

Title

Natura Impact Statement

Development Description

"Housing development consisting of 39 residential units, ranging for 1 to 3 storeys high and modification of existing stone vehicular bridge over Pausdeen stream to include footpath and associated and ancillary services and site works"

Location

Ardclough Road, Celbridge, Co. Kildare

Applicants

Kildare County Council

Prepared by:

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1 INTRODUCTION

1.1 Background

This Stage 2 Natura Impact Statement (Appropriate Assessment Report) has been prepared by Megan Lee (B.Sc (Hons) M.Sc (Hons)) and Colette Casey (B.Sc (Hons)) in partnership with James O' Donnell, Planning Consultant (BA, MRUP, Dip APM) on behalf of Kildare County Council who are applying for planning permission to Kildare County Council for a "Housing development consisting of 39 residential units, ranging for 1 to 3 storeys high and modification of existing stone vehicular bridge over Pausdeen stream to include footpath and associated and ancillary services and site works." The site for the proposed development lies in Ardclough Road, Celbridge, Co. Kildare. The site lies adjacent to a flood risk area, which is connected via the River Liffey to the Rye Water Valley/Carton SAC (Site code:001398) site which has been designated under the EU Habitats Directive, and so it is necessary that the potential impacts of the proposed works be assessed by the competent authority, in accordance with Article 6 of the Habitats Directive. This report provides the information necessary for the competent authority to complete an Appropriate Assessment of the potential impacts of the proposed works on sites of European importance in the area.

The current project is not directly connected with, or necessary for, the management of any European Site.

The assessment in this report is based on a desk study, and a field survey undertaken in (July,2021). It specifically assesses the potential for the proposed development to impact on European sites. This Stage 2 NIS has been informed by the Stage 1 AA Screening Report, which concluded that Indirect impacts on the Rye Water Valley/Carton SAC Natura 2000 network could not be ruled out at that stage, owing to the potential surface water runoff during the construction phase and operational phases. The Rye Water Valley/Carton SAC, connects to the application site via the flood risk area, via the River Liffey and the Pausdeen stream, due to this hydrological connection the proposed development could result in the potential water quality deterioration of the SAC. It is proposed to install a storm drainage pipe, that will drain into the River Liffey. The surface water runoff during the operational phase, can potentially result it the water quality deterioration of the habitats associated with the Rye Water Valley/Carton SAC. In this case, the need for mitigation has necessitated the preparation of this NIS.

This Report has been prepared in accordance with the European Commission guidance document Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC (EC, 2001) and the Department of the Environment's Guidance on the Appropriate Assessment of Plans and Projects in Ireland (December 2009, amended February 2010).

1.1.1 Statement of Authority

A baseline ecological survey was undertaken on the 9th July 2021 by Megan Lee (B.Sc. (Hons), M.Sc (Hons)). This was supplemented by an additional ecological survey on 31st August 2021 undertaken by Megan Lee (B.Sc. (Hons) and Colette Casey (BSc Hons).

Megan Lee is an experienced and qualified ecologist. She has obtained a Bachelor's degree in Environmental Science (BSc Hons) and a Master's degree in Biodiversity and Land-use Planning (MSc Hons) at the National University of Ireland, Galway. She has been involved in the completion of numerous Appropriate Assessment Screening Reports (AASR's), Natura Impact statements (NIS's), Construction Environmental Management Plans (CEMP's), Ecological Impact Assessments (EcIA's) and Bat Surveys in the Republic of Ireland.

Colette Casey (BSc Hons) is a qualified and experienced ecologist and a member of Chartered Institute of Ecology and Environmental Management (CIEEM). She has been involved in the preparation of several bat surveys and assessments. She has also prepared several Appropriate Assessment Screening Reports, Natura Impacts Statements, Construction Environmental management Plan and EIA Screening reports. She has conducted a number of Bat surveys and Otter surveys in the Republic of Ireland and is a member of Bat Conservation Ireland.

