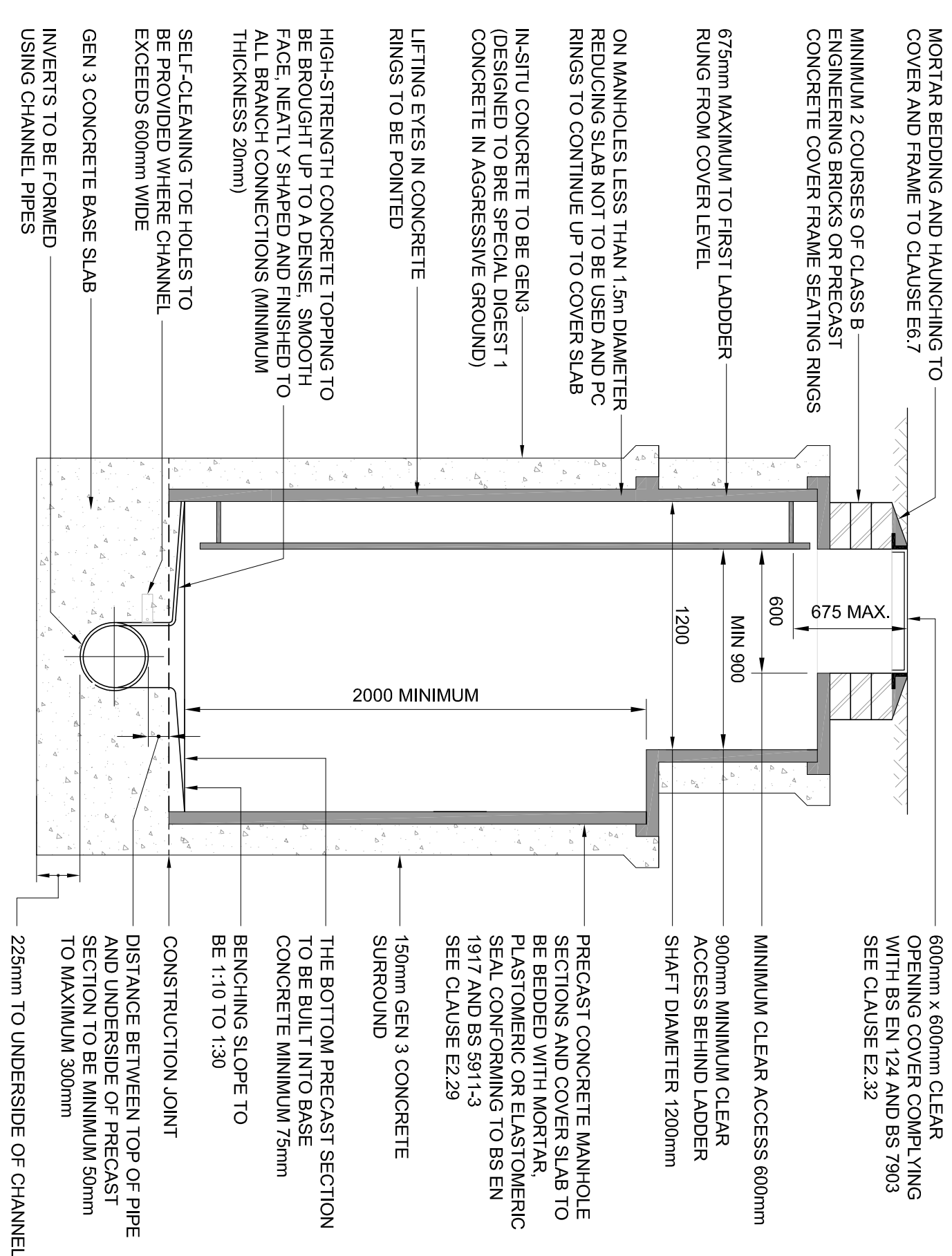
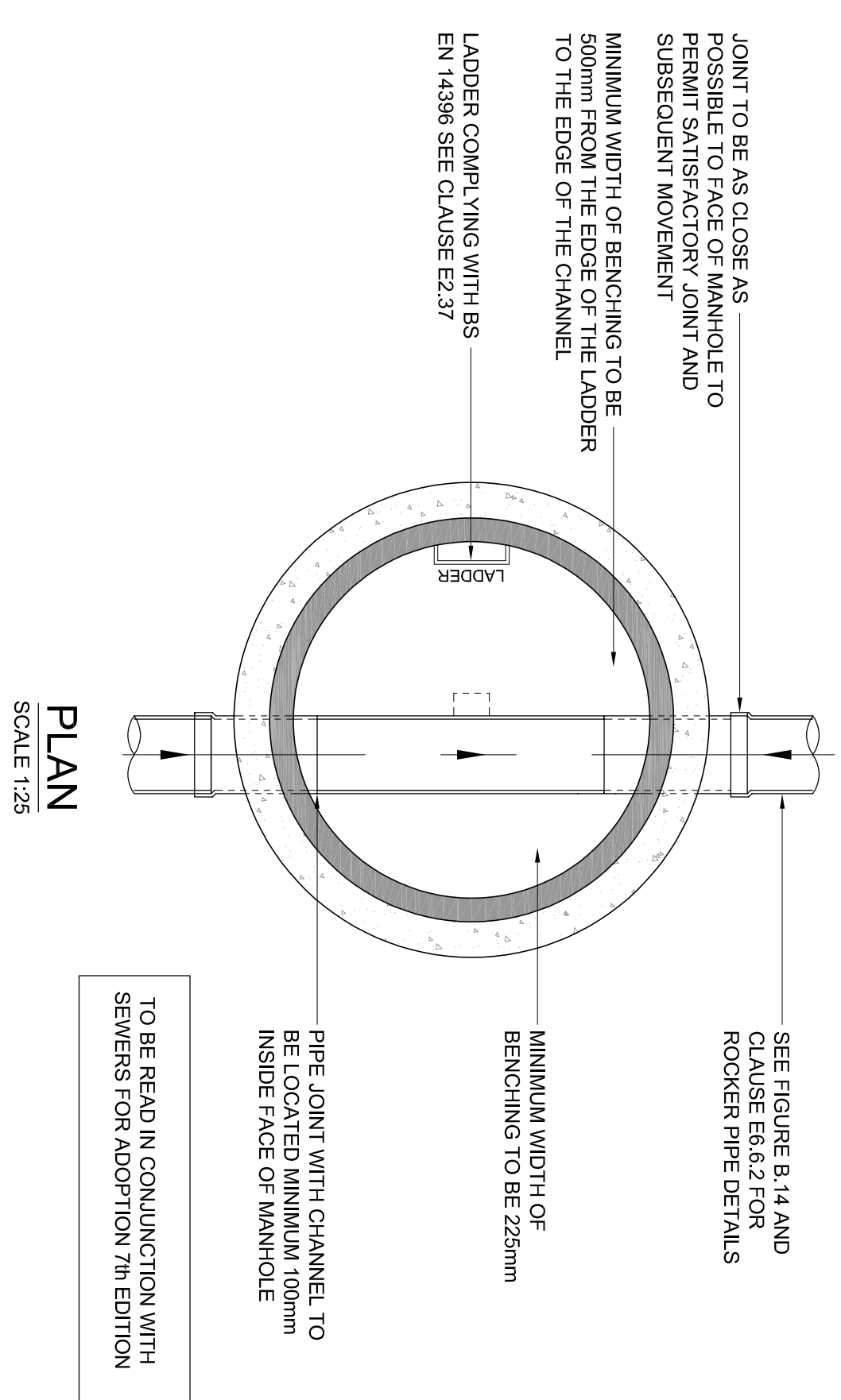
