

**Screening for Appropriate Assessment**  
South East Greenway Car Park at New Ross Boat Yard,  
Raheen, New Ross, Co. Kilkenny



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## 1 SUMMARY OF FINDINGS

### 1.1 SCREENING FOR APPROPRIATE ASSESSMENT

<b>Project Title</b>	Construction of new Car Park at New Ross Boat Yard associated with the South-East Greenway
<b>Project Proponent</b>	Kilkenny County Council
<b>Project Location</b>	Waterford Road, Raheen, New Ross, Co. Kilkenny
<b>Screening for Appropriate Assessment</b>	The Screening for Appropriate Assessment is undertaken to determine the potential for likely significant effects of the construction and operation of a car park, individually, or in combination with other plans or projects, in view of the conservation objectives of the site on a Natura 2000 Site.
<b>Conclusion</b>	<p>It has been objectively concluded during the screening process that significant impacts on Natura 2000 sites owing to the development are unlikely to occur, in relation to the following Natura 2000 sites:</p> <ul style="list-style-type: none"> <li>• The River Barrow and River Nore SAC (002162)</li> <li>• River Nore SPA (004233)</li> <li>• Blackstairs Mountains SAC (000770)</li> <li>• Lower River Suir SAC (002137)</li> </ul>

## 2 INTRODUCTION

### 2.1 PURPOSE OF ASSESSMENT

This Screening for appropriate assessment has been undertaken to determine the potential for significant impacts of a proposal to construct and operate a new car park associated with the South East Greenway, in the townland of Raheen, Co. Kilkenny, on nearby sites with European conservation designations (i.e. Natura 2000 Sites).

The Screening for appropriate assessment has been undertaken by Malachy Walsh and Partners ecologists.

### 2.2 LEGISLATIVE CONTEXT

The Habitats Directive (92/43/EEC) seeks to conserve natural habitats of wild fauna and flora by the designation of Special Areas of Conservation (SACs), and the Birds Directive (79/409/EEC) seeks to protect birds of special importance by the designation of Special Protected Areas (SPAs). It is the responsibility of each member state to designate SPAs and SACs, both of which will form part of Natura 2000, a network of protected sites throughout the European Community. The Habitats Directive has been transposed into Irish law and the relevant Regulations are the European Communities (Birds and Natural Habitats) Regulations 2011. The requirement for appropriate assessment of the implications of plans and projects on the Natura 2000 network of sites comes from the Habitats Directive (Article 6(3)).

Under the European Communities (Birds and Natural Habitats) Regulations 2011 a public authority is required to carry out a Screening for appropriate assessment of a proposed development prior to issuing consent to assess, in view of best scientific knowledge and the sites conservation objectives, if that project or plan, individually or in combination with other plans or projects is likely to have a significant effect on a Natura 2000 site. The information presented in this Screening for appropriate assessment will be used by the competent authority to assist them to complete their screening exercise.

Further information is available at:

<http://ec.europa.eu/environment/nature/legislation/habitatsdirective/>

<http://www.npws.ie/planning/appropriateassessment/>

The Screening for appropriate assessment will determine whether an appropriate assessment of the proposed development is required if it cannot be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plan or projects, will have a significant effect on a Natura 2000 site. If it is determined that an appropriate assessment is required in respect of the proposed development, a Natura Impact Statement (NIS) must be prepared. In the case of a proposed development, the application for consent must be accompanied by a NIS. The NIS will assist the competent authority to conduct the appropriate assessment.

The current assessment was conducted within this legislative framework and also the DoEHLG (2009) guidelines. As outlined in these, it is the responsibility of the proponent of the project, Kilkenny County Council, to provide a comprehensive and objective Screening for Appropriate

Assessment, which can then be used by the competent authority in order to conduct the Appropriate Assessment (DoEHLG, 2009).

### 2.3 STAGES OF APPROPRIATE ASSESSMENT

The appropriate assessment process is a four-stage process with issues and tests at each stage. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required. The stages are set out in **Appendix 1**. This proposal has proceeded as far as Stage 1.

## 3 ASSESSMENT METHODOLOGY

### 3.1 APPROPRIATE ASSESMENT GUIDANCE

This Screening for appropriate assessment has been undertaken in accordance with the European Commission Methodological Guidance on the provision of Article 6(3) and 6(4) of the 'Habitats' Directive 92/43/EEC (EC, 2001) and the European Commission Guidance 'Managing Natura 2000 sites' (EC, 2000) and guidance prepared by the NPWS (DoEHLG, 2009).

### 3.2 DESK STUDY

In order to complete the Screening for Appropriate Assessment, certain information on the existing environment is required. A desk study was carried out to collate available information on the site's natural environment. This comprised a review of the following publications, data and datasets:

- OSI Aerial photography and 1:50000 mapping, and other online mapping sources (online)
- National Parks and Wildlife Service (NPWS) (online)
- National Biodiversity Data Centre (NBDC) (online)
- BirdWatch Ireland
- Teagasc soil area maps (NBDC website)
- Geological Survey Ireland (GSI) area maps (online)
- Environmental Protection Agency (EPA) water quality data (online)
- Southeast River Basin District (ShRBD) datasets (Water Framework Directive) (online)
- Other information sources and reports footnoted in the course of the report

### 3.3 SCREENING FOR APPROPRIATE ASSESSMENT

As set out in the NPWS guidance, the task of establishing whether a plan or project is likely to have an effect on a Natura 2000 site(s) is based on a preliminary impact assessment using available information and data, including that outlined above, and other available environmental information, supplemented as necessary by local site information and ecological surveys. This is followed by a determination of whether there is a risk that the effects identified could be significant. The precautionary principle approach is required.

Once the potential impacts that may arise from the proposal are identified the significance of these is assessed through the use of key indicators:

- Water quality
- Habitat loss and alteration

- Disturbance and/or displacement of species
- Habitat or species fragmentation

## 4 SCREENING FOR APPROPRIATE ASSESSMENT

Screening for Appropriate Assessment (Stage 1) determines the need for a full Appropriate Assessment (Stage 2) and consists of a number of steps, each of which is addressed in the following sections of this report:

- 4.1 Establish whether the project is necessary for the management of a Natura 2000 site
- 4.2 Description of the Project (*to construct and operate a car park*)
- 4.3 Identification of Natura 2000 sites potentially affected
- 4.4 Identification and description of individual and cumulative impacts of the project
- 4.5 Assessment of the significance of the impacts on the integrity of Natura 2000 sites
- 4.6 Conclusion of screening stage

### 4.1 MANAGEMENT OF NATURA 2000 SITES

The proposal is not connected with or necessary to the conservation management of a Natura 2000 site.

### 4.2 DESCRIPTION OF THE PROJECT

#### 4.2.1 Site Location

The proposed car park will be located in the townland of Raheen in Co. Kilkenny, on the south-western outskirts of New Ross town, approximately 17.5km northeast of Waterford City centre. The site is located immediately off the R723, a Regional Road that connects to the newly constructed New Ross Bypass and serves as the main access point to New Ross for traffic arriving from the southwest. Approximate ITM coordinates for the centre point of the car park are: Easting 670772.820, Northing 626909.368 (See **Figure 1** and **Figure 2** below).

