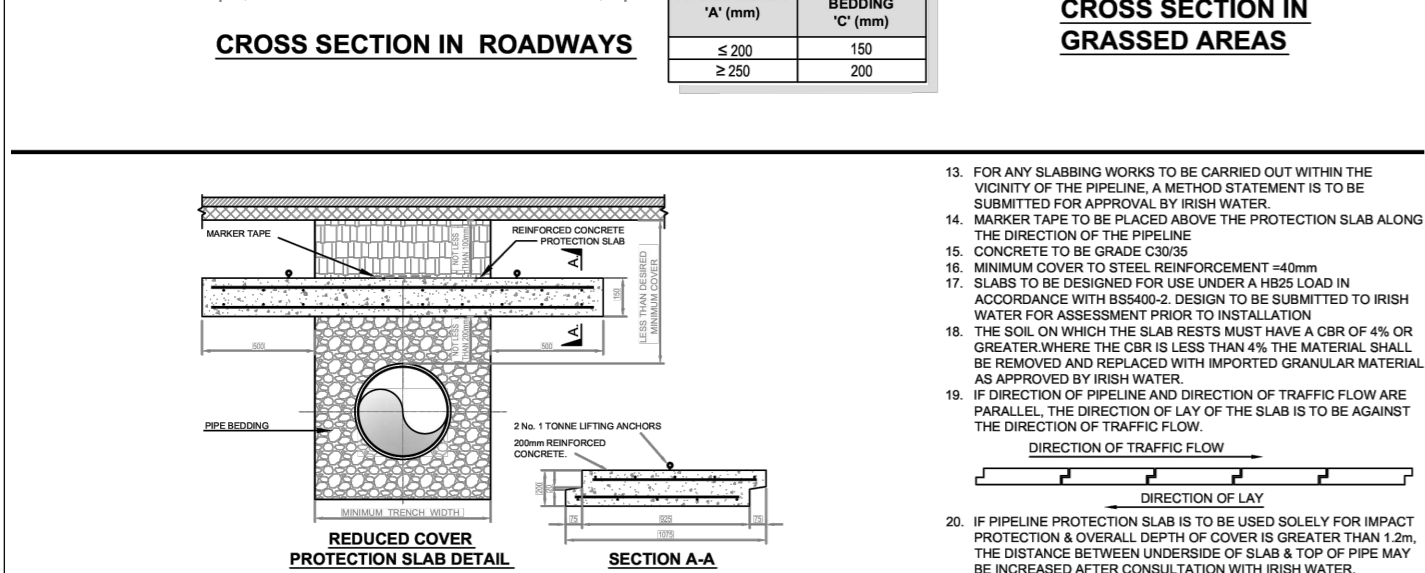
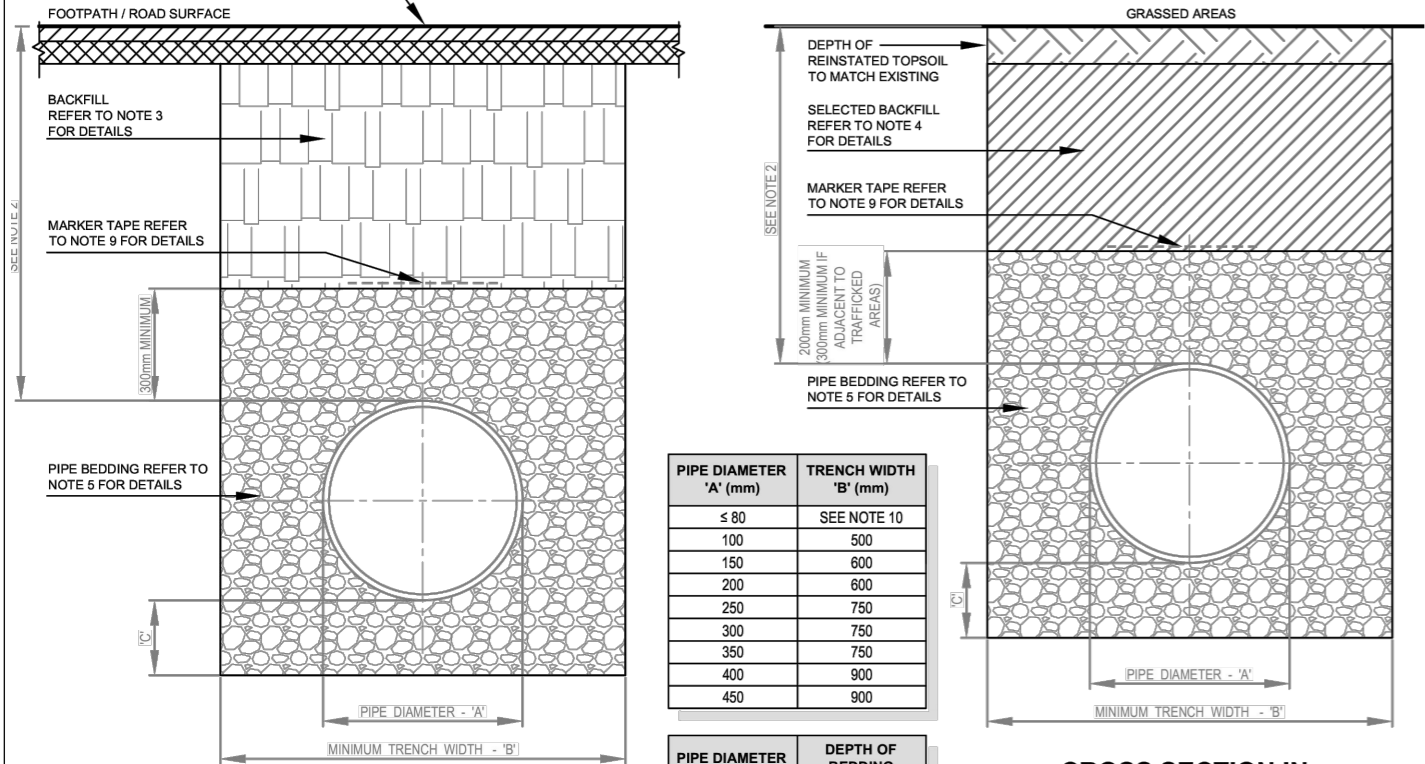
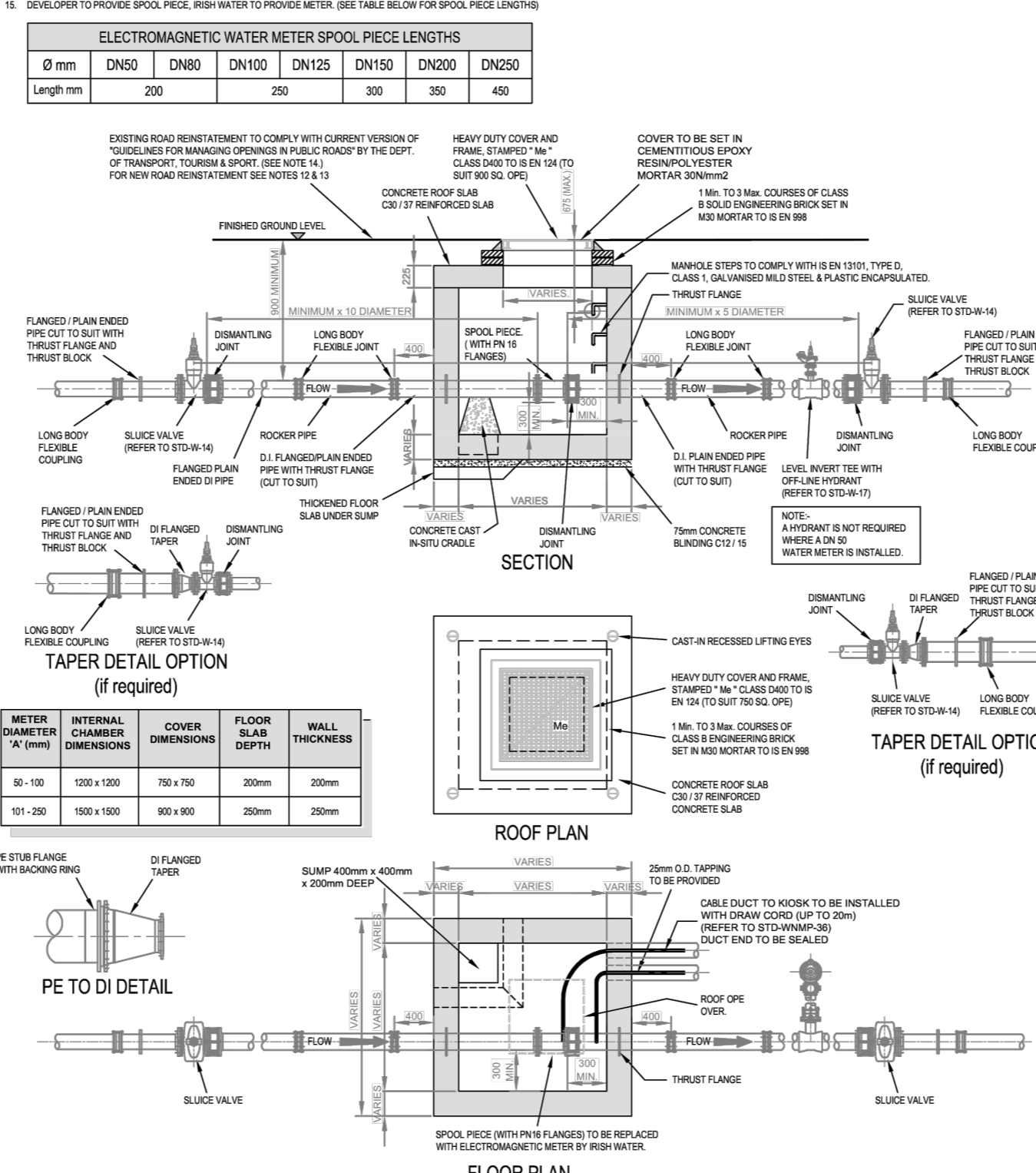


- ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
- THE MINIMUM DEPTH OF COVER FROM THE FINISHED GRADE LEVEL TO THE EXTERNAL CROWN OF THE PIPE SHALL BE 800mm WHERE THE PIPE IS TO BE LOCATED UNDER HIGHWAY/ESTATE ROADS. GREATER DEPTHS OF COVER AND/OR PIPE STRENGTH AND/OR A HIGHER CLASS OF BEDDING MATERIAL MAY BE REQUIRED WHERE BULKY LOADS ARE ANTICIPATED. THE DESIRABLE COVER FOR A WATERMAIN SHALL BE 1200mm, WHERE PRACTICABLE & SHALL NOT EXCEED 1500mm.
- CLASS 804 (80) 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 IN THE NEAREST PART OF THE TRENCH IS WITHIN 10m OF THE PAVED EDGE OF THE ROADWAY, CLASS 804 (80) IS TO BE COMPACTED AS PER CLASS 804 OF THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS. CLASS 804 (80) IS TO BE USED WITHIN 200mm OF CEMENT BOUND MATERIALS, CONCRETE