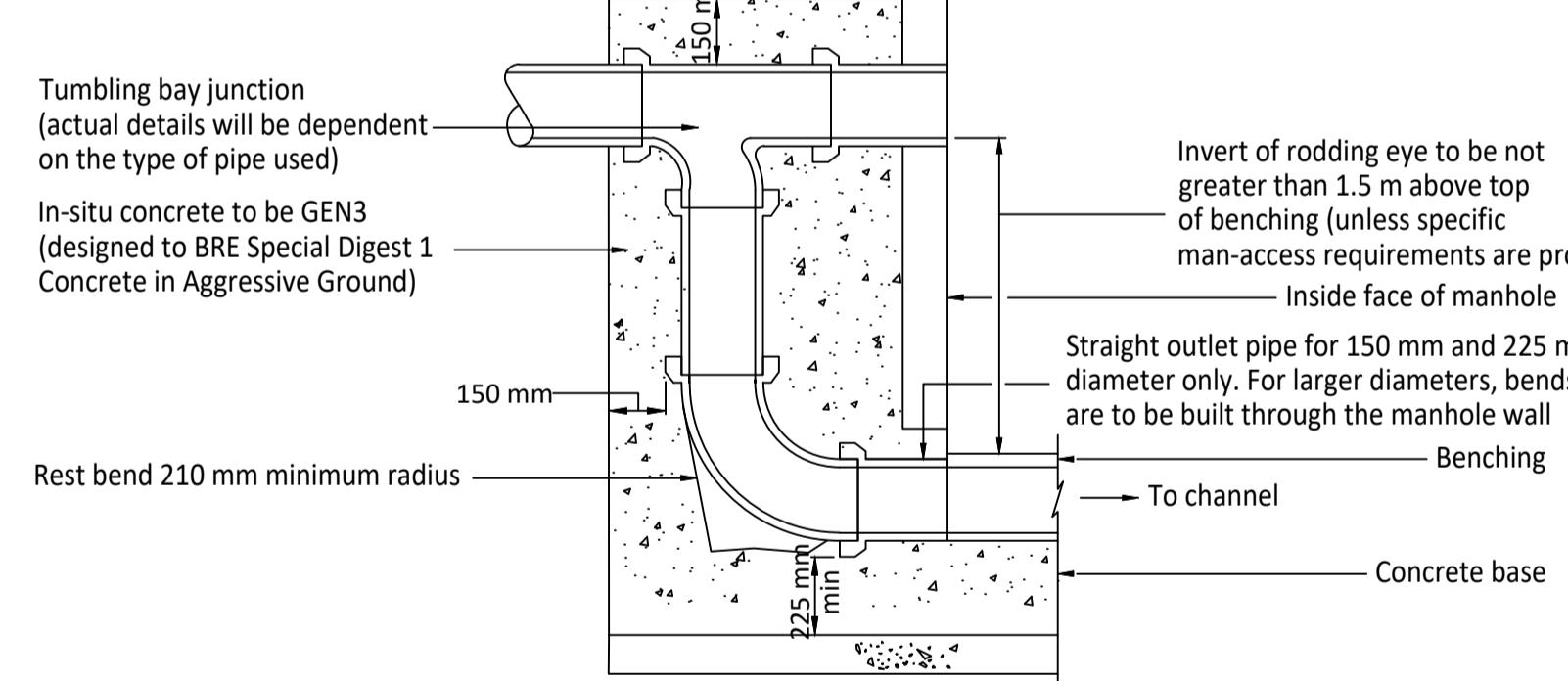
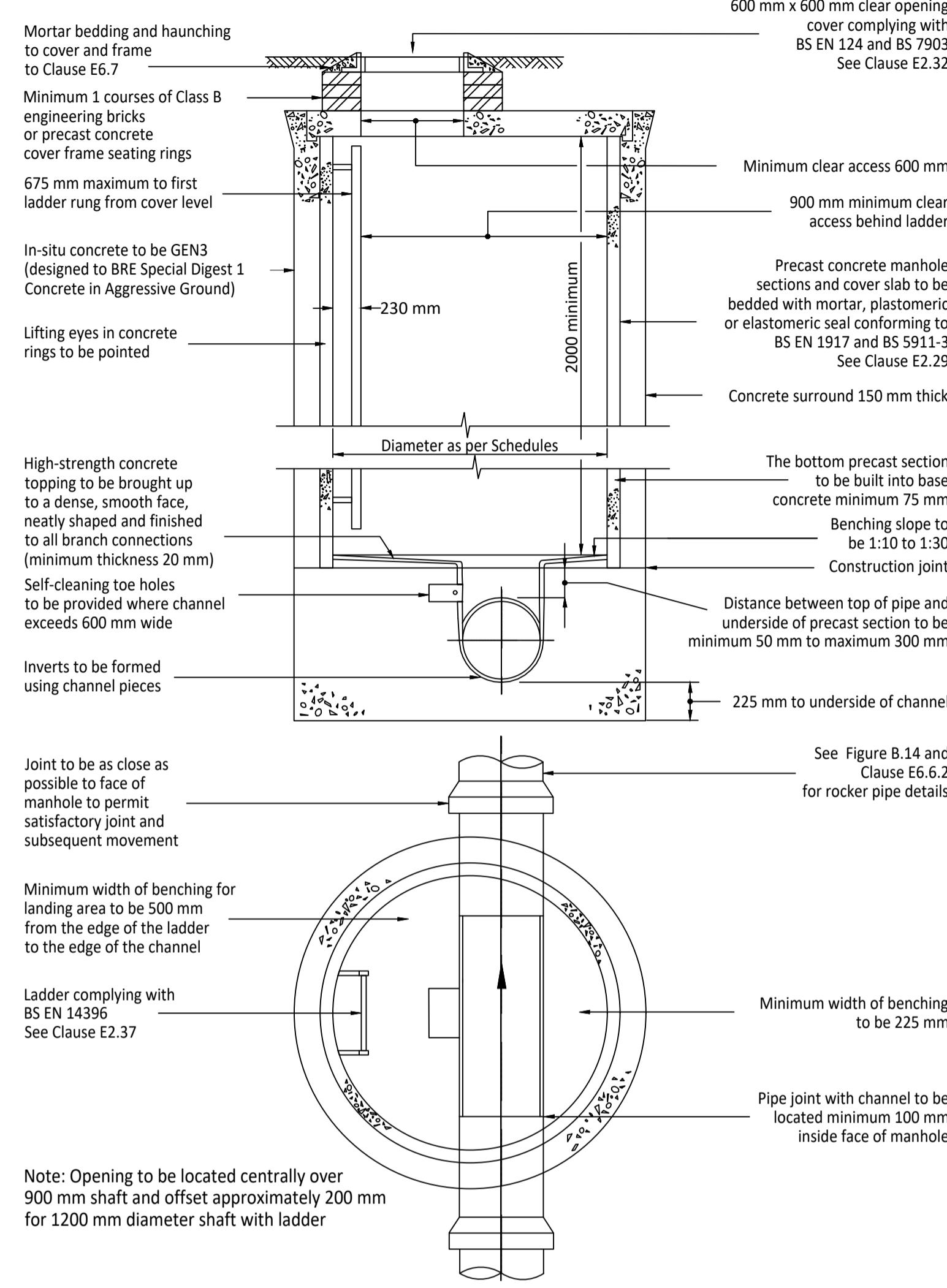