1.2 Background to Appropriate Assessment

1.2.1 Screening for Appropriate Assessment

The screening exercise will be conducted in line with the recommendations and protocol set out in the Guidance from the Commission (EC, 2002). This protocol involves a four-stage process to complete an Appropriate Assessment. At each stage, the findings of certain issues and tests will determine whether the next stage in the process is required.

The four stages in the Appropriate Assessment process are outlined below:

Stage 1: Screening

This step consists of examining the likely potential impacts of a project or plan, alone or in combination with other projects, upon a Natura 2000 site or sites, and considers whether these impacts may be considered significant. If no significant impacts are foreseen, then a 'finding of no significant effects' (FONSE) statement is issued to the appropriate authority, and the process is complete. If the effects are considered significant or their significance is unknown, then the process moves on to Stage 2.

Stage 2: Appropriate Assessment

Where the screening process has identified potential impacts which are considered significant or unknown, this process examines these potential impacts in detail, in relation to the conservation interests of the Natura 2000 site or sites. Mitigation measures may be suggested to reduce the likelihood or severity of these impacts. If the impacts are still considered to be significant or unknown after this stage is complete, then alternative solutions must be considered (Stage 3).

This Natura Impact Statement represents an **Appropriate Assessment** of a development consisting of the "the construction of 39 No. Residential Units comprising Single storey, 2 storey and 3 storey dwellings, improvement works to the Existing Strategic Open Space, wastewater treatment system and associated works and services" at Ardclough Road, Celbridge, Co. Kildare examining potential effects on the Rye Water Valley/Carton SAC.

Stage 3: Assessment of Alternative Solutions

'If the potential impacts are still considered to be significant or unknown after the Appropriate Assessment stage, then alternative ways of implementing the project are considered at this stage. If no alternative solutions are possible, then it is considered whether the project or plan may go ahead regardless, if imperative reasons of overriding public interest (IROPI) are found'.

Stage 4: Imperative Reasons of Overriding Public Interest (IROPI)

If significant negative impacts on the Natura 2000 site are unavoidable, and no alternative solutions may be found, then this stage involves the consideration of whether the project or plan may go ahead despite these effects, for 'imperative reasons of overriding public interest' (IROPI).

2 DESCRIPTION OF THE PROPOSED DEVELOPMENT

2.1 Site Location

The proposed development site is at Ardclough Road, Celbridge, Co. Kildare (Grid Ref: E: 696555.53, N: 731568.32). The development is located in an undeveloped field, currently used for agricultural purposes, there is an unused dwelling house in the application site. The development site is located approximately 5.69km from the Rye Water Valley/Carton SAC and is connected to the application site via an indirect, hydrological pathway. The habitats present in the application site include: Scrub (WS1), Treelines (WL2), Built land and Artificial surfaces (BL3), Hedgerow (WL1) and Improved Agricultural grassland (GA1).

2.2 Characteristics of Proposed Development

2.2.1 General Project Description

The proposed development is a "Housing development consisting of 39 residential units, ranging for 1 to 3 storeys high and modification of existing stone vehicular bridge over Pausdeen stream to include footpath and associated and ancillary services and site works" at Ardclough Road, Celbridge, Co. Kildare. The development site comprises an overall area of 1.4ha. A map showing the site location is provided as **Figure 2.1.**

