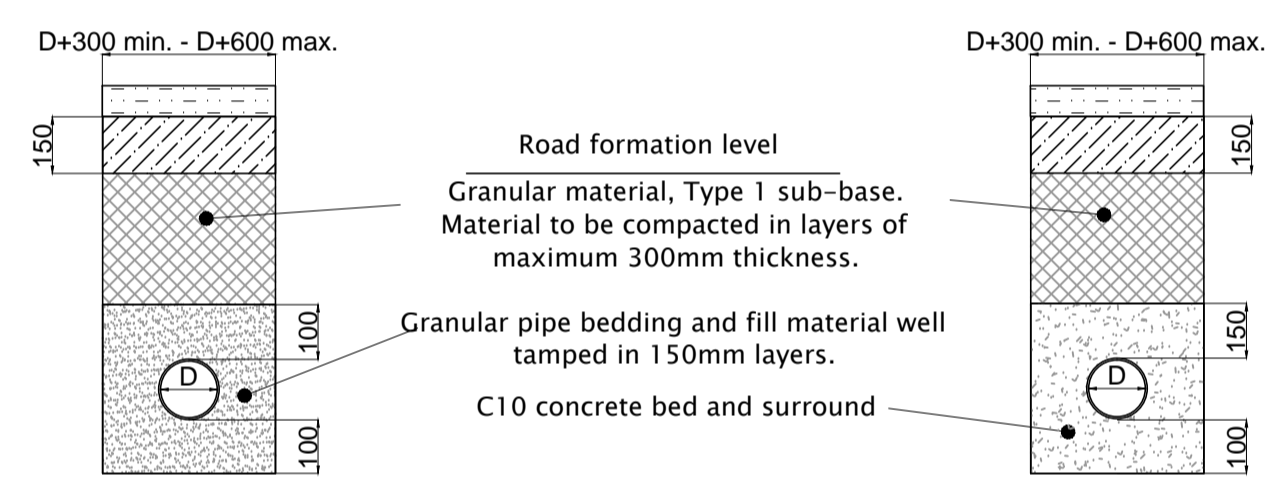
TABLE 2 – SUB-GRADE IMPROVEMENT FOR LOW CBR VALUES

NOTES:

- DO NOT SCALE – Use figured dimensions only.
- All dimensions shown are in millimetres unless otherwise stated.
- All levels are in metres above ordnance datum unless otherwise stated.
- The Contractor is to verify all dimensions on site before commencing work.
- This drawing is to be read in conjunction with all Engineers and Architects drawings.
- Site investigation identified the Kellaways Clay Member.
- Site investigation indicates infiltration not suitable for site due to clay soils.
- Site investigation indicated CBR = 3%.
- All surface water inspection chambers to have 300mm silt trap sump.
- All surface water drainage pipes to be 150mm diameter where there is flow from 2 or more rainwater pipes (RWPs).
- Surface water drainage pipes to be laid at a gradient no less than 1:150.
- No foul drainage pipes or manholes can be located in the SuDS attenuation area.
- Foul water pipes can pass underneath the SuDS attenuation area.
- Vortex Control Chambers to be maintained in accordance with manufacturer's instructions.
- SuDS to be maintained in accordance with maintenance schedule.
- SuDS to be maintained by property owner.