PAVEMENTS, CONCRETE STRUCTURES OR CONCRETE PRODUCTS. OTHERWISE CLASS 804 MAY BE USED. ALTERNATIVE BACKFILL MATERIAL TO THAT DESCRIBED ABOVE IS ALLOWED WHERE THE TRENCH IS TO BE LOCATED IN A GREENFIELD AREA. THE TRENCH SHALL ONLY BE ALLOWED BY IRISH WATER WHERE THE ROADS AUTHORITY IN WRITING APPROVALS TO THE DEVELOPER TO USE SUCH ALTERNATIVE MATERIAL.
- SELECTED LOCALISED MATERIAL MAY BE USED IN GREENFIELD AREAS ABOVE GRANULAR PIPE SURROUND MATERIAL, SUBJECT TO REVIEW BY IRISH WATER.
- PIPE BEDDING SHALL COMPLY WITH EN 48-02 AND EN 48-04 GRANULAR MATERIAL SHALL BE 16mm TO 20mm (5/6) GRADED AGGREGATE OR 10mm (5/5) SINGLE SIZED AGGREGATE TO EN 12524.
- IN SOFT GROUND CONDITIONS COVER TO THE MATERIAL SHOULD BE EXAGGERATED OUT OF ACCORDANCE WITH THE WATER MAINS ACT AND CLASS 804 (80) MATERIAL. BY ADDITIONAL COVER TO THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS SHALL BE USED. THE EXAGGERATED 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 APPROVAL BY IRISH WATER BEFORE ADVANCING WITH THE WORK.
- PIPES SHALL NOT BE SUPPORTED ON TOMES, BRICKS, OR ANY HARD SUBJECT 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 CLASS 804 (80) MATERIAL IN ACCORDANCE WITH THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS. GRANULAR MATERIAL SHALL LEAD ABOVE THIS VOID BACKFILL MATERIAL.
- SHOULDER CEMENT COVER NOT BE ACHIEVABLE, CONCRETE GRADE C15/20 SHALL BE USED AS BACKFILL MATERIAL. MARKER TAPE TO BE 400mm WIDE BLUE POLYETHYLENE MATERIAL IN ACCORDANCE WITH CLASS 804 (80) MATERIAL. PLASTIC PIPES SHALL HAVE WARNING TAPE INCORPORATED A REINFORCED BRASS BAND WIRE. SERVICE PIPES SHALL HAVE 200mm WIDE HIGH TAPE. MARKER TAPE TO LEAD AT TOP OF PIPE BEDDING LAYER.
- TRENCH MARKERS FOR PIPE BEDDING ABOVE 400mm SHALL BE 400mm. SUBJECT TO CONSIDERATION BEING GIVEN TO THE TRENCH DEPTH, HEALTH & SAFETY CONSTRUCTION ACCESS REQUIREMENTS.
