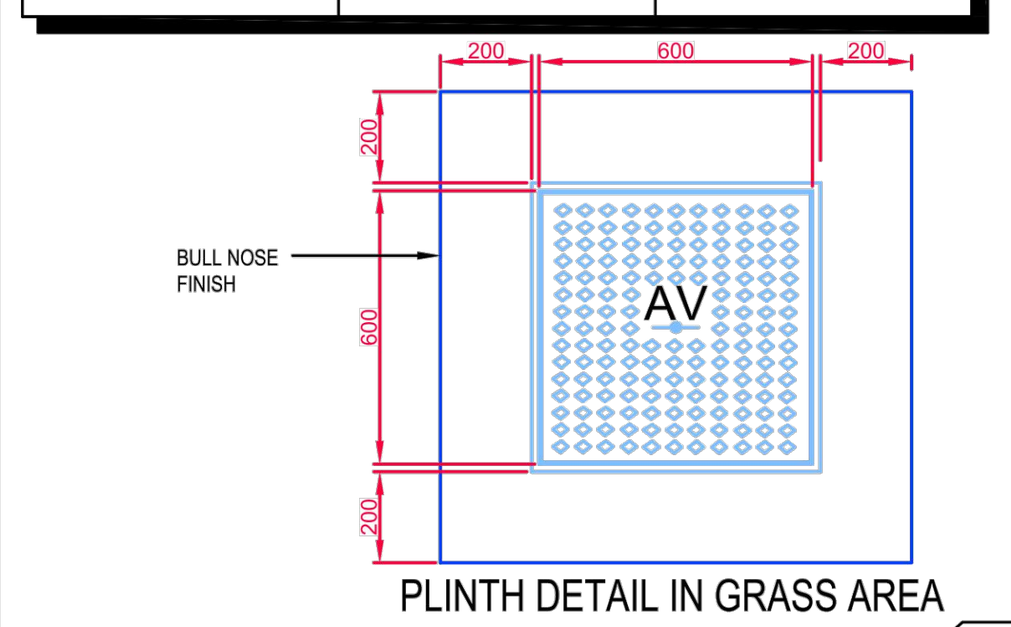
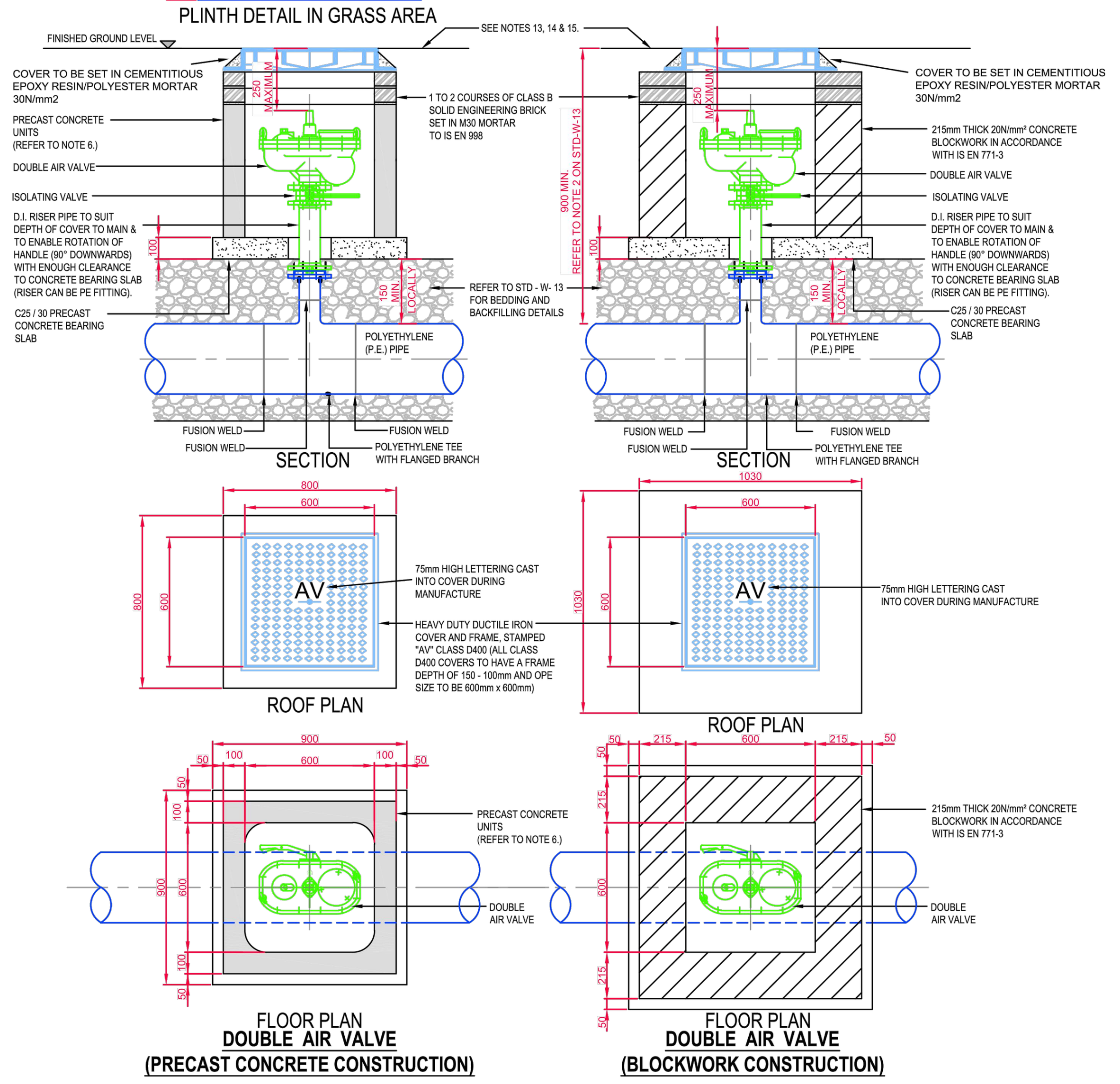
DIAMETER OF MAIN	UP TO 250 (mm)	250 TO 350 (mm)
DIAMETER OF BRANCH	80mm	100mm
BORE OF VALVE INLET	80mm	100mm

