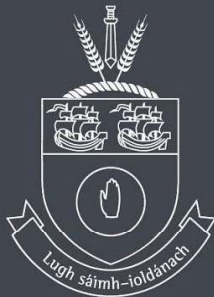


Engineering Report

3 Unit Infill Residential Development at Grange Close,
Muirhevnamore, Dundalk, Co.Louth



Comhairle Contae **Lú**
Louth County Council

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Appendix I Irish Water Connection Application

1. Introduction

The site is located on the lands at Grange Close, Muirhevnamore, Dundalk, Co. Louth. The site is fully serviced with all utilities in close proximity to the site perimeter including services for water & foul water network.

The development will consist of 3 no. terrace two-storey housing units and all associated site works.

This report should be read in conjunction with the following drawings; which are enclosed with this submission:

Drawing No.	Title
Dwg 003	Existing and Proposed Site Water & Drainage Layout Section 179 (a) Submission

Table 1 - Drawing Schedule

2. Water Supply

A pre-connection application (for water supply) has been submitted to Uisce Eireann. Uisce Eireann have confirmed feasible for the above development. See Attached Appendix I for details.

It is proposed to take 3 no. new connections from the existing watermain adjacent to the 3 new dwellings to provide a water supply. All water supply details will be in accordance with and Uisce Eireann's Code of Practice and Standard Details and a connection application submitted once planning permission has been granted

3. Surface Water and SuDS

The surface water network will be designed and arranged in accordance with the requirements of the GDSDS in conjunction with "Recommendations for Site Development Works for Housing Areas" (current edition) published by the (DOEHLG). Cognisance has also been taken of the recommendations contained within the Building Regulations Part H – Drainage and Waste Water Disposal.

It is proposed to collect the surface water run-off generated by the roof areas to the rear of the dwellings in a shared filter drain, offset from the properties and boundaries, prior to discharging to a new shared surface water manhole to the east of the development.

It is proposed to discharge the runoff generated from the roof areas to the front of the units, via inspection chamber catchpits and perforated distributor pipework, to the sub-base of the permeable paving located within the front gardens of each dwelling. The areas of permeable paving will be linked via a perforated pipe within the sub-base, allowing a single discharge location to the new shared manhole to the east.

Due to risk of blockages, it is considered good practice not to restrict surface water runoff to less than 2.0l/s. It is therefore proposed to restrict the runoff, via an orifice plate fitted to the outlet of the shared manhole, to 2.0l/s for the entire development site.

The SuDS mechanisms outlined within this report will be designed for a 1 in 100 year return period storm, as required by GDSDS "Regional Drainage Policies Vol 2 New Development"

A site specific site investigation to determine the infiltration rate and water table level once planning has been granted and if required the surface water design proposals will be revised to reflect the results and this can be a condition of planning.

The SuDS measures included within the proposals for the site are as follows:

Permeable Paving

Permeable paving is proposed to the front gardens of each individual unit. It is proposed to discharge the surface water from the rain water gullies, where possible, directly to the sub-base of the permeable paving via perforated pipework located within the sub-base.

Rainwater will infiltrate directly to the ground or, where the ground is either saturated or impermeable, will drain via the land drainage constructed within the paving section. These permeable surfaces, together with their associated substructures, are an efficient means of managing surface water runoff close to source – intercepting runoff, reducing the volume and frequency of runoff, and providing treatment medium.

Filter Drains

Filter drains, consisting of 150mm perforated pipelines surrounded in clean stone and wrapped in a permeable geotextile membrane, are proposed to the rear of the dwellings. It is proposed to discharge the surface water from the rain water gullies located to the rear, directly to the filter drains. The filter drains will contribute to the removal of contaminants from the initial runoff and will provide the facility to store rainwater within the voids in the stone base layer until that water percolates into the ground, providing the ground is sufficiently permeable. This storage and percolation process will also have the effect of reducing the volume of run-off water being carried by the pipe network.

Water Butts

It is proposed to locate water butts (190 litre capacity) to the rear of all units within the proposed development. Water butts are the most common means of harvesting rainwater for use within gardens, while providing a benefit in terms of surface water management.

Raised rainwater planters

It is proposed to discharge the runoff from the rear rainwater pipes to raised rainwater planters. Rainwater planters are low-cost and allow for the effective use of rainwater while slowing the flow of rainfall to the drainage network.

Interception Volume

The GDSDS dictates that no run-off should directly pass to the receiving watercourse for rainfall depths of at least 5mm (preferably 10mm), therefore interception should be provided at source where practicable. The volume of interception required is based on 5 to 10mm of rainfall depth on 80% of the impermeable areas as defined in the GDSDS. The proposed SuDS measures outlined above will ensure that the first 5 to 10mm of rainfall from the impermeable areas will be intercepted either through evaporation or through infiltration to ground via the sub-base of the proposed permeable paving and filter drains.