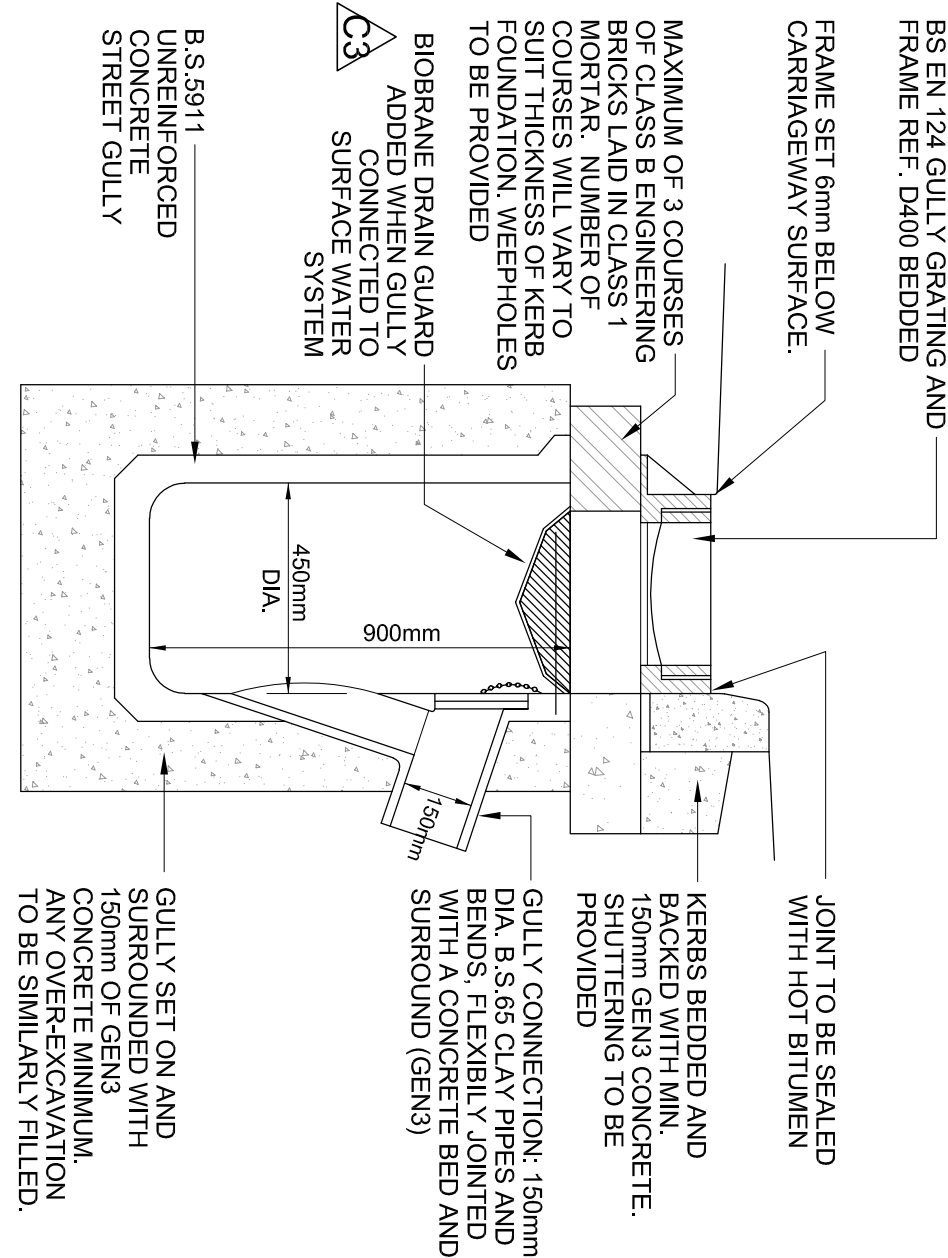




