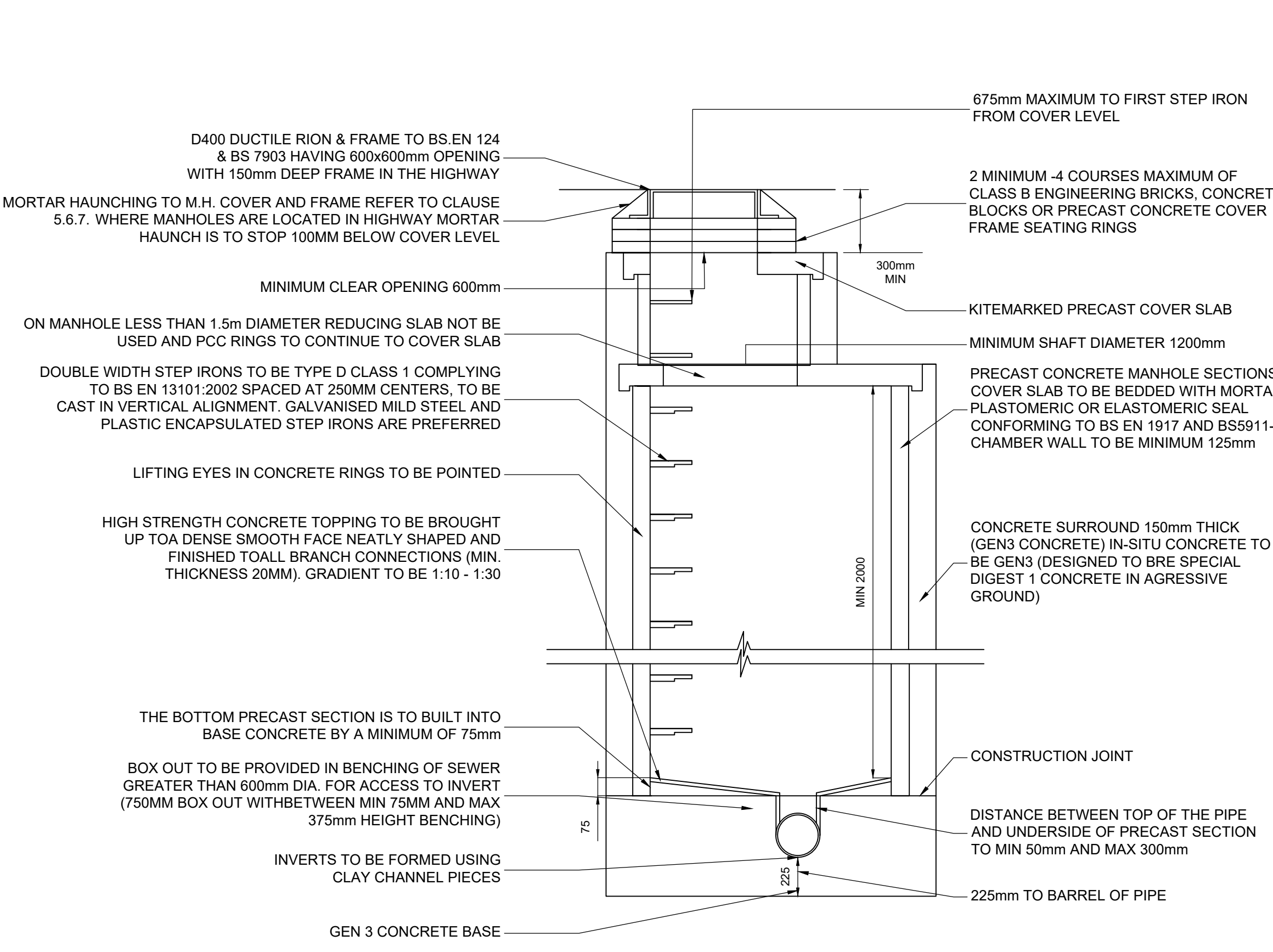
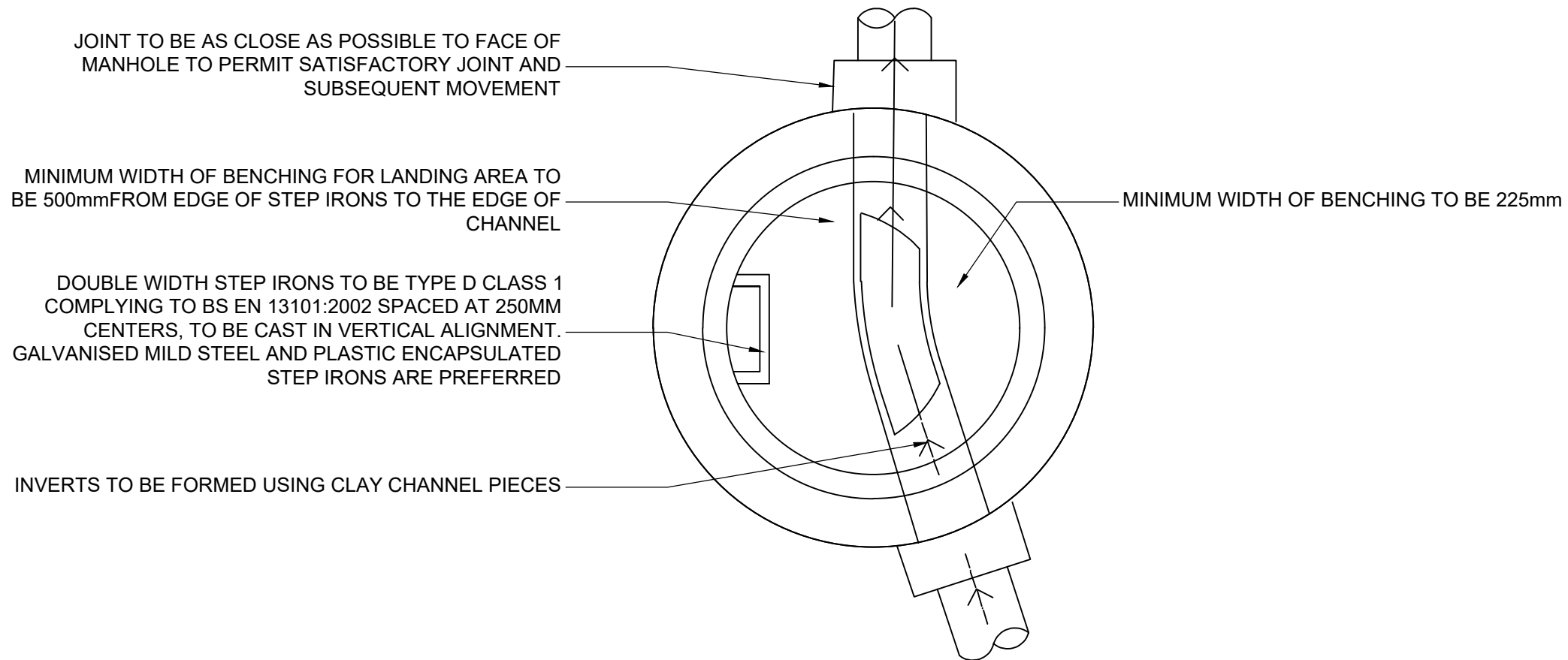