4. Foul Water

A pre-connection application (for foul water) was submitted to Uisce Eireann. Uisce Eireann have confirmed feasible subject to upgrades for the above development. See Attached Appendix I for details.

It is proposed to make connection to existing foul to the 3 new dwellings. All foul sewer drainage details will be in accordance with and Uisce Eireann's Code of Practice and Standard Details and a connection application submitted once planning permission has been granted

Appendix I Uisce Eireann Pre-Connection Application Confirmation of Feasibility



CONFIRMATION OF FEASIBILITY

Brendan Mcardle
Council Offices
Fair St. Drogheda
Louth
A92P44

30 May 2023

Uisce Éireann
Bosca OP 448
Oifig Sheachadta na
Cathrach Theas
Cathair Chorcaí

Irish Water
PO Box 448,
South City
Delivery Office
Cork City.

www.water.ie

**Our Ref: CDS23001974 Pre-Connection Enquiry
Grange Close, Muirhevnamore, Dundalk, Louth**

Dear Applicant/Agent,

We have completed the review of the Pre-Connection Enquiry.

Irish Water has reviewed the pre-connection enquiry in relation to a Water & Wastewater connection for a Housing Development of 4 unit(s) at Grange Close, Muirhevnamore, Dundalk, Louth, (the **Development**).

Based upon the details provided we can advise the following regarding connecting to the networks;

- **Water Connection**
 - Feasible without infrastructure upgrade by Irish Water
 - Please note that according to our records there is an existing watermain running through this site (see drawing attached). It will not be permitted to build over any Uisce Éireann infrastructure. The layout of the development must ensure that this pipe is protected and adequate separation distances are provided between Uisce Éireann infrastructure and any structures on site. Alternatively you may enter into a diversion agreement with Uisce Éireann and divert the pipe to accommodate your development. If you wish to proceed with this option please contact Uisce Éireann at Diversions@water.ie and submit detailed design drawings before submitting your planning application. It will be necessary to provide a wayleave over

this pipe to the benefit of Uisce Éireann and ensure that it is accessible for maintenance.

- **Wastewater Connection** - Feasible Subject to upgrades
- In order to accommodate the proposed connection, upgrade works are required to increase the capacity of Coes Road Pumping Station. There is no information available regarding delivery of these upgrade works.

Please note that according to our records there is an existing sewer running through this site (see drawing attached). It will not be permitted to build over any Uisce Éireann infrastructure. The layout of the development must ensure that this pipe is protected and adequate separation distances are provided between Uisce Éireann infrastructure and any structures on site. Alternatively, you may enter into a diversion agreement with Uisce Éireann and divert the pipe to accommodate your development. If you wish to proceed with this option, please contact Uisce Éireann at Diversions@water.ie and submit detailed design drawings before submitting your planning application. It will be necessary to provide a wayleave over this pipe to the benefit of Uisce Éireann and ensure that it is accessible for maintenance.

Separation distances between the Uisce Éireann infrastructure and proposed structures, other services, trees, etc. have to be in accordance with the Uisce Éireann Codes of Practice and Standard Details. Prior to submitting your planning application, you are required to submit these detailed design proposals to Uisce Éireann Diversion Team via email address diversions@water.ie for review and approval.

This letter does not constitute an offer, in whole or in part, to provide a connection to any Irish Water infrastructure. Before the Development can be connected to our network(s) you must submit a connection application and be granted and sign a connection agreement with Irish Water.

As the network capacity changes constantly, this review is only valid at the time of its completion. As soon as planning permission has been granted for the Development, a completed connection application should be submitted. The connection application is available at www.water.ie/connections/get-connected/

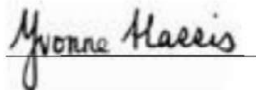
Where can you find more information?

- **Section A** - What is important to know?
- **Section B** - Details of Irish Water's Network(s)

This letter is issued to provide information about the current feasibility of the proposed connection(s) to Irish Water's network(s). This is not a connection offer and capacity in Irish Water's network(s) may only be secured by entering into a connection agreement with Irish Water.

For any further information, visit www.water.ie/connections, email newconnections@water.ie or contact 1800 278 278.