TYPICAL MANHOLE DETAIL - TYPE 1A
MAXIMUM DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE 3.0m TO 6m

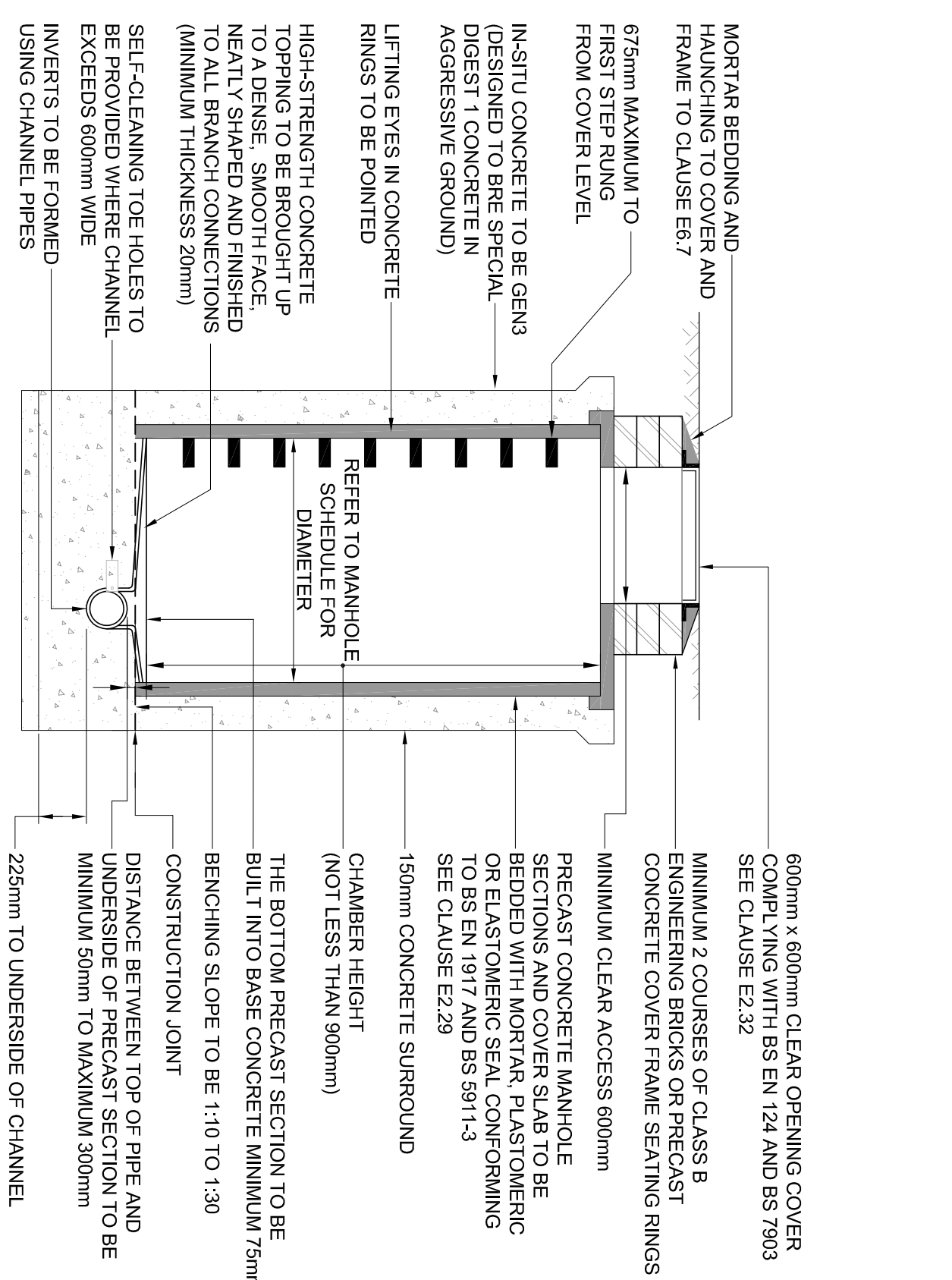


PLAN
SCALE 1:25

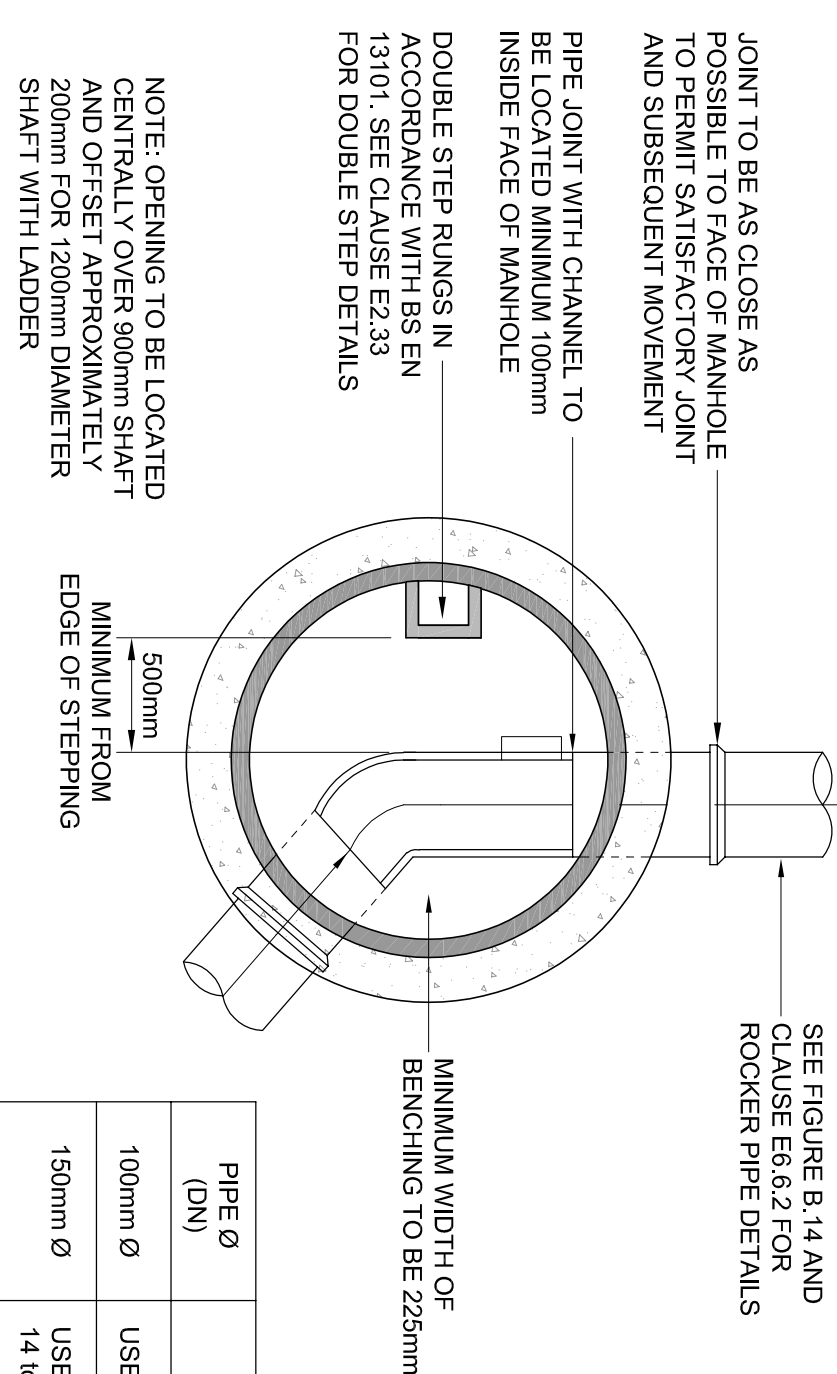


