

Minimum 8l/s flow required from Hydrants for fire fighting purposes at multi-occupied housing developments with units of more than two floors as per "National Guidance Document on the Provision of Water for firefighting - Water UK 3rd Edition".

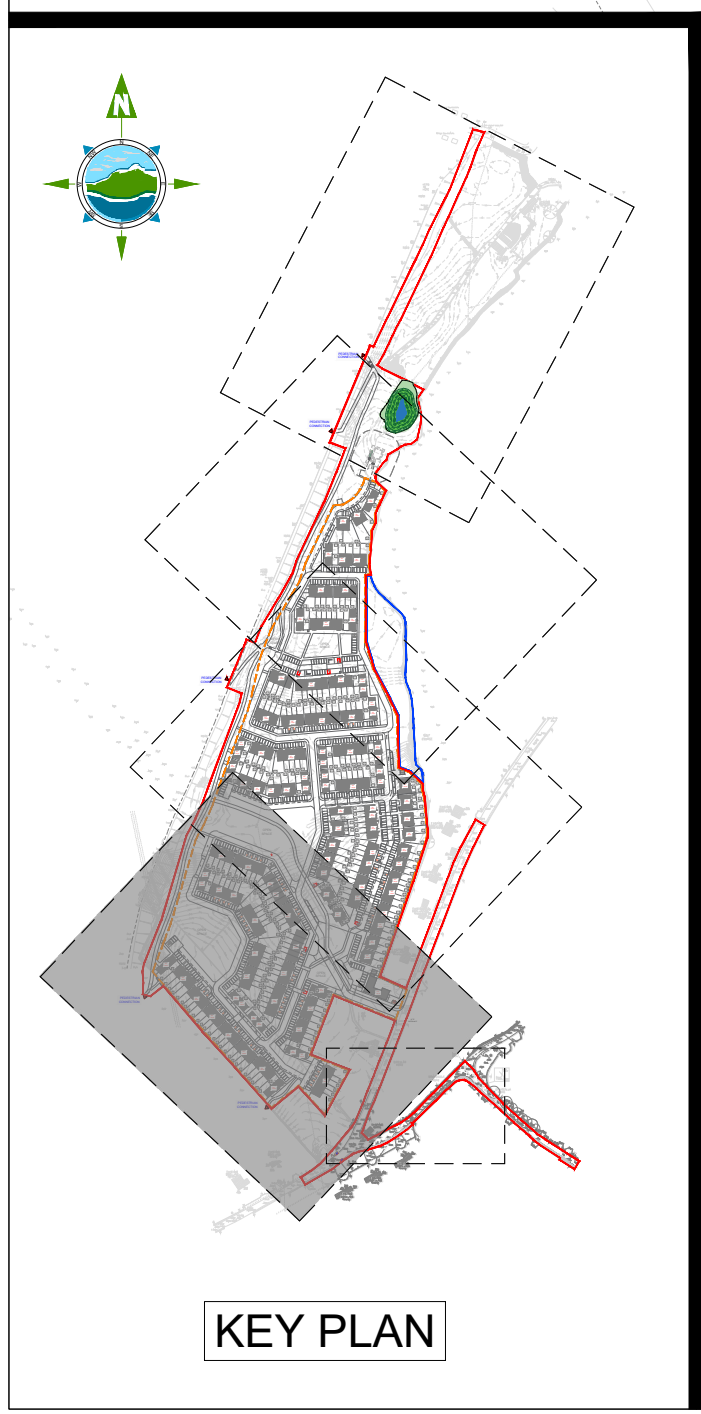
Hydrants to be tested on completion of watermain. If 8l/s is achieved, static water tank may not be required subject to agreement with the local authority. Otherwise 28.8m³ static water storage tank providing 1hr storage volume at 8 l/s minimum or approved alternative to be provided.

