



ENVIROPLAN CONSULTING
LIMITED

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Title

APPROPRIATE ASSESSMENT SCREENING REPORT

Development Description

"The proposed development consists of the demolition of the existing public toilet block and tourist kiosk within the pedestrian area of Eyre Square/Kennedy Park, and the construction of a new tourist information centre and public toilets, as well as the construction of a new Changing Places facility as an extension to the existing substation. The development is to include new public seating, a performance space, and associated landscape elements."

Location

Kennedy Park, Eyre Square, Galway City

Applicants

Galway City Council

Prepared by:

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Note: The scope of this report is to provide the necessary information to the competent authority, to assess whether the proposed development alone and in combination with other projects, could have significant effects on Natura 2000 sites in the area in view of the sites conservation objectives, in accordance with Article 6 of the Habitats Directive, and does not purport to be an ecological assessment of the subject site.

1 INTRODUCTION

This Appropriate Assessment Screening Report has been prepared by Edel Hardiman (B.Sc) in consultation with James O'Donnell, Planning Consultant (MA, MRUP, Dip APM) on behalf of Galway City Council who are applying for planning permission for *“the demolition of the existing public toilet block and tourist kiosk within the pedestrian area of Eyre Square/Kennedy Park, and the construction of a new tourist information centre and public toilets, as well as the construction of a new Changing Places facility as an extension to the existing substation. The development is to include new public seating, a performance space, and associated landscape elements”* at Kennedy Park, Eyre Square, Galway City.

Edel Hardiman is a qualified ecologist and has obtained a Bachelor's degree in Environmental Science (BSc Hons) at the University of Galway. Edel has completed Appropriate Assessment Screening Reports, Natura Impact Statements, Ecological Impact Assessments, Bat Survey Reports and Environmental Impact Assessment Screening Reports for a wide range of public and private sector projects. She has conducted Bird Surveys and Bat Surveys in the Republic of Ireland. She is a registered member of CIEEM.

James O' Donnell is a qualified Town Planner and Project Manager with over 25 years planning experience in both the public and private sector in the west of Ireland, including 6 years experience as a local authority planning officer. James has particular experience in the project management and delivery of a wide range of complex planning applications requiring environmental and ecological assessment, in accordance with the requirements of the EU Habitats Directive and EIA Directives.

The site for the proposed works is located approximately 333 meters east of the Lough Corrib SAC (Site code: 000297), and 480 meters northwest of the Galway Bay Complex SAC (Site code: 000268) and the Inner Galway Bay SPA (Site code: 004031), which have been designated under the EU Habitats Directive & Birds Directive, and so it is necessary that the potential impacts of the proposed works be assessed by the competent authority, in accordance with Article 6 of the Habitats Directive. This report provides the information necessary for the competent authority to complete an Appropriate Assessment of the potential impacts of the proposed works on sites of European importance in the area. This report has also had regard to the provisions of the March 2021 publication entitled *“OPR Practice Note PN01- Appropriate Assessment Screening for Development Management.”*

Table 1.1: Step One: Description of the project/proposal and local site characteristics

Brief description of the project plan	<i>“The proposed development consists of the demolition of the existing public toilet block and tourist kiosk within the pedestrian area of Eyre Square/Kennedy Park, and the construction of a new tourist information centre and public toilets, as well as the construction of a new Changing Places facility as an extension to the existing substation. The development is to include new public seating, a performance space, and associated landscape elements.”</i>
Brief description of site characteristics	The application site features an existing and operational tourist information office single storey building as well as a single storey public toilet building located to the northwest of Kennedy Park, Eyre Square, within Galway City centre. The park features amenity grassland areas with parkland trees and landscaping throughout. Several seating areas are present throughout the park for public use and recreation. The Galway Ceant Rail and Bus Station is to the south of the Park, with the City Bus services to the north, east and south and taxi ranks to the north and east also present. The park is surrounded by buildings including bars, restaurants and hotels and is situated in a vibrant city centre urban environment. The site is bounded by pedestrian zones to the west and north with the R863 Regional road further to the north.

1.1 LEGISLATIVE BACKGROUND

1.1.1 EU Nature Conservation Legislation and Natura 2000 Sites.

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

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

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

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

Due to the proximity of the proposed development site to a candidate Special Area of Conservation, also known as a Natura 2000 site, an Appropriate Assessment may be required under the Habitats Directive 92/43/EEC, Article 6(3) and (4), Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites. Such assessments are required where it is identified that a proposed plan or project could have significant impact on a Natura 2000 site. Articles 6(3) and (4) of the Directive, state the following;

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

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

2 METHODOLOGY

The screening exercise will be conducted in line with the recommendations and protocol set out in the Guidance from the Commission (EC, 2021). This protocol involves a four-stage process to complete an Appropriate Assessment. At each stage, the findings of certain issues and tests will determine whether the next stage in the process is required.

2.1.1 Appropriate Assessment Stages

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

Stage 1: Screening

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

Stage 2: Appropriate Assessment

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

Stage 3: Assessment of Alternative Solutions

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

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

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

The results of a Stage 1 (Screening) Exercise are detailed in **Section 3** of this report.

3 STAGE 1: SCREENING FOR APPROPRIATE ASSESSMENT

3.1 DESCRIPTION OF THE PLAN OR PROJECT

Permission is sought “*the demolition of the existing public toilet block and tourist kiosk within the pedestrian area of Eyre Square/Kennedy Park, and the construction of a new tourist information centre and public toilets, as well as the construction of a new Changing Places facility as an extension to the existing substation. The development is to include new public seating, a performance space, and associated landscape elements.*”

A Site Layout Plan is included as **Appendix A** to this report.

3.2 DESCRIPTION OF THE EXISTING ENVIRONMENT

3.2.1 Site Location in Relation to Natura 2000 Sites

The proposed site lies in Kennedy Park, Eyre Square, within Galway City Center (Easting: 529971.24, Northing: 725423.62) (see **Figure 3.1** below). The site for the proposed development is approximately 333 meters east of the Lough Corrib SAC (Site code: 000297) (see **Figure 3.2** below). The site for the proposed development is located approximately 480 meters northwest of the Galway Bay Complex SAC (Site code: 000268) and the Inner Galway Bay SPA (Site code: 004031) (see **Figure 3.3** below).

The application site is not located within a known Lesser Horseshoe foraging range. The closest Lesser Horseshoe foraging range is 12.5 km to the southeast of the site and is associated with the Lough Fingal Complex SAC (see **Figure 3.4** below). It is noted that according to surveys carried out for the N6 Galway City Ring Road, there is a Lesser Horseshoe Bat (*Rhinolophus hipposideros*) roost (PBR218) recorded approximately 1.6 km to the north of the application site (see **Figure 3.5** below). However, owing to the intervening-built environment, which includes residential and commercial developments and public lighting and the absence of a continuous ecological corridor, no impacts are predicted in this regard.

All Natura 2000 sites within a 15km buffer of the proposed development are listed in **Table 3.1** and **Figure 3.6**.

Table 3.1: Step Two: Identification of relevant Natura 2000 sites using Source-Pathway-Receptor Model and Compilation of information on QI and Conservation Objectives

European Site (Code)	List of Qualifying Interest/Special Conservation Interest	Distance from the proposed development (m/km)	Receptor/Connection	Screen In – Yes/No
Lough Corrib SAC Site code: 000297	QIs- 15 Habitats and 9 Species https://www.npws.ie/protected-sites/sac/000297	333 meters	No direct/ indirect impacts predicted for this Natura 2000 site. Demolition and Construction Phase: Direct Impacts: The application site lies completely outside of this SAC, therefore direct impacts can be ruled out during the demolition and construction phase. Indirect Impacts: There are no identifiable ecological/ hydrological connector/ receptor pathways between this application site and this SAC. Given the significant built-up intervening distance, no indirect impacts/ effects are predicted for this SAC during the demolition and construction phase. Due to the small scale of the proposed works (the proposed gross floor area for the tourist office and the public toilets is 104 sqm, and the proposed gross floor area for the changing places is 17 sqm), cumulative impacts are not anticipated during the proposed demolition and construction phases of this development. Having regard to the established urban environment, the vibrant uses in the area, together with the small scale of the proposed works, it is concluded that noise disturbance would not impact QI Species. Operational Phase: Direct Impacts: The application site lies completely outside of this SAC, therefore direct impacts can be ruled out during the operational phase. Indirect Impacts: Indirect impacts can be ruled out during the operational phase of this development.	No

			Surface water will be managed through permeable paving, soakaways and a rainwater rill. All rainwater from impermeable areas will be collected via a series of underground pipes. There is existing development on site, and the proposed redevelopment of the tourist office is small in scale. Considering this, no impacts are predicted with regards to storm water runoff. The existing public toilets will be demolished and reconstructed to the west of the proposed tourist office building. The existing foul sewer connections will be removed and replaced following the construction of the public toilets. No impacts are predicted in this regard. There are no identifiable ecological/ hydrological connector/ receptor pathways between this application site and this SAC. Given the significant built-up intervening distance, no indirect impacts/ effects are predicted for this SAC during the operational phase for this development.	
Galway Bay Complex SAC Site code: 000268	QIs- 15 Habitats and 2 Species https://www.npws.ie/protected-sites/sac/000268	480 m	No direct/ indirect impacts predicted for this Natura 2000 site. Demolition and Construction Phase: Direct Impacts: The application site lies completely outside of this SAC, therefore direct impacts can be ruled out during the demolition and construction phase. Indirect Impacts: There are no identifiable ecological/ hydrological connector/ receptor pathways between this application site and this SAC. Given the significant built-up intervening distance, no indirect impacts/ effects are predicted for this SAC during the demolition and construction phase. Due to the small scale of the proposed works (the proposed gross floor area for the tourist office and the public toilets is 104 sqm, and the proposed gross floor area for the	No

			changing places is 17 sqm), cumulative impacts are not anticipated during the proposed demolition and construction phases of this development. Having regard to the established urban environment, the vibrant uses in the area, together with the small scale of the proposed works, it is concluded that noise disturbance would not impact QI Species. Operational Phase: Direct Impacts: The application site lies completely outside of this SAC, therefore direct impacts can be ruled out during the operational phase. Indirect Impacts: Indirect impacts can be ruled out during the operational phase of this development. Surface water will be managed through permeable paving, soakaways and a rainwater rill. All rainwater from impermeable areas will be collected via a series of underground pipes. There is existing development on site, and the proposed redevelopment of the tourist office is small in scale. Considering this, no impacts are predicted with regards to storm water runoff. The existing public toilets will be demolished and constructed to the west of the proposed tourist office building. The existing foul sewer connections will be removed and replaced following the construction of the public toilets. No impacts are predicted in this regard. There are no identifiable ecological/ hydrological connector/ receptor pathways between this application site and this SAC. Given the significant built-up intervening distance, no indirect impacts/ effects are predicted for this SAC during the operational phase for this development.	
East Burren Complex SAC	QIs- 14 Habitats and 3 Species https://www.npws.ie/protected-	13.9 km	No significant direct/ indirect impacts predicted due to the lack of	No