- NEW ROAD CONSTRUCTION & SURFACE FINISH TO BE TO ROAD AUTHORITY REQUIREMENTS.
- EXISTING ROAD REINFORCEMENT TO COMPLY WITH CURRENT VERSION OF 'GUIDELINES FOR MAKING OPENINGS IN PUBLIC ROADS' BY THE DEPT. OF TRANSPORT, TOURISM & SPORT, OR TRANSPORT INFRASTRUCTURE IRELAND REQUIREMENTS.



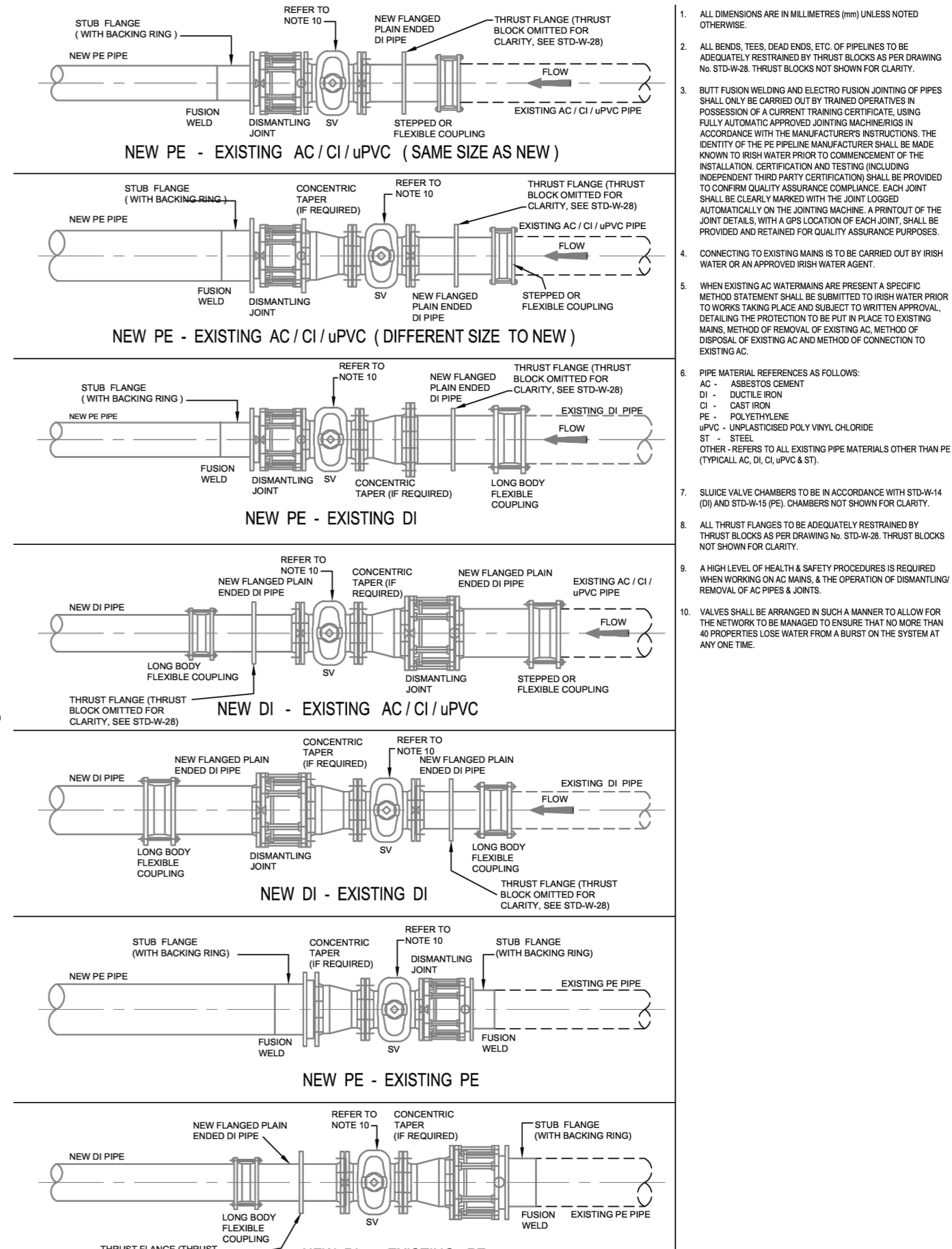
STD-W-13 TRENCH BACKFILL/BEDDING AND REDUCED COVER PROTECTION SLAB DETAIL.
