



**HAYES HIGGINS PARTNERSHIP**  
**CHARTERED ENGINEERS • PROJECT MANAGERS**

**Greenfields,  
Maynooth  
Co. Kildare**

**Part 8 Planning Report**

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**INDEX**

1.0	INTRODUCTION	1
2.0	WASTEWATER DRAINAGE	1
3.0	SURFACE WATER DRAINAGE	3
4.0	WATERMAIN	4
5.0	TRANSPORTATION	5
6.0	SAFETY & HEALTH	6

APPENDIX- A IRISH WATER CONFIRMATION OF FEASIBILITY

## 1.0. Introduction

1.01 The following reports refers engineering items in support of Part 8 application for a proposed housing scheme at Greenfields, Maynooth, Co. Kildare.

## 2.0. Wastewater Drainag

2.01 All new wastewater drainage works are to be designed in accordance with: -

- The Discharge Unit Method.
- British Standards Self-Cleansing Velocities & Design Capacities.
- GDSDS Policies.
- Specific Requirements of the Kildare County Council.
- Specific Requirements of Irish Water.

2.02 All sewers will be designed to achieve a self-cleansing velocity of 0.75 meters per second. All foul drainage lines will be designed using the discharge unit method.

2.03 A full Topographical and GPR Survey was carried out to identify all existing services and utilities on the and surrounding site area.

2.04 Having reviewed the connection levels for the existing services, we propose to connect into an existing 225mm diameter sewer located on road adjacent to the site. We have confirmed same with Irish Water, who have issued a Confirmation of Feasibility (CDS20003534) in line with the proposal outlined above.  
(see appendix A)

### 3.0. Surface Water Drainage

3.01 The design of the surface water drainage system will comply with: -

- Greater Dublin Stormwater Management Policies.
- Sustainable Urban Drainage Systems (SUDS) Report Ciria Series C521.
- Guide for Drainage of Development Sites report SR574 by H.R. Wallingford.
- Specific Requirements of Kildare County Council.
- Velocities & Proportional Velocities in the range of 0.75m/s to 3.0m/s.

3.02 A full Topographical and GPR Survey was carried out to identify all existing services and utilities on the and surrounding site area.

3.03 The storm drainage design philosophy that we have applied to this site in Greenfields, Maynooth was agreed with Mr David H A Hall, BE, MIEI, Senior Executive Engineer, Water Services Planning, Kildare County Council, on a recent part 8 granted Kildare County Council housing project the Old Ambassador Site, Kill, Co. Kildare.

3.04 The surface water system is to be a Natural Base Solution System (NBS).

3.05 A copy of the pre planning submission drawings were issued to Mr David Hall Kildare County Council, with no comments received.

3.06 We will incorporate a Surface Water Management Plan (SWMP) into the design where water slowly flows from where it falls to a storage area or discharge point through a series of features that help to treat, store, re-use and convey water within the site.

3.07 Within the curtilage of each property, we have a four stage at source sustainable solution incorporating natural based solutions.

For the rear of the roof, the rain water shall discharge directly to a water butt which can be harvested during dryer periods by the tenants. From the water butt there will be an overflow pipe to discharge the remainder of the roof drainage into a soakpit located to the rear of the property.

To the front of the property, the rain water shall discharge initially into a NBS raised house planter located at the front of the house on the perimeter pathway; this shall hold the water and be used as a ponding depth. We have also included an overflow pipe at the base of the planter, which then further discharges via a diffuser box into the porous pavement on the site.

3.08 In the common areas on the site we have also included a number of natural based solutions that we have agreed with the project architect the following number of sustainable solutions.

- All of the car parking and set down shall be detailed in porous pavement in order to allow for infiltration at source.
- The access roads and turning areas are detailed with porous and Formpave Aquaflow infiltration systems.
- Any of the trees that are located within the development shall include sustainable tree pits to absorb the water run off directly from the roadways.
- Bio Detention Areas are detailed throughout the site and to further enhance infiltrating at source these are interconnected with swales and land drains / under drains.
- Refer to drawings 21KK001 C-020,C-021, C022 Natural Base Solutions Plans & NBS Details 21KK001 C-050,C051,C052.

#### 4.0. Watermain

4.01 The design of the watermain system will comply with: -

- The fire consultant

- The Requirements of the Fire Officer & Fire Certificate.
- County Council Watermain Specification.
- Specific Requirements of Irish Water.