Site code: 001926	sites/sac/001926		connectors/ receptors and significant distance from the proposed site.	
Lough Fingall Complex SAC Site code: 000606	QIs- 6 Habitats and 1 Species https://www.npws.ie/protected-sites/sac/000606	13.5 km	No significant direct/ indirect impacts predicted due to the lack of connectors/ receptors and significant distance from the proposed site.	No
Connemara Bog Complex SAC Site code: 002034	QIs- 14 Habitats and 4 Species https://www.npws.ie/protected-sites/sac/002034	13 km	No significant direct/ indirect impacts predicted due to the lack of connectors/ receptors and significant distance from the proposed site.	No
Ross Lake and Woods SAC Site code: 001312	QIs- 1 Habitat and 1 Species https://www.npws.ie/protected-sites/sac/001312	14.1 km	No significant direct/ indirect impacts predicted due to the lack of connectors/ receptors and significant distance from the proposed site.	No
Creganna Marsh SPA Site code: 004142	QIs- 1 Species https://www.npws.ie/protected-sites/spa/004142	8 km	No significant direct/ indirect impacts predicted due to the lack of connectors/ receptors and significant distance from the proposed site.	No
Lough Corrib SPA Site code: 004042	QIs- 14 Species https://www.npws.ie/protected-sites/spa/004042	3.4 km	No significant direct/ indirect impacts predicted due to the lack of connectors/ receptors and significant distance from the proposed site.	No
Inner Galway Bay SPA Site code: 004031	QIs- 1 Habitat and 20 Bird Species https://www.npws.ie/protected-sites/spa/004031	480 m	No direct/ indirect impacts predicted for this Natura 2000 site. Demolition and Construction Phase: Direct Impacts: The application site lies completely outside of this SPA, therefore direct impacts can be ruled out during the demolition and construction phase. Indirect Impacts: There are no identifiable ecological/ hydrological connector/ receptor pathways between this application site and this SPA. Given the significant built-up intervening distance, no indirect impacts/ effects are predicted for this SPA during the demolition and construction phase. Due to the small scale of the proposed works (the proposed gross floor area for the tourist office and the public toilets is 104 sqm, and the proposed gross floor area for the changing places is 17 sqm), cumulative impacts are not anticipated during the proposed demolition and construction phases of this development. Having regard to the established urban environment, the vibrant uses in the area, together with the small scale of the proposed works, it is concluded that noise	No

			disturbance would not impact QI Species. Operational Phase: Direct Impacts: The application site lies completely outside of this SPA, therefore direct impacts can be ruled out during the operational phase. Indirect Impacts: Indirect impacts can be ruled out during the operational phase of this development. Surface water will be managed through permeable paving, soakaways and a rainwater rill. All rainwater from impermeable areas will be collected via a series of underground pipes. There is existing development on site, and the proposed redevelopment of the tourist office is small in scale. Considering this, no impacts are predicted with regards to storm water runoff. The existing public toilets will be demolished and constructed to the west of the proposed tourist office building. The existing foul sewer connections will be removed and replaced with new following the construction of the public toilets. No impacts are predicted in this regard. There are no identifiable ecological/ hydrological connector/ receptor pathways between this application site and this SPA. Given the significant built-up intervening distance, no indirect impacts/ effects are predicted for this SPA during the operational phase for this development.	
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No direct/ indirect impacts/ effects are predicted on the Lough Corrib SAC, Galway Bay Complex SAC and Inner Galway Bay SPA during the demolition, construction and operational phase of this development. This is due to the existing urban environment, significant built-up intervening distance to European sites and the lack of identifiable hydrological/ecological connector/ receptor pathways between the application site and these Natura 2000 sites. The proposed development involves the demolition of the existing tourist office and public toilets and the redevelopment of these public services.

Considering the small scale of the proposed works (the proposed gross floor area for the tourist office and the public toilets is 104 sqm, and the proposed gross floor area for the changing places is 17 sqm) and the established urban activities within Galway City centre, no impacts are predicted on any Natura 2000 site during the course of the development.

Due to the small scale of the proposed works, cumulative noise impacts are not anticipated during the proposed demolition, construction and operational phases of this development. Having regard to the established urban environment, the vibrant uses in the area, together with the small scale of the proposed works, it is concluded that noise disturbance would not impact QI Species associated with the Natura 2000 sites.

No other Natura 2000 site has been screened in either during construction phase or operational phase due to the significant distance and lack of connector/ receptor pathways.