NTS

- ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
- STRUCTURAL DESIGN AND REINFORCEMENT DETAIL TO BE PROVIDED BY THE DEVELOPER AND SUBMITTED TO IRISH WATER FOR REVIEW. ROOF SLAB SHALL BE DESIGNED TO CARRY ALL LIVE LOADS & DEAD LOADS & CONSIST OF A REINFORCED CONCRETE SLAB WITH MINIMUM THICKNESS OF 200mm. ALTERNATIVELY PRECAST CONCRETE ROOMS MAY BE USED. SUBJECT TO IRISH WATER REVIEW & COMPLIANCE WITH EN 12051-2.
- CONCRETE FLOOR WITH CHAMBER TO EN 12051-2.
- PRECAST FLOOR WITH CHAMBER TO EN 12051-2.
- CONCRETE FLOOR WITH CHAMBER TO EN 12051-2.
- METER CHAMBER SHALL BE COVERED WITH APPROVED HEAVY DUTY METAL COVER TO EN 12051-2. COVER AND FRAME SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS AND IS SUBJECT TO REVIEW BY IRISH WATER.
- ANTI-CORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.
- 200mm AL AL ANODIZING, 100mm DEEP CONCRETE PLUNTS AND ANODIZING TO EN 12051-2.
- ALL CHAMBERS TO BE CHECKED FOR LEAKS BY THE DEVELOPER BASED ON GROUND CONDITIONS WITHIN THE SITE. SHOULDER FLATLATION MEASURES BE REQUIRED THAT SHALL BE SUBJECT TO REVIEW BY IRISH WATER. PERSONS TO BE COMMANDED TO ACCOMMODATE THE REQUIRED RANGE OF THE FLOW METER. STRONG PIPE LENGTHS UPSTREAM AND DOWNSTREAM OF THE METER TO BE PROVIDED. THE METER SHALL BE CAPABLE OF ACCURATE NIGHT FLOW MEASUREMENTS.
- ALL CONCRETE IS IN ACCORDANCE WITH EN 12051-2.
- ANY SPECIAL ROAD REINFORCEMENT AROUND COVER & FRAME SHALL BE TO ROAD AUTHORITY REQUIREMENTS.
- NEW ROAD CONSTRUCTION SURFACE FINISH TO BE TO ROAD AUTHORITY REQUIREMENTS.
- EXISTING ROAD REINFORCEMENT TO COMPLY WITH CURRENT VERSION OF 'GUIDELINES FOR MAKING OPENINGS IN PUBLIC ROADS' BY THE DEPT. OF TRANSPORT, TOURISM & SPORT, OR TRANSPORT INFRASTRUCTURE IRELAND REQUIREMENTS.
- DESIGNER TO PROVIDE SPOOL PIECE, IRISH WATER TO PROVIDE METER. SEE TALL BELOW ON SPOOL PIECE LENGTHS.



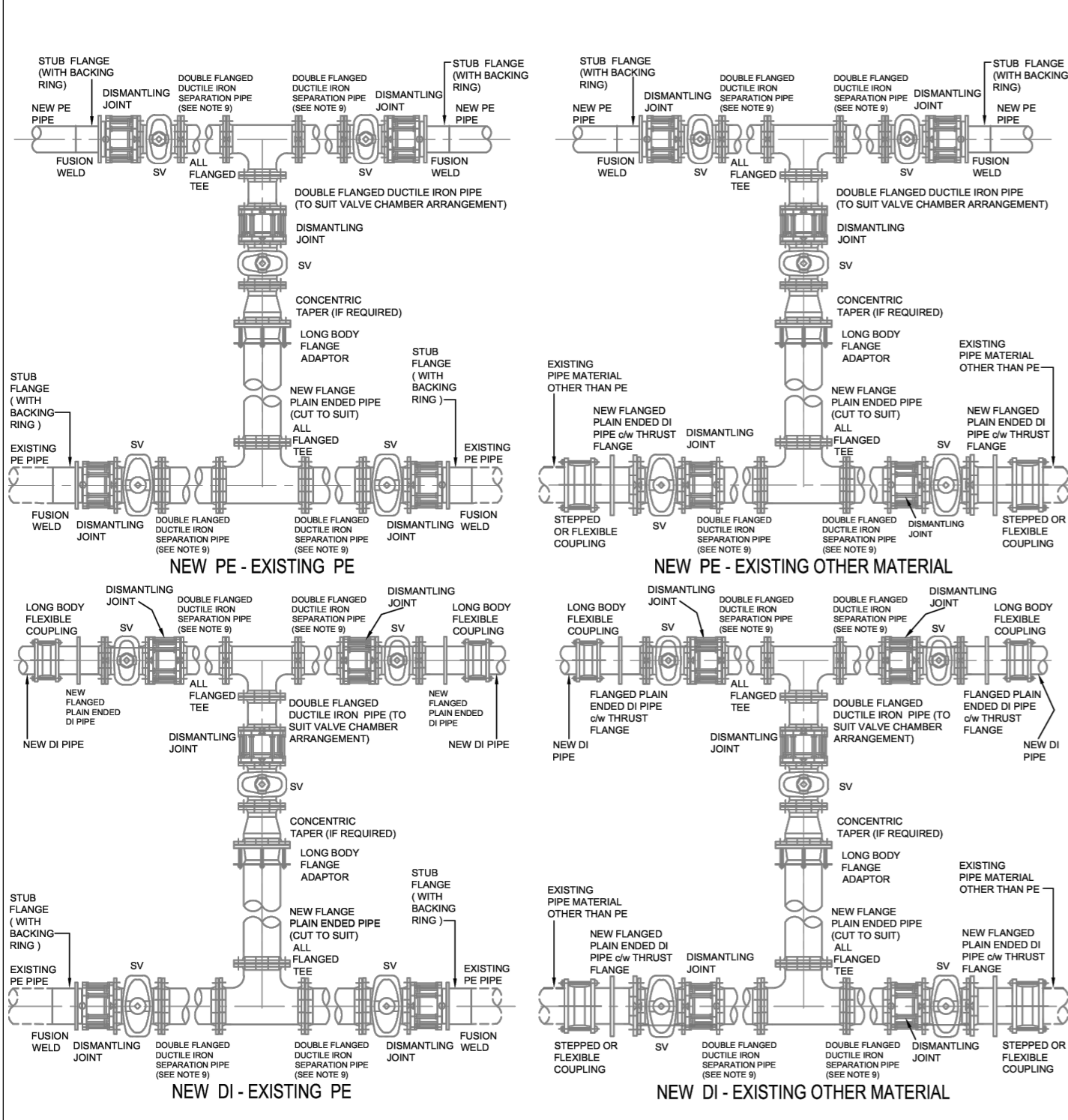
STD-W-26 METER CHAMBER.
NTS

NOTES.
SPEC FOR IW METER TO BE CONFIRMED WITHIN THE IW CONNECTION OFFER ISSUED BY IRISH WATER.

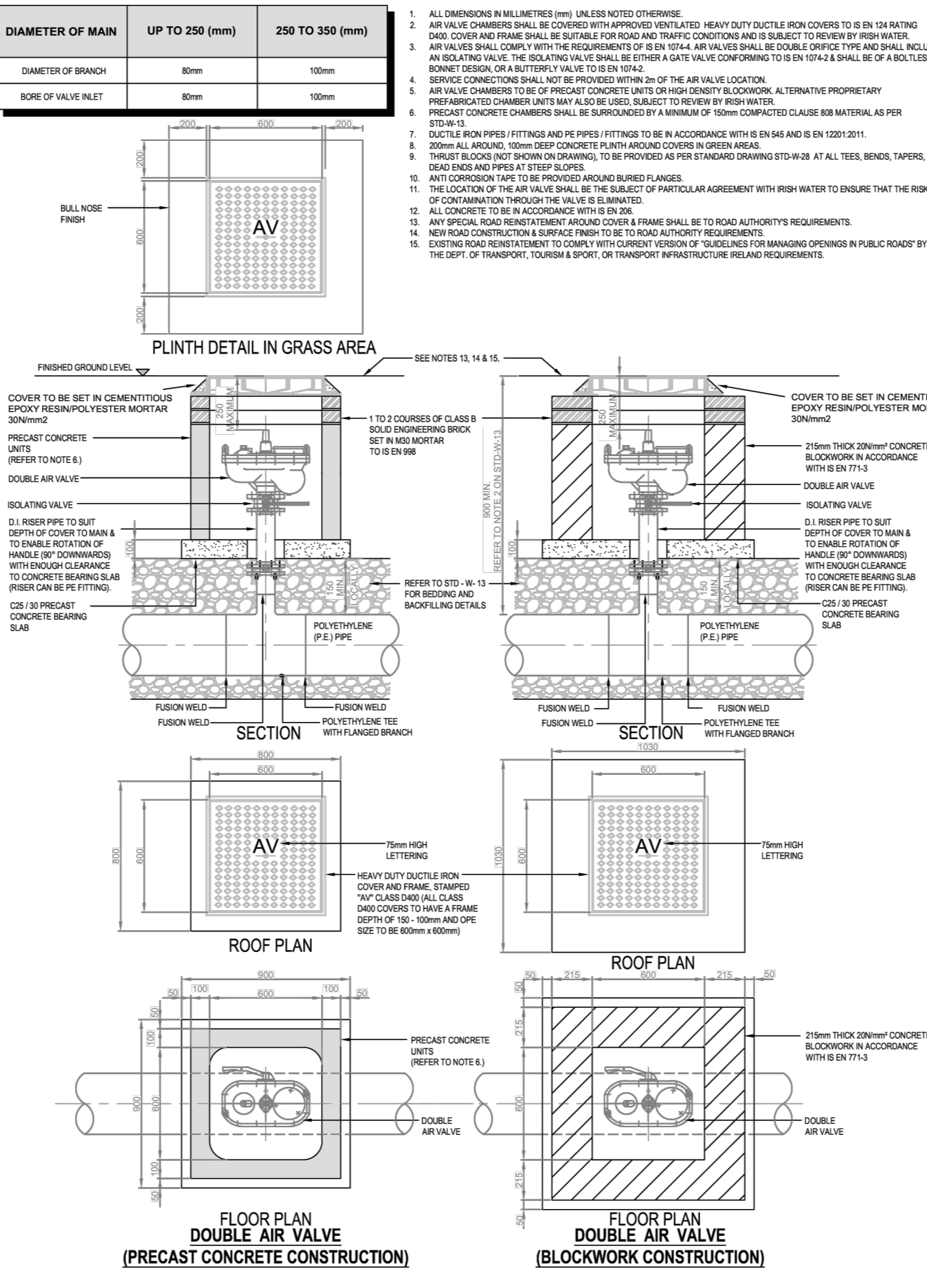


STD-W-04 GENERAL PIPE CONNECTIONS.
