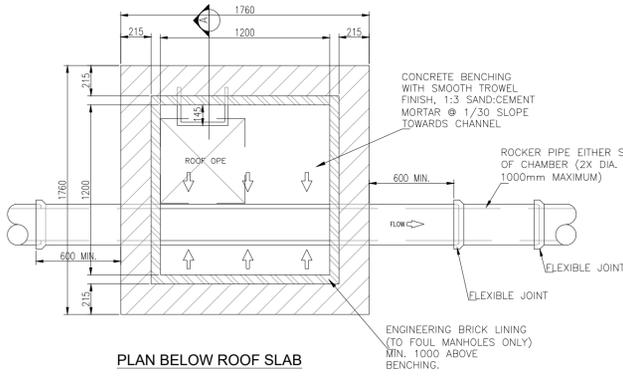
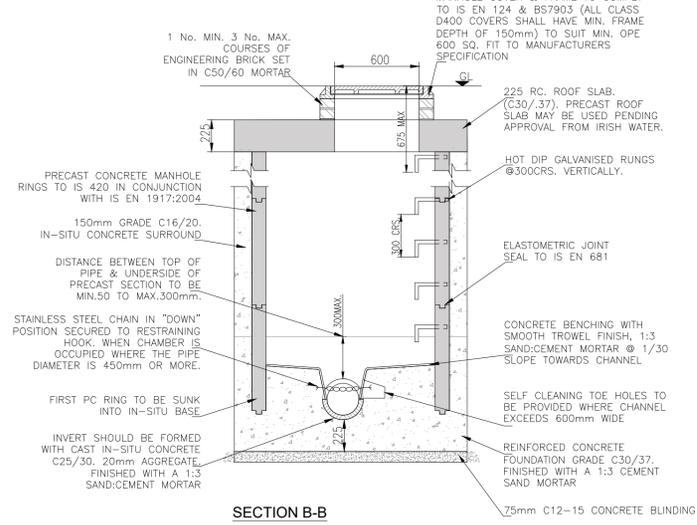


SECTION A-A

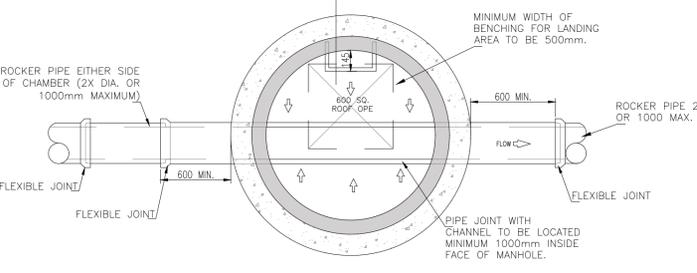


PLAN BELOW ROOF SLAB

BLOCKWORK MANHOLE FOR PIPE DIAMETERS < 450mm
 MAX. DEPTH TO INVERT 1.2M (UNLESS OTHERWISE AGREED WITH MMOS & IRISH WATER)



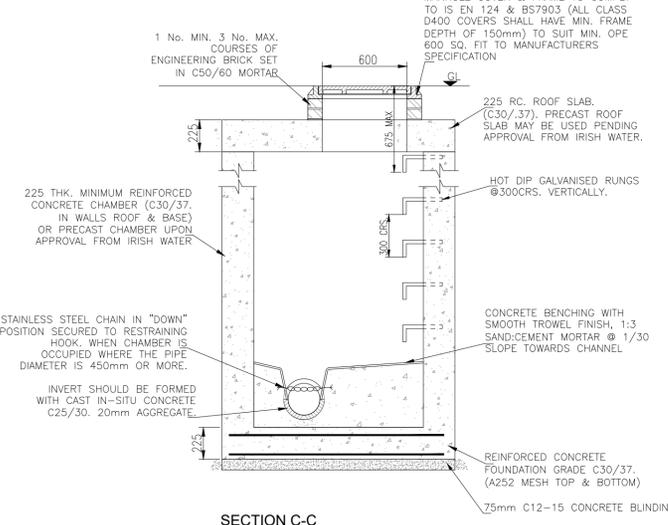
SECTION B-B



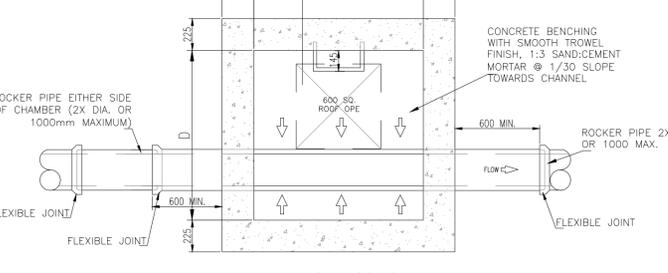
PLAN BELOW ROOF SLAB

PRE-CAST CONCRETE MANHOLE

MINIMUM MANHOLE DIAMETERS	
DIAMETER OF LARGEST PIPE IN MANHOLE (mm)	INTERNAL DIMENSION OF MANHOLE (mm)
LESS THAN 375mm	1200
375 TO 450	1350
500 TO 750	1500



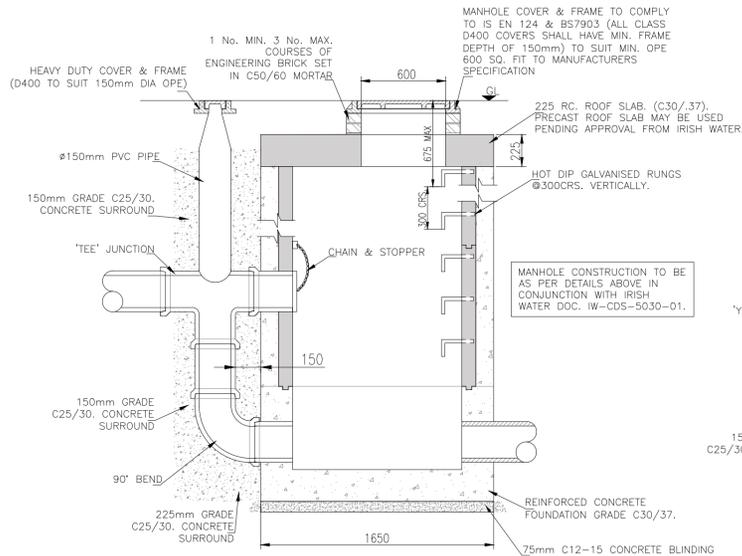
SECTION C-C



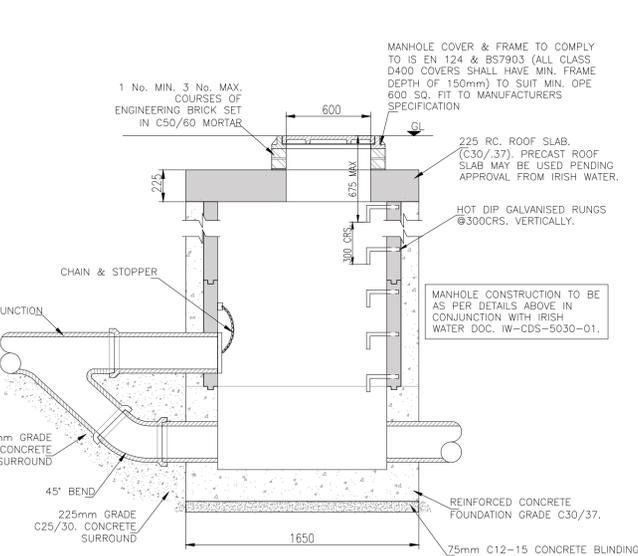
PLAN BELOW ROOF SLAB

IN-SITU CONCRETE MANHOLE

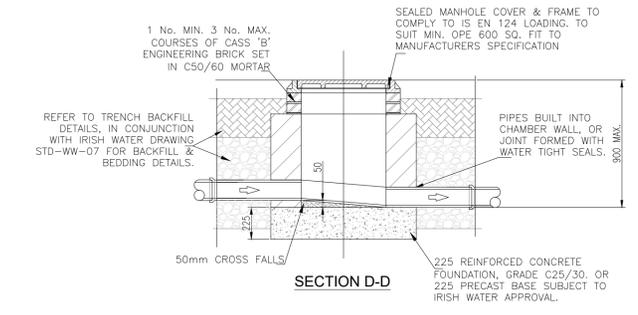
MINIMUM MANHOLE DIMENSION "D"	
DIAMETER OF LARGEST PIPE IN MANHOLE (mm)	INTERNAL DIMENSION OF MANHOLE (mm)
LESS THAN 375mm	1200
375 TO 450	1350
500 TO 750	1500



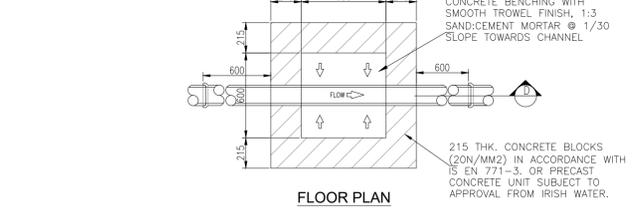
BACKDROP MANHOLE TYPE 02, SECTIONAL ELEVATION
 150mm - 450mm DIA. (INCL.) DROP GREATER THAN 900mm & LESS THAN 1700mm
 500mm - 900mm DIA. (INCL.) DROP GREATER THAN 1300mm & LESS THAN 2300mm



BACKDROP MANHOLE TYPE 03, SECTIONAL ELEVATION
 150mm - 450mm DIA. (INCL.) DROP GREATER THAN 600mm & LESS THAN 900mm
 500mm - 900mm DIA. (INCL.) DROP GREATER THAN 600mm & LESS THAN 1300mm



SECTION D-D



FLOOR PLAN

PRIVATE SIDE INSPECTION CHAMBER
 DEPTH TO INVERT < 900mm
 FOR ACCESS POINTS / AJS WITH DEPTH TO INVERT LESS THAN 600mm, SEE NOTE 24.

- STEPS ARE REQUIRED IN MANHOLES UP TO A DEPTH OF 2.5M. MANHOLE LADDERS ARE REQUIRED FOR MANHOLES WITH A DEPTH IN EXCESS OF 2.5M & ARE TO COMPLY WITH IS EN 14396 & WITH BS4211
- RODDING EYE CHAMBER SHALL BE COVERED WITH APPROVED HEAVY DUTY METAL COVERS TO IS 261 AND BS 5834. COVER AND FRAME SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS AND IS SUBJECT TO THE APPROVAL OF IRISH WATER.
- AN INSPECTION CHAMBER SHOULD BE LOCATED AT OR WITHIN 1m OF THE PROPERTY BOUNDARY AT THE UPSTREAM END OF EACH SERVICE CONNECTION ON THE PRIVATE SIDE OF THE CURTLAGE, IF PRACTICABLE.
- ANY PIPE AND ASSOCIATED ACCESS UPSTREAM OF THE POINT OF CONNECTION TO A PUBLIC SEWER IS A PRIVATE DRAIN AND SHOULD BE CONSTRUCTED IN ACCORDANCE WITH THE BUILDING REGULATIONS.
- ACCESS POINTS SHOULD BE LOCATED SO THAT THEY ARE ACCESSIBLE AND APPARENT TO THE MAINTAINER AT ALL TIMES FOR USE. THEY SHOULD AVOID REAR GARDENS OR ENCLOSED LOCATIONS AND THEY SHOULD NEVER BE OVERLAIN WITH SURFACE DRESSING, TOPSOIL, ETC.
- PROPRIETARY PREFABRICATED INSPECTION CHAMBER UNITS MAY BE USED, SUBJECT TO APPROVAL FROM IRISH WATER.
- CONCRETE CHAMBERS SHALL BE SURROUNDED BY A MINIMUM OF 150mm COMPACTED CLAUSE 804 OR CLAUSE 808 MATERIAL.
- ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206 : 2013.
- FOR ACCESS POINTS IN NON TRAFFICKED AREAS AROUND BUILDINGS AT PIPE HEADS, BENDS, JUNCTIONS OR CHANGES IN PIPE SIZES. PROPRIETARY AJS MAY BE USED FOR COVER TO INVERT LEVELS LESS THAN 600mm. SUBJECT TO ENGINEERS APPROVAL. INTERNAL AJ. SIZE MAY BE NO LESS THAN 300mm DIAMETER COVER TO AJ TO BE THE SAME DIMENSION AS THE INTERNAL CHAMBER SIZE. WORKING SPACE MUST BE AVAILABLE AT GROUND LEVEL TO ACCESS CHAMBER.