TYPICAL ROAD GULLY

SCALE 1:20

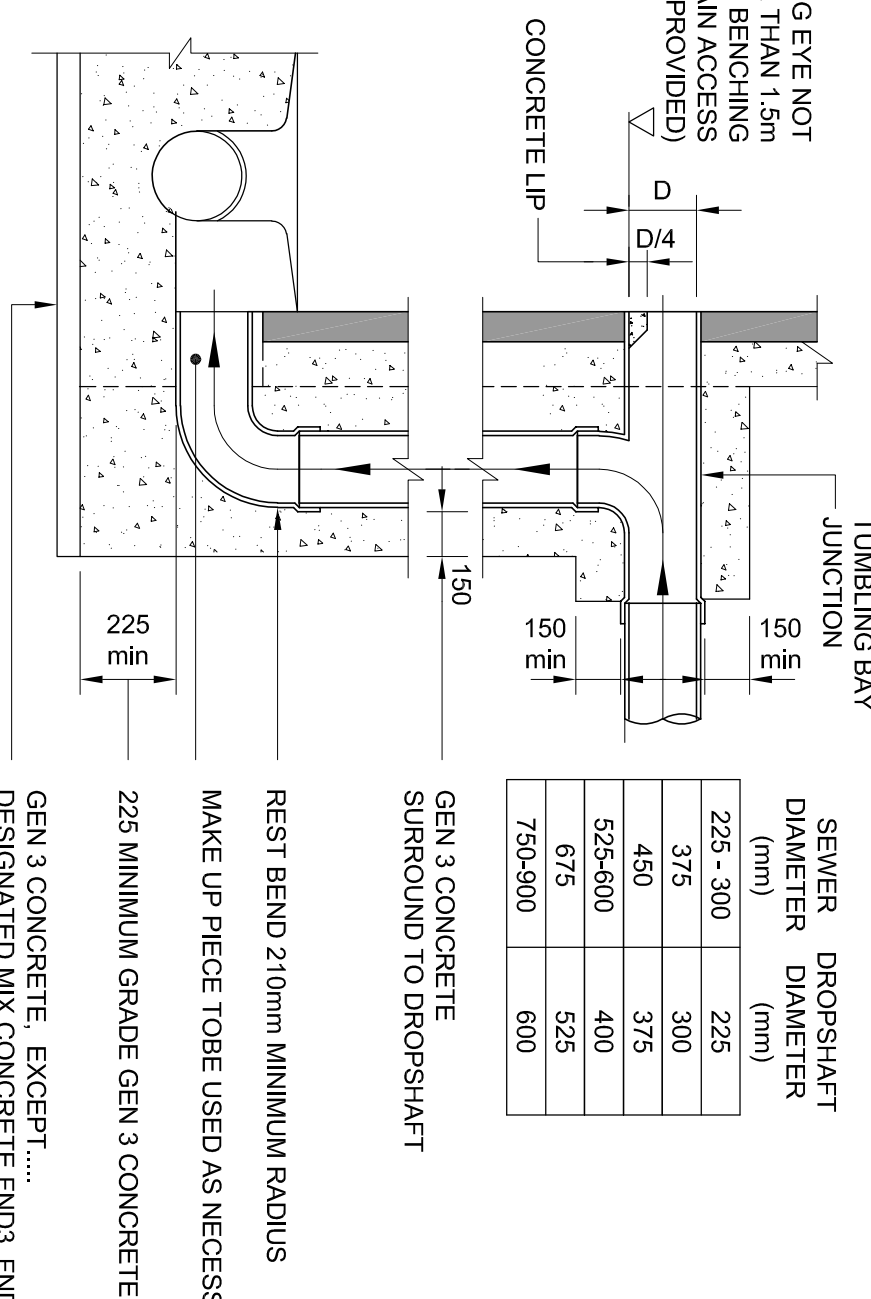


TYPICAL MANHOLE DETAIL - TYPE 2
MAXIMUM DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE 3.0m

