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O'CONNOR · SUTTON · CRONIN  
MULTIDISCIPLINARY CONSULTING ENGINEERS



**W370: DUNLAVIN FIRE STATION**

# **AA SCREENING REPORT**

**For  
Wicklow County Council**

**16 June 2023**

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# 1 INTRODUCTION

## 1.1 PROJECT CONTRACTUAL BASIS & PARTIES INVOLVED

This report has been prepared by O'Connor Sutton Cronin & Associates Ltd. (OCSC) at the request of their Client, Wicklow County Council and as part of a Part 8 application. The proposal is for the construction of a new two-storey fire station building including on-site parking for 16 vehicles, a hard-landscaped training yard to the rear of the new building, the construction of a new four storey training tower at the northeast corner of the site to the rear of the main building and hard and soft landscaping and all associated boundary treatments. The development will include all associated drainage and site development works. The regulatory authority for the site is Wicklow County Council.

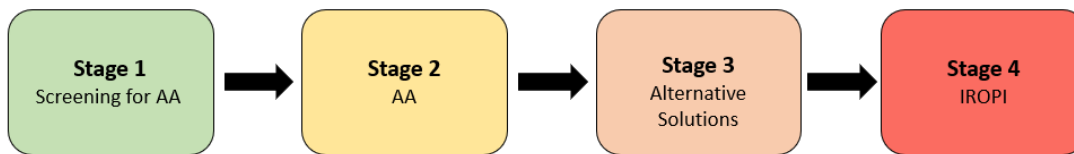
## 1.2 LEGISLATIVE CONTEXT

The Habitats Directive provides legal protection for habitats and species of European importance. The overall aim of the Habitats Directive is to maintain or restore the "favourable conservation status" of habitats and species of European Community Interest. These habitats and species are listed in the Habitats and Birds Directives (Habitats Directive as above and Directive 2009/147/EC on the conservation of wild birds) with Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) designated to afford protection to the most vulnerable of them. These two designations are collectively known as European Sites. Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect such sites. Article 6(3) establishes the requirement for AA. These requirements are implemented in the Republic of Ireland by the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) and the Planning Development Act 2000 (as amended).

This AA screening is based on the best scientific knowledge and has utilised ecological and hydrological expertise. In addition, a detailed online review of published scientific literature and 'grey' literature was conducted. This included a detailed review of the National Parks and Wildlife Service (NPWS) website, including mapping and available reports for relevant sites and, in particular, sensitive qualifying interests/special conservation interests described and their conservation objectives. The EPA EnVision map viewer (EPA 2023) and available reports were also reviewed, as was the NPWS (2019) publication "The Status of Protected EU Habitats and Species in Ireland".

The ecological desktop study completed for the AA screening of the proposed development is comprised of the following elements:

- Identification of European sites with 15 km of the proposed project boundary with identification of potential pathway links for specific sites (if relevant) greater than 15 km from the proposed project boundary;
- Review of the NPWS site synopses and conservation objectives for European sites within 15 km and for which potential pathways from the proposed site have been identified; and
- Examination of available information on protected species.



IROPI: imperative reasons of overriding public interest (IROPI)

### Stage One: Screening

The process identifies the likely impacts upon a European site of a project, either alone or in combination with other projects or plans and considers whether these impacts are likely to be significant.

### Stage Two: Appropriate Assessment

The consideration of the impact on the integrity of the European site of the project, either alone or in combination with other projects or plans, concerning the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment is made of the potential mitigation of those impacts. If adequate mitigation is proposed to ensure no significant adverse impacts on European sites, then the process may end at this stage. However, if the likelihood of significant impacts remains, then the process must proceed to Stage Three.

### Stage Three: Assessment of Alternative Solutions

The process examines alternative ways of achieving the objectives of the project or plan that avoids adverse impacts on the integrity of the European site.

### Stage Four: Assessment where no alternative solutions exist and where adverse impacts remain

An assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project should proceed.

The Habitats Directive promotes a hierarchy of avoidance, mitigation, and compensatory measures. This approach aims to avoid any impacts on European sites by identifying possible impacts early in the plan or project-making process and avoiding such impacts. Secondly, the approach involves the application of mitigation measures, if necessary, during the AA process to the point where no adverse impacts on the site(s) remain. If potential impacts on European sites remain and no further practicable mitigation is possible, the approach requires the consideration of alternative solutions. If no alternative solutions are identified and the

plan or project is required for imperative reasons of overriding public interest, then compensation measures are required for any remaining adverse effects.

Ecological impact assessment of potential effects on European sites is conducted following a standard source-pathway-receptor model where all three elements of this mechanism must be in place for an effect to be established. The absence or removal of one of the elements of the mechanism is sufficient to conclude that a potential effect is of any relevance or significance. The elements of this model consist of the following:

- Source(s) – e.g. pollutant run-off from proposed works;
- Pathway(s) – e.g. groundwater connecting to nearby qualifying wetland habitats; and
- Receptor(s) – qualifying aquatic habitats and species of European sites.
- 

In relation to this report, receptors are the ecological features that are known to be utilised by the qualifying interests or special conservation interests of a European site. A source is any identifiable element of the proposed development that is known to interact with ecological processes. The pathways are any connections or links between the source and the receptor. This report provides information on whether direct, indirect, and/or cumulative adverse effects could arise from the proposed development.

### 1.3 METHODOLOGY AND APPROACH

The AA Screening has been prepared taking into account the aforementioned and following legislation and guidance:

- Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government, 2009; 11 February 2010 revision.
- Commission Notice: Managing Natura 2000 sites – The provisions of Article 6 of the Habitats Directive 92/43/EEC. European Commission, 2018.
- Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. European Commission Environment DG, 2002.
- Managing Natura 2000 sites: the Provisions of Article 6 of the Habitats Directive 92/43/EEC. European Commission, 2000.
- Appropriate Assessment Screening for Development Management. Office of the Planning Regulator, March 2021.

The above documents have been used to carry out a desktop AA Screening based on the best available guidance and operating within the applicable legislation.

## 1.4 SCOPE OF WORKS

To meet the project objectives, the following scope of works were completed:

- Present a discussion of the proposed development and its potential effects on its receiving environment;
- Present a discussion of the current site status and key environmental influences around the site;
- Undertake and present a review of European sites in the region of the proposed development;
- Conduct and present a discussion on the screening of the identified European sites in relation to the potential effects arising from the project; and
- Provide a conclusion as to whether or not the proposed development is likely to, either alone or in combination with other plans or projects, have a significant effect on any European site.
- 

## 1.5 LIMITATIONS

This Appropriate Assessment Screening Report has been prepared for the sole use of Wicklow County Council (“the Client”). No other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by OCSC.

This assessment is based on a review of available historical information, environmental records, consultations, relevant guidance information, and reports from third parties. All information received has been taken in good faith as being true and representative.

This report has been prepared in line with the best industry standards. The methodology adopted and the sources of information used by OCSC in providing its services are outlined in this Report. The assessment undertaken by OCSC and described was undertaken in May 2023 and is based on the information available during that period. The scope of this report and the services are accordingly factually limited by these circumstances.

OCSC disclaim any undertaking or obligation to advise any person of any change in any matter affecting the Report which may come or be brought to OCSC’s attention after the date of the Report. The conclusions presented in this report represent OCSC’s best professional judgement based on a review of the relevant information available at the time of writing. The opinions and conclusions presented are valid only to the extent that the information provided was accurate and complete.

