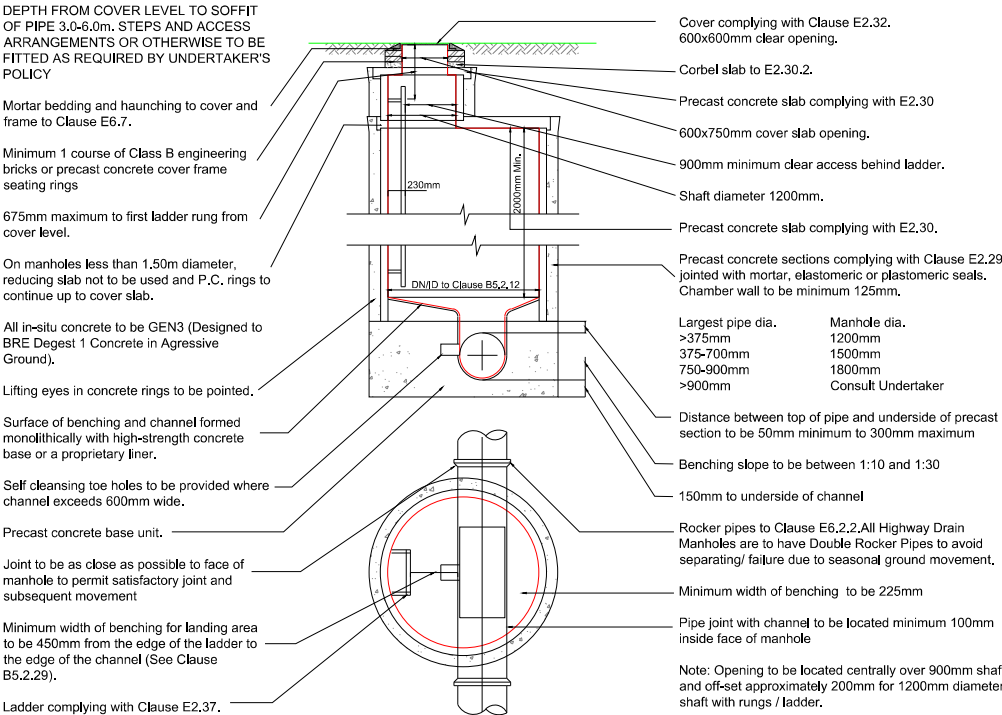
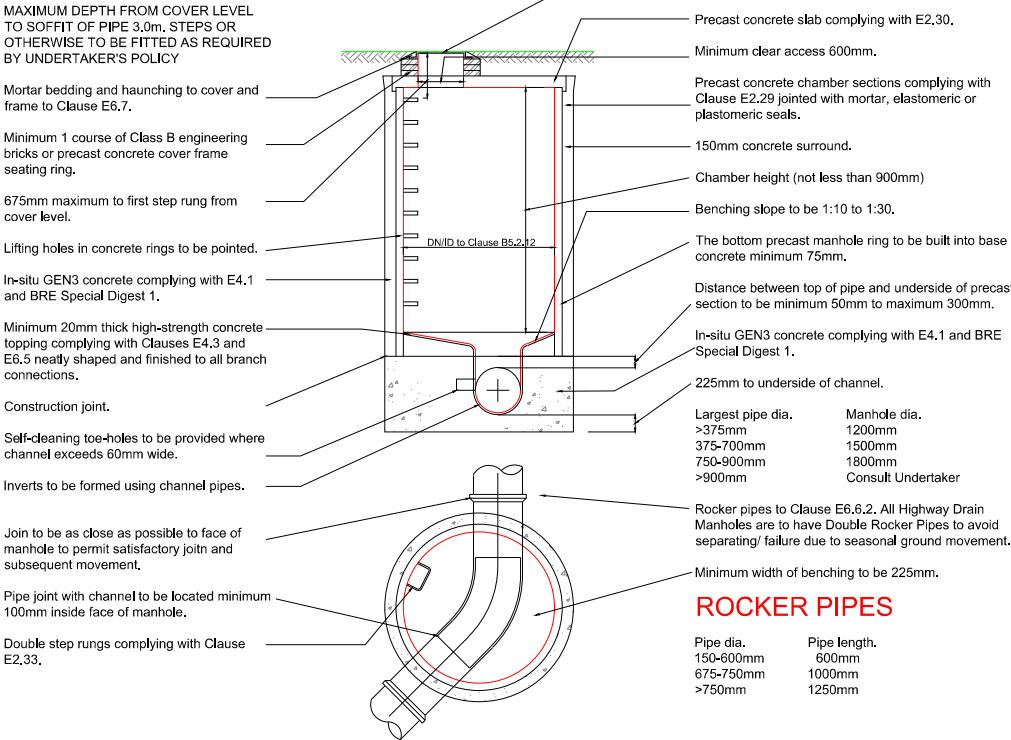