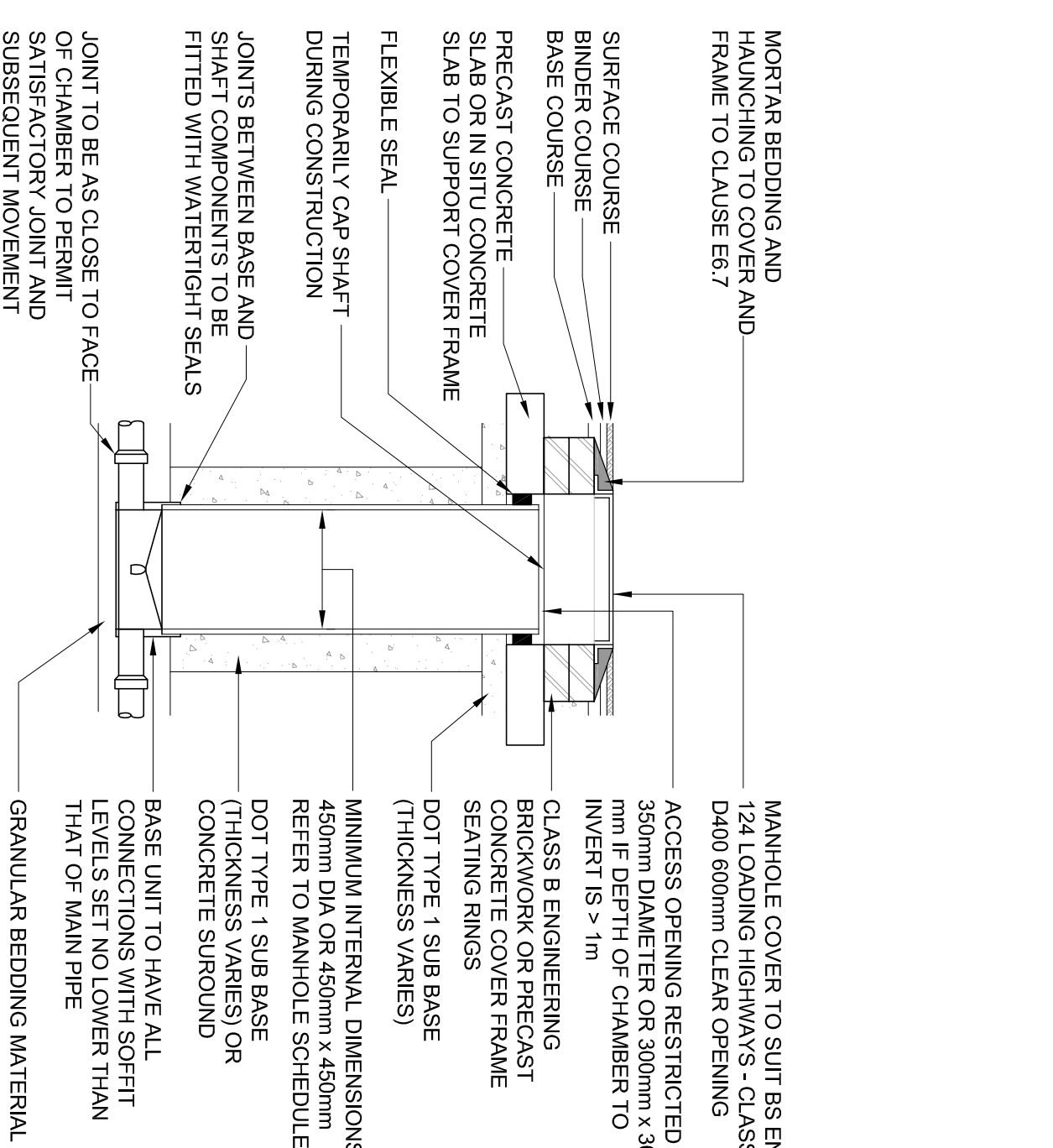


PLAN
SCALE 1:25

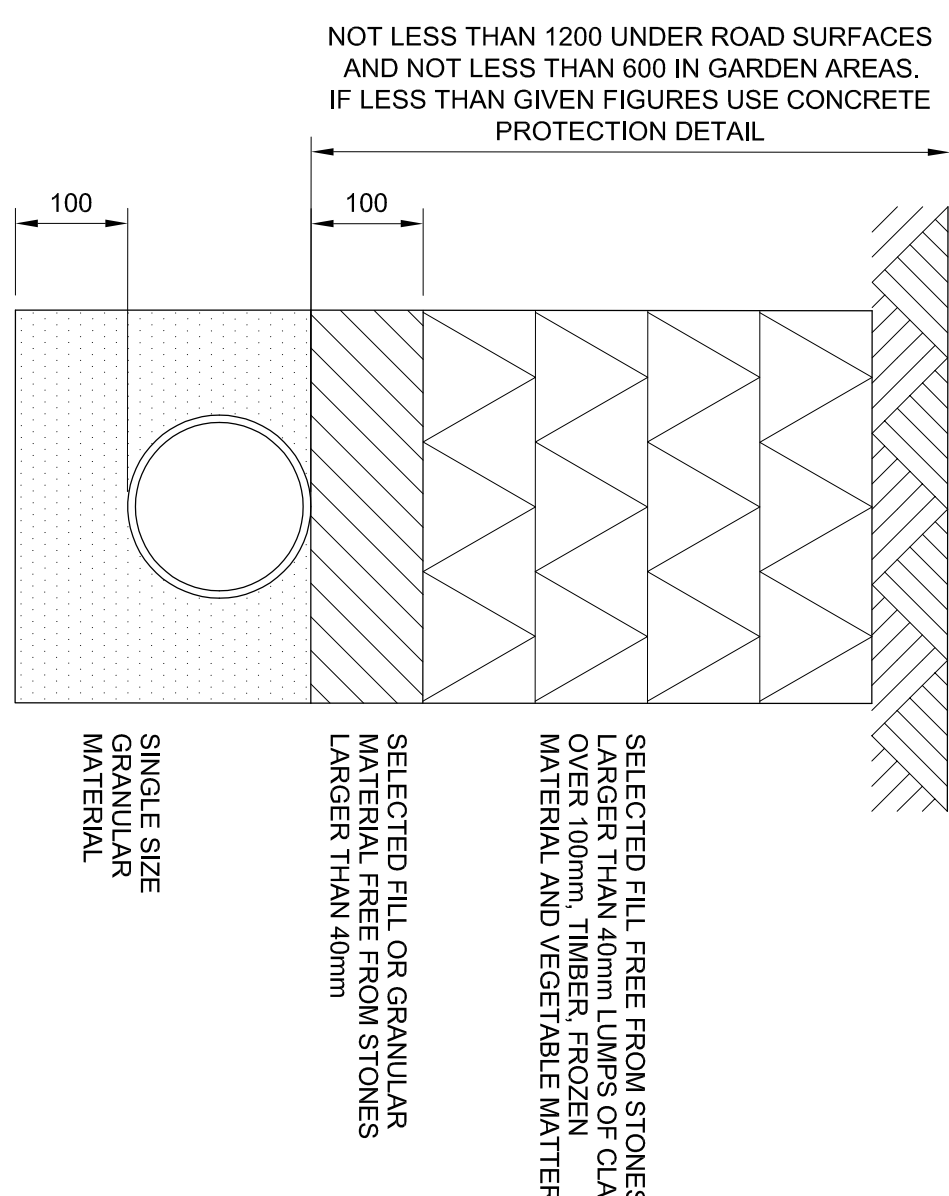
SEWER DIAMETER (mm)	DROPSHAFT DIAMETER (mm)
225-300	225
375	300
450	375
525-600	400
675	525
750-900	600