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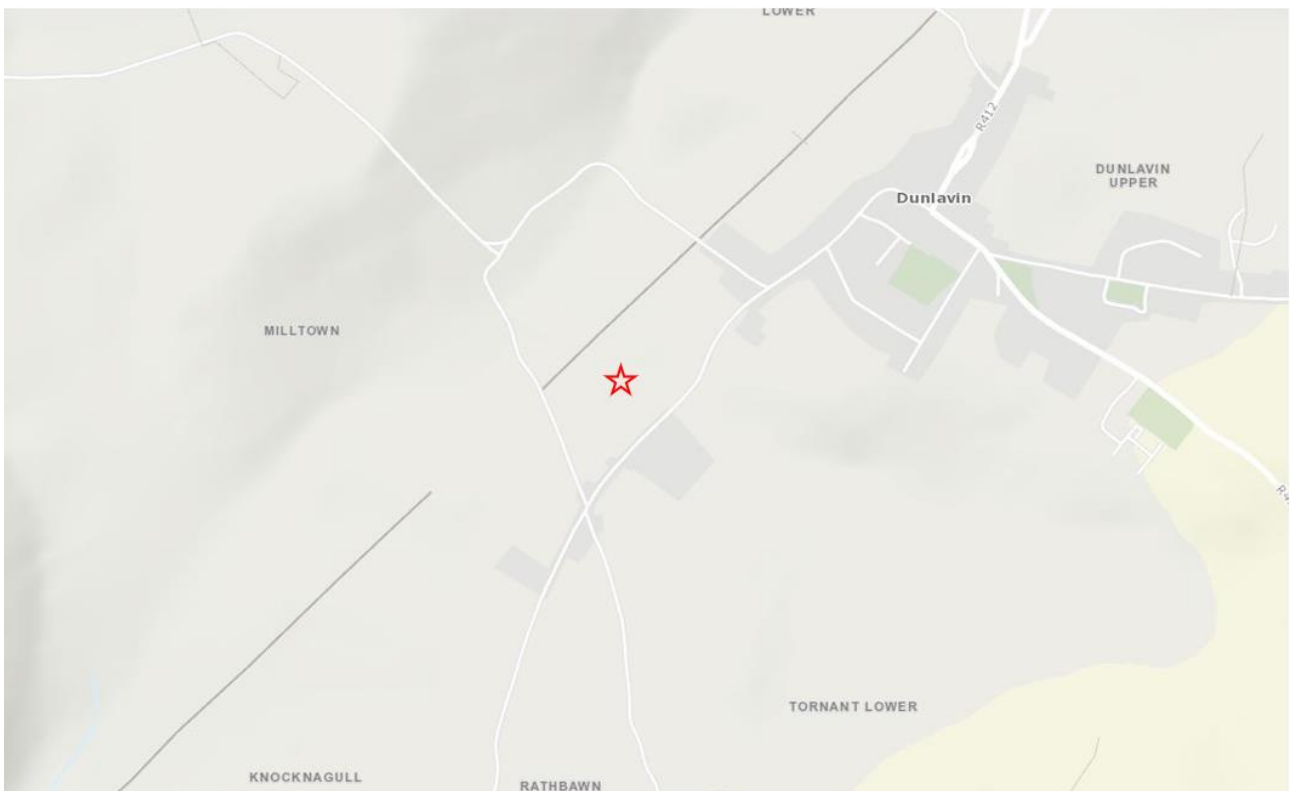
## 2 DESCRIPTION OF THE EXISTING ENVIRONMENT

### 2.1 PROJECT DESCRIPTION

This Appropriate Assessment (AA) Screening report has been prepared for the proposed fire station at Dunlavin, County Wicklow. Works include the construction of a new fire station, a fire training tower, a concrete water tank for fire training, and associated lighting, drainage, and entrance infrastructure.

### 2.2 SITE SETTING AND LOCATION

The site is located on the southwest edge of the town of Dunlavin, County Wicklow and 776m southwest of the Market Square. The site currently consists of agricultural land within an area of mixed residential and agricultural land use. The site location and aerial photograph of the study area are shown in Figure 2.1 and Figure 2.2, respectively.



*Figure 2.1: Site Location; site indicated by the red star. (GSI, 2023).*



*Figure 2.2: Aerial Photo of Study Area; site location indicated by the red star. (Google Maps 2023).*

## 2.3 SURROUNDING LAND USE

The area immediately surrounding the site is in residential, agricultural, and municipal infrastructural use as shown in Figure 2.2. The site consists of a greenfield site in agricultural use which is bordered to the east by agricultural land, to the north by the Dunlavin wastewater treatment plant, and to the west and south by an access road to the treatment plant and agricultural land. Further to the northeast and east are Church Road and residential areas of Dunlavin. Further to the south are Church Road and Dublin Products. In other directions distal to the site, land use consists of agricultural land with scattered residences. See Table 2.1 for adjacent land uses.

*Table 2.1: Adjacent Land Uses*

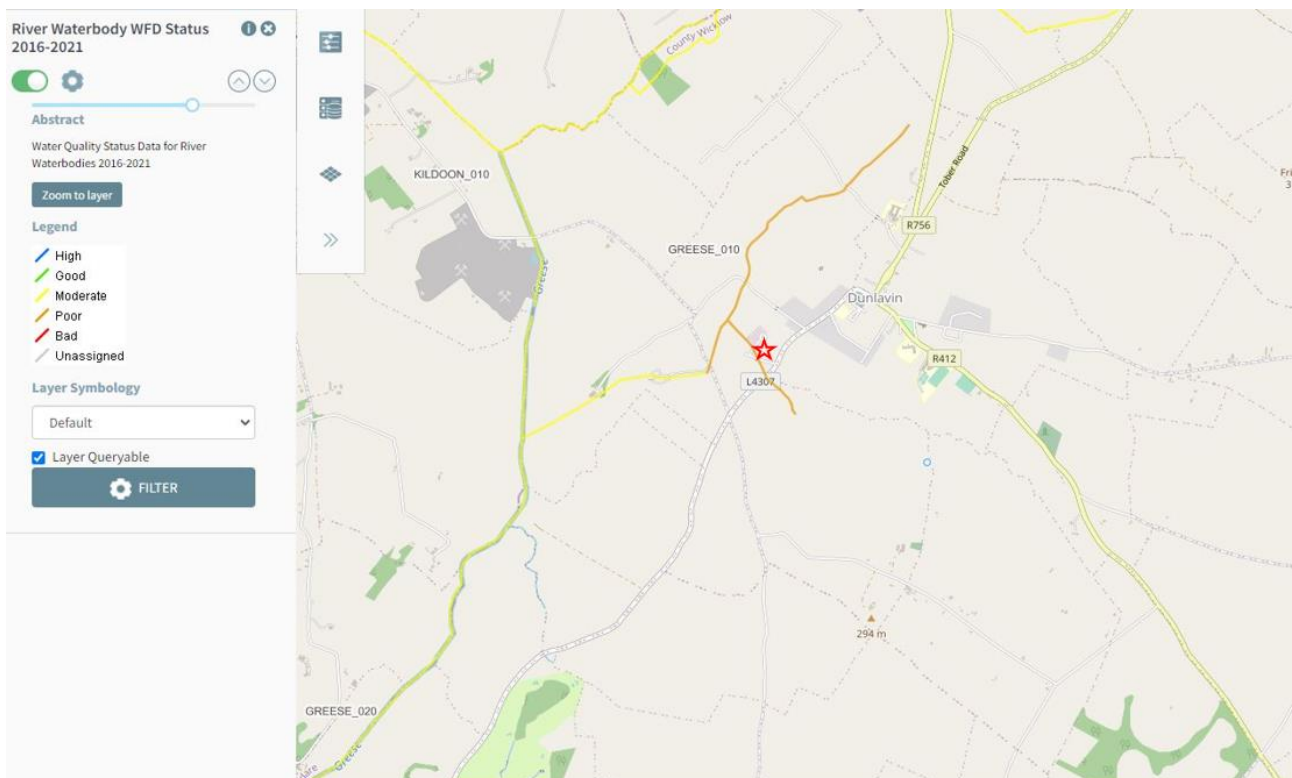
Boundary	Land Use
North	Dunlavin Wastewater treatment plant
South	Access road to the wastewater treatment plant and agricultural land
East	Agricultural land
West	Access road to the wastewater treatment plant and agricultural land

## 2.4 HYDROLOGY

There are no surface water features within the site boundary. The nearest surface waterbody is a small stream (IE\_SE\_14G040070) which is a tributary of the River Greese (IE\_SE\_14G040070). This stream is located 45m west of the proposed development at the nearest point. The stream flows from this point into the Greese, approximately 304 metres downstream. The River Greese joins the River Barrow north of Carlow town. See **Error! Reference source not found.** and **Error! Reference source not found.** for waterbody locations.

Based on the most recent water quality information (2016-2021), the stream segments nearest the site have an overall Water Framework Directive (WFD) status of Poor with downstream sections of the Greese\_010 and the Greese\_020 having a Moderate status as shown in Figure 2.3.

The EPA spatial dataset indicates that the risk of the River Greese downstream of the site and its tributaries near the site are at risk of failing to meet their WFD objectives by 2027 (EPA 2023) as shown in Figure 2.4. WFD information for the tributary streams nearest the site are summarised in Table 2.2.



