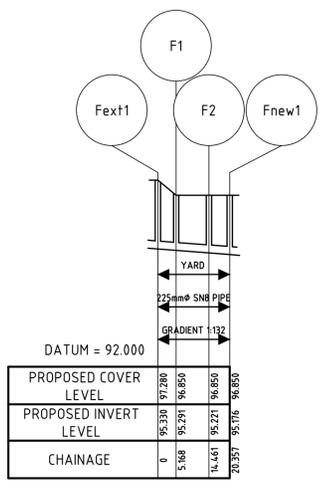
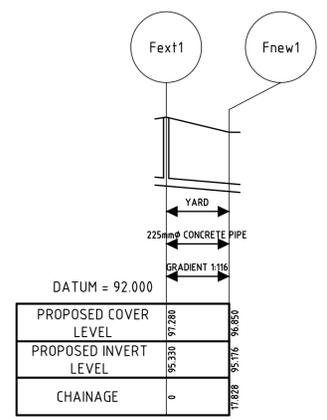


**OPTION 2: PROPOSED SITE SERVICES LAYOUT WITH PARTIAL DIVERSION OF EXISTING FOUL SEWER OUT FROM UNDER BUILDINGS, DEPENDENT ON NO ACCESS TO THIRD PARTY LANDS**  
SCALE 1:100

Lower Main Street



**PROPOSED FOUL SEWER SECTION**  
**Fext1 - Fnew1**  
HORIZONTAL SCALE 1:1000  
VERTICAL SCALE 1:100



**FOUL SEWER SECTION TO BE DIVERTED**  
**Fext1 - Fnew1**  
HORIZONTAL SCALE 1:1000  
VERTICAL SCALE 1:100

**WATER INFRASTRUCTURE**

CONFIRMATION BY A CHARTERED ENGINEER AND TEST RESULT CERTIFICATES & REPORTS INDICATING THAT THE WATER INFRASTRUCTURE HAS UNDERGONE APPROPRIATE ON-SITE TESTING, OFF SITE TESTING AND COMMISSIONING. THE APPROPRIATE SITE TESTS FOR WATER COLLECTION INFRASTRUCTURE WOULD BE AS FOLLOWS:

- IGN TEST REPORTS - WATERMAIN PRESSURE TESTING
- SERVICE CONNECTION TEST RESULTS
- ELECTRO/BUTT FUSION WELD TEST RESULT REPORTS (DESTRUCTIVE TESTING)
- PRINTOUT OF THE JOINT DETAILS, WITH A GPS LOCATION OF EACH ELECTROFUSION & BUTT FUSION JOINT
- TESTING COMPLETION RESULTS FOR BOOSTER PUMP PLANT (IF APPROPRIATE)
- SWABBING & FLUSHING RECORDS
- DISINFECTION TEST REPORTS (ACCREDITED LABORATORY REPORT)
- WATER QUALITY SAMPLING RESULTS (ACCREDITED LABORATORY REPORT)

**WASTE WATER INFRASTRUCTURE**

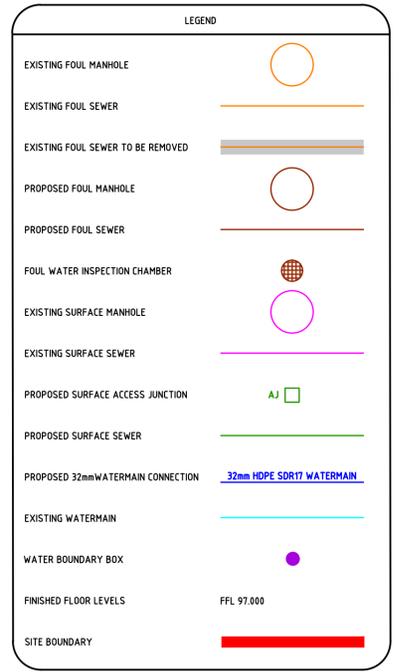
CONFIRMATION BY A CHARTERED ENGINEER AND TEST RESULT CERTIFICATES INDICATING THAT THE WASTEWATER INFRASTRUCTURE HAS UNDERGONE APPROPRIATE ON-SITE TESTING AND COMMISSIONING. THE APPROPRIATE SITE TESTS FOR WASTEWATER COLLECTION INFRASTRUCTURE WOULD BE AS FOLLOWS:

- AIR TESTS AND WATER TESTS COMPLETION RESULTS FOR SEWERS
- WATER RETAINING TESTS COMPLETION RESULTS FOR MANHOLES AND PUMPING STATION STRUCTURES
- PRESSURE TESTING COMPLETION RESULTS OF RISING MAINS COMPLETE WITH A HARD COPY PRINT OUT FROM THE LOGGER OF THE RELAXATION CURVE AS PROOF OF THE OUTCOME OF THE TEST. (IGN 4-01-03 COMPLIANT REPORT)
- A PRINTOUT OF THE JOINT DETAILS, WITH A GPS LOCATION OF EACH JOINT (HDPE WELDING)
- PUMPING STATIONS - TESTING & COMMISSIONING REPORTS

**WASTEWATER INFRASTRUCTURE - CCTV & MANHOLE SURVEY REPORTS**

REPORTING AND DELIVERING - THE FINAL REPORTS AND DELIVERABLES TO IRISH WATER SHALL INCLUDE THE FOLLOWING ITEMS:

- A - CCTV SURVEY FOOTAGE: FILES IN "XML" FORMAT SUBMITTED TO IRISH IN ACCORDANCE WITH MSCC, 5TH ADDITION, COMPATIBLE WITH INFONET.
- B - CCTV REPORTS: REPORTS SUBMITTED IDENTIFYING THAT NO DEFECTS EXIST. REPORTS SUBMITTED IN CD OR DVD FORMAT WITH A HARD COPY OF THE SURVEY REPORT.
- C - MANHOLE SURVEY REPORTS: REPORTS SUBMITTED IDENTIFYING THAT NO DEFECTS EXIST. REPORTS SUBMITTED IN "EXCEL" FORMAT ON CD OR DVD WITH A HARD COPY OF THE SURVEY REPORTS. MANHOLE REFERENCING SHALL BE CONSISTENT WITH THE AS CONSTRUCTED DRAWINGS - TO IRISH NATIONAL GRID COORDINATES (INGI) TO +/- 100mm ACCURACY IN THE HORIZONTAL PLANE, WITH DIMENSIONS RELATING TO FIXED ORDNANCE SURVEY CO-ORDINATES.
- D - CERTIFICATION FROM THE CUSTOMERS CONSULTANT ENGINEER: CONFIRMATION THAT A QUALITY CONTROL REGIME HAS BEEN IMPLEMENTED WITH THE RESULT THAT NO DEFECTS EXIST IN EITHER THE SEWERS OR THE MANHOLES.



**NOTES**

ALL WORKS REGARDING THE FOUL SEWER TO BE CARRIED OUT TO IRISH WATER CODE OF PRACTICE DOCUMENT CDS-5030-03

INDIVIDUAL WASTEWATER CONNECTION TO EACH DWELLING WILL BE AS PER STANDARD DETAIL STD-WW-02.

REFER TO SECTION 3.2 FOR SERVICE CONNECTION GRADIENTS.

THE INSPECTION CHAMBER WILL BE IN COMPLIANCE WITH STD-WW-03 AND STD-WW-13 AND WILL BE LOCATED WITHIN 1M OF EACH SITE BOUNDARY.

PIPE MATERIALS SHALL COMPLY WITH SECTION 3.13 OF THE IRISH WATER CODE OF PRACTICE.

PIPE MATERIALS WILL BE UNPLASTICISED PVC FOR THE MAIN SEWERS AS PER SECTION 3.13.3 OF THE IRISH WATER CODE OF PRACTICE.