TYPICAL RAINWATER DISTRIBUTION PIPE DETAIL

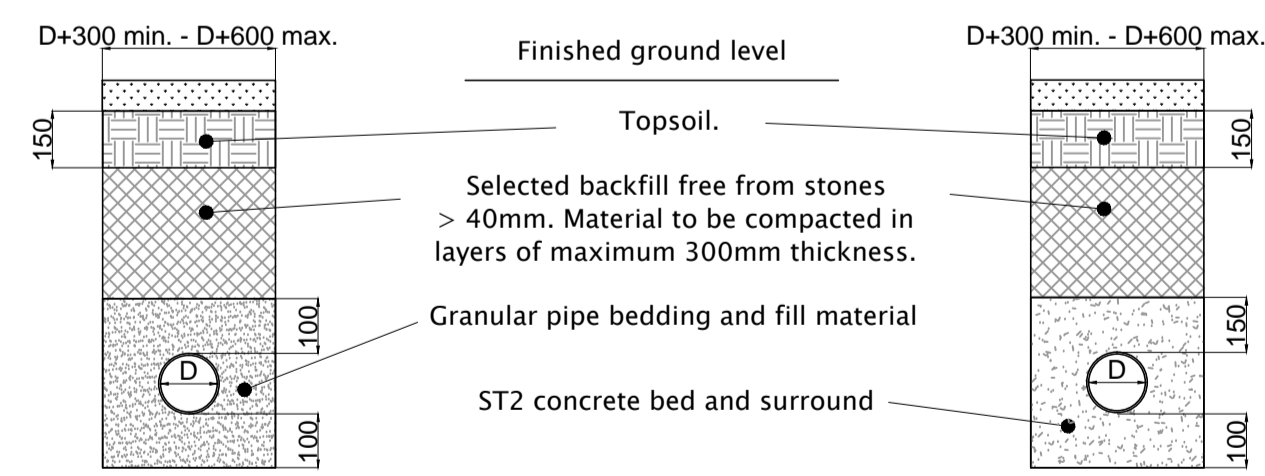


TYPE D1 – More than 1200mm cover to top of pipe

TYPE D3 – Less than 1200mm cover to top of pipe

Compressible board or joint filler to all joints for full thickness of surround.
 18mm to <450mm Ø,
 36mm to 450mm to 1200mm Ø,
 54mm to >1200mm Ø

