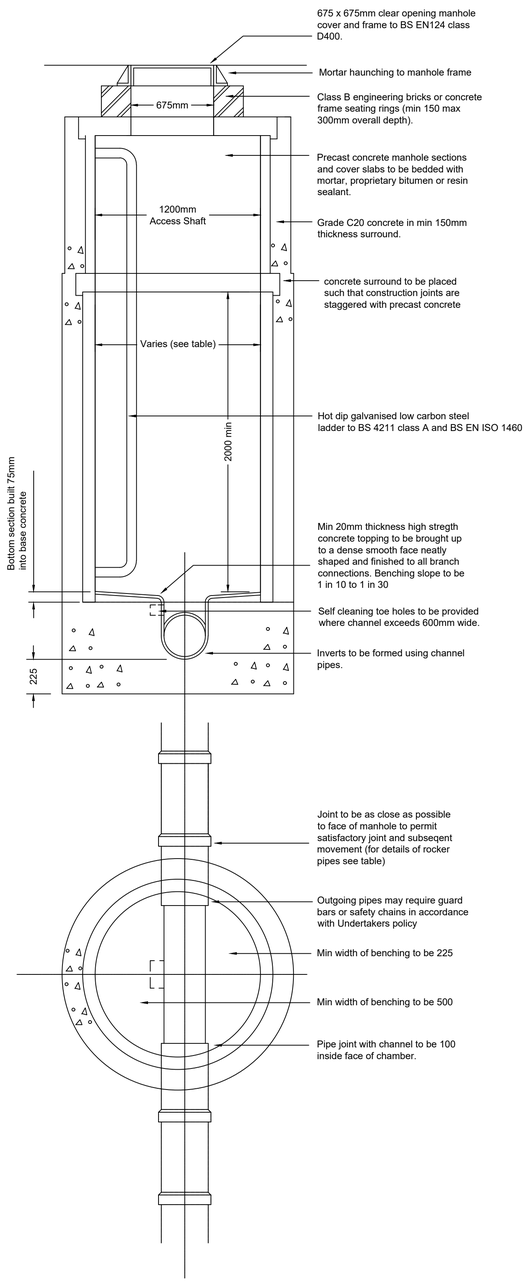
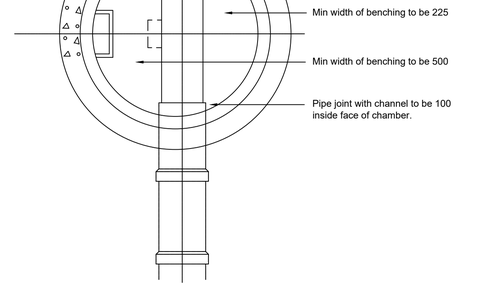
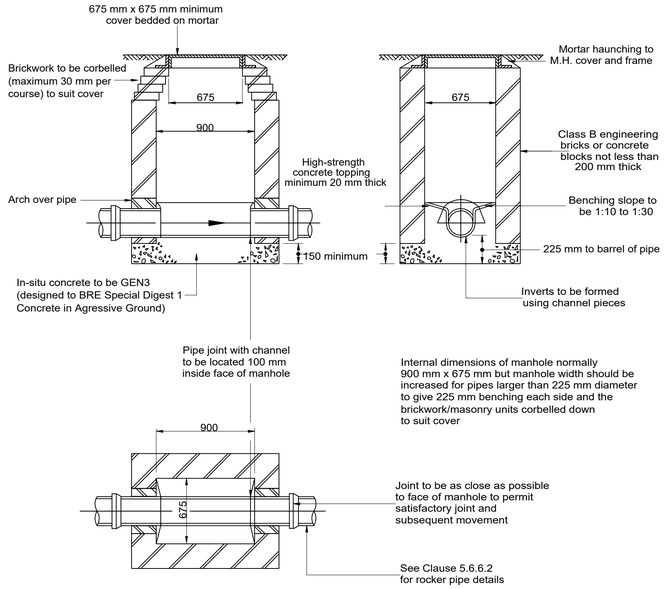