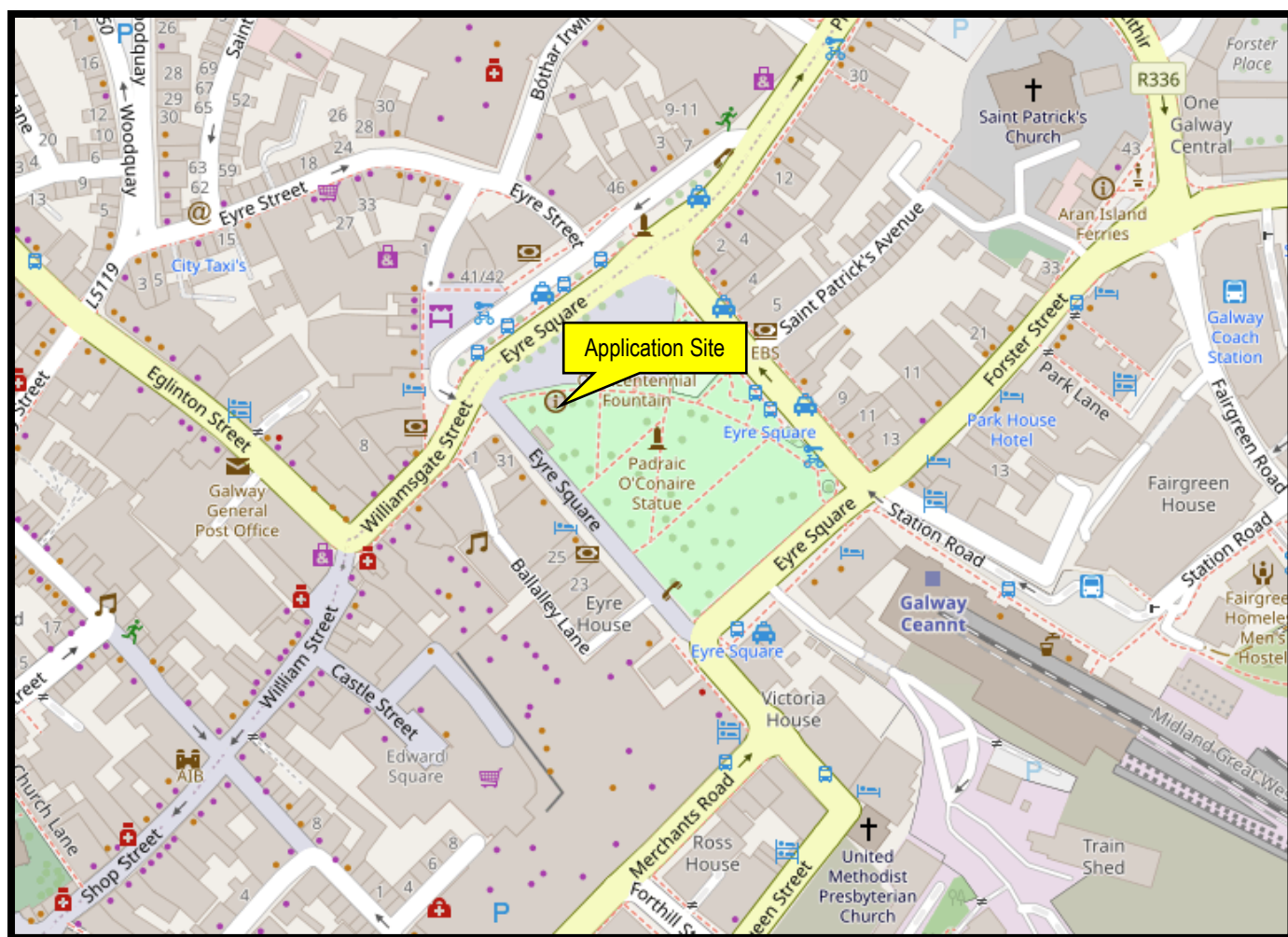


Figure 3.1: Indicative Location of the Application Site in Galway City

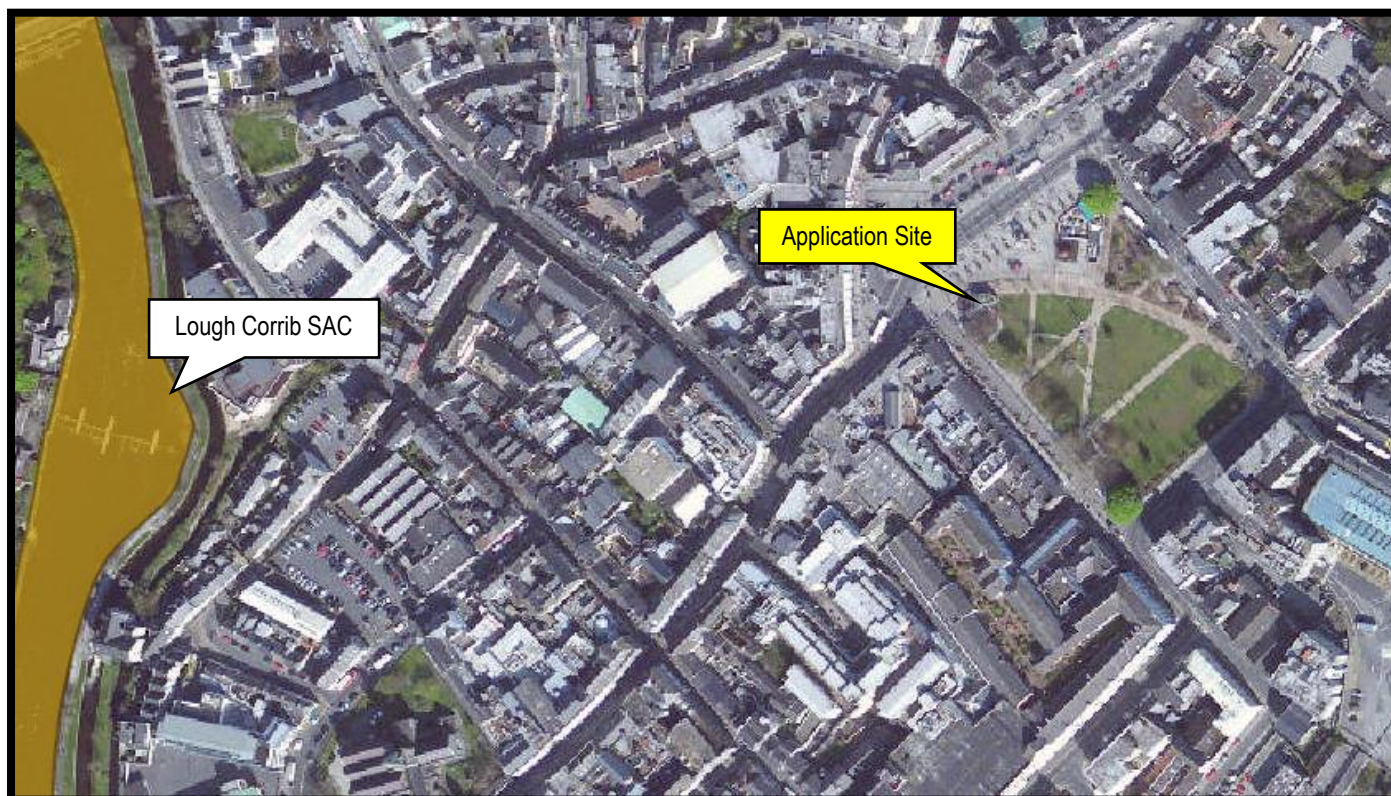


Figure 3.2: Site Location in Relation to the Lough Corrib SAC Natura 2000 site

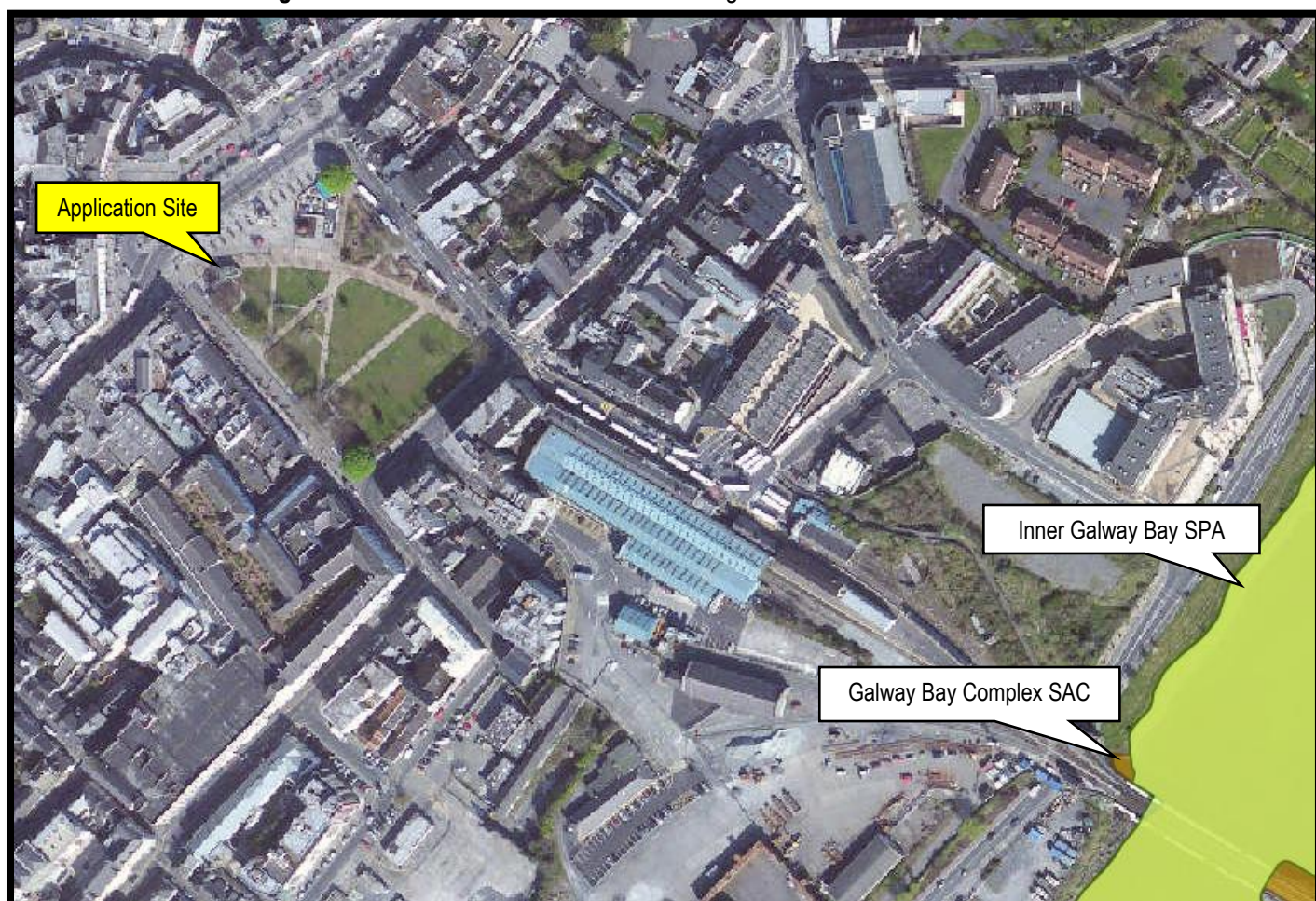


Figure 3.3: Site Location in Relation to the Galway Bay Complex SAC and Inner Galway Bay SPA Natura 2000 sites