MANHOLE TYPE "A"



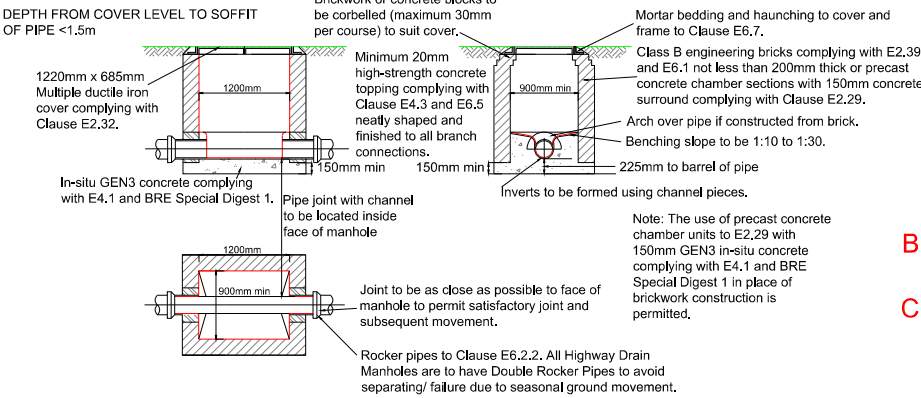
MANHOLE TYPE "B"



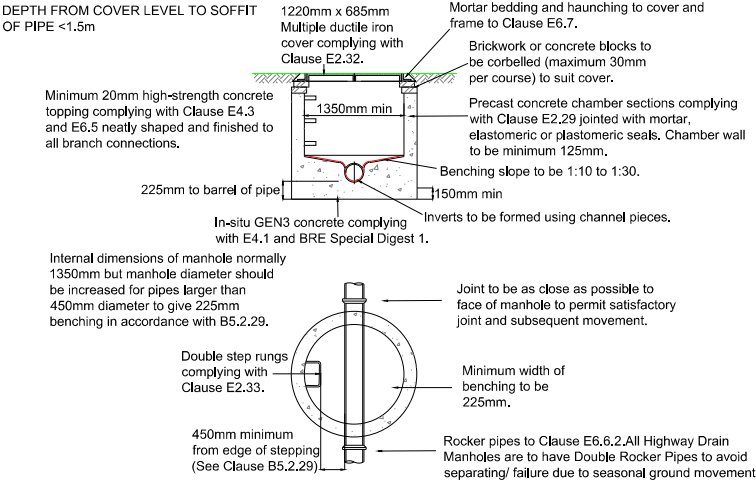
ROCKER PIPES

Pipe dia.	Pipe length.
150-600mm	600mm
675-750mm	1000mm
>750mm	1250mm

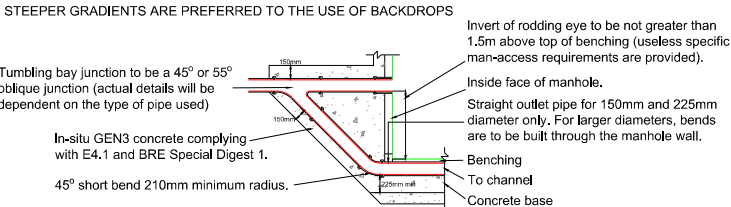
MANHOLE TYPE "C" BRICKWORK



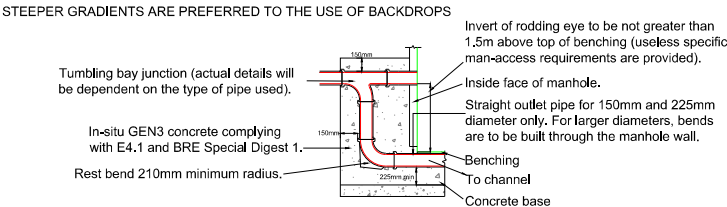
MANHOLE TYPE "C" CONCRETE



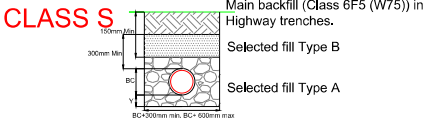
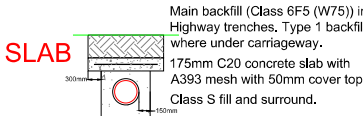
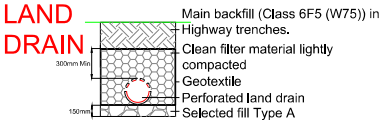
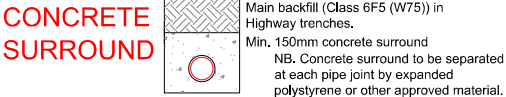
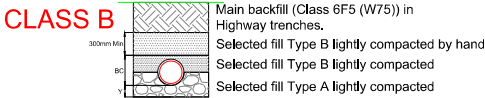
EXTERNAL RAMPED BACKDROP MANHOLE