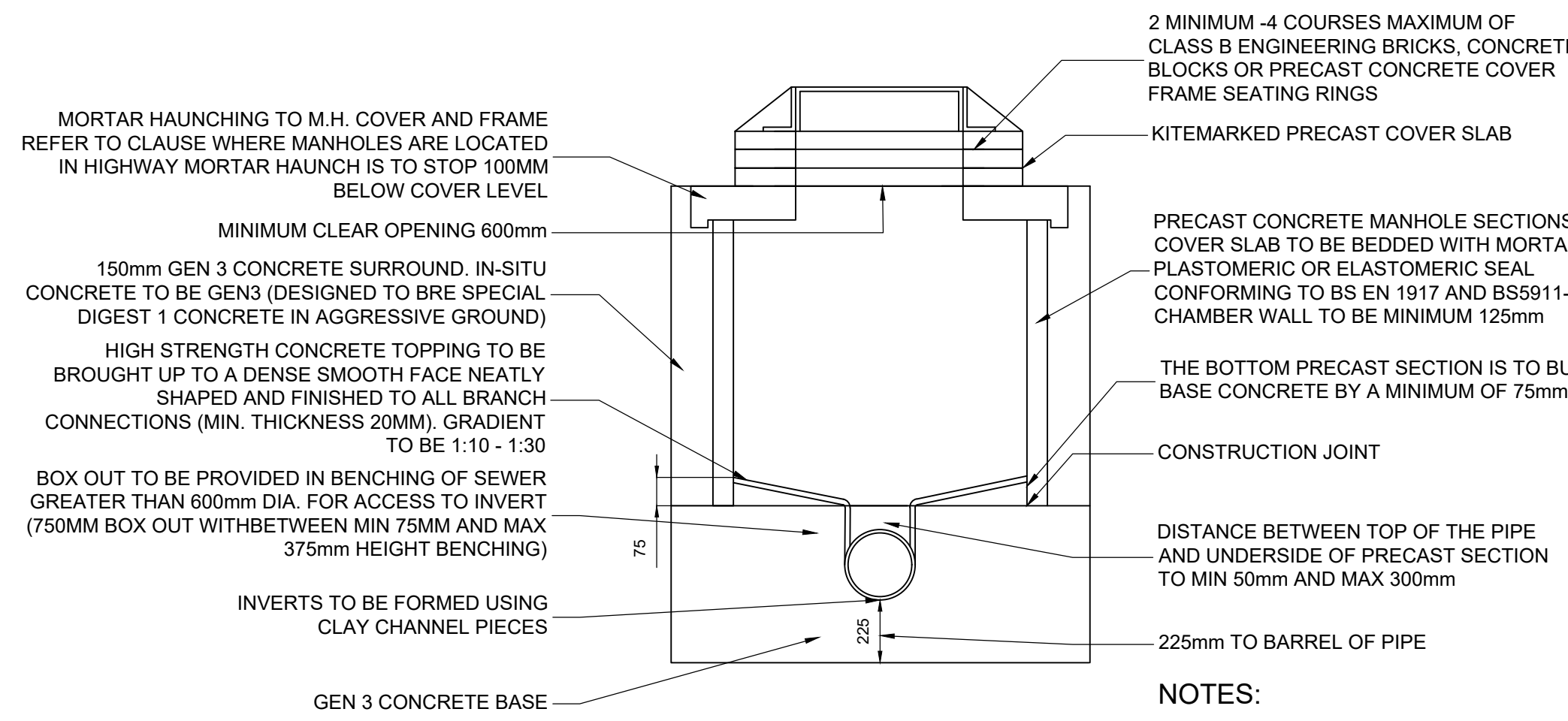




