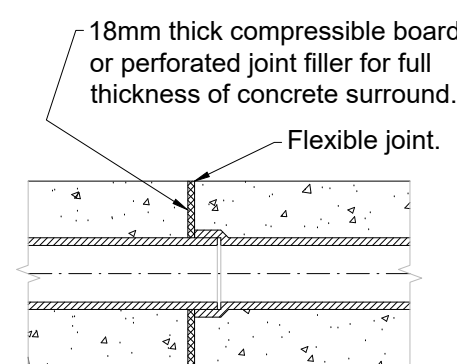
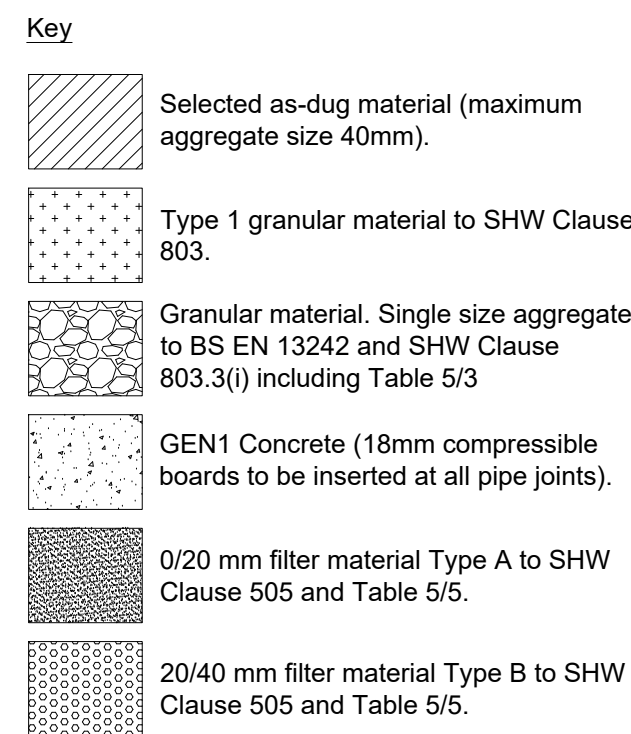
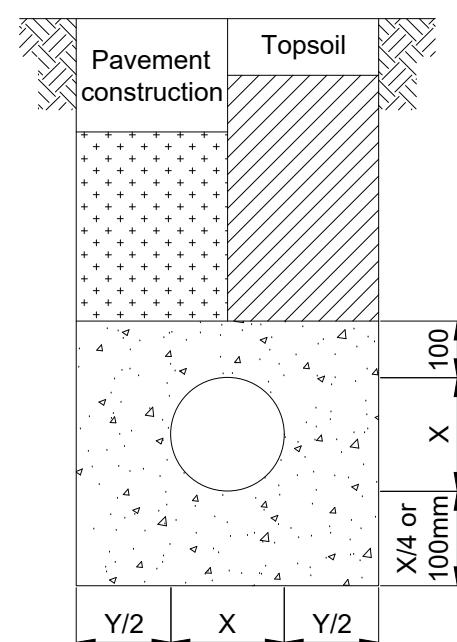
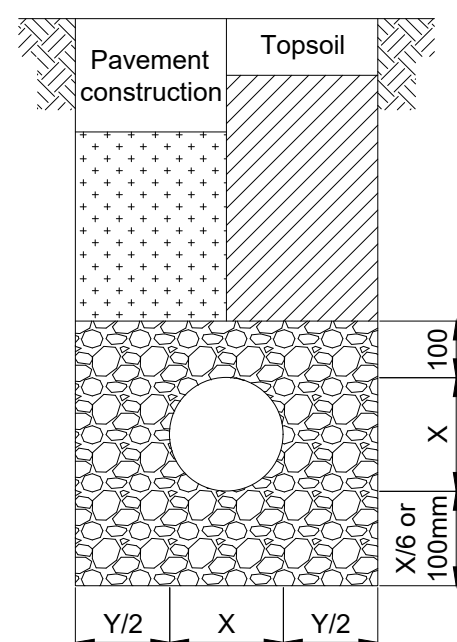