MANHOLES WILL CONFORM TO STANDARD DETAILS STD-WW-09, STD-WW-10, STD-WW-11 AND/OR STD-WW-12 AS APPROPRIATE.

SEPARATION DISTANCES FROM FOUL SEWERS TO STRUCTURES AND OTHER UTILITIES WILL COMPLY WITH SECTION 3.5 OF THE IRISH WATER CODE OF PRACTICE.

REFER TO STD-W-12A, STD-WW-06, STD-WW-06A & 3.26 OF THE IRISH WATER CODE OF PRACTICE FOR PLANTING RESTRICTIONS OF WATER AND WASTE WATER. ROOT PROTECTION TO BE REDWOOD 2000 OR SIMILAR.

REFER TO DETAILS STD-W-11 FOR TYPICAL SERVICES LAYOUT DISTANCES & STD-WW-05 FOR WASTEWATER TYPICAL SERVICES LAYOUT AND 3.21 IRISH WATER WASTEWATER CODE OF PRACTICE.

REFER TO SECTION 3.5.16 OF THE WASTE WATER IRISH WATER CODE OF PRACTICE FOR UNAVOIDABLE SERVICES CROSSOVER.

MANHOLE COVERS LOCATED IN GRASS AREAS TO HAVE 200mm ALL ROUND CONCRETE PLINTH AND 100mm DEEP FORMED CONCRETE, 20mm AGGREGATE, BEDDED IN CLAUSE 804 MATERIAL.

REFER TO 3.5.13 OF THE IRISH WATER CODE OF PRACTICE FOR STAGGERED MANHOLE SYSTEMS DETAILS.

EXTERNAL FACE OF PROPOSED MANHOLE CHAMBER TO BE A MINIMUM OF 0.5m FROM KERB LINE AND EXTERNAL FACE OF SEWERS ARE A MINIMUM OF 1M FROM KERB LINE. SEE SECTION 3.5.15 OF IRISH WATER WASTEWATER CODE OF PRACTICE

ALL WORKS TO COMPLY WITH THE RECOMMENDATIONS FOR SITE DEVELOPMENT WORKS FOR HOUSING AREAS AS ISSUED BY THE DEPARTMENT OF THE ENVIRONMENT NOVEMBER 1998

ALSO REFER TO ALAN TRAYNOR CONSULTING ENGINEERS GENERAL SPECIFICATION

ALL SEWER PIPES WITH LESS THAN 1200MM COVER IN ROADS AND 600MM ELSEWHERE TO BE SURROUNDED IN MINIMUM 150MM THICK CONCRETE (35N/20)

THIS DRAWING TO BE READ IN CONJUNCTION WITH ARCHITECTS DRAWINGS

EXACT START & FINISHED LEVELS TO BE CONFIRMED ON SITE

ALL MANHOLE COVERS TO BE LOADING CLASS D400 AND TO BE LOCKABLE

LOCATION AND LEVELS OF ALL EXISTING SERVICES TO BE CONFIRMED ON SITE AND RECORDED TO ALL NECESSARY PARTIES PRIOR TO ANY CONSTRUCTIONS

REV.	DATE	DESCRIPTION	APPROVED

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CLIENT <b>CAVAN COUNTY COUNCIL</b>			
PROJECT TITLE <b>PROPOSED HOUSING DEVELOPMENT AT MAIN STREET, KILNALECK, Co. CAVAN</b>			
DRAWING TITLE <b>SITE SERVICES LAYOUT OPTION 2 PROPOSED FOUL WATER &amp; SURFACE WATER SEWERS AND WATERMAIN CONNECTIONS</b>			
SCALE <b>1:100</b>	DRAWN JOHN O'REILLY DATE MAY 2023	CHECKED LIAM MCELGUNN DATE MAY 2023	APPROVED ALAN TRAYNOR DATE MAY 2023
DRAWING No. <b>23-103-101</b>			REV.