## NOTES:

- 1 ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
- 2 THE MINIMUM DEPTH OF COVER FROM THE FINISHED SURFACE TO THE EXTERNAL CROWN OF THE PIPE SHALL BE 750mm FOR SERVICE CONNECTIONS, 900mm FOR WATER MAINS. GREATER DEPTHS OF COVER AND/OR PIPE STRENGTH AND/OR A HIGHER CLASS OF BEDDING MATERIAL MAY BE REQUIRED WHERE HIGH TRAFFIC LOADING IS ANTICIPATED. THE MAXIMUM COVER SHOULD NOT EXCEED 1.2M
- WHERE PRACTICABLE. 3 CLAUSE 808 MATERIAL IN ACCORDANCE WITH THE TRANSPORT INFRASTRUCTURE IRELAND SPECIFICATION FOR ROAD WORKS IS TO BE USED AS BACKFILL MATERIAL WHERE THE WATER 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
- TRANSPORT INFRASTRUCTURE IRELAND SPECIFICATION FOR ROAD WORKS. 4 SELECTED EXCAVATED MATERIAL MAY BE USED IN GREEN-FIELD AREAS ABOVE GRANULAR PIPE SURROUND MATERIAL SUBJECT TO THE APPROVAL OF IRISH WATER.
- 5 PIPE BEDDING SHALL COMPLY WITH WIS 4-08-02 AND IGN 4-08-01 GRANULAR MATERIAL SHALL BE 14mm TO 5mm GRADED AGGREGATE OR 10mm SINGLE SIZED
- AGGREGATE IS EN 13242. 6 IN SOFT GROUND CONDITIONS (CBR < 5) THE MATERIAL SHOULD BE EXCAVATED OUT AND DISPOSED OF IN ACCORDANCE WITH THE WASTE MANAGEMENT ACT AND CLAUSE 808 MATERIAL IN ACCORDANCE WITH THE TRANSPORT INFRASTRUCTURE IRELAND 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. 7 PIPES SHALL NOT BE SUPPORTED ON STONES OR ROCKS, OR ANY HARD OBJECT 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 804 MATERIAL IN ACCORDANCE WITH THE TRANSPORT INFRASTRUCTURE IRELAND SPECIFICATION FOR ROAD WORKS. THE GRANULAR MATERIAL SHALL BE LAID ABOVE THIS VOID BACKFILL
- 8 SHOULD MINIMUM COVER NOT BE ACHIEVABLE, CONCRETE GRADE C8/10 SHALL BE USED AS

TO BE LAID AT TOP OF PIPE BEDDING LAYER.

MAY BE <500mm, SUBJECT TO CONSIDERATION

BEING GIVEN TO THE TRENCH DEPTH, HEALTH

10 TRENCH WIDTHS FOR PIPE SIZES ≤80mm

& SAFETY & CONSTRUCTION ACCESS

PIPE DIAMETER

'A' (mm)

< 200

> 250

PIPE DIAMETER

'A' (mm)

< 80

100

150

250

300

350

400

GRASSED AREAS

PIPE DIA 'A'

MINIMUM TRENCH

CROSS SECTION IN GRASSED AREAS

ROAD/FOOTPATH SURFACE

PIPE DIA 'A'

MINIMUM TRENCH

CROSS SECTION IN ROADS

 $\overline{\text{(STD - W - 13)}}$ 

WIDTH 'B'

TRENCH BACKFILL AND BEDDING

BE C30/37 9 MARKER TAPE TO BE 400mm WIDE BLUE 4. PRECAST METER CHAMBER(WITH CONCRETE 8. DUCTILE IRON PIPES AND FITTINGS TO BE IN POLYETHYLENE MATERIAL IN ACCORDANCE SURROUND) MAY BE USED SUBJECT TO IRISH WITH EN 12163, PLASTIC PIPES SHALL HAVE WATER APPROVAL. WARNING TAPE INCORPORATED A REINFORCED BAND BRACING WIRE. SERVICE PIPES SHALL APPROVED HEAVY DUTY METAL COVERS TO 9. ALL CHAMBERS TO BE CHECKED FOR UPLIFT IS EN206. HAVE 200mm WIDE MESH TAPE. MARKER TAPE

DEPTH OF BEDDING

'C' (mm)

150

200

TRENCH WIDTH

'B' (mm)

< SEE NOTE 10.