BACKDROP CONNECTION TYPICAL DETAIL



INSPECTION CHAMBER TYPE 3 (FLEXIBLE MATERIAL)
MAXIMUM DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE 3m NON ENTRY



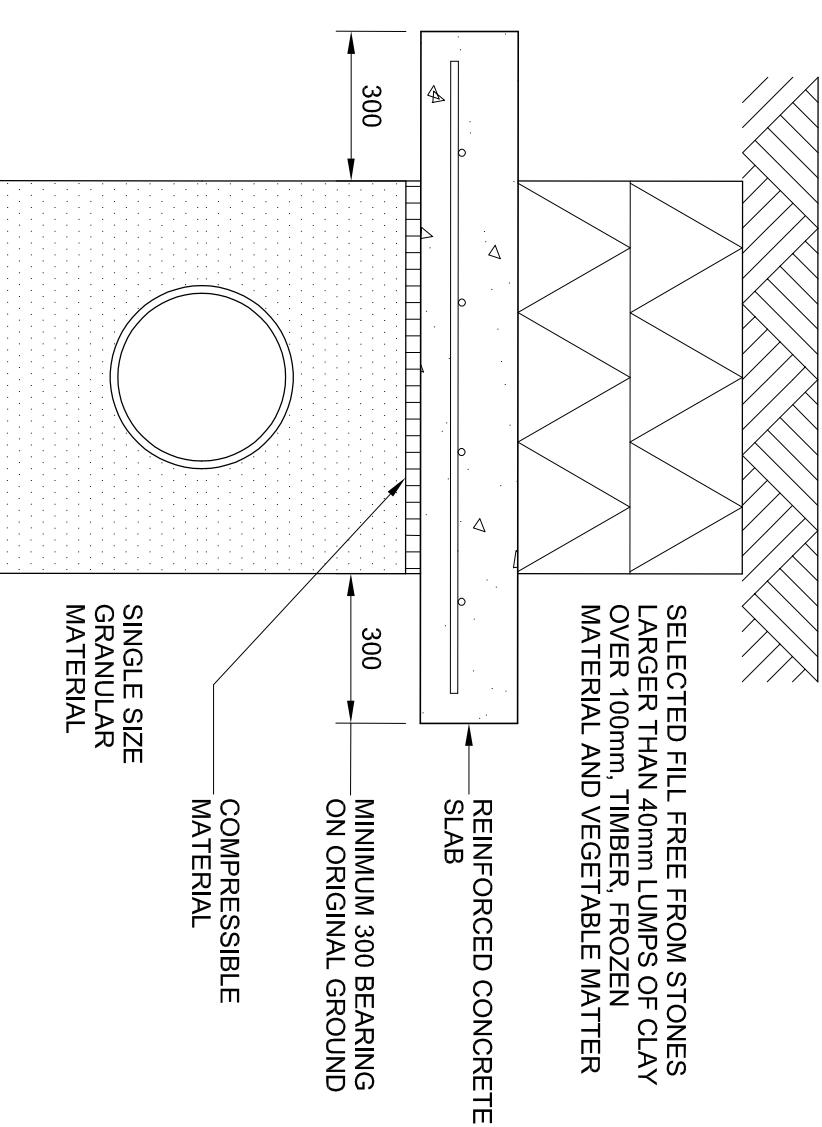
**TYPICAL FLEXIBLE PIPE
STANDARD BACKFILL**

PIPE Ø (DN)	IMPORTED GRANULAR MATERIALS
100mm Ø	USE 10mm SINGLE SIZE MATERIAL
150mm Ø	USE 10 or 14mm SINGLE SIZE MATERIAL or 14 to 5mm GRADED
225mm Ø & 300mm Ø	USE 10, 14 or 20mm SINGLE SIZE MATERIAL or 14 to 5mm GRADED or 20 to 5mm GRADED