*Figure 2.3: River Waterbody WFD Status; approximate site location indicated by the red star (EPA Maps, 2023)*

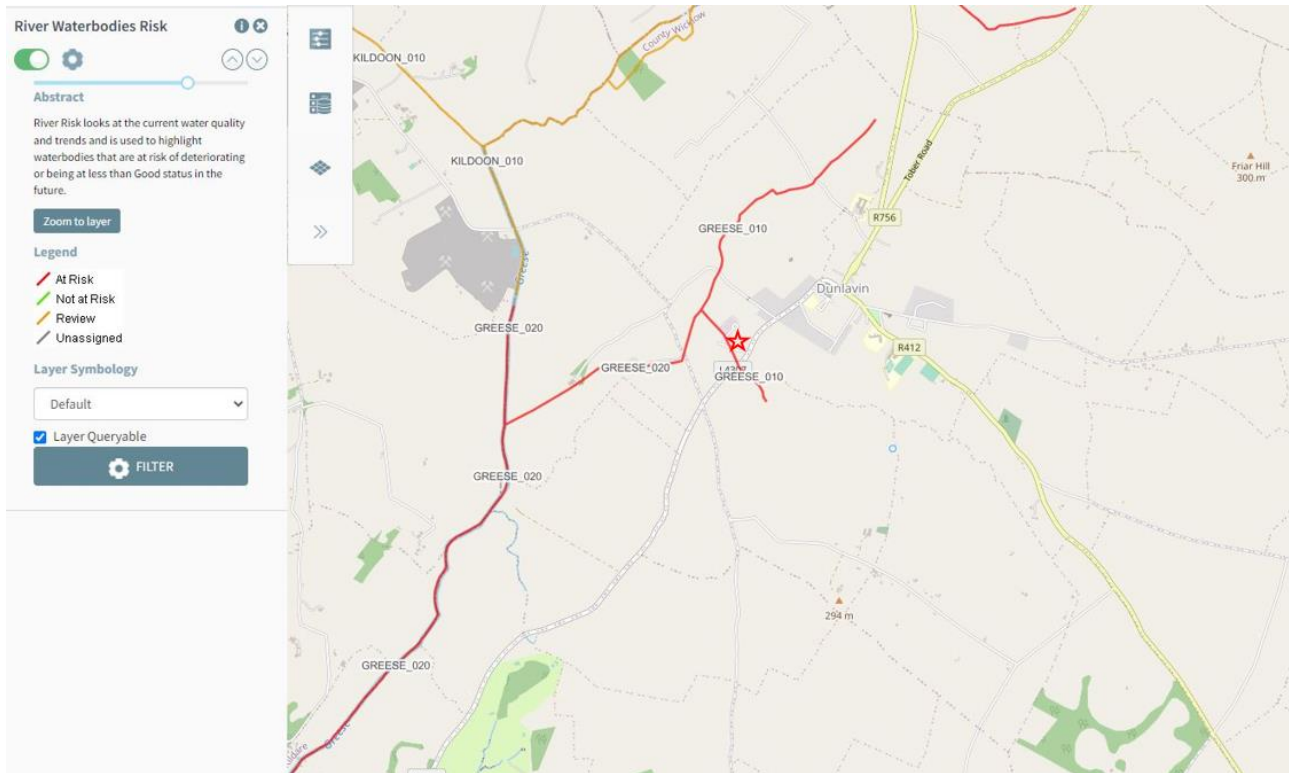


Figure 2.4: River Waterbodies Risk; approximate site location indicated by the red star. (EPA Maps, 2023)

Table 2.2: WFD Summary Information

WFD Summary Information	
Name	River Greese
Waterbody Code	IE_SE_14G040070
Waterbody Name	Greese_010
Waterbody Type	River
Iteration	SW 2016-2021
Status	Poor
Risk	At risk



## 3 SCREENING FOR APPROPRIATE ASSESSMENT

### 3.1 SCREENING PROCESS

This stage of the process identifies any likely significant effects to European sites from a project or plan, either alone or in combination with other projects or plans. The screening phase was progressed in stages during which a series of questions were asked to determine:

- Whether a plan or project can be excluded from AA requirements because it is directly connected with or necessary to the management of a European Site.
- Whether the project will have a potentially significant effect on a European Site, either alone or in combination with other projects or plans, in view of the site's conservation objectives or if residual uncertainty exists regarding potential impacts.

An important element of the AA process is the identification of the “conservation objectives”, “Qualifying Interests” (QIs), and/ or “Special Conservation Interests” (SCIs) of European sites requiring assessment. QIs are the habitat features and species listed in Annexes I and II of the Habitats Directive for which each European Site has been designated and afforded protection. SCIs are wetland habitats and bird species listed within Annexes I and II of the Birds Directive. It is also vital that the threats to the ecological/environmental conditions that are required to support QIs and SCIs are considered as part of the assessment.

Site-Specific Conservation Objectives (SSCOs) have been designed to define favourable conservation status for a particular habitat or species at that site. Paragraph 4.6(3) of the European Commission interpretation document ‘Managing Natura 2000 sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC’ states:

*“The significant effects on any European Site, in view of the site’s conservation objectives, involves its ecological functions. The decision as to whether it is adversely affected should focus on and be limited to the site’s conservation objectives.”*

Favourable conservation status of habitat is achieved when:

- Its natural range, and area it covers within that range, are stable or increasing;
- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future; and
- The conservation status of its typical species is favourable.
- 

The favourable conservation status of a species is achieved when:

- Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;

- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

### 3.2 IDENTIFICATION OF RELEVANT EUROPEAN SITES

This section of the screening process describes the European sites located within the Zone of Influence (ZOI) of the site. The Department of the Environment (2010 revised) Guidance on AA recommends a 15 km buffer zone to be considered for Natura 2000 sites, but projects are evaluated on a case-by-case basis. A review of all sites within the ZOI has allowed a determination to be made that, in the absence of significant hydrological links, the characteristics of the proposed works will not impose effects beyond the 15 km ZOI. Natura sites located within 15km of the site are shown in, Figure 3., Figure 3., and 3.3.

To determine the potential for effects from the proposed works, information on the qualifying features, known vulnerabilities, and potential impacts which are likely to have significant effects on any European Site, in view of the site's conservation objectives, were reviewed. Background information on threats to individual sites and vulnerability of habitats and species that were used during this assessment included the following:

- Ireland's Article 17 Report to the European Commission "Status of EU Protected Habitats and Species in Ireland" (NPWS, 2021);
- Site Synopses (NPWS 2019a); and
- NATURA 2000 Standard Data Forms (NPWS 2019b).

The assessment takes consideration of the SSCOs of each of the sites within the ZOI. Since the conservation objectives for the European sites focus on maintaining the favourable conservation condition of the QIs/SCIs of each site, the screening process focused on assessing the potential effects of the proposed works against the QIs/SCIs of each site. The conservation objectives for each site were consulted throughout the assessment process. QIs/SCIs for Natura sites within 15km of the site are detailed in Table 3.1.

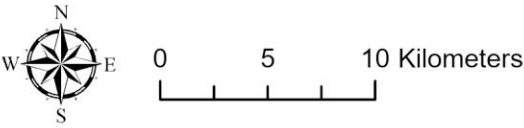
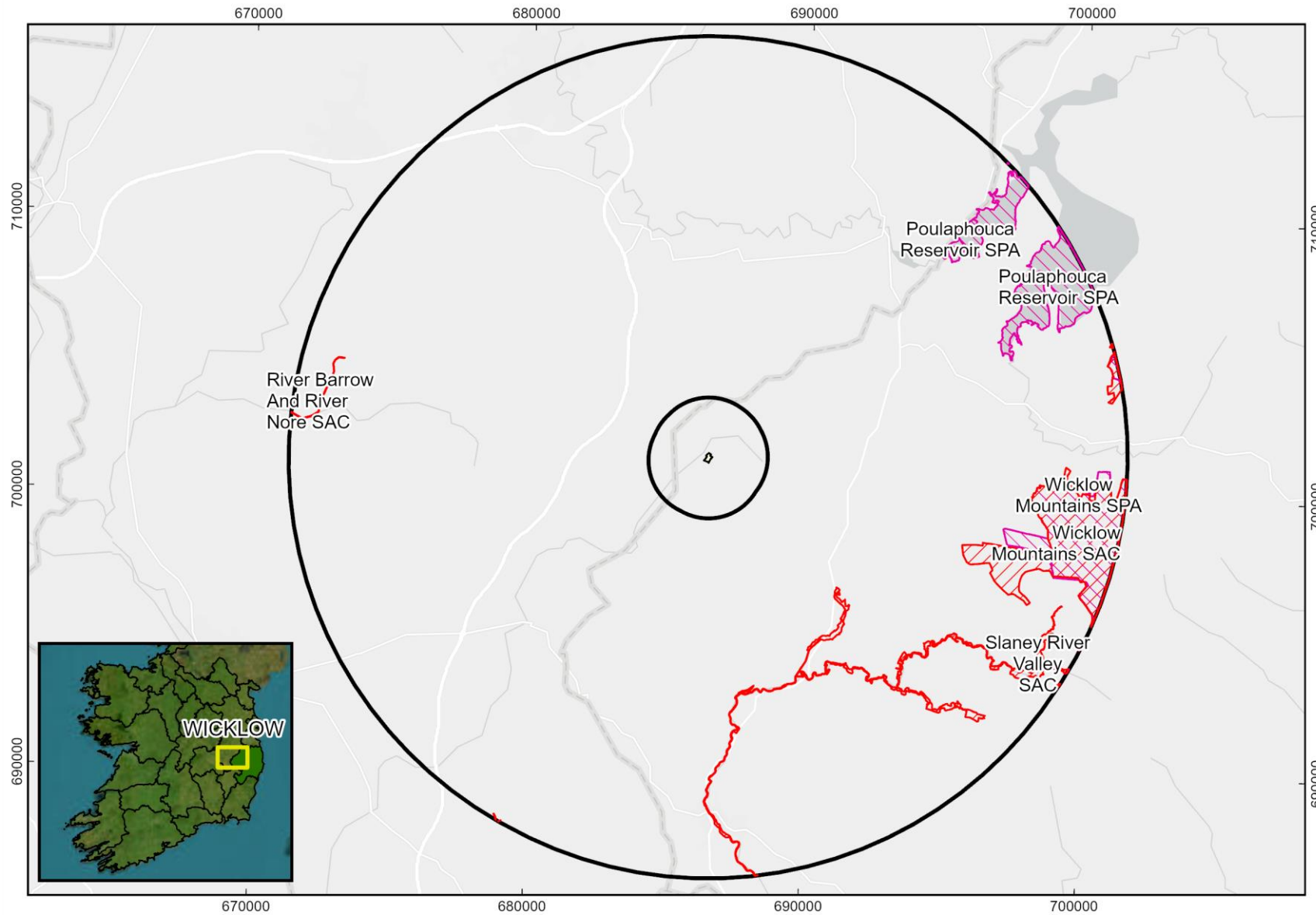
- Conservation objectives that have been considered by this assessment are included in the following NPWS documents:
- NPWS (2022) Conservation objectives for Wicklow Mountains SPA [004040]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.
- NPWS (2022) Conservation Objectives: Poulaphouca Reservoir SPA [004063] Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- NPWS (2011) Conservation Objectives: Slaney River Valley SAC [000781]. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