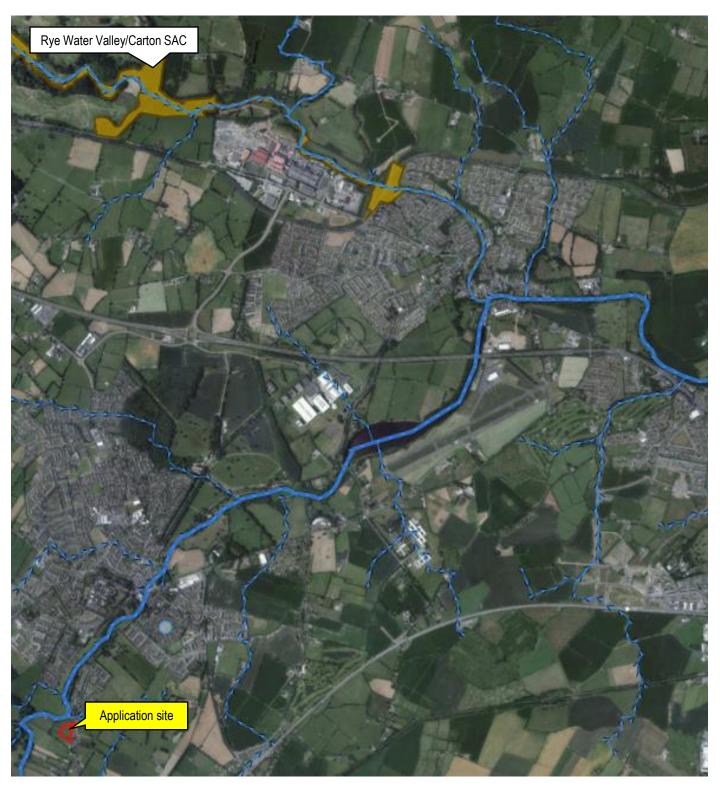


Fig 2.1 – Site location in relation to the Rye Water Valley/Carton SAC Natura 2000 site.

2.3 Characteristics of the Existing Environment

2.3.1 Habitats

A walkover survey of the site was conducted on the 9th July 2021 and 31st August 2021. The NRA publication *Ecological* Surveying Techniques for Protected Flora and Fauna was used as a guide for surveying. Habitats were classified

according to the information in *A Guide to Habitats in Ireland* (Fossit 2000), and correlated with any Annex I habitats if applicable. The ecological survey was undertaken within the optimal time to undertake a habitat and flora survey (Smith et al., 2011).

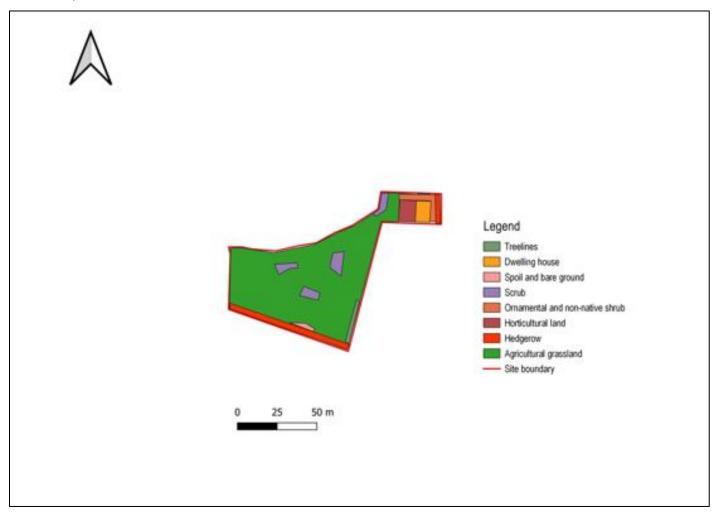


Fig 2.4 Habitat map of proposed site

Upon entering the application site from the northeastern most boundary, the first habitat observed in the application site was a hedgerow habitat (WL1). This habitat was composed of: Brambles (*Rubus fruticosus agg.*), Creeping Buttercup (*Ranunculus repens*) and Common Nettle (*Urtica dioica*) (See Plate 2.1). Another hedgerow habitat present in the application site was observed along the southern site boundary. In addition to Brambles (*R. fruticosus agg.*) and Common Nettle (*U. dioica*) present in this hedgerow, Bracken (*Pteridium spp.*), Elder (*Sambucus nigra*), Hawthorn (*Crataegus monogyna*) and Ivy (*Hedera helix*) were also identified in the southern hedgerow habitat (See Plate 2.7).

The next habitat observed in the northeastern most section of the application site was a built land and artificial surfaces habitat (BL3) in the form of a dwelling house. This habitat had only lvy (*Hedera helix*) present (See Plate 2.1).

Another habitat that was present in the northeastern most section of the application site was an ornamental and non-native shrub (WS3). This habitat was composed of: Dotted loosestrife (*Lysimachia punctata*), Buttonbush (*Cephalanthus occidentalis*) and Mediterranean cypress (*Cupressus sempervirens*) (See Plate 2.2).