500

600

600

750

750

750

900

900

DEPTH OF REINSTATED - TOPSOIL TO MATCH

- SELECTED BACKFILL.

REFER TO NOTE 4

FOR DETAILS

FOR DETAILS.

MARKER TAPE.

REFER TO NOTE

PIPE BEDDING.

FOR DETAILS.

REFER TO NOTE 5

TO NOTE 3 FOR

MARKER TAPE. REFER TO NOTE 9

FOR DETAILS.

PIPE BEDDING. REFER TO NOTE 5 FOR DETAILS.

DETAILS

NOTES:

REVIEW.

FLOW

 $\overline{\phantom{a}}$ 

LONG BODY

LONG BODY

LONG BODY

FLEXIBLE COUPLING

FLEXIBLE COUPLING

FLEXIBLE COUPLING

5. METER CHAMBER SHALL BE COVERED WITH

D.I. FLANGED PLAIN—

ENDED PIPE WITH

THRUST FLANGE

(CUT TO SUIT)

SLUICE

VALVE

DI FLANGED

DISMANTLING

TAPER

400x400x200

DEEP SUMP

WATER TIGHT SEAL —

CAST IN RECESSED LIFTING \_

HEAVY DUTY COVER AND FRAME \_ STAMPED "Me" CLASS D400 TO IS EN124 (TO SUIT 900 SQ. OPE)

> ENGINEERING BRICKWORK SET IN C50/60 MORTAR

MAX. OF CLASS B

CONCRETE ROOF SLAB

C30/37 REINFORCED CONCRETE SLAB

1. ALL DIMENSIONS ARE IN MILLIMETRES (mm)

2. STRUCTURAL DESIGN AND REINFORCEMENT

DETAIL TO BE PROVIDED BY THE DEVELOPER

UNLESS NOTED OTHERWISE.

- AND SUBMITTED TO IRISH WATER FOR STAINLESS STEEL METAL BAND AROUND COVER IN GRASS AREAS. 3. CONCRETE FOR FLOW METER CHAMBER TO 7. ANTI CORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.
  - 12201: 2011.

HEAVY DUTY COVER AND FRAME

STAMPED "Me" CLASS D400 TO IS

EN124 (TO SUIT 900 SQ. OPE)

CONCRETE ROOF SLAB

C30/37 REINFORCED SLAB

SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS WITHIN THE SITE. SHOULD ANTI CONDITIONS AND IS SUBJECT TO THE FLOATATION MEASURES BE REQUIRED THEY APPROVAL OF IRISH WATER. SHALL BE SUBJECT TO APPROVAL FROM IRISH WATER. 200mm ALL ROUND, 100mm DEEP CONCRETE PLINTH WITH PROTECTIVE 10. PIPEWORK TO BE DOWNSIZED TO

IS EN124 RATING D400. COVER AND FRAME BY THE DEVELOPER BASED ON GROUND

- ACCOMMODATE THE REQUIRED RANGE OF THE FLOW METER. STRAIGHT PIPE LENGTHS UPSTREAM AND DOWNSTREAM OF THE METER TO BE PROVIDED. IF THE METER IS NOT CAPABLE OF ACCURATE NIGHT FLOW MEASUREMENTS, A BY-PASS FLOW METER SHALL BE PROVIDED WITH APPROPRIATE
- ACCORDANCE WITH IS EN545. PE PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS EN VALVES, FITTINGS AND PIPEWORK. 11. ALL CONCRETE TO BE IN ACCORDANCE WITH PER MANUFACTURERS

-

DETAIL AS PER INLET

CONCRETE CAST

IN-SITU CRADLE

THICKENED FLOOR

SLAB UNDER SUMP

DETAIL AS PER INLET

THRUST FLANGE —

DUCT END TO BE SEALED

DISMANTLING JOINT —

FLANGED PLAIN

ENDED DI PIPE

FLOW METER -

25mm O.D. TAPPING

PRESSURE TAPPING DUCT TO KIOSK TO BE

INSTALLED WITH DRAW CORD(REFER TO-

STD-W-36) DUCT END TO BE SEALED

TO BE PROVIDED

10xPIPEØ MIN. FROM FLOW METER TO DISMANTLING JOINT (ENTRY)

5xPIPEØ MIN. FROM FLOW METER TO DISMANTLING JOINT (EXITING)

<u>FLOOR PLAN</u>

FLOW METER -

- COVER TO BE SET AS SPECIFICATION

75mm CONCRETE

BLINDING C12/15

APPROVAL FROM IRISH WATER. 6. CONCRETE CHAMBERS SHALL BE SURROUNDED BY A MINIMUM OF 150mm COMPACTED CLAUSE 808 MATERIAL AS PER STD-W-13.