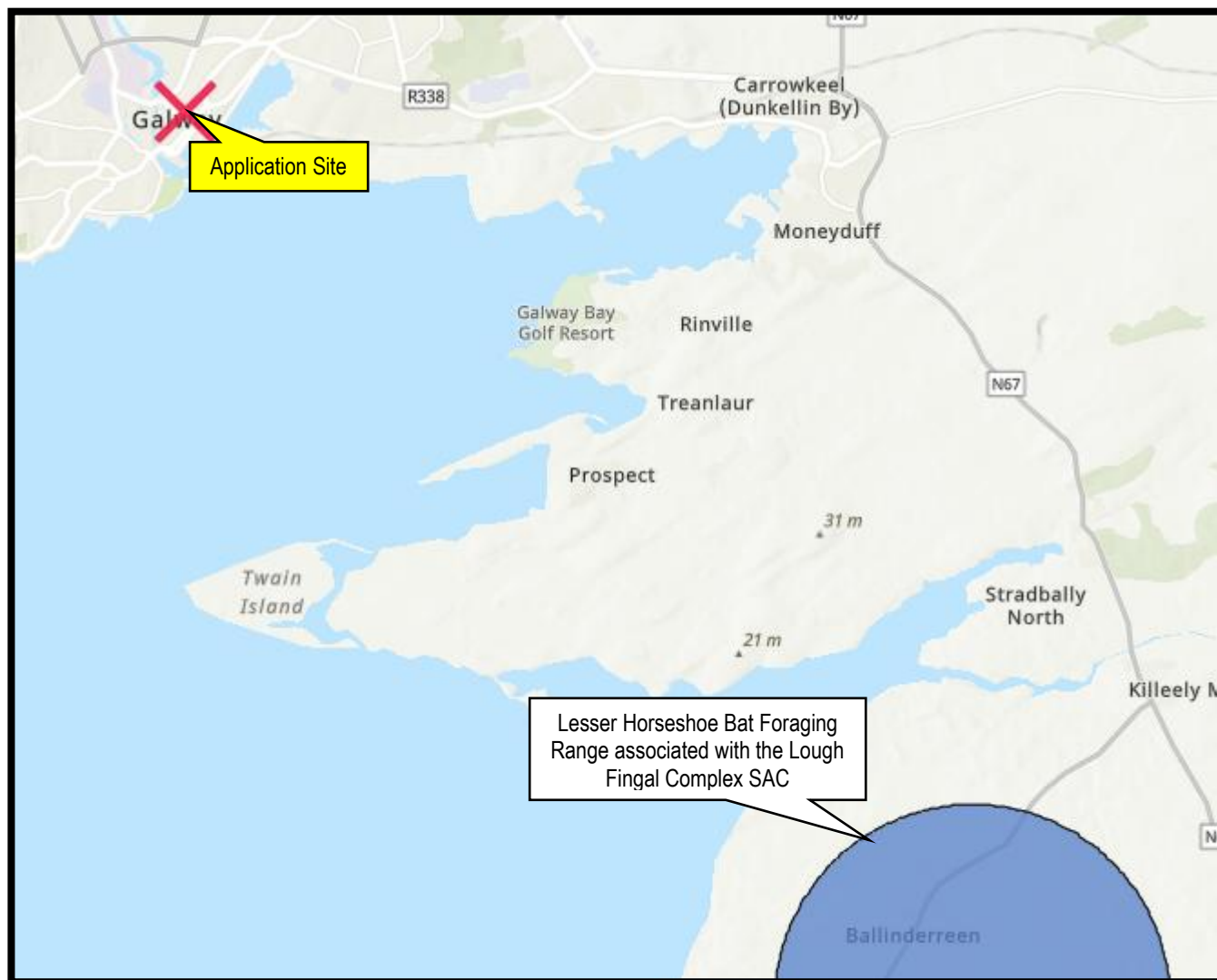


Figure 3.4: Site Location in Relation to the Lough Fingal Complex SAC Lesser Horseshoe foraging range

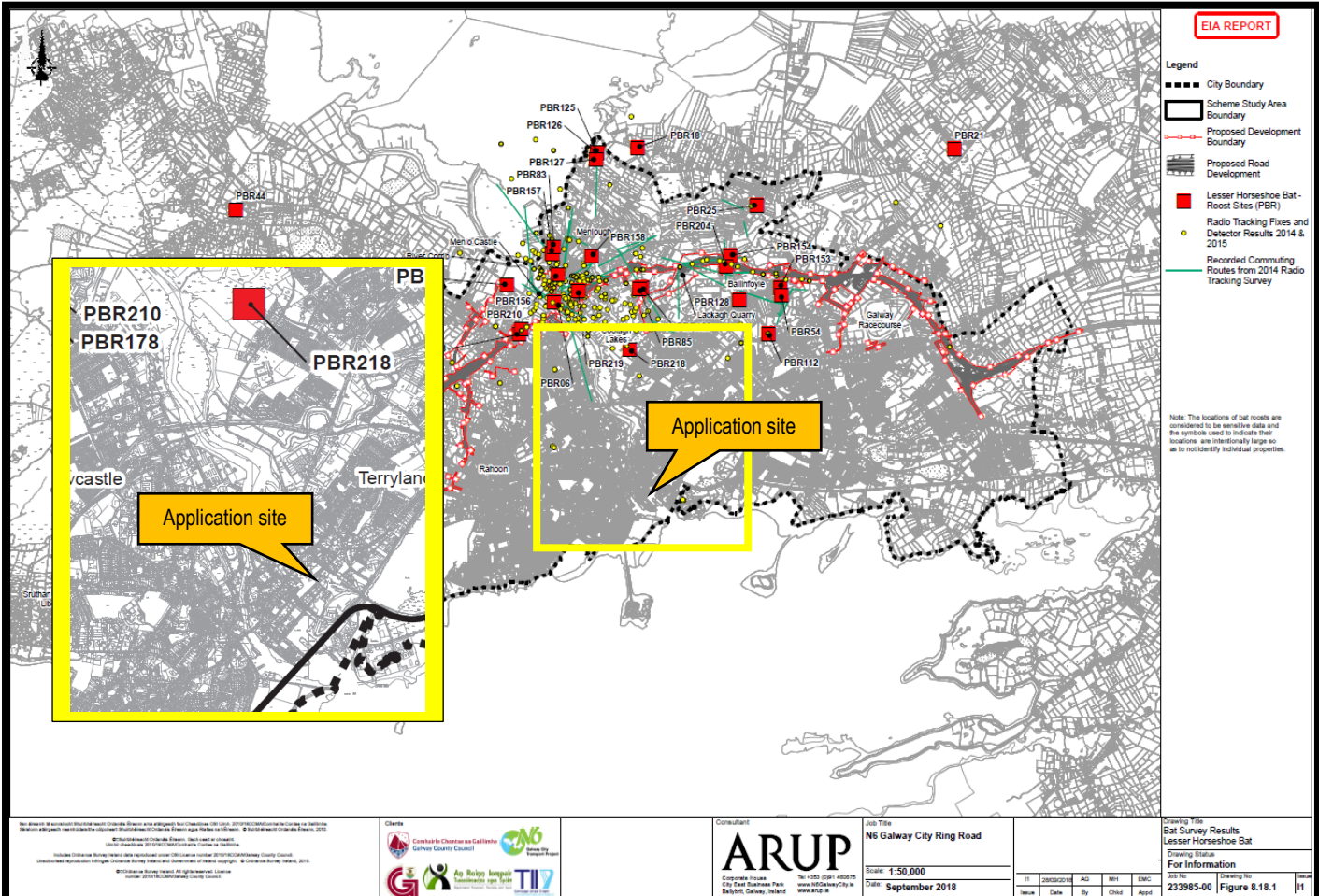


Figure 3.5: Site Location in Relation to the closest Lesser Horseshoe bat roost identified during the N6 Galway City Ring Road surveys

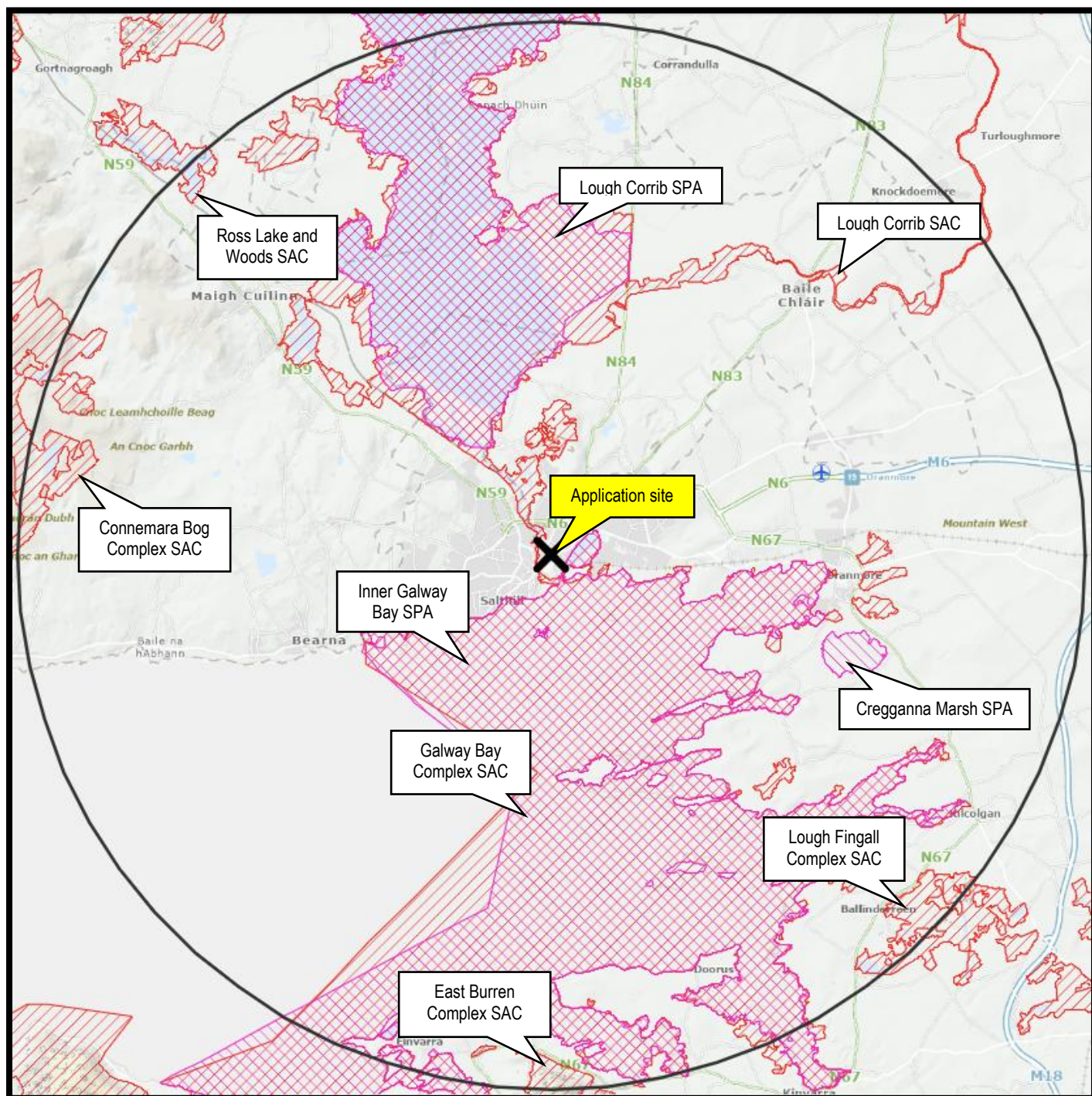


Figure 3.6: 15km Buffer Surrounding Site

4 BRIEF DESCRIPTION OF THE NATURA 2000 SITES WHICH MAY BE AFFECTED

Qualifying Features

Natura 2000 sites are designated on the presence of certain habitats and species which are afforded protection under the Birds and Habitats Directives. These habitats and species are regarded as 'qualifying features' of the Natura 2000 site. The following section provides details on the qualifying features of the Natura 2000 sites in question – Lough Corrib SAC, Galway Bay Complex SAC and Inner Galway Bay SPA Natura 2000 sites. The NPWS site synopses for the Lough Corrib SAC, Galway Bay Complex SAC and Inner Galway Bay SPA are given as Appendix B, Appendix C and Appendix D to this report, respectively.