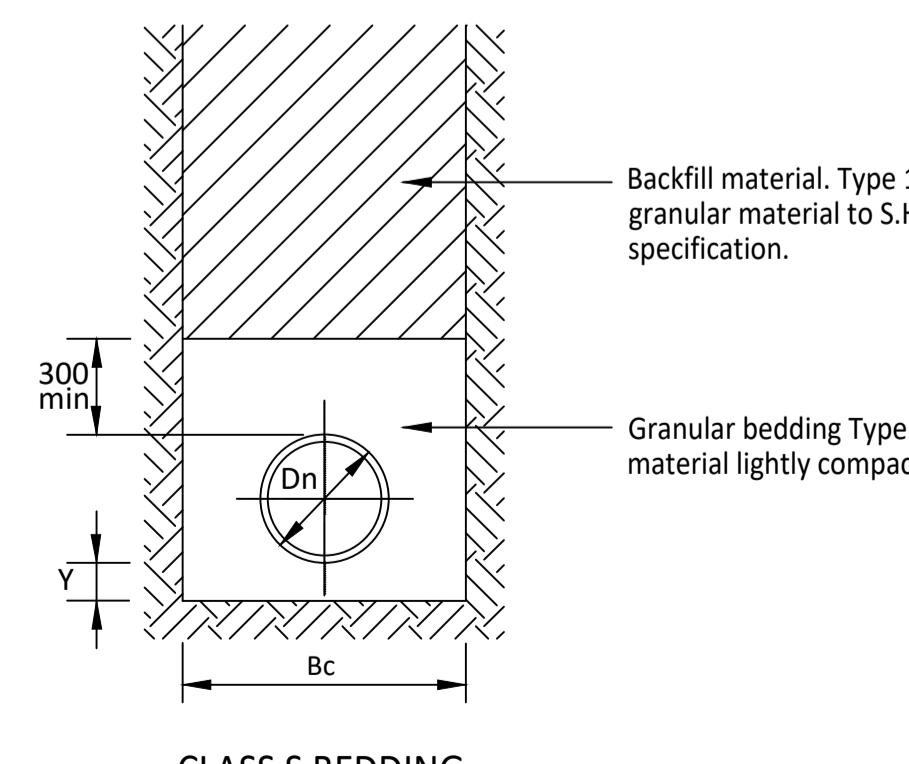


