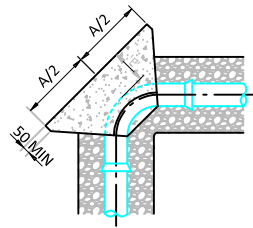
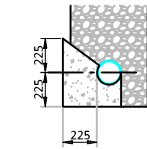


TEE
SCALE 1:50 @ A3



90 DEGREE BEND
SCALE 1:50 @ A3



SECTION FOR BEND OR TEE
SCALE 1:50 @ A3

DIAMETER OF WATERMAIN
(100mm) 25mm HIGH TEXT



HYDRANT
SCALE 1:10

DISTANCE OF MARKER FROM
HYDRANT (2m) 25mm HIGH TEXT



AIR VALVE
SCALE 1:20 @ A3



WATERMAIN
SCALE 1:20 @ A3



SLUICE VALVE
SCALE 1:20 @ A3

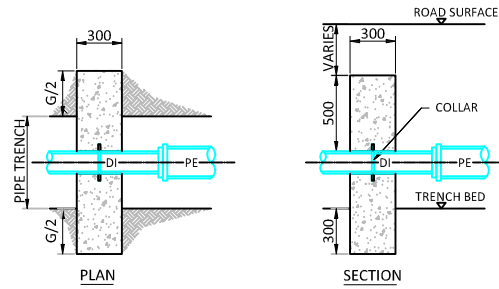
25mm HIGH TEXT

80mm HIGH TEXT

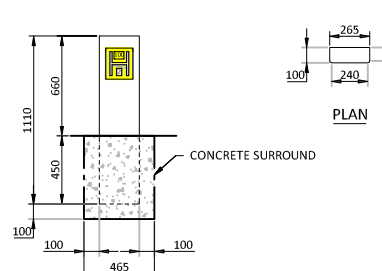
MARKER POSTS & HYDRANT INDICATOR PLATES

THRUST BOCKS HORIZONTAL BENDS

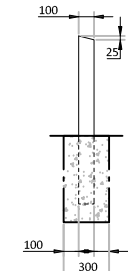
- ALL DIMENSIONS IN MILLIMETERS (mm) UNLESS NOTED OTHERWISE.
- CONCRETE THRUST BLOCKS (ANCHORAGE) SHALL BE POSITIONED SYMMETRICALLY WITH RESPECT TO THE CONNECTING PIPES AND BENDS.
- TRENCH DIMENSIONS REFER TO TRENCH BEDDING AND BACKFILL DETAILS.
- THRUST BLOCKS SHALL BEAR ON UNDISTURBED SOIL, IF FOR ANY REASON THEY CANNOT THEN THE DEVELOPER SHALL NOTIFY IRISH WATER IMMEDIATELY WITH A PROPOSED SOLUTION.
- THRUST BLOCK REINFORCEMENT REQUIRES 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 100KN/m (TYPICAL FOR SOFT CLAY). FOR OTHER CONDITIONS, ACTUAL DIMENSIONS MAY BE ALTERED ON INSTRUCTION FROM IRISH WATER.
- CONCRETE 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 18mm.
- CONCRETE THRUST BLOCKS FOR POLYETHYLENE PIPE TO COMPLY WITH MANUFACTURERS SPECIFICATIONS.
- 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.



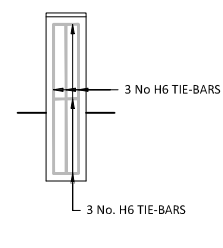
THRUST BLOCK FOR DUCTILE IRON TO
POLYETHYLENE CHANGE OVER



ELEVATION
SCALE 1:50 @ A3



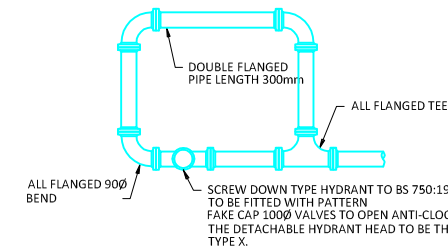
END VIEW
SCALE 1:50 @ A3



RC DETAILS
SCALE 1:50 @ A3

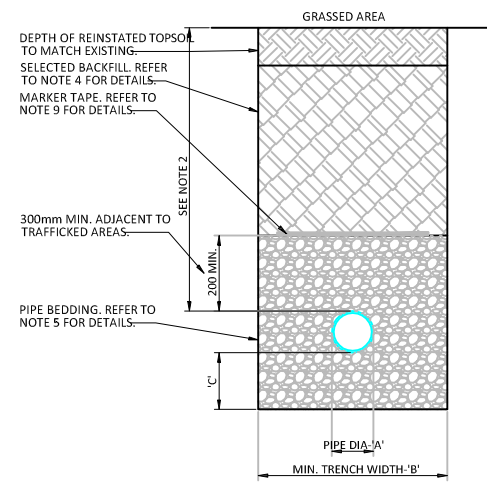
- WHERE PRACTICAL MARKER PLATES SHALL BE FIXED TO ADJACENT WALLS OR ALTERNATIVELY ATTACHED TO MARKER POSTS.
- PLATES TO BE FIXED IN POSITION USING WALL PLUGS AND STAINLESS STEEL SCREWS.
- MARKER PLATES TO BE MANUFACTURED IN ACCORDANCE WITH BS 3251.
- FOR HYDRANT PLATE ALL CHARACTERS SHOULD BE BLACK AND THE REMAINDER OF THE FRONT FACE SHOULD CONFORM TO COLOUR REFERENCE No. 309 (CANARY YELLOW) OF BS 381C.
- PIPE DIAMETER ON HYDRANT PLATE TO REFER TO WATERMAIN, NOT BRANCH.
- SLUICE VALVE, AIR VALVE, SCOUR VALVE, WASHOUT HYDRANT, AND METER PLATES SHOULD BE CAST IRON. ALL CHARACTERS SHOULD BE BLACK ON WHITE PAINT BACKGROUND.
- CONCRETE SURROUND TO MARKER POST TO BE GRADE C25/30.
- PLASTIC MARKER POSTS ARE NOT ACCEPTABLE.
- ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.

