

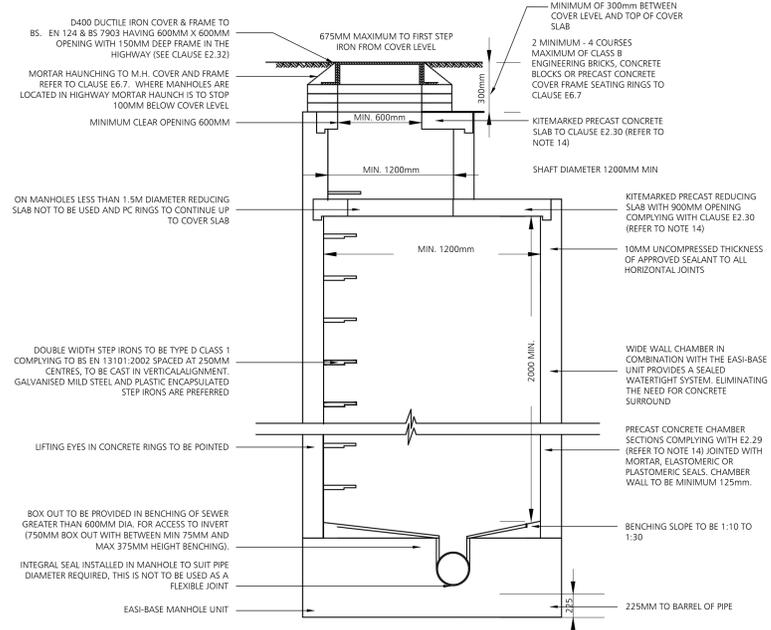
DESIGNERS HAZARD IDENTIFICATION
 IT IS ASSUMED THAT ALL WORKS WILL BE UNDERTAKEN BY A COMPETENT CONTRACTOR WORKING WHERE APPROPRIATE TO AN APPROVED METHOD STATEMENT IN ADDITION TO THE HAZARDS TYPICALLY ASSOCIATED WITH THE TYPES OF CONSTRUCTION DETAILED ON THIS DRAWING. ANY KNOWN ABNORMAL HAZARDS SPECIFIC TO THIS DRAWING HAVE BEEN IDENTIFIED.