The habitat observed behind the dwelling house in the application site was a Horticultural land (BC2), in the form of a small vegetable garden with raised vegetable beds. This habitat was composed of Cabbage (*Brassica oleracea*), Onion (*Allium cepa*) and Runner beans (*Phaseolus coccineus*) (See Plate 2.3).

The dominant habitat present throughout the application site was the improved agricultural grassland (GA1). There was evidence of cowpats, indicating the use of the habitat as a grazing area for cattle. This habitat was composed of a multitude of vegetative species, including: Red clover, White clover, Perennial Ryegrass, Ribwort Plantain (*Plantago lanceolata*), Creeping Buttercup (*R. repens*), Bristly Oxtongue (*Helminthotheca echioides*) (See Plate 2.4).

The scrub habitats were scattered throughout the application site (WS1). There were four scrub habitats present in the application site. These habitat were composed of Brambles (*R. fruticosus agg*), Creeping Buttercup (*R.* repens), Spear Thistle (*Cirsium vulgare*), Common Nettle (*Urtica dioica*), Dandelion (*Taraxacum vulgaria*), Broad-leafed dock (*Rumex obtusifolius*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Gorse (*Ulex europaeus*) (See Plate 2.5).

A small treeline habitat (WL2) was present on the eastern boundary of the application site. This habitat was composed of Brambles (*R. fruticosus agg.*), Pussy willow (*Salix caprea*) and Leyland cypress (*Cupressus x leylandii*) (See Plate 2.6).

A spoil and bare habitat (ED2) was the smallest habitat present in the application site. This habitat was located adjacent to the hedgerow habitat along the southern boundary of the application site. There were no visible vegetation present in this habitat. Field signs indicate that this habitat arose from poaching by the cattle grazed in the application site (See Plate 2.8).



Plate 2.1 – Dwelling house and hedgerow habitats present in application site .



Plate 2.2 – Ornamental and non-native scrub habitat in application site.



Plate 2.3 – Horticultural land habitat present in application site.



Plate 2.4 – Improved agricultural grassland in application site with evidence of cattle grazing.



Plate 2.5 – Scrub habitat present in application site.



Plate 2.6 – Treeline habitat present in application site.



Plate 2.7 – Hedgerow habitat present in the southern section of application site.



Plate 2.8 – Spoil and bare ground habitat in application site with evidence of poaching.

2.3.2 Fauna

A rook, woodpigeon, swift and European robin were the birds identified in the application site. A dragonfly (*Anisoptera spp.*), Bumblebee (*Bombus spp.*) and Meadow Brown Butterfly (*Maniola jurtina*) were the invertebrates identified in the application site.

The findings of a Bat Survey are included as part of the Ecological Impact Assesment which accompanies the application. Bats identified to species level during the various surveys included: Common Pipistrelle (Pipistrellus pipistrellus), Soprano Pipistrelle (Pipistrellus pygmaeus), Leisler's bat (Nyctalus leisleri) and Pipistrelle species (Pipistrellus species).

No species, or any signs of their presence, considered as Qualifying Interests in the Rye Water Valley/Carton SAC conservation objectives were recorded on the proposed site. Furthermore, no Annex II species, or any signs of their presence, were recorded on site.

2.4 EU Nature Conservation Legislation and Natura 2000 Sites.

There are three main types of designation for nature conservation in Ireland: Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Natural Heritage Areas (NHAs). NHAs are designated under the Irish Wildlife Act 1976 (amended 2000). SACs and SPAs are designated under European legislation, the EU Habitats Directive 92/43/EEC (transposed into Irish law in the European Union (Natural Habitats) Regulations, 1997 as amended in 1998 and 2005) and the EU Birds Directive 79/409/EEC, respectively. These European designated sites (SACs and SPAs) are also known as Natura 2000 sites. This means that they are part of the Natura 2000 Network, a network of important ecological sites across the European Union.

Sites are designated on the basis of the presence of certain 'Qualifying Features', i.e. the habitats listed under Annex I and the species listed under Annex II of the EU Habitats Directive.