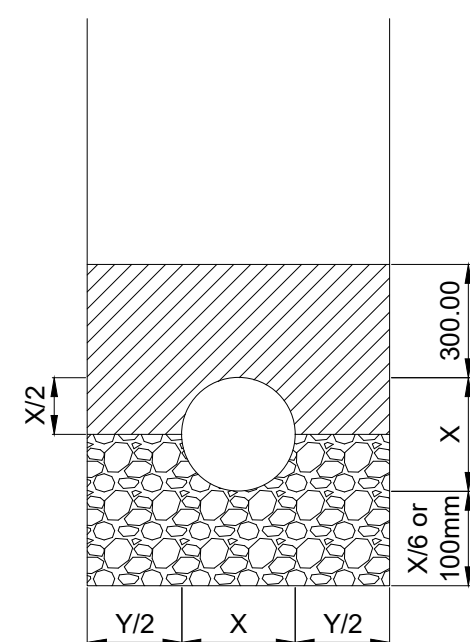
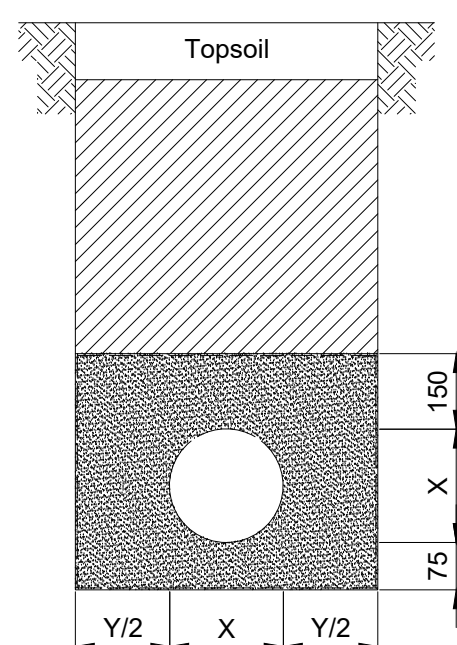
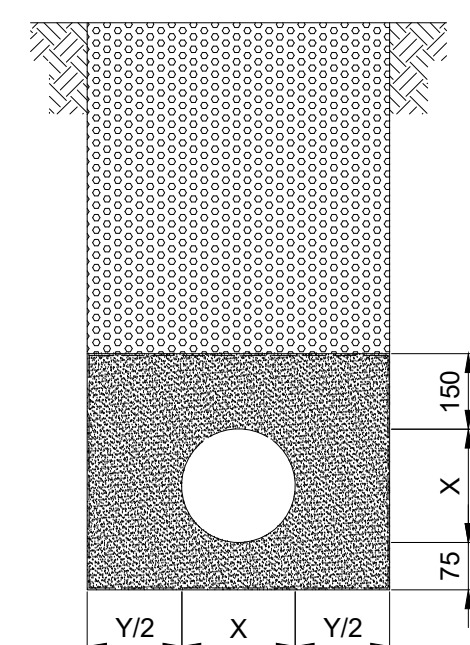