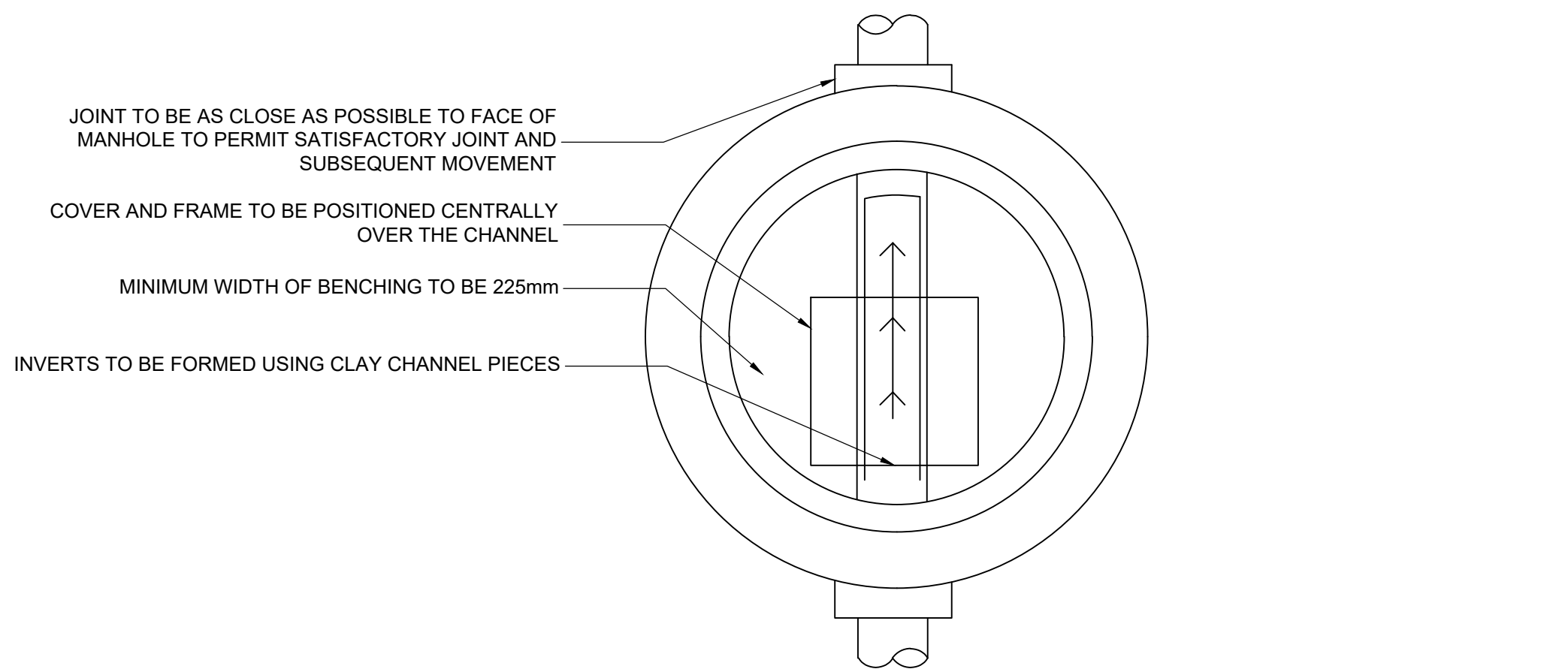
TYPE A1 CONCRETE MANHOLE - SECTION VIEW
FOR DEPTHS TO SOFFIT BETWEEN 3000mm AND 6000mm