1. ALL DIMENSIONS IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
2. AIR VALVE CHAMBERS SHALL BE COVERED WITH APPROVED VENTILATED HEAVY DUTY DUCTILE IRON COVERS TO IS EN 124 RATING D400. COVER AND FRAME SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS AND IS SUBJECT TO REVIEW BY UISCE ÉIREANN.
3. AIR VALVES SHALL COMPLY WITH THE REQUIREMENTS OF IS EN 1074-4. AIR VALVES SHALL BE DOUBLE ORIFICE TYPE AND SHALL INCLUDE AN ISOLATING VALVE. THE ISOLATING VALVE SHALL BE EITHER A GATE VALVE CONFORMING TO IS EN 1074-2 & SHALL BE OF A BOLTLESS BONNET DESIGN, OR A BUTTERFLY VALVE TO IS EN 1074-2.
4. SERVICE CONNECTIONS SHALL NOT BE PROVIDED WITHIN 2m OF THE AIR VALVE LOCATION.
5. AIR VALVE CHAMBERS TO BE OF PRECAST CONCRETE UNITS OR HIGH DENSITY BLOCKWORK. ALTERNATIVE PROPRIETARY PREFABRICATED CHAMBER UNITS MAY ALSO BE USED, SUBJECT TO REVIEW BY UISCE ÉIREANN.
6. PRECAST CONCRETE CHAMBERS SHALL BE SURROUNDED BY A MINIMUM OF 150mm COMPACTED CLAUSE 808 MATERIAL.
7. DUCTILE IRON PIPES / FITTINGS AND PE PIPES / FITTINGS TO BE IN ACCORDANCE WITH IS EN 545 AND IS EN 12201:2011.
8. 200mm ALL AROUND, 100mm DEEP CONCRETE PLINTH AROUND COVERS IN GREEN AREAS.
9. THRUST BLOCKS (NOT SHOWN ON DRAWING), TO BE PROVIDED AS PER STANDARD DRAWING STD-W-28 AT ALL TEES, BENDS, TAPERS, DEAD ENDS AND PIPES AT STEEP SLOPES.
10. ANTI CORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.
11. THE LOCATION OF THE AIR VALVE SHALL BE THE SUBJECT OF PARTICULAR AGREEMENT WITH UISCE ÉIREANN TO ENSURE THAT THE RISK OF CONTAMINATION THROUGH THE VALVE IS ELIMINATED.
12. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.
13. ANY SPECIAL ROAD REINSTATEMENT AROUND COVER & FRAME SHALL BE TO ROAD AUTHORITY'S REQUIREMENTS.
14. NEW ROAD CONSTRUCTION & SURFACE FINISH TO BE TO ROAD AUTHORITY REQUIREMENTS.
15. ALL TEMPORARY AND PERMANENT ROAD REINSTATEMENT TO COMPLY WITH CURRENT VERSION OF "GUIDELINES FOR MANAGING OPENINGS IN PUBLIC ROADS" BY THE DEPT. OF TRANSPORT, OR TRANSPORT INFRASTRUCTURE IRELAND REQUIREMENTS.