TYPICAL PIPE BEDDING DETAILS UNDER ROAD, FOOTWAY AND CYCLEWAY

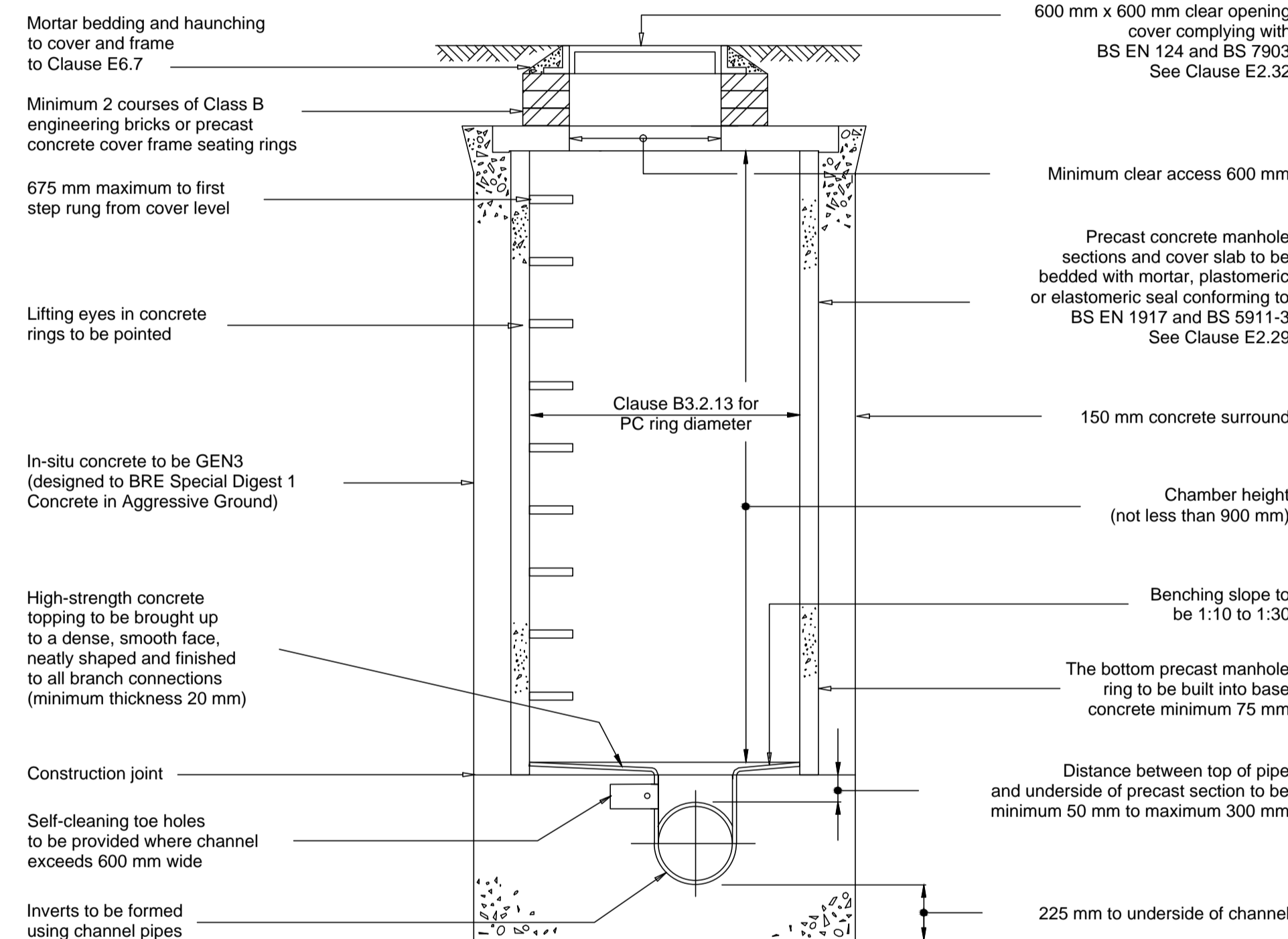


TYPE D5 – More than 900mm cover to top of pipe

TYPE D7 – Less than 900mm cover to top of pipe

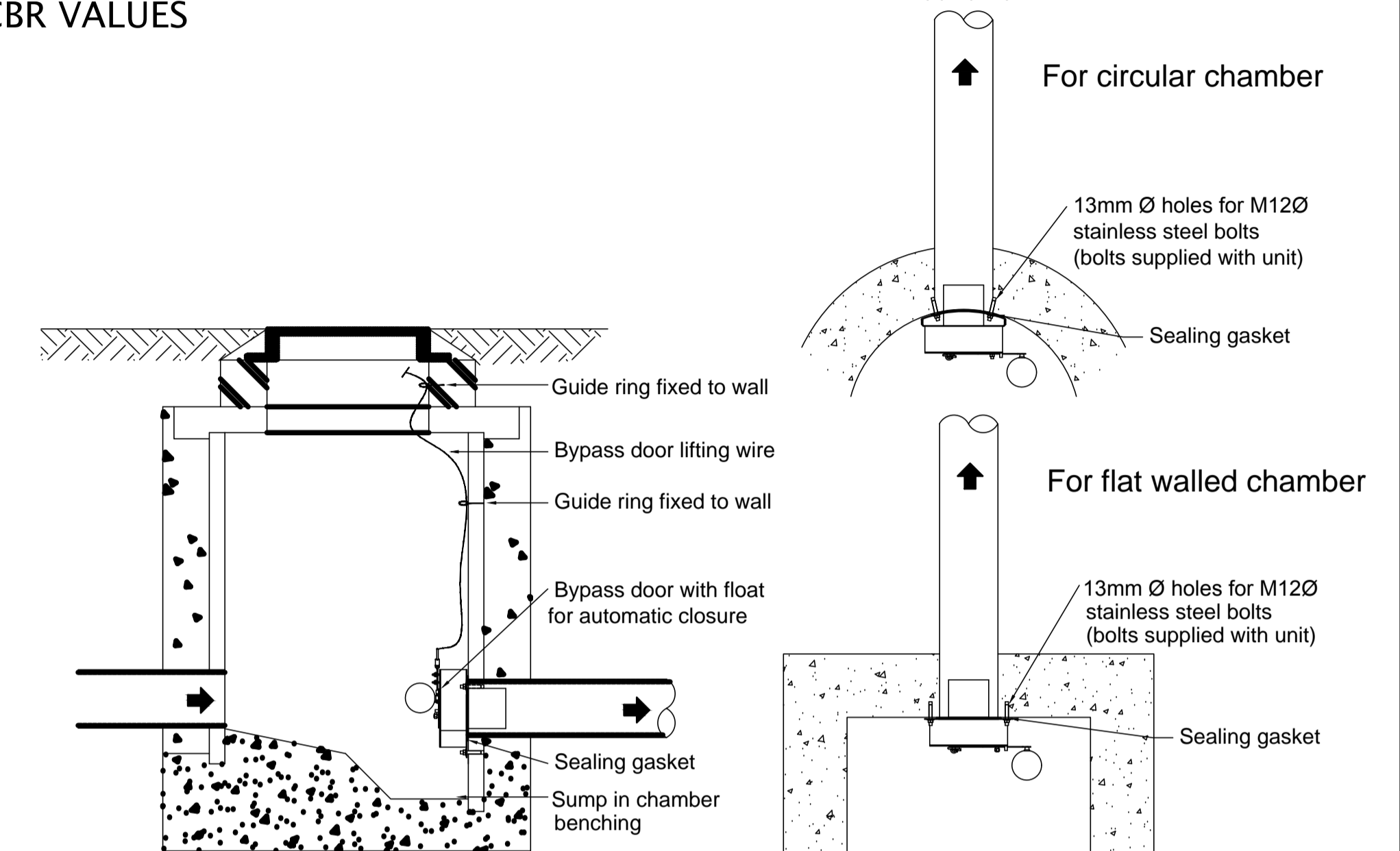
Compressible board or joint filler to all joints for full thickness of surround.
 18mm to <450mm Ø,
 36mm to 450mm to 1200mm Ø,
 54mm to >1200mm Ø