Table 4.1 Lough Corrib SAC Habitat Information

Habitat code	Habitat name	Cover (ha)	Representativity
3110	Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>)	497.498 ha	C
3130	Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i>	11572.3ha	C
3260	Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation	252.48ha	C
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites)	252.48ha	B
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)	252.48ha	B
7110	Active raised bogs	39.22ha	B
7120	Degraded raised bogs still capable of natural regeneration	17.74ha	B
7150	Depressions on peat substrates of the <i>Rhynchosporion</i>	1.6769ha	A
7210	Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i>	252.48ha	A
7220	Petrifying springs with tufa formation (<i>Cratoneurion</i>)	252.48ha	C
7230	Alkaline fens	252.48ha	A
8240	Limestone pavements	252.48ha	A
91A0	Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles	252.48ha	A
91D0	Bog woodland	1.22ha	A

Table 4.2 Galway Bay Complex SAC Habitat Information

Habitat code	Habitat name	Cover (ha)	Representativity ¹
1140	Mudflats and sandflats not covered by seawater at low tide	744.229	A
1150	Coastal lagoons	76.67	A
1160	Large shallow inlets and bays	10824.50	A
1170	Reefs	2772.7028	A
1220	Perennial vegetation of stony banks	0.6241	B
1230	Vegetated sea cliffs of the Atlantic and Baltic coasts	18.85	A
1310	Salicornia and other annuals colonising mud and sand	1.348	C
1330	Atlantic salt meadows (<i>Glaucio-Puccinellietalia maritimae</i>)	263.80	A

1410	Mediterranean salt meadows (<i>Juncetalia maritimi</i>)	19.89	A
3180	Turloughs	63.31	B
5130	<i>Juniperus communis</i> formations on heaths or calcareous grasslands	1.41	B
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites)	144.09	B
7210	Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i>	144.09	B
7230	Alkaline fens	144.09	B
8240	Limestone pavements	125.84	B

For species, a value is given for 'Population Significance'. This value is based on the relative density or size of the population of that species within the Natura 2000 site with that of the national population. Population Significance is ranked on a scale from A to D where A - 100>=p>15%, B - 15>=p>2%, C - 2>=p>0% and D - Non-significant population. The qualifying species found in the Lough Corrib SAC, Galway Bay Complex SAC and Inner Galway Bay SPA Natura 2000 sites are outlined in Table 4.3, Table 4.4, and Table 4.5 below.

Table 4.3 Lough Corrib SAC Species Information

Species code	Latin name	English name	Population significance
1029	<i>Margaritifera margaritifera</i>	Freshwater Pearl Mussel	C
1092	<i>Austropotamobius pallipes</i>	White-clawed Crayfish	C
1095	<i>Petromyzon marinus</i>	Sea Lamprey	C
1096	<i>Lampetra planeri</i>	Brook Lamprey	C
1106	<i>Salmo salar</i>	Salmon	C
1303	<i>Rhinolophus hipposideros</i>	Lesser Horseshoe Bat	C
1355	<i>Lutra lutra</i>	Otter	C
1393	<i>Drepanocladus vernicosus</i>	Slender Green Feather-moss	B
1833	<i>Najas flexilis</i>	Slender Naiad	B

Table 4.4 Galway Bay Complex SAC Species Information

Species code	Latin name	English name	Population significance
1355	<i>Lutra Lutra</i>	Otter	C
1365	<i>Phoca vitulina</i>	Harbour Seal	B

Table 4.5 Inner Galway Bay SPA Species Information

Species code	Latin name	English name	Population significance
A002	<i>Gavia arctica</i>	Black-throated Diver	A
A003	<i>Gavia immer</i>	Great Northern Diver	B
A017	<i>Phalacrocorax carbo</i>	Cormorant	B
A028	<i>Ardea cinerea</i>	Grey Heron	C
A046	<i>Branta bernicla hrota</i>	Light-bellied Brent Goose	B
A050	<i>Anas penelope</i>	Wigeon	C
A052	<i>Anas crecca</i>	Teal	C
A069	<i>Mergus serrator</i>	Red-breasted Merganser	B
A137	<i>Charadrius hiaticula</i>	Ringed Plover	B
A140	<i>Pluvialis apricaria</i>	Golden Plover	C
A142	<i>Vanellus vanellus</i>	Lapwing	B
A149	<i>Calidris alpina</i>	Dunlin	C

A157	<i>Limosa lapponica</i>	Bar-tailed Godwit	B
A160	<i>Numenius arquata</i>	Curlew	C
A162	<i>Tringa totanus</i>	Redshank	C
A169	<i>Arenaria interpres</i>	Turnstone	C
A179	<i>Chroicocephalus ridibundus</i>	Black-headed Gull	C
A182	<i>Larus canus</i>	Common Gull	C
A191	<i>Sterna sandvicensis</i>	Sandwich Tern	B
A193	<i>Sterna hirundo</i>	Common Tern	B

Potential Pressures and Threats to the Natura 2000 Sites

The European Nature Information System (EUNIS) website contains data on all Natura 2000 sites, including details of the main threats to and pressures on their qualifying features. Potential threats to and pressures on the qualifying features of Lough Corrib SAC, Galway Bay Complex SAC and Inner Galway Bay SPA Natura 2000 sites are listed in Table 4.6, Table 4.7, and Table 4.8 below.

Table 4.6 Potential Pressures and Threats to the Lough Corrib SAC Natura 2000 Site

Activity	Location	Intensity	Influence
Diffuse pollution to surface waters due to household sewage and waste waters	Outside	High	Negative
Forest planting on open ground	Both	Medium	Negative
Roads, paths and railroads	Inside	Medium	Negative
Agricultural intensification	Both	High	Negative
Disposal of household / recreational facility waste	Inside	Low	Negative
Dispersed habitation	Inside	Medium	Negative
Other human intrusions and disturbances	Inside	High	Negative
Removal of hedges and copses or scrub	Inside	Medium	Negative
Mechanical removal of peat	Inside	High	Negative
Fertilisation	Both	Medium	Negative
Other human induced changes in hydraulic conditions	Both	Medium	Negative
Invasive non-native species	Inside	High	Negative
Piers / tourist harbours or recreational piers	Inside	Medium	Negative
Abandonment of pastoral systems, lack of grazing	Inside	Medium	Negative
Infilling of ditches, dykes, ponds, pools, marshes or pits	Inside	Medium	Negative
Sand and gravel extraction	Outside	Low	Negative
Continuous urbanisation	Outside	Medium	Negative

Table 4.7 Potential Pressures and Threats to the Galway Bay Complex SAC Natura 2000 Site

Activity	Location	Intensity	Influence
Slipways	Inside	Low	Negative
Sand and gravel extraction	Inside	Moderate	Negative
Estuarine and coastal dredging	Inside	Moderate	Negative
Hunting, fishing or collecting activities not referred to above	Inside	Low	Negative
Invasive non-native species	Both	Moderate	Negative
Reclamation of land from sea, estuary or marsh	Inside	Moderate	Negative
Marine and Freshwater Aquaculture	Both	Moderate	Negative

Golf course	Inside	Low	Negative
Sea defense or coast protection works, tidal barrages	Inside	High	Negative
Non-motorized nautical sports	Inside	Low	Negative
Industrial ports	Inside	High	Negative
Disposal of inert materials	Inside	Low	Negative
Diffuse pollution to surface waters due to agricultural and forestry activities	Both	Low	Negative
Diffuse pollution to surface waters due to household sewage and waste waters	Both	High	Negative
Modification of water flow (tidal & marine currents)	Both	High	Negative
Shipping lanes, ports, marine constructions	Inside	Low	Negative
Non-motorized nautical sports	Inside	High	Negative
Paths, tracks, cycling tracks	Inside	Low	Negative
Slipways	Inside	Low	Negative
Agricultural intensification	Inside	Moderate	Negative
Non intensive cattle grazing	Inside	Moderate	Negative
Reclamation of land from sea, estuary or marsh	Inside	Moderate	Negative
Non intensive sheep grazing	Inside	Moderate	Negative
Removal of beach materials	Inside	Moderate	Negative
Pipelines	Inside	Moderate	Negative

Table 4.8 Potential Pressures and Threats to the Inner Galway Bay SPA Natura 2000 Site

Activity	Location	Intensity	Influence
Walking, horse-riding and non-motorised vehicles	Inside	Medium	Negative
Dykes, embankments, artificial beaches, general	Inside	Medium	Negative
Industrial or commercial areas	Outside	Medium	Negative
Hunting	Inside	Low	Negative
Marine and Freshwater Aquaculture	Inside	Medium	Negative
Reclamation of land from sea, estuary or marsh	Inside	High	Negative
Nautical sports	Inside	Medium	Negative
Grazing	Inside	Low	Negative
Urbanised areas, human habitation	Outside	High	Negative
Discharges	Inside	High	Negative
Leisure fishing	Inside	Medium	Negative
Roads, motorways	Outside	Medium	Negative
Fertilisation	Outside	Medium	Negative

Conservation Objectives of the Natura 2000 Sites

Once a site has been designated as a Natura site, a management plan should be put together for the site which sets out the Conservation Objectives for the site. Every effort should then be made to ensure that these objectives are fulfilled, in order to prevent potential impacts to the qualifying features of the site and maintain as far as possible their favourable conservation status.

European and national legislation places a collective obligation on Ireland and its citizens to maintain at favourable conservation status sites designated as Special Areas of Conservation and Special Protection Areas. The Government

and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

Favourable conservation status of a habitat is achieved when: its natural range, and area it covers within that range, is stable or increasing, and the ecological factors that 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 data on the species concerned indicate that it is maintaining itself, and the natural range of the species is neither being reduced or 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.