Movement joint for pipes with concrete bed and surround

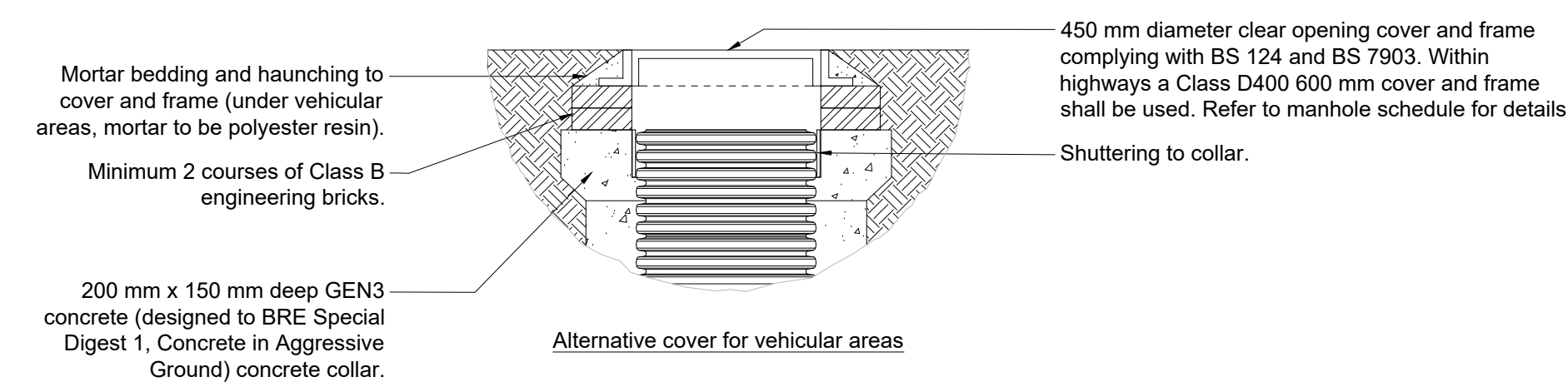
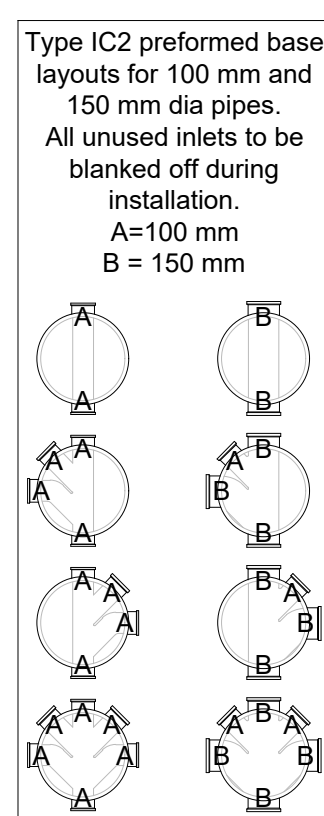
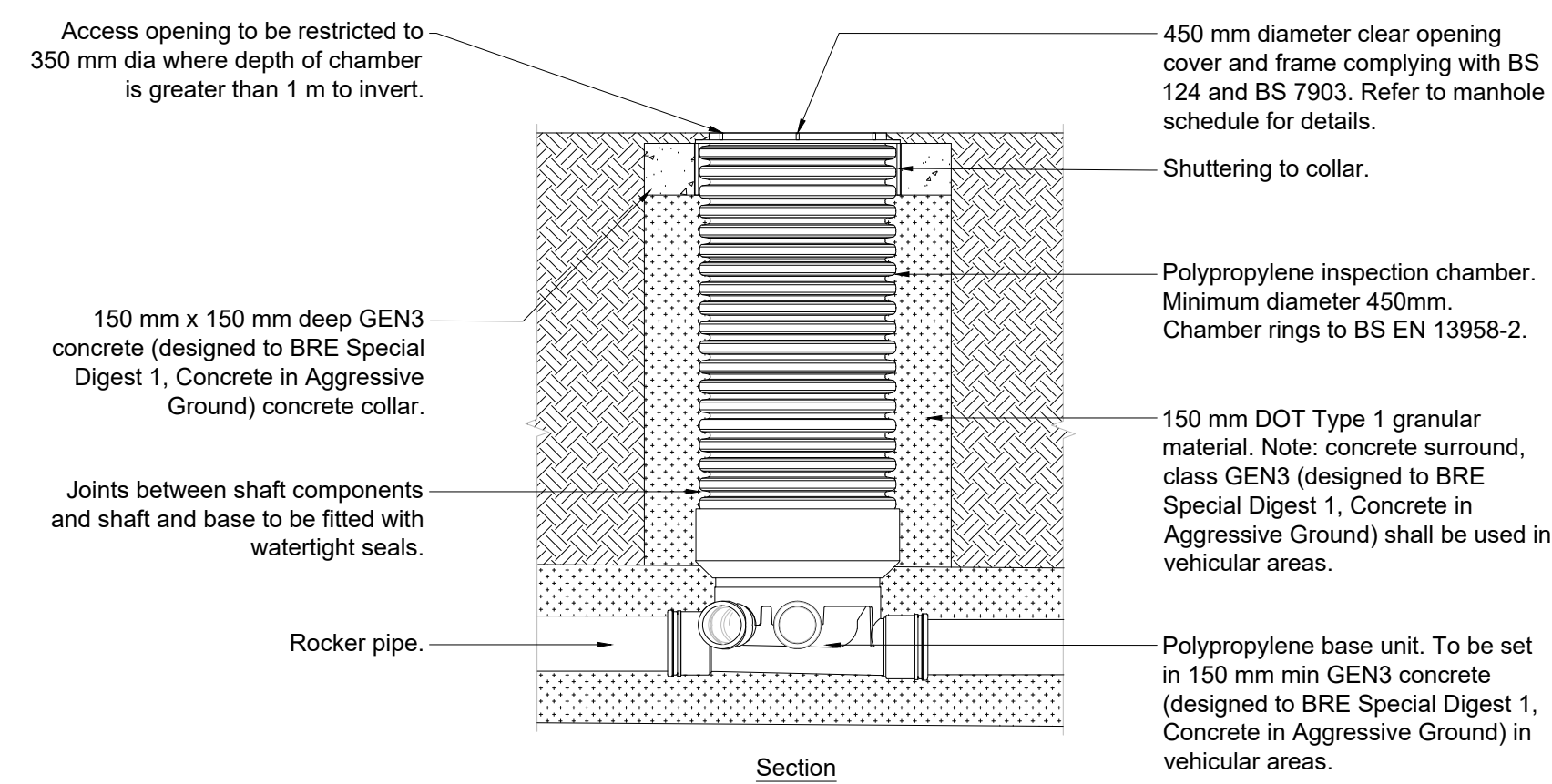