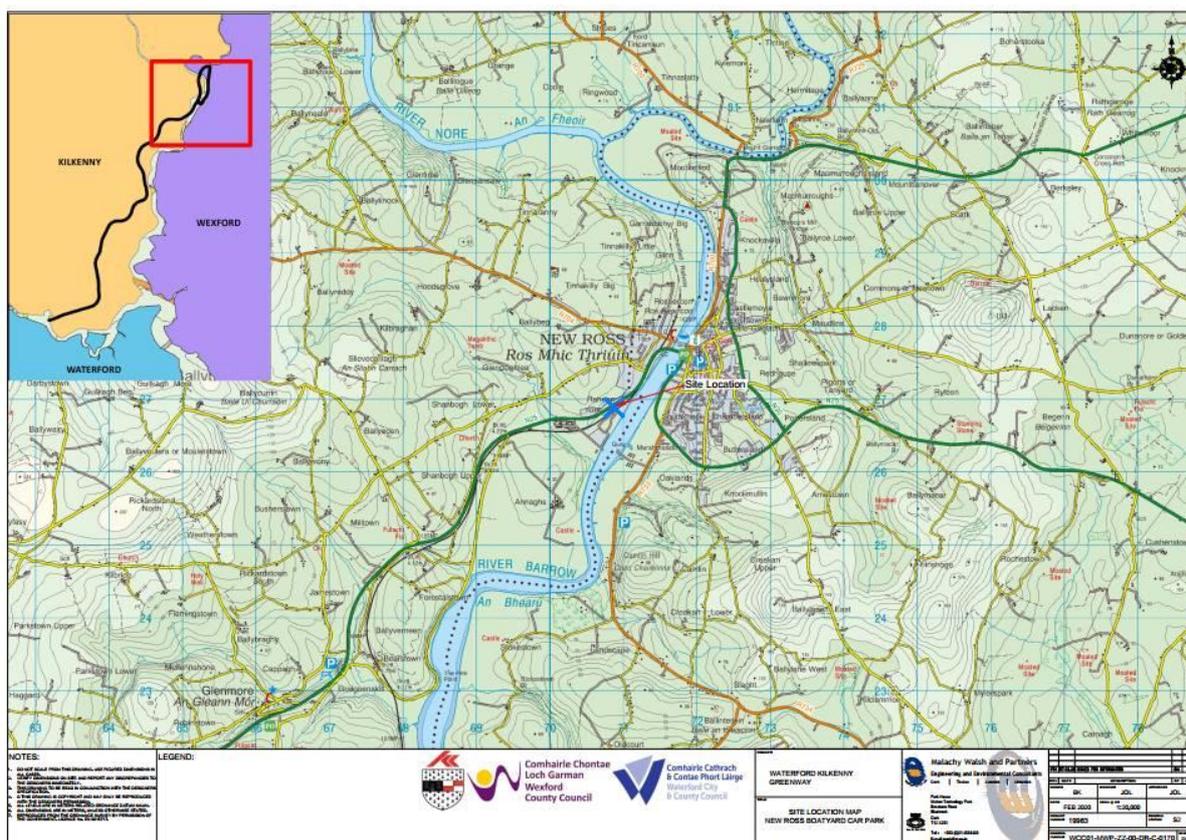


Figure 1: Location of proposed car park at New Ross Boat Yard, Co. Kilkenny

**4.2.2 Brief Project Description**

Kilkenny County Council proposes to construct and operate a new car park in the townland of Raheen, New Ross, Co. Kilkenny. The proposed car park will encompass an area of approximately 2,355m<sup>2</sup>. The car park will provide spaces for up to 54 no. cars and bicycle racks with associated fencing, landscaping, drainage, and public lighting. The car park will be situated directly adjacent to the consented South East Greenway which runs parallel to the south-western border of the proposed site.

Vehicular access to the car park will be through an existing entrance at the north of the site from Waterford Road (R723), west of New Ross town. A new access footpath at the site is also proposed while existing fencing to the north-east and south-west are to remain in place. The works will also include a new trailhead to connect the proposed car park to the South East Greenway at the south-east corner of the car park. Pedestrian and cyclist access to the Greenway will be via this trailhead. See **Appendix 2** for map of the proposed car park site layout.

**4.2.3 Purpose of the Project**

The purpose of the proposed car park is to provide safe parking and access for users (visitors/cyclists/pedestrians) along the northern section of the South East Greenway.



Figure 2: Site of proposed car park at New Ross Boat Yard, Co. Kilkenny.

#### 4.2.4 Description of the Site

The proposed site has an approximate footprint of 2,355m<sup>2</sup>. It is bounded to the north by Waterford Road (R723 Regional Road), to the west by a petrol station/ shop and associated car park, and to the east by a commercial trailer/truck yard. The proposed South East Greenway route will encompass an old, disused railway line located 3m east of the proposed development site, behind its south-eastern border of hedgerow. Further southeast is the New Ross Boat Yard, and beyond this the River Barrow, approximately 120m east of the proposed development site which forms the boundary with Co. Wexford.

The dominant habitats within the site are Buildings and Artificial Surfaces (BL3) and Scrub (ES1), bounded by Hedgerows (WL1) and Tree-lines (WL2) along the peripheries. Japanese Knotweed (*Fallopia japonica*) canes are located running along the fencing of the site's northern border adjacent to Waterford Road for approximately 30m. This is currently being managed by Kilkenny County Council as part of the South East Greenway knotweed management plan. The current layout of the proposed carpark allows the knotweed area to be bypassed until such time as the knotweed is eradicated by on site treatment.

An open culvert currently traverses the site and drains south-east to the River Barrow.

A 75m section of private roadway passes through the proposed site to serve as access to the New Ross Boat Yard from Waterford Road (R723). Apart from this access roadway, the site is predominantly a greenfield site, surrounded in the wider area by marginal agricultural grassland to the north, west and south with some scattered private dwellings and farmsteads. To the east and northeast there is a mixture of private and commercial dwellings/buildings as part of the town of New Ross (see Figure 2 above).

The proposed site is located within the Electoral Division (ED) of Rosbercon Rural (CSO Area Code: 07037) which reported a population of 684 in the 2016 Census, 331 of which were male, and 353 were female. Total housing stock in the area was 252, with a reported 21 homes vacant in the area, excluding holiday homes. The dominant industries of the area in 2016 were manufacturing, commerce and trade, and agriculture and forestry.<sup>1</sup>

Geological Survey Ireland data shows that the proposed site is located on a locally important aquifer with bedrock that is considered moderately productive, but in local zones only. The bedrock at the site is made up of “laminated green to grey slates and shales interbedded with green or pale-grey siltstones and occasional andesitic flows and tuffs.....Red-purple and green laminated and variegated siltstones and shales” from the Oakland formation, Lower Paleozoic – Ordovician.<sup>2</sup> The soil type is described as a “fine, loamy drift with siliceous stones” and classed as Acid Brown Earths and Brown Podzolics. The 2018 Corine (2018) land cover category for the proposed site is “Artificial Surfaces” with “Industrial and Commercial Units”.<sup>3</sup>

Compliance with the reporting requirements of the Water Framework Directive (WFD) (Directive 2000/60/EC) obliges each member state to publish reports providing summary information about individual water bodies relating to their status, risks and objectives. Within this reporting framework, the proposed work site is located within the “Nore\_SC\_140” sub-catchment (Sub-catchment Code: 15\_18) which in turn is located within the “Nore catchment” (Catchment ID: 15).

The south-eastern boundary of the proposed site is approximately 120m from the River Barrow, which flows past from north to south. This section of the River Barrow forms part of the transitional waterbody ‘New Ross Port’ (Code: IE\_SE\_100\_0200) and has a Transitional Waterbody WFD Status (2010-2015) categorised as ‘Moderate’. It also designated an ‘At risk’ area due mainly to agricultural pressures<sup>4</sup>. Approximately 780m southwest of the site, the Oaklands\_010 river waterbody (Code: IE\_SE\_140130860) drains into the River Barrow. The River Waterbody Status (2010-2015) for the Oaklands\_010 river is currently ‘Unassigned’ and under review.<sup>5</sup> There is a Primary Effluent Emission Point and Storm Water Overflow Emission Point approximately 830m downstream from the proposed site on the opposite river bank.<sup>6</sup>

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<sup>1</sup> <http://census.cso.ie/sapmap/> [Accessed 08/04/2020]

<sup>2</sup> <https://dceir.maps.arcgis.com/apps/MapSeries/index.html?appid=a30af518e87a4c0ab2fbde2aaac3c228> [Accessed 08/04/2020]

<sup>3</sup> <https://gis.epa.ie/EPAMaps/> [Accessed 08/04/2020]

<sup>4</sup> [https://www.catchments.ie/wp-content/files/subcatchmentassessments/15\\_18%20Nore\\_SC\\_140%20Subcatchment%20Assessment%20WFD%20Cycle%202.pdf](https://www.catchments.ie/wp-content/files/subcatchmentassessments/15_18%20Nore_SC_140%20Subcatchment%20Assessment%20WFD%20Cycle%202.pdf) [Accessed 07/04/2020]

<sup>5</sup> [https://www.catchments.ie/maps/?layer=transitional&code=IE\\_SE\\_100\\_0250](https://www.catchments.ie/maps/?layer=transitional&code=IE_SE_100_0250) [Accessed 09/04/2020]

<sup>6</sup> <https://gis.epa.ie/EPAMaps/> [Accessed 09/04/2020]

#### 4.2.5 Characteristics of the Project

The proposal is described below and has been confirmed with the Project Engineer.

