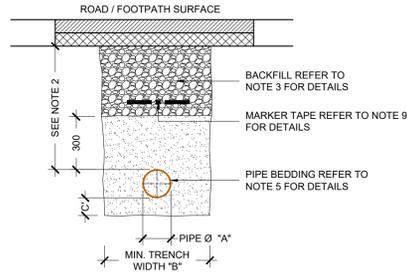
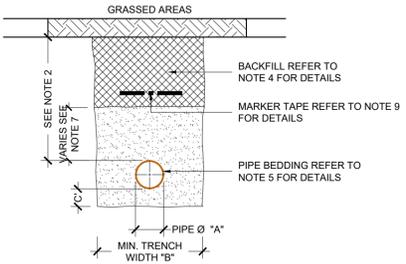


REVISION SCHEDULE				
REV. NO.	REV. DESCRIPTION	REV. DATE	DRAWN	CHECKED
PL1	ISSUED FOR PRE-PLANNING DISCUSSION	16/08/2023	JPC	JFC
PL2	ISSUED FOR PRE-PLANNING DISCUSSION	31/08/2023	JPC	JFC
PL3	ISSUED FOR PLANNING	23/11/2023	KJD	JFC

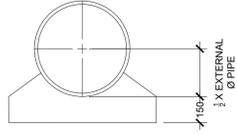
- NOTES**
- ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
 - THE MINIMUM DEPTH OF COVER FROM THE FINISHED SURFACE TO THE CROWN OF GRAVITY PIPES WITHOUT PROTECTION SHOULD BE AS FOLLOWS:
 - GARDENS AND PATHWAYS WITHOUT ANY POSSIBILITY OF VEHICULAR ACCESS - DEPTH NOT LESS THAN 0.9m (THIS WOULD NORMALLY RELATE TO DRAINS IN PRIVATE PROPERTY, SHALLOW PIPES OF THIS NATURE ARE UNDESIRABLE AND SHOULD BE INSTALLED IN ACCORDANCE WITH THE CURRENT BUILDING REGULATIONS)
 - DRIVEWAYS, PARKING AREAS AND YARDS WITH HEIGHT RESTRICTIONS TO PREVENT ENTRY BY VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES - DEPTH NOT LESS THAN 0.75m.
 - DRIVEWAYS, PARKING AREAS AND NARROW STREETS WITHOUT FOOTWAYS (E.G. MEWS DEVELOPMENTS) WITH LIMITED ACCESS FOR VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES - DEPTH NOT LESS THAN 0.9m
 - DEPTHS OF SEWERS IN GATED ESTATES SHALL BE SIMILAR TO THAT OUTLINED ABOVE.
 - AGRICULTURAL LAND AND PUBLIC OPEN SPACE - DEPTH NOT LESS THAN 0.9m
 - OTHER HIGHWAYS AND PARKING AREAS WITH UNRESTRICTED ACCESS TO VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES - DEPTH NOT LESS THAN 1.2m
 - CLAUSE 808 MATERIAL IN ACCORDANCE WITH THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS IS TO BE USED AS BACKFILL MATERIAL WHERE THE SEWER 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.
 - SELECTED EXCAVATED MATERIAL MAY BE USED IN GREEN-FIELD AREAS ABOVE GRANULAR PIPE SURROUND MATERIAL SUBJECT TO THE APPROVAL OF IRISH WATER.
 - PIPE BEDDING SHALL COMPLY WITH WIS-09-02 AND IGN 4-08-01 GRANULAR MATERIAL SHALL BE 14mm TO 5mm GRADED AGGREGATE OR 10mm SINGLE SIZED AGGREGATE IS EN 13242. CONCRETE BED, HAUNCH & SURROUND, WHERE REQUIRED SHALL BE TO IRISH WATER STANDARDS.
 - IN SOFT GROUND CONDITIONS (CBR <5) THE MATERIAL SHOULD BE EXCAVATED 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.
 - IN GREEN FIELD AREAS, TYPE B BACKFILL (SELECTED EXCAVATED MATERIAL) WILL BE ALLOWED ABOVE THE SIDE HAUNCH GRANULAR MATERIAL IN THE CASE OF RIGID PIPES. A GRANULAR SURROUND OF A MINIMUM DEPTH OF 150mm ABOVE THE CROWN OF THE PIPE IS REQUIRED FOR FLEXIBLE PIPES, AND TYPE B MATERIAL MAY BE USED AS BACKFILL ABOVE THIS. ALL RISING MAINS IN GREENFIELD AREAS SHALL HAVE A MINIMUM COVER OF 300mm OF GRANULAR MATERIAL ABOVE THE EXTERNAL CROWN OF THE PIPE.
 - PIPES SHALL NOT BE SUPPORTED ON STONES, ROCKS OR ANY HARD OBJECTS 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 808 MATERIAL IN ACCORDANCE WITH THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS. THE GRANULAR MATERIAL SHALL BE LAID ABOVE THIS VOID BACKFILL MATERIAL.
 - NON DEGRADABLE MARKER TAPE SHOULD BE INSTALLED AT TOP OF PIPE BEDDING LAYER. IN THE CASE OF NON METAL PIPE MATERIAL, THE TAPE SHOULD INCORPORATE A TRACE WIRE WHICH IS LINKED TO FITTINGS AND TERMINATED AT THE WASTE WATER PUMPING STATION AND DISCHARGE MANHOLE.
 - TRENCH WIDTHS FOR PIPE SIZES $\leq 80\text{mm}$ MAY BE $\leq 500\text{mm}$, SUBJECT TO CONSIDERATION BEING GIVEN TO THE TRENCH DEPTH, HEALTH & SAFETY & CONSTRUCTION ACCESS TO REQUIREMENTS.