ADOPTABLE MANHOLE DETAIL - TYPE A

Depth from cover level to soffit of pipe 3 m to 6 m



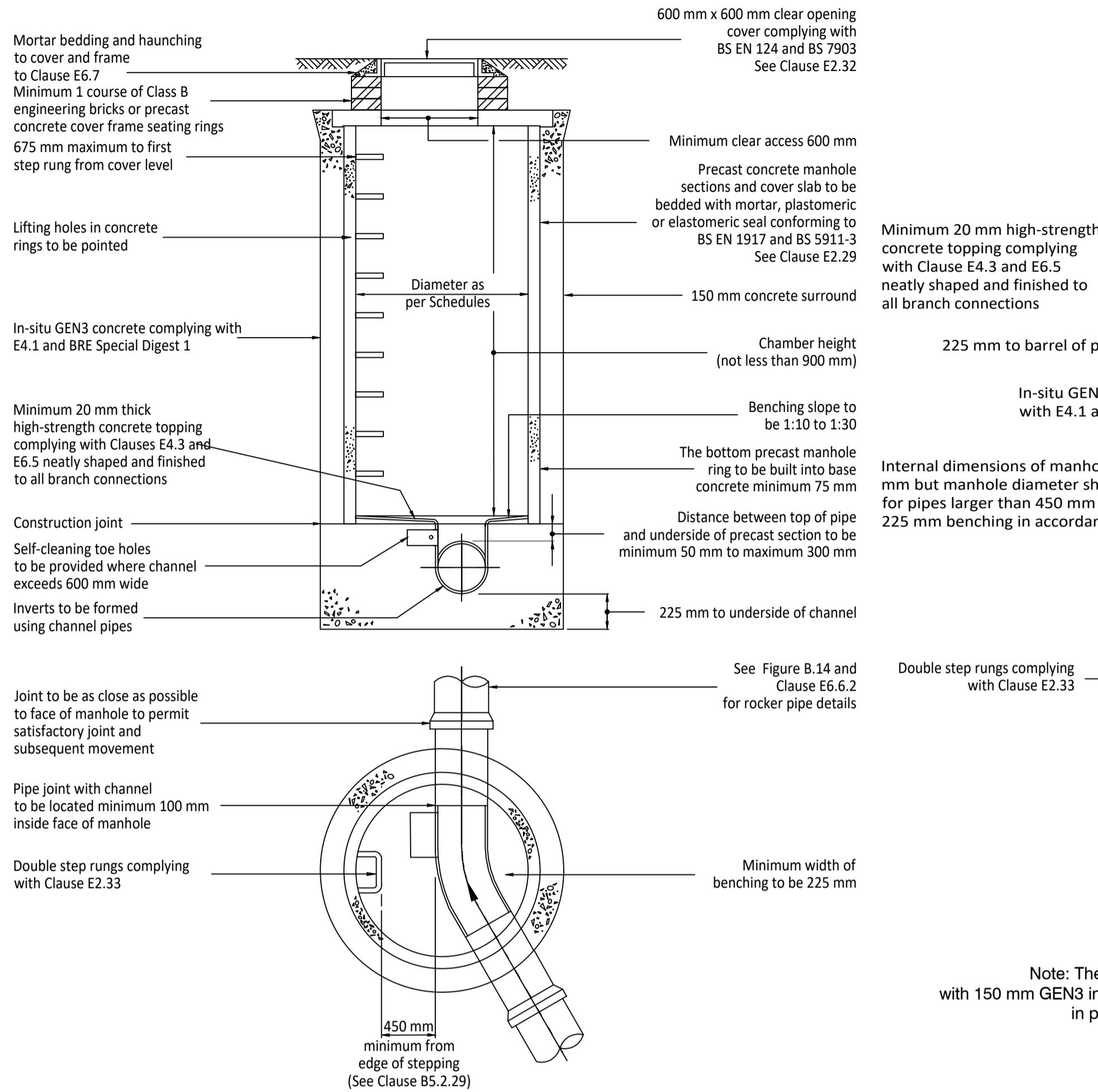
EXTERNAL VERTICAL BACKDROP



CLASS S BEDDING (On trafficked areas)

ADOPTABLE MANHOLE DETAIL - TYPE B

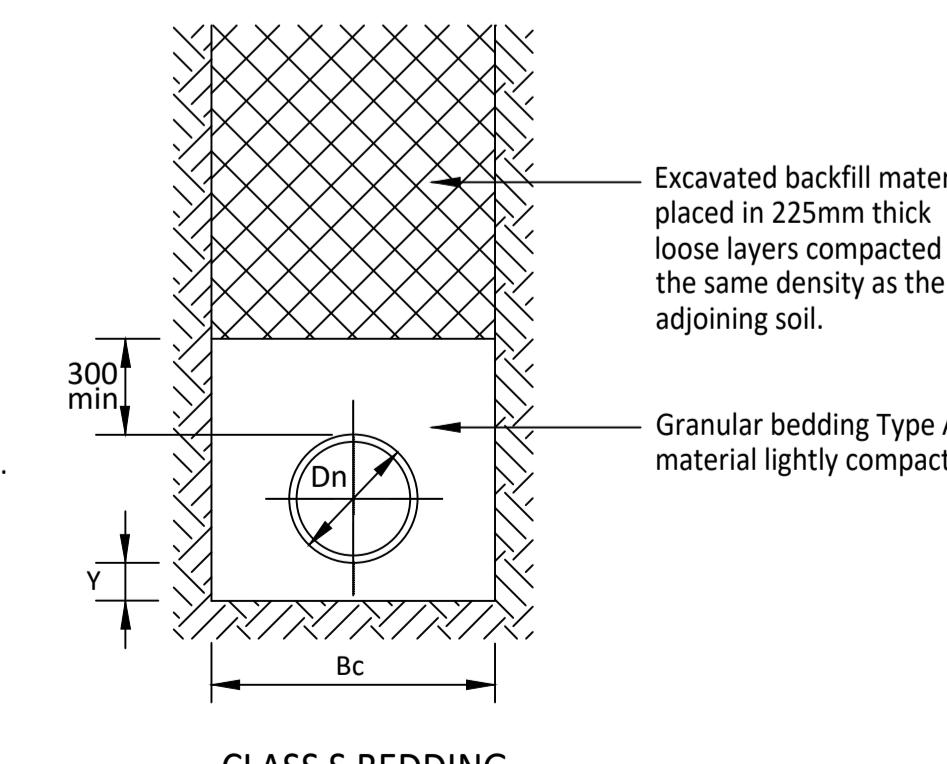
Depth from cover level to soffit of pipe 1.5m to 3.0m



GRANULAR BEDDING

Nominal bore of pipe (mm)	Alternative Aggregate sizes (mm)		Y(mm)	L(mm)	Z Min (mm)
	Single sized	Graded			
100	10	-	100	200	150
150	10 or 14	14-5	150	200	150
225	700	580	150	200	
300	750	680	150	200	150
375	1050	950	150	200	150
450	1150	1030	150	200	150
525	1200	1120	150	200	150
600	1350	1240	150	200	150
675	1450	1330	150	200	225
750	1500	1400	150	200	225
825	1600	1490	150	225	225
900	2100	1900	150	225	225
975	2150	1950	175	250	300
1050	2250	2050	175	275	300
1200	2500	2250	200	300	300
Over 1200	O.D+1000	O.D+800	I.D/6	I.D/4	54
					400