NOTE
FOR GRANULAR BEDDING DETAILS FOR FLEXIBLE PIPES
WITH A DIAMETER GREATER THAN 300mm REFER TO
MANUFACTURERS DETAILS

TABLE A
GRANULAR BEDDING AND SIDEFILL
MATERIALS FOR FLEXIBLE PIPES

SEWER DIAMETER (mm)	DROPSHAFT DIAMETER (mm)
225-300	225
375	300
450	375
525-600	400
675	525
750-900	600



TYPICAL FLEXIBLE PIPE WITH CONCRETE PROTECTION

DRAINAGE NOTES

1. ALL NON ADAPTABLE DRAINS UP TO 150 Dia. TO BE TSN WITH PLASTIC PIPE MANUFACTURED IN ACCORDANCE WITH BS EN 14011 OR EQUAL APPROVED.
2. ALL ADAPTABLE DRAINS UP TO 300 Dia. TO BE POLYSEWER BY POLY-PIPE AND MANUFACTURED IN ACCORDANCE WITH THE WATER INDUSTRY SPECIFICATION WIS4-38-01.
3. DRAINS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, BACKFILL AND BEDDING TO AS PER TYPICAL DETAIL UNO.
4. ALL DRAINS TO BE Laid SOFTLY TO SOFT.
5. WORKS TO ANY ADOPTED SERVICES ARE TO BE IN ACCORDANCE WITH SEWERS FOR ADOPTION 7TH EDITION AND SHOULD BE APPROVED WITH UNITED UTILITIES PRIOR TO COMMENCEMENT.
6. NEW INSPECTION CHAMBERS (IC) TO BE A MINIMUM OF 450mm DIA. ALL MANHOLES (MH) TO BE A MINIMUM OF 1200mm DIA. REFER TO M.H. SCHEDULE FOR ACTUAL SIZES.
7. REFER TO ARCHITECTS DRAWINGS FOR INTERNAL DRAINAGE POOL UP POSITIONS.
8. ANY DRAINS PASSING THROUGH STRUCTURE WALLS TO HAVE A MINIMUM 50mm CLEAR SPACE TO UNITS SUPPORT ABOVE A CEMENT FIBRE COLLARS EITHER SIDE TO PREVENT VERMIN ENTRY.
9. ALL DRAINS CAST IN A PASSING THROUGH CONCRETE GROUND BEANS TO HAVE A FLEXIBLE JOINT NOT MORE THAN 150mm FROM THE FACE OF THE GROUND BEAM. FLEXIBLE JOINT TO MANUFACTURERS DETAIL(S) AND A MAXIMUM 800mm LONG ROCKER PIER EITHER SIDE.
10. ALL LINES OF DRAINAGE INDICATED ARE PROVISIONAL. ONLY THE EXACT POSITIONS OF ALL DRAINS MAY BE ALTERED TO SUIT AND DETERMINED ON SITE PRIOR TO COMMENCEMENT OF WORK. ANY REVISIONS ARE TO BE SUBJECT TO THE APPROVAL OF THE ARCHITECT. THE LOCATION OF ANY AMENDMENT IS TO BE KEPT BY THE CONTRACTOR.
11. COVER LEVELS SHOW ARE APPROXIMATE ONLY AND SHOULD BE ALTERED TO SUIT FINISHED SURFACE LEVELS. READ IN CONJUNCTION WITH THE MANHOLE SCHEDULE PLATES.
12. ALL SOIL AND VENT PIPES TO HAVE LOW LEVEL ACCESS PLATES.
13. ALL BURIED CONNECTIONS TO PO-UPS TO BE 150mm Dia.

TYPICAL DRAINAGE NOTES - MANHOLES

1. ALL PCAST CONCRETE MANHOLE SURROUNDS SHALL BE IN ACCORDANCE WITH BS5951 P1 & BS5EN 1917:2002.
2. IN SITU CONCRETE TO BE SET AND BE IN ACCORDANCE WITH BS EN 206-1 AND BS 8500:1
3. CONSTRUCTION JOINTS IN CONCRETE SURROUNDS MUST NOT BE WITHIN 150 OF CHAMBER SHAFT RING JOINTS.
4. ALL MANHOLE COVERS AND FRAMES SHALL COMPLY WITH BS EN 24.
5. THE CONSTRUCTION SHOWN IS FOR NORMAL GROUND CONDITIONS.
6. WORKMANSHIP TO COMPLY TO BS 8001 PART 14 CODE OF PRACTICE FOR BELOW GROUND DRAINAGE AND SUPPLEMENTARY SPECIFICATIONS.
7. ANY CHANGE OF PIPE DIAMETER OR PIPE DIRECTION TO BE WITHIN THE MANHOLE CHAMBER
8. MANHOLE LEVEL TO BE FLUSH WITH SURFACING AND 150mm ABOVE GL IN LANDSCAPED AREA.
9. SAFETY CHAINS ARE REQUIRED IN MANHOLES WITH OUTLETS 6000 OR LARGER. CHAINS TO BE FITTED IN DOWNSTREAM SIDE OF MANHOLE. ALL COMPONENTS FABRICATED IN STAINLESS STEEL GRADE 316 S16 TO BS EN 10089-3.

C3	16.04.24	BIDBRANE ADDED TO GULLY DETAIL	SAS	GE	SR
C2	15.06.22	ISSUED FOR CONSTRUCTION	SAS	EZ	GE
C1	14.12.21	ISSUED FOR CONSTRUCTION	SAS	EZ	GE
Date	Revision Details		By	Chkd	Appd

Westlakes
Engineering

Client

WHITEHAVEN HARBOUR COMMISSIONERS

WHITEHAVEN HARBOUR COMMISSIONERS

THE EDGE, CUMBRIA'S COASTAL
ACTIVITIES CENTRE, WHITEHAVEN

TYPICAL DRAINAGE DETAILS

Drawing No

W/L 1654 052

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Drawn	EZ
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GE

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