Once a site is designated as an SAC and publicly advertised it is legally protected and becomes a proposed candidate SAC (pcSAC). A three month period follows during which landowners may lodge an objection to the designation. Details of each proposed SAC are then given to the EU Commission, and thereafter the site is called a "candidate SAC". Once the sites are approved by the commission, they are formally designated by the Minister.

2.4.1 Appropriate Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites

Due to the proximity of the proposed development site to a Natura 2000 site, an Appropriate Assessment may be required under the Habitats Directive 92/43/EEC, Article 6(3) and (4), Assessment of Plans and Projects Significantly Affecting

Natura 2000 Sites. Such assessments are required where it is identified that a proposed plan or project could have significant impact on a Natura 2000 site. Articles 6(3) and (4) of the Directive, state the following;

6.3 'Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to Appropriate Assessment of its implications for the site in view of the site's conservation objectives... the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned....'

6.4 'If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest... the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected...'

2.5 European Sites in the likely Zone of Impact of the Proposed Development

A desktop study was conducted examining online and GIS spatial datasets for Surface Water Catchments and European designated sites on the 17th August 2021. Information from the site was gleamed from the following source:

- The National Park and Wildlife website www.npws.ie was consulted for details of protected sites and rare and protected species in the area.
- The Geological Survey of Ireland (GSI) was consulted for information on the soils, geology and hydrology of the site.
- The website catchements ie was used to review information on groundwater
- Relevant Development Plans and Local Area Plans in the neighbouring areas.
- The planning section of the KIldare County Council's website was consulted for information on local planning applications.
- Various other publications and websites were consulted for supporting information (see References section)

European sites within the zone of likely effects of the project were identified along with potential water connectivity. The surrounding Natura 2000 sites barring the Rye Water Valley/Carton SAC were screened out (See Appropriate Assessment Screening Report submitted as part of this application)

Table 2.1 lists all European Sites within the zone of likely effect. The site synopsis and conservation objectives of these sites, as per the NPWS website (www.npws.ie), were considered at the time of preparation of this report. Details of these sites, including their distance from the proposed development, are provided in Table 2.1.

Table 2.1 Determination of European Sites within the Likely Zone of Impact

European Site	 Qualify Interests/Special Conservation Interests for which the European Site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 20th August 2021) 	Conservation Objectives	Zone of Likely Impact Determination				
Special Areas of Conservation (SACs)							
Rye Water Valley/Carton SAC	 Petrifying springs with tufa formation (Cratoneurion) [7220] 	Detailed conservation objectives for this site (Version 8.0, March 2021)	The proposed works are located approximately 5.69km from this European Site at its closest point.				
Site code:001398	, , , , ,	assessment and are available at the Ry prelimi					
5.69km	 Narrow-mouthed Whorl Snail (Vertigo angustior) [1014] 						
	 Desmoulin's Whorl Snail (Vertigo moulinsiana) [1016] 						

3 ASSESSMENT OF LIKELY EFFECTS ON EUROPEAN SITES

Any likely direct or indirect effects of the proposed development, both alone and in combination with other plans and projects, on European Sites by virtue of the following criteria: size and scale, land-take, distance from the European Site or key features of the site, resource requirements, emissions, excavation requirements, transportation requirements and duration of construction and operation have been considered in this assessment.

3.1 Assessment with regard to each of the European Sites located within the Likely Zone of Impact

Table 3.1 provides the assessment with regard to each of the European Sites located within the Likely Zone of Impact. The Rye Water Valley/Carton SAC is within the Likely Zone of Impact.