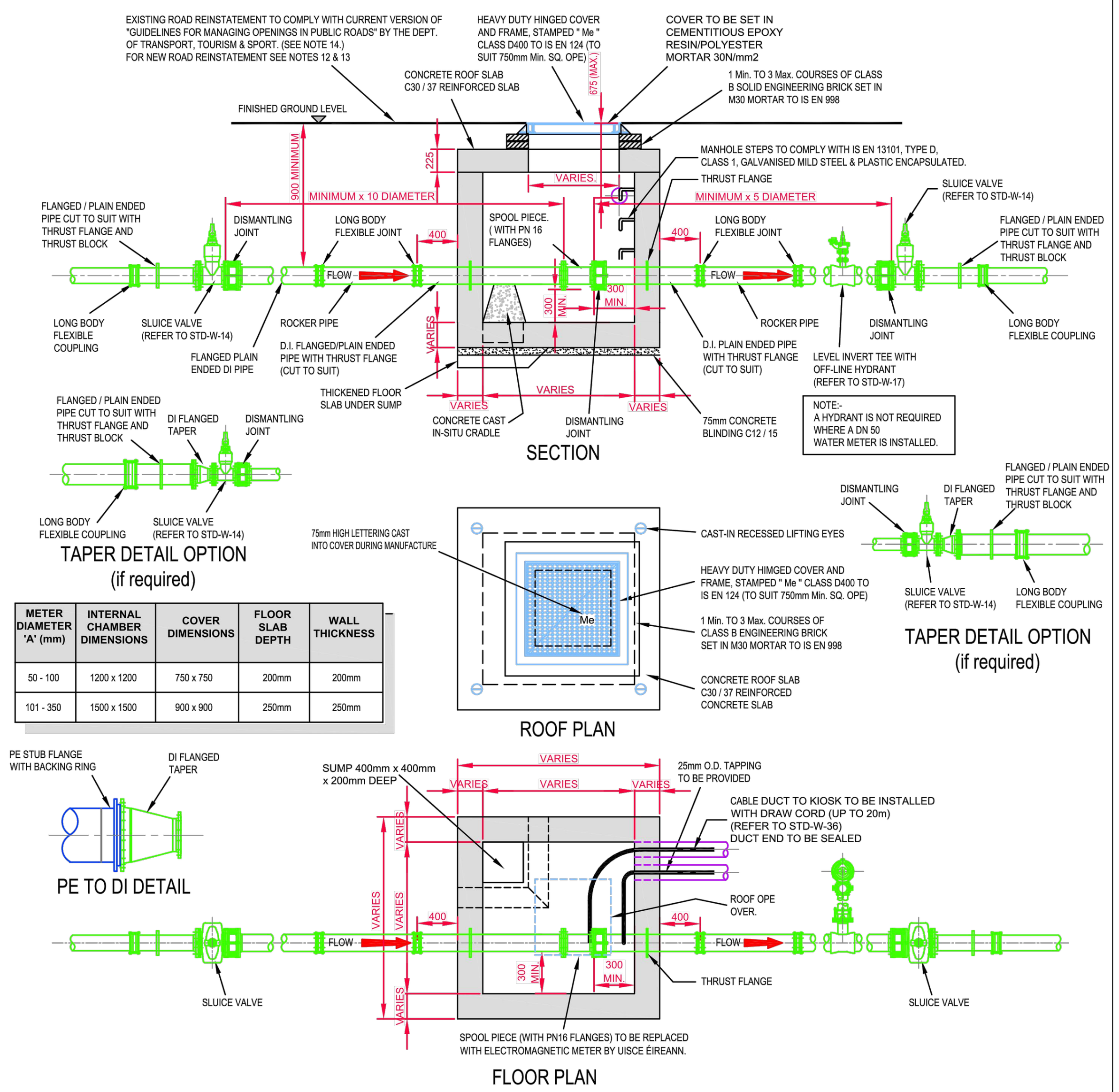




STD-W-22 ON-LINE AIR VALVE FOR POLYETHYLENE (P.E.) PIPE (SHEET 3 OF 4)

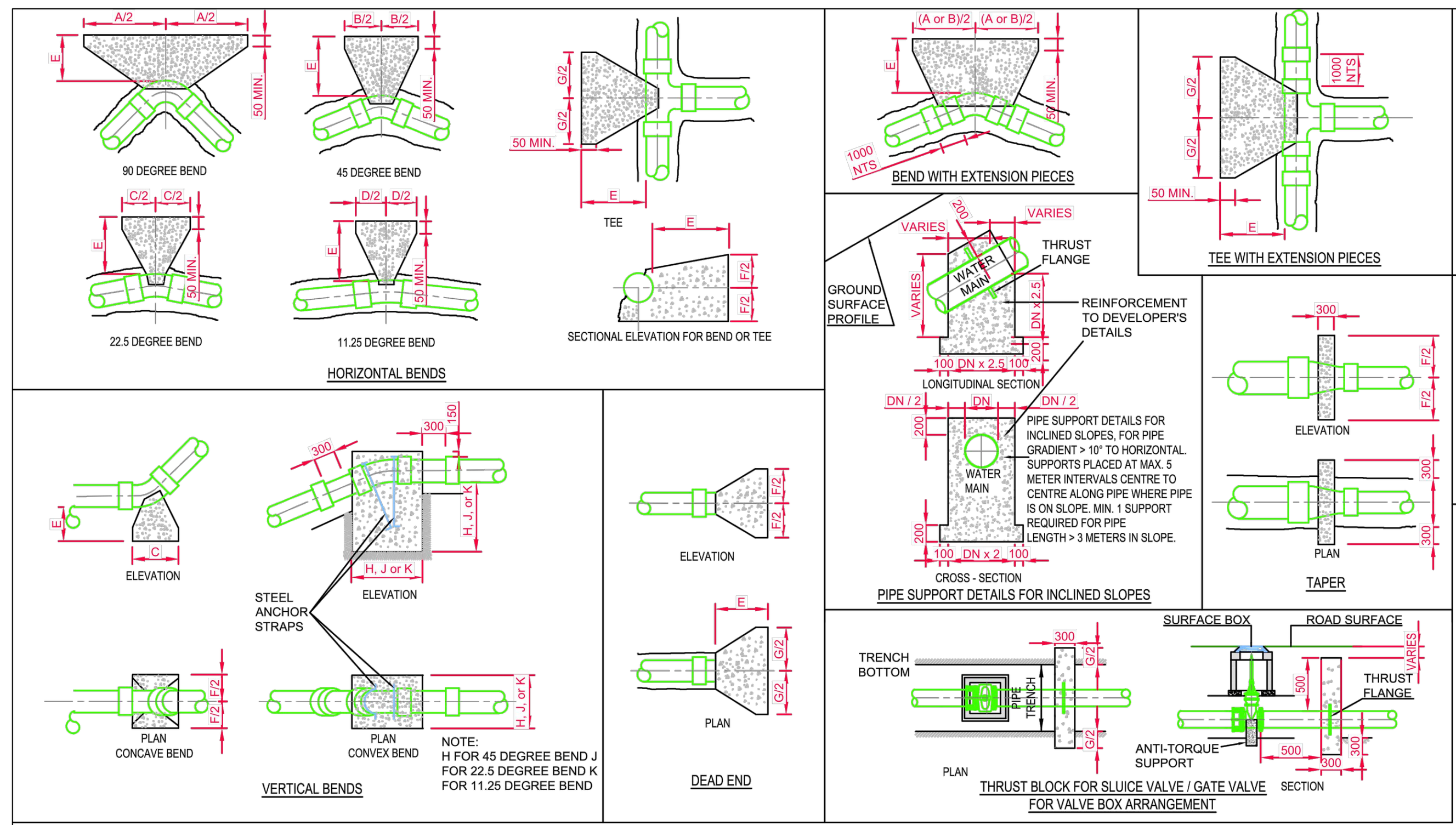
1. ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
2. STRUCTURAL DESIGN AND REINFORCEMENT DETAIL TO BE PROVIDED BY THE DEVELOPER AND SUBMITTED TO UISCE ÉIREANN FOR REVIEW. ROOF SLABS SHALL BE DESIGNED TO CARRY ALL LIVE LOADS & DEAD LOADS, & CONSIST OF A REINFORCED CONCRETE SLAB OF IN-SITU CONCRETE, GRADE C30/37, WITH A MINIMUM THICKNESS OF 225mm. ALTERNATIVELY, PRE-CAST CONCRETE ROOFS MAY BE USED, SUBJECT TO UISCE ÉIREANN REVIEW, & COMPLIANCE WITH IS EN 1917 & IS 420
3. CONCRETE FOR FLOW METER CHAMBER TO BE C30 / 37.
4. PRECAST UNITS COMPLETED WITH RUBBER SEALING GASKET BETWEEN UNITS, COMPLYING WITH THE REQUIREMENTS OF IS EN 1917 AND IS 420, COMPLETE WITH 150mm CONCRETE SURROUND MAY BE USED AS AN ACCEPTABLE ALTERNATIVE. CONCRETE SURROUND TO BE GRADE C20/25 IN ACCORDANCE WITH IS EN 206.
5. METER CHAMBER SHALL BE COVERED WITH APPROVED HEAVY DUTY METAL COVERS TO IS EN 124 RATING D400. COVER AND FRAME SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS AND IS SUBJECT TO REVIEW BY UISCE ÉIREANN.
6. 200mm ALL ROUND, 100mm DEEP CONCRETE PLINTH AROUND COVER IN GRASS AREAS.
7. ANTI CORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.
8. DUCTILE IRON PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS EN 545. PE PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS EN 12201:2011.
9. 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 REVIEW BY UISCE ÉIREANN.
10. PIPEWORK TO BE DOWNSIZED TO ACCOMMODATE THE REQUIRED RANGE OF THE FLOW METER. STRAIGHT PIPE LENGTHS UPSTREAM AND DOWNSTREAM OF THE METER TO BE PROVIDED. THE METER SHALL BE CAPABLE OF ACCURATE NIGHT FLOW MEASUREMENTS.
11. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.
12. ANY SPECIAL ROAD REINSTATEMENT AROUND COVER & FRAME SHALL BE TO ROAD AUTHORITY'S REQUIREMENTS.
13. NEW ROAD CONSTRUCTION & SURFACE FINISH TO BE TO ROAD AUTHORITY REQUIREMENTS.
14. ALL TEMPORARY AND PERMANENT ROAD REINSTATEMENT TO COMPLY WITH CURRENT VERSION OF "GUIDELINES FOR MANAGING OPENINGS IN PUBLIC ROADS" BY THE DEPT. OF TRANSPORT, OR TRANSPORT INFRASTRUCTURE IRELAND REQUIREMENTS
15. DEVELOPER TO PROVIDE SPOOL PIECE, UISCE ÉIREANN TO PROVIDE METER. (SEE TABLE BELOW FOR SPOOL PIECE LENGTHS)
16. KIOSK AND DUCT ARE REQUIRED FOR FLOW METER CHAMBER.