- NPWS (2017) Conservation objectives for Wicklow Mountains SAC [002122]. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- NPWS (2011) Conservation Objectives: River Barrow and River Nore SAC [002162]. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

# Map 370/2.1 - NPWS Designated Sites

## Legend

-  Site
-  2km Buffer
-  15km Buffer
-  SAC
-  SPA



Scale: 1:350.000

Spatial Reference  
Name: WGS 1984 Web Mercator Auxiliary Sphere  
PCS: WGS 1984 Web Mercator Auxiliary Sphere  
GCS: GCS WGS 1984  
Datum: WGS 1984  
Projection: Mercator Auxiliary Sphere

Project: Wicklow Fire Service - Dunlavin

Reference: W370/2

Client: Wickow County Council



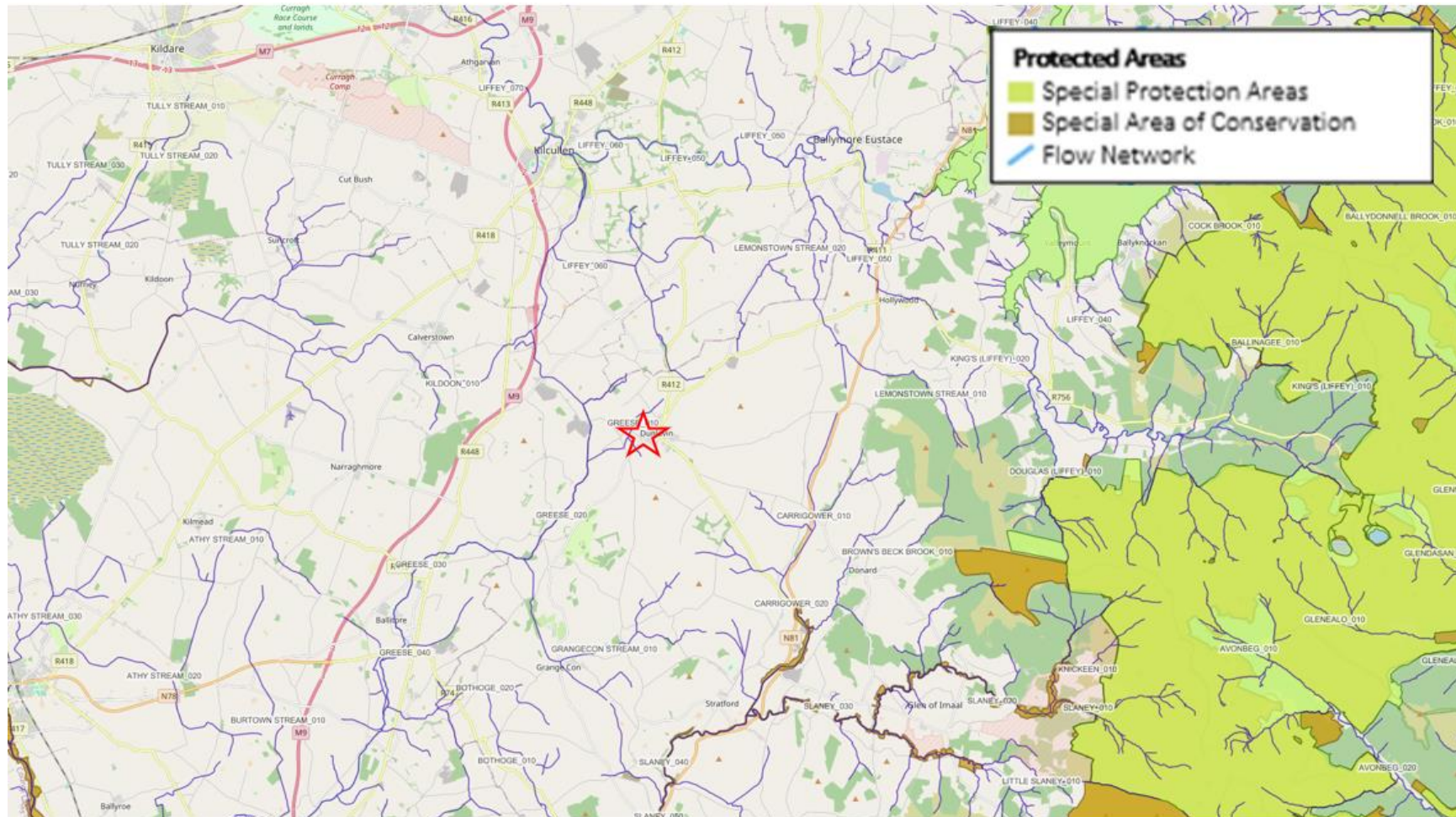
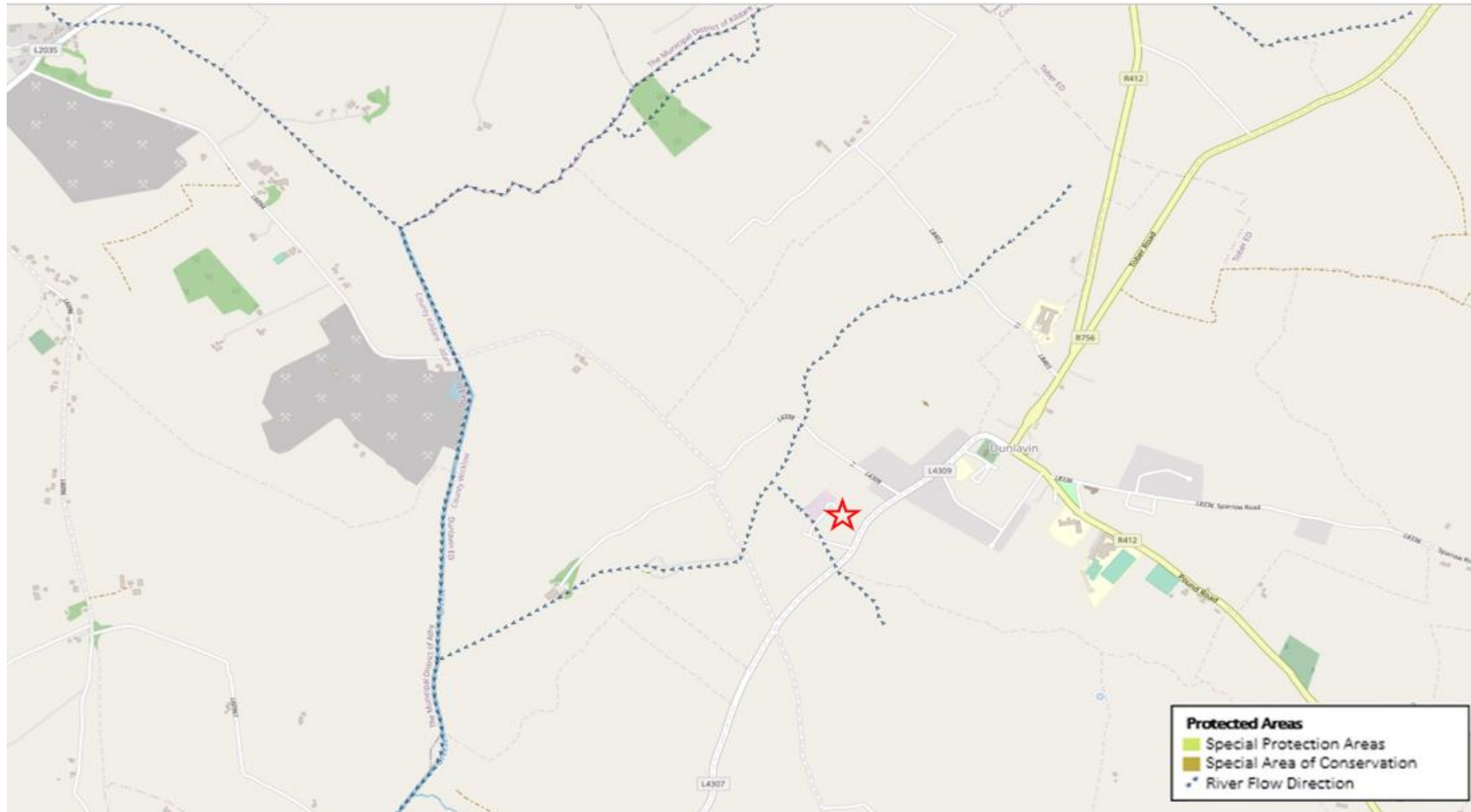


Figure 3.2: European Sites and EPA Rivers near the study area; site location indicated by the red star. (EPA maps, 2023).