NOTES:

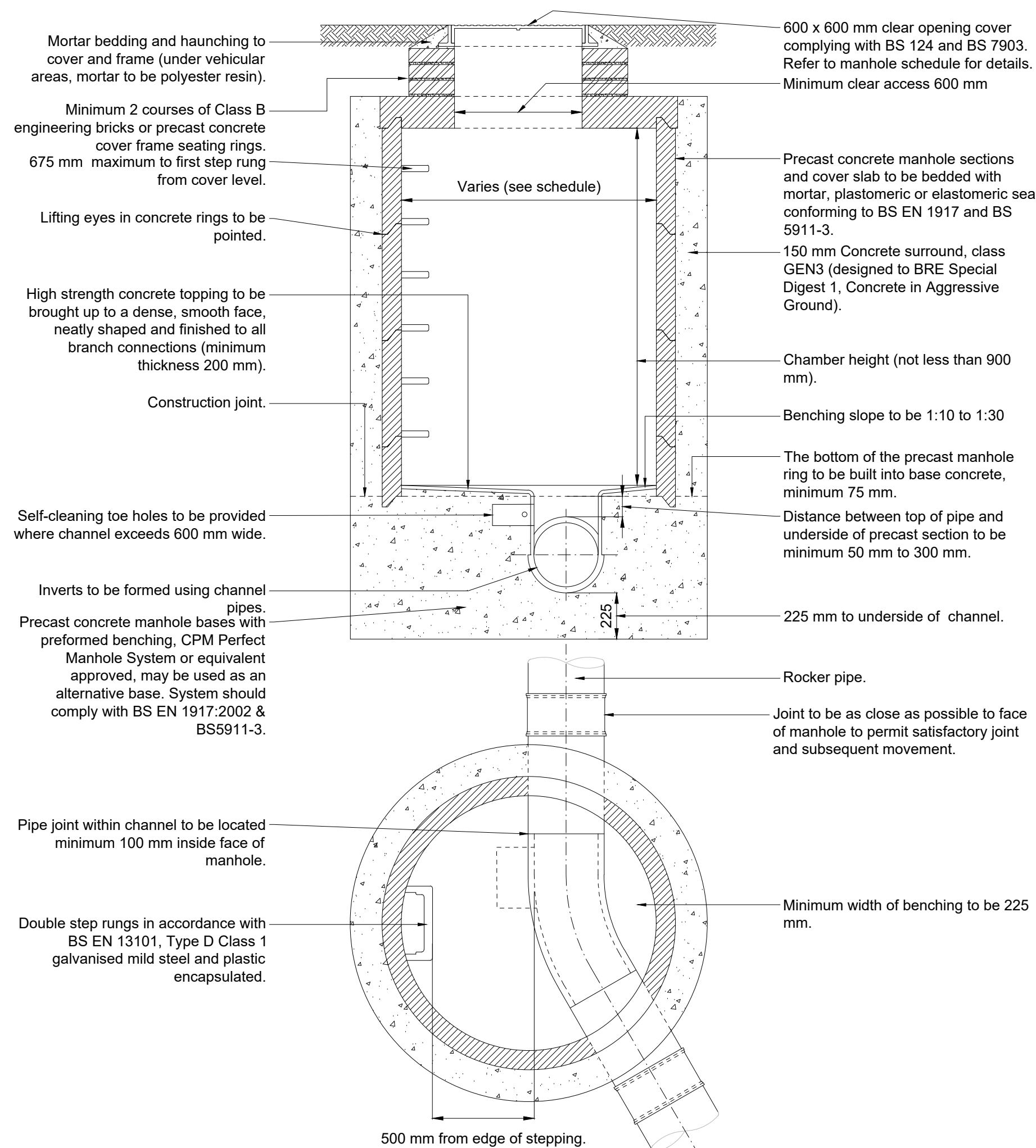
1. X = Outside diameter (OD) of pipe.
2. The first 300mm of fill above the crown of the pipe shall not be mechanically compacted.
3. Geotextiles may be used, where directed by the Engineer, to contain bedding material in certain soils, such as running sand.
4. In very wet conditions, or where directed by the Engineer, a temporary land drain may be laid within the granular bed.

Pipe (DN) size	Y (mm)	Granular fill
100	400	10mm nominal size single stone
150	400	10, 14mm nominal size single stone
225 - 300	500	
375 - 450	700	
525 - 675	700	10, 14, 20mm nominal size single stone
750 - 1200	850	
1350 - 1800	1000	

Pipe bedding details
Scale 1:20



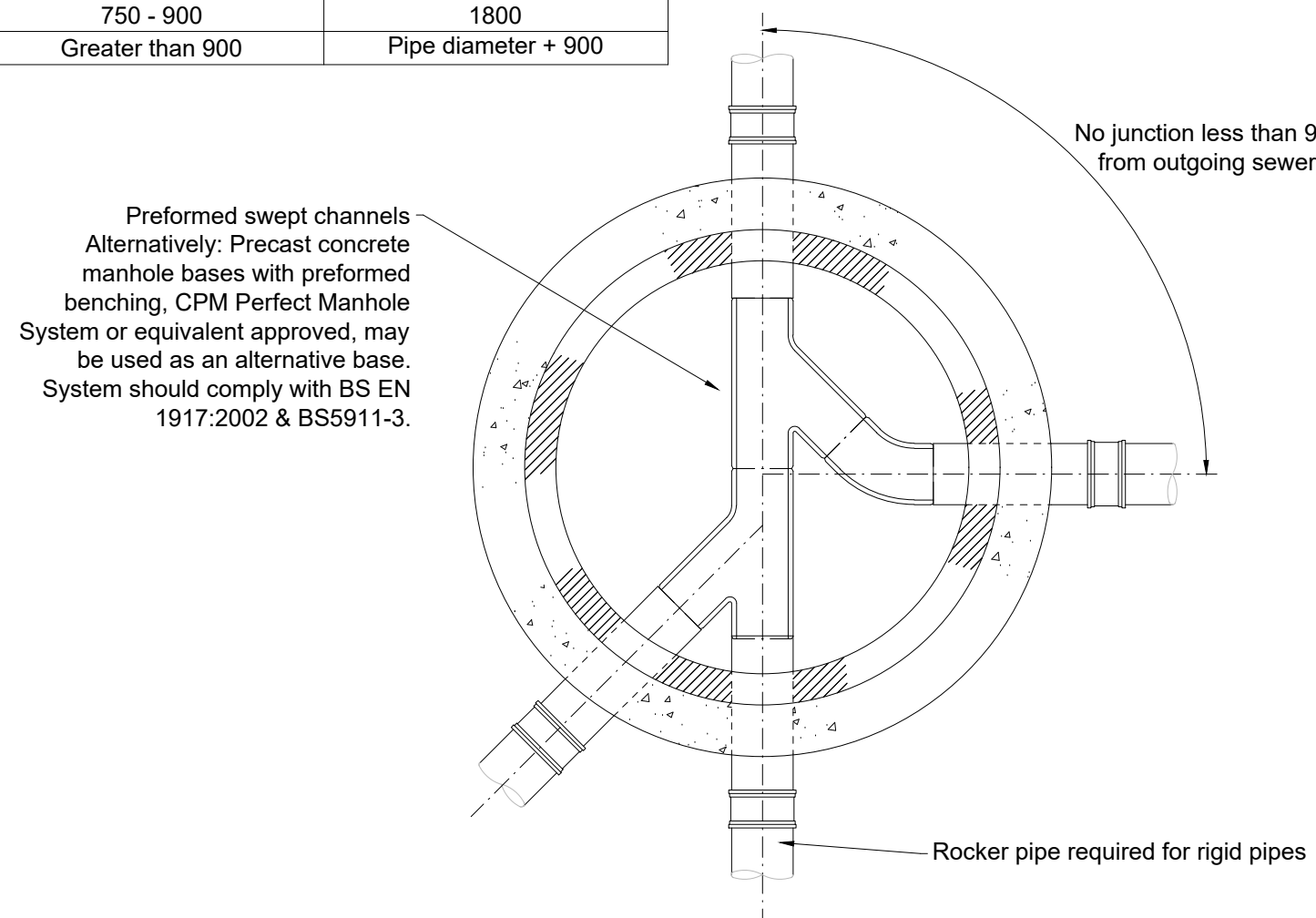
Inspection chamber (Type IC2)
Non-entry
Maximum depth to soffit 3.0m
Scale 1:20