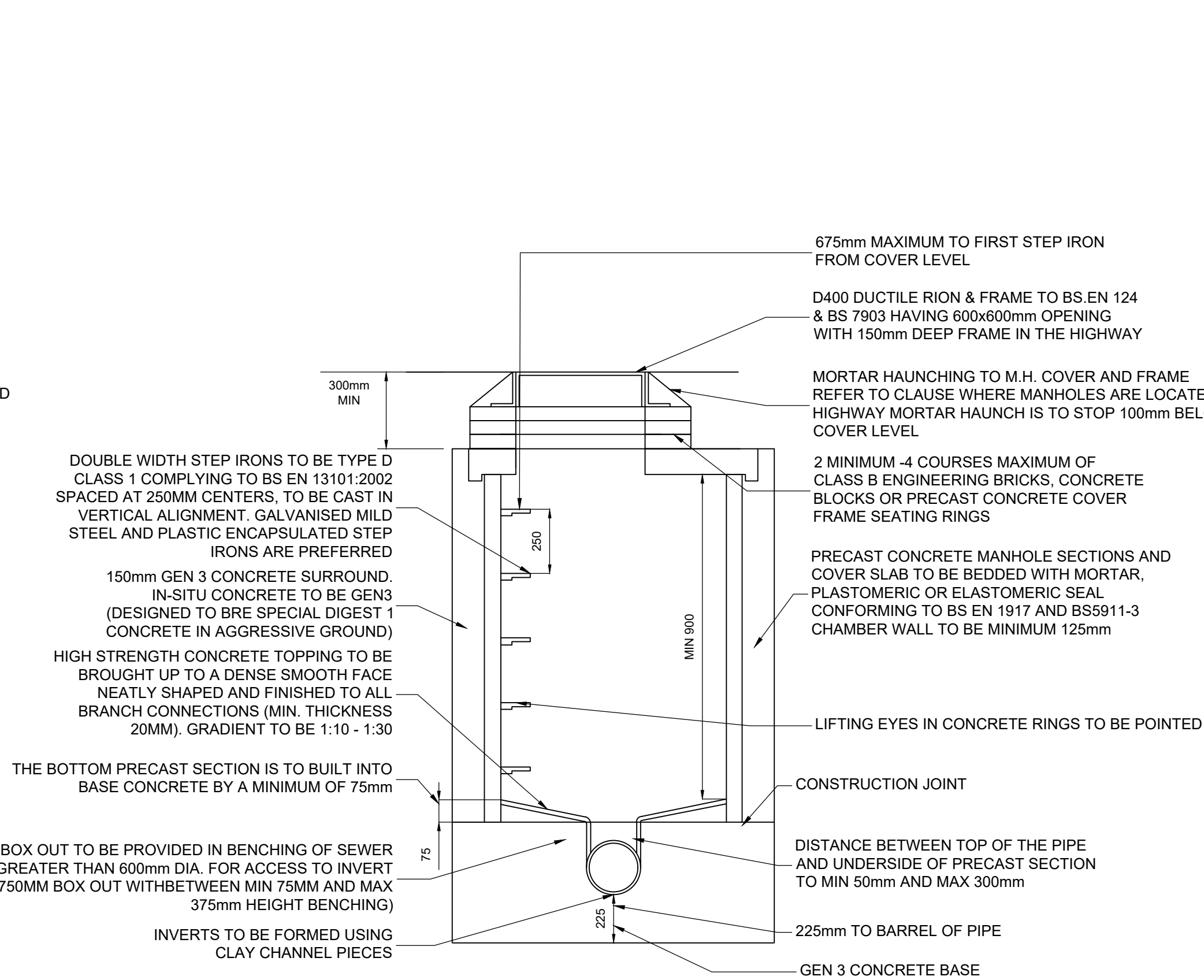
TYPE A1 AND B CONCRETE MANHOLE - PLAN VIEW