Yours sincerely,



Yvonne Harris
Head of Customer Operations

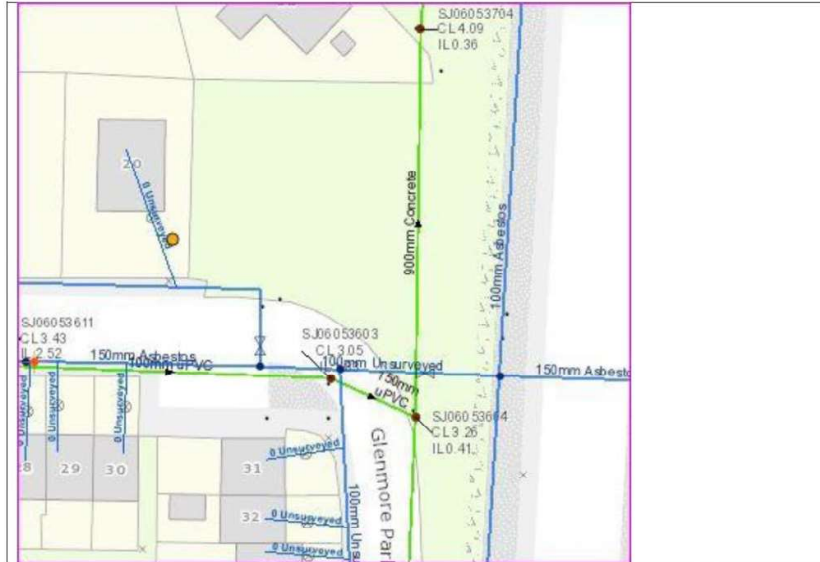
Section A - What is important to know?

What is important to know?	Why is this important?
<p>Do you need a contract to connect?</p>	<ul style="list-style-type: none"> • Yes, a contract is required to connect. This letter does not constitute a contract or an offer in whole or in part to provide a connection to Irish Water's network(s). • Before the Development can connect to Irish Water's network(s), you must submit a connection application <u>and be granted and sign</u> a connection agreement with Irish Water.
<p>When should I submit a Connection Application?</p>	<ul style="list-style-type: none"> • A connection application should only be submitted after planning permission has been granted.
<p>Where can I find information on connection charges?</p>	<ul style="list-style-type: none"> • Irish Water connection charges can be found at: https://www.water.ie/connections/information/charges/
<p>Who will carry out the connection work?</p>	<ul style="list-style-type: none"> • All works to Irish Water's network(s), including works in the public space, must be carried out by Irish Water*. <p>*Where a Developer has been granted specific permission and has been issued a connection offer for Self-Lay in the Public Road/Area, they may complete the relevant connection works</p>
<p>Fire flow Requirements</p>	<ul style="list-style-type: none"> • The Confirmation of Feasibility does not extend to fire flow requirements for the Development. Fire flow requirements are a matter for the Developer to determine. • What to do? - Contact the relevant Local Fire Authority
<p>Plan for disposal of storm water</p>	<ul style="list-style-type: none"> • The Confirmation of Feasibility does not extend to the management or disposal of storm water or ground waters. • What to do? - Contact the relevant Local Authority to discuss the management or disposal of proposed storm water or ground water discharges.
<p>Where do I find details of Irish Water's network(s)?</p>	<ul style="list-style-type: none"> • Requests for maps showing Irish Water's network(s) can be submitted to: datarequests@water.ie

What are the design requirements for the connection(s)?	<ul style="list-style-type: none">• The design and construction of the Water & Wastewater pipes and related infrastructure to be installed in this Development shall comply with <i>the Irish Water Connections and Developer Services Standard Details and Codes of Practice</i>, available at www.water.ie/connections
Trade Effluent Licensing	<ul style="list-style-type: none">• Any person discharging trade effluent** to a sewer, must have a Trade Effluent Licence issued pursuant to section 16 of the Local Government (Water Pollution) Act, 1977 (as amended).• More information and an application form for a Trade Effluent License can be found at the following link: https://www.water.ie/business/trade-effluent/about/ <p>**trade effluent is defined in the Local Government (Water Pollution) Act, 1977 (as amended)</p>

Section B – Details of Irish Water’s Network(s)

The map included below outlines the current Irish Water infrastructure adjacent the Development: To access Irish Water Maps email datarequests@water.ie



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Note: The information provided on the included maps as to the position of Irish Water’s underground network(s) is provided as a general guide only. The information is based on the best available information provided by each Local Authority in Ireland to Irish Water.

Whilst every care has been taken in respect of the information on Irish Water’s network(s), Irish Water assumes no responsibility for and gives no guarantees, undertakings or warranties concerning the accuracy, completeness or up to date nature of the information provided, nor does it accept any liability whatsoever arising from or out of any errors or omissions. This information should not be solely relied upon in the event of excavations or any other works being carried out in the vicinity of Irish Water’s underground network(s). The onus is on the parties carrying out excavations or any other works to ensure the exact location of Irish Water’s underground network(s) is identified prior to excavations or any other works being carried out. Service connection pipes are not generally shown but their presence should be anticipated.

