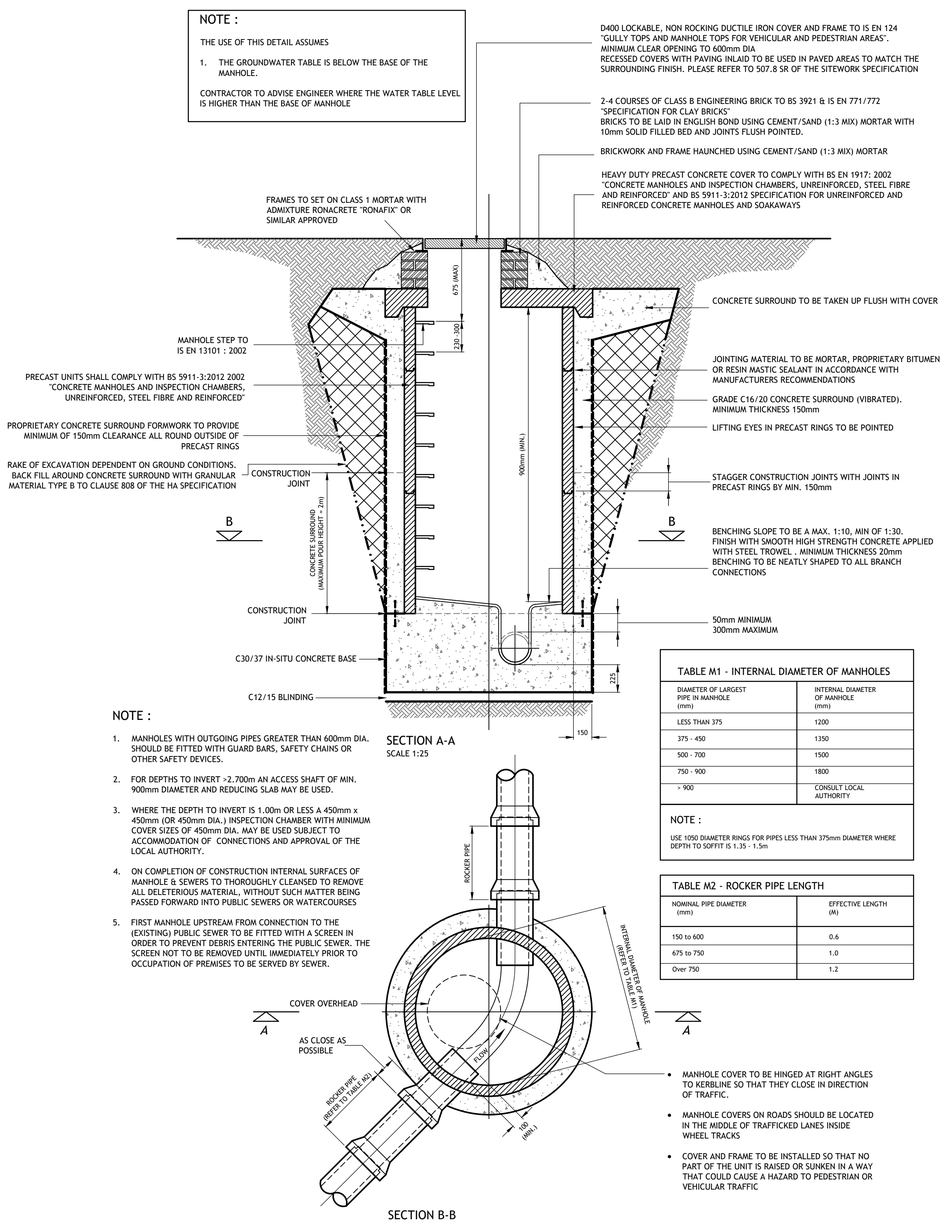
NOTE :

THE USE OF THIS DETAIL ASSUMES

1. THE GROUNDWATER TABLE IS BELOW THE BASE OF THE MANHOLE.

CONTRACTOR TO ADVISE ENGINEER WHERE THE WATER TABLE LEVEL IS HIGHER THAN THE BASE OF MANHOLE



NOTE :