<p><i>Size, scale, area, land-take</i></p>	<p>The proposed car park and associated walkway will occupy approximately 2,355m<sup>2</sup>. The proposal site is currently a greenfield site located approximately 1.2km southwest of New Ross Town. Access to the site is via the existing R723.</p> <p>The proposed works involves the construction of up to 54 no. car parking spaces and bicycle racks with associated fencing, landscaping, drainage, and public lighting. The works also include construction of a new trailhead to connect the proposed car park to the Greenway.</p> <p>There is no overlap between the proposed site and any Natura 2000 site(s); therefore, there will be no land-take within a Natura 2000 site. However, there is a hydrological link between the subject site and the Natura 2000 site, River Nore and River Barrow SAC (Site Code 002162). A culvert currently traverses the site, continues as an open drain through the area, before ultimately discharging to the SAC at the River Barrow, 120m east of the site boundary. The enclosed section of the culvert will be extended over the footprint of the site.</p>
<p><i>Details of physical changes that will take place during the various stages of implementing the proposal</i></p>	<p>Details that are proposed to be employed during the installation of the proposed works are provided below:</p> <ul style="list-style-type: none"> <li>• Construction of a site compound to provide welfare facilities and site storage of required materials for the project duration. This will involve the erection of temporary fencing to the compound area and provision of welfare facilities.</li> <li>• Provision of temporary fencing to delineate the knotweed area and to ensure no disturbance of same during the currency of the works.</li> <li>• Plant and equipment will access the site via the public road and will be transported by low loader.</li> <li>• The existing topsoil and sub surface soil will be removed to the required formation level and geotextile installed. Graded stone will be transported to site in tipper trucks and placed to form car park sub-base. Stripped topsoil will be retained on site for landscape berms.</li> <li>• Concrete retaining structures will be completed to retain the fill material.</li> <li>• Buried services such as drainage and ducts will be installed and final wearing course layered.</li> <li>• Access to the greenway involves an at grade direct link with the proposed car park.</li> <li>• Perimeter fencing and site definition will be as per the planning drawings.</li> <li>• Signage / Planting and street furniture will be installed.</li> <li>•</li> </ul>

	<p>The construction of the car park will involve the excavation of topsoil to circa 0.3m bGL to facilitate the installation of a geotextile and granular sub-base for the car park wearing surface. The car park drainage will be at a depth of approximately 1.0m, a trench will be dug in the existing ground to an average depth of 0.5m.</p> <p>Excavated material is estimated to be in the region of 800m<sup>3</sup>.</p> <p>An existing 60m drain already culverted into the site will be extended over the length of the site:</p> <ul style="list-style-type: none"> <li>• Existing live flow will be over-pumped and the drain will be blocked at either end with sandbags to facilitate excavation.</li> <li>• To further aid excavation, work will also be carried out in low-flow conditions.</li> <li>• The existing drain is to be cleaned out and formation will be prepared for laying new pipes. Silt fences and settlement ponds will be utilised to control silt and to ensure that there will be no silt transmission via the existing drainage network to the River Barrow/Nore SAC.</li> <li>• New pipes will be laid and backfilled and a precast headwall will be installed at the pipe's termination.</li> <li>• The existing open culvert will be enclosed over the extent of the new car park.</li> </ul> <p>There will be a closed network drainage system installed consisting of twin wall pipe work and associated manholes. The drainage system will include 1 no. full oil interceptor, and will discharge to the extended culvert that traverses the site.</p>
<p><i>Description of resource requirements for the construction/operation and decommissioning of the proposal (water resources, construction material, human presence etc)</i></p>	<p>Construction materials and quantities to be used in the proposed development (approximate quantities):</p> <ul style="list-style-type: none"> <li>• Imported Hardcore 2,500m<sup>3</sup></li> <li>• Imported Dense Bitumen Macadam 250m<sup>3</sup></li> <li>• Imported pea gravel for surround to storm sewer 40m<sup>3</sup></li> <li>• Storm sewer 225mm/150mm diameter upvc piping 85m approximately</li> <li>• 1 no. Class 1 full Petrol Interceptor</li> <li>• 1 no. Precast headwall</li> <li>• Sandbags</li> </ul> <p>All works will be managed by the contractor's site management team. Approximately 8 construction staff will be required to cover the various phases of project construction, including workers, and managers.</p> <p>A Construction and Environmental Management Plan (CEMP) will be prepared for the project.</p> <p>The bulk earthworks to be completed will consist of excavation to between 0.3 bGL. Excavated material is estimated to be in the region of 800m<sup>3</sup>.</p>
<p><i>Description of timescale for</i></p>	<p>It is anticipated that the proposed works will take 3 months to complete.</p>

<i>the various activities that will take place as a result of implementation (including likely start and finish date)</i>	
<i>Description of wastes arising and other residues (including quantities) and their disposal</i>	<p>It is envisaged that topsoil from the car park excavation will be reused onsite for planting to berms and other landscaping.</p> <p>All wastes arising from the proposed development works are to be minimised by strict control and where not reused are to be removed from site by authorised contractors and disposed of at a suitably licensed facility off-site. All quantities will be logged by the contractor.</p> <p>Fuels/oils.</p> <p>Wastewater/effluent from temporary toilet facilities.</p>
<i>Identification of wastes arising and other residues (including quantities) that may be of particular concern in the context of the Natura 2000 network</i>	<p>No wastes arising are of particular concern in the context of Natura 2000 sites.</p> <ul style="list-style-type: none"> <li>• No hazardous waste material is envisaged from the proposal</li> <li>• Incidental waste materials such as pallets and packaging will be separated accordingly prior to disposal</li> <li>• Waste will be minimised by strict control and planning of materials received</li> </ul> <p>All wastes generated during the construction phase will be managed as part of the Waste Management Plan included in the contractors CEMP. The CEMP will outline cooperative measures necessary to adhere to the Kilkenny County Council Knotweed Management Plan.</p> <p>During construction waste from the portable toilet will be collected and disposed of off-site by a licensed contractor.</p> <p>Refuelling will take place within a dedicated, hard-surface area which will be lined and bunded with polythene and stone. Fuel will be stored in a secure, impermeable storage area, away from drains and open water. A fuel management plan will be put in place for the duration of the works.</p>
<i>Description of any additional services required to implement the project or plan, their location and means of construction</i>	<p>A temporary site compound will be in-situ for the duration of the works.</p> <p>No additional services are required to implement the project.</p>

#### 4.2.6 Identification of Other Projects or Plans or Activities

The proposal was considered in combination with other plans and projects in the area that could result in cumulative impacts on Natura 2000 sites. Other plans considered include:

- Kilkenny County Development Plan (2014 – 2020); and
- The River Basin Management Plan for Ireland: 2018-2021

Each of these plans has a range of environmental and natural heritage policy safeguards in place. These safeguard to protect the natural environment and Natura 2000 Sites will also apply to the proposal described in this report. The primary land-use in the area extending away to from the site is primarily urban within the town limits, and extending away it is primarily agricultural. The level of urban and agricultural activity is likely to be sustained at current levels, throughout the construction and operational phases of the proposal, constraints on the extent and type of developments that are, or will be, permitted are imposed by the Kilkenny County Development Plan (2014-2020) which indicates that the amount of development that will occur within the environs of the subject site are limited to lands zoned for residential development.

A search of the Kilkenny County Council and Wexford County Council Planning websites indicates that there has been an application submitted on the 27<sup>th</sup> March 2020 by Gas Networks Ireland T/A Aurora Telecom for a development located approximately 560m west of the proposed car park site at New Ross Boat Yard. The submission (Planning Application Reference 20201) relates to a proposed construction of a new 2.4m high security fence and “installation of a new 9m long by 3m wide by 3m high telecommunications container, back-up diesel generator and fuel storage tank”. A decision on the application is due on 21<sup>st</sup> May 2020<sup>7</sup>. In the townland of Marshmeadows across the River Barrow, a successful application (Application Number: 20200124) has been made by Green Biofuels Ireland Limited for the installation of a liquid natural gas fuel system and new plant control container. Permission with conditions was granted on the 27<sup>th</sup> March 2020<sup>8</sup>. Other existing planning permissions in the townland of Raheen and surrounding areas primarily relate to relatively small construction/renovation projects within existing residential and/or commercial areas.

A review of EPA licensed facilities occurring within the general area determined that there is an Industrial Emissions facility (IEL) licensed by the EPA located across the River Barrow in Marshmeadows, approximately 872m southeast of the proposed site. The facility is licensed to Green Biofuels Ireland Limited with an Active License Number of P0829-01<sup>9</sup>. The same licensee also has an Integrated Pollution Prevention and Control (IPPC) license with the same License Number. New Ross Urban Waste Water Treatment Plant (UWWT) plant (Licence No. D0036-01) is located on the River Barrow in New Ross (agglomeration PE >10,000). This plant has an overall plant compliance of ‘Pass’<sup>10</sup>.