MANHOLE NOTES:

- ALL WASTEWATER DRAINAGE DESIGNED & CONSTRUCTED TO COMPLY WITH IRISH WATER CONNECTION & DEVELOPER SERVICES CODE OF PRACTICE FOR WASTEWATER INFRASTRUCTURE DOCUMENT, IW-CDS-5030-03.
- ALL WASTEWATER DETAILS TO COMPLY WITH IRISH WATER CONNECTION & DEVELOPER SERVICES, WASTE WATER INFRASTRUCTURE STANDARD DETAILS, IRISH WATER DOCUMENT, IW-CDS-5030-01.
- ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
- IN-SITU MANHOLES TO HAVE A MINIMUM WALL AND FLOOR THICKNESS OF 225mm FOR MANHOLE DEPTHS UP TO 3.0m AND 300mm OR MORE WHEN THE MANHOLE DEPTH EXCEEDS 3.0m.
- STRUCTURAL DESIGN & REINFORCEMENT DETAILS TO BE PROVIDED BY THE DEVELOPER AND SUBMITTED TO IRISH WATER FOR REVIEW.
- MANHOLES GREATER THAN 3m IN DEPTH WILL REQUIRE A DETAILED STRUCTURAL DESIGN AND BE SUBJECT TO IRISH WATER APPROVAL.
- MAXIMUM DEPTH OF BLOCKWORK MANHOLE IS 1.20m (THE USE OF BLOCKWORK IN DEEPER MANHOLES WILL BE CONSIDERED BUT SUCH USE WILL REQUIRE DETAILED STRUCTURAL DESIGN AND WRITTEN APPROVAL FROM IRISH WATER).
- THICKER MANHOLE BASES REQUIRED FOR SEWERS IN EXCESS OF 3m DEEP WHERE THE SIZE IS GREATER THAN THE STANDARD MINIMUM SIZE.
- WALLS IN BLOCKWORK MANHOLES FOR FOUL SEWERS TO BE FLUSH POINTED AND NOT PLASTERED INTERNALLY. INTERNAL LINING OF ENGINEERING BRICK TO IS EN 771-1 TO A HEIGHT OF 1m ABOVE BENCHING. ENGINEERING BRICK TO BE BONDED TO BLOCKWORK USING ENGLISH GARDEN WALL BOND.
- PRE-CAST MANHOLES UNITS: COMPLYING WITH REQUIREMENTS OF IS EN 1917 AND BS 5911-PART 3.
- APPROVED PRE-CAST CONCRETE BASES MAY BE USED INCORPORATING CHANNELS, BENCHING ETC. SUBJECT TO IRISH WATER APPROVAL AND COMPLYING WITH BS 5911-PART 4: 2002.
- COVERS AND FRAMES SHALL COMPLY WITH IS EN 124 & BS7903 & BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS SUBJECT TO APPROVAL FROM IRISH WATER.
- MANHOLE ROOF SLABS SHOULD CONSIST OF RE-INFORCED CONCRETE SLAB OF IN-SITU CONCRETE, C30 / 37, WITH A MINIMUM THICKNESS OF 225mm DESIGNED TO CARRY ALL LIVE AND DEAD LOADS. ALTERNATIVELY, APPROVED PRE-CAST CONCRETE ROOF SLABS MAY BE USED SUBJECT TO IRISH WATER APPROVAL AND COMPLIANCE WITH BS 5911 PART 4: 2002.
- 200mm ALL AROUND, 100mm DEEP CONCRETE PLINTH WITH PROTECTIVE STAINLESS STEEL METAL BAND AROUND COVERS IN GREEN AREAS.
- ALL CHAMBERS TO BE CHECKED FOR UPLIFT BY THE DEVELOPER BASED ON GROUND CONDITIONS WITHIN THE SITE. SHOULD ANTI FLOATATION MEASURES BE REQUIRED THEY SHALL BE SUBJECT TO APPROVAL FROM IRISH WATER.

Rev	Sts	Description	Date
P01	S2	Issued for Planning	12.12.25
P02	S2	Issued for Planning	06.02.26

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 MURPHY-MATSON-O'SULLIVAN CONSULTING CIVIL & STRUCTURAL ENGINEERS

PROJECT
Proposed Residential Development at Blarney, Co. Cork.

CLIENT
HRP Construction

TITLE
Typical Manhole Details

DRAWN BY KC	CHECKED BY PM	APPROVED BY PM
SCALE As Shown	PROJECT NUMBER 23141	
DOCUMENT REFERENCE 23141-MMS-ZZ-ST-DR-C-10005		STATUS S2 REV P02
PROJECT-ORIGINATOR-ZONE-LEVEL-TYPE-DICIPLINE-NUMBER		