Type 2 manhole
(maximum depth from cover level to soffit of pipe 3.0m)
Scale 1:20

Nominal internal diameter of largest pipe in manhole (mm)	Minimum nominal internal dimension of manhole (mm)
Less than 375	1200
375 - 450	1300
500 - 700	1500
750 - 900	1800
Greater than 900	Pipe diameter + 900

Nominal diameter (mm)	Maximum effective length (m)
150 - 600	0.60
601 - 750	1.00
Over 750	1.25



Rigid pipes built into manhole should have flexible joint as close as feasible to the external face of the structure and the length of the next rocker pipe should be as shown.

Typical arrangement of pipe junctions within manholes

Notes

1. Do not scale from this drawing on print or electronically. Work from figured dimensions only.
 2. No deviation from the details on this drawing is allowed without CampbellReith's prior permission in writing.
 3. Read this drawing with all Architect's, Service Engineer's and CampbellReith's relevant details, specifications and drawings.
 4. All work is to be done in accordance with the relevant specifications issued by CampbellReith, British Standard Codes of Practice, Statutory Requirements and the Contract Documents.
 5. Drawing revision:
- | | |
|------------------------|--|
| P: Preliminary | Evolving drawings for approvals, tenders, billings etc. |
| C: Contractural | Drawings authorized and approved for stage completion
i.e. Stage-Tender or Stage 5-Construction . |

6. Drawing status:
- Work in progress
- S0** - Initial status
- Shared (Non-contractual)**
- S1** - Suitable for coordination, **S2** - Suitable for information, **S3** - Suitable for review and comment, **S4** - Suitable for stage approval.
- Published (For contractors purposes)**
- A1, A** etc - Authorised and accepted ('n' relates to work stages)
- B1, B** etc - Partial sign-off (with comments)
- CR** - As constructed record document (Final Construction ONLY. Any deviations to that which is on site is not the liability of CampbellReith)
7. Work Stages:
- 2 - Concept, 3 - Definition, 4 - Design, 5 - Build & commission, 6 - Handover
8. Only drawings with **revision Cn** and **status A5** to be used for Construction

P1	Issued for Information	07/09/23	IC
Rev	Description	Date	By

CampbellReith
consulting engineers

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Job Title **Gwersyllt, Wrexham**

Client	J10 Planning
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Proposed Drainage
Standard Details
(Sheet 1 of 3)

Drawn by	Date made	Scale @ A1	Checked by	Suitability	CR Project
IC	17/08/23	1:20	LM	S2	14009

Project No.	Originator	Volume	Lvl/Loc	Type	Role	Number	Rev
14009	CRH	ZZ	XX	DR	C	5301	P1