NOM. DIA. (mm)	DIMENSIONS										
	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	

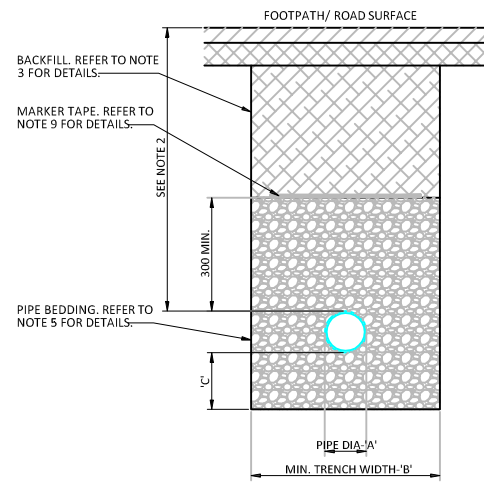


HYDRANT LOOP FOR DEAD ENDS
ALL LOOPS MUST INCLUDE 4 UNITS AND A FIRE HYDRANT

TRENCH BACKFILL AND BEDDING DETAILS



CROSS SECTION IN GRASSED AREAS
SCALE 1:20 @ A3



CROSS SECTION IN ROADWAYS
SCALE 1:20 @ A3

PIPE DIA. 'A'(mm)	TRENCH WIDTH. 'B'(mm)
<80mm	SEE NOTE 10
100mm	500mm
150mm	600mm
200mm	600mm
250mm	750mm
300mm	750mm
350mm	750mm
400mm	900mm
450mm	900mm

PIPE DIA. 'A'(mm)	BEDDING DEPTH 'C'(mm)
<200mm	150mm
>250mm	200mm

- ALL DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS NOTED OTHERWISE.
- THE MINIMUM DEPTH OF COVER FROM THE FINISHED GROUND LEVEL TO THE EXTERNAL CROWN OF THE PIPE SHALL BE 750mm TO 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 1200mm WHERE PRACTICABLE.
- CLAUSE 808 MATERIAL IN ACCORDANCE WITH THE TII SPECIFICATION FOR ROAD WORKS IS TO BE USED AS BACKFILL MATERIAL WHERE TO 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 TII SPECIFICATION FOR ROAD WORKS.
- SELECTED EXCAVATED MATERIAL MAY BE USED IN GREEN FIELD AREAS ABOVE GRANULAR PIPE SURROUND MATERIAL SUBJECT TO THE APPROVAL OF IRISH WATER.
- 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 SIZE AGGREGATE TO IS EN 1242.
- 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 TII SPECIFICATION ON 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 THE SOFT MATERIAL IS EXCESSIVE. SUCH ARRANGEMENTS SHALL BE SUBJECT TO ASSESSMENT BY IRISH WATER BEFORE ADVANCING WITH THE WORK.
- PIPES SHALL NOT BE SUPPORTED ON STONES OR ROCKS, OR ANY HARD OBJECT AT ANY POINT ALONG THE TRENCH. ROCKS 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 TII SPECIFICATION FOR ROAD WORKS. THE GRANULAR MATERIAL SHALL BE LAID ABOVE THIS VOID BACKFILL MATERIAL.
- SHOULD MINIMUM COVER NOT BE ACHIEVABLE, CONCRETE GRADE C8/10 SHALL BE USED AS BACKFILL MATERIAL.
- MARKER TAPE TO BE 400mm WIDE BLUE POLYETHYLENE MATERIAL IN ACCORDANCE WITH EN 12163, PLASTIC PIPES SHALL HAVE WARNING TAPE INCORPORATING A REINFORCED BAND BRACING WIRE. SERVICE PIPES SHALL HAVE 200mm WIDE MESH TAPE. MARKER TAPE TO BE LAID AT TOP OF PIPE BEDDING LAYER.
- TRENCH WIDTHS FOR PIPES <80mm MAY BE <500mm, SUBJECT TO CONSIDERATION BEING GIVEN TO THE TRENCH DEPTH, HEALTH AND SAFETY AND CONSTRUCTION REQUIREMENTS.

NOTE:
ALL DIMENSIONS TO BE CHECKED ON SITE.
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CLIENT
Lagan Homes Drogheda Ltd.

PROJECT
**Development at Newfoundland Road,
Drogheda, Co. Louth.**

JOB NUMBER:	18/032
DATE	September 2019
SCALE:	AS SHOWN
DRAWN	SK
CHECKED	JOD
STATUS	

DRAWING
**Site Services
Watermain Details Sheet 3**

CAD FILE	REVISION

PLANNING

DL-332

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