*Figure 3.3: Nearest European Sites and EPA Rivers relative to the study area; site location indicated by the red cross. (EPA maps, 2023).*

**Table 3.1: European Sites Within 15 km of the Proposed Works`**

Site Code	Site Name	Distance (km)	Sensitive Receptors	Site Code
000781	Slaney River Valley SAC	6.5 SE	<p>[1029] Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>)</p> <p>[1095] Sea Lamprey (<i>Petromyzon marinus</i>)</p> <p>[1096] Brook Lamprey (<i>Lampetra planeri</i>)</p> <p>[1099] River Lamprey (<i>Lampetra fluviatilis</i>)</p> <p>[1103] Twaite Shad (<i>Alosa fallax</i>)</p> <p>[1106] Atlantic Salmon (<i>Salmo salar</i>) (only in fresh water)</p> <p>[1130] Estuaries</p> <p>[1140] Mudflats and sandflats not covered by seawater at low tide</p> <p>[1355] Otter (<i>Lutra lutra</i>)</p> <p>[1365] Harbour Seal (<i>Phoca vitulina</i>)</p> <p>[3260] Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation</p> <p>[91A0] Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles</p> <p>[91E0] * Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>)</p>	<p>This site comprises the freshwater stretches of the River Slaney as far as the Wicklow Mountains; a number of tributaries, the larger of which include the Bann, Boro, Glasha, Clody, Derry, Derreen, Douglas and Carrigower Rivers; the estuary at Ferrycarrig; and Wexford Harbour. The site flows through the Counties of Wicklow, Wexford and Carlow. Towns along the site but not within it include Dunlavin, Hacketstown, Tinahely, Tullow, Bunclody, Camolin, Enniscorthy and Wexford. The river is up to 100 m wide in places and is tidal at the southern end from Edermine Bridge below Enniscorthy.</p> <p>The site supports populations of several species listed on Annex II of the E.U. Habitats Directive, including Sea Lamprey, River Lamprey and Brook Lamprey, Otter, Salmon, small numbers of Freshwater Pearl Mussel, and in the tidal stretches, Twaite Shad. The Slaney is primarily a spring salmon fishery and is regarded as one of the top rivers in Ireland for early spring fishing. The upper Slaney and tributary headwaters are very important for spawning. The site is of high ornithological importance also, with internationally important populations of Mute Swan (300), Light-bellied Brent Goose (200), Bar-tailed Godwit (1,843) and Black-tailed Godwit (350) occurring – all figures are average peaks for the five winters, 1995/96-99/2000. The River Slaney supports typical riparian species, including Dipper and Kingfisher. The site supports many of the mammal species occurring in Ireland. Those which are listed in the Irish Red Data Book include Pine Marten, Badger, Irish Hare and Daubenton’s Bat. Common Frog (<i>Rana temporaria</i>), another Red Data Book species, also occurs within the site.</p> <p>The site supports populations of several species listed on Annex II of the E.U. Habitats Directive, and habitats listed on Annex I of this Directive, as well as important numbers of wintering wildfowl</p>

				including some species listed on Annex I of the E.U. Birds Directive. The presence of wet and broadleaved woodlands increases the overall habitat diversity, and the occurrence of a number of Red Data Book plant and animal species adds further importance to the site. Overall, it is of considerable conservation significance.
002122	Wicklow Mountains SAC	9.6 E	<p>[3110] Oligotrophic Waters containing very few minerals</p> <p>[3160] Dystrophic Lakes</p> <p>[4010] Wet Heath</p> <p>[4030] Dry Heath</p> <p>[4060] Alpine and Subalpine Heaths</p> <p>[6130] Calaminarian Grassland</p> <p>[6230] Species-rich Nardus Grassland*</p> <p>[7130] Blanket Bogs (Active)*</p> <p>[8110] Siliceous Scree</p> <p>[8210] Calcareous Rocky Slopes</p> <p>[8220] Siliceous Rocky Slopes</p> <p>[91A0] Old Oak Woodlands</p> <p>[1355] Otter (Lutra lutra)</p>	<p>Wicklow Mountains SAC is a complex of upland areas in Counties Wicklow and Dublin, flanked by the Blessington reservoir to the west and Vartry reservoir in the east, Cruagh Mountain in the north and Lybagh Mountain in the south. Most of the site is over 300 m, with much ground over 600 m. The highest peak is 925 m at Lugnaquilla. The Wicklow Mountains are drained by several major rivers including the Dargle, Liffey, Dodder, Slaney and Avonmore. The river water in the mountain areas is often peaty, especially during floods.</p> <p>The vegetation over most of Wicklow Mountains SAC is a mosaic of heath, blanket bog and upland grassland (mostly on peaty soil, though some on mineral soil), stands of dense Bracken (<i>Pteridium aquilinum</i>), and small woodlands mainly along the rivers. Mountain loughs and corrie lakes are scattered throughout the site. The two dominant vegetation communities in the area are heath and blanket bog. Deer are abundant, mainly hybrids between Red and Sika Deer. Other mammals include Hare, Badger and Otter, the latter being a species listed on Annex II of the E.U. Habitats Directive. Pine Marten has recently been confirmed as occurring within the site. Among the birds, Meadow Pipit, Skylark, Raven and Red Grouse are resident throughout the site. Wheatear, Whinchat and the scarce Ring Ouzel are summer visitors. Wood Warbler and Redstarts are rare breeding species of the woodlands. Dipper and Grey Wagtail are typical riparian species. Merlin and Peregrine, both Annex I species of the E.U. Birds Directive, breed within the site. Recently, Goosander has become established as a breeding species.</p> <p>Wicklow Mountains is important as a complex, extensive upland site. It shows great diversity from a geomorphological and a topographical point of view. The vegetation provides examples of</p>



				the typical upland habitats with heath, blanket bog and upland grassland covering large, relatively undisturbed areas. In all, twelve habitats listed on Annex I of the E.U. Habitats Directive are found within the site. Several rare or protected plant and animal species occur, adding further to its value.
004040	Wicklow Mountains SPA	10.9 E	[A098] Merlin ( <i>Falco columbarius</i> ) [A103] Peregrine ( <i>Falco peregrinus</i> )	<p>This is an extensive upland site, comprising a substantial part of the Wicklow Mountains. Most of the site is in Co. Wicklow, but a small area lies in Co. Dublin. Most of site is over 300 m, with much ground being over 600 m; the highest peak is Lugnaquilla (925 m). The predominant habitats present are blanket bog, heaths and upland grassland.</p> <p>The site is of special conservation interest for Merlin and Peregrine. A series of surveys of the Wicklow Mountains SPA indicates that up to 9 pairs of Merlin breed within the site in any one year. Traditionally a ground-nesting species, Merlin in the Wicklow Mountains are usually found nesting in old crows' nests in conifer plantations. The open peatlands provide excellent foraging habitat for Merlin with small birds such as Meadow Pipit being their main prey. The cliffs and crags within the site also provide ideal breeding locations for Peregrine (20 pairs in 2002). Other birds of the open peatlands and scree slopes that have been recorded within the site include Ring Ouzel and Red Grouse.</p> <p>The Wicklow Mountains SPA is of high ornithological importance as it supports nationally important populations of Merlin and Peregrine, both species that are listed on Annex I of the E.U. Birds Directive. Part of Wicklow Mountains SPA is a Statutory Nature Reserve.</p>
004063	Poulaphouca Reservoir SPA	11 NE	[A043] Greylag Goose ( <i>Anser anser</i> ) [A183] Lesser Black-backed Gull ( <i>Larus fuscus</i> )	<p>This area is located within the western foothills of the Wicklow mountains. It was created by damming of the River Liffey to generate electricity from hydropower. It is the largest inland water body in the mid-east and south-east regions of Ireland. The underlying of the reservoir consists of mostly sand and gravel deposits due to the last glaciation. The shores are predominantly</p>