Table 3.1 Assessment of pathways for potential adverse effects on the integrity of European Sites within the Zone of Likely Impact of the Proposed Works

European Site	Pathways for Direct Effects	Pathways for Indirect Effects	Potential for adverse effects on the European Site
Rye Water Valley/Carton SAC Site code: 001398 5.69km from the application site	There is no potential for direct effect on the Qualifying Interests of the European Site. The proposed works are entirely outside the boundary of the European Site.	As the application site is located adjacent to a flood risk area, which via the River Liffey is connected to the Rye Water Valley/Carton SAC, the potential for silt-laden surface water to exit the site and enter the nearby SAC was identified as a route for potential indirect effects. The removal of the existing stone parapet/ construction of the pedestrian bridge over the Pausdeen stream is likely to cause a deterioration in water quality during the construction phase. Best practice and mitigation measures are outlined in section 3.3 of this report, and in particular it should be noted that a silt fence will be erected and maintained throughout the construction phase. This will remove silt from the surface water and in doing so will protect the integrity of the SAC.	With the proposed mitigation in place, there is no potential for impact on this European site. No potential for adverse effect.

3.2 Likely Cumulative Impact of the Proposed Development on European Sites, in-combination with other plans and projects

The proposed development was considered in combination with other plans and projects in the area that could result in cumulative effects on European Sites.

The online planning system for Kildare County Council, was consulted on the 21st August 2021. Nine other projects were granted within a 300m radius of the proposed site within the last 5 years and comprised of;

- PI. Ref no. 161271 "Extension of Duration of Planning Ref. 11/213 for a two storey dormer style dwelling house and detached garage with all associated site works including a new vehicular entrance."
- PI. Ref. no. 161338 "Alterations to the existing kitchen roof, a new sliding door to existing rear elevation and
 internal alterations to the existing house to provide for the construction of a new two storey side extension,
 including a new kitchen, utility, office, main bedroom, dressing room and ensuite, of 88.2sqm and all associated
 site works."
- PI. Ref. no. 18877 "A single storey extension to the side of existing dwelling comprising of family room, WC and storage room."
- PI. Ref. no. 21144 "Demolition of existing sub-standard lean-to extension to rear of house and construction of new single storey sunroom and storeroom extension with internal alterations to house and for all ancillary site and drainage works. Also, for installation of new external insulation to existing house with selected smooth plaster finish."
- PI. Ref. no. 21621 "Extension of Duration of planning Ref. No. 16/1338 alterations to the existing kitchen roof, a new sliding door to existing rear elevation and internal alterations to the existing house to provide for the construction of a new two storey side extension, including a new kitchen, utility, office, main bedroom, dressing room and ensuite, of 88.2sgm and all associated site works."
- PI. Ref. no. 18676 "Sought for side and rear single storey extensions to an existing two storey semi detached dwelling, associated alterations to side and rear elevations and all associated site works."
- PI. Ref. no. 21277 "An attic conversion to a non-habitable storage space with roof windows to front of existing roof and ancillary works."
- PI. Ref. no. 16340 "Conversion of attic into habitable room, sky-lights to front for light and fire escape and all
 ancillary site works."
- Pl. Ref. no. 181089 "1 No. two storey dwelling house (190sqm approximately) to include new vehicle and pedestrian access, service and drainage connections, car parking, garden storage, surface treatments, new

boundary fence, landscaping and other associated site works including demolition of existing 28sqm shed, on site comprising 0.0510 hectares approximately."

The works as proposed have been assessed in **Table 3.1** and it has been concluded that on adhering to mitigation measures stated below, there is no potential to result in adverse effects on any European site. Potential pathways for small scale effects on the surrounding environment have also been assessed. Due to the nature, scale and location of the proposed works as described in **Section 2.2** and assessed in **Table 3.1** it has been concluded that there will be no cumulative impact on any European sites as a result of the proposed works.

No potentially significant cumulative and/or in-combination pollution disturbance, displacement or habitat loss effects on any QI of any European Site have been identified with regard to the Proposed Development.

3.3 Mitigation and Best Practice Measures

The following best practice measures will be adhered to during the construction of the proposed development. These are an integral part of the design of the project and are considered standard procedure. These guidelines should be read in conjunction with the "Preliminary Construction Environmental and Demolition Waste Management Plan" prepared by Planning Consultancy Services and submitted as part of this planning application.