It is considered that agriculture, wastewater treatment and permitted/proposed development within the environs of the proposal site comprise the main activities with which the proposed development could potentially interact synergistically to create any cumulative or in-combination impacts. While it is not foreseen that any of the projects or plans discussed above will result in significant cumulative impacts on any of the Natura 2000 sites in combination with the proposal the potential for significant cumulative or in-combination impacts is discussed in **Section 4.5.5** below.

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<sup>7</sup> <http://www.eplanning.ie/KilkennyCC/AppFileRefDetails/20201/0> [Accessed 09/04/2020]

<sup>8</sup> <https://dms.wexfordcoco.ie/index.php#> [Accessed 09/04/2020]

<sup>9</sup> <http://www.epa.ie/terminalfour/ippc/ippc-view.jsp?regno=P0829-01> [Accessed 09/04/2020]

<sup>10</sup> <https://gis.epa.ie/EPAMaps/> [Accessed 02/09/2019]

### 4.3 IDENTIFICATION OF NATURA 2000 SITES

#### 4.3.1 Zone of Impact Influence

The screening stage of AA involves compiling a ‘long list’ of European sites within a zone of potential impact influence for later analysis which may or may ultimately not be significantly impacted upon by the proposal. All Natura 2000 sites within 15km of the proposal location will be characterised in the context of the rationale for designation and qualifying features, in accordance with NPWS guidance. In line with the precautionary principle, during the preparation of this report Natura 2000 sites that lie outside 15km that may be significantly impacted as a result of the proposed works were also considered. Following this, the potential impacts associated with the proposal will be identified before an assessment is made of the likely significance of these impacts.

As described above, the test for the screening for appropriate assessment is to assess, in view of best scientific knowledge, if the development, individually or in combination with other plan/project is likely to have a significant affect on a Nature 2000 site. If there are any significant, potentially significant, or uncertain effects, it will be necessary to proceed to appropriate assessment and submit an NIS.

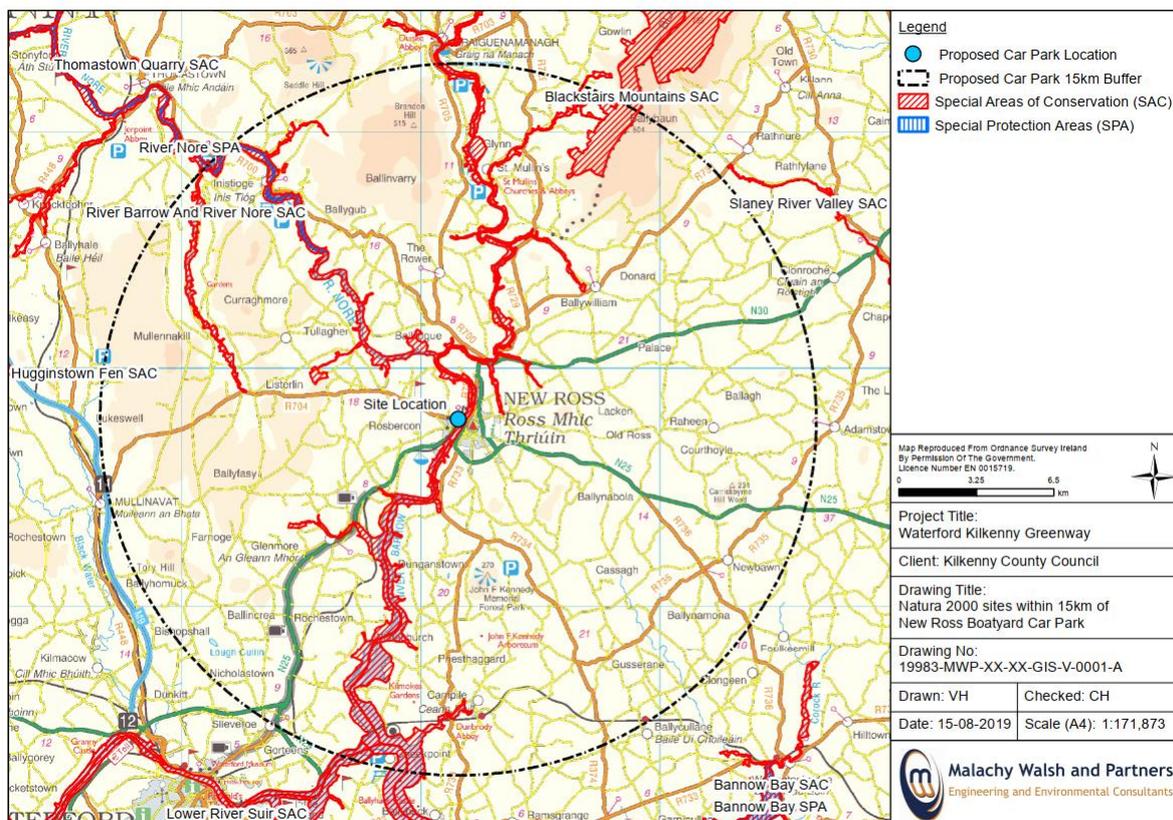


Figure 3: Natura 2000 Sites within 15km radius of proposed site

#### 4.3.2 Identification of Natura 2000

Adopting the precautionary principle in identifying potentially affected European sites, it has been decided to include all SACs and SPAs, within a 15km radius of the proposal site.

Table 1 below lists designated SACs and SPA within 15km or the anticipated zone of influence of the proposal site including their proximity.

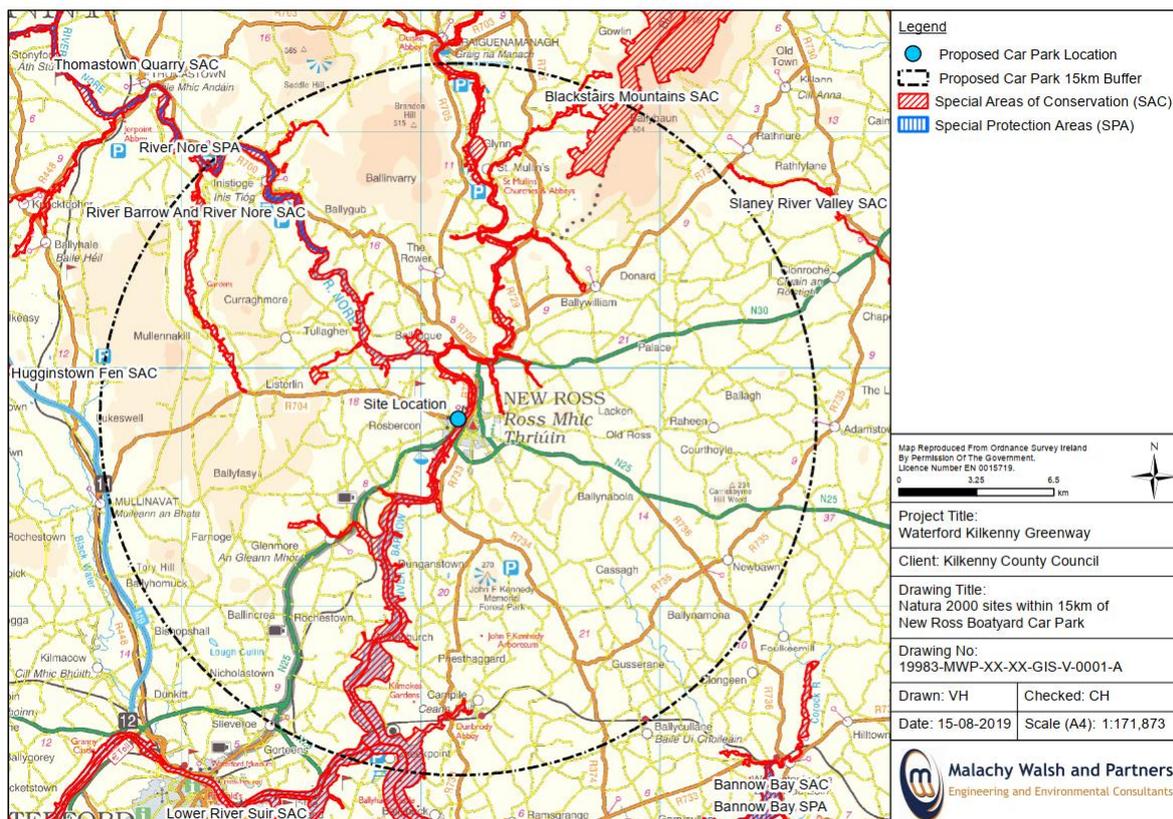


Figure 3 above, shows all Natura 2000 sites within 15km of the proposal.