				<p>sand, however, when the water levels are low the exposed lake and muds are colonised by an ephemeral floral. Wet grasslands occur in the sheltered areas around the lake.</p> <p>This site is of natural importance for the Greylag Goose population, a species listed on Annex I of the E.U. Birds Directive. It is the main roost for the species and the feeding occurring outside the site on improved grassland. Around 701 individuals were recorded. Other important waterfowl species include Whooper Swan, Wigeon, Teal, Mallard, Goldeneye, Cormorant, Great Crested Grebe, Curlew and Mute Swan. The reservoir also attracts roosting gulls during the winter months, larger populations of Lesser Black-backed Gull, which is typically rare as they tend to winter away from the South coast. Part of the reservoir SPA is also a Wildfowl Sanctuary.</p>
002162	River Barrow and River Nore SAC	13.6 W	<p>[1130] Estuaries                  [1140] Tidal Mudflats and Sandflats                  [1170] Reefs                  [1310] Salicornia Mud                  [1330] Atlantic Salt Meadows                  [1410] Mediterranean Salt Meadows                  [3260] Floating River Vegetation                  [4030] Dry Heath                  [6430] Hydrophilous Tall Herb Communities                  [7220] Petrifying Springs*                  [91A0] Old Oak Woodlands                  [91E0] Alluvial Forests*                  [1016] Desmoulin's Whorl Snail (<i>Vertigo moulinsiana</i>)                  [1029] Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>)                  [1092] White-clawed Crayfish (<i>Austropotamobius pallipes</i>)                  [1095] Sea Lamprey (<i>Petromyzon marinus</i>)                  [1096] Brook Lamprey (<i>Lampetra planeri</i>)                  [1099] River Lamprey (<i>Lampetra fluviatilis</i>)                  [1103] Twait Shad (<i>Alosa fallax</i>)                  [1106] Atlantic Salmon (<i>Salmo salar</i>)                  [1355] Otter (<i>Lutra lutra</i>)                  [1421] Killarney Fern (<i>Trichomanes speciosum</i>)</p>	<p>This site consists of the freshwater stretches of the Barrow and Nore River catchments as far upstream as the Slieve Bloom Mountains, and it also includes the tidal elements and estuary as far downstream as Creadun Head in Waterford. The site passes through eight counties – Offaly, Kildare, Laois, Carlow, Kilkenny, Tipperary, Wexford and Waterford. Major towns along the edge of the site include Mountmellick, Portarlinton, Monasterevin, Stradbally, Athy, Carlow, Leighlinbridge, Graiguenamanagh, New Ross, Inistioge, Thomastown, Callan, Bennettsbridge, Kilkenny and Durrow. The larger of the many tributaries include the Lerr, Fushoge, Mountain, Auhavaud, Owenass, Boherbaun and Stradbally Rivers of the Barrow, and the Delour, Dinin, Erkina, Owveg, Munster, Arrigle and King's Rivers on the Nore.</p> <p>The site is very important for the presence of a number of E.U. Habitats Directive Annex II animal species including Freshwater Pearl Mussel (both <i>Margaritifera margaritifera</i> and <i>M. m. durrovensis</i>), White-clawed Crayfish, Salmon, Twait Shad, three lamprey species – Sea Lamprey, Brook Lamprey and River Lamprey, the tiny whorl snail <i>Vertigo moulinsiana</i> and Otter. This is the only site in the world for the hard water form of the Freshwater Pearl Mussel, <i>M. m. durrovensis</i>, and one of only a handful of spawning grounds in the</p>

			<p>[1990] Nore Freshwater Pearl Mussel (<i>Margaritifera durrovensis</i>)</p>	<p>country for Twaite Shad. The freshwater stretches of the River Nore main channel is a designated salmonid river. The site supports many other important animal species. Those which are listed in the Irish Red Data Book include Daubenton's Bat, Badger, Irish Hare and Common Frog. In addition to the Freshwater Pearl Mussel, the site also supports two other freshwater mussel species, <i>Anodonta anatina</i> and <i>A. cygnea</i>. The site is of ornithological importance for a number of E.U. Birds Directive Annex I species, including Greenland White-fronted Goose, Whooper Swan, Bewick's Swan, Bar-tailed Godwit, Peregrine and Kingfisher. Nationally important numbers of Golden Plover and Bar-tailed Godwit are found during the winter.</p> <p>Overall, the site is of considerable conservation significance for the occurrence of good examples of habitats and of populations of plant and animal species that are listed on Annexes I and II of the E.U. Habitats Directive. Furthermore, it is of high conservation value for the populations of bird species that use it. The occurrence of several Red Data Book plant species including three rare plants in the salt meadows and the population of the hard water form of the Freshwater Pearl Mussel, which is limited to a 10 km stretch of the Nore, add further interest to this site.</p>
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### **3.3 ASSESSMENT CRITERIA**

#### **3.3.1 EXCLUSION FROM APPROPRIATE ASSESSMENT**

As set out in the provisions of the Habitats Directive, plans or projects that are directly connected with or necessary to the management of a European Site do not require AA. For this exception to apply, management is required to be interpreted narrowly as nature conservation management in the sense of Article 6(1) of the Habitats Directive. This refers to specific measures to address the ecological requirements of annexed habitats and species (and their habitats) present on a site(s). The relationship should be shown to be direct and not a by-product of the plan, even if this might result in positive or beneficial effects for a site(s).

In this case, however, the proposed Dunlavin fire station is neither necessary for nor directly connected with the management of a European Site. As such, the proposed development cannot be excluded from AA. It is considered that the operational phase elements of the proposed project will not introduce effects over and above those already existing as the site use is not predicted to change following completion of the works.

#### **3.3.2 ELEMENTS OF THE WORKS WITH THE POTENTIAL TO GIVE RISE TO EFFECTS**

The construction phase of the proposed works has the potential to introduce effects such as disturbance due to noise and vibrations, surface water run-off, and sedimentation. These effects are examined in detail in relation to the sensitive receptors of each of the European sites identified with regard to the conservation objectives and the potential pathways for effects.

#### **3.3.3 IDENTIFICATION OF POTENTIAL EFFECTS AND SCREENING OF SITES**

This section documents the final stage of the screening process. It uses the information collected on the sensitivity of each European Site and describes any impact to have likely significant effects on any European Site, in view of the site's conservation objectives, resulting from the proposed works. This assessment assumes the absence of any controls, conditions, or mitigation measures. In determining the potential for effects, a number of factors have been considered including the sensitivity and reported threats to the European Site and the individual elements of the proposed works and the potential effect they may cause to the site.

Sites are screened out based on one or a combination of the following criteria:

- Where it can be shown that there are no significant pathways such as hydrological links between activities of the proposed works and the site to be screened;



- Where the site is located at such a distance from proposed works that effects are not foreseen; and/ or
- Where it is that known threats or vulnerabilities at a site cannot be linked to potential impacts that may arise from the proposed works.

### 3.4 ASSESSMENT OF SIGNIFICANCE OF POTENTIAL EFFECTS

Assessment is the process of evaluating the importance or significance of project/plan effects (whether negative or positive). The following parameters are described when characterising impacts (following guidance from the Chartered Institute of Ecology and Environmental Management, the Environmental Protection Agency, and Transport Infrastructure Ireland/ National Roads Authority):

**Direct and Indirect Impacts** – An impact can be caused either as a direct or as an indirect consequence of proposed development.

**Magnitude** - Magnitude refers to size, amount, intensity, and volume. It should be quantified if possible and expressed in absolute or relative terms (e.g., the amount of habitat lost, percentage change to habitat area, percentage decline in a species population). Magnitude measures the size of an impact which is described as high, medium, low, very low, or negligible.

**Extent** - The extent is the spatial or geographical area over which the impact/effect may occur under a suitably representative range of conditions (e.g. noise transmission underwater).

**Duration** - The time for which the effect is expected to last prior to recovery or replacement of the resource or feature.

- Temporary: the effects would take up to 1 year to be mitigated;
- Short Term: the effects would take 1-7 years to be mitigated;
- Medium Term: the effects would take 7-15 years to be mitigated;
- Long Term: the effects would take 15-60 years to be mitigated; and
- Permanent: the effects would take 60+ years to be mitigated.
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**Likelihood** – The probability of an impact/effect occurring taking into account all available information.

- Certain/Near Certain: >95% chance of occurring as predicted;
- Probable: 50-95% chance as occurring as predicted;
- Unlikely: 5-50% chance as occurring as predicted; and
- Extremely Unlikely: <5% chance as occurring as predicted.

The document 'Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, European Commission Environment DG, 2001' outlines the types of effects that may impact European sites. These include effects from the following activities:

- Land take
- Resource requirements (drinking water abstraction, etc.)
- Emissions (disposal to land, water, or air)
- Excavation requirements
- Transportation requirements
- Duration of construction, operation, decommissioning

In addition, the guidance outlines the following likely changes that may occur at a designated site which may result in significant effects on any European Site and its function, in view of its conservation objectives:

- Reduction of habitat area
- Disturbance to key species
- Habitat or species fragmentation
- Reduction in species density
- Changes in key indicators of conservation value (water quality, etc.)
- Climate change

The elements detailed above were considered with reference to each of the European sites identified within a 15km radius of the site (Table 3.1).

### **3.4.1 LAND TAKE/HABITAT LOSS**

As there is no spatial overlap between the site and any European site, there is no anticipated impact on the land take or habitat loss posed to European sites from the proposed works.

### **3.4.2 RESOURCE REQUIREMENTS**

There will be no resource requirements additional to existing requirements except during the operational phase of the proposed works when water will be required to supply the water tank for fire training and for general use within the station. However, this water will be sourced from the existing municipal water mains and will not impact the resources necessary for the maintenance of the conservation objectives of any European site.