SFA Figure 2.4
Typical Type A Manhole
Depth from cover level to soffit of pipe 3 m to 6 m
For steps and access arrangements see SFA Table 2.3



SFA Figure 2.5
Typical Type B Manhole
Maximum depth from cover level to soffit of pipe 3.0 m
For steps and access arrangements see SFA Table 2.3



Note: The use of precast rectangular concrete manhole units with 150 mm grade GEN3 concrete surround (designed to BRE Special Digest 1 Concrete in Agressive Ground) is permitted.
The design of manholes will need to comply with the Undertaker's safety policy.

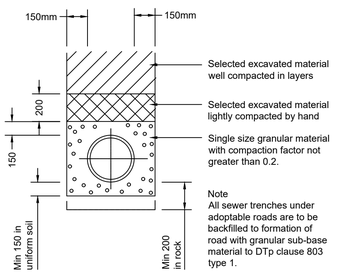
SFA Figure 2.7
Typical Type D Manhole
Depth from cover level to soffit of pipe less than 1.0m
Approval of the Undertaker must be given for installation of this type of manhole.

Diameters of manholes

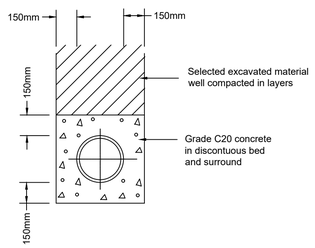
Diameter of largest pipe in manhole (mm)	Internal diameter of manhole (mm)
Less than 375	1200
375-700	1500
750-900	1800
Greater than 900	Consult Untertaker

Rocker Pipes

Pipe diameter (mm)	Effective length (m)
150-600	0.60m
675-750	1.00m
825 and over	1.25m

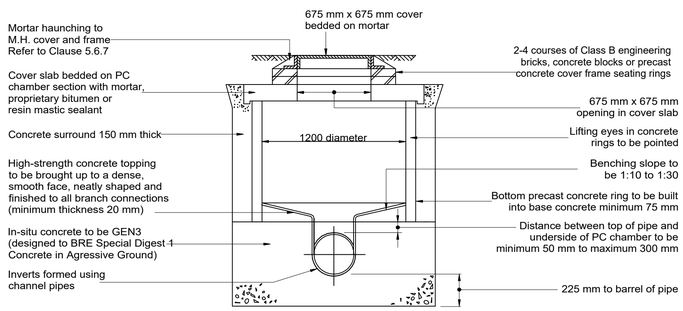


Class S Bedding



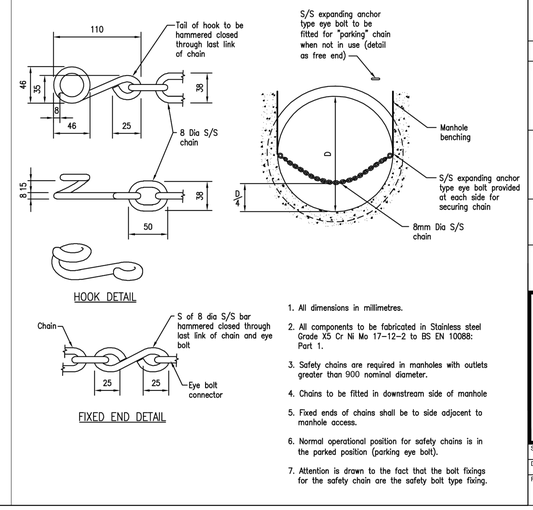
Concrete Protection

Concrete protection shall be interupted at each pipe joint by shaped compressible filler



Note: The use of precast rectangular concrete manhole units with 150 mm grade GEN3 concrete surround (designed to BRE Special Digest 1 Concrete in Agressive Ground) is permitted.

SFA Figure 2.8
Typical Type E Manhole
Depth from cover level to soffit of pipe 1.0m to 1.5m
Maximum sewer diameter 375mm
Approval of the Undertaker must be given for installation of this type of manhole.



