

## WATER INFRASTRUCTURE

CONFIRMATION BY A CHARTERED ENGINEER INDICATING THAT THE WATER INFRASTRUC TESTING, OFF SITE TESTING AND COMMIS
WATER COLLECTION INFRASTRUCTURE WOUL
<ul> <li>IGN TEST REPORTS – WATERMAIN PRES</li> </ul>
SERVICE CONNECTION TEST RESULTS
<ul> <li>ELECTRO/BUTT FUSION WELD TEST RES</li> </ul>
PRINTOUT OF THE JOINT DETAILS, WITH
BUTT FUSION JOINT
TESTING COMPLETION RESULTS FOR BO
<ul> <li>SWABBING &amp; FLUSHNG RECORDS</li> </ul>

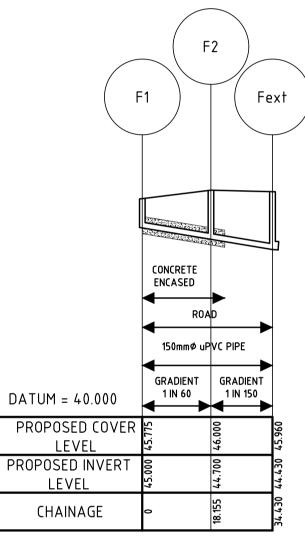
## WASTE WATER INFRASTRUCTURE

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 FOE 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
- A PRINTOUT OF THE JOINT DETAILS, WITH A GPS LOCATION OF EACH JOINT (HDPE WELDING)
- PUMPING STATIONS TESTING & COMMISSIONING REPORTS

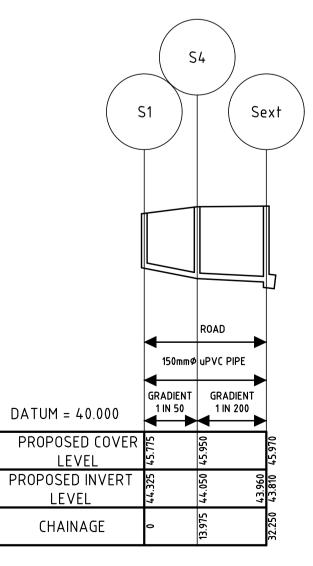
WASTEWATER INFRASTRUCTURE - CCTV & MANHOLE SURVEY REPORTS REPORTING AND DELIVERING - THE FINAL REPORTS AND DELIVERABLES TO IRISH WATER SHALL INCLUDE THE FOLLOWING ITEMS: A- CCTV SURVEY FOOTAGE: FILES IN "XML" FORMAT SUBMITTED TO IRISH IN ACCORDANCE WITH MSCC, 5TH ADDITION, COMPATIBLE WITH INFONET.

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 "CSC" 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 (ING)) 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.



## PROPOSED FOUL SEWER SECTIONS <u>F1-Fext</u>

HORIZONTAL SCALE 1:1000 VERTICAL SCALE 1:100



PROPOSED STORM SEWER SECTIONS <u>S1-Sext</u> HORIZONTAL SCALE 1:1000 VERTICAL SCALE 1:100

D ENGINEER AND TEST RESULT CERTIFICATES & REPORTS INFRASTRUCTURE HAS UNDERGONE APPROPRIATE ON-SITE AND COMMISSIONING. THE APPROPRIATE SITE TESTS FOE CTURE WOULD BE AS FOLLOWS: RMAIN PRESSURE TESTING

ELD TEST RESULT REPORTS ( DESTRUCTIVE TESTING) TAILS, WITH A GPS LOCATION OF EACH ELECTROFUSION & ILTS FOR BOOSTER PUMP PLANT ( IF APPROPRIATE)

ORDS DISINFECTION TEST REPORTS ( ACCREDITED LABORATORY REPORT) WATER QUALITY SAMPLING RESULTS (ACCREDITED LABORATORY REPORT)

• 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)

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

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

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.

REFER TO SECTION 3.2 FOR SERVICE CONNECTION GRADIENTS.

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 REROOT 2000 OR SIMILAR. REFER TO DETAILSTD-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 C 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