SHEET 1 OF 7.
NTS

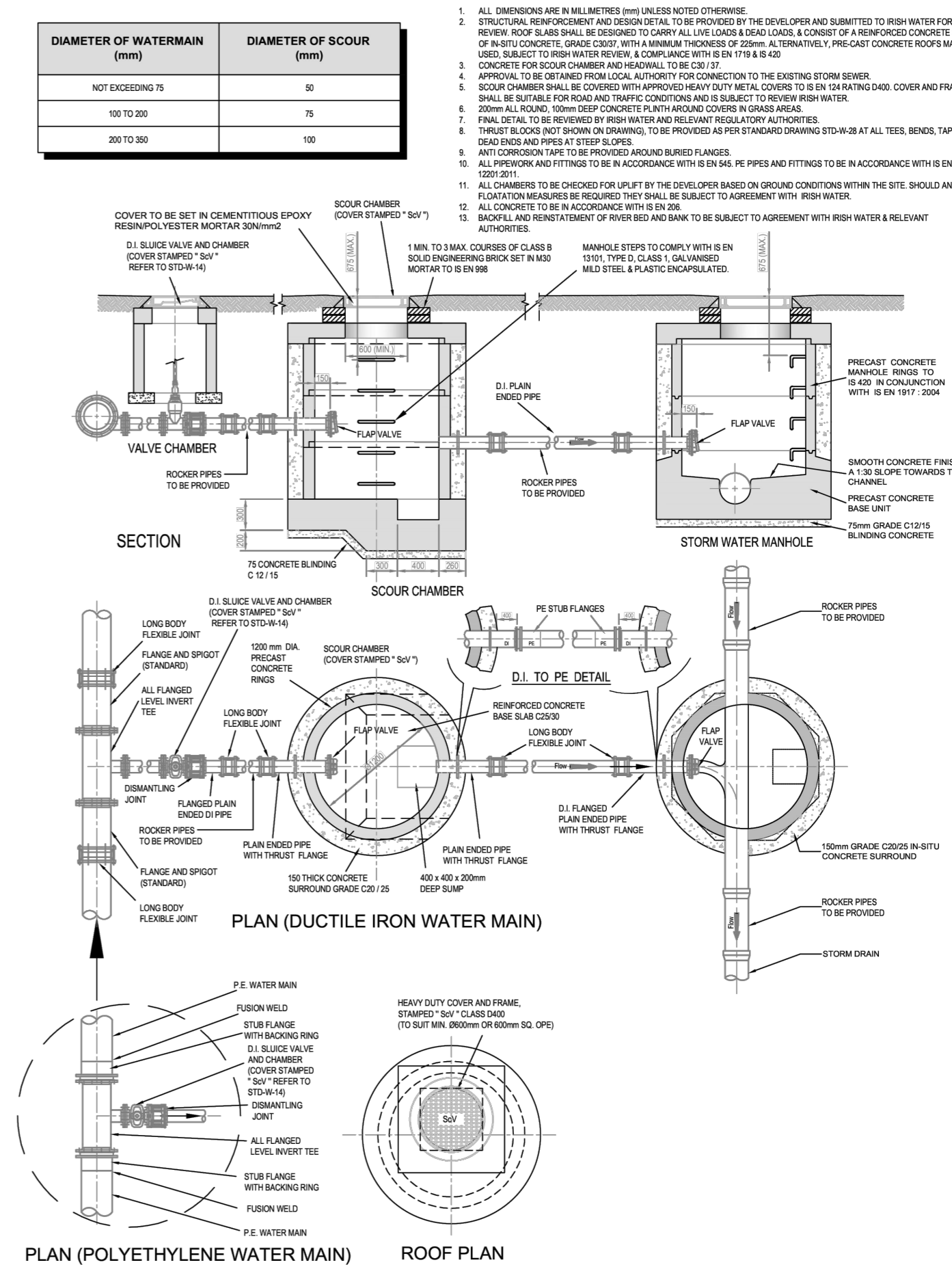
- ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
- ALL BLENDS, TEEs, DEAD ENDS, ETC. OF PIPES TO BE ADEQUATELY RESTRAINED BY THRUST BLOCKS AS PER DRAWING. NTS. THRUST BLOCKS NOT SHOWN FOR CLARITY.
