

NOTES

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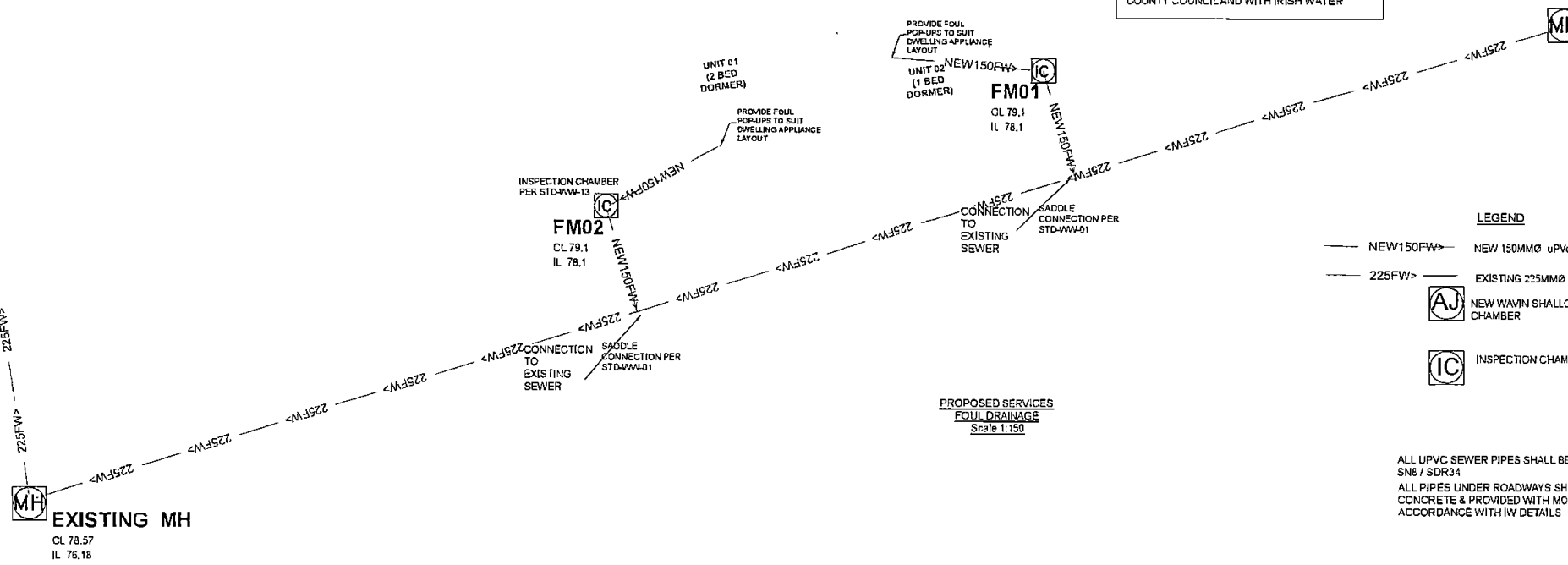
- PROGRESS
- PLANNING
- TENDER
- CONSTRUCTION

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A			PLANNING
Scales		Date	Drawn
			Checked

JOB TITLE
 PROPOSED DEVELOPME
 NEWLANDS DRIVE, CLON
 DAVID RAMILLIES
 DRG. TITLE
 ENGINEERING SERVICES
 WATER SUPPLY

NOTE:
 PROPOSED GRAVITY DRAINAGE SYSTEM WILL BE CONSTRUCTED WITH UPVC OR CONCRETE PIPES TO IS 6 AND LAID IN ACCORDANCE WITH THE BUILDING REGULATIONS (SECTION H) AND IN ACCORDANCE WITH THE SELECTED PIPE MANUFACTURER'S RECOMMENDATIONS. ALL PROPOSED WORKS AFFECTING THE PUBLIC DRAINAGE SYSTEM WILL BE SUBJECT TO DETAILED AGREEMENT WITH THE WATER AND DRAINAGE DEPARTMENT OF SOUTH DUBLIN COUNTY COUNCIL AND WITH IRISH WATER



LEGEND

- NEW 150FW — NEW 150MM Ø uPVC P
- - - 225FW - - - EXISTING 225MM Ø C
- (AJ) NEW WAIN SHALLOW CHAMBER
- (IC) INSPECTION CHAMBER

PROPOSED SERVICES
FOUL DRAINAGE
 Scale 1:150

ALL UPVC SEWER PIPES SHALL BE S
 SN8 / SDR34
 ALL PIPES UNDER ROADWAYS SHALL
 CONCRETE & PROVIDED WITH MOV
 ACCORDANCE WITH IW DETAILS

NOTES

- 1.0 DRAWINGS ARE NOT TO BE SCALED. USE OF NOTIFIED OF ANY DISCREPANCIES.
- 2.0 ALL LEVELS REFER TO OS DATUM MALIN H
- 3.0 THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT DOCUMENTATION.
- 4.0 ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY.
- 5.0 CONCRETE BASES AND SURROUNDS SHALL THICK AND CONTAIN ONE LAYER OF A142 MESH
- 6.0 BLINDING CONCRETE SHALL BE GRADE CIS.
- 7.0 SAND CEMENT RENDER SHALL BE A MINIMUM
- 8.0 CHAMBERS COVERS & FRAMES SHALL COMPLY WITH MINIMUM CLASS D400. CHAMBER COVERS SHALL INDICATE THE TYPE OF VALV
- 9.0 ALL CONNECTIONS TO THE LOCAL MAINS SHALL BE UNDER THE SUPERVISION OF THE LOCAL AUTHORITY
- 10.0 ALL PRESSURE TESTING & STERILISATION SHALL BE UNDER THE SUPERVISION OF THE LOCAL AUTHORITY

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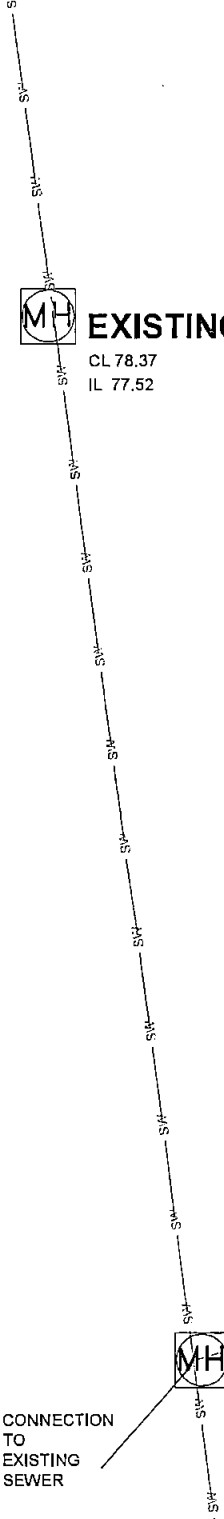
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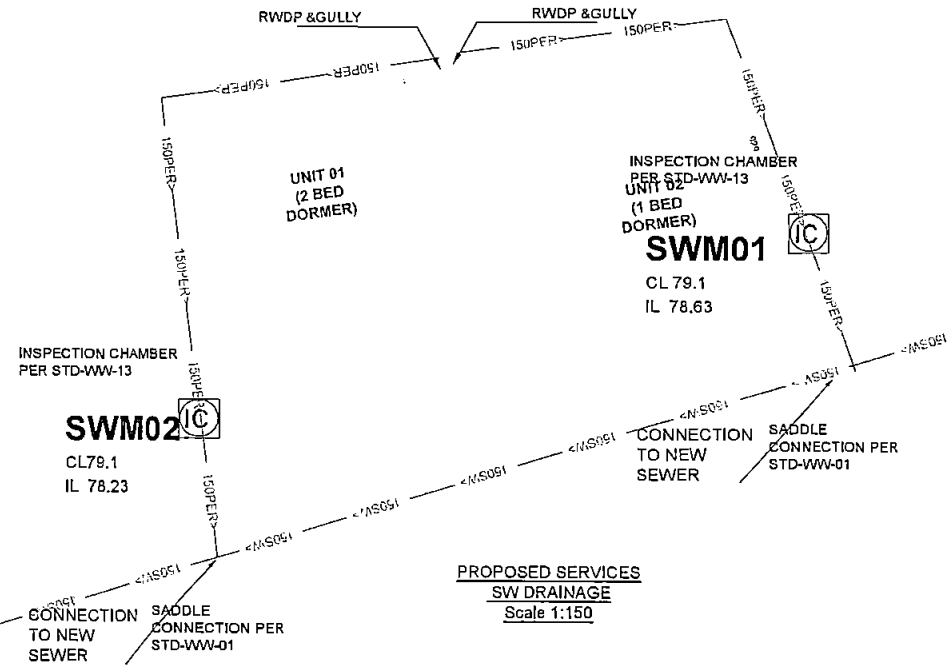
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JOB TITLE
 PROPOSED DEVELOPMENT
 NEWLANDS DRIVE, CLON
 DAVID RAMILLIES
ORG. TITLE
 ENGINEERING SERVICES
 FOUL DRAINAGE

MH EXISTING SW MH
 CL 78.37
 IL 77.52



MH NEW SW MH
 CL 78.57
 IL 77.90
 CONNECTION TO EXISTING SEWER



PROPOSED SERVICES
SW DRAINAGE
 Scale 1:150

NOTE:
 PROPOSED GRAVITY DRAINAGE SYSTEM WILL BE CONSTRUCTED WITH UP
 PIPES TO IS 6 AND LAID IN ACCORDANCE WITH THE BUILDING REGULATIONS
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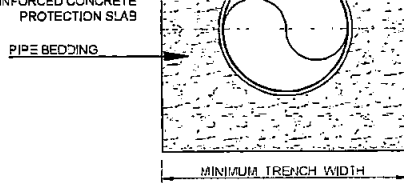
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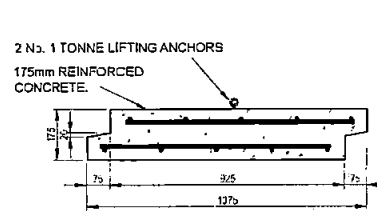
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JOB TITLE
 PROPOSED DEVELOPMENT
 NEWLANDS DRIVE, CLO
 DAVID RAMILLIES
DRG. TITLE
 ENGINEERING SERVICES
 SURFACE DRAINAGE

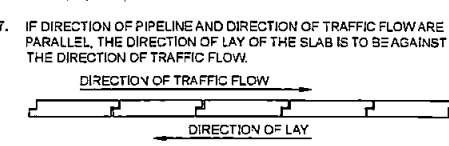
NOTI
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REDUCED COVER PROTECTION SLAB DETAIL

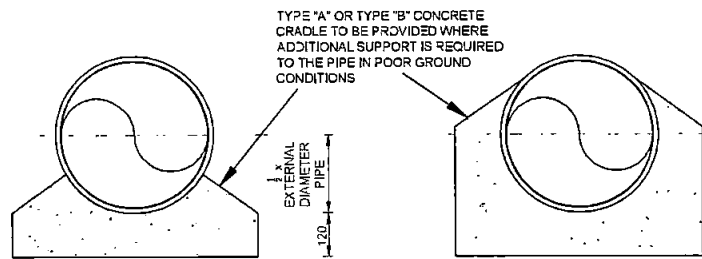


SECTION A-A



7. IF DIRECTION OF PIPELINE AND DIRECTION OF TRAFFIC FLOW ARE PARALLEL, THE DIRECTION OF LAY OF THE SLAB IS TO BE AGAINST THE DIRECTION OF TRAFFIC FLOW.

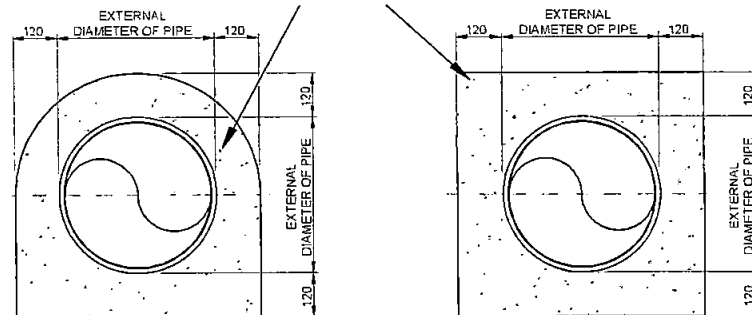
8. IF PIPELINE PROTECTION SLAB IS TO BE USED SOLELY FOR IMPACT PROTECTION & OVERALL DEPTH OF COVER IS GREATER THAN 1.2m, THE DISTANCE BETWEEN UNDERSIDE OF SLAB & TOP OF PIPE MAY BE INCREASED AFTER CONSULTATION WITH IRISH WATER.
9. ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
10. CONCRETE BED AND HAUNCHES MAY BE REQUIRED TO PROVIDE ADDITIONAL SUPPORT IN POOR GROUND CONDITIONS. PROPOSALS TO BE PROVIDED TO IRISH WATER WITH GEOTECHNICAL REPORT SUPPORTING THEIR USE.
11. CONCRETE SURROUNDS SHALL HAVE A MINIMUM THICKNESS OF 150mm WITH AN ABSOLUTE MINIMUM DEPTH OF COVER ABOVE THE EXTERNAL CROWN OF THE PIPE OF 750mm.
12. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206 AND TO BE GRADE C16/20 TO IS EN206
13. THE HAUNCHES AND SURROUNDS TO BE FORMED USING FORM WORK TO PROVIDE A ROUGH CAST FINISH.
14. EXPANSION JOINTS IN THE CONCRETE SHALL BE PROVIDED AT ALL PIPE JOINTS TO ALLOW FOR PIPE FLEXIBILITY, COMPRESSIBLE FILLER BOARD TO BE IN ACCORDANCE WITH BS EN 622-1 AND BS EN 622-4, AND TO BE 18mm THICK.
15. POLYETHYLENE AND uPVC PIPES SHALL BE WRAPPED IN PLASTIC SHEETING HAVING A COMPOSITION IN ACCORDANCE WITH BS 6076 BEFORE BEING CAST INTO CONCRETE.
16. BITUMINOUS MATERIAL SHALL NOT BE PUT IN CONTACT WITH PE OR PVC PIPES.



TYPE 'A' (BED)

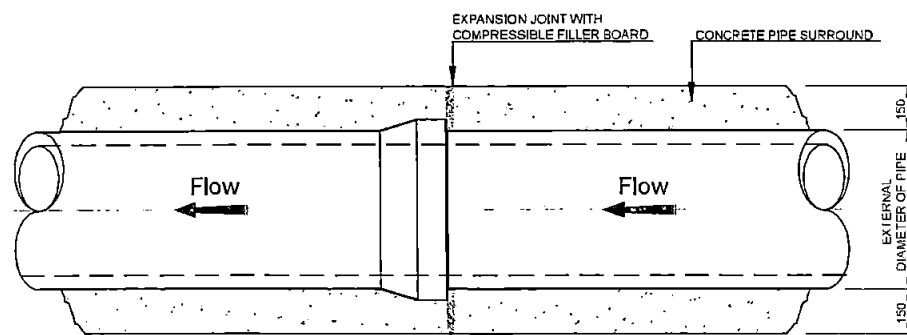
TYPE 'B' (HAUNCH)

TYPE 'C' OR TYPE 'D' CONCRETE SURROUND TO BE PROVIDED WHERE DEPTH OF COVER IS LESS THAN 900mm IN FIELDS OR 1200mm IN ROADS AS AN ALTERNATIVE TO PROVISION OF SUPPORT SLAB SUBJECT TO IRISH WATER AGREEING TO THE OMISSION OF THE SLAB IN LIEU OF THE SURROUND.



TYPE 'C' (SURROUND)

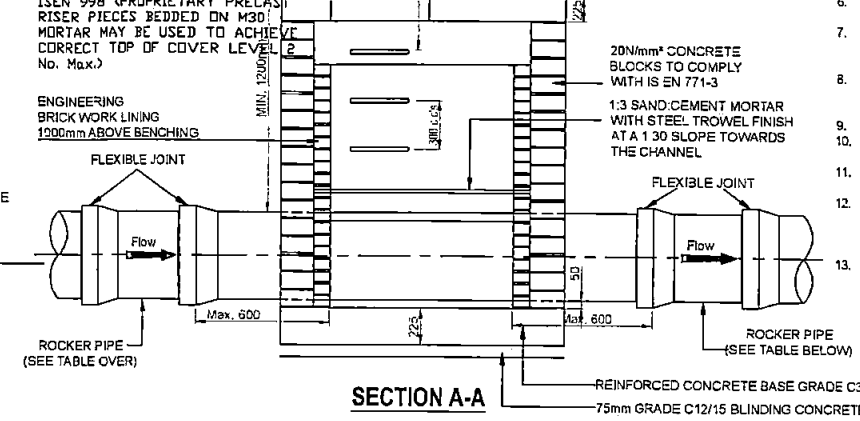
TYPE 'D' (SURROUND)



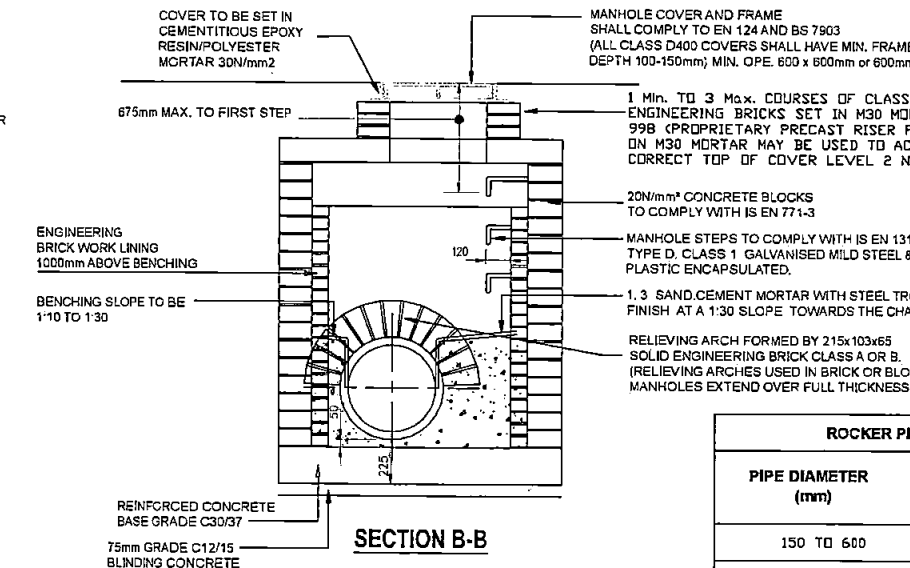
SPIGOT AND SOCKET JOINT

STD-WW-08 CONCRETE PROTECTION TO WASTEWATER PIPES

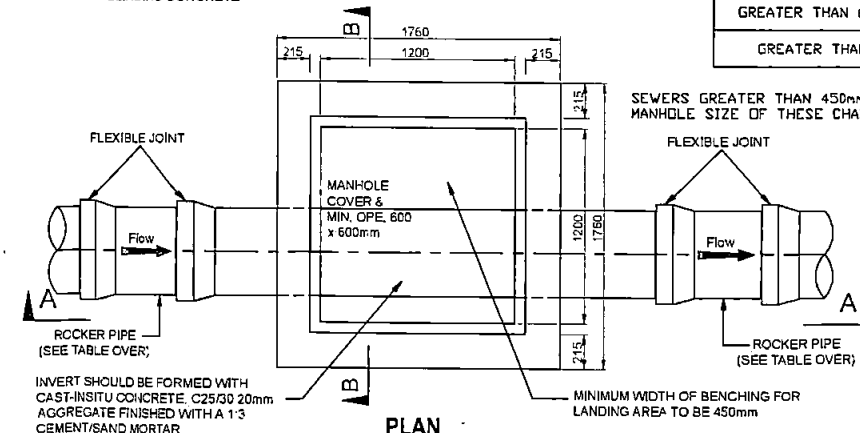
NTS



SECTION A-A



SECTION B-B



PLAN STD-WW-09 BLOCKWORK MANHOLE (<450mm DIA.)

NTS

ROCKER PIPE LENGTH	
PIPE DIAMETER (mm)	LENGTH (mm)
150 TO 600	750
GREATER THAN 600 TO 750	750
GREATER THAN 750	750

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JOB TITLE
RESIDENTIAL DEVELOPMENT
NEWLANDS DRIVE
DUBLIN 8

DWG. TITLE
SHEET 1
DRAINAGE DETAILS

ENGINEERING BRICKS SET IN M30 MORTAR TO IS EN 998 (PROPRIETARY PRECAST RISER PIECES BEDDED ON M30 MORTAR MAY BE USED TO ACHIEVE CORRECT TOP OF COVER LEVEL 2 No. Max.)

PRECAST CONCRETE MANHOLE RINGS TO IS 420 IN CONJUNCTION WITH IS EN 1917 2004

ELASTOMETRIC JOINT SEAL TO EN 681

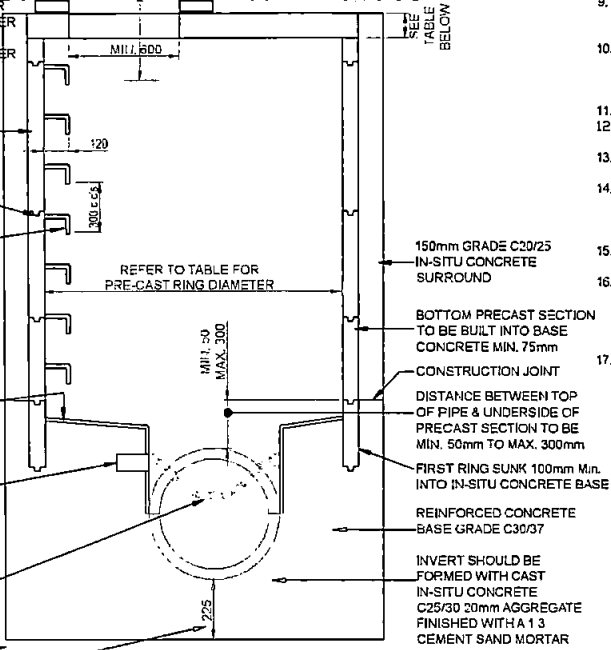
MAN-HOLE STEPS TO COMPLY WITH IS EN 13101, TYPE D, CLASS 1, GALVANISED MILD STEEL & PLASTIC ENCAPSULATED. STEPS ARE REQUIRED IN MANHOLES UP TO A GROUND TO PIPE SOFFIT DEPTH OF LESS THAN 3.0m. MANHOLE LADDERS ARE REQUIRED FOR MANHOLES WITH A DEPTH IN EXCESS OF 3.0m & LADDERS ARE TO COMPLY WITH IS EN 14396.

1:3 CEMENT SAND MORTAR WITH STEEL TROWEL FINISH AT A 1:30 SLOPE TOWARDS THE CHANNEL

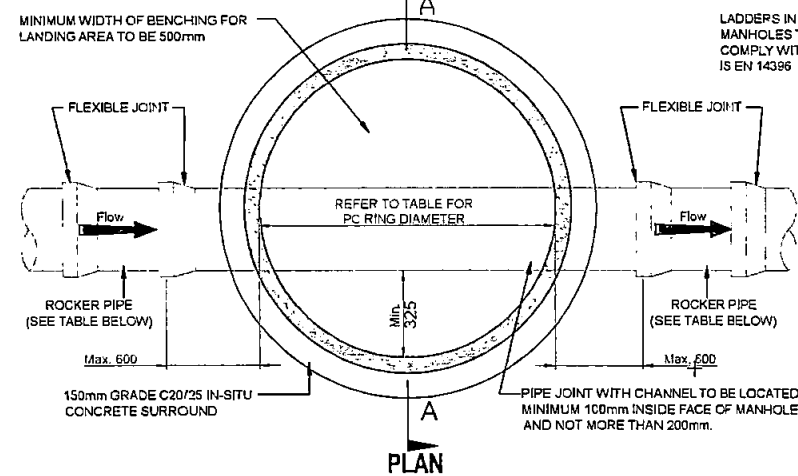
SELF CLEANING TOE HOLES TO BE PROVIDED WHERE CHANNEL EXCEEDS 600mm WIDE

75mm GRADE C12/15 BLINDING CONCRETE TO BARREL OF PIPE

STAINLESS STEEL CHAIN IN 'DOWN' POSITION SECURED TO RESTRAINING HOOK. WHEN CHAMBER IS OCCUPIED WHERE THE PIPE DIAMETER IS 450mm OR MORE



SECTION A-A



PLAN

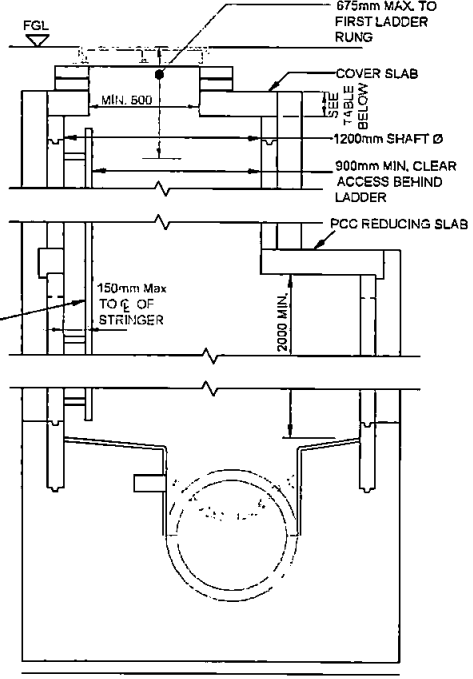
MINIMUM MANHOLE DIAMETERS			
DIAMETER OF LARGEST PIPE IN MANHOLE (mm)	INTERNAL DIAMETER OF MANHOLE (mm)	MIN. PRECAST ROOF SLAB EFFECTIVE THICKNESS (mm)	MIN. IN-SITU ROOF SLAB THICKNESS (mm)
LESS THAN 375	1200	160	225
375 TO 450	1350	160	225
500 TO 750	1500	170	225

ROCKER PIPE LENGTH	
PIPE DIAMETER (mm)	ROCKER PIPE LENGTH (mm)
150 TO 600	600
GREATER THAN 600 TO 750	1000
GREATER THAN 750	1250

*SEWERS GREATER THAN 450mm Ø ARE OUTSIDE THE SCOPE OF THE STANDARD DETAILS. MANHOLE SIZE OF THESE CHAMBERS MAY BE REQUIRED DUE TO MULTIPLE PIPES WITHIN MANHOLE.

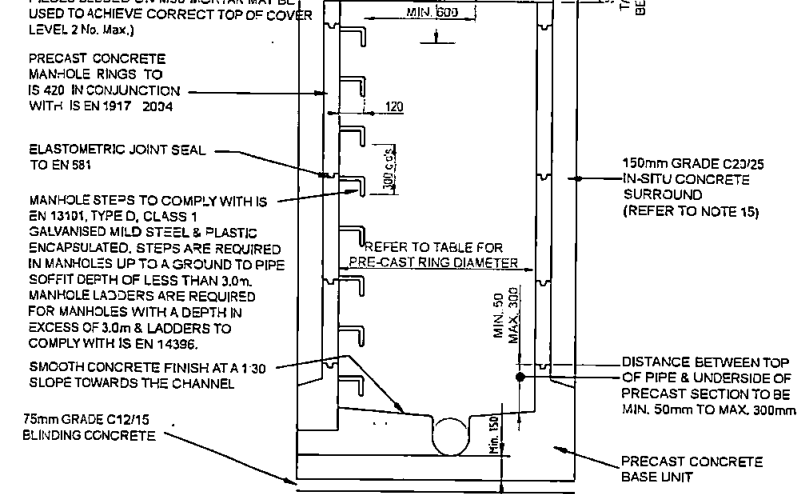
STD-WW-10 PRECAST CONCRETE MANHOLE WITH CAST IN SITU BASE

- 200mm ALL AROUND x 100mm DEEP C20/25 CONCRETE PLINTH COMPLETE WITH BULL NOSE FINISH AND TO BE PROVIDED COMPLETE WITH MILD STEEL REINFORCEMENT LINK AROUND COVERS IN GREEN AREAS.
- ALL CHAMBERS TO BE CHECKED FOR UPLIFT BY THE DEVELOPER BASED ON GROUND CONDITIONS WITHIN THE SITE. SHOULD ANTI FLOTATION MEASURES BE REQUIRED THEY SHALL BE SUBJECT TO REVIEW BY IRISH WATER.
- ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 205 2013.
- ANY SPECIAL ROAD REINSTATEMENT AROUND COVER & FRAME SHALL BE TO ROAD AUTHORITY'S REQUIREMENTS.
- NEW ROAD CONSTRUCTION & SURFACE FINISH TO BE TO ROAD AUTHORITY REQUIREMENTS.
- EXISTING ROAD REINSTATEMENT TO COMPLY WITH CURRENT VERSION OF "GUIDELINES FOR MANAGING OPENINGS IN PUBLIC ROADS" BY THE DEPT. OF TRANSPORT, TOURISM & SPORT. OR TRANSPORT INFRASTRUCTURE IRELAND REQUIREMENTS.
- IF DEPTH FROM GROUND TO PIPE SOFFIT IS GREATER THAN 6m DEEP. A SITE SPECIFIC ENGINEERED SOLUTION FOR ACCESS SHALL BE PROVIDED. PROPRIETARY WATERTIGHT PCC MANHOLE RING SYSTEMS WITH A WALL THICKNESS > 125mm & A WATER TIGHT JOINT SEALING SYSTEM, MAY BE USED WITHOUT CONCRETE SURROUND. SUBJECT TO THE GROUND WATER LEVEL AT THE MANHOLE BEING LOW & SUBJECT TO REVIEW BY IRISH WATER.
- THE INTERNAL MANHOLE DIAMETERS SHOWN IN THE TABLE BELOW ARE MINIMUM DIMENSIONS AND WILL INCREASE DEPENDING ON THE NUMBER AND DIAMETER OF ADDITIONAL INLETS AND FINISHED WITH A 1:3 SAND/CEMENT FINISH TO SUIT FLOW OF INLETS AND OUTLET.