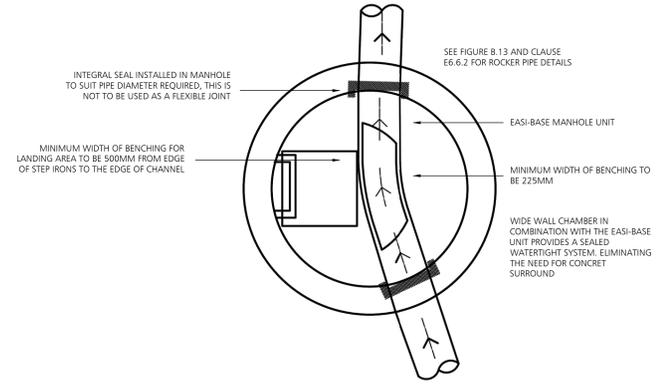
- YORKSHIRE WATER GENERAL NOTES**
- ALL ADAPTABLE SEWER WORKS AND MATERIAL TO BE IN ACCORDANCE WITH SEWERAGE SECTOR GUIDANCE DESIGN AND CONSTRUCTION GUIDANCE (SCDG FOR ADOPTION). THE RELEVANT BRITISH/IRISH/EPAN AND YORKSHIRE WATERS STANDARDS/REQUIREMENTS/LOCAL PRACTICE FOR THE ADOPTION OF SMALL SUBMERGIBLE FOUL AND SURFACE WATER PUMPING STATIONS 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 WILL THEREFORE BE REQUIRED AND YOU WILL HAVE TO LIASE WITH THE LOCAL AUTHORITY. LAND DRAINAGE SECTION WITH REGARD TO 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 2 METRES CLEARANCE FROM TREES AND HEDGES OR THE WIDTH OF THE CANOPY AT MATURE HEIGHT.
 - SEWERS TO BE LAID IN CLASS "B" 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 NON-VEHICULAR 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 DIA. MANHOLE RINGS ARE NOT PREFERRED. INSTEAD IT IS PREFERRED THAT YOU USE A TYPE "E" MANHOLE WITH 1200MM DIA. OR 1500MM DIA. RINGS, WITH THE OPENING SIZED OVER THE CHANNEL WHERE DEPTH OF COVER TO PIPE SOFFIT IS 1 - 1.5M.
 - ADAPTABLE PLASTIC SEWER PIPES TO BE BS (KITEMARKED) (CERTIFIED TO WS 4-35-01 AND BS EN 13476). ADAPTABLE PLASTIC SEWER PIPES TO BE LAID IN MAXIMUM 3 METRE LENGTHS UNLESS THERE IS A SPECIFIC OPERATIONAL NEED TO LAID LONGER LENGTHS. PLASTIC CHANNEL SECTIONS IN MANHOLES ARE NOT ACCEPTABLE AND YORKSHIRE WATER WOULD PREFER CLAYWARE CHANNEL IN MANHOLES.
 - THE MINIMUM CRUSHING STRENGTH FOR CLAY PIPES SHOULD BE AS FOLLOWS: 100MM DIA. 40NMM, 150MM DIA. 40NMM, 225MM DIA. 65NMM AND 300MM DIA. 72NMM. THE MINIMUM CRUSHING STRENGTH FOR CONCRETE PIPES SHOULD BE: (CLASS 120 TO EN 1916/BS5911 1:1 2002) PLASTIC PIPES SHOULD CONFORM TO WS 4-35-01 AND BS EN 13476.
 - WHERE A B125 COVER AND FRAME HAS BEEN APPROVED, THIS MUST NOT BE COATED IN PLASTIC AND MUST HAVE LIFTING EYES SUITABLE SIZED TO ACCOMMODATE STANDARD LIFTING KEYS. SCREW DOWN COVERS ARE NOT ACCEPTABLE.
 - THERE MUST BE ENOUGH CLEARANCE AT CROSSOVERS TO ACCOMMODATE BEDDING TO BOTH PIPES, APPROX. 300MM; IF CROSSOVER IS NEAR THE ROCKER THEN THE CLEARANCE NEEDED MAY BE NEAR TO BE INCREASED.
 - ALL PRECAST CONCRETE ELEMENTS, INCLUDING COVER SLABS, TO BE IN ACCORDANCE WITH THE SEWERAGE SECTOR GUIDANCE APPENDIX C CLAUSES E2.29 AND E2.30 AND TO HAVE A CONCRETE DESIGN CEMENTAL CLASS OF 30-4.
 - PC COVER SLABS TO HAVE A MINIMUM OF 300MM COVER.

TYPICAL WIDEWALL MANHOLE CONSTRUCTION
 TYPE A2 ALTERNATIVE WIDE WALL MANHOLE CONSTRUCTION
 (DESIGN AND CONSTRUCTION GUIDANCE)

FOR USE ON MANHOLES OF DEPTH FROM COVER LEVEL TO SOFFIT LEVEL BETWEEN 3000MM AND 6000MM. WIDE WALL MANHOLE RING CONSTRUCTION



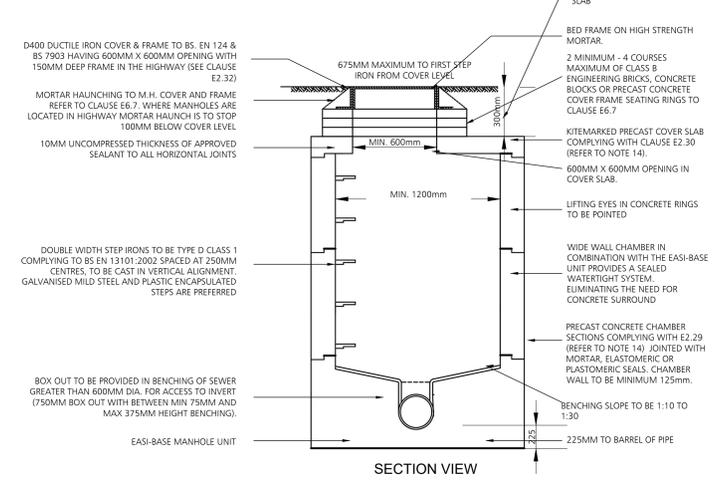
SECTION VIEW
 TYPICAL WIDEWALL MANHOLE PLAN VIEW
 TYPE A & B (DESIGN AND CONSTRUCTION GUIDANCE)