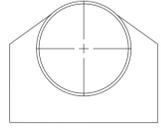
CROSS SECTION IN ROADS
N.T.S.



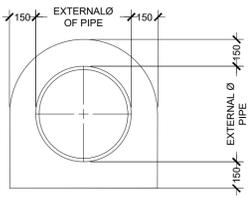
CROSS SECTION IN GRASSED AREAS
N.T.S.



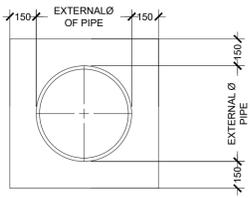
TYPE 'A'
N.T.S.



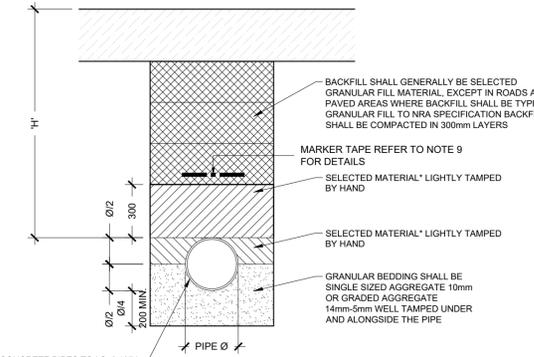
TYPE 'B'
N.T.S.



TYPE 'C'
N.T.S.

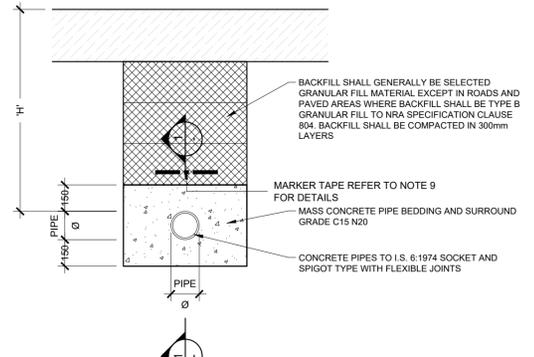


TYPE 'D'
N.T.S.



CONCRETE PIPES BEDDED IN GRANULAR MATERIAL
SCALE: 1:20

NOTE:
DETAIL APPLIES WHERE COVER 'H' IS GREATER THAN 1.2m IN ROADS AND PAVED AREAS, 0.9m IN FIELDS AND FOOTPATHS AND 0.6m IN GARDENS

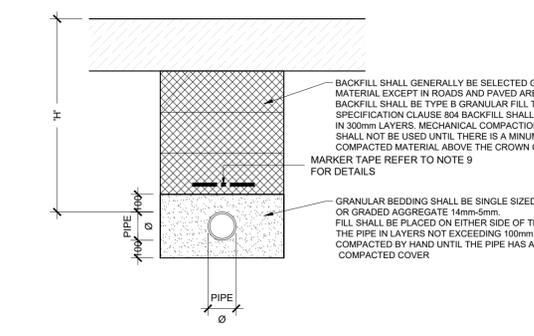


CONCRETE PIPES BEDDED IN CONCRETE
SCALE: 1:20

NOTE:
25mm THICK COMPRESSIBLE FILLER BOARD SHALL BE PROVIDED AT EACH PIPE JOINT AND SHALL EXTEND OVER THE FULL WIDTH AND DEPTH OF THE CONCRETE