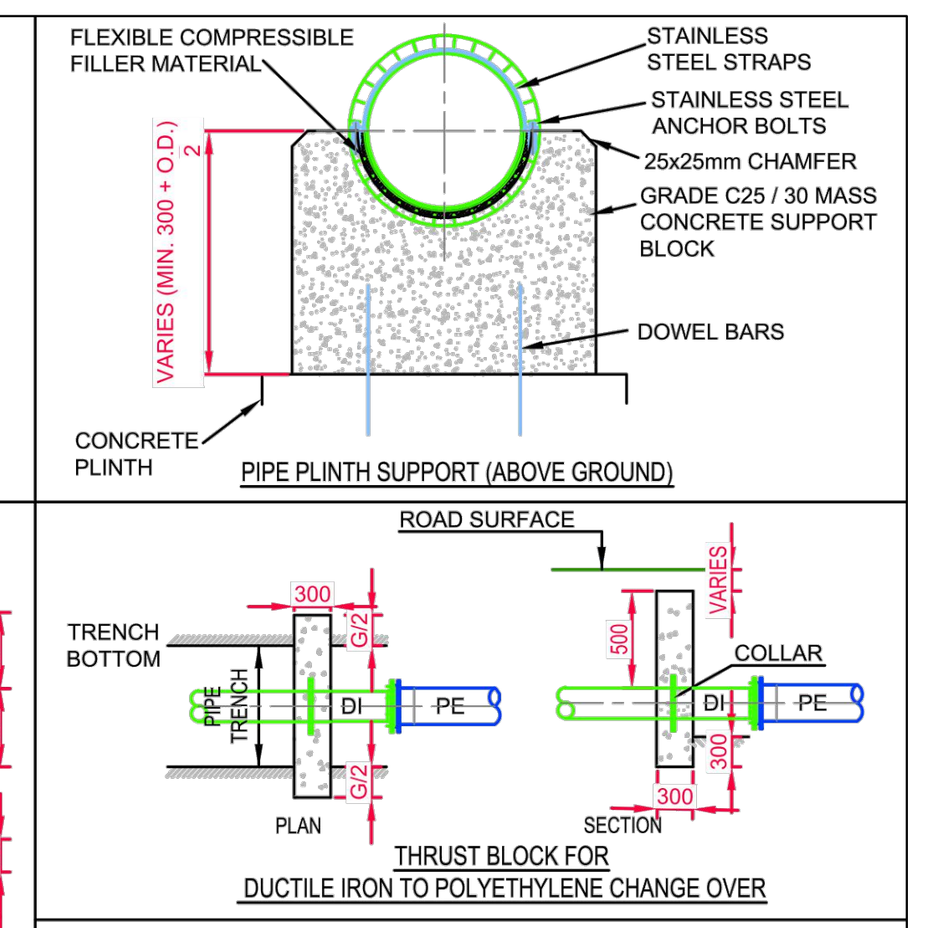
ELECTROMAGNETIC WATER METER SPOOL PIECE LENGTHS									
Ø mm	DN50	DN80	DN100	DN125	DN150	DN200	DN250	DN300	DN350
Length mm	200		250		300	350	450	500	550



METER DIAMETER 'A' (mm)	INTERNAL CHAMBER DIMENSIONS	COVER DIMENSIONS	FLOOR SLAB DEPTH	WALL THICKNESS
50 - 100	1200 x 1200	750 x 750	200mm	200mm
101 - 350	1500 x 1500	900 x 900	250mm	250mm

STD-W-26 ELECTROMAGNETIC METER CHAMBER (DN80 – DN350MM DIA.)





< 12 BAR TEST PRESSURE

NOM. DIA. (mm)	A	B	C	D	E	F	G	H	J	K
100	600	330	160	80	200	350	390	700	600	400
150	950	510	260	130	225	450	660	900	750	600
200	1150	600	310	160	300	650	790	1050	900	700
250	1350	750	380	200	300	800	970	1200	1000	750
300	1580	850	450	220	320	950	1110	1300	1100	850
350	2100	1150	570	290	450	1000	1450	1550	1200	900
400	2550	1400	700	350	500	1050	1800	1700	1250	1000
450	3000	1630	830	420	680	1100	2130	1800	1450	1150
500	3590	1950	990	500	800	1200	2540	1950	1600	1250
600	4100	2200	1120	570	850	1400	2880	2100	1700	1300

12 BAR TO 15 BAR TEST PRESSURE

NOM. DIA. (mm)	A	B	C	D	E	F	G	H	J	K
100	700	380	190	100	200	350	510	750	600	400
150	1135	620	320	160	225	450	760	950	750	600
200	1400	750	380	190	300	650	980	1150	950	700
250	1730	940	480	240	320	800	1210	1350	1050	850
300	2090	1130	580	300	380	950	1480	1500	1200	950
350	2600	1410	720	360	500	1050	1840	1700	1350	1050
400	2980	1610	820	420	750	1200	2110	1850	1500	1150
450	3400	1840	940	470	900	1300	2330	2000	1600	1250
500	4090	2210	1130	570	1000	1400	2890	2200	1750	1350
600	5010*	2710*	1380	700	1000	1500	3550*	2350	1900	1500

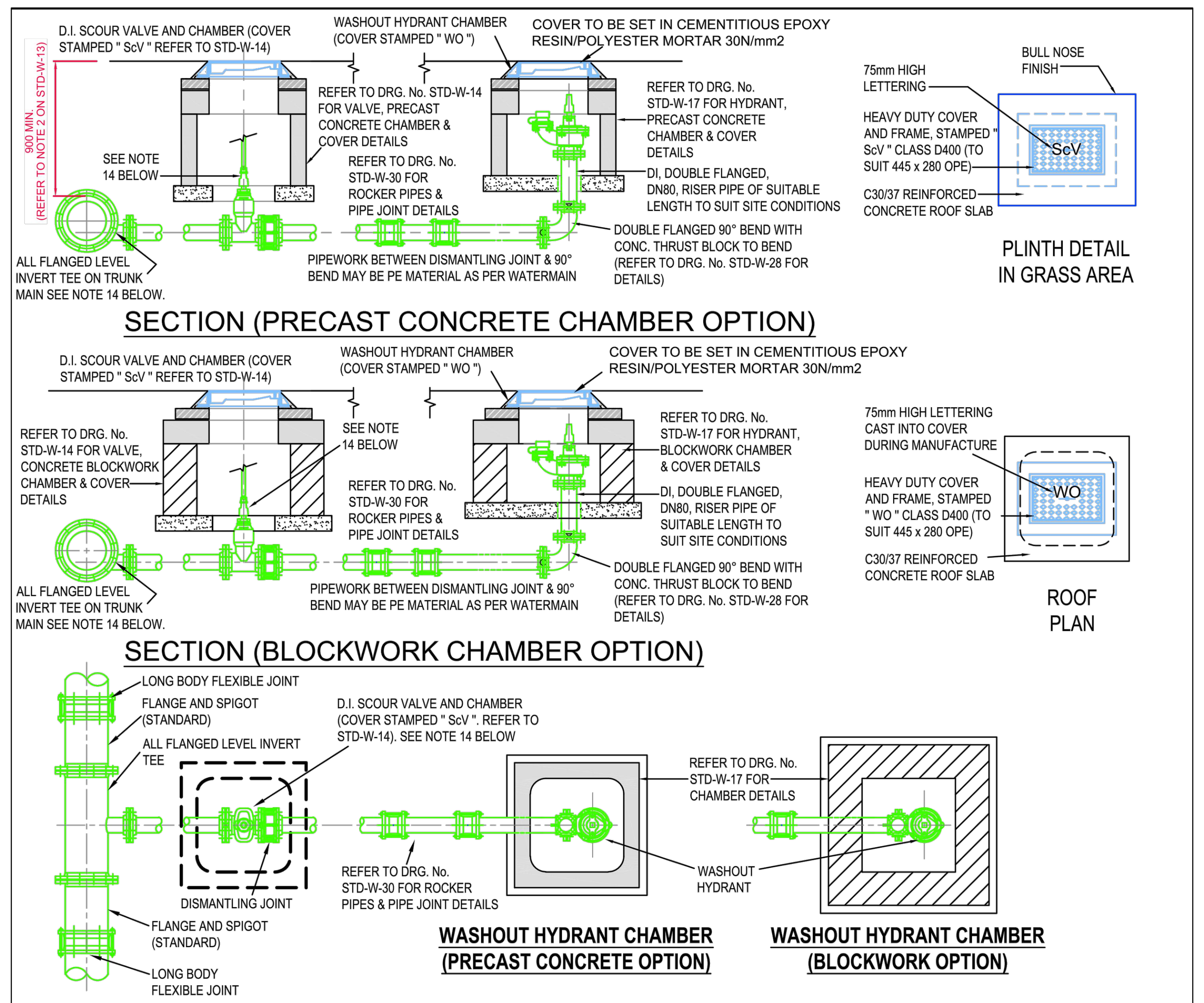
15 BAR TO 18 BAR TEST PRESSURE

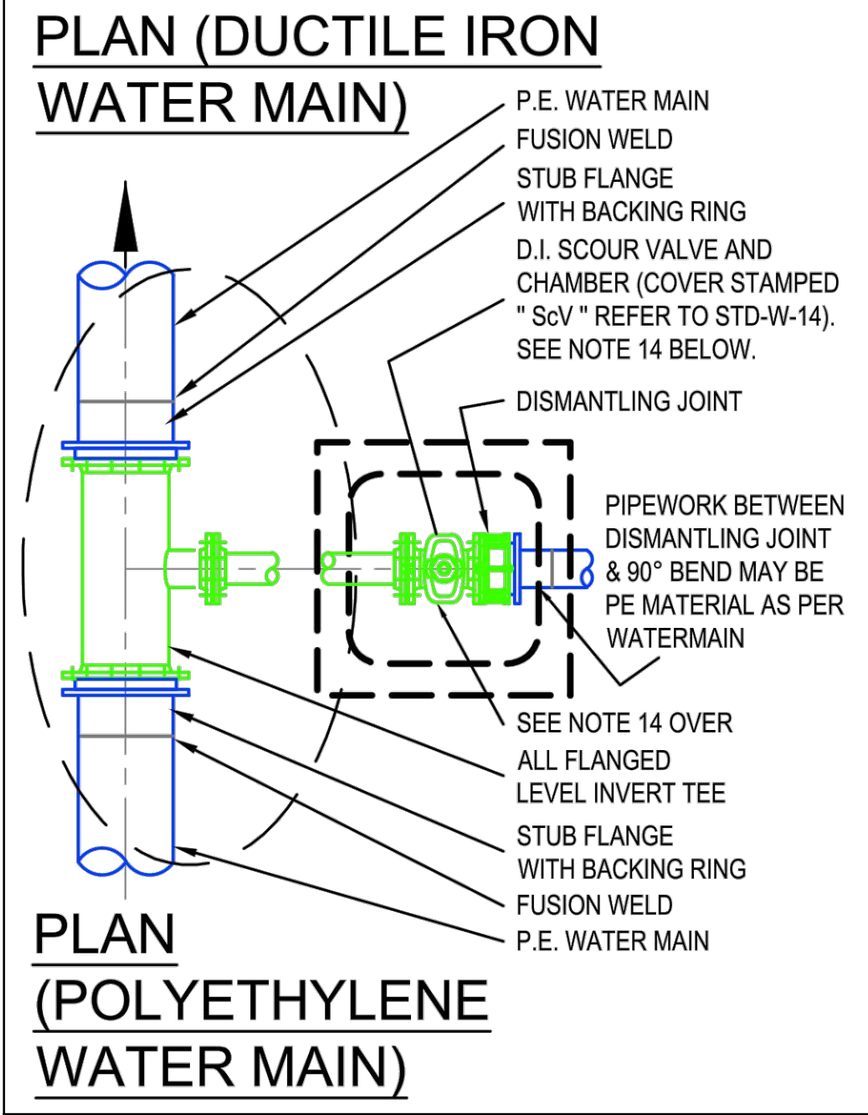
NOM. DIA. (mm)	A	B	C	D	E	F	G	H	J	K
100	750	400	205	100	220	400	530	800	650	400
150	1250	700	350	180	250	500	890	1000	850	650
200	1650	890	450	230	320	700	1170	1250	1000	800
250	1960	1060	540	270	350	900	1370	1450	1150	900
300	2300	1200	640	320	500	1100	1630	1650	1300	1050
350	2930	1580	830	410	750	1200	2070	1850	1500	1150
400	3510	1900	970	190*	1000	1300	2490	2000	1600	1250
450	3810	2270	1160	580	1000	1350	2970	2150	1700	1350
500	4340*	2380	1210	610	1000	1400	3700	2250	1750	1400
600	6370*	3450*	1760	890	1000	1500	4500*	2400	2050	1650

1. ALL DIMENSIONS IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
2. CONCRETE THRUST BLOCKS (ANCHORAGE) SHALL BE POSITIONED SYMMETRICALLY WITH RESPECT TO THE CONNECTING PIPE & BENDS.
3. TRENCH DIMENSIONS : REFER TO DRAWING No's. STD-W-13.
4. THRUST BLOCKS SHALL BEAR ON UNDISTURBED SOIL. IF FOR ANY REASON THEY CANNOT THEN THE DEVELOPER SHALL NOTIFY UISCE ÉIREANN IMMEDIATELY WITH A PROPOSED SOLUTION.
5. THRUST BLOCK REINFORCEMENT REQUIRES SPECIFIC DESIGN.
6. FOR TEST PRESSURES GREATER THAN 18 BAR, THRUST BLOCK DESIGN IS TO BE SUBMITTED TO UISCE ÉIREANN FOR REVIEW.
7. THRUST BLOCKS ARE DESIGNED FOR AN AVERAGE BEARING PRESSURE OF 100 KN/m (TYPICAL FOR SOFT CLAY). FOR OTHER/ADVERSE SOIL CONDITIONS, ACTUAL DIMENSIONS MAY BE ALTERED SUJECT TO THE DEVELOPER SUBMITTING AN ALTERNATIVE DESIGN TO UISCE ÉIREANN FOR REVIEW AND APPROVAL.
8. CONCRETE IN THRUST BLOCKS SHALL BE GRADE C20/25.
9. COMPRESSIBLE FILLER FOR CONCRETE PROTECTION TO BE IN ACCORDANCE WITH BS EN 622-1 AND BS EN 622-4. BITUMINOUS MATERIAL SHALL NOT BE PUT IN CONTACT WITH PLASTIC PIPES. THE THICKNESS OF COMPRESSIBLE FILLER FOR MAINS < 450mm IN DIAMETER IS TO BE 18mm.
10. CONCRETE THRUST BLOCKS FOR POLYETHYLENE PIPE TO COMPLY WITH THE MANUFACTURES REQUIREMENTS.
11. POLYETHYLENE PIPES SHALL BE WRAPPED IN PLASTIC SHEETING HAVING A COMPOSITION IN ACCORDANCE WITH BS 6076 BEFORE BEING CAST INTO CONCRETE.
12. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.