PRECAST CONCRETE UNITS OR HIGH

DENSITY BLOCKWORK, ALTERNATIVELY

PROPRIETARY PREFABRICATED CHAMBER

UNITS MAY ALSO BE USED SUBJECT TO

GROUND

CLASS B ENGINEERING BRICK

SET IN C50/60 MORTAR

CONCRETE ROOF SLAB

CONCRETE BASE C25/30

LONG BODY —

FLEXIBLE COUPLING

CUT TO SUIT

FLANGED/PLAIN ENDED PIPE —/

FLANGED SLUICE VALVE —

C30/37 REINFORCED SLAB

(mm) UNLESS NOTED OTHERWISE.

2. SLUICE VALVE CHAMBERS SHALL BE

- 7. DUCTILE IRON PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS EN 545. 1. 1 ALL DIMENSIONS ARE IN MILLIMETRES
- 8. 200mm ALL AROUND, 100mm DEEP CONCRETE PLINTH WITH PROTECTIVE STEEL METAL BAND AROUND COVER IN GREEN COVERED WITH APPROVED HEAVY DUTY
- METAL COVERS TO IS 261 OR BS 5834. COVER AND FRAME SHALL BE SUITABLE FOR 9. THRUST BLOCKS(NOT SHOWN ON DRAWING) ROAD AND TRAFFIC CONDITIONS AND IS TO BE PROVIDED AS PER STANDARD DRAWING STD-W-28 AT ALL TEES AND SUBJECT TO THE APPROVAL OF IRISH BENDS, TAPERS, DEAD ENDS AND PIPES AT STEEP SLOPES.
- 3. SLUICE VALVES SHALL BE RESILIENT SEATED AND SHALL COMPLY WITH BS 5163-1, BS 10. ANTICORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES. 5163-2, IS EN 1074-1, IS EN 1074-2, OR EQUIVALENT EU SPECIFICATIONS. 11. ALL CONCRETE TO BE IN ACCORDANCE WITH

PLINTH IN GRASSED AREAS

AREAS.

- 4. ALL SLUICE VALVES SHALL BE IS EN 206 ANTI-CLOCKWISE CLOSING. 12. ALL THRUST FLANGES TO BE ADEQUATELY 5. VALVE CHAMBER TO BE CONSTRUCTED OF
  - RESTRAINED BY THRUST BLOCKS AS PER DRAWING No. STD-W-28. THRUST BLOCKS NOT SHOWN FOR CLARITY

- 1. 1 ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
- 2. HYDRANT CHAMBERS SHALL BE COVERED WITH APPROVED HEAVY DUTY METAL COVERS TO IS 261 OR BS 5834. COVER AND FRAME SHALL BE SUITABLE FOR ROAD 8. 200mm ALL AROUND, 100mm DEEP AND TRAFFIC CONDITIONS AND IS SUBJECT
- TO THE APPROVAL OF IRISH WATER 3. ALL HYDRANTS, SURFACE BOX FRAMES AND COVERS SHALL COMPLY WITH THE RELEVANT PROVISIONS OF IS EN 14339, IS EN 1074-6 & BS 750. FIRE HYDRANTS SHALL BE TYPE 2. THE HYDRANT INLET

UNITS MAY ALSO BE USED SUBJECT TO

FINISHED

GROUND

LEVEL

CLASS B ENGINEERING BRICK

SET IN C50/60 MORTAR

C30/37 REINFORCED SLAB

RISER PIPE OF SUITABLE

CONCRETE BASE C25/30

HEAVY DUTY COVER-

AND FRAME, STAMPED

'FH' CLASS D400 ( TO

SUIT 445x280 OPE)

LENGTH TO SUIT CONDITIONS

CONCRETE ROOF SLAB

DI DOUBLE FLANGED DN80, 50

APPROVAL FROM IRISH WATER.