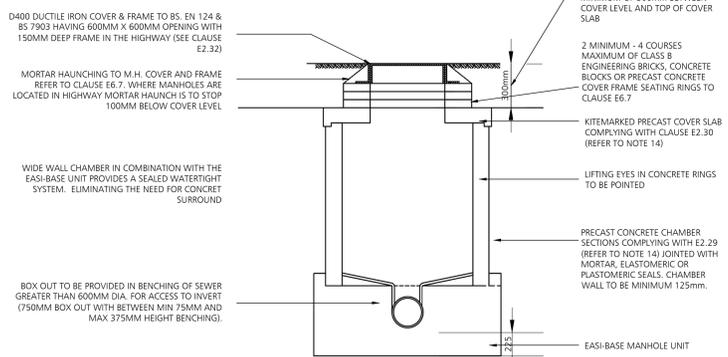
MANHOLE DIAMETER	
NOMINAL INTERNAL DIAMETER OF LARGEST PIPE IN MANHOLE (mm)	MINIMUM NOMINAL INTERNAL DIMENSION OF MANHOLE (mm)
UP TO 300	1200
375-450	1350
500-700	1500
750-900	1800
GREATER THAN 900	SPECIFIC DETAILED DRAWING REQUIRED

PLEASE NOTE WHERE MANHOLES HAVE BACKDROP CONNECTIONS A FULL 150MM CONCRETE SURROUND TO THE MANHOLE IS REQUIRED

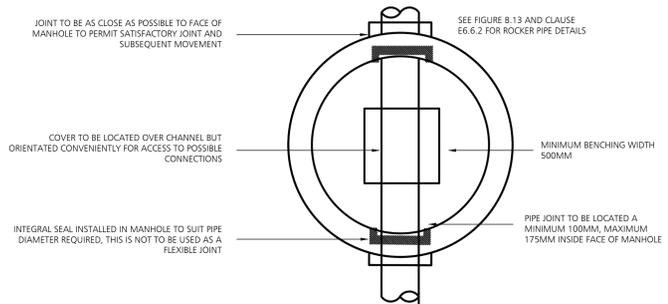
(DESIGN AND CONSTRUCTION GUIDANCE)
 MAXIMUM DEPTH FROM COVER LEVEL TO SOFIT OF PIPE 3000MM WIDE WALL MANHOLE RING CONSTRUCTION



SECTION VIEW
 SHALLOW MANHOLE CONSTRUCTION
 TYPE C ALTERNATIVE WIDE WALL MANHOLE CONSTRUCTION
 (DESIGN AND CONSTRUCTION GUIDANCE)
 CONSTRUCTION OF MANHOLE WHERE DEPTH FROM SOFIT TO COVER LEVEL LESS THAN 1500MM



SECTION VIEW
 SHALLOW MANHOLE PLAN VIEW
 TYPE C (DESIGN AND CONSTRUCTION GUIDANCE)



Date	Revision	By	Chkd	Ref
14.03.24	CONSTRUCTION ISSUE			

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Project
LOVELL HOMES
 SAVILLE ROAD
 SKELMANTHORPE
 Title
DRAINAGE CONSTRUCTION
 DETAILS SHEET 2

Scale	SHOWN	Paper	A0	Drawn	SM	Check	MJ
Date	APR 22	Status	CONSTRUCTION				
Job No.	21374	Orig. No.	126	Rev.	A		