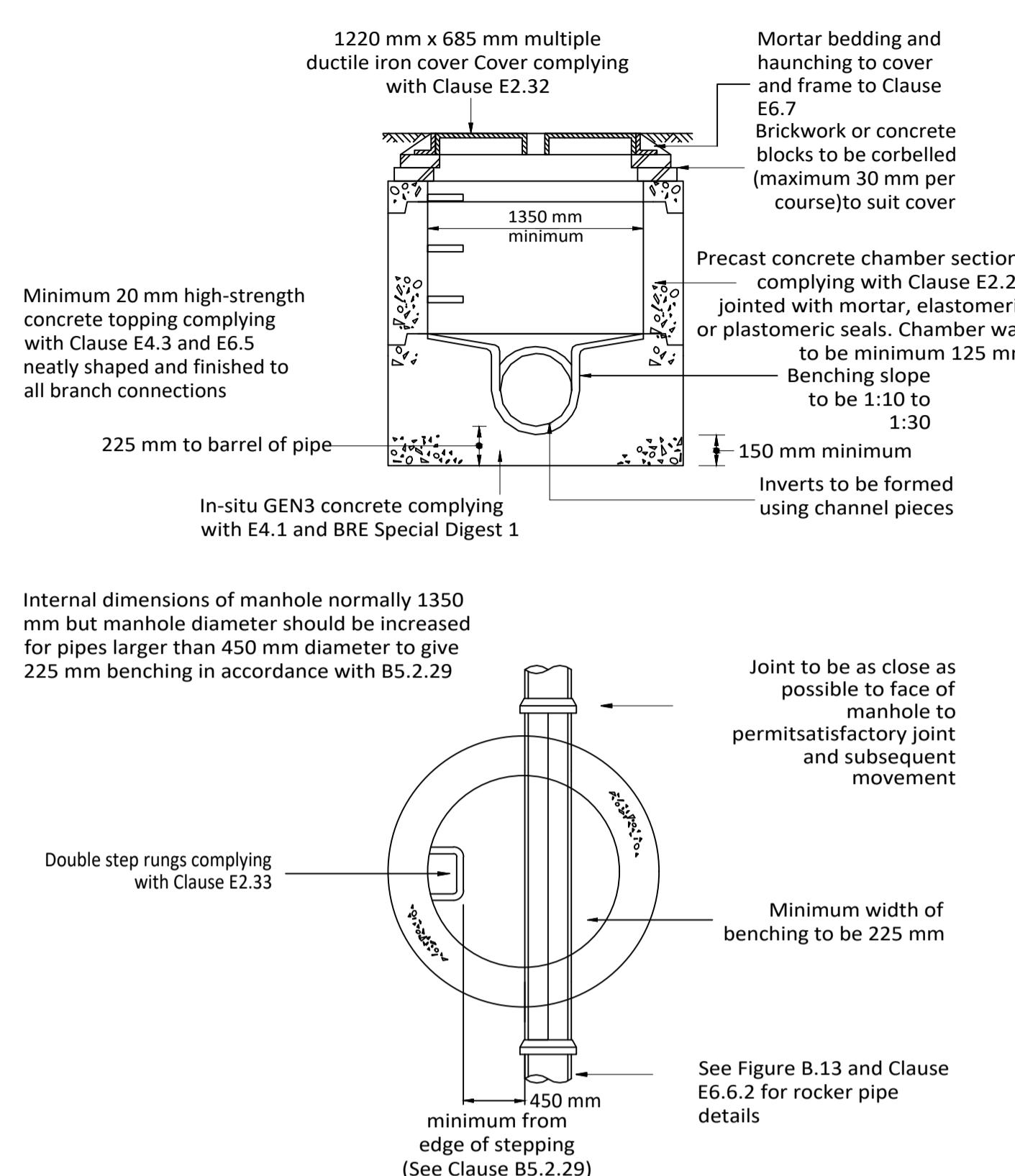
Granular bedding for pipes and backfilling material for temporary drains (trench sub-drains) shall consist of aggregates from natural sources to BS EN 13242 and BS EN 1744-1 or sintered pulverised fuel ash complying with the relevant provisions of BS 3892; sized in accordance with the above table
Selected fill material, whether selected from locally excavated material or imported, shall consist of uniform, readily compactible material, free from vegetable matter, building rubbish and frozen material, or materials susceptible to spontaneous combustion, and excluding clay of liquid limit greater than 80 and/or plastic limit greater than 55 and materials of excessively high moisture content. Clay lumps and stones shall be retained on 100mm and 40mm sieves respectively.