Site-Specific Conservation Objectives for Lough Corrib SAC, Galway Bay Complex SAC and Inner Galway Bay SPA have been published. Qualifying interests and objectives (bulleted) are listed below.

Lough Corrib SAC

[3110] Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*)

- Area of habitat is stable or increasing, subject to natural processes
- No decline, subject to natural processes of habitat distribution
- Typical species present, in good condition, and demonstrating typical abundances and distribution
- All characteristic zones should be present, correctly distributed and in good condition
- Restore maximum depth of vegetation, subject to natural processes
- Maintain appropriate natural hydrological regime necessary to support the habitat
- Restore appropriate substratum type, extent and chemistry to support the vegetation
- Restore appropriate Secchi transparency. There should be no decline in Secchi depth/transparency
- Restore the concentration of nutrients in the water column to sufficiently low levels to support the habitat and its typical species
- Restore appropriate water quality to support the habitat, including high chlorophyll a status
- Maintain appropriate water quality to support the habitat, including high phytoplankton composition status
- Restore/maintain trace/absent attached algal biomass
- Maintain high macrophyte status
- Maintain appropriate water and sediment pH, alkalinity and cation concentrations to support the habitat, subject to natural processes
- Restore/maintain appropriate water colour to support the habitat
- Restore/maintain appropriate organic carbon levels to support the habitat

- Restore/maintain appropriate turbidity to support the habitat
- Maintain the area and condition of fringing habitats necessary to support the natural structure and functioning of habitat 3110

Predicted Impacts: Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[3130] Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or *Isoeto-Nanojuncetea*

- Area stable or increasing, subject to natural processes
- No decline, subject to natural processes. See map 3 for indicative lake habitat distribution
- Typical species present, in good condition, and demonstrating typical abundances and distribution
- All characteristic zones should be present, correctly distributed and in good condition
- Restore maximum depth of vegetation, subject to natural processes
- Maintain appropriate natural hydrological regime necessary to support the habitat
- Restore appropriate substratum type, extent and chemistry to support the vegetation
- Restore appropriate Secchi transparency. There should be no decline in Secchi depth/transparency
- Restore the concentration of nutrients in the water column to sufficiently low levels to support the habitat and its typical species
- Restore appropriate water quality to support the habitat, including high chlorophyll a status
- Maintain appropriate water quality to support the habitat, including high phytoplankton composition status
- Restore/maintain trace/absent attached algal biomass
- Maintain high macrophyte status
- Maintain appropriate water and sediment pH, alkalinity and cation concentrations to support the habitat, subject to natural processes
- Restore/maintain appropriate water colour to support the habitat
- Restore/maintain appropriate organic carbon levels to support the habitat
- Restore/maintain appropriate turbidity to support the habitat
- Maintain the area and condition of fringing habitats necessary to support the natural structure and functioning of habitat 3130

Predicted Impacts: Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[3140] Hard oligo-mesotrophic waters with benthic vegetation of Chara spp

- Area stable or increasing, subject to natural processes
- No decline, subject to natural processes.
- Typical species present, in good condition, and demonstrating typical abundances and distribution
- All characteristic zones should be present, correctly distributed and in good condition
- Restore maximum depth of vegetation, subject to natural processes
- Maintain appropriate natural hydrological regime necessary to support the habitat
- Restore appropriate substratum type, extent and chemistry to support the vegetation
- Restore appropriate Secchi transparency. There should be no decline in Secchi depth/transparency
- Restore the concentration of nutrients in the water column to sufficiently low levels to support the habitat and its typical species
- Maintain appropriate water quality to support the habitat, including high chlorophyll a status
- Maintain appropriate water quality to support the habitat, including high phytoplankton composition status
- Restore/maintain trace/absent attached algal biomass (<5% cover) and high phytobenthos status.
- Restore high macrophyte status
- Maintain appropriate water and sediment pH, alkalinity and cation concentrations to support the habitat, subject to natural processes
- Restore/maintain appropriate water colour to support the habitat
- Restore/maintain appropriate organic carbon levels to support the habitat
- Restore/maintain appropriate turbidity to support the habitat
- Maintain the area and condition of fringing habitats necessary to support the natural structure and functioning of habitat 3140

Predicted Impacts: Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/ hydrological connector/ receptor pathways between this QI and the application site.

[3260] Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation

- Area stable or increasing, subject to natural processes
- No decline, subject to natural processes
- Maintain appropriate hydrological regimes
- Maintain appropriate substratum particle size range, quantity and quality, subject to natural process
- Maintain appropriate water quality to support the natural structure and functioning of the habitat
- Typical species of the relevant habitat sub-type should be present and in good condition
- The area of active floodplain at and upstream of the habitat should be maintained

- Maintain the area and condition of fringing habitats necessary to support the habitat and its sub-types

Predicted Impacts: Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[6210] Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (* important orchid sites)

- Area stable or increasing, subject to natural processes
- No decline, subject to natural processes of occurrence
- At least seven positive indicator species present, including two "high quality" species
- Negative indicator species collectively not more than 20% cover, with cover by an individual species not more than 10%
- Cover of non-native species not more than 1%
- Cover of woody species (except certain listed species) and bracken (*Pteridium aquilinum*) not more than 5% cover
- Broadleaf herb component of vegetation between 40% and 90%
- At least 30% of sward between 5cm and 40cm tall
- Litter cover not more than 25%
- Not more than 10% bare soil
- Area showing signs of serious grazing or other disturbance less than 20m²

Predicted Impacts: Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[6410] *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)

- Area stable or increasing, subject to natural processes
- No decline, subject to natural processes of occurrence
- At least seven positive indicator species present, including one "high quality" species as listed in O'Neill et al. (2013)
- Negative indicator species collectively not more than 20% cover, with cover by an individual species not more than 10%
- Cover of non-native species not more than 1%
- Hair mosses (*Polytrichum* spp.) not more than 25% cover
- Cover of woody species and bracken (*Pteridium aquilinum*) not more than 5%

- Broadleaf herb component of vegetation between 40% and 90%
- At least 30% of sward between 10cm and 80cm tall
- Litter cover not more than 25%
- Not more than 10% bare soil
- Area showing signs of serious grazing or other disturbance less than 20m²

Predicted Impacts: Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[7110] Active raised bogs

- Restore the area of active raised bog to 78.8ha, subject to natural processes
- Restore the distribution and variability of active raised bog across the SAC
- No decline in extent of high bog subject to the conservation requirements of the SAC
- Restore appropriate water levels throughout each site
- Restore, where possible, appropriate high bog topography, flow directions and slopes
- Restore adequate transitional areas to support/protect the raised bog ecosystem and the services it provides
- Restore 39.4ha of central ecotope/active flush/soaks/bog woodland as appropriate
- Restore adequate cover of high quality microtopographical features
- Restore adequate cover of bog moss (Sphagnum) species to ensure peatforming capacity
- Restore, where appropriate, typical active raised bog flora
- Restore, where appropriate, typical active raised bog fauna
- Maintain features of local distinctiveness, subject to natural processes
- Negative physical features absent or insignificant
- Native negative indicator species at insignificant levels
- Non-native invasive species at insignificant levels and not more than 1% cover
- Air quality surrounding the bogs close to natural reference conditions. The total nitrogen deposition should not exceed 5kg N/ha/y
- Water quality on the high bog and in transitional areas close to natural reference conditions

Predicted Impacts: Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[7120] Degraded raised bogs still capable of natural regeneration

- The long-term aim for Degraded raised bogs still capable of natural regeneration is that its peat-forming capability is re-established; therefore, the conservation objective for this habitat is inherently linked to that of Active raised bogs (7110) and a separate conservation objective has not been set in Lough Corrib SAC

Predicted Impacts: Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[7150] Depressions on peat substrates of the Rhynchosporion

- Depressions on peat substrates of the Rhynchosporion is an integral part of good quality Active raised bogs (7110) and thus a separate conservation objective has not been set for the habitat in Lough Corrib SAC

Predicted Impacts: Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[7210] Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*

- Area stable or increasing, subject to natural processes
- No decline, subject to natural processes of occurrence
- Maintain appropriate natural hydrological regimes necessary to support the natural structure and functioning of the habitat
- Maintain active peat formation, where appropriate
- Maintain appropriate water quality, particularly nutrient levels, to support the natural structure and functioning of the habitat
- Maintain vegetation cover of typical species including brown mosses and vascular plants
- Cover of non-native species less than 1%
- Cover of scattered native trees and shrubs less than 10%
- Cover of disturbed bare ground not more than 10%. Where tufa is present, disturbed bare ground not more than 1%
- Areas showing signs of drainage as a result of drainage ditches or heavy trampling not more than 10%
- No decline in distribution or population sizes of rare, threatened or scarce species associated with the habitat

Predicted Impacts: Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[7220] Petrifying springs with tufa formation (*Cratoneurion*)

- Area stable or increasing, subject to natural processes
- No decline, subject to natural processes of occurrence
- Maintain appropriate hydrological regimes
- No increase from baseline nitrate level and less than 10mg/l
- No increase from baseline phosphate level and less than 15µg/l
- At least three positive/high quality indicator species as listed in Lyons and Kelly (2016) and no loss from baseline number
- Potentially negative indicator species should not be Dominant or Abundant; invasive species should be absent
- Field layer height between 10cm and 50cm (except for bryophyte-dominated ground <10cm)
- Cover should not be Dominant or Abundant

Predicted Impacts: Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[7230] Alkaline fens