TYPICAL PIPE BEDDING DETAILS UNDER VERGES AND LANDSCAPED AREAS

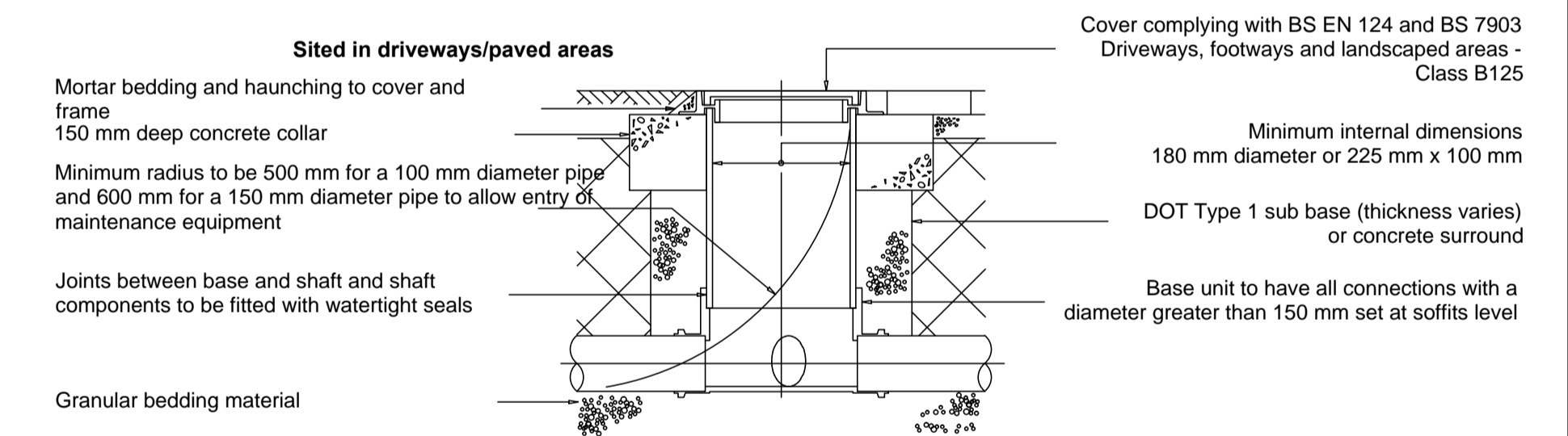


TYPICAL MANHOLE DETAIL - TYPE 2

Maximum depth from cover level to soffit of pipe 3.0 m



TYPICAL VORTEX CONTROL CHAMBER DETAILS



TYPICAL INSPECTION CHAMBER DETAIL – TYPE 4 (Flexible material detail)

Maximum depth from cover level to soffit of pipe 2 m, non-entry
 Plastic chambers and rings shall comply with BS EN 13598-1 and BS EN 13598-2 or have equivalent independent approval

Client: **Blenheim Estate**

Project: **Rectory Farmhouse Barn, OX20 1RS**

Project Ref: **FEDS-221054**

Title: **External Works Details**

Drawn by: **TP**

Checked by: **DKP**

Date: **25.10.21**

Scale: **1:20**

Dwg.no: **221054 -004**

Rev: **C**

Size: **A1**

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