3.3.1 Site Set Up

- A solid fence will be erected around the perimeter of the proposed development site prior to the commencement
 of construction works. This will create a solid boundary between the site and the surrounding area.
- All works will be located within the confines of these fences. No works will take place outside the fences to prevent damage to areas outside the necessary development footprint.
- A silt trap will be erected along the northern and western boundaries of site before the commencement of works
 on site. The silt trap will remain in place for the entirety of the construction phase. See Fig 2.2.
- Sedimats will be placed to the west of the proposed pedestrian bridge over Pausdeen stream, these sedimats are to remain in place for the entirety of the construction phase.
- Construction of the proposed pedestrian bridge is to take place outside of the salmon and trout season, October to the end of February.

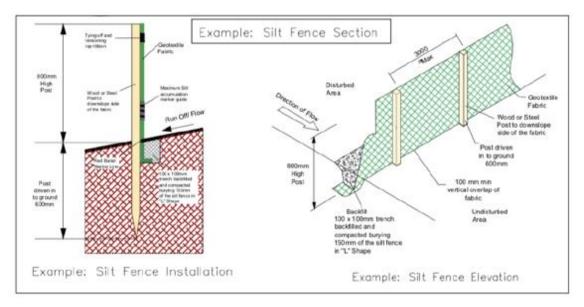


Fig 2.2. An example of the silt trap to be erected before the commencement of works on site.



Fig 2.3. An example of the sedimat to be placed near waterways before the commencement of works on site.

3.3.2 Earthworks

- Works such as soil excavations, soil depositing or soil stripping shall not take place immediately following periods
 of heavy or prolonged rainfall.
- All stockpile areas of sand, gravels and soils should be stored on level terrain and shall be covered during heavy rainfall periods in order to prohibit the mobilisation of sediments.
- Removal of vegetation from Pausdeen stream should be only carried out when necessary. Removed vegetation should be stockpiled for replacement post construction. These stockpiles are to be placed away from the stream and covered to prevent run off.
- If gravel or handstand materials are being brought onsite ensure that the source is free of invasive species such as Japanese Knotweed, *Gunnera* and *Rhododendron*.

3.3.3 Air Quality Dust and Emissions

- Dust and mal odours will be kept to a minimum.
- The site shall be dampened down as necessary to minimise windblown dust when necessary or during periods of dry weather.
- Dust suppression equipment must be used when point source emissions are likely
- No Burning of materials will be allowed onsite.
- Care will be taken from the commencement of the project that the deposition of debris on local roads is kept to a minimum.

3.3.4 Refuelling, fuel and hazardous materials storage

- All machinery maintenance and re-fuelling shall be carried out off-site. Spill kits for contaminants such as fuels
 oils and lubricants must be used.
- All petroleum products to be bunded during the construction stage of the development.

3.3.5 Environmental Approvals and Licenses

 Appropriate waste permits will be provided to and retained by the supervising engineer for the completion of demolition / waste disposal file.

3.3.6 Groundwater Contamination

- All direct discharges of pollutants into groundwater is prohibited.
- Drip trays must be utilized for all machinery on site and monitoring undertaking to ensure that there is no risk of overflowing and that they are adequately sized to deal with the specific element of machinery that they are protecting against.

3.3.7 Drainage and Water Quality

- The works shall be planned and executed in accordance with Environmental Protection Agency Guidelines.
- Construction of the Storm drain will adhere to the Inland Fisheries Guidelines 2016, a petrol interceptor will be installed to minimize water quality deterioration.
- Wash water from on-site mixers or lorries shall be disposed of appropriately off site
- The contractor should ensure that operations do not give rise to the discharge of large quantities of dirty water into the watercourses. Measures must be in place to ensure that silt will not be allowed to enter the water system.
- To prevent run off from stripped ground, banks are to be placed on the downstream side of stock piles.

- Water from excavations shall be pumped to land and allowed to settle, or passed through silt traps, before returning into the watercourse.
- Good site management will ensure that surface water and groundwater will be protected from accidental contamination.
- Washing out of concrete trucks should not be permitted within the site and should be conducted in hard standing areas
- Works with concrete shall be done during dry conditions for a period sufficient to cure the concrete (at least 48 hours).
- Concrete pours shall occur in contained areas
- During construction of the pedestrian bridge concrete structures should be pre-casted, this is to minimize concrete pours on site.
- All shuttering must be inspected for leaks prior to pouring during the construction of the proposed pedestrian bridge.
- Portable toilets and sanitary facilities will be provided for site use.
- Plant will be re-fuelled away from watercourses.
- All site operatives will have immediate access to spill kits when machinery is being used.

