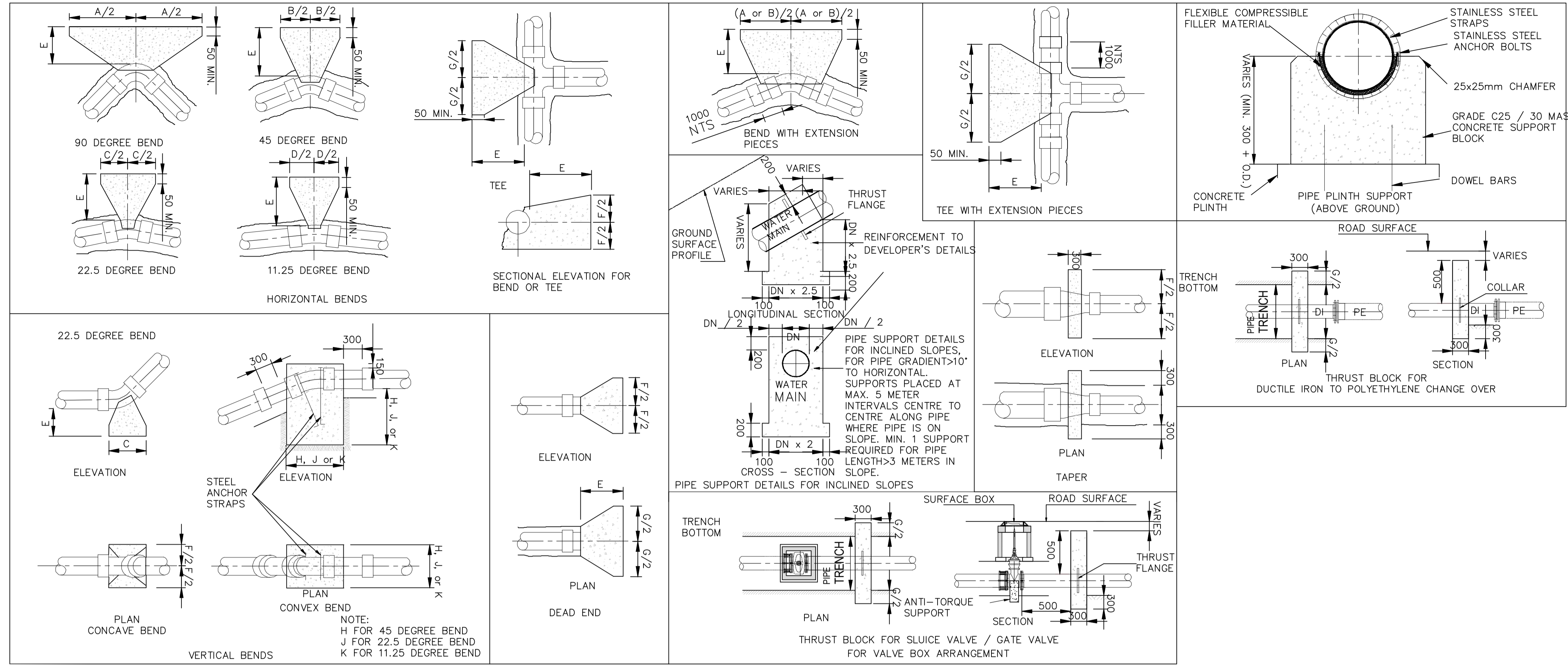


- NOTES:
- DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL AND ENGINEERING DRAWINGS.
 - WATERMANS SHALL BE LAID IN ACCORDANCE WITH THE LOCAL AUTHORITY / IRISH WATER SPECIFICATION FOR THE LAYING OF NEW WATERMANS AND BY LAWS WHICH OVER-RIDE THESE NOTES. THE CONSTRUCTION OF THE WATERMAIN SHALL BE IN ACCORDANCE WITH THE BEST CURRENT PRACTICE AND THE LATEST EDITIONS OF THE RELEVANT STANDARDS AND CODES OF PRACTICE.
 - WATERMANS SHALL NOT BE LAID UNDER WALLS OR AREAS DESIGNATED FOR TREES/SHRUBS/FLOWERS.
 - PIPES SHALL BE HDPE (BLUE PIPE) UNLESS NOTED OTHERWISE BY AGREEMENT WITH THE LOCAL AUTHORITY. DUCTILE IRON PIPES SHALL BE USED UNDER ROADS OF CLASSIFICATION "DISTRICT DISTRIBUTOR" UPWARDS UNLESS NOTED OTHERWISE.
 - PIPES SHALL CONFORM TO THE UK WATER INDUSTRY SPECIFICATION OR EQUIVALENT E.U. SPECIFICATION.
 - DUCTILE IRON (DI) PIPES SHALL CONFORM TO IS EN 545 AND SHALL HAVE MINIMUM C40 PRESSURE RATING. DUCTILE IRON FITTINGS SHALL HAVE 16 BAR RATING AT LEAST DI PIPEWORK SHALL BE COATED INTERNALLY WITH A BLAST FURNACE CEMENT LINING WHICH COMPRISES WITH THE REQUIREMENTS OF BS 6920. EXTERNAL PROTECTION SHALL INCLUDE AN ALLOY OF ZINC AND ALUMINUM WITH A MINIMUM 15% ALUMINUM WITH OR WITHOUT OTHER MATERIALS HAVING A MASS OF 400g/m² COMPETE WITH A FINISHING LAYER OF BLUE FUSION BONDED EPOXY IN ACCORDANCE WITH IS EN 14901.
 - WATERMANS SHALL BE LAID UNDER FOOTPATHS PREFERABLY OR GRASS MARGINS WHERE APPROVED. NO PIPE, CONDUIT, CABLE OR OTHER SERVICE SHALL BE LAID LONGITUDINALLY OVER THE LINE OF A WATERMAIN. NO CABINET POLES, JUNCTION BOXES OR CHAMBERS SHALL BE CONSTRUCTED OVER A WATERMAIN.
 - THE MINIMUM COVER TO A WATERMAIN SHALL BE 750mm, THE MAXIMUM COVER SHALL BE 900mm UNLESS NOTED OTHERWISE.
 - CONNECTIONS TO THE MAINS WHICH ARE THE PROPERTY OF THE IRISH WATER CAN BE MADE BY THE IRISH WATER ONLY. NO OTHER PERSON MAY INTERFERE IN ANY WAY WITH THESE MAINS. SUCH CONNECTIONS WILL BE MADE BY IRISH WATER AT THE EXPENSE OF THE PERSONS REQUIRING THEM. THE ESTIMATED COST OF SUCH CONNECTIONS MUST BE LODGED WITH IRISH WATER BEFORE THE WORK IS UNDERTAKEN.
 - IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT ALL WORKS ARE CONSTRUCTED IN ACCORDANCE WITH THE IRISH WATER CODE OF PRACTICE AND STANDARD DETAILS. THE CODE OF PRACTICE AND STANDARD DETAILS ARE AVAILABLE TO DOWNLOAD FROM THE IRISH WATER WEB SITE AT WWW.WATER.IE/CONNECTIONS/DEVELOPER-SERVICES/ WHERE THE DETAILS CONTAINED ON THIS DRAWING DIFFER FROM THE IRISH WATER CODE OF PRACTICE OR STANDARD DETAILS THIS MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY. IRISH WATER STANDARDS WILL TAKE PRECEDENCE.



< 12 BAR TEST PRESSURE

| NOM. DIA. (mm) | DIMENSIONS | | | | | | | | | |
|----------------|------------|------|------|-----|-----|------|------|------|------|------|
| | A | B | C | D | E | F | G | H | J | K |
| 100 | 600 | 330 | 180 | 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 | 360 | 800 | 970 | 1200 | 1000 | 750 |
| 300 | 1580 | 850 | 450 | 220 | 320 | 960 | 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 | 3580 | 1950 | 990 | 500 | 860 | 1200 | 2540 | 1950 | 1600 | 1250 |
| 600 | 4100 | 2200 | 1120 | 570 | 950 | 1400 | 2880 | 2100 | 1700 | 1300 |

12 BAR TO 15 BAR TEST PRESSURE

| NOM. DIA. (mm) | DIMENSIONS | | | | | | | | | |
|----------------|------------|-------|------|-----|------|------|-------|------|------|------|
| | 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 | 180 | 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 | 1600 | 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 | 4080 | 2210 | 1130 | 570 | 1000 | 1400 | 2690 | 2200 | 1750 | 1350 |
| 600 | 5010* | 2710* | 1380 | 700 | 1000 | 1500 | 3550* | 2350 | 1900 | 1500 |

15 BAR TO 18 BAR TEST PRESSURE

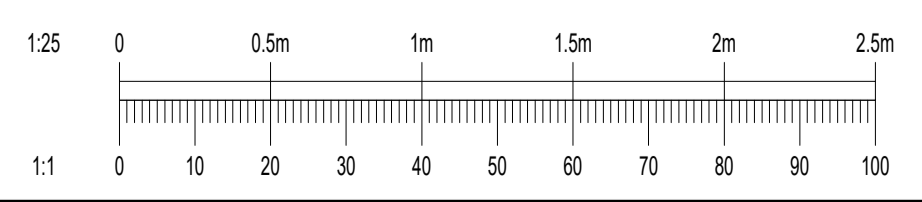
| NOM. DIA. (mm) | DIMENSIONS | | | | | | | | | |
|----------------|------------|-------|------|------|------|------|-------|------|------|------|
| | A | B | C | D | E | F | G | H | J | K |
| 100 | 750 | 400 | 205 | 100 | 220 | 400 | 530 | 800 | 650 | 400 |
| 150 | 1250 | 700 | 350 | 180 | 250 | 500 | 890 | 1000 | 850 | 600 |
| 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 | 2830 | 1580 | 830 | 410 | 750 | 1200 | 2070 | 1850 | 1500 | 1150 |
| 400 | 3510 | 1900 | 970 | 490* | 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* | 1780 | 890 | 1000 | 1500 | 4500* | 2400 | 2050 | 1650 |

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 |

WATERMAIN THRUST AND SUPPORT BLOCKS STD-W-28

- ALL DIMENSIONS IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
- CONCRETE THRUST BLOCKS (ANCHORAGE) SHALL BE POSITIONED SYMMETRICALLY WITH RESPECT TO THE CONNECTING PIPE & BENDS.
- TRENCH DIMENSIONS : DRAWING No's. STD-W-13.
- THRUST BLOCKS SHALL BEAR ON UNDISTURBED SOIL. IF FOR ANY REASON THEY CANNOT THEN THE DEVELOPER SHALL NOTIFY IRISH WATER IMMEDIATELY WITH A PROPOSED SOLUTION.
- THRUST BLOCK REINFORCEMENT REQUIRE SPECIFIC DESIGN.
- FOR TEST PRESSURES GREATER THAN 18 BAR, THRUST BLOCK DESIGN IS TO BE SUBMITTED TO IRISH WATER FOR APPROVAL.
- THRUST BLOCKS ARE DESIGNED FOR AN AVERAGE BEARING PRESSURE OF 100 kN/m² (TYPICAL FOR SOFT CLAY) FOR OTHER CONDITIONS. ACTUAL DIMENSIONS MAY BE ALTERED ON INSTRUCTIONS FROM IRISH WATER.
- CONCRETE IN THRUST BLOCKS SHALL BE GRADE C20/25.
- 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.
- CONCRETE THRUST BLOCKS FOR POLYETHYLENE PIPE TO COMPLY WITH THE MANUFACTURERS REQUIREMENTS.
- POLYETHYLENE PIPES SHALL BE WRAPPED IN PLASTIC SHEETING HAVING A COMPOSITION IN ACCORDANCE WITH BS 6076 BEFORE BEING CAST INTO CONCRETE.
- ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.



| | | | | |
|--|------|-------------|------------|--------------|
| Rev | Date | Description | By | CHK |
| Amendments | | | | |
| Project | | | | |
| PHASE 1, MOORETOWN | | | | |
| Title | | | | |
| WATERMAIN DETAILS SHEET 2 OF 4 | | | | |
| Client | | | | |
| FINGAL COUNTY COUNCIL | | | | |
| | | | | |
| BLOCK 5, EASTPOINT BUSINESS PARK, ALFIE BYRNE ROAD, DUBLIN D03 H3F4 IRELAND. Tel: (01) 664 8900 Email: info@waterman-moylan.ie www.waterman-moylan.ie | | | | |
| Status | | | | |
| PUBLIC DISPLAY | | | | |
| Designed By | RM | Approved | MD | Waterman Ref |
| Drawn By | MS | Date | MARCH 2024 | 23-102 |
| Project - Originator - Volume - Level - Type - Rate - Number | | | | Revision |
| MTN - WMC - PH1 - ZZ - DR - C - P1321 | | | | 1:25 |