CLASS S BEDDING (Verges & Landscaping)

Typical manhole detail - Type C

Depth from cover level to soffit of pipe less than 1.5 m
Rigid material construction



Note: The use of precast concrete chamber units to E2.29 with 150 mm GEN3 in-situ concrete complying with E4.1 and BRE Special Digest 1 in place of brickwork construction is permitted.

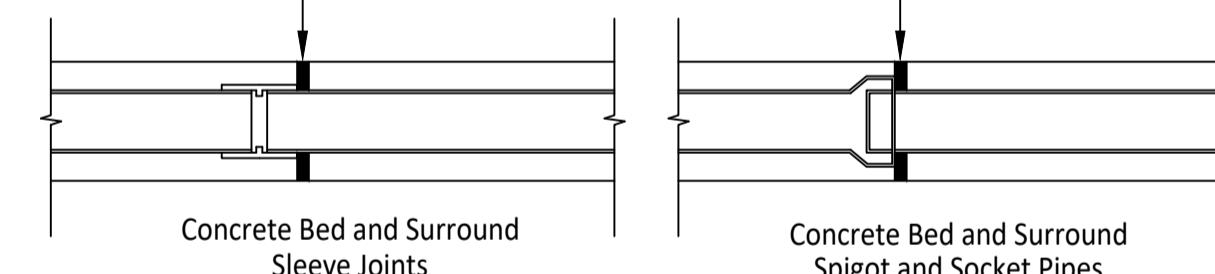
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GENERAL DRAINAGE NOTES:

- All sewers to comply with the requirements of the water authorities publication "Design and Construction Guidance, Version 2.1" together with Independent Water Network Addendum.
- All new sewers and drains shall be the subject of a Section 104 agreement of the Water Industry Act 1991.
- Invert levels of existing manholes and sewers to be checked on site before construction commences and results reported to engineers.
- All manholes, ironworks and sewer joints to suit loading as below:
 - Carriageways and Roads - E600
 - Footways and Pavements - C250
 - Footways and Pavements - C250
- All sewer pipes, up to, and including 255mm to be vitrified clay to BS EN295. All sewer pipes 300mm diameter and above to concrete pipes to BS EN1916.
- All drainage shall be installed and tested strictly in accordance with the Manhole and Sewer Construction Instructions, BS EN 1801, Local Water Authority requirements and the Building Regulations.
- All bedding shall be Class S unless noted otherwise.
- All trenches under existing and proposed public highways are to be backfilled with thoroughly compacted Type 1 granular sub-base material.
- Drainage laid beneath roads and areas of vehicular access (car parking etc) unless less than 1200mm of cover shall be encased in concrete and provided with reinforced movement joints. Drainage laid beneath paths, footways and pedestrian areas with less than 900mm of cover shall be similarly treated.
- Chambers with outgoing pipes greater than 600mm diameter shall be fitted with guard bars, safety chains or other approved safety devices.
- The use of precast concrete products made with sulphate resisting cement is mandatory, unless a laboratory report proves such precautions are not necessary.
- All gully connections to use a minimum diameter pipe of 150mm and to be surrounded by a minimum of 150mm of grade C8/C10 concrete over its full length (which should not exceed 15m) and its connection to the carrier system.

HEADWALL NOTES:

1. All dimensions are in millimetres unless shown otherwise.
2. Brickwork constructed in English Bond in Class B engineering bricks to BS 3921:1985 & BS EN 727 flush pointed with mortar to designation (I) SHW Series 2400.
3. Brickwork to be:
 - 225 Thick for H < 1.2m
 - 337 Thick for H > 1.2m
4. Concrete to be grade 574.
5. Unformed surfaces to be U2 plain finish.
6. All concrete below ground shall have Class 2 sulphate resistance.



FLEXIBLE JOINT DETAILS



KIER PROPERTY DEVELOPMENTS LIMITED

SOUTH WOKINGHAM SLD PHASE 2B R11 RESERVED MATTERS APPLICATION

DRAINAGE CONSTRUCTION DETAILS SHEET 1

Status

Scale	AS SHN @ A1	Date	MARCH 2025	Drawn	JJS	Checked	RF
Drawing No	A389-R11-RM-511						Revision

B