Given the nature, scope, scale and location of the works, it is not considered that the proposal will significantly affect Natura 2000 sites outside of those considered here.

**Table 1: Designated conservation sites within 15km radius of proposal site**

No.	Designated Site	Site Code	Proximity of site to nearest point of designated site
1	River Barrow and River Nore SAC	002162	65m east of site
2	River Nore SPA	004233	9.31km northwest of site
3	Blackstairs Mountains SAC	000770	12.44km northeast of site
4	Lower River Suir SAC	002137	13km southwest of site

**4.3.3 Characteristics of Natura 2000 Sites**

The following table (Table 2) lists the features of interest for the SACs and SPAs sites that lie within 15km of the proposal site, as identified in the previous table. Information pertaining to designated sites is from site synopses, conservation objectives and other information available on www.npws.ie.

**Table 2: Natura 2000 sites with qualifying features of conservation interest within 15km of proposed development**

Natura 2000 Site	Qualifying features of conservation interest	Conservation Objectives
River Barrow and River Nore SAC (002162)	Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140]	To maintain or restore the favourable conservation condition of the Annex I habitats listed as Qualifying Interests for this SAC.

Natura 2000 Site	Qualifying features of conservation interest	Conservation Objectives
	<p>Reefs [1170]</p> <p>Salicornia and other annuals colonizing mud and sand [1310]</p> <p>Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330]</p> <p>Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]</p> <p>Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation [3260]</p> <p>European dry heaths [4030]</p> <p>Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]</p> <p>Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220]</p> <p>Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]</p> <p>Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91E0]</p> <p>Desmoulin's Whorl Snail (<i>Vertigo moulinsiana</i>) [1016]</p> <p>Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>) [1029]</p> <p>White-clawed Crayfish (<i>Austropotamobius pallipes</i>) [1092]</p> <p>Sea Lamprey (<i>Petromyzon marinus</i>) [1095]</p> <p>Brook Lamprey (<i>Lampetra planeri</i>) [1096]</p> <p>River Lamprey (<i>Lampetra fluviatilis</i>) [1099]</p> <p>Twaite Shad (<i>Alosa fallax fallax</i>) [1103]</p> <p>Salmon (<i>Salmo salar</i>) [1106]</p> <p>Otter (<i>Lutra lutra</i>) [1355]</p> <p>Killarney Fern (<i>Trichomanes speciosum</i>) [1421]</p> <p>Nore Pearl Mussel (<i>Margaritifera durrovensis</i>) [1990]</p>	<p>To maintain or restore the favourable conservation condition of the species listed as Qualifying Interests for this SAC.</p>
River Nore SPA (004233)	Kingfisher ( <i>Alcedo atthis</i> ) [A229]	To maintain or restore the favourable conservation condition of the species listed as Qualifying Interests for this SPA.
Blackstairs SAC (000770)	Northern Atlantic wet heaths with <i>Erica tetralix</i> [4010]	To maintain or restore the favourable conservation condition of the Annex I

Natura 2000 Site	Qualifying features of conservation interest	Conservation Objectives
	European dry heaths [4030]	habitat(s) and/or the Annex II species for which the SAC has been selected.
Lower River Suir SAC (002137)	<p>Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330]</p> <p>Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]</p> <p>Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation [3260]</p> <p>Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]</p> <p>Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]</p> <p>Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91E0]</p> <p>Yew (<i>Taxus baccata</i>) woods of the British Isles [91J0]</p> <p>Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>) [1029]</p> <p>White-clawed Crayfish (<i>Austropotamobius pallipes</i>) [1092]</p> <p>Sea Lamprey (<i>Petromyzon marinus</i>) [1095]</p> <p>Brook Lamprey (<i>Lampetra planeri</i>) [1096]</p> <p>River Lamprey (<i>Lampetra fluviatilis</i>) [1099]</p> <p>Twaite Shad (<i>Alosa fallax fallax</i>) [1103]</p> <p>Salmon (<i>Salmo salar</i>) [1106]</p> <p>Otter (<i>Lutra lutra</i>) [1355]</p>	<p>To maintain or restore the favourable conservation condition of the Annex I habitats listed as Qualifying Interests for this SAC.</p> <p>To maintain or restore the favourable conservation condition of the species listed as Qualifying Interests for this SAC.</p>

\* indicates a priority habitat under the Habitats Directive

#### 4.3.4 Conservation Objectives

According to the Habitat's Directive, the *conservation status of a natural habitat* will be taken as 'favourable' within its biogeographic range when:

- Its natural range and areas it covers within that range are stable or increasing, and
- 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 as defined below.

According to the Habitat's Directive, the conservation status of a species means the sum of the influences acting on the species concerned that may affect the long-term distribution and

abundance of its populations. The conservation status will be taken as 'favourable' within its biogeographic range 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, and
- 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.

The specific conservation objectives for each site are available on [www.npws.ie](http://www.npws.ie). These have been accessed for the sites listed in the tables above on the 08<sup>th</sup> April 2020.

Generic conservation objectives were available for:

- River Nore SPA (004233). Produced February 2018, Version 6.
- Blackstairs Mountains SAC (000770). Produced February 2018, Version 6.

Site specific and more detailed conservation objectives were available for the following sites:

- River Barrow and River Nore SAC (002162). Produced July 2011, Version 1.
- Lower River Suir SAC (002137). Produce March 2017, Version 1.

All conservation objectives together with other designated site information are available on <http://www.npws.ie/protectedsites/>.

#### 4.4 IDENTIFICATION OF POTENTIAL IMPACTS

In this section potential theoretical impacts associated with the proposal will be identified before an assessment is made. In **Section 4.5** below, it is assessed as to whether these theoretical impacts are likely to cause significant impacts on the Natura 2000 sites listed in **Table 1** above in view of those sites' conservation objectives.

Identification of a theoretical risk does not constitute a prediction, either that it will occur, or that it will cause or create an adverse impact. However, identification of the risk does mean that there is a possibility of ecological or environmental damage occurring, with the level and significance of the impact depending upon the nature and exposure to the risk and the characteristics of the receptor. **Table 3** below identifies the potential theoretical impacts which could occur as a result of the project.

**Table 3: Potential Theoretical Impacts Owing to the Project**

<i>Description of elements of the project likely to give rise to potential ecological impacts sites.</i>	<ul style="list-style-type: none"> <li>– Works will take place within 100m of a Natura 2000 site, designated for the protection of aquatic habitats/species.</li> <li>– Use of machinery/equipment and/or increase in human activity and noise for the duration of the works</li> <li>– Use and storage of fuel, oils and cementitious material on-site</li> <li>– Increase in traffic</li> </ul>
<i>Describe any likely direct, indirect or secondary ecological impacts of the</i>	<u>Construction Phase</u>

<p><i>project (either alone or in combination with other plans or projects) by virtue of:</i></p> <ul style="list-style-type: none"> <li>• <i>Size and scale;</i></li> <li>• <i>Land-take;</i></li> <li>• <i>Distance from Natura 2000 Site or key features of the Site;</i></li> <li>• <i>Resource requirements;</i></li> <li>• <i>Emissions;</i></li> <li>• <i>Excavation requirements;</i></li> <li>• <i>Transportation requirements;</i></li> <li>• <i>Duration of construction, operation etc.; and</i></li> <li>• <i>Other.</i></li> </ul>	<ul style="list-style-type: none"> <li>– Risk of pollution of watercourse by virtue of: <ul style="list-style-type: none"> <li>○ Ingress of fines/sediment</li> <li>○ Ingress of uncured cementitious material/grout/concrete wastewater</li> <li>○ Fuel or oil spill</li> </ul> </li> <li>– Risk of spread of invasive alien species, specifically Japanese Knotweed.</li> <li>– Risk of disturbance/displacement via human presence/fugitive noise emissions associated with the works.</li> </ul> <p><u>Operational Phase</u> No ecological impacts predicted.</p>
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#### 4.5 ASSESSMENT OF LIKELIHOOD OF POTENTIAL IMPACTS ON NATURA 2000 SITES

This section considers the list of Natura 2000 sites identified in **Section 4.3.2** above, together with the potential ecological impacts identified in the previous section, and determines whether the proposed car park is likely to have significant effects on any Natura 2000 sites in view of the sites' conservation objectives.

When assessing impact, qualifying features of conservation interest are only considered relevant where a credible or tangible source-pathway-receptor link exists between the proposed development and special conservation interest species or habitat. In order for an impact to occur there must be a risk initiated by having a 'source' (e.g. construction works), a 'receptor' (e.g. a protected species), and an impact pathway between the source and the receptor (e.g. a watercourse which connects the proposed development site to the site designated for the protection of a species). Due to the absence of a plausible impact pathway connecting certain designated sites to the location of the proposed works, and/or in the absence of potential ecological receptors, such sites are considered to be outside the functional zone of impact influence of the proposal. These sites are outlined in **Table 4** below, along with the rationale in support of the conclusions made.

**Table 4: Likelihood of Significant Impacts on Conservation Objectives of Natura 2000 Sites**

Natura 2000 Site	Proximity of Natura 2000 site to subject site	Likelihood of Significant Impact	Rationale
River Nore SPA (0042330)	Approximately 9.3km northwest of the subject site	No	<ul style="list-style-type: none"> <li>– Designated for protection of Kingfisher</li> <li>– No spatial overlap between subject area and SPA</li> <li>– No plausible impact pathway for potential water quality effects</li> <li>– Nature, scale and location of the works</li> <li>– Intervening distance considered sufficient to negate any potential for significant disturbance/displacement impacts</li> </ul>

Blackstairs Mountains SAC (000770)	Approximately 12.4km northeast of the subject site	No	<ul style="list-style-type: none"> <li>– Designated for protection of two terrestrial habitats</li> <li>– No spatial overlap between subject area and SAC</li> <li>– Nature, scale and location of the works</li> <li>– No plausible impact pathway for effects</li> </ul>
Lower River Suir SAC (002137)	Approximately 13km southwest of the subject site	No	<ul style="list-style-type: none"> <li>– Designated for wide variety of habitats and species including freshwater, terrestrial and coastal/marine</li> <li>– No spatial overlap between subject area and SAC</li> <li>– No plausible impact pathway for potential water quality effects (the eastern boundary of the SAC is contiguous with the River Barrow and River Nore SAC east of Waterford City but the SAC is located upstream of the confluence between the River Barrow and the River Suir)</li> <li>– Nature, scale and location of the works</li> <li>– Intervening distance considered sufficient to negate any potential for significant disturbance/displacement impacts</li> </ul>

Therefore, it is objectively concluded that the proposal does not include any element likely to result in significant effects on the conservation objectives of the River Nore SPA, the Blackstairs Mountains SAC, or the Lower River Suir SAC as outlined in **Table 4** above.

It is considered that the proposed development has some, albeit limited, potential to affect some of the qualifying features of the remaining Natura 2000 site identified as being within the functional zone of impact influence, namely the River Barrow and River Nore SAC (002162) due to the proximity of the SAC to the proposal area and the direct hydrological connection between them. Therefore, the assessment of significance of potential effects focuses on this designated site.

The likelihood of significant effects from the project was determined based on a number of indicators including:

- Water quality
- Habitat loss and alteration
- Disturbance and/or displacement of species
- Habitat or species fragmentation

The likelihood of significant cumulative/in-combination effects is assessed in **Section 4.5.5**.

#### 4.5.1 Water Quality

In general, where works are conducted within or in close proximity to a watercourse impairment of water quality may potentially occur as a result of ingress of sediment/fines, accidental fuel/oil spills from machinery/equipment and the release of uncured concrete, cementitious material or grout during the works.

There are several elements of the proposed development, identified in **Section 4.4** above, which could potentially result in impairment of water quality. However, in light of the characteristics of these impact sources as described in **Section 4.2.5**, above, it is concluded that these impact sources are not of a sufficient scale, scope or duration to constitute a plausible source of disturbance which could exert an ex-situ influence on water quality within the Natura 2000 site to which the subject

site is hydrologically linked, namely River Barrow and River Nore SAC. This takes into account the large size of the River Barrow at New Ross, a 7<sup>th</sup> order transitional channel, subject to tidal fluctuations and providing significant dilution.

An existing culvert traverses the proposed development area and continues as an open drain through the site, ultimately discharging to the River Barrow thereby providing a hydrological link to the River Barrow and River Nore SAC. To maintain clean water flow during construction, the existing live flow through the drain will be overpumped and the drain blocked at either end using sandbags. This temporary diversion of flow away from the area of works is required in order to allow for completion of necessary excavations. A secondary effect of this diversion is the segregation of drainage-flow from substances posing a risk to water quality e.g. fines, cementitious material etc for the duration of the works. Furthermore, works will be carried out in low-flow conditions which further minimises the risk of any waste or residue materials generated from entering the nearby watercourse.

A Fuel Management Plan will be implemented throughout the proposed building phase and standard best construction practices will be employed for the duration of the works. This includes the use of spill trays and the storage of all tools and materials in a bunded area away from any surface drains or open water. This will ensure that the risk of accidental fuel release into the existing culverted drains is considered low.

Any waste generated will be managed as part of the Waste Management Plan included in the contractors CEMP. Waste is to be minimised where possible, removed from site by authorised contractors and disposed of at a suitably licensed facility. During construction, waste from the portable toilet will be collected and disposed of off-site by a licensed contractor. Waste management measures set out in the Waste Management Plan will be regularly monitored and checked to ensure functionality and efficacy, thus rendering the risk posed to water quality as low.

Once construction is completed, the existing flow through the culverted drains will be restored and the newly-laid pipes will be connected to the drainage system presently on-site. Although, this drainage system ultimately discharges to the River Nore and River Barrow SAC, it is not anticipated that any sedimentary ingress greater than general background rate caused by flood/heavy rain events will be created. In addition, the assimilative capacity of the intervening distance between ingress of sediment to the drain and of discharge to the river will preclude significant impacts to the SAC.

It is concluded that the proposal will not cause or initiate any event that could release any significant volumes of sediment or nutrient-enriched material into the existing drainage system that would be of sufficient volume to exert significant impacts on the River Barrow and River Nore SAC. Furthermore, it is considered that the works are not substantial in their scale or scope and will be of a relatively short duration, as described in detail in **Section 4.2.5** above. In addition, the development site will comprise a controlled site which will be fully contained and enclosed within the surrounding landscape. The works will also be carried out with due cognisance to the Greenway Knotweed Management Plan which is now well underway. Therefore, significant impacts to the Conservation Objectives of the River Barrow and River Nore SAC as a result of water quality impacts are not envisaged as a result of the proposal.

#### 4.5.2 Habitat Loss and Alteration

The River Barrow and River Nore SAC is designated for a variety of habitat types which are both aquatic (freshwater/marine) and terrestrial in nature, as follows:

- Estuaries [1130]
- Mudflats and sandflats not covered by seawater at low tide [1140]
- Reefs [1170]
- *Salicornia* and other annuals colonizing mud and sand [1310]
- Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) [1330]
- Mediterranean salt meadows (*Juncetalia maritimi*) [1410]
- Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation [3260]
- European dry heaths [4030]
- Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]
- Petrifying springs with tufa formation (*Cratoneurion*) [7220]
- Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles [91A0]
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*) [91E0]

There is no spatial overlap between the proposed area of works and the SAC. Therefore, there will be no direct loss or alteration of any of the qualifying interest habitats for which the River Barrow and River Nore SAC is designated.

With regards to the potential for indirect alteration of aquatic or other water dependant habitats through potential water quality impacts arising as a result of the proposal, it has been determined in the previous section (**Section 4.5.1**) that significant water quality impacts are not envisaged as a result of the proposal considered in this report. Therefore, significant indirect alteration of any of the qualifying interest habitats for which the River Barrow and River Nore SAC is designated is not likely.

It is therefore objectively concluded that significant impacts to any of the qualifying habitats for which the River Barrow and River Nore SAC is designated are not likely to occur and significant impacts to the Conservation Objectives of the SAC are not envisaged or likely as a result of the proposal.

#### 4.5.3 Disturbance and/or Displacement of Species

The River Barrow and River Nore SAC is designated for a variety of species, both aquatic and terrestrial, as follows:

- Desmoulin's Whorl Snail (*Vertigo moulinsiana*) [1016]
- Freshwater Pearl Mussel (*Margaritifera margaritifera*) [1029]
- White-clawed Crayfish (*Austropotamobius pallipes*)[1092]
- Sea Lamprey (*Petromyzon marinus*) [1095]
- Brook Lamprey (*Lampetra planeri*) [1096]
- River Lamprey (*Lampetra fluviatilis*) [1099]
- Twait Shad (*Alosa fallax fallax*) [1103]

- Atlantic Salmon (*Salmo salar*) [1106]
- Otter (*Lutra lutra*) [1355]
- Killarney Fern (*Trichomanes speciosum*) [1421]
- Nore Freshwater Pearl Mussel (*Margaritifera durrovensis*) [1990]

#### 4.5.3.1 Plant Species

The River Barrow and River Nore SAC is designated for the protection of one species of plant, namely Killarney fern. This species can occur, in its sporophyte form, in “dripping caves, cliff faces, crevices by waterfalls and cascades, rock crevices in woodlands and very occasionally on the floor of damp woodlands. The gametophyte grows in similar habitats, albeit drier and darker, as it does not appear to require direct contact with water”<sup>11</sup>. The works will also be carried out with due cognisance to the Greenway Knotweed Management Plan which is now well underway.