1. MANHOLES WITH OUTGOING PIPES GREATER THAN 600mm DIA. SHOULD BE FITTED WITH GUARD BARS, SAFETY CHAINS OR OTHER SAFETY DEVICES.
2. FOR DEPTHS TO INVERT >2.700m AN ACCESS SHAFT OF MIN. 900mm DIAMETER AND REDUCING SLAB MAY BE USED.
3. WHERE THE DEPTH TO INVERT IS 1.00m OR LESS A 450mm x 450mm (OR 450mm DIA.) INSPECTION CHAMBER WITH MINIMUM COVER SIZES OF 450mm DIA. MAY BE USED SUBJECT TO ACCOMMODATION OF CONNECTIONS AND APPROVAL OF THE LOCAL AUTHORITY.
4. ON COMPLETION OF CONSTRUCTION INTERNAL SURFACES OF MANHOLE & SEWERS TO THOROUGHLY CLEANSED TO REMOVE ALL DELETERIOUS MATERIAL, WITHOUT SUCH MATTER BEING PASSED FORWARD INTO PUBLIC SEWERS OR WATERCOURSES
5. FIRST MANHOLE UPSTREAM FROM CONNECTION TO THE (EXISTING) PUBLIC SEWER TO BE FITTED WITH A SCREEN IN ORDER TO PREVENT DEBRIS ENTERING THE PUBLIC SEWER. THE SCREEN NOT TO BE REMOVED UNTIL IMMEDIATELY PRIOR TO OCCUPATION OF PREMISES TO BE SERVED BY SEWER.

SECTION A-A
SCALE 1:25

TABLE M1 - INTERNAL DIAMETER OF MANHOLES	
DIAMETER OF LARGEST PIPE IN MANHOLE (mm)	INTERNAL DIAMETER OF MANHOLE (mm)
LESS THAN 375	1200
375 - 450	1350
500 - 700	1500
750 - 900	1800
> 900	CONSULT LOCAL AUTHORITY

NOTE :

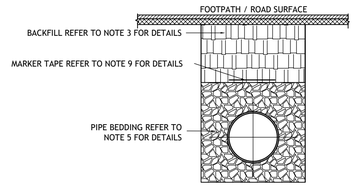
USE 1050 DIAMETER RINGS FOR PIPES LESS THAN 375mm DIAMETER WHERE DEPTH TO SOFFIT IS 1.35 - 1.5m

TABLE M2 - ROCKER PIPE LENGTH	
NOMINAL PIPE DIAMETER (mm)	EFFECTIVE LENGTH (M)
150 to 600	0.6
675 to 750	1.0
Over 750	1.2

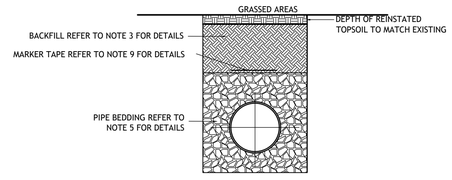
SECTION B-B
SCALE 1:25

- MANHOLE COVER TO BE HINGED AT RIGHT ANGLES TO KERBLINE SO THAT THEY CLOSE IN DIRECTION OF TRAFFIC.
- MANHOLE COVERS ON ROADS SHOULD BE LOCATED IN THE MIDDLE OF TRAFFICKED LANES INSIDE WHEEL TRACKS
- COVER AND FRAME TO BE INSTALLED SO THAT NO PART OF THE UNIT IS RAISED OR SUNKEN IN A WAY THAT COULD CAUSE A HAZARD TO PEDESTRIAN OR VEHICULAR TRAFFIC