### 3.4.3 DURATION OF WORKS

The construction phase of the proposed works is anticipated to be short term. Given the relatively small-scale of these works, the duration of the works is extremely unlikely to impact on nearby European sites.

### 3.4.4 EMISSIONS (DISPOSAL TO LAND, WATER OR AIR)

#### Construction Phase:

Works undertaken during the construction phase may create localised impacts including noise and dust as well as increased siltation, turbidity, and pollution due to accidental spillages of oils or fuels from machinery and runoff during construction works.

There is one surface water feature 45m from the site (IE\_SE\_4G040070). This stream joins a larger stream approximately 300m northwest of the site. This in turn joins the main channel of the River Greese (IE\_SE\_14G040100/ Greese \_020) 1.4km west-southwest of the site. The River Greese joins the River Barrow and River Nore SAC approximately 30.2 km downstream. However, due to the scale of the works and the distance to the river and SAC, impacts to this waterbody and European site during the construction phase are deemed to be short-term, unlikely, and negligible.

No other European sites within the ZOI are hydrologically connected to the proposed site. Therefore, due to the scale and duration of the proposed works, the distance from the study area to these sites, and the lack of hydrological connection, impact on these European sites is determined to be extremely unlikely and negligible.

#### Operational Phase:

Based on EPA mapping, a tributary to the River Greese is located adjacent to the site. The River Greese discharges to the River Nore and River Barrow SAC north of Carlow. The site is topographically and hydrologically upstream of the River Nore and River Barrow SAC; the River Nore and River Barrow SAC is 30.2km downstream of the site. In addition, surface water drainage from the site will discharge to the municipal surface water system which discharges to River Greese. Therefore, impact to the River Greese and the downstream European site and other designated sites within the Zone of Influence of the proposed works is deemed unlikely given the nature of the development and the scale and duration of the proposed construction works. Subject to the implementation of design and standard best practice measures, no significant negative impacts on the local biodiversity and conservation objectives of the local species are anticipated as a result of this development.

### **3.4.5 EXCAVATION REQUIREMENTS/EROSION/SEDIMENTATION**

The proposed development does not require significant excavation works. Therefore, given the scale of the development and distance to European sites, the impacts arising from these works are considered to be temporary, unlikely, and not significant.

### **3.4.6 TRANSPORTATION REQUIREMENTS**

There will be a small, short-term increase in construction traffic during the construction phase and a small, permanent increase in traffic during the operational phase. However, these effects are considered to be not significant with regard to European sites due to the small scale and short duration of the construction works, the limited traffic contribution during the operations phase, and the distances observed.

### **3.4.7 DURATION OF CONSTRUCTION, OPERATION, DECOMMISSIONING**

The construction phase of the proposed project is short term and will have no significant effects on European sites given the small scale and duration of the works and the distances observed. The fire station will be a permanent feature with no decommissioning phase and is predicted to have no significant effects on European sites due to the nature of its use and the distance to the nearest sites.

### **3.4.8 HABITAT REDUCTION**

The nearest European site, the Slaney River Valley SAC, or qualifying habitat feature is located 6.5 km direct from the site and the nearest hydrologically connected European site, the River Barrow and River Nore SAC, is located 30.2 km downstream from the site. As such, there will be no reduction of the habitat of European sites resulting from the proposed development.

### **3.4.9 SPECIES DISTURBANCE**

The nearest European site is the Slaney River Valley SAC which is located 6.5 km south-east of the proposed development. As such, disturbance from noise, vibrations, lighting, etc. are not a valid link. There are no pathways for disturbance effects identified due to the distance between the proposed development and this European site.

### 3.4.10 HABITAT OR SPECIES FRAGMENTATION

Given the scale and duration of the construction phase, the long-term use of the proposed project, and the distance from the nearest European sites, the project is considered to have no potential effects on any European site with regard to habitat or species fragmentation.

### 3.4.11 CHANGES IN KEY INDICATORS OF CONSERVATION VALUE

The Slaney River Valley SAC is the nearest European site and is located 6.5 km south-east of the proposed project. The nearest hydrologically connected European site is the River Barrow and River Nore SAC, 30.2 km downstream via the River Greese. Given the scale and duration of the proposed works, the long-term use of the proposed project, and the distance to the nearest European site, impacts to key indicators of conservation value at this and other European sites arising from the proposed project is expected to be extremely unlikely and not significant.

### 3.4.12 CLIMATE CHANGE

Due to the nature and scale of the proposed work, the effects of the proposed development on climate and Ireland's obligations under the Kyoto Protocol are not anticipated to be significant.

### 3.4.13 COMBINATION EFFECTS WITH OTHER PROJECTS

Grants of planning in the vicinity of the site were reviewed to identify works of a significant scale which may produce in-combination effects with the proposed works. The following planning grants of larger than a single domestic scale were identified:

**20466: (Liam Burke):** permission for the construction of a 26 no. housing development in two separate phases. Phase A will consist of 23 no. houses as follows: 5 no. two bedroom terraced two storey houses (houses no 1-5 inclusive). 4 no. three bedroom terraced two storey houses (houses no. 6-9 inclusive). 6 no. three bedroom terraced two storey houses (houses 10-15 inclusive). 4 no. three bedroom semi-detached two storey houses (houses no. 16-19 inclusive). 4 no. two bedroom semi-detached two storey houses (houses 20-23 inclusive). Phase B will consist of 3 no. four bedroom detached houses (houses 24-26 inclusive). Permission for the construction of a vehicular entrance through Chapel Hill, connection to public foul sewer, open space and pedestrian access to Chapel View, permission to amalgamate public open space of Chapel Hill into proposed development and all associated site works. Retention of existing block wall t the north eastern boundary of the site as constructed.

**211141: (DL Residential Properties Ltd.):** permission for 89 no. dwellings consisting of 8 no. 2 bed terraced bungalow dwellings, 10 no. 2 bed semidetached 2 storey dwellings, 4 no. 2 bed terraced 2 storey dwellings, 34 no. 3 bed semidetached 2 storey dwellings, 6 no. 3 bed terraced 2 storey dwellings, 13 no. 3 bed detached 2 storey dwellings, 8 no. 4 bed semidetached 2 storey dwellings 6 no. 4 bed detached 2 storey dwellings. Development is to include connection to the existing access road across Cow Green which connects to R412, proposed internal roads and pathways, alterations to existing levels, site landscaping, boundary treatments, pedestrian access and all ancillary site development and excavation works.

Other granted planning permissions in the vicinity of the site pertain primarily to small-scale agricultural, residential, and commercial constructions, extensions, change of use, or retention of works. Although two larger planning grants were identified in the vicinity of the site, due to the small scale of the proposed development, in-combination effects with these are considered to be unlikely and not significant.

**Table 3.2: Screening assessment of the potential effects arising from the proposed works**

Site Code	Site Name	Distance (km)	Sensitive Receptors (Qualifying Interest & Special Conservation Interests) (including the relevant code for the qualifying feature)	Characterisation of Potential Effects	Potential Significant Effects	Potential In-Combination Effects
000781	Slaney River Valley SAC	6.5 SE	<p>[1029] Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>)</p> <p>[1095] Sea Lamprey (<i>Petromyzon marinus</i>)</p> <p>[1096] Brook Lamprey (<i>Lampetra planeri</i>)</p> <p>[1099] River Lamprey (<i>Lampetra fluviatilis</i>)</p> <p>[1103] Twaite Shad (<i>Alosa fallax</i>)</p> <p>[1106] Atlantic Salmon (<i>Salmo salar</i>) (only in fresh water)</p> <p>[1130] Estuaries</p> <p>[1140] Mudflats and sandflats not covered by seawater at low tide</p> <p>[1355] Otter (<i>Lutra lutra</i>)</p> <p>[1365] Harbour Seal (<i>Phoca vitulina</i>)</p> <p>[3260] Water courses of plain to montane levels with the <i>Ranunculus fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation</p> <p>[91A0] Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles</p> <p>[91E0] * Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>)</p>	<p>Threats to the site include: I01 (invasive non-native species); H01.01 (pollution to surface waters by industrial plants); D01.05 (bridge, viaduct); H01 (Pollution to surface waters (limnic, terrestrial, marine &amp; brackish)); K01.01 (Erosion); C01.01 (Sand and gravel extraction); A01 (Cultivation); A10.01 (removal of hedges and copses or scrub); J02.12.02 (dykes and flooding defence in inland water systems); A08 (Fertilisation); D03.01.03 (fishing harbours); F02.03.01 (bait digging / collection); E03 (Discharges); E05 (Storage of materials); F01.03 (bottom culture); J02.05.02 (modifying structures of inland water courses); J02.06 (Water abstractions from surface waters); D01.01 (paths, tracks, cycling tracks); F03.02.04 (predator control); H01.08 (diffuse pollution to surface waters due to household sewage and waste waters); A09 (Irrigation); H01.05 (diffuse pollution to surface waters due to agricultural and forestry activities); B02 (Forest and Plantation management &amp; use); J02.11 (Siltation rate changes, dumping, depositing of dredged deposits); and J02.06.01 (surface water abstractions for agriculture).</p> <p>There is no spatial overlap or hydrological link between the site and the protected area. Given the scale and nature of the works, construction phase effects will be</p>	Unlikely	Unlikely