- Area stable or increasing, subject to natural processes
- No decline, subject to natural processes of occurrence
- Maintain soil nutrient status within natural range
- Maintain active peat formation, where appropriate
- Maintain appropriate natural hydrological regimes necessary to support the natural structure and functioning of the habitat
- Maintain appropriate water quality, particularly nutrient levels, to support the natural structure and functioning of the habitat
- Maintain variety of vegetation communities, subject to natural processes
- Number of brown moss species present at each monitoring stop is at least one
- Number of positive vascular plant indicator species present at each monitoring stop is at least two for small-sedge flushes and at least three for black bog-rush (*Schoenus nigricans*) flush and bottle sedge (*Carex rostrata*) fen
- Total cover of brown moss species and positive vascular plant indicator species at least 20% for small-sedge flushes and at least 75% cover for black bog-rush (*Schoenus nigricans*) flush and bottle sedge (*Carex rostrata*) fen
- Total cover of negative indicator species less than 1%
- Cover of non-native species less than 1%
- Cover of scattered native trees and shrubs less than 10%

- Total cover of soft rush (*Juncus effusus*) and common reed (*Phragmites australis*) less than 10%
- Proportion of live leaves and/or flowering shoots of vascular plants that are more than 5cm above the ground surface should be at least 50%
- Cover of disturbed bare ground less than 10%
- Area showing signs of drainage as a result of drainage ditches or heavy trampling less than 10%
- Disturbed proportion of vegetation cover where tufa is present is less than 1%
- No decline in distribution or population sizes of rare, threatened or scarce species associated with the habitat

Predicted Impacts: Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[8240] Limestone pavements

- Area stable or increasing, subject to natural processes
- No decline, subject to natural processes of occurrence
- At least seven positive indicator species present
- Bryophyte cover at least 50% on wooded pavement
- Collective cover of negative indicator species on exposed pavement not more than 1%
- Cover of non-native species not more than 1% on exposed pavement; on wooded pavement not more than 10% with no regeneration
- Scrub cover no more than 25% of exposed pavement
- Bracken (*Pteridium aquilinum*) cover no more than 10% on exposed pavement
- Canopy cover on wooded pavement at least 30%
- Sufficient quantity of dead wood on wooded pavement to provide habitat for saproxylic organisms
- No evidence of grazing pressure on wooded pavement
- Indicators of local distinctiveness are maintained

Predicted Impacts: Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[91A0] Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles

- Area stable or increasing, subject to natural processes
- No decline in occurrence

- Area stable or increasing. Where topographically possible, "large"; woods at least 25ha in size and "small" woods at least 3ha in size. Area stable or increasing. Where topographically possible, "large"; woods at least 25ha in size and "small" woods at least 3ha in size.
- Diverse structure with a relatively closed canopy containing mature trees; subcanopy layer with semimature trees and shrubs; and well-developed herb layer
- Maintain diversity and extent of community types
- Seedlings, saplings and pole age-classes occur in adequate proportions to ensure survival of woodland canopy
- At least 30m³/ha of fallen timber greater than 10cm diameter; 30 snags/ha; both categories should include stems greater than 40cm diameter
- No decline in woodland structure for indicators of local distinctiveness and veteran trees.
- No decline. Native tree cover not less than 95%
- A variety of typical native species present, depending on woodland type, including oak (*Quercus petraea*) and birch (*Betula pubescens*)
- Negative indicator species, particularly non-native invasive species, absent or under control

Predicted Impacts: Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[91D0] Bog woodland

- Area stable or increasing, subject to natural processes
- No decline, subject to natural processes of occurrence
- Birch (*Betula pubescens*), bog moss (*Sphagnum*) species and at least five other indicator species present
- Both native and non-native invasive species absent or under control. Total cover should be less than 10%
- A minimum 30% cover of birch (*Betula pubescens*) with a median canopy height of 4m
- Dwarf shrub cover not more than 50%
- Ling (*Calluna vulgaris*) cover not more than 40%
- Bryophyte cover at least 50%, with bog moss (*Sphagnum* spp.) cover at least 25%
- Each size class present
- Senescent or dead wood present

Predicted Impacts: Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[1029] *Margaritifera margaritifera* (Freshwater Pearl Mussel)

- Maintain at 9.1km
- Restore Owenriff population to at least one million adult mussels
- Restore to at least 20% of population no more than 65mm in length; and at least 5% of population no more than 30mm in length
- No more than 5% decline from previous number of live adults counted; dead shells less than 1% of the adult population and scattered in distribution
- Restore suitable habitat in more than 8.3km in the Owenriff and Glenawbeg rivers (see NPWS Map) and any additional stretches necessary for salmonid spawning
- Restore condition of suitable habitat
- Restore water quality - macroinvertebrates: EQR greater than 0.90 (Q4-5 or Q5); phytobenthos: EQR greater than 0.93
- Restore substratum quality - filamentous algae: absent or trace (less than 5%); macrophytes: absent or trace (less than 5%)
- Restore substratum quality - stable cobble and gravel substrate with very little fine material; no artificially elevated levels of fine sediment
- Restore to no more than 20% decline from water column to 5cm depth in substrate
- Restore appropriate hydrological regimes
- Maintain sufficient juvenile salmonids to host glochidial larvae
- Maintain the area and condition of fringing habitats necessary to support the population

Predicted Impacts: Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[1092] *Austropotamobius pallipes* (White-clawed Crayfish)

- No reduction from baseline occurrence, in both Lough Corrib and rivers
- Juveniles and/or females with eggs in all occupied tributaries and occupied parts of Lough Corrib
- No alien crayfish species
- No instances of disease
- At least Q3-4 at all sites sampled by EPA
- No decline in habitat heterogeneity or habitat quality

Predicted Impacts: Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[1095] *Petromyzon marinus* (Sea Lamprey)

- Greater than 75% of main stem length of rivers accessible from estuary
- At least three age/size groups present
- Mean catchment juvenile density at least 1/m²
- No decline in extent and distribution of spawning beds
- More than 50% of sample sites positive, with a minimum of four positive sites in a catchment, which are at least 5km apart

Predicted Impacts: Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/ hydrological connector/ receptor pathways between this QI and the application site.

[1096] *Lampetra planeri* (Brook Lamprey)

- Access to all watercourses down to first order streams
- At least three age/size groups of brook/river lamprey present
- Mean catchment ammocoete density of brook/river lamprey at least 5/m²
- No decline in extent and distribution of spawning beds
- More than 50% of sample sites positive for juvenile habitats

Predicted Impacts: Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/ hydrological connector/ receptor pathways between this QI and the application site.

[1106] *Salmo salar* (Salmon)

- 100% of river channels down to second order accessible from estuary
- Conservation limit (CL) for each system consistently exceeded
- Maintain or exceed 0+ fry mean catchment-wide abundance threshold value. Currently set at 17 salmon fry/5 minutes sampling
- No significant decline
- No decline in number and distribution of spawning redds due to anthropogenic causes
- At least Q4 at all sites sampled by EPA

Predicted Impacts: Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/ hydrological connector/ receptor pathways between this QI and the application site.

[1303] *Rhinolophus hipposideros* (Lesser Horseshoe Bat)

- Minimum number of 100 bats for summer roost (roost id. 217 in NPWS database)
- No decline in condition and nature of summer and auxillary roosts
- No Significant decline in foraging habitat
- No significant loss, within 2.5km of qualifying roosts.
- No significant increase in artificial light intensity adjacent to named roost or along commuting routes within 2.5km of the roost.

Predicted Impacts: Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/ hydrological connector/ receptor pathways between this QI and the application site.

[1355] *Lutra lutra* (Otter)

- No significant decline in distribution
- No significant decline. Area mapped and calculated as 1,054ha along river banks/ lake shoreline/around ponds
- No significant decline. Length mapped and calculated as 314.2km
- No significant decline. Area mapped and calculated as 4,178ha
- No significant decline in couching sites, holts and fish biomass available
- No increase in barriers to connectivity.

Predicted Impacts: Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/ hydrological connector/ receptor pathways between this QI and the application site.

[1833] *Najas flexilis* (Slender Naiad)

- Restore the spatial extent of *Najas flexilis* within the lake, subject to natural processes
- Restore the depth range of *Najas flexilis* within the lake, subject to natural processes
- Restore plant fitness, subject to natural processes
- Restore the cover abundance of *Najas flexilis*, subject to natural processes
- Restore to at least the north-western bay, subject to natural processes
- Restore, subject to natural processes
- Maintain appropriate natural hydrological regime necessary to support the habitat for the species
- Restore appropriate substratum type, extent and chemistry to support the population of the species
- Restore appropriate water quality to support the population of the species
- Maintain appropriate water and sediment pH, alkalinity and cation concentrations to support the population of *Najas flexilis*, subject to natural processes

- Restore/maintain appropriate water colour to support the population of *Najas flexilis*
- Restore appropriate associated species and vegetation communities to support the population of *Najas flexilis*
- Maintain the area and condition of fringing habitats necessary to support the population of *Najas flexilis*

Predicted Impacts: Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[6216] *Hamatocaulis vernicosus* (Slender Green Feather-moss)

- No decline, subject to natural processes with regards to distribution of populations and population size
- Mean percentage cover of slender green feather-moss (*Hamatocaulis vernicosus*) should be at least 45%
- No decline, subject to natural processes of suitable habitats
- Maintain suitable hydrological conditions
- Mean percentage tree cover should be less than 15%
- Mean percentage shrub cover should be less than 20%
- Mean percentage grass species cover should be less than 25%
- Mean percentage bryophyte cover should be more than 50%
- Mean percentage cover of *Calliergonella cuspidate* should be less than 15%
- Mean vegetation height should not exceed 40cm

Predicted Impacts: Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

Galway Bay Complex SAC

[1140] Mudflats and sandflats not covered by seawater at low tide

- The permanent habitat area is stable or increasing, subject to natural processes.
- Conserve the following community types in a natural condition: Intertidal sandy mud community complex; and Intertidal sand community complex.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[1150] Coastal lagoons

- Area stable, subject to slight natural variation. Favourable reference area 76.7ha.
- No decline, subject to natural processes.
- Median annual salinity and temporal variation within natural ranges.