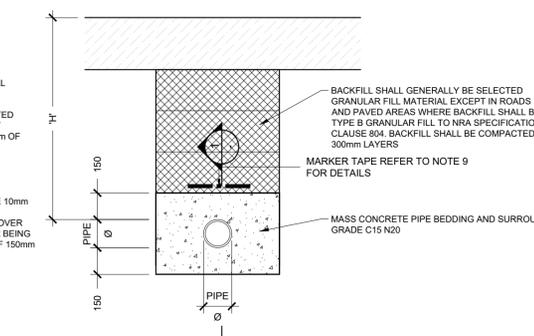
SECTION 1-1
SCALE: 1:20

NOTE:
DETAIL APPLIES WHERE COVER 'H' IS LESS THAN 1.2m IN ROADS AND PAVED AREAS, 0.9m IN FIELDS AND FOOTPATHS AND 0.6m IN GARDENS.



uPVC PIPES BEDDED IN GRANULAR MATERIAL
SCALE: 1:20

NOTE:
DETAIL APPLIES WHERE COVER 'H' IS GREATER THAN 1.2m IN ROADS AND PAVED AREAS, 0.9m IN FIELDS AND FOOTPATHS AND 0.6m IN GARDENS

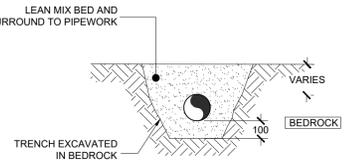


uPVC PIPES BEDDED IN CONCRETE
SCALE: 1:20

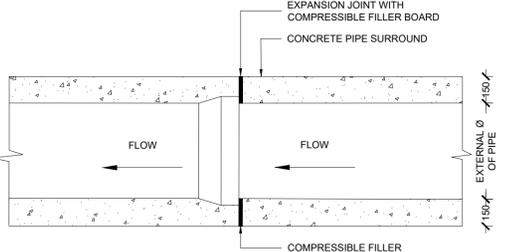
NOTE:
25mm THICK COMPRESSIBLE FILLER BOARD SHALL BE PROVIDED AT EACH PIPE JOINT AND SHALL EXTEND OVER THE FULL WIDTH AND DEPTH OF THE CONCRETE

SECTION 2-2
SCALE: 1:20

NOTE:
DETAIL APPLIES WHERE COVER 'H' IS LESS THAN 1.2m IN ROADS AND PAVED AREAS, 0.9m IN FIELDS AND FOOTPATHS AND 0.6m IN GARDENS.



SECTION A-A CROSS SECTION OF DRAINAGE PIPEWORK WITHIN BUILDINGS
N.T.S.



SPIGOT AND SOCKET JOINT
N.T.S.

Drawing Stage: PLANNING	Project Details:	<p align="center">Notes</p> <ol style="list-style-type: none"> ALL ENGINEERS DRAWINGS TO BE READ IN CONJUNCTION WITH RELEVANT DRAWINGS AND SPECIFICATIONS. ALL LEVELS ARE STRUCTURAL UNLESS NOTED OTHERWISE. ALL SETTING OUT TO ARCHITECTS DRAWINGS. DO NOT SCALE FROM ENGINEERS DRAWINGS. ANY DISCREPANCIES BETWEEN DRAWINGS, SKETCHES, VERBAL INSTRUCTIONS AND SITE CONDITIONS TO BE REFERRED TO THE DESIGN TEAM BEFORE WORK COMMENCES. 	Drawn by: JPC	Checked by: KO'M	Approved by: JFC	Date: MAR '23	<p>Behan House, 10 Lower Mount St., Dublin 2. D02 HT71 Tel: +353 (0)1 661 1100 e-mail: info@cora.ie Web: www.cora.ie</p>
	Site Address: MONAGHAN CO. CO. HQ, ROOSKY, MONAGHAN TOWN		Project Name: CIVIC OFFICES	Scale: A.S. @ A1	Project Number: 2223		
	Client: MONAGHAN COUNTY COUNCIL		Project: MCC	Originator: CORA	Zone: ZZ		
	Architect: HENRY J LYONS ARCHITECTS		Level: ZZ	Type: DR	Discipline: C		
M&E Designer:	Contractor:	Level: ZZ	Type: DR	Discipline: C	Drawing No: 0013	Stage: PL3	Revision: