ALL DIMENSIONS 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, & 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
IRISH WATER REVIEW & COMPLIANCE WITH IS EN 1917 & IS 420.
 CONCRETE FOR FLOW METER CHAMBER TO BE C30/37.
 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.
 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 IRISH WATER.
 200mm ALL ROUND, 100mm DEEP CONCRETE PLINTH AROUND COVER IN GRASS AREAS.
 ANTI CORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.
 DUCTILE IRON PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS EN 545. PE PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS
EN 1720112 10. IN 12201:2011

ALL CHAMBERS TO BE CHECKED FOR UPLIFT BY THE DEVELOPER BASED ON GROUND CONDITIONS WITHIN THE SITE. SHOULD ANTI ALL CHAMBERS TO BE REQUIRED THEY SHALL BE SUBJECT TO REVIEW BY IRISH WATER.

**CLOATATION MEASURES BE REQUIRED THEY SHALL BE SUBJECT TO REVIEW BY IRISH WATER.

**CLOATATION MEASURES BE REQUIRED THEY SHALL BE SUBJECT TO REVIEW BY IRISH WATER.

**STING CONCRETE TO BE IN ACCOMMODATE THE METER SHALL BE CAPABLE OF ACCURATE NIGHT FLOW MEASUREMENTS.

**ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.

**ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.

**ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.

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**ALL CONCRETE TO BE IN ACCORDANCE WITH SEN 206.

**ALL CONCRETE TO BE IN ACCORDANCE WEASTRUCTURE INFORMATION OF "GUIDELINES FOR MANAGING OPENINGS IN PUBLIC ROADS" BY THE DEPT. OF TRANSPORT, OR TRANSPORT INFRASTRUCTURE IRELAND REQUIREMENTS.

**DEVELOPER TO PROVIDE SPOOL PIECE, IRISH WATER TO PROVIDE METER. (SEE TABLE BELOW FOR SPOOL PIECE LENGTHS)

**DEVELOPER TO PROVIDE SPOOL PIECE, IRISH WATER TO PROVIDE METER. (SEE TABLE BELOW FOR SPOOL PIECE LENGTHS) METER DIAMETER 'A' (mm) Length mm 50 - 100 Ø mm PE STUB FLANGE WITH BACKING RIN ROOF INTERNAL CHAMBER DIMENSIONS 1200 x 1200 1500 x 1500 ELECTROMAGNETIC WATER METER SPOOL PIECE LENGTHS DN50 PLAN COVER DIMENSIONS DETAIL 900 x 900 750 x 750 DI FLANGED TAPER DN100 FLOOR SLAB DEPTH CLASS D400 1 Min. TO 3 Max. COURSES OF CLASS ENGINEERING BRICK SET IN M30 MORTAR TO IS EN 998 CONCRETE ROOF SLAB C30/37 REINFORCED CONCRETE SLAB CAST-IN RECESSED LIFTING EYES DN125 WALL COVER TO IS I FLANGED/PLAIN ENDED PIPE CUT TO SUIT WITH THRUST FLANGE AND THRUST BLOCK DN150 AND FRAME, STAMPED " NEN 124 (TO SUIT 750 SQ. 300 LONG BODY FLEXIBLE COUPLING DN200 DN250 450 SLUICE VALVE (REFER TO STD-W-14) EXISTING ROAD REINSTATEMENT TO COMPLY WITH CURRENT VERSION OF 'GUIDELINES FOR MANAGING OPENINGS IN PUBLIC ROADS' BY THE DEPT. OF TRANSPORT, TOURISM & SPORT (SEE NOTE 14)
FOR NEW ROAD REINSTATEMENT SEE NOTES 12&13 D.I. FLANGED PLAIN ENDED PIPE WITH THRUST FLANGE (CUT TO SUIT) THICKENED FLOOR SLAB UNDER SUMP ROCKER PIPE 900 MINIMUM **##**\ SUMP 400mm x x 200mm DEEP 10 DIAME VARIES CONCRETE ROOF SLAB C30 / 37 REINFORCED SLAB **VARIES IVARIES** 400 HEAVY DUTY COVER AND FRAME, STAMPED " Me "CLASS D400 (TO SUIT 900 SQ. OPE) CONCRETE CAST IN-SITU CRADLE SPOOL PIECE (WITH PN 16 FLANGES) 300 MIN. FL00R **SECTION** MIN. 300 VARIES VARIES 75mm CONCRETE BLINDING C12 / 15 PLAN 300 N **1** €30 \Box THRUST FLANGE 400 400 THRUST FLANGE DISMANTLING JOINT COVER TO BE SET IN
CEMENTITIOUS EPOXY
RESIN/POLYESTER MORTAR
30N/mm2 MANHOLE STEPS TO COMPLY WITH IS EN 13101, TYPE D, CLASS 1, GALVANISED MILD STEEL & PLASTIC ENCAPSULATED. 25mm O.D. TAPPING TO BE PROVIDED FLOW-D.I. PLAIN ENDED PIPE WITH THRUST FLANGE (CUT TO SUIT) 1 Min. TO 3 Max. COURSES OF CLASS B SOLID ENGINEERING BRICK SET IN M30 MORTAR TO IS EN 998 LONG BODY FLEXIBLE JOINT CABLE DUCT TO KIOSK TO BE INSTALLED WITH DRAW CORD (UP TO 20m)
(REFER TO STD-WNMP-36)
DUCT END TO BE SEALED MINIMUM X 5 DIAMETER LEVEL INVERT TEE WITH I OFF-LINE HYDRANT (REFER TO STD-W-17) SLUICE VALVE (REFER TO STD-W-14) DISMANTLING ICE VALVE FLANGED/PLAIN ENDED PIPE CUT TO SUIT WITH THRUST FLANGE AND THRUST BLOCK SLUICE VALVE (REFER TO STD-W-14) FLEXIBLE COUPLING TAPER DETAIL (IF REQUIRED) FLANGED / PLAIN ENDED PIPE CUT TO SUIT WITH THRUST FLANGE AND THRUST BLOCK LONG BODY
FLEXIBLE COUPLING OPTION

> NOTES: DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL AND ENGINEERING DRAWINGS.
- WATERMAINS SHALL BE LAID IN ACCORDANCE WITH THE LOCAL AUTHORITY/IRISH WATER SPECIFICATION FOR THE LAYING OF NEW WATERMAINS AND BYLAWS 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.
- 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. WATERMAINS SHALL NOT BE LAID UNDER WALLS OR AREAS DESIGNATED FOR TREES/SHRUBS/FLOWERS.
- 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 ALLMINUM 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.
- WATERMAINS 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.
- 12. 12. 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
- 13. IRISH WATER APPROVED BOUNDARY BOXES AND COVERS BS 58 34-2, AND IN ACCORDANCE WITH ALL REQUIREMENTS OF IRISH WATER CODE OF PRACTICE AND IRISH WATER STANDARD DRAWING STD-W-03.
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| BLOCK S, EASTPOINT BUSINESS PARK, ALFIE BYRNE ROAD, DUBLIN D03 H3F4 IRELAND. Tel: (01) 664 8900 Fax: (01) 661 3618 Email: info@waterman-moylan.ie www.waterman-moylan.ie | Waterman Moylan Engineering Consultants |
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| | TITLE | PROJECT | ARCHITECT | CLIENT |
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| WATERMAIN CONSTRUCTION DETAILS SHEET 4 OF 4 | | AUBURN, MALAHIDE, CO. DUBLIN | ARCHITECT CONROY CROWE KELLY ARCHITECTS | KINWEST LTD. |
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