TYPE C CONCRETE MANHOLE - SECTION VIEW
FOR DEPTHS TO SOFFIT LESS THAN 1500mm

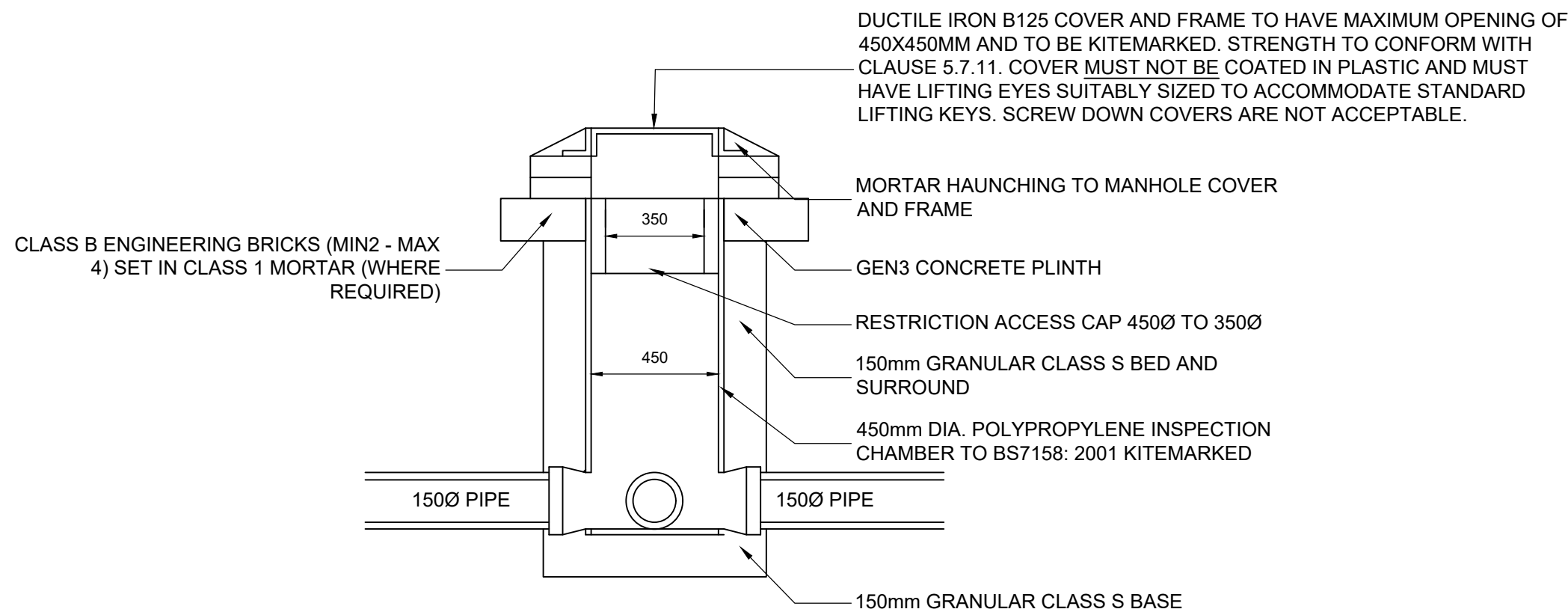


TYPE C CONCRETE MANHOLE - PLAN VIEW

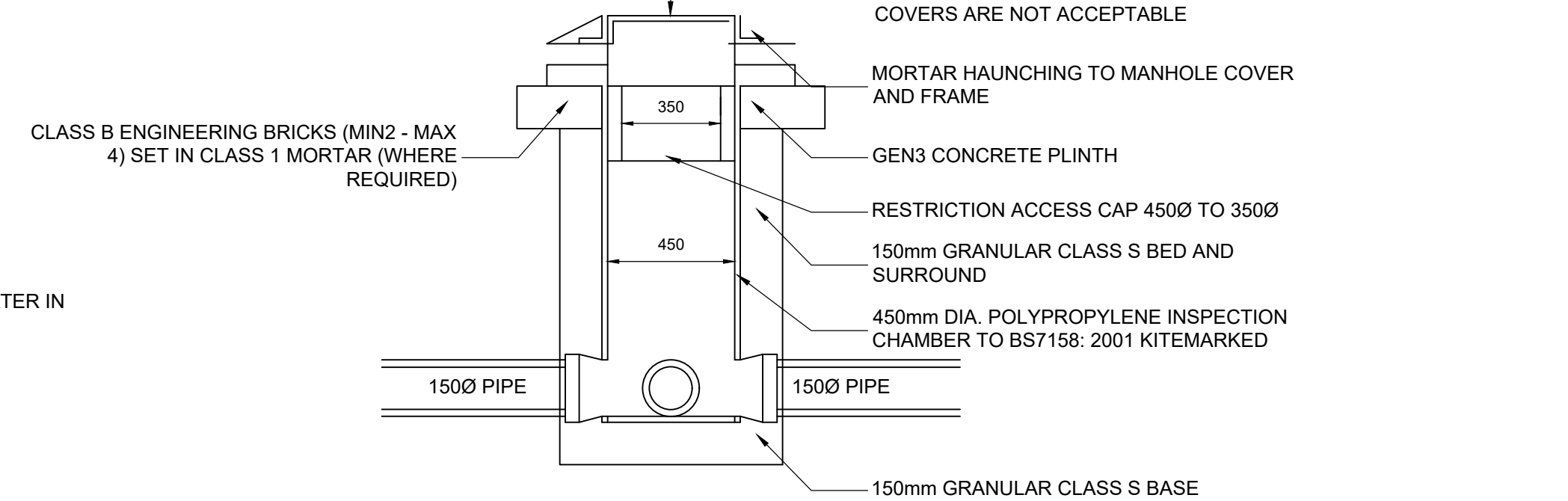


TYPE B CONCRETE MANHOLE - SECTION VIEW
FOR MAXIMUM DEPTHS TO SOFFIT OF 3000mm

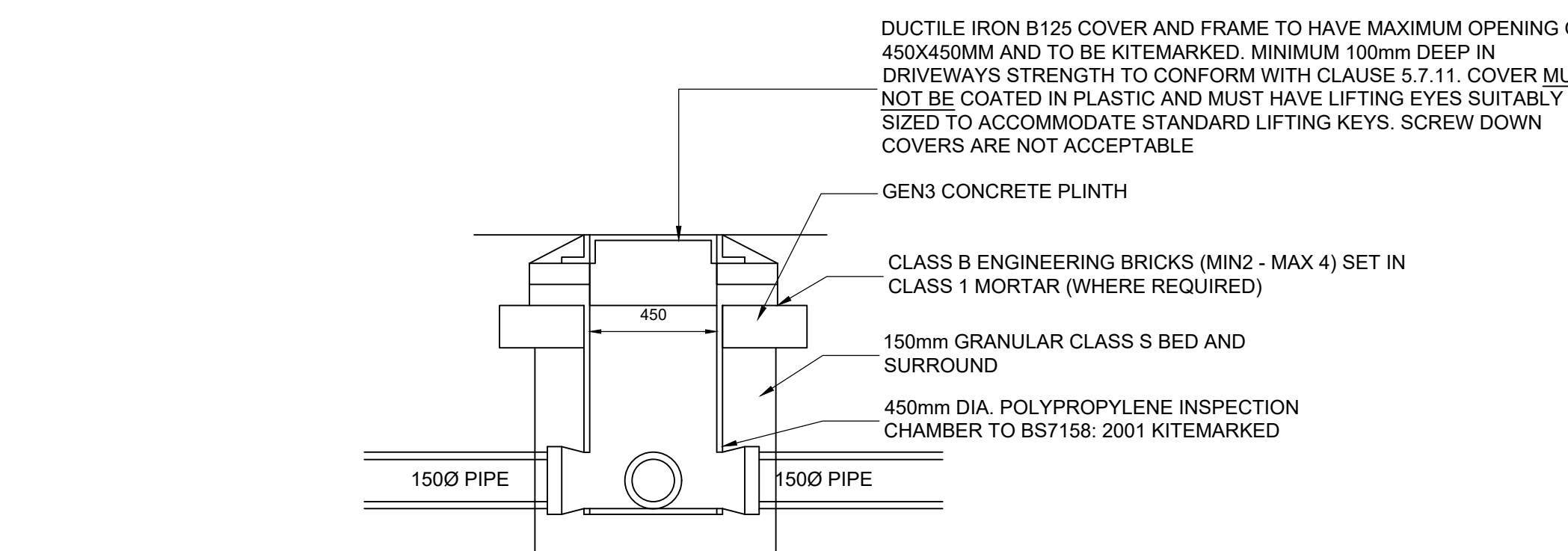
MANHOLE DIAMETERS	
NOMINAL INTERNAL DIAMETER OF LARGEST PIPE IN MANHOLE (mm)	MINIMUM INTERNAL DIMENSION OF MANHOLE (mm)
UP TO 300	1200
375-450	1250
500-700	1500
750-900	1800
GREATER THAN 900	SPECIFIC DRAWING REQUIRED