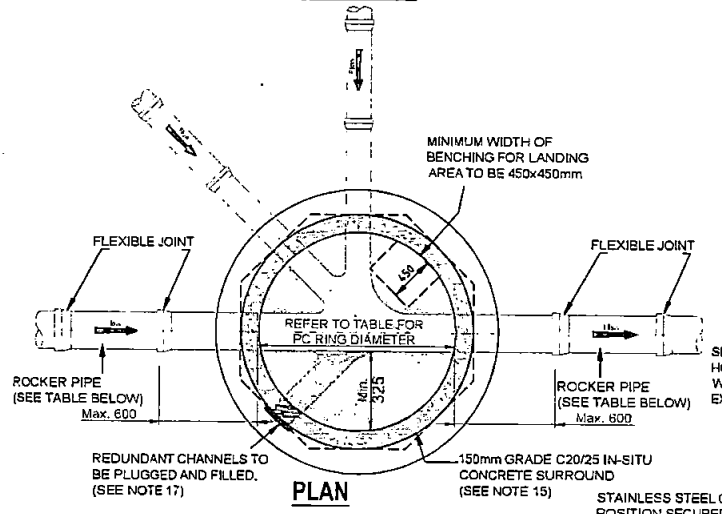


MANHOLE DETAIL > 3m & < 6m GROUND TO SOFFIT DEPTH

(NOTE: ON MANHOLES < 1.5m Ø, REDUCING SLAB NOT TO BE USED & PCC RINGS TO CONTINUE UP TO COVER SLAB)



SECTION A-A



PLAN

NOTE: IF FLEXIBLE PIPES ARE BEING USED, ROCKER PIPES ARE NOT REQUIRED.

MINIMUM MANHOLE DIAMETERS			
DIAMETER OF LARGEST PIPE IN MANHOLE (mm)	INTERNAL DIAMETER OF MANHOLE (mm)	MIN. PRECAST ROOF SLAB EFFECTIVE THICKNESS (mm)	MIN. IN-SITU ROOF SLAB THICKNESS (mm)
LESS THAN 375	1200	160	225
375 TO 450	1350	160	225
500 TO 750	1500	170	225

PIPE DIAMETER
150
GREATER
GREATER

*SEWERS GREATER THAN 450mm Ø ARE OUTSIDE THE SCOPE OF THE STANDARD DETAILS.

STD-WW-10A PRECAST CONCRETE MANHOLE

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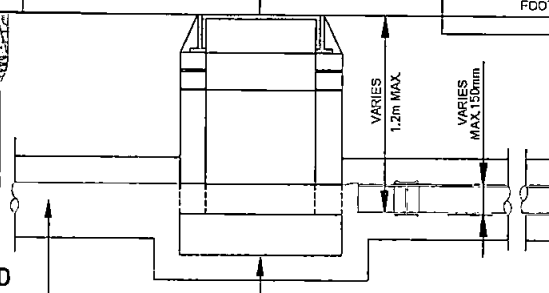
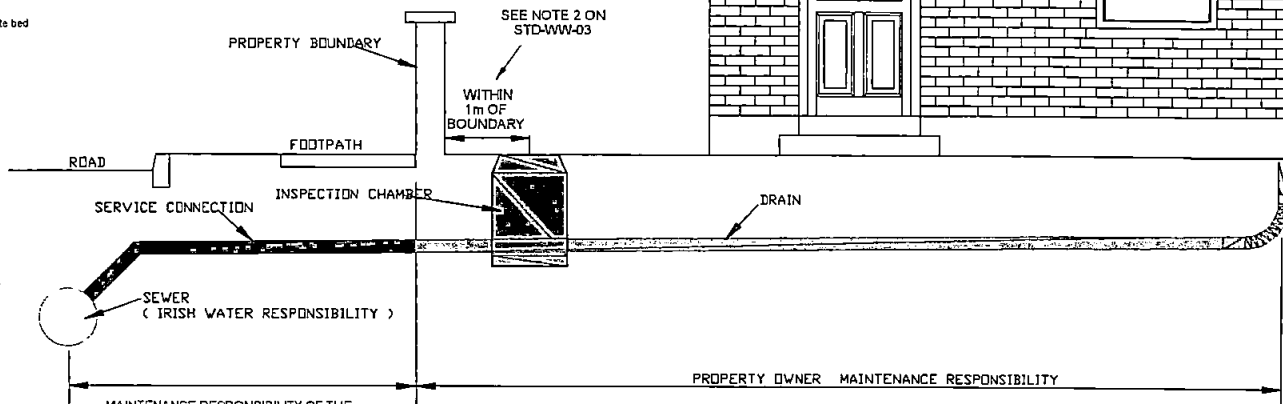
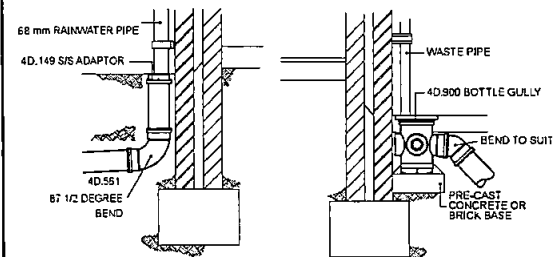
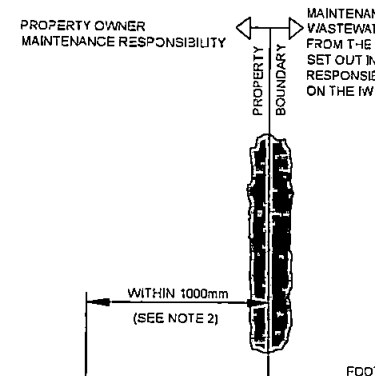
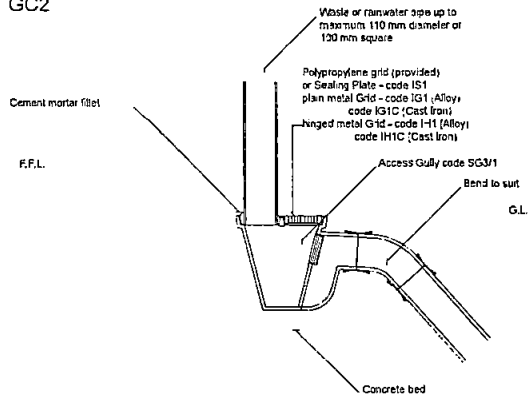
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 PROPOSED DEVELOPMENT
 NEWLANDS DRIVE
 CLONDALKIN
 DRG. TITLE
 SHEET 2
 DRAINAGE DETAILS

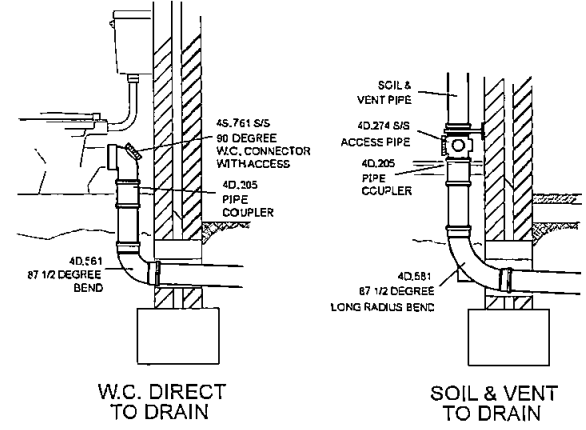
Access Gully.
Connection Detail
GC2



EXTERNAL R.W.P. TO DRAIN
EXTERNAL WASTE PIPE TO GULLY

MAINTENANCE RESPONSIBILITY OF THE WASTEWATER SERVICE CONNECTIONS FROM THE SEWER TO THE BOUNDARY IS SET OUT IN THE PIPE MAINTENANCE RESPONSIBILITY DIAGRAMS INCLUDED ON THE IW WEBSITE @ WWW.WATER.IE