Static Water Storage Tank for Firefighting Purposes. (28,800 Litres Minimum Capacity)

Ø80mm connection to site watermain to provide for top-up and filling of static water storage tank above top of water level to ensure an air gap exists and shut off valve

Marker plate for static water tank and dedicated hydrant to static water tank & marker plate

CONNECTION TO EXISTING Ø350mm ASBESTOS WATERMAIN



THE INFORMATION ON THIS DRAWING IS TO THE ORDNANCE SURVEY IRELAND ITM COORDINATE SYSTEM

- LEGEND:**
- Site Boundary
 - Existing Watermain
 - Proposed Ø150mm Water Supply Pipe
 - Proposed Ø100mm PE100 SDR 17 Water Supply Pipe
 - Proposed Ø25mm PE80 SDR 17 House Connection and Water Meter
 - H Proposed Watermain Fire Hydrant
 - BM Proposed Bulk Meter
 - AV Proposed Air Valve
 - SCV Proposed Scour Valve & Washout Chamber
 - TB Proposed Thrust Block
 - SV Proposed Sluice Valve
 - 3-SV Proposed 3-Way Sluice Valve Arrangement (Ductile Iron Pipework Between Valves) as per IW-CDS-5020-01
 - Proposed Below Ground Static Water Storage Tank (min. Capacity 28.8m³ Litres)
 - Ø150mm High-Level Overflow from Water Storage Tank Connected to Storm Drainage Network
 - Ø80mm Connection to Storage Tank
 - Ductile Iron Valve Connection
 - ▲ PROPOSED +5.30 m Proposed Road Levels
 - Developable Area

- NOTES:**
1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING.
 2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE.
 3. ENGINEER/EMPLOYERS REPRESENTATIVE, AS APPROPRIATE, TO BE INFORMED BY THE CONTRACTOR OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES.
 4. THE CONTRACTOR SHALL UNDERTAKE A THOROUGH CHECK FOR THE ACTUAL LOCATION OF ALL SERVICES/UTILITIES, ABOVE AND BELOW GROUND, BEFORE ANY WORK COMMENCES.
 5. ALL LEVELS SHOWN RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD.

Rev	Date	Description	By	Chkd.
P02	15.08.2022	Issued For Planning	PMC	BH
P01	08.07.2022	Draft Planning	EC	BH

Client: Glenveagh Homes

Project: Residential Development, Ennis, Co. Clare.

Title: Proposed Watermain Layout Sheet 1 of 3

Scale @ A1: 1:500 / @ A3 1:1000

Prepared by: EC Checked: BH Date: July 2022

Project Director: Brian Carroll

Drawing Status: Planning

TOBIN
CONSULTING ENGINEERS

Galway Office
Fairgreen House, Fairgreen Road,
Galway,
H91 AXK8,
Ireland.

Tel: +353 (0)91 565 211
www.tobin.ie

Drawing No: 11269-2109 P02

Revision:

WATERMAIN NOTES:

ALL WATERMAIN INFRASTRUCTURE SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE IRISH WATER (IW) CODE OF PRACTICE (COP) FOR WATER IW-CDS-5020-03 AND STANDARD DETAILS IW-CDS-5020-01.

IW SOP AND STANDARD DETAILS CAN BE FOUND AT <https://www.water.ie/connections/developer-services/>

WATERMAIN TO BE CONSTRUCTED IN LINE WITH REQUIREMENTS OF IRISH WATER CONNECTION AGREEMENT.

CONNECTION TO EXISTING 250mm Ø uPVC WATERMAIN TO COMPLY WITH STANDARD DETAIL IW-STD-W-05 AND THE REQUIREMENTS OF IW COP IW-CDS-5020-01.

WATERMAIN MATERIAL SHALL COMPLY WITH SECTIONS 3.3 AND 3.9 OF IRISH WATER COP FOR WATER INFRASTRUCTURE IW-CDS-5020-03.

THREE-WAY SLUICE VALVE ARRANGEMENT TO BE CONSTRUCTED WITH DUCTILE IRON AND IN ACCORDANCE WITH IRISH WATER STANDARD DETAIL DRAWINGS STD-W-04 TO STD-W-10.

INTERCONNECTING PIPEWORK BETWEEN VALVES AND HYDRANTS TO BE DUCTILE IRON FITTINGS AS PER RELEVANT IW STANDARD DETAILS.

WATERMAIN LOOPS TO INCLUDE A MINIMUM OF FOUR HOUSE CONNECTIONS AND A FIRE HYDRANT.

WATERMANS TO BE A MINIMUM 750mm FROM KERBS AND 300mm FROM ANY OTHER SERVICE. TYPICAL SERVICE LAYOUT DISTANCES (HORIZONTALLY AND VERTICALLY) AS PER STANDARD DETAIL STD-W-11.

THRUST BLOCKS TO WATERMANS AS PER IW STANDARD DETAIL DRAWING STD-W-28.