- BUTT FUSION WELDING AND ELECTRO FUSION JOINTING OF PIPES SHALL ONLY BE CARRIED OUT BY TRAINED OPERATIVES IN POSSESSION OF A CURRENT TRAINING CERTIFICATE, USING FULLY AUTOMATIC APPROVED JOINTING MACHINES IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. JOINTS SHALL BE CLEARLY MARKED WITH THE JOINT LOGGED AUTOMATICALLY ON THE JOINTING MACHINE. APPROVAL OF THE JOINT SHALL BE PROVIDED BY IRISH WATER. JOINTS SHALL BE CLEARLY MARKED WITH THE JOINT LOGGED AUTOMATICALLY ON THE JOINTING MACHINE. APPROVAL OF THE JOINT SHALL BE PROVIDED BY IRISH WATER.
- CONNECTING TO EXISTING MAINS IS TO BE CARRIED OUT BY IRISH WATER OR AN APPROVED IRISH WATER AGENT.
- IRISH WATER TO PROVIDE SPOOL PIECE TO BE SUBMITTED FOR APPROVAL BY IRISH WATER. THE SPOOL PIECE SHALL BE PROVIDED WITH THE JOINT LOGGED AUTOMATICALLY ON THE JOINTING MACHINE. APPROVAL OF THE JOINT SHALL BE PROVIDED BY IRISH WATER.
- CONCRETE TO BE GRADUATED TO EN 12524.
- AC - ABSOLUTE CEMENT
- DI - DUCTILE IRON
- PE - POLYETHYLENE
- ST - STEEL
- REFER TO ALL OTHER PIPE MATERIALS OTHER THAN PE (TYPICALLY AC, CI, uPVC & DI).
- SLUCE VALVE CHAMBERS TO BE IN ACCORDANCE WITH STD-W-14 (PE) & STD-W-15 (DI). CHAMBERS NOT SHOWN FOR CLARITY.
- IRISH WATER TO PROVIDE SPOOL PIECE TO BE SUBMITTED FOR APPROVAL BY IRISH WATER. THE SPOOL PIECE SHALL BE PROVIDED WITH THE JOINT LOGGED AUTOMATICALLY ON THE JOINTING MACHINE. APPROVAL OF THE JOINT SHALL BE PROVIDED BY IRISH WATER.
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- IRISH WATER TO PROVIDE SPOOL PIECE TO BE SUBMITTED FOR APPROVAL BY IRISH WATER. THE SPOOL PIECE SHALL BE PROVIDED WITH THE JOINT LOGGED AUTOMATICALLY ON THE JOINTING MACHINE. APPROVAL OF THE JOINT SHALL BE PROVIDED BY IRISH WATER.



STD-W-08 GENERAL PIPE CONNECTIONS.
SHEET 5 OF 7.
NTS



STD-W-22 ON-LINE AIR VALVE FOR POLYETHYLENE (P.E.) PIPE. - SHEET 3 OF 4.
NTS



STD-W-30B SCOUR CHAMBER TO STORM SEWER ARRANGEMENTS.
NTS

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Rev. No.	Date	REVISION NOTE
P1	16.05.2024	ISSUED FOR STAGE 2 PLANNING
P2	28.06.2024	ISSUED FOR STAGE 3 PLANNING
P3	23.07.2024	ISSUED FOR REVIEW
P4	08.08.2024	ISSUED FOR REVIEW
P5	13.08.2024	ISSUED FOR PLANNING SUBMISSION

Client	LDA
Project	Cloggriffin Blocks 5 & 6
Title	Watermain Details Sheet 1 of 3
Dwg. No.	CLN-CSC-XX-XX-DR-C-0135
Date	MAY 2024
Drawn by	JS
Checked by	JF
Approved by	NB
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