FOR DETAIL OF INSPECTION CHAMBER SEE DRAWING STD-WW-13
DRAIN TO BE INSTALLED TO RELEVANT BUILDING REGULATION REQUIREMENTS



W.C. DIRECT TO DRAIN

SOIL & VENT TO DRAIN

	MAINTENANCE RESPONSIBILITY
(A) SEWER	IRISH WATER
(B-C) SERVICE CONNECTION (INCLUDING SADDLE)	SEE NOTE ABOVE
INSPECTION CHAMBER	PROPERTY OWNER
(C-D) DRAIN	PROPERTY OWNER
INTERNAL PLUMBING	PROPERTY OWNER

SECTION SHOWING DRAIN CONNECTION PIPEWORK

PIPE SIZE (mm)	
100	

STD-WW-01
WASTEWATER SERVICE
CONNECTION MAINTENANCE RESPONSIBILITY

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CLONDALKIN
ORG. TITLE
SHEET 3
DRAINAGE DETAILS

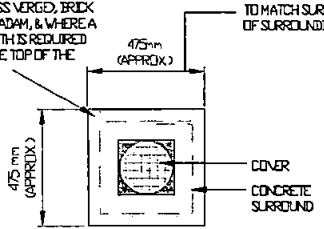
DRAIN AND SEWER

8
9
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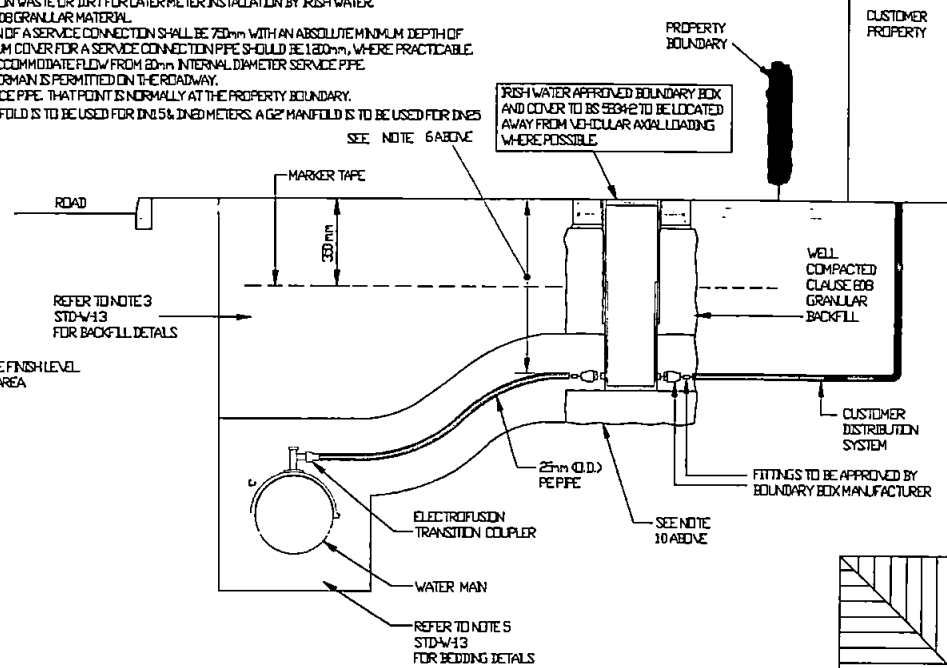
THE PIPE FITTINGS TO THE BOUNDARY BOX SHALL BE APPROVED BY THE BOUNDARY BOX MANUFACTURER.
 THE BOUNDARY BOX SHALL BE INSTALLED HYGIENICALLY & LEFT CLEAN & FREE OF CONSTRUCTION WASTE OR DIRT FOR LATER METER INSTALLATION BY IRISH WATER.
 THE BOUNDARY BOX SHALL BE FOUNDED ON 100mm DEPTH OF C12.5 CONCRETE AND SURROUNDED WITH CLAUSE 80B GRANULAR MATERIAL.
 THE DESIRABLE MINIMUM COVER FROM THE EXTERNAL CROWN OF A SERVICE CONNECTION SHALL BE 750mm WITH AN ABSOLUTE MINIMUM DEPTH OF 600mm FOR SHORT DISTANCES (SUBJECT TO IRISH WATER AGREEMENT). THE DESIRABLE MAXIMUM COVER FOR A SERVICE CONNECTION PIPE SHOULD BE 1200mm, WHERE PRACTICABLE.
 CUSTOMERS DISTRIBUTION PIPEWORK WITHIN THE PREMISES SHOULD BE SUITABLY SIZED TO ACCOMMODATE FLOW FROM 250mm INTERNAL DIAMETER SERVICE PIPE.
 WHERE A GRASS VERGE IS NOT AVAILABLE AND A FOOTPATH IS LESS THAN 1.5m WIDE, THE WATERMAIN IS PERMITTED ON THE ROADWAY.
 THE POSITION OF THE METER DOES NOT REPRESENT THE CHANGE OF OWNERSHIP IN THE SERVICE PIPE. THAT POINT IS NORMALLY AT THE PROPERTY BOUNDARY.
 THE BOUNDARY BOX ACCOMMODATES 100mm DIA AND 125mm CONCENTRIC METERS. A G1 MANFOLD IS TO BE USED FOR 100mm DIA METERS. A G2 MANFOLD IS TO BE USED FOR 125mm METERS.

MAINTENANCE RESPONSIBILITY OF THE WATER SERVICE CONNECTED TO FROM THE WATERMAIN TO THE BOUNDARY IS SET OUT IN THE PIPE MAINTENANCE RESPONSIBILITY DIAGRAMS INCLUDED ON THE WWW.WATER.IE WEBSITE

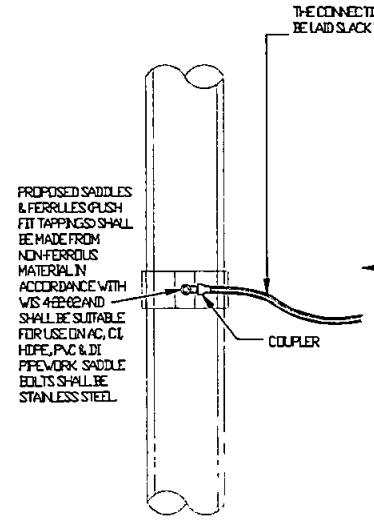
THIS DETAIL APPLIES TO WHERE THE FINISHED SURFACE IS EITHER UNBOUND (GRASS VERGE), BRICK PAVING OR MACADAM, & WHERE A CONCRETE PLINTH IS REQUIRED TO SUPPORT THE TOP OF THE BOUNDARY BOX.