- 4.02 A full Topographical and GPR Survey was carried out to identify all existing services and utilities on the and surrounding site area.
- 4.03 A Pre-Application to Irish Water has being made in order to determine the availability, location and adequacy of water supply, and any special requirements that Irish Water may have. Refer to Appendix A for the Confirmation of Feasibility Letter from Irish Water.
- 4.04 The project will include a new 150mm diameter HDPE fully looped watermain, PE80 SDR11 12.5 laid in accordance with the specific requirements of Irish Water is required to serve the proposed development.

## 5.0. Transportation

- 5.01. All roads surfaces will be designed for the proposed long term usage. An autotrack design has been carried out on the layout of the roads and set down.
- 5.02. The Proposed Layout is designed in accordance DMURS requirement and Site Development Works for turning heads, refer to Drawing 21KK001 C-030 DMURS Layout Plan.

## 6.0. Safety & Health

- 6.01 The proposed levels will be set in order to comply with the accessibility requirements of Technical Guidance Document M, to ensure the safe mobility of pedestrians and wheelchair users alike.
- 6.02 We have prepared detailed Civil and Structural Designer Risk Assessment's for the Project Supervisor Design Stage (PSDP) in line with the requirements of Safety Health and Welfare at Work (Construction) Regulations 2013.



## APPENDIX A

(Irish Water Confirmation Of Feasibility)





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](http://www.water.ie)

Patrick Henderson  
Kildare County Council  
Aras Chill Dara  
Devoy Park  
Naas  
Co. Kildare  
W91X77F

29 June 2020

Dear Patrick Henderson,

**Re: Connection Reference No CDS20003534 pre-connection enquiry -  
Subject to contract | Contract denied**

**Connection for Housing Development of 65 unit(s) at Old Greenfield, Maynooth, Co. Kildare**

Irish Water has reviewed your pre-connection enquiry in relation to a water and wastewater connection at Old Greenfield, Maynooth, Co. Kildare.

Based upon the details that you have provided with your pre-connection enquiry and on the capacity currently available in the network(s), as assessed by Irish Water, we wish to advise you that, subject to a valid connection agreement being put in place, your proposed connection to the Irish Water network(s) can be facilitated.

**Water:**

New connection to the existing network is feasible without upgrade.

This Confirmation of Feasibility to connect to the Irish Water infrastructure also does not extend to your fire flow requirements. Please note that Irish Water cannot guarantee a flow rate to meet fire flow requirements and in order to guarantee a flow to meet the Fire Authority requirements, you may need to provide adequate fire storage capacity within your development.

In order to determine the potential flow that could be delivered during normal operational conditions, an onsite assessment of the existing network is required.

**Wastewater:**

New connection to the existing network is feasible without upgrade.

There are Irish Water pipes within and in close proximity of the site boundaries (please find attached Irish Water GIS record of the area as a general guide only). The Developer will be required to survey the site to determine the exact location of the pipes. Any trial investigations should be carried out with the agreement and in the presence of the Local Authority Inspector.

You are advised that structures or works over or in close proximity to Irish Water infrastructure that will inhibit access for maintenance or endanger structural or functional integrity of the infrastructure are not allowed. Separation distances between the Irish Water infrastructure and proposed structures, other

services, trees, etc. have to be in accordance with the Irish Water Codes of Practice and Standard Details.

If you wish to divert the asset to facilitate the development, you must have entered into a diversion agreement prior to commencing. Prior to submitting your planning application, you are required to submit these detailed design proposals to Irish Water Diversion Team via email address [diversions@water.ie](mailto:diversions@water.ie) for review and approval.

All infrastructure should be designed and installed in accordance with the Irish Water Codes of Practice and Standard Details. A design proposal for the water and/or wastewater infrastructure should be submitted to Irish Water for assessment. Prior to submitting your planning application, you are required to submit these detailed design proposals to Irish Water for review.

You are advised that this correspondence does not constitute an offer in whole or in part to provide a connection to any Irish Water infrastructure and is provided subject to a connection agreement being signed at a later date.

A connection agreement can be applied for by completing the connection application form available at [www.water.ie/connections](http://www.water.ie/connections). Irish Water's current charges for water and wastewater connections are set out in the Water Charges Plan as approved by the Commission for Regulation of Utilities.

If you have any further questions, please contact Deirdre Ryan from the design team on 022 54620 or email [deiryan@water.ie](mailto:deiryan@water.ie). For further information, visit [www.water.ie/connections](http://www.water.ie/connections).

Yours sincerely,



**Maria O'Dwyer**

**Connections and Developer Services**