1. All dimensions in millimetres.
2. All components to be fabricated in Stainless steel Grade X5 Cr Ni Mo 17–12–2 to BS EN 10088: Part 1.
3. Safety chains are required in manholes with outlets greater than 900 nominal diameter.
4. Chains to be fitted in downstream side of manhole
5. Fixed ends of chains shall be to side adjacent to manhole access.
6. Normal operational position for safety chains is in the parked position (parking eye bolt).
7. Attention is drawn to the fact that the bolt fixings for the safety chain are the safety bolt type fixing.

The Contractor is to check and verify in conjunction with the Architects details all setting out points, building and site dimensions, levels and sewer invert levels at connection points and ensure that they are fully conversant with the contents and requirements of the site investigation report before work starts. The Contractor is to comply in all respects with current building legislation, British Standard Specifications, Building Regulations etc.,whether or not specifically stated on this drawing.

This drawing is not intended to show details of ground conditions or ground contaminants. Each area of ground relied upon to support any structure depicted (including drainage) must be investigated by the Contractor any areas of formation for said structures which do not accord with the anticipated conditions as described in the site investigation report are to be immediately notified to the Engineer, where applicable. Any suspect fluid ground or ground contaminants on or within the ground should be further investigated by a suitable expert. Any earthworks shown indicate typical slopes for guidance only and should be investigated further by a suitable geotechnical expert.

Where existing trees are shown to be retained they should be subject to a full Arboricultural inspection for safety. All trees are to be planted so as to ensure they are a minimum of 5 metres from buildings and 3 metres from drainage and services, where applicable. A foundation is to be provided to accommodate the proposed tree planting, where applicable.

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GENERAL NOTES

1. This drawing is to be read in conjunction with relevant architectural and engineering drawings.
2. Levels indicated in blocks are Finished floor levels and are 150mm above adjacent finished ground levels unless otherwise shown.
3. Levels of the existing road at the point of tie-in with proposed site road must be checked prior to commencement of works.
4. Any discrepancies between the details shown and actual on site conditions to be reported immediately to the engineer prior to commencement of works.

ADOPTABLE ROADS AND SEWERS

1. Roads, footways and parking bays which form part of the highway to be adopted under Section 38 of the Highways Act 1980 shall comply with the requirements of the Adopting Authority.
2. Sewers to be adopted under Section 104 of the Water Industries Act 1991 shall comply with the Water Authorities Association "Sewers for Adoption 6th Edition" with any amendments specified by the Adopting Water Authority.
3. All pipes to be used in adoptable sewerage shall be either claywate to BS EN 295 or concrete to BS EN 1916 and BS 5911: Part 1 with Class S bedding unless otherwise stated. With approval of the Adopting Authority solid wall concentric external rib reinforced uPVC pipes complying with the relevant provisions of BS EN 13476 may be used.
4. Where cover to a pipe is more than 1200mm under adoptable carriageway the trench shall be filled to formation of the carriageway with well compacted DTp Type 1 material.
5. Where cover to a pipe is less than 1200mm under adoptable carriageway it shall be provided with concrete protection in accordance with the specification of the adopting authority and back filled to formation of the carriageway with well compacted DTp Type 1 material. Where concrete bed and surround is specified flexibility of joints is to be maintained by using compressible bitumen impregnated fibreboard at each pipe joint.
6. All existing drainage invert levels, diameters and locations are to be checked by the Contractor prior to the commencement of any proposed drainage work. Any difference between actual and drawn details is to be reported to the Engineer immediately.
7. Positions of existing services/statutory undertakers apparatus adjacent to or crossing proposed sewers is to be checked by the Contractor prior to starting work.

Rev.	Description	Date	By
-	First issue	23.03.21	CS

Drawing Status: **PRELIMINARY**

Subject to WSCC & Icosa approval as part of ongoing consultations and design checks. Amendments may be requested.

Client: PERSIMMON Together, we make a home

Project: Dappers Lane, Angmering, West Sussex

Title: Drainage Construction Details

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