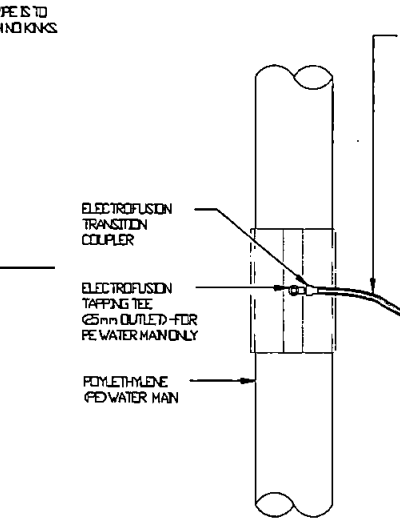
PLAN
CONCRETE SURROUND TO BOUNDARY BOX COVER



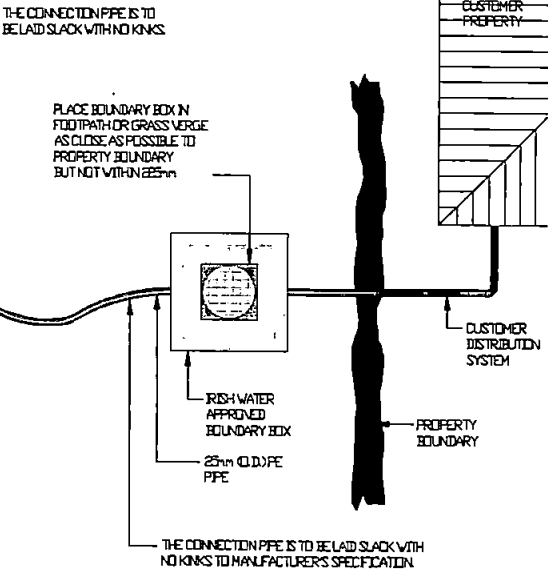
SECTION



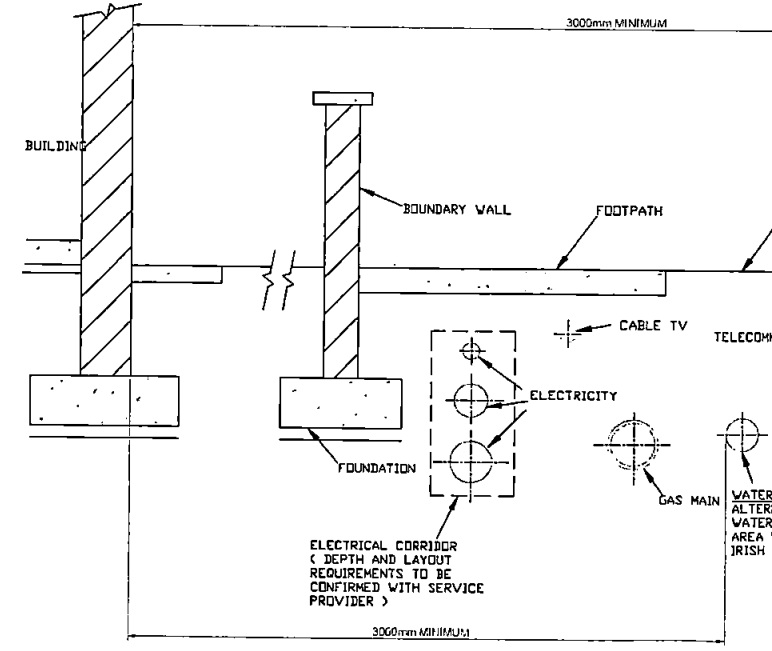
FOR D.I. WATER MAINS



FOR POLYETHYLENE (PE) WATER MAIN ONLY
STD-W-03 CUSTOMER CONNECTION & BOUNDARY BOX



PLAN



STD-WW-05 TYPICAL SERVICE LAYOUT INDICATING MINIMUM CLEARANCES
NTS

- NOTIFICATION IN WRITING IS REQUIRED SHOULD WORKS BE WITHIN THE FOLLOWING DISTANCES FROM A WATER MAIN OR SEWER WHERE THE DEPTH OF THE EXISTING INFRASTRUCTURE DOES NOT EXCEED 1.5m -
 HORIZONTAL
 1m AT EITHER SIDE OF AN EXISTING PIPE LESS THAN 200mm IN DIAMETER.
 2m AT EITHER SIDE OF AN EXISTING PIPE OF 200mm TO 350mm IN DIAMETER.
 5m AT EITHER SIDE OF AN EXISTING PIPE OF 350mm OR GREATER IN DIAMETER.
 WHERE DUCTS OR PIPES ARE TO BE LAID CLOSE TO AN EXISTING WATERMAIN OR SEWER IN THE OWNERSHIP OF 10 DAYS AHEAD OF ADVANCEMENT OF THE WORK. THIS ALSO APPLIES WHERE THE DEPTH OF THE INFRASTRUCTURE IS GREATER THAN 1.5m. SPECIFIC WRITTEN APPROVAL WILL BE REQUIRED FROM IRISH WATER BEFORE PROCEEDING WITH THE WORK.
 NOTIFICATION IN WRITING IS REQUIRED SHOULD WORKS BE WITHIN 1.5m DISTANCE OF A WASTEWATER SEWER.
 REQUIREMENTS SHALL ALSO APPLY TO TRIAL HOLES OR SLIT TRENCHES TO LOCATE THE MAIN OR GAIN ACCESS TO THE MAIN.
 LARGER DIAMETERS >350mm DISTRIBUTION AND TRUNK MAINS, IRISH WATER MUST BE NOTIFIED AT LEAST 14 DAYS AHEAD OF ADVANCEMENT OF THE WORK.
 DEVELOPERS SHALL ALSO COMPLY WITH ANY NOTIFICATION REQUIREMENTS OF OTHER UTILITY PROVIDERS.
- DETAILED PROPOSALS, INCLUDING WORK METHOD STATEMENTS, INSURANCE CONFIRMATION AND DETAILS OF PROTECTION SHALL BE SUBMITTED TO IRISH WATER FOR ITS CONSIDERATION BEFORE AGREEMENT WILL ISSUE. ALL SUCH WORKS (MAINS GREATER THAN 400mm) SHALL BE SUBJECT TO WRITTEN AGREEMENT WITH IRISH WATER BEFORE COMMENCEMENT OF WORK. THESE SEPARATION DISTANCES SHALL ALSO APPLY TO SEPARATION FROM EXISTING STRUCTURES, INCLUDING TRENCHES.
- ANY DAMAGE SHALL BE NOTIFIED IMMEDIATELY TO IRISH WATER. THE PERSON WHO CAUSES THE DAMAGE SHALL BE RESPONSIBLE FOR THE REPAIRS AND SHALL BE COMMITTED AN OFFENCE UNDER SECTION 45 OF THE WATER SERVICES ACT 2007.
- UNDER NO CIRCUMSTANCES WILL IRISH WATER ACCEPT SEWER MAIN INSTALLATIONS UNDER STRUCTURE OR IN EXISTING STRUCTURES OR FEATURES THAT WILL INHIBIT ACCESS FOR POST INSTALLATION MAINTENANCE.
- THE MINIMUM CLEAR HORIZONTAL DISTANCES SHOWN BELOW WILL BE INCREASED IF THE DEPTH OF THE EXISTING INFRASTRUCTURE IS GREATER THAN 1.5m. THE MINIMUM CLEAR DISTANCES FOR PIPE DIAMETERS OF 450mm AND GREATER OR FOR DEPTHS EXCEEDING 1.5m SHALL ALSO APPLY TO SEPARATION FROM EXISTING STRUCTURES, INCLUDING TRENCHES.
- THE EXTERNAL FACES OF MANHOLES SHALL BE AT LEAST 0.5m FROM THE EXTERNAL FACE OF THE KERB LINE.
- THE EXTERNAL WALL OF THE SEWER IS TO BE AT LEAST 1.0m FROM THE EXTERNAL FACE OF THE KERB LINE.
- WHERE DESIGN DEVIATES FROM TYPICAL DETAILS, THE LAYOUT SHALL BE SUBMITTED TO IRISH WATER FOR APPROVAL. WRITTEN AGREEMENT, WHICH IS TO BE OBTAINED IN WRITING BEFORE WORK COMMENCES.