BEDDING DETAILS WATERMAINS



CROSS SECTION IN ROADWAYS



CROSS SECTION IN ROADWAYS

TRENCH BACKFILL AND BEDDING

SCALE 1:25

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE
2. THE MINIMUM DEPTH OF COVER FROM THE FINISHED GROUND LEVEL TO THE EXTERNAL CROWN OF THE PIPE SHALL BE 750mm FOR SERVICE CONNECTIONS, 900mm FOR WATER MAINS. GREATER DEPTHS OF COVER AND/OR PIPE STRENGTH AND/OR A HIGHER CLASS OF BEDDING MATERIAL MAY BE REQUIRED WHERE HIGH TRAFFIC LOADING IS ANTICIPATED. THE MAXIMUM COVER SHOULD NOT EXCEED 1,200mm WHERE PRACTICABLE.
3. CLAUSE 808 MATERIAL IN ACCORDANCE WITH THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS IS TO BE USED AS BACKFILL MATERIAL WHERE THE WATER MAIN IS LOCATED IN ROADS, FOOTPATHS OR WHEN THE NEAREST PART OF THE TRENCH IS WITHIN 1m OF THE PAVED EDGE OF THE ROADWAY. CLAUSE 808 IS TO BE COMPACTED AS PER CLAUSE 802 OF THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS.
4. SELECTED EXCAVATED MATERIAL MAY BE USED IN GREEN-FIELD AREAS ABOVE GRANULAR PIPE SURROUND MATERIAL SUBJECT TO THE APPROVAL OF IRISH WATER.
5. PIPE BEDDING SHALL COMPLY WITH WIS 4-08-02 AND IGN 4-08-01 GRANULAR MATERIAL SHALL BE 14mm TO 5mm GRADED AGGREGATE OR 10mm SINGLE SIZED AGGREGATE TO IS EN 13242.
6. IN SOFT GROUND CONDITIONS (CBR < 5) THE MATERIAL SHOULD BE EXCAVATED OUT AND DISPOSED OF IN ACCORDANCE WITH THE WASTE MANAGEMENT ACT AND CLAUSE 808 MATERIAL IN ACCORDANCE WITH THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS SHALL REPLACE THE EXCAVATED MATERIAL, WRAPPED IN GEO-TEXTILE WRAPPING. ALTERNATIVELY, SPECIAL PIPE SUPPORT ARRANGEMENTS, INCLUDING PILING ETC. MAY BE REQUIRED WHERE THE DEPTH OF SOFT MATERIAL IS EXCESSIVE. SUCH ARRANGEMENTS SHALL BE SUBJECT TO ASSESSMENT BY IRISH WATER BEFORE ADVANCING WITH THE WORK.
7. PIPES SHALL NOT BE SUPPORTED ON STONES OR ROCKS, OR ANY HARD OBJECT AT ANY POINT ALONG THE TRENCH. ROCK SHALL BE EXCAVATED TO A DEPTH OF 150mm BELOW THE ACTUAL DEPTH OF THE TRENCH WITH THE VOID FILLED WITH CLAUSE 804 MATERIAL IN ACCORDANCE WITH THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS. THE GRANULAR MATERIAL SHALL BE LAID ABOVE THIS VOID BACKFILL MATERIAL.
8. SHOULD MINIMUM COVER NOT BE ACHIEVABLE, CONCRETE GRADE C8/10 SHALL BE USED AS BACKFILL MATERIAL.
9. MARKER TAPE TO BE 400mm WIDE BLUE POLYETHYLENE MATERIAL IN ACCORDANCE WITH EN 12163, PLASTIC PIPES SHALL HAVE WARNING TAPE INCORPORATED A REINFORCED BAND BRACING WIRE. SERVICE PIPES SHALL HAVE 200mm WIDE MESH TAPE. MARKER TAPE TO BE LAID AT TOP OF PIPE BEDDING LAYER.
10. TRENCH WIDTHS FOR PIPE SIZES TO CONSIDERATION BEING GIVEN TO THE TRENCH DEPTH, HEALTH & SAFETY & CONSTRUCTION ACCESS REQUIREMENTS.

Date Drawn: 2021-01-07
Drawn By: Colin O'Sullivan
Colour Drawing:

Rev	Amendment	By	Date
C01	ISSUED FOR PLANNING	DT	07/10/2022

Client: Comhairle Cathrach Chorcaí Cork City Council

Job Title: CLOVERHILL SOCIAL HOUSING DEVELOPMENT
Dwg Title: PROPOSED CONSTRUCTION DETAILS SHEET 1
Job No: 194191 | Model Ref: CLO-PUNCH-XX-XX-M2-0500 | Drawing Status: A0

PUNCH consulting engineers
Dublin | Limerick | Cork | Galway | Glasgow
Elm Court, Boreenmanna Road, Cork, T12 HHW2
IRL: +353 21 462 4000 www.punchconsulting.com

Scale @ A1: 1:25
Technician Check: Shane Slattery
Engineer Check: Mike O'Connor
Approved: David O'Donovan
Document No: CLO-PUNCH-XX-XX-DR-C-0500
Revision No: C01