TABLE OF DIMENSIONS FOR STEEPLY INCLINED PIPELINES	
GRADIENT	SPACING
1 IN 2 & STEEPER	5.5m
BELOW 1 IN 2 TO 1 IN 4	11.0m
1 IN 4 TO 1 IN 5	16.6m
1 IN 5 TO 1 IN 6	22.0m

STD-W-28 WATER MAIN THRUST AND SUPPORT BLOCKS



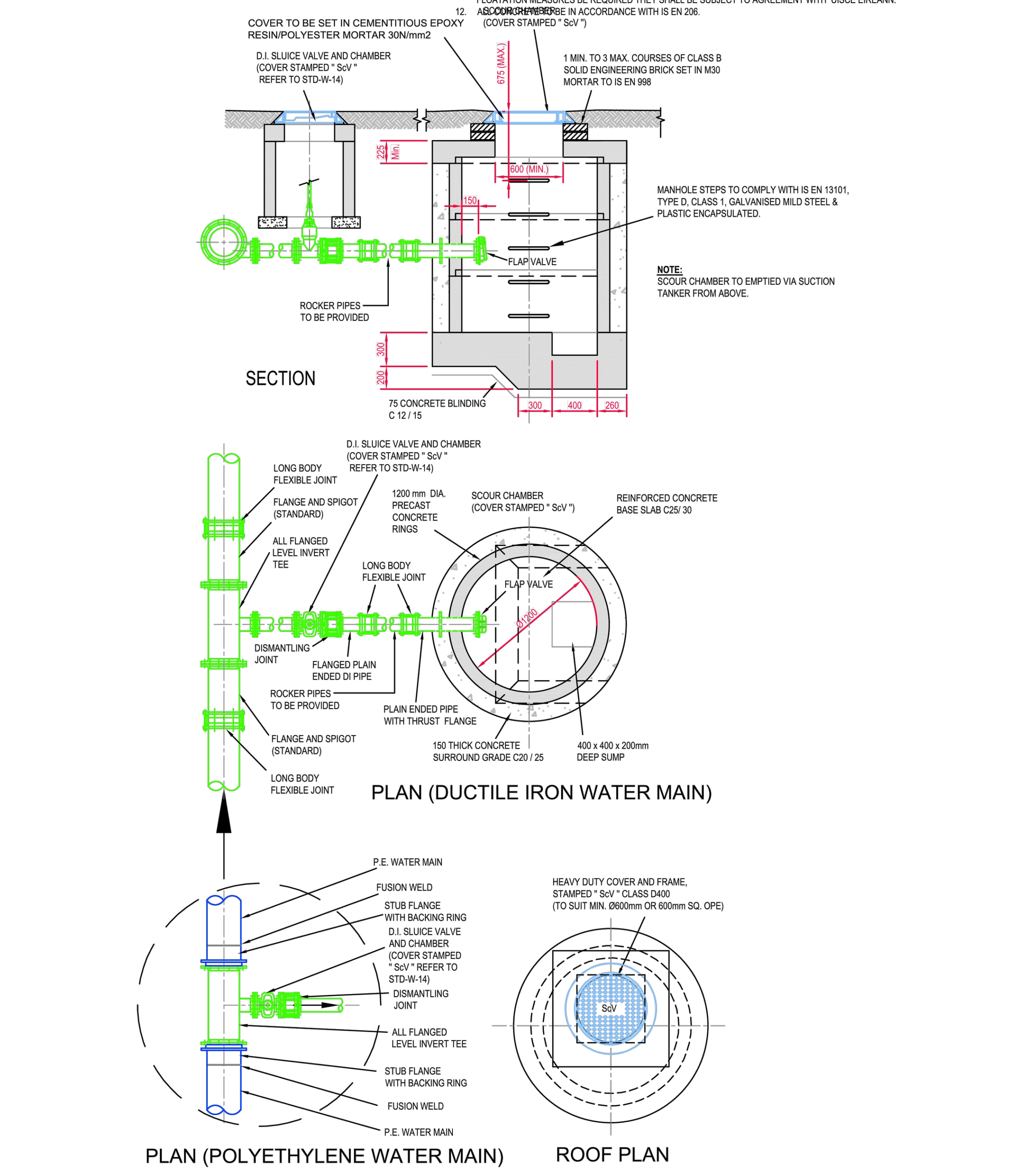


1. ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
2. STRUCTURAL REINFORCEMENT AND DESIGN DETAIL TO BE PROVIDED BY THE DEVELOPER AND SUBMITTED TO UISCE ÉIREANN FOR REVIEW.
3. HYDRANT CHAMBERS SHALL BE COVERED WITH APPROVED HEAVY DUTY METAL COVERS TO IS 261 AND BS 5834 COVER AND FRAME SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS AND IS SUBJECT TO REVIEW BY UISCE ÉIREANN.
4. HYDRANTS SHALL BE DOUBLE FLANGED DRILLED TO PN 16. THEY SHALL COMPLY WITH BS 750: 2012. THE HYDRANT SHALL INCORPORATE A SCREW DOWN GATE VALVE, UNDERGROUND "GUIDE TO HEAD" TYPE WITH SCREW DOWN CONNECTION OUTLET AND FALSE SPINDLE CAP AND IRON CHAIN IN ACCORDANCE WITH ITEM 15 BELOW.
5. ALL HYDRANTS SHALL BE CLOCKWISE CLOSING.
6. HYDRANT CHAMBER & SCOUR VALVE CHAMBER TO BE CONSTRUCTED OF PRECAST CONCRETE UNITS OR HIGH DENSITY BLOCKWORK. ALTERNATIVELY PROPRIETARY PREFABRICATED CHAMBER UNITS MAY ALSO BE USED, SUBJECT TO REVIEW FROM UISCE ÉIREANN. ROOF SLABS SHALL BE DESIGNED TO CARRY ALL LIVE LOADS & DEAD LOADS, & CONSIST OF A REINFORCED CONCRETE SLAB OF IN-SITU CONCRETE, GRADE C30/37, WITH A MINIMUM THICKNESS OF 150mm. ALTERNATIVELY, PRE-CAST CONCRETE ROOFS MAY BE USED, SUBJECT TO USCE ÉIREANN REVIEW, & COMPLIANCE WITH BS 5911, Part 4.
7. CONCRETE CHAMBERS SHALL BE SURROUNDED BY A MINIMUM OF 150mm COMPACTED CLAUSE 808 MATERIAL.
8. 200mm ALL ROUND, 100mm DEEP CONCRETE PLINTH AROUND COVERS IN GRASS AREAS.
9. THRUST BLOCKS (NOT SHOWN ON DRAWING), TO BE PROVIDED AS PER STANDARD DRAWING STD-W-28 AT ALL TEES, BENDS, TAPERS, DEAD ENDS AND PIPES AT STEEP SLOPES.
10. ANTI CORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.
11. ALL PIPEWORK AND FITTINGS FOR WASHOUT HYDRANT CHAMBER CONNECTION SHALL BE DUCTILE IRON. PIPES AND FITTINGS ON MAIN LINE SHALL BE: PE PIPES & FITTINGS IN ACCORDANCE WITH IS EN 12201:2011, OR DUCTILE IRON PIPES AND FITTINGS IN ACCORDANCE WITH IS EN 545.
12. 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 AGREEMENT WITH UISCE ÉIREANN.
13. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.
14. WHERE HYDRANTS ARE INSTALLED ON TRUNK MAINS, A SEPARATE SCOUR VALVE IS REQUIRED. THE PURPOSE OF THE SCOUR VALVE IS TO ISOLATE THE WASHOUT HYDRANT FOR MAINTENANCE PURPOSES & ALSO TO REDUCE THE VELOCITY OF THE DISCHARGE FLOW WHERE HIGH HEAD VALUES ARE CONCERNED. A "SANDWICH" OR "SPADE" VALVE MAY BE USED IN LIEU OF A SEPARATE SCOUR VALVE, SUBJECT TO PRIOR REVIEW BY UISCE ÉIREANN.