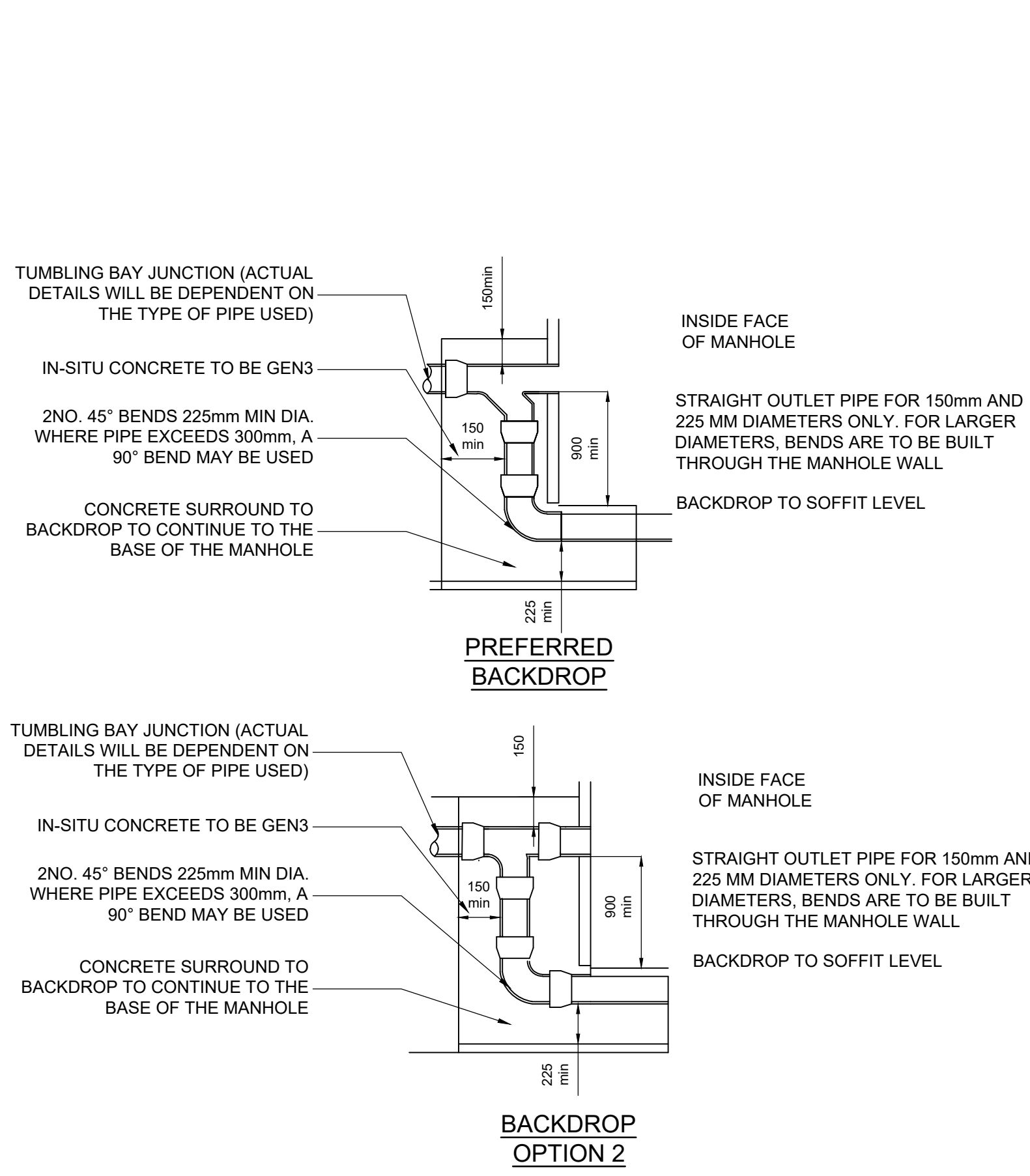
DEMARICATION CHAMBER LOCATED IN A GARDEN
FOR DEPTHS TO SOFFIT BETWEEN 1200mm AND 3000mm



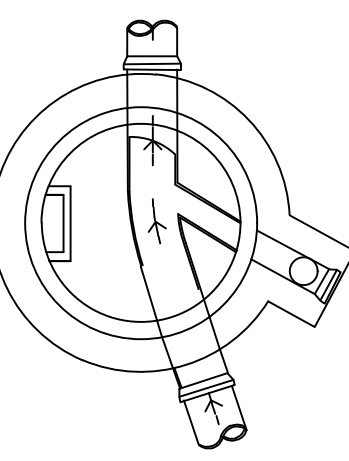
DEMARICATION CHAMBER LOCATED IN A DRIVEWAYS
FOR DEPTHS TO SOFFIT BETWEEN 1200mm AND 3000mm



DEMARICATION CHAMBER LOCATED IN A DRIVEWAYS
FOR DEPTHS TO SOFFIT LESS THAN 1200mm



BACKDROP TO BE WITHIN 150mm
CONCRETE SURROUND TO THE MAHOLE



BACKDROP DETAIL

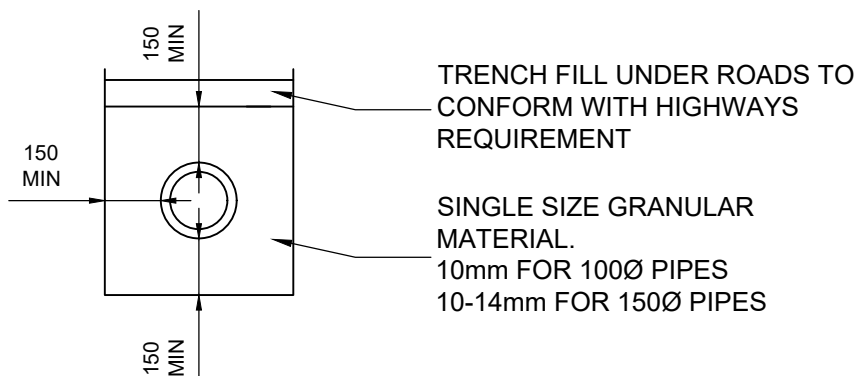
PIPES		
DIAMETER (mm)	GRADIENT	
	FOUL	SURFACE
100	1:80	-
150	1:80	1:80

NOTES:

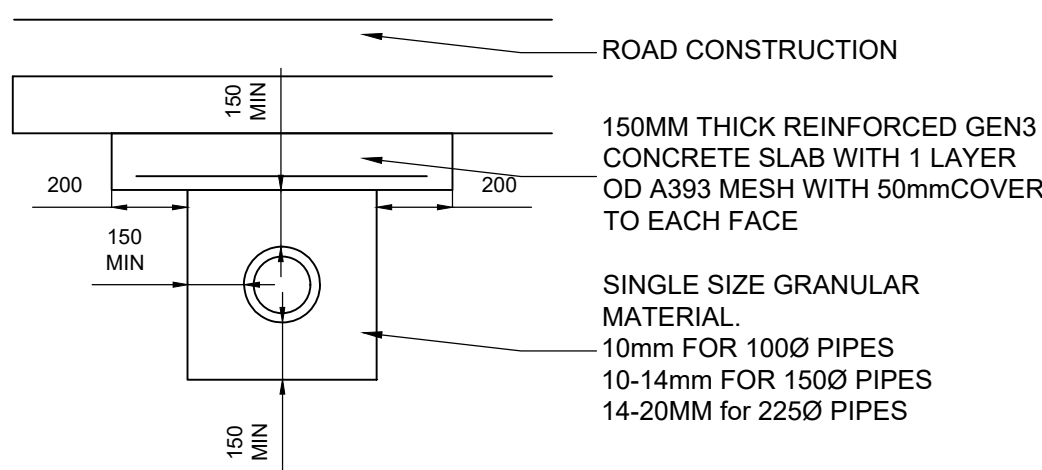
VITRIFIED CLAY PIPS TO BS EN 295 KITEMARKED. UNPLASTICISED PVC PIPES TO BS 4660:200 & BS EN 1401-1 KITEMARKED. STRUCTURED WALL UNPLASTICISED PVC PIPES TO WIS 4-35-01 KITEMARKED

DEMARICATION CHAMBER COVERS AND FRAMES		
SURFACE	CLASS (LOADING IN kN)	LOADING
ROAD	D400	VEHICLE IMPACT
FOOTWAY & DRIVEWAY	B125	OCCASIONAL VEHICLE LOADING
GARDENS	B125	PEDESTRIAN/CYCLIST

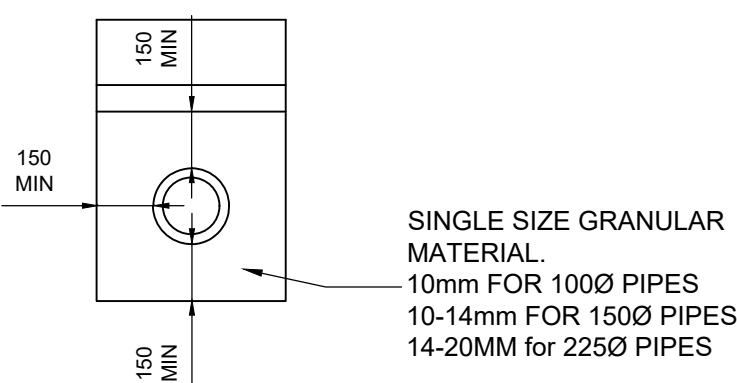
MINIMUM DEPTH OF LATERAL DRAINS	
LOCATION	MINIMUM DEPTH (M)
GARDENS	0.9
AGRICULTURAL/OPEN SPACES	0.9000
DRIVEWAYS (TRAFFICKED AREAS)	1.2000



LATERAL DRAIN BEDDING DETAIL



CLASS S BED SURROUND WITH CONCRETE PROTECTION
TO BE USED WHERE SEWER IS LESS THAN 1200mm IN DEPTH IN TRAFFICKED AREAS
AND LESS THAN 900mm IN UN-TRAFFICKED AREAS



CLASS S PIPE SURROUND AND BED

NOTES:

BOXING/SHEETING TO BE REMOVED PROGRESSIVELY DURING PLACEMENT OF THE MAIN BACKFILL ABOVE THE PIPE TO PREVENT DISPLACEMENT OF THE GRANULAR MATERIAL.

SIDEFILL MATERIAL TO BE PLACED EVENLY ON BOTH SIDES OF THE PIPE TAKING CARE TO WORK MATERIAL UNDER THE LOWER QUADRANT OF THE PIPE WHILE ENSURING THE PIPE IS NOT LIFTED. BOTH SIDES OF THE TRENCH SHOULD BE FILLED SIMULTANEOUSLY TO AVOID HORIZONTAL MOVEMENT OF THE PIPE

TRENCH FILL UNDER ROADS TO CONFORM WITH HIGHWAYS REQUIREMENTS

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Reference to any third party equipment shown on this drawing was only relevant at the time the drawing was prepared.
It is the client's responsibility to ensure that any equipment ordered meets the design.