				localised and unlikely to cause significant impact on the SAC.		
002122	Wicklow Mountains SAC	9.6 E	<p>[3110] Oligotrophic Waters containing very few minerals                  [3160] Dystrophic Lakes                  [4010] Wet Heath                  [4030] Dry Heath                  [4060] Alpine and Subalpine Heaths                  [6130] Calaminarian Grassland                  [6230] Species-rich Nardus Grassland*                  [7130] Blanket Bogs (Active)*                  [8110] Siliceous Scree                  [8210] Calcareous Rocky Slopes                  [8220] Siliceous Rocky Slopes                  [91A0] Old Oak Woodlands                  [1355] Otter (Lutra lutra)</p>	<p>Threats to the site include:                  B06 (grazing in forests/ woodland);                  G01.03.02 (off-road motorized driving); I01 (invasive non-native species); J01.01 (burning down); K01.01 (Erosion); A05.02 (stock feeding) E03.01 (disposal of household / recreational facility waste); F04.02 (collection (fungi, lichen, berries etc.)); G01.04 (mountaineering, rock climbing, speleology); G02.09 (wildlife watching); G05.06 (tree surgery, felling for public safety, removal of roadside trees); L05 (collapse of terrain, landslide); A04 (grazing); C01.03 (peat extraction); D01.01 (paths, tracks, cycling tracks); E01 (Urbanised areas, human habitation); F03 (Hunting and collection of wild animals (terrestrial)); F03.02.02 (taking from nest (falcons)); G01 (Outdoor sports and leisure activities, recreational activities); G01.02 (walking, horse riding and non-motorised vehicles); G04.01 (Military manoeuvres); G05.01 (Trampling, overuse); G05.04 (Vandalism); G05.07 (missing or wrongly directed conservation measures); and K04.05 (damage by herbivores (including game species)).</p> <p>There is no spatial overlap or hydrological link between the site and the protected area. Given the scale and nature of the works, construction phase effects will be localised and unlikely to cause significant impact on the SAC.</p>	Unlikely	Unlikely



004040	Wicklow Mountains SPA	10.9 E	[A098] Merlin ( <i>Falco columbarius</i> ) [A103] Peregrine ( <i>Falco peregrinus</i> )	Threats to the site include: G01.02 (walking, horse riding and non-motorised vehicles); B (Sylviculture, forestry); A04 (grazing); C01.03 (Peat extraction); and D01.01 (paths, tracks, cycling tracks).  There is no spatial overlap or hydrological link between the site and the protected area. Given the scale and nature of the works, construction phase effects will be localised and unlikely to cause significant impact on the SPA.	Unlikely	Unlikely
004063	Poulaphouca Reservoir SPA	11 NE	[A043] Greylag Goose ( <i>Anser anser</i> ) [A183] Lesser Black-backed Gull ( <i>Larus fuscus</i> )	Treats to the site include: F03.01 (Hunting); G01.01 (Nautical sports;); F02.03 (Leisure fishing); B01 (Forest planting on open ground); D01.05 (Bridge, viaduct)  There is no spatial overlap or hydrological link between the site and the protected area. Given the scale and nature of the works, construction phase effects will be localised and unlikely to cause significant impact on the SPA.	Unlikely	Unlikely
002162	River Barrow and River Nore SAC	13.6 W	[1130] Estuaries [1140] Tidal Mudflats and Sandflats [1170] Reefs [1310] Salicornia Mud [1330] Atlantic Salt Meadows [1410] Mediterranean Salt Meadows [3260] Floating River Vegetation [4030] Dry Heath [6430] Hydrophilous Tall Herb Communities [7220] Petrifying Springs* [91A0] Old Oak Woodlands [91E0] Alluvial Forests* [1016] Desmoulin's Whorl Snail ( <i>Vertigo moulinsiana</i> ) [1029] Freshwater Pearl Mussel ( <i>Margaritifera margaritifera</i> )	Threats to the site include: J02 (human induced changes in hydraulic conditions); B05 (use of fertilizers (forestry)); J03.02.01 (reduction in migration/ migration barriers); H01 (Pollution to surface waters (limnic, terrestrial, marine & brackish)); M01 (Changes in abiotic conditions); C01.03 (Peat extraction); A04.01.01 (intensive cattle grazing); I01 (invasive non-native species); K01.01 (Erosion); J02.02.01 (dredging/ removal of limnic sediments); J02.05.02 (modifying structures of inland water courses); J02.12.02 (dykes and flooding defence in inland water systems); F02 (Fishing and harvesting aquatic	Unlikely	Unlikely

			<p>[1092] White-clawed Crayfish (<i>Austropotamobius pallipes</i>)</p> <p>[1095] Sea Lamprey (<i>Petromyzon marinus</i>)</p> <p>[1096] Brook Lamprey (<i>Lampetra planeri</i>)</p> <p>[1099] River Lamprey (<i>Lampetra fluviatilis</i>)</p> <p>[1103] Twaité Shad (<i>Alosa fallax</i>)</p> <p>[1106] Atlantic Salmon (<i>Salmo salar</i>)</p> <p>[1355] Otter (<i>Lutra lutra</i>)</p> <p>[1421] Killarney Fern (<i>Trichomanes speciosum</i>)</p> <p>[1990] Nore Freshwater Pearl Mussel (<i>Margaritifera durrovensis</i>)</p>	<p>resources); B07 (Forestry activities not referred to above); F02.03 (Leisure fishing); J02.06 (Water abstractions from surface waters); D03.01 (port areas); F02.01.02 (netting); A10.01 (removal of hedges and copses or scrub); C01.01.01 (sand and gravel quarries); B02 (Forest and Plantation management &amp; use); F01.01 (intensive fish farming, intensification); and A02.01 (agricultural intensification).</p> <p>There is no spatial overlap. The site is 30.2 km downstream, so there is no direct impact on habitats. Hydrological link not considered to pose a significant risk due to distance from the site. Given the scale and nature of the works, construction phase effects will be localised and unlikely to cause significant impact on the SAC.</p>		
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## 4 SUMMARY AND CONCLUSION

### 4.1 SUMMARY

The Habitats Directive provides legal protection for habitats and species of European importance and establishes the requirement for an AA. This AA screening is based on best scientific knowledge and has utilised ecological and hydrological expertise. In addition, a detailed online review of published scientific literature and 'grey' literature was conducted.

This AA has been prepared for the proposed new construction of the Dunlavin fire station. Works include the construction of a new fire station, a fire training tower, a concrete water tank for fire training, and associated lighting, drainage, and entrance infrastructure in Dunlavin, County Wicklow. The current site consists of a greenfield site in agricultural use.

The Slaney River Valley SAC is the nearest European site and is located approximately 6.5km to the south-east of the proposed site. However, given the scale of the development and distance to this site, the effects arising from these works will be negligible. The nearest downstream protected area is the River Barrow and River Nore SAC which is located 30.2 km west of the study area. There is no spatial overlap from the proposed development to the protected area and, given the scale of the development and distance to this European site, the effects arising from these works will be negligible.

The surface water drainage from the site will discharge to the municipal surface water system which discharges into the River Greese and ultimately to the River Barrow and River Nore SAC. However, due to the distance from the proposed site and this European site (30.2km downstream), the scale and duration of the proposed construction works, and the nature of the site operations, impact to this and other European sites within the ZOI is considered to be intermittent and not significant.

No changes are predicted to occur at any designated sites which may result in effects on the conservation objectives of those sites with regard to the following:

- reduction in habitat area
- habitat or species fragmentation
- climate change
- disturbance to key species
- reduction in species density
- changes in key indicators of conservation value

## 4.2 CONCLUSION

This stage 1 screening for AA of the proposed construction of a new fire station has considered potential effects which may arise during the construction and operational phases as a result of the implementation of the project.

The nearest European sites or qualifying habitat features is located 6.5 kilometres from the proposed development site while the nearest hydrologically connected European site is located 30.2 km downstream from the proposed site. However, given the nature of the development, its scale, and the localised and temporary nature of the construction effects identified as potential sources, the project is not foreseen to give rise to any significant adverse effects on any designated European sites, alone or in combination with other plans or projects. This evaluation is made in view of the conservation objectives of the habitats or species for which these sites have been designated. Consequently, a Stage Two AA is not required for the project.

## 5 VERIFICATION

This report was compiled by Rebecca Duane, BSc, Ecologist; reviewed by Luis Iemma, BSc, MSc, Ph. D, CEcol, MCIEEM, Principal Ecologist; and approved by Eleanor Burke, BSc, MSc, DAS, MIEEnvSc, CSci, Technical Principal, and the OCSC Environmental Division Manager.



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