Given that the works will be restricted to an area of scrub and built ground, which based on the species’ habitat requirements is not considered to comprise suitable habitat, it is objectively concluded that significant disturbance/displacement impacts on the Conservation Objectives of Killarney fern within the River Barrow and River Nore SAC are not reasonably foreseeable as a result of the proposed development.

#### 4.5.3.2 Aquatic Species

##### Freshwater Pearl Mussel (*M. margaritifera*)/Nore Pearl Mussel (*M. durrovensis*)

Freshwater pearl mussels are relatively large, long-lived bivalve molluscs which occur in rivers, streams and lakes. Like many other bivalves they are filter-feeders removing small particles from the surrounding water (Moorkens, 1999). They typically occur in clean, fast-flowing, well-oxygenated rivers, which have unconsolidated substrates. The River Nore pearl mussel population was previously described as a separate taxon; however, genetic research has now placed the Nore population within the *Margaritifera margaritifera* taxon (NPWS, 2019). The freshwater pearl mussel (*Margaritifera durrovensis*) is known only from the lime-rich waters of the River Nore, in contrast to *Margaritifera margaritifera* which lives in acid waters (NPWS, 2013). The current overall conservation status for freshwater pearl mussel has been assessed as ‘Bad’ (NPWS, 2019). There are no recent records of *M. margaritifera* occurring in the River Barrow and River Nore SAC and currently the status of *M. margaritifera* as a qualifying Annex II species for this designated site is under review and no site-specific conservation objectives are set for this species (NPWS, 2011).

The subject site is not located within a freshwater pearl mussel catchment. The 10km grid square, S72, within which the subject site is located, is not encompassed within the current known range or distribution for this species (NPWS, 2019). Within the SAC, the population of Nore pearl mussel (*M. durrovensis*) is known to stretch from Poorman’s Bridge (S407859) to Lismaine Bridge (S442660) in the far northern end of the River Nore catchment (NPWS, 2011).

Based on these factors, including in particular the conclusions regarding potential impacts to water quality as outlined in **Section 4.5.1**, it is objectively concluded that significant

<sup>11</sup> [http://www.npws.ie/publications/archive/2008\\_KillarneyFern\\_SAP.pdf](http://www.npws.ie/publications/archive/2008_KillarneyFern_SAP.pdf) [Accessed 09/04/2020]

disturbance/displacement impacts to freshwater pearl mussel (*M. margaritifera*/*M. durrovensis*) within the River Barrow and River Nore SAC are not likely as a result of the proposal.

#### White-clawed crayfish (*A. pallipes*)

White-clawed crayfish require relatively hard water with high calcium levels. The species preferentially selects streams and rivers that combine a shallow riffle in the stream flow with large rocks in the channel (Reynolds 1998). In Ireland, the species most commonly occurs in small and medium-sized lakes, large rivers, streams and drains, where there is adequate dissolved oxygen and sufficient lime to provide the calcium required to harden their exoskeletons following moulting (Gallagher *et al.*, 2006 cited in Reynolds *et al.*, 2010).

Current distribution mapping indicates that the 10km grid square, S72, that encompasses the subject site, is not included in either the current known range or distribution for this species (NPWS, 2019). Conservation Objectives for the SAC state that records for this species only extend as far downstream on the River Barrow as Graiguenamanagh (approximately 26km upstream of the subject site). A review of NBDC species records available on-line determined that there are no previous records of white-clawed crayfish within the Nore\_SC\_140 sub-catchment<sup>12</sup>.

Based on the factors outlined above, including in particular the conclusions regarding potential impacts to water quality as outlined in **Section 4.5.1**, it is objectively concluded that significant disturbance/displacement impacts on the Conservation Objectives of white-clawed crayfish within the River Barrow and River Nore SAC are not reasonably foreseeable as a result of the proposed development.

#### Sea lamprey (*P. marinus*), River lamprey (*L. fluviatilis*), Brook lamprey (*L. planeri*)

All three lamprey species known to occur in Ireland are listed on Annex II of the EU Habitats Directive. River lamprey is also listed in Annex V. Sea lamprey and river lamprey have a similar life history spending their adult life in marine and estuarine waters living as external parasites on other fish species. Both species migrate upriver to spawn in areas of clean gravel after which they die. After hatching, the young larvae, known as ammocoetes, drift downstream burrowing into suitable sand/silt beds. Once established they live as filter feeders within fine sediment in still water where they may remain for several years before metamorphosing into adults and migrating downstream. Brook lamprey is the smallest of the three lamprey species native to Ireland. Unlike sea and river lamprey it is not parasitic and is non-migratory, spending its entire life in freshwater. In general, lamprey distribution within river catchments is dependent on the availability of suitable habitat; adults require fine sand/gravel areas in which to spawn while the juvenile form needs clean, fine sediment into which to burrow (King, *et al.*, 2011).

During the most recent species assessments sea lamprey, brook lamprey and river lamprey were found to have an overall Conservation Status of 'Bad', 'Favourable' and 'Unknown' respectively (NPWS, 2019). The 10km grid square, S72, is included within the current known distribution for brook lamprey, but not for sea or river lamprey. A review of NBDC species records available on-line determined that there are no previous records of lamprey from within S72; however, there are records of sea lamprey from the grid square S73<sup>13</sup>.

<sup>12</sup> <https://maps.biodiversityireland.ie/Map> [Accessed 08/04/2020]

<sup>13</sup> <https://maps.biodiversityireland.ie/Map> [Accessed 08/04/2020]

Based on the factors outlined above, including in particular the conclusions regarding potential impacts to water quality as outlined in **Section 4.5.1**, it is objectively concluded that significant disturbance/displacement impacts on the Conservation Objectives of sea, river or brook lamprey within the River Barrow and River Nore SAC are not reasonably foreseeable as a result of the proposed development.

#### Twaite shad (*A. fallax fallax*)

Twaite shad spend their adult life at sea or in the lower reaches of estuaries and normally spawn near the tidal limit (NPWS, 2013). Weirs and dams are known to be obstacles to the migration of twaite shad upstream. Threats which have been identified for this species include commercial fisheries, obstruction of upstream migration, water quality and reduced fecundity.

During the most recent species assessment twaite shad were assessed as having an overall Conservation Status of 'Bad' (NPWS, 2019). The 10km grid square S72 is included within the current known range and distribution for this species, and regular breeding has been recorded in the River Barrow (NPWS, 2011). A review of NBDC species records available on-line determined that there are no previous records of twaite shad within the vicinity of the proposal site, however, they are likely to occur. The nearest record of the species is from the River Barrow at St. Mullins, approximately 18.5km upstream from the proposed development site.<sup>14</sup>

Based on the factors outlined above, including in particular the conclusions regarding potential impacts to water quality as outlined in **Section 4.5.1**, it is objectively concluded that significant disturbance/displacement impacts on the Conservation Objectives of twaite shad within the River Barrow and River Nore SAC are not reasonably foreseeable as a result of the proposed development.

#### Salmon (*S. salar*)

The Atlantic salmon is listed on Annex II and Annex V of the EU Habitats Directive and is afforded full legal protection during the freshwater phase of its life cycle. Because salmon migrate upriver to spawn they are potentially ubiquitous within any river system where they are present. Salmon are an anadromous species, living in freshwater for at least the first two or three years of life before migrating to sea. The main requirements for salmon are a clean and plentiful supply of water, good habitat variability, adequate food supply, free upstream passage for adult fish and free downstream passage for smolts. Relatively large cool rivers with extensive gravel-bottom headwaters are essential during their early life. Spawning occurs in well-oxygenated, fast-flowing rivers and streams.

During the most recent species assessment Atlantic salmon was assessed as having an overall Conservation Status of 'Inadequate' (NPWS, 2019). The 10km grid square, S72, is included within the current known range and distribution for this species. A review of NBDC species records available on-line determined that there are no previous records of Atlantic salmon anywhere within the vicinity of the proposal site, however, they are likely to occur.

Based on the factors outlined above, including in particular the conclusions regarding potential impacts to water quality as outlined in **Section 4.5.1**, it is objectively concluded that significant disturbance/displacement impacts on the Conservation Objectives of Atlantic salmon within the

<sup>14</sup> <https://maps.biodiversityireland.ie/Map> [Accessed 08/04/2020]

River Barrow and River Nore SAC are not reasonably foreseeable as a result of the proposed development.