NOTES

- ALL ADOPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH CODE FOR ADOPTION: THE RELEVANT BRITISH EUROPEAN AND YORKSHIRE WATER'S STANDARDS/REQUIREMENTS/ADDENDUM TO THE MECHANICAL AND ELECTRICAL SPECIFICATION AND KITEMARKED.
- MANHOLE COVERS SHALL HAVE A CLEAR OPENING OF 600mm AND SHALL BE CLASS D400 TO BS EN 124 WITH 150mm DEEP FRAMES IN HIGHWAYS.
- FILLED GROUND MUST BE FILLED AND CONSOLIDATED UNDER THE SUPERVISION AND TO THE SATISFACTION OF YORKSHIRE WATER BEFORE ANY SEWER WORKS ARE CARRIED OUT.
- YORKSHIRE WATER IS NOT OBLIGED TO ACCEPT FILTER DRAINLAND DRAINAGE RUN-OFF INTO THE PUBLIC SEWER NETWORK OR ADOPTABLE DRAINAGE SYSTEM (DIRECTLY OR INDIRECTLY). AN ALTERNATIVE METHOD OF DISPOSAL OF THE LAND DRAINAGE RUN-OFF, THEREFORE BE REQUIRED AND YOU WILL HAVE TO LIAISE WITH THE LOCAL AUTHORITY, LAND DRAINAGE SECTION REGARDING THE DISPOSAL OF THE FILTER DRAINLAND DRAINAGE RUN-OFF.
- THE ADOPTABLE SEWERS SHOULD BE A MINIMUM OF 1M AND MANHOLES 0.5M FROM KERB FACES AND SERVICE MARGINS.
- SEWERS MUST HAVE 5 METRES CLEARANCE FROM TREES AND HEDGES OR THE WIDTH OF THE CANOPY AT MATURE HEIGHT.
- SEWERS TO BE LAID IN CLASS "S" BEDDING (150mm GRANULAR BED AND SURROUND), WHERE DEPTH OF COVER TO TOP OF THE SEWER IS LESS THAN 1.2M IN HIGHWAYS AND VERGES OR LESS THAN 900mm IN NONVEHICULAR ACCESS AREAS) THEN A CONCRETE SLAB SHOULD BE PROVIDED ABOVE GRANULAR BED AND SURROUND.
- BEDDING AND BACKFILL MATERIAL TO CONFORM TO THE REQUIREMENT OF WATER INDUSTRY SPECIFICATION 4-08-02 (TABLE A2).
- YORKSHIRE WATER POLICY IS THAT TYPE "C" BRICK MANHOLES AND 1050mm DIAMETER MANHOLE RINGS ARE NOT PREFERRED. INSTEAD, IT IS PREFERRED THAT YOU USE A TYPE "B" MANHOLE WITH 1200mm DIAMETER OR 1500mm DIAMETER RINGS, WITH THE OPENING SITED OVER THE CHANNEL, WHERE DEPTH OF COVER TO PIPE SOFFIT IS 1 - 1.5M.
- ADOPTABLE PLASTIC SEWER PIPES TO BE BS1 KITEMARKED (CERTIFIED TO WIS 4-35-01 AND BS EN 1401-1). ADOPTABLE PLASTIC SEWER PIPES TO BE LAID IN MAXIMUM 3 METRE LENGTHS UNLESS THERE IS A SPECIFIC OPERATIONAL NEED TO LAY LONGER LENGTHS. PLASTIC CHANNEL SECTIONS IN MANHOLES ARE NOT ACCEPTABLE AND YORKSHIRE WATER WOULD REQUIRE CLAY WARE CHANNEL IN MANHOLES.
- THE MINIMUM CRUSHING STRENGTH FOR CLAY PIPES SHOULD BE AS FOLLOWS:
 - 100mm DIA. 40KNM.
 - 150mm DIA. 40KNM.
 - 225mm DIA. 45KNM.
 - 300mm DIA. 72KNM.
- THE MINIMUM CRUSHING STRENGTH FOR CONCRETE PIPES SHOULD BE: (CLASS 120 TO EN 1916/BS5911-1:2002). PLASTIC PIPES SHOULD CONFORM TO WIS 4-35-01 AND BS EN 1401-1.
- WHERE A B125 COVER AND FRAME HAS BEEN APPROVED, THIS MUST NOT BE COATED IN PLASTIC AND MUST HAVE LIFTING EYES SUITABLY SIZED TO ACCOMMODATE STANDARD LIFTING KEYS. SCREW DOWN COVERS ARE NOT ACCEPTABLE.
- THERE MUST BE ENOUGH CLEARANCE AT CROSSEOVERS TO ACCOMMODATE BEDDING TO BOTH PIPES. APPROX. 300mm. IF CROSSEOVER IS NEAR THE ROCKER THEN THE CLEARANCE NEEDED MAY NEED TO BE INCREASED.
- FALL ALL CLAUSE AND TABLE REFERENCES PLEASE REFER TO DESIGN AND CONSTRUCTION GUIDANCE. CONTAINED WITHIN THE CODE FOR ADOPTION.
- PRECAST CONCRETE MANHOLE UNITS INCLUDING THEIR PCC COVER SLABS SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 1917 AND BS 5911-3 AND SHALL BE MANUFACTURED FROM CONCRETE WITH A DESIGN CHEMICAL CLASS DC4 UNLESS SATISFACTORY EVIDENCE THROUGH SOIL ANALYSIS CAN BE PROVIDED THAT A LOWER CLASS WILL RESIST ATTACK FROM SOILS AND GROUND WATER.
- ALL PCC UNITS IN OVERSIZE MANHOLES MUST HAVE A DESIGN WORKING LIFE OF 100 YEARS (min) IN ACCORDANCE WITH BS 8500-1:2015+A2:2019 - TABLE A.5

PO2	ADDITIONAL NOTES 16 & 17 ADDED	TC	09/10/2025	DB
PO1	FIRST ISSUE	TOD	14/01/2025	TC
Rev	Drawn	Amendment	Date	Checked

Drawing Status

SS - FOR APPROVAL



Client	JONES HOMES (YORKSHIRE) LTD			
Project Title	SECTION 104 CLAYTON FIELDS, EDGERTON			
Drawing Title	DRAINAGE CONSTRUCTION DETAILS			
Scale	H 1:500 V 1:100	Drawing Size	A0	Drawn By TOD
Project Number	163366	Date	January 25	Checked By TC
Drawing Number	163366-SAN-CLF-XX-DR-C-05_008	Rev		Approved By DB
				P02