4 CONCLUDING STATEMENT

4.1 Characteristics of the Site and Development

This report details the results of an Appropriate Assessment carried out for the proposed development of a "Housing development consisting of 39 residential units, ranging for 1 to 3 storeys high and modification of existing stone vehicular bridge over Pausdeen stream to include footpath and associated and ancillary services and site works" in Ardclough Road, Celbridge, Co. Kildare.

The site for the proposed development is located adjacent to a flood risk area, which via the River Liffey is connected to the Rye Water Valley/Carton SAC. It is not expected that the proposed development, will give rise to any direct impacts on the Natura 2000 sites in question.

- a) Is the project directly connected with or necessary to the management of the site?
 The project is not directly connected with or necessary to the management of any European Site.
- b) Cumulative Impact Assessment Are there any other projects or plans that together with the project being assessed could affect the site?

A search in relation to plans and projects that may have the potential to result in cumulative impacts on European sites was carried out as part of the Appropriate Assessment Process. As detailed above in **Section 3.2**, the proposed development will have no individual or in-combination impacts on any European site in any regard.

4.2 Assessment of Significance of Effects

Describe how the project is likely to affect the Natura 2000 sites

The project as planned will not adversely affect the integrity of any European site. During the assessment, pathways for potential significant effects on Rye Water Valley/Carton SAC were identified in the form of surface water contamination during the construction phase and operational phase and proposed removal of the existing stone parapet/ construction of the pedestrian bridge over the Pausdeen stream. The proposed removal of the existing stone parapet/ construction of the pedestrian bridge over the Pausdeen stream in conjunction with the surface water runoff could result in the potential water quality deterioration of the Rye Water Valley/Carton SAC as the application site is too adjacent a flood risk area, which via the River Liffey is connected to the Rye Water Valley/Carton SAC. This report has provided an assessment of all potential pathways for direct impacts or indirect impacts on European Sites. Any identified potential pathways for impact are robustly blocked, avoiding the potential for any adverse impacts via any of the pathways identified.

b) Explain why these effects are not considered significant

- There will be no negative direct impacts or reduction in Annex I habitat area or Annex II species within any European Site.
- There will be no reduction in key habitats supporting populations of Annex II species and no reduction in the populations of any Annex II species.
- Any potential pathways for impact have been blocked through good design and mitigation measures, and a suitability assessment of the lands for development of this type.
- The works themselves will involve little disturbance or disruption to the ecological processes in the area during construction, operation or decommissioning.

4.3 Data Collected to Carry Out Assessment

In preparation of the report, the following sources were used to gather information:

- Review of NPWS Site Synopses and Conservation Objectives for European sites.
- Site Visits on 9th July 2021 & 31st of August 2021
- Desk study of relevant ecological information.

4.4 Concluding Statement

With the implementation of the best practice and mitigation measures described in section 3.3 of this report, it is not expected that the proposed development will give rise to any direct, indirect or secondary impacts on the Rye Water Valley/Carton SAC.

- In particular, it should be noted that the application site adjoins a flood risk area and a silt trap will be constructed along
 the western and northern site boundaries of the housing site before the commencement of works on site and will remain
 in place for the entirety of the construction phase.
- The proposed removal of the existing stone parapet/ construction of the pedestrian bridge over the Pausdeen stream
 will require sedimats to be placed to the west of the bridge to prevent water deterioration, these will remain in place
 throughout the construction phase
- For the construction of the pedestrian bridge where possible pre casted concrete structures will be used. Shuttering for concrete pours will be inspected prior to use to look for leaks to prevent deterioration of water quality.
- Construction of the proposed storm sewer should be carried out in line with guidelines from Inland Fisheries Ireland 2016.

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6 APPENDIX A – SITE LAYOUT PLAN