Planning Pack Map



Tailte Éireann

CENTRE COORDINATES:
ITM 706273.805732

ORDER NO.:
50330665_1

MAP SERIES:
1:1,000 1702-06
1:1,000 1702-09
1:1,000 1702-13
1:2,500 1702-B

Site Area: c. 0.075 Ha

Site Outlined in Red

COMPILED AND PUBLISHED BY:
National Mapping Division of
Tailte Éireann,
Phoenix Park,
Dublin 8,
Ireland.
D08F6E4

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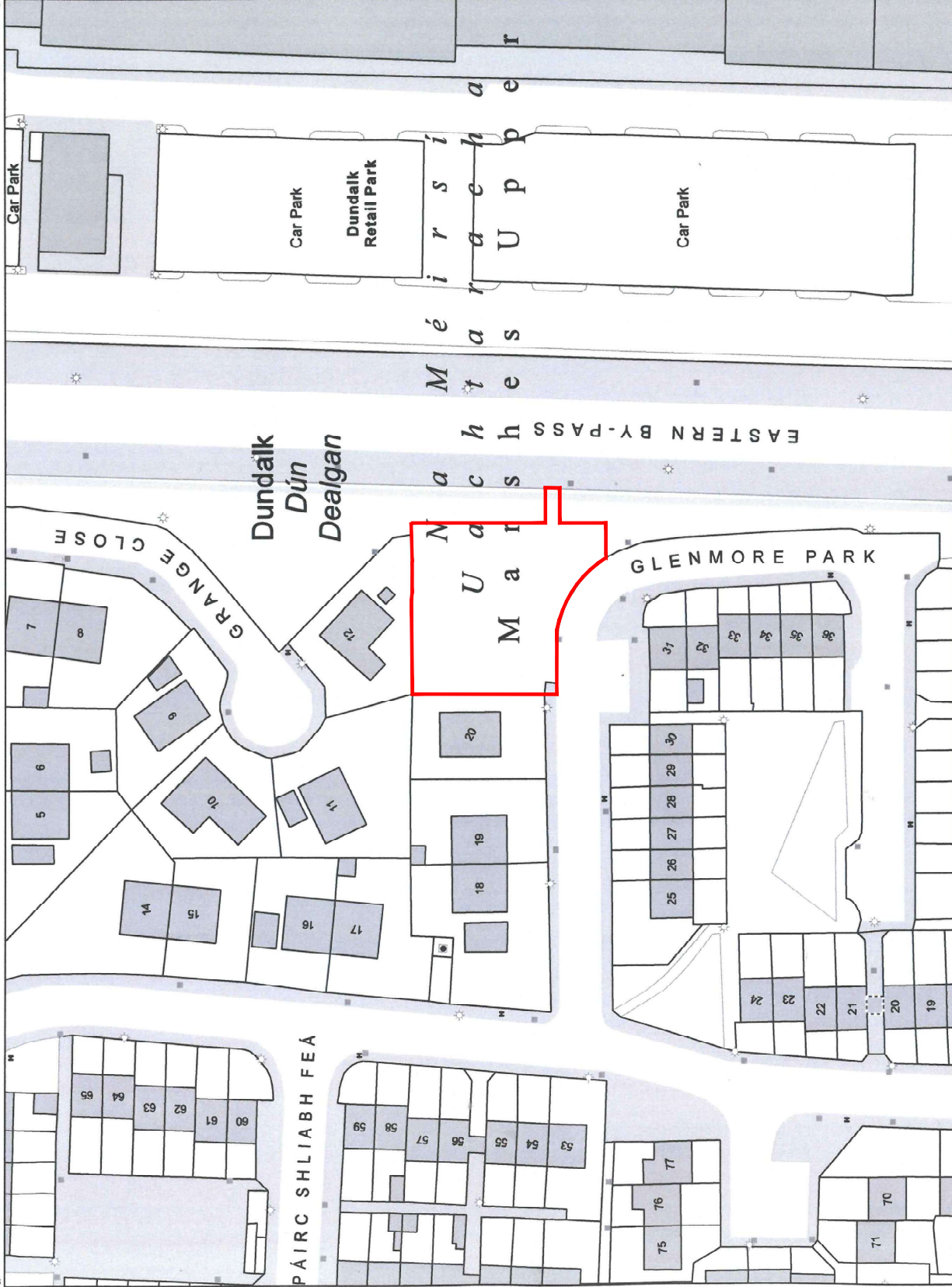
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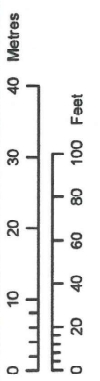
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LEGEND:
To view the legend visit
www.os.ie and search for
"Large Scale Legend"

CAPTURE RESOLUTION:
The map objects are only accurate to the
resolution at which they were captured.
Output scale is not indicative of data capture scale.
Further information is available at:
www.os.ie, search 'Capture Resolution'

OUTPUT SCALE: 1:1,000



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