#### 4.5.3.3 *Semi-aquatic Species*

##### Desmoulin's Whorl Snail (*V. moulinsiana*)

There are eight species of *vertigo* whorl snail in Ireland. Some are common while some are rare/threatened. All whorl snails favour damp or wet habitats, where they live mostly in moss, leaves and decaying vegetation. They feed on bacterial films and decaying vegetation. *V. moulinsiana* lives on living and dead stems and leaves of tall wetland plants. It has a requirement for tall structured vegetation containing tall riparian grasses and sedges (NPWS, 2019). Within the SAC the species is known from two sites; Borris Bridge in County Carlow and Boston Bridge, Kilnaseer in County Laois (NPWS, 2011).

During the most recent species assessment, Desmoulin's whorl snail was assessed as having an overall Conservation Status of 'Inadequate' (NPWS, 2019). The 10km grid square, S72, is not included within either the current known range or distribution for this species.

Based on the factors outlined above, including an absence of suitable habitat within the development footprint, and the conclusions regarding potential impacts to water quality as outlined in **Section 4.5.1**, it is objectively concluded that significant disturbance/displacement impacts on the Conservation Objectives of Desmoulin's whorl snail within the River Barrow and River Nore SAC are not reasonably foreseeable as a result of the proposed development.

##### Otter (*L. lutra*)

Otters are largely solitary animals feeding primarily on fish. Typical prey comprises slow-moving, benthic-dwelling species (Kruuk, 2006). The amount of time spent within different parts of an individual's home range is related to prey abundance. For a territory to be viable there needs to be high potential prey biomass available. Otters are highly territorial and this has implications on how many otters can reside along a given stretch of river or coastline.

Otters are found in a variety of aquatic habitats in Ireland such as lakes, rivers, streams, estuaries, marshland, and canals and along the coast. Their preferred habitat has good cover of vegetation, such as scrub with an herbaceous under layer. Because otters are mainly nocturnal they require access to safe refuges to use as denning sites, known as holts, within which they remain for most of the day. Holts are the main den locations used by otters and these are most commonly situated underground along a river's bank or among the root systems of trees. Several holts will be located within an individual's territory and lying up sites known as couches will also be used at ground level within vegetated areas. Couches are often linked to waterways by regularly used paths. The overall assessment of Conservation Status for this species is 'Favourable' (NPWS, 2019).

Otter has a widespread distribution throughout Ireland. The most recent assessment for this species determined that the 10km grid square, S72, is included within both the current known range and distribution for this species (NPWS, 2019). A review of on-line records held by the NBDC determined that there is one record (2017) for otter in the vicinity of the proposal site. This record is from O'Hanrahan Bridge in New Ross where a live animal was recorded (grid square S717277)<sup>15</sup>. It is

<sup>15</sup> <https://maps.biodiversityireland.ie/Map> [Accessed 09/08/2020]

assumed that otters have the potential to occur along the stretch of the Barrow in the vicinity of the subject site.

The favourable conservation condition for otter within the River Barrow and River Nore SAC is defined by the following list of Attributes and Targets:

**Table 5. Species Attributes, measures and Targets for 'Otter' (NPWS, 2011)**

Attribute	Measure	Target
Distribution	Percentage positive survey sites	No significant decline
Extent of terrestrial habitat	Hectares	No significant decline
Extent of marine habitat	Hectares	No significant decline
Extent of freshwater (river) habitat	Kilometres	No significant decline
Extent of freshwater (lake) habitat	Hectares	No significant decline
Couching sites and holts	Number	No significant decline
Fish biomass available	Kilograms	No significant decline

The development site itself does not encompass suitable habitat for otters comprising scrub and marginal grassland in conjunction with built-ground. There are no watercourses within the development footprint. There is an intervening distance of approximately 120m between the development site and the river channel.

The works, by their nature and scale, will result in the release of fugitive noise emissions for the duration of the construction phase; however, this will only occur during such times as when construction works are taking place. Noise emissions from construction activity are not expected to be significantly greater than existing background noise levels given the limited nature and scale of the works and the urban setting of the development site on the edge of New Ross town. No significant disturbance/displacement impacts are therefore considered to be likely.

The proposal will not result in any loss or modification of aquatic habitats or functionally linked habitats which could impact on species distribution or habitat accessibility/landscape connectivity and the proposal is not expected to result in any impairment of water quality, which could significantly impact on prey availability.

Bearing these factors in mind it is concluded that significant disturbance/displacement impacts to otter are not likely to occur as a result of the proposal considered in this report during either the construction or operational phases of the proposal. Therefore, it is objectively concluded that the achievement of the Attributes and Targets for otter, as outlined in the Conservation Objectives for the River Barrow and River Nore SAC, will not be affected and significant adverse impacts are not

envisaged as a result of either the construction or operational phases of the proposal, described at **Section 4.2.5** above.

#### **4.5.4 Habitat or Species Fragmentation**

Habitat fragmentation has been defined as ‘reduction and isolation of patches of natural environment’ (Hall *et al.*, 1997 cited in Franklin *et al.*, 2002) which results in spatial separation of habitat areas which had previously been in a state of greater continuity. Adverse effects of habitat fragmentation on species or populations can include the increased isolation of populations which can detrimentally impact on the resilience or robustness of the populations thereby reducing overall species diversity and altering species abundance.

The preceding sections have concluded that significant habitat loss or alteration within the River Barrow and River Nore SAC are not foreseen, significant water quality impacts are not predicted and significant disturbance or displacement of any qualifying interest species is not expected to ensue. Having regard to the location, nature and scale of the proposed works and the conclusions of the preceding sections it is considered that significant habitat or species fragmentation impacts are not reasonably foreseeable as a result of the proposal considered in this report.

#### **4.5.5 Cumulative/In-combination Impacts**

As well as singular effects, the potential for in-combination or cumulative impacts also need to be considered. A cumulative impact arises from incremental changes caused by past, present and proposed projects together with the proposal considered in this document. Relevant plans and projects have been identified in **Section 4.2.6** above.

In light of the conclusions of preceding sections **4.5.1** to **4.5.4**, inclusive, and bearing in mind the minor scale and scope of the works and their temporary, localised nature, it is concluded that significant habitat or species fragmentation impacts to the River Barrow and River Nore SAC are not likely to occur as a result of the proposed works.

## **4.6 CONCLUSION OF SCREENING STAGE**

The Screening for appropriate assessment is undertaken to determine the potential for likely significant effects of a proposed new car park associated with the permitted South East Greenway, individually, or in combination with other plans or projects, in view of the conservation objectives of the site on a Natura 2000 Site. The proposed development is within 15km of four Natura 2000 sites.

It has been objectively concluded that the following sites are unlikely to be significantly affected by the proposal:

- The River Barrow and River Nore SAC (002162)
- River Nore SPA (004233)
- Blackstairs Mountains SAC (000770)
- Lower River Suir SAC (002137)

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# **Appendix 1**

## Stages of Appropriate Assessment

**Stage 1 - Screening**

This is the first stage of the Appropriate Assessment process and that undertaken to determine the likelihood of significant impacts as a result of a proposed project or plan (either alone or in combination with other projects or plans). It determines need for a full Appropriate Assessment.

If it can be concluded that no significant impacts to Natura 2000 sites are likely then the assessment can stop here. If not, it must proceed to Stage 2 for further more detailed assessment.

**Stage 2 - Natura Impact Statement (NIS)**

The second stage of the Appropriate Assessment process assesses the impact of the proposal (either alone or in combination with other projects or plans) on the integrity of the Natura 2000 site with respect to the conservation objectives of the site and its ecological structure and function. This is a much more detailed assessment than Stage 1. A Natura Impact Statement containing a professional scientific examination of the proposal is required and includes any mitigation measure to avoid, reduce or offset negative impacts.

If the outcome of Stage 2 is negative i.e. adverse impacts to the sites cannot be scientifically ruled out, despite mitigation, the plan or project should proceed to Stage 3 or be abandoned.

**Stage 3 - Assessment of alternative solutions**

A detailed assessment must be undertaken to determine whether alternative ways of achieving the objective of the project/plan exists.

Where no alternatives exist the project/plan must proceed to Stage 4.

**Stage 4 - Assessment where no alternative solutions exist and where adverse impacts remain**

The final stage is the main derogation process examining whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project to adversely affect a Natura 2000 site where no less damaging solution exists.

## **Appendix 2**

### Proposed Car Park Layout at New Ross Boat Yard