15. FIRE HYDRANT OUTLET TYPE SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE FIRE OFFICER FOR THE AREA AND SHALL BE AGREED PRIOR TO THE COMMENCEMENT OF WORKS.

STD-W-30A WASHOUT HYDRANT

DIAMETER OF WATERMAIN (mm)	DIAMETER OF SCOUR (mm)
NOT EXCEEDING 75	50
100 TO 200	75
200 TO 350	100

1. ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
2. STRUCTURAL REINFORCEMENT AND DESIGN DETAIL TO BE PROVIDED BY THE DEVELOPER AND SUBMITTED TO UISCE ÉIREANN FOR REVIEW. ROOF SLABS SHALL BE DESIGNED TO CARRY ALL LIVE LOADS & DEAD LOADS, & CONSIST OF A REINFORCED CONCRETE SLAB OF IN-SITU CONCRETE, GRADE C30/37, WITH A MINIMUM THICKNESS OF 225mm. ALTERNATIVELY, PRE-CAST CONCRETE ROOFS MAY BE USED, SUBJECT TO UISCE ÉIREANN REVIEW, & COMPLIANCE WITH IS EN 1719 & IS 420.
3. CONCRETE FOR SCOUR CHAMBER AND HEADWALL TO BE C30 / 37.
4. PREFABRICATED CHAMBER AND HEADWALL MAY ALSO BE USED, SUBJECT TO REVIEW FROM UISCE ÉIREANN.
5. SCOUR CHAMBER SHALL BE COVERED WITH APPROVED HEAVY DUTY METAL COVERS TO IS EN 124 RATING D400. COVER AND FRAME SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS AND IS SUBJECT TO REVIEW UISCE ÉIREANN.
6. 200mm ALL ROUND, 100mm DEEP CONCRETE PLINTH AROUND COVERS IN GRASS AREAS.
7. FINAL DETAIL TO BE REVIEWED BY UISCE ÉIREANN AND RELEVANT REGULATORY AUTHORITIES.
8. THRUST BLOCKS (NOT SHOWN ON DRAWING), TO BE PROVIDED AS PER STANDARD DRAWING STD-W-28 AT ALL TEES, BENDS, TAPERS, DEAD ENDS AND PIPES AT STEEP SLOPES.
9. ANTI CORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.
10. ALL PIPEWORK AND FITTINGS TO BE IN ACCORDANCE WITH IS EN 545. PE PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS EN 12201:2011.
11. 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 AGREEMENT WITH UISCE ÉIREANN.
12. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.



STD-W-30 SCOUR CHAMBER ARRANGEMENTS

PLANNING DRAWING

NOT FOR CONSTRUCTION.
ALL LEVELS GIVEN ARE RELATIVE TO ORDNANCE DATUM.
THIS DRAWING HAS BEEN ISSUED FOR INFORMATION PURPOSES ONLY AND MUST NOT BE USED FOR CONSTRUCTION UNDER ANY CIRCUMSTANCES.

NOTES

1. For setting out refer to Architect's drawings.
2. 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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REV	DESCRIPTION	DRN. BY	CHK. BY	DATE
P1	ISSUE FOR LRD OPINION	SC	FDB	19.11.2025
P2	ISSUE FOR LRD STAGE 3	SC	FDB	08.05.2026

PROJECT	CLONGRIFFIN WIDER LANDS
CLIENT	LAND DEVELOPMENT AGENCY
JOB No.	L106
DRAWING No.	L106-CSC-XX-XX-DR-C-0120
STATUS	S2 - Shared (Coordination)
DRAWN BY	SC
CHECKED BY	FB
REVISION	P2
TITLE	WATERMAIN DETAILS SHEET 3 OF 3
SCALE	NA
DATE	SEPT. '25

CS CONSULTING
Civil , Structural & Traffic Engineering
Head Office: 19-22 Dame Street, Dublin 2.
t: +353 (0)1 5480863 e: info@csconsulting.ie w: www.csconsulting.ie

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