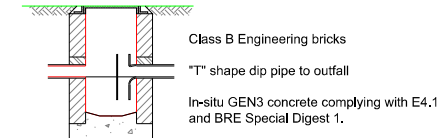
EXTERNAL VERTICAL BACKDROP MANHOLE



BEDDING DETAILS



CATCHPIT DETAIL



PIPE BEDDING AND FILL MATERIAL

1. Granular bedding Type A for pipes and back fill material for temporary drains (trench sub-drains) shall consist of free draining, hard, clean, chemically stable gravel, crushed stone or crushed slag. Shall be aggregates from natural or sintered pulverised fuel ash complying with the relevant provisions of BS 3797 Part 2, respectively sized in accordance with the following:

Nominal bore of pipe (mm)	Alternative aggregate size (mm)
	Single size Graded
100	10 -
150	10 or 14 14 to 5
225-300	10, 14 or 20 14 to 5 or 20 to 5
375-525	14 to 20 14 to 5 or 20 to 5
<525	14, 20 or 40 14 to 5, 20 to 5 or 40 to 5

2. Selected fill Type B, whether selected from locally excavated material or imported, shall consist of uniformly readily compatible material, free from vegetable matter, building material and frozen material or materials susceptible to spontaneous combustion and excluding clay of liquid limit greater than 55 and materials of excessively high moisture content. Clay lumps and stones shall be retained on 75mm and 375mm sieves respectively.

3. Pipe bedding and fill materials to concrete pipes shall not contain more than 0.3 percent sulphate expressed as sulphur trioxide.

4. Sand for bedding pipes shall comply with the provisions of BS 882 Table 5 for Grading Zone C.

5. Dimension Y:

In rock or mixed soils containing rock boulders, large flints or stones or irregular hard spots that result in an uneven trench bottom.

Y=200mm minimum but sufficient to provide 150mm minimum under sockets.

In soils that permit an even trench bottom Y=100mm minimum but sufficient to provide 50mm minimum under sockets.

VITRIFIED CLAY PIPES

Vitrified clay pipes and fittings shall have flexible mechanical joints. Pipes for foul and surface water sewers shall comply with the relevant requirements of BS EN 295 and BS 65 (surface water pipes only)

CONCRETE PIPES

Unreinforced and reinforced concrete pipes and fittings with flexible joints shall comply with the relevant provisions of BS 5911: Part 100 and 110, respectively. All pipes and fittings shall have gasket-type joints of spigot and socket or rebated form, unless otherwise agreed.

COMPRESSIBLE FILLER AND PACKING FOR PIPELINES

Compressible filler for interrupting concrete protection to pipes shall consist of bitumen impregnated insulating board to BS 1142, BS EN 120 and BS EN 317, or other equally compressible material in accordance with the following:

Pipe diameter.	Compressible filler thickness.
<450mm	18mm
>450-1200mm	36mm
>1200mm	54mm

Compressible packing for use between pipes and precast concrete sealing blocks shall consist of bitumen damp-proof sheeting complying with BS 743.

MANHOLE COVERS AND FRAMES

Manholes covers and frames shall comply with the relevant provisions of BS EN 124. They shall be of a non-rocking design which does not rely on the use of cushion inserts.

Class D 400 covers shall be used in carriageways of roads (including pedestrian streets), hard shoulders and parking areas used by all types of road vehicles.

Class B 125 covers shall be used in footways, pedestrian areas and comparable locations. All covers shall be the non-ventilating type and shall have closed keyways.

DRAWING NOTES

This drawing has been produced for and is subject to Section 104 Approval.

All details are to be checked by the contractor prior to any construction taking place.

Rev	Description	Date	By	Chkd
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Dwg Status: Preliminary

Client Name: BELLWAY EAST MIDLANDS

Project Name: RATBY

Drawing Title: ROAD CONSTRUCTION DETAILS

Scale:	NTS	Size:	A1	First Issue Date:	December 2024	Initial:	RA	Check:	JH
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Project No: RED165

Drawing No: 420

Rev: *

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