LOCATION OF VALVES, MANHOLES, HYDRANTS ARE SHOWN INDICATIVE ONLY ON THIS DRAWING. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT THE POSITIONS ON THE GROUND ARE IN ACCORDANCE WITH IW-CDS-5020-03.

REFER TO SECTION 3.26 OF IW COP IW-CDS-5020-03 AND IW STANDARD DRAWINGS STD-W-12, STD-W-12A, STD-WW-06, STD-WW-06A & FOR PLANTING RESTRICTIONS NEAR WATER INFRASTRUCTURE. ROOT PROTECTION TO BE Redwood 2000 OR SIMILAR.

ALL WATERMANS TO BE A MINIMUM OF 3.0m FROM SMALL SIZED AMENITY TREES AND 6.0m FROM DECIDUOUS TREES (STD-W-12A).

ALL WATERMANS TO BE KEPT 1.5m TO 2.0m FROM TREES WITH ROOT PROTECTION. TREES TO BE NO GREATER THAN MEDIUM SIZE E.G. ASH, HOLLY, WHITEBEAM OR SIMILAR.

VALVE AND CHAMBER COVERS LOCATED IN GRASSED AREAS TO HAVE 200mm ALL ROUND CONCRETE PLINTH AND 100mm DEEP FORMED WITH C20/25 CONCRETE, 20mm AGGREGATE BEDDED IN CLAUSE 804 MATERIAL. THE PLINTH SHALL BE COMPLETE WITH BULL-NOSED FINISH TO ITS PERIMETER AND BE PROVIDED WITH A MILD STEEL REINFORCEMENT LINK.

SCOUR VALVES TO BE LOCATED AT LOW POINTS, A NON-RETURN VALVE IS REQUIRED AT SCOUR VALVE LOCATIONS TO PREVENT BACKFLOW TO THE WATER SUPPLY NETWORK SYSTEM AND CONNECTION TO BE AGREED WITH THE LOCAL AUTHORITY. REFER TO SECTION 3.16.4 AND 3.21 OF THE IW COP FOR WATER INFRASTRUCTURE.

SCOUR VALVES TO HAVE SCOUR CHAMBERS AS PER IRISH WATER STANDARD DRAWING STD-W-30. IF A CONNECTION TO A SW MANHOLE IS NOT FEASIBLE, A CONNECTION TO A WASHOUT HYDRANT IN ACCORDANCE WITH STANDARD DETAILS STD-W-30A IS REQUIRED.

SCOUR VALVE ON AN OFFLINE PIPES TO BE AGREED BY LOCAL AUTHORITY. REFER TO SECTIONS 3.16.4 AND 3.21 OF IW COP.

VALVES, CHAMBERS AND HYDRANTS TO COMPLY WITH SECTION 3.18 OF THE IW COP FOR WATER INFRASTRUCTURE. WHERE PROVIDED IN GRASSED AREAS SHALL BE SURROUNDED BY CONCRETE PLINTH, 200mm ALL ROUND AND 100mm DEEP FORMED WITH C20/25 CONCRETE, 20mm AGGREGATE SIZE BEDDED IN CLAUSE 804 MATERIAL. THE PLINTH SHALL INCORPORATE MILD STEEL REINFORCEMENT LINKS ALL AROUND AND SHALL HAVE BULL NOSE FINISH AROUND ITS PERIMETER.

FOR WATERMAIN CONNECTIONS TO DWELLINGS, REFER TO M&E DRAWING DETAILING "POP-UP" LOCATIONS. ALL WATERMANS CONNECTIONS TO BE INSTALLED AS PER IRISH WATER COP IW-CDS-5030-03.

WATERMAIN HOUSE CONNECTIONS TO COMPLY WITH SECTIONS 3.7 & 3.15 OF THE IW COP AND STANDARD DETAIL DRAWING STD-W-03 AND STD-W-26.

BOUNDARY BOX AND INDIVIDUAL HOUSE WATERMAIN CONNECTION LOCATIONS SHOWN INDICATIVELY. FOR POP-UP LOCATIONS REFER TO M&E DRAWINGS.

PIPE MATERIALS SHALL BE HDPE OR MDPE IN ACCORDANCE WITH IW COP.

PEDESTRIAN CONNECTION

ALL DOMESTIC WATERMAIN CONNECTIONS SHOWN INDICATIVELY

ALL WORKS TO CARRIED OUT IN ACCORDANCE WITH IRISH WATER CODES OF PRACTICE AND IRISH WATER DETAILS