- NOTES
- For scaling and refer to Architect's drawings.
 - This drawing to be read in conjunction with all other Architectural and Engineering drawings and all other relevant drawings and Specifications.
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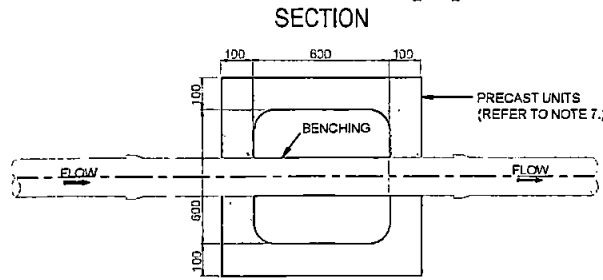
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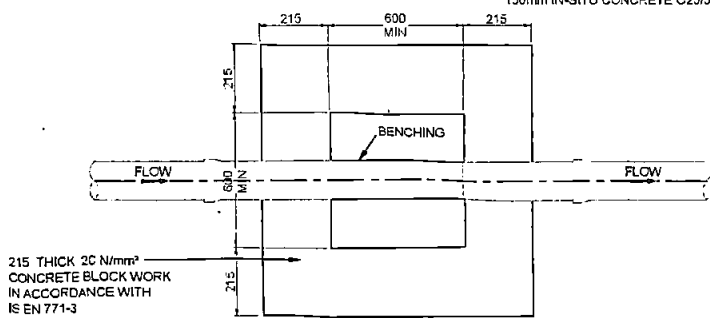
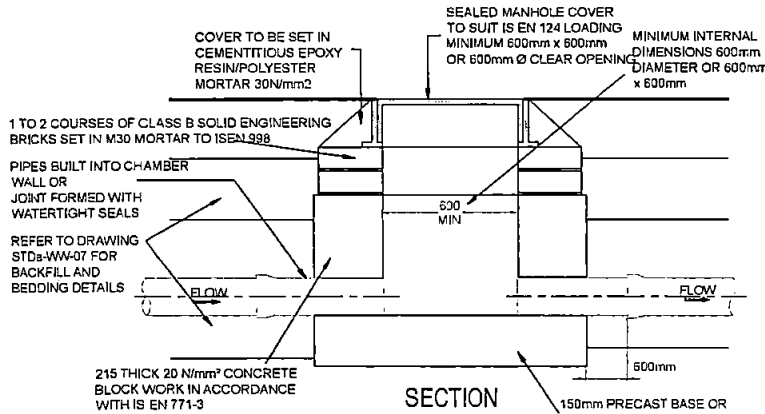
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JOB TITLE
 PROPOSED DEVELOP
 NEWLANDS DRIVE
 CLONDALKIN
 ORG. TITLE
 SHEET 5
 DRAINAGE DETAILS

150mm PRECAST BASE OR
150mm IN-SITU CONCRETE C25/30

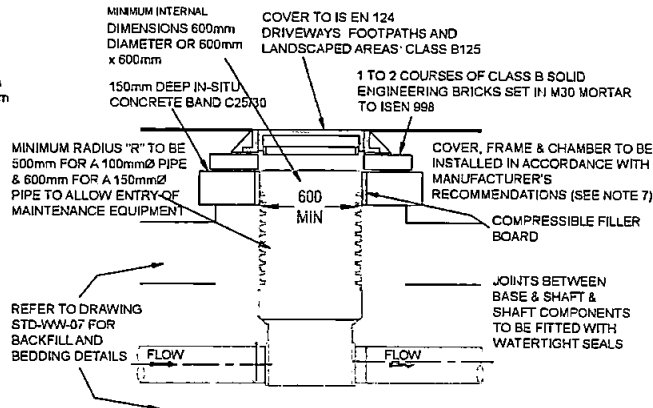


SECTION
FLOOR PLAN
INSPECTION CHAMBER
(PRECAST CONCRETE CONSTRUCTION)



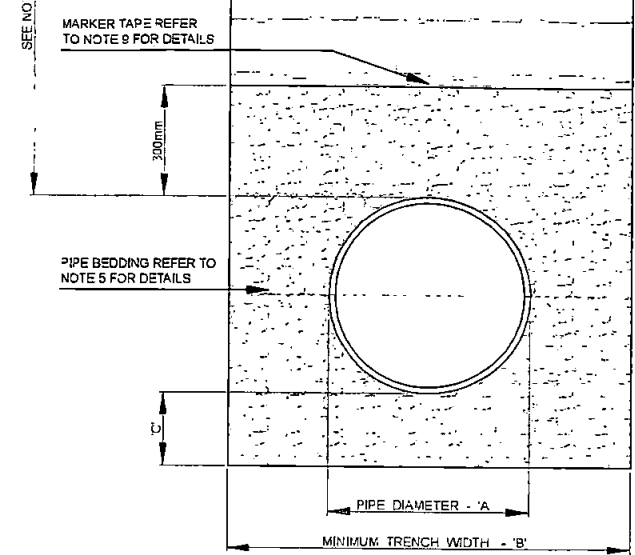
SECTION
FLOOR PLAN
INSPECTION CHAMBER
(BLOCK WORK CONSTRUCTION)

9. COMPACTED CLAUSE 804 OR CLAUSE 803 MATERIAL AS PER STD-WW-07. MAXIMUM DEPTH FROM COVER LEVEL TO INVERT OF PIPE = 1.2m. INTERNAL DIMENSIONS GREATER THAN 600 x 600mm OR 600mm Ø REQUIRED WHERE DEPTH EXCEEDS 1.2m - CONSULT WITH IRISH WATER.
10. SMALLER INSPECTION CHAMBERS WITH INTERNAL DIMENSIONS OF 450mm Ø OR 450 x 450mm MAY BE PERMITTED SUBJECT TO APPROVAL BY IRISH WATER WHERE CONFINED PHYSICAL CONDITIONS EXIST.
11. PREFABRICATED UNITS SHOULD HAVE WATER TIGHT JOINTS AND SHOULD BE INTERLOCKING TO PREVENT LATERAL MOVEMENT OF INDIVIDUAL SECTIONS OF THE UNIT

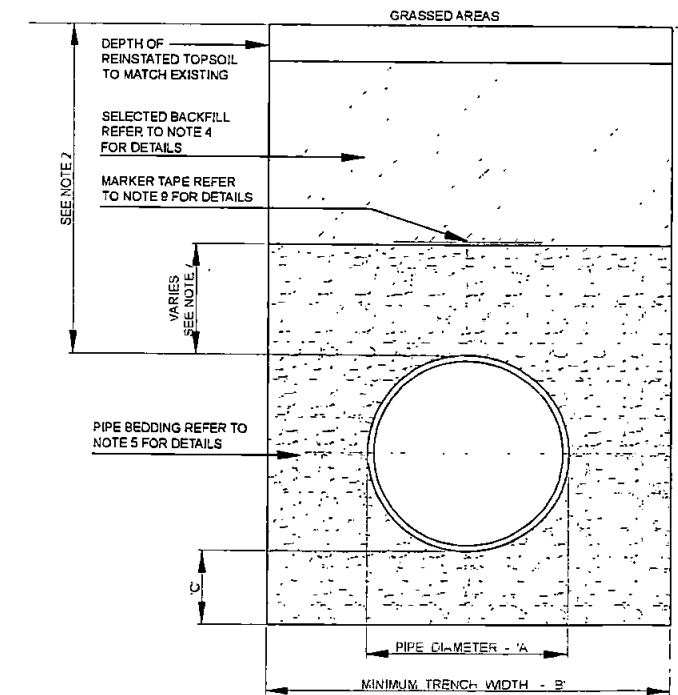


SECTION
PROPRIETARY INSPECTION CHAMBER to EN13598-2
(FLEXIBLE MATERIAL, SUBJECT TO PRIOR IRISH WATER APPROVAL)

(MAXIMUM DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE: 1.2m)



CROSS SECTION IN ROADS



CROSS SECTION IN GRASSED AREAS

STD-WW-13
PRIVATE SIDE INSPECTION CHAMBER

STD-WW-07 TRENCH

- NOTES**
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SHEET 4
DRAINAGE DETAILS