- SHALL BE 80mm DIAMETER WITH PN16. 4. ALL HYDRANTS SHALL BE CLOCKWISE
- CLOSING. PROPRIETARY PREFABRICATED CHAMBER

STAINLESS STEEL

COVER TO MANUFACTURERS

— EXTENSION SPINDLE

UNITS (REFER TO NOTE 5)

- REFER TO STD-W-13

FOR BEDDING DETAILS

- DISMANTLING JOINT

CONCRETE SUPPORT

PRECAST CONCRETE

METAL BAND

- 6. CONCRETE CHAMBERS SHALL BE SURROUNDED BY A MINIMUM OF 150mm COMPACTED CLAUSE 808 MATERIAL AS PER
- STD-W-13. DUCTILE IRON PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS EN 545.

CONCRETE PLINTH WITH PROTECTIVE STEEL

- METAL BAND AROUND COVER IN GREEN 9. THRUST BLOCKS(NOT SHOWN ON DRAWING) TO BE PROVIDED AS PER STANDARD DRAWING STD-W-28 AT ALL TEES AND BENDS, TAPERS, DEAD ENDS AND PIPES AT
- STEEP SLOPES. 10. ANTICORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.
- 5. VALVE CHAMBER TO BE CONSTRUCTED OF 11. ALL CONCRETE TO BE IN ACCORDANCE WITH PRECAST CONCRETE UNITS OR HIGH IS EN 206 DENSITY BLOCKWORK. ALTERNATIVELY

PLINTH IN GRASSED AREAS

N O

## 5. SERVICE CONNECTIONS SHALL NOT BE PROVIDED WITHIN 2m OF THE AIR VALVE CONCRETE UNITS OR HIGH DENSITY

STAINLESS STEEL

MANUFACTURERS

PRECAST CONCRETE

FOR BEDDING DETAILS

SOCKETED

75mm HIGH

CONCRETE ROOF SLAB

C30/37 REINFORCED SLAB

LETTERING

BRANCH

TEE WITH FLANGED

UNITS (REFER TO NOTE 5)

SPECIFICATION

METAL BAND

LOCATION. 6. AIR VALVE CHAMBERS TO BE OF PRECAST

1. 1 ALL DIMENSIONS ARE IN MILLIMETRES

(mm) UNLESS NOTED OTHERWISE.

METAL COVERS TO IS EN 124 RATING D400.

ROAD AND TRAFFIC CONDITIONS AND IS

SUBJECT TO THE APPROVAL OF IRISH

3. AIR VALVES SHALL COMPLY WITH THE

REQUIREMENTS OF IS EN 1074-4. AIR

4. THE AIR VALVES SHALL OF BODIES AND

COVERS OF CAST IRON TO BS EN 1563

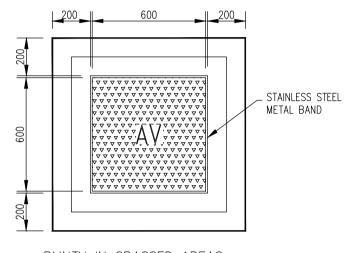
WITH FLANGES DRILLED TO PN 16 IN

ACCORDANCE WITH BS EN 1092. EACH

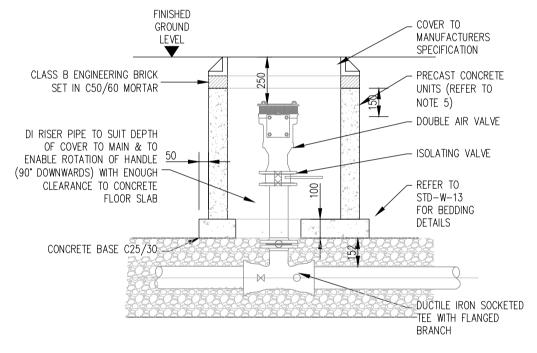
- BLOCKWORK. ALTERNATIVE PROPRIETARY PREFABRICATED CHAMBER UNITS MAY ALSO
- BE USED, SUBJECT TO APPROVAL FROM IRISH WATER. 2. AIR VALVE CHAMBERS SHALL BE COVERED PRECAST CONCRETE CHAMBERS SHALL BE WITH APPROVED VENTILATED HEAVY DUTY
  - SURROUNDED BY A MINIMUM OF 150mm COMPACTED CLAUSE 808 MATERIAL AS PER STD-WW-13.
- COVER AND FRAME SHALL BE SUITABLE FOR 8. DUCTILE IRON PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS EN 545.
- CONCRETE PLINTH WITH PROTECTIVE STEEL METAL BAND AROUND COVER IN GREEN VALVES SHALL BE DOUBLE ORIFICE TYPE AND SHALL INCLUDE AN ISOLATING VALVE. THE ISOLATING VALVE SHALL BE A GATE 10. THRUST BLOCKS(NOT SHOWN ON DRAWING) VALVE CONFORMING TO IS EN 1074-2 AND TO BE PROVIDED AS PER STANDARD

9. 200mm ALL AROUND, 100mm DEEP

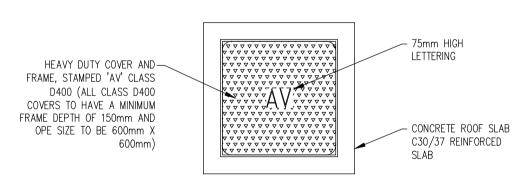
- SHALL BE OF A BOLTLESS BONNET DESIGN DRAWING STD-W-28 AT ALL TEES AND BENDS, TAPERS, DEAD ENDS AND PIPES AT STEEP SLOPES.
- 11. ANTICORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES. VALVE SHALL HAVE A LARGE AND A SMALL
- AIR ESCAPE ORIFICE WITH AN ISOLATING 12. THE LOCATION OF THE AIR VALVE SHALL BE THE SUBJECT OF PARTICULAR AGREEMENT WITH IRISH WATER TO ENSURE THAT THE RISK OF CONTAMINATION THROUGH THE VALVE IS ELIMINATED:.
  - 13. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206



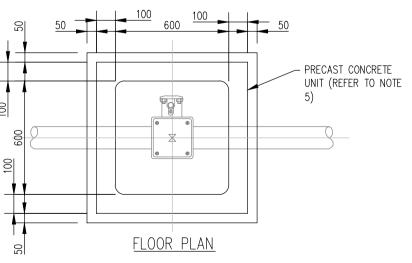
PLINTH IN GRASSED AREAS



<u>SECTION</u>



ROOF PLAN



AIR VALVE CHAMBER

(PRECAST CONCRETE CONSTRUCTION) (STD - W - 20)SCALE 1:20

(STD - W - 26)

SCALE 1:20

NOT FOR CONSTRUCTION. ALL LEVELS GIVEN ARE

PURPOSES ONLY AND MUST NOT BE USED FOR CONSTRUCTION UNDER ANY CIRCUMSTANCES

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<u>ROOF PLAN</u>

P1 | 17.07.2023 | ISSUED FOR STAGE 2 P2 20.02.2024 REVISED FOLLOWING IW SODA COMMENTS SC AC P3 22.02.2024 ISSUED FOR PLANNING SC LJ

Michael Fitzpatrick (MFA) Drumlark Development Co. Cavan **Proposed Watermain Details** Sheet 1 D111-CSC-XX-XX-DR-C-0007

JF NB As Shown @ A1

June 2023

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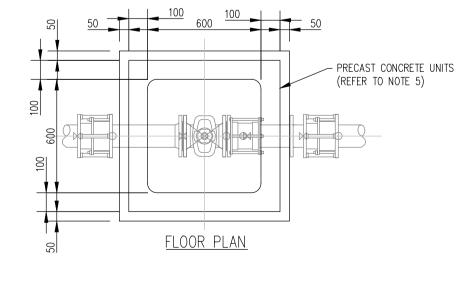
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D111

Ordnance Survey Ireland Licence Number EN 0074024

HEAVY DUTY COVER AND-CABLE DUCT TO KIOSK TO BE INSTALLED WITH DRAW CORD (REFER TO STD-W-36) D400 ( TO SUIT 445x280 OPE) CONCRETE ROOF SLAB C30/37 REINFORCED SLAB ROOF PLAN

<u>SECTION</u>



SLUICE VALVE CHAMBER (PRECAST CONCRETE CONSTRUCTION) <u>(STD - W - 14)</u>

PRECAST CONCRETE UNITS (REFER TO NOTE 5) FLOOR PLAN

FIRE HYDRANT CHAMBER <u>(PRECAST CONCRETE CONSTRUCTION)</u> (STD - W - 16)

ROOF PLAN

**P3** 

PLANNING DRAWING.

METER CHAMBER (<300mmø)

RELATIVE TO ORDNANCE DATUM. THIS DRAWING HAS BEEN ISSUED FOR INFORMATION