- Annual water level fluctuations and minimal within natural ranges.
- Appropriate hydrological connections between lagoons and sea, including where necessary, appropriate management.
- Annual median chlorophyll a within natural ranges and less than Njg/L.
- Annual median MRP within natural ranges 0.1mg/L.
- Annual median DIN within natural ranges and less than 0.15mg/L.
- Macrophyte colonisation to at least 2m depth.
- Maintain number and extent of listed lagoonal specialists, subject to natural variation.
- Maintain listed lagoon specialists, subject to natural variation.
- Negative indicator species absent or under control.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[1160] Large shallow inlets and bays

- The permanent habitat area is stable or increasing, subject to natural processes.
- Maintain the extent of the *Zostera*-dominated community complex and the maërl-dominated community, subject to natural processes.
- Conserve the high quality of *Zostera*-dominated communities, subject to natural processes.
- Conserve the high quality of the maërl-dominated community, subject to natural processes.
- Conserve the following community types in a natural condition: Intertidal sandy mud community complex; Intertidal sand community complex; Fine to medium sand with bivalves community complex; Sandy mud to mixed sediment community complex; Mixed sediment dominated by *Mytilidae* community complex; Shingle; *Fucoid*-dominated community complex; *Laminaria*-dominated community complex; and Shallow sponge-dominated community complex.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[1170] Reefs

- The distribution of reefs is stable or increasing, subject to natural processes.
- The permanent habitat area is stable, subject to natural processes.
- Maintain the extent of the *Mytilus*-dominated reef community, subject to natural processes.
- Conserve the high quality of the *Mytilus*-dominated reef community, subject to natural processes.
- Conserve the following community types in a natural condition: *Fucoid* dominated community complex; *Laminaria* dominated community complex; and Shallow sponge-dominated community complex.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[1220] Perennial vegetation of stony banks

- Area stable or increasing, subject to natural processes, including erosion and succession.
- No decline, or change in habitat distribution, subject to natural processes.
- Maintain the natural circulation of sediment and organic matter, without any physical obstructions.
- Maintain range of coastal habitats including transitional zones, subject to natural processes including erosion and succession.
- Maintain the typical vegetated shingle flora including the range of subcommunities within the different zones. Typical species include sea sandwort (*Honckenya peploides*), sea beet (*Beta vulgaris ssp maritima*), rock samphire (*Crithmum maritimum*), sea mayweed (*Tripleurospermum maritimum*), yellow-horned poppy (*Glaucium flavum*) and sea campion (*Silene uniflora*).
- Negative indicator species (including non-natives) to represent less than 5% cover.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[1310] Salicornia and other annuals colonising mud and sand

- Area stable or increasing, subject to natural processes, including erosion and succession.
- Maintain/restore, natural circulation of sediments and organic matter, without any physical obstructions.
- Maintain, or where necessary restore creek and pan structure, subject to natural processes, including erosion and succession.
- Maintain natural tidal regime.
- Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession.
- Maintain structural variation within sward.
- Maintain more than 90% of area outside creeks vegetated.
- Maintain the range of species-poor communities with typical species listed in SMP (McCorry and Ryle, 2009).
- There is currently no common cordgrass (*Spartina anglica*) in this SAC. Prevent establishment of cordgrass.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[1330] Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

- Area increasing, subject to natural processes, including erosion and succession.
- No decline or change in habitat distribution, subject to natural processes.
- Maintain/restore natural circulation of sediments and organic matter, without any physical obstructions.
- Maintain creek and pan structure, subject to natural processes, including erosion and succession.
- Maintain natural tidal regime.
- Maintain range of coastal habitats including transitional zones, subject to natural processes including erosion and succession.
- Maintain structural variation within sward.
- Maintain more than 90% area outside creeks vegetated.
- Maintain range of subcommunities with typical species listed in SMP (McCorry and Ryle, 2009).
- There is currently no common cordgrass (*Spartina anglica*) in this SAC. Prevent establishment of cordgrass.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[1410] Mediterranean salt meadows (*Juncetalia maritimi*)

- Area stable or increasing, subject to natural processes, including erosion and succession.
- No decline, subject to natural processes.
- Maintain/restore natural circulation of sediments and organic matter, without any physical obstructions.
- Maintain creek and pan structure, subject to natural processes, including erosion and succession.
- Maintain natural tidal regime.
- Maintain range of coastal habitats including transitional zones, subject to natural processes including erosion and succession.
- Maintain structural variation in the sward.
- Maintain more than 90% of area outside creeks vegetated.
- Maintain range of subcommunities with typical species listed in SMP (McCorry and Ryle, 2009).
- There is currently no common cordgrass (*Spartina anglica*) in this SAC. Prevent establishment of cordgrass.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[3180] Turloughs

- Area stable at c.59ha or increasing, subject to natural processes.
- No decline, subject to natural processes.
- Appropriate natural hydrological regimes necessary to support the natural structure and functioning of the habitat.

- Variety, area and extent of soil types necessary to support turlough vegetation and other biota.
- Nutrient status appropriate to soil types.
- Sufficient wet bare ground, as appropriate.
- Appropriate CaCO₃ deposition rates and concentration in soil.
- Appropriate water quality to support the natural structure and functioning of the habitat.
- Active peat formation, where appropriate.
- Maintain area of sensitive and high conservation value vegetation communities/units at each turlough.
- Maintain vegetation zonation/mosaic characteristic of each turlough.
- Sward heights appropriate to the vegetation unit, and a variety of sward heights across each turlough.
- Maintain typical species within and across all turloughs.
- Maintain marginal fringing habitats that support turlough vegetation, invertebrate, mammal and/or bird populations.
- Maintain appropriate turlough woodland diversity and structure.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[5130] *Juniperus communis* formations on heaths or calcareous grasslands

- Area stable or increasing, subject to natural processes. At least 1.4ha at mapped location.
- No decline.
- At least 50 plants.
- Well-developed structure with an open to closed cover of juniper up to or exceeding 0.5 m in height with associated species.
- Appropriate diversity and extent of formation.
- At least 10% of plants bearing cones and at least 10% of juniper plants within the formation are seedlings.
- Not more than 10% of plants dead.
- A variety of typical native species with a minimum of 10 species present (excluding negative indicator species).
- Negative indicator species, particularly non-native invasive species, absent or under control.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[6210] Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco Brometalia*)(*important orchid sites)

- Area stable or increasing, subject to natural processes.
- No decline, subject to natural processes.

- Broadleaf herb component of vegetation between 40 and 90%.
- At least 7 positive indicator species present, including 2 "high quality" species.
- Negative indicator species collectively not more than 20% cover, with cover by an individual species not more than 10%. Nonnative invasive species, absent or under control.
- 30-70% of sward 5-40cm high.
- Cover of bracken (*Pteridium aquilinum*) and woody species (except juniper (*Juniperus communis*)) not more than 5% cover.
- Not more than 10% bare ground.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[7210] Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*

- Area stable or increasing, subject to natural processes.
- No decline, subject to natural processes.
- Appropriate natural hydrological regime necessary to support the natural structure and functioning of the habitat.
- Active peat formation, where appropriate.
- Appropriate water quality to support the natural structure and functioning of the habitat.
- Maintain vegetation cover of typical species including brown mosses and vascular plants.
- Cover of scattered native trees and shrubs not more than 10%.
- Cover of disturbed bare ground not more than 10%. Where tufa is present, disturbed bare ground not more than 1%.
- Areas showing signs of drainage as a result of drainage ditches or heavy trampling not more than 10%.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[7230] Alkaline fens

- Area stable or increasing, subject to natural processes.
- No decline, subject to natural processes.
- Appropriate natural hydrological regime necessary to support the natural structure and functioning of the habitat.
- Active peat formation, where appropriate.
- Appropriate water quality to support the natural structure and functioning of the habitat.
- Maintain vegetation cover of typical species including brown mosses and vascular plants.
- Cover of scattered native trees and shrubs less than 10%.

- Cover of disturbed bare ground less than 10%. Where tufa is present, disturbed bare ground less than 1%.
- Areas showing signs of drainage as a result of drainage ditches or heavy trampling less than 10%.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[1355] Otter (*Lutra lutra*)

- No significant decline in distribution.
- No significant decline in terrestrial habitat.
- No significant decline in marine habitat.
- No significant decline in freshwater (river) habitat.
- No significant decline in freshwater (lake/lagoon) habitat.
- No significant decline in couching sites and holts and no decline in fish biomass available.
- No significance increases in barriers to connectivity.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[1365] Harbour seal (*Phoca vitulina*)

- Species range within the site should not be restricted by artificial barriers to site use.
- Conserve breeding sites in a natural condition.
- Conserve moult haul-out sites in a natural condition.
- Conserve resting haul-out sites in a natural condition.
- Human activities should occur at levels that do not adversely affect the harbour seal population at the site.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

Inner Galway Bay SPA

[A003] Great Northern Diver (*Gavia immer*)

- Long term population trend stable or increasing.
- No significant decrease in the range, timing or intensity of use of areas by great northern diver, other than that occurring from natural patterns of variation.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[A017] Cormorant (*Phalacrocorax carbo*)

- No significant decline in breeding population abundance.
- No significant decline in productivity rate.
- No significant decline in distribution of breeding colonies.
- No significant decline in prey biomass available.
- No significant increase in barriers to connectivity.
- Human activities should occur at levels that do not adversely affect the breeding cormorant population.
- Long term population trend stable or increasing.
- No significant decrease in the numbers or range of areas used by cormorant, other than that occurring from natural patterns of variation.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[A028] Grey Heron (*Ardea cinerea*)

- Long term population trend stable or increasing.
- No significant decrease in the range, timing and intensity of use of areas used by grey heron, other than that occurring from natural patterns of variation.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[A046] Brent Goose (*Branta Bernicla hrota*)

- Long term population trend stable or increasing.
- No significant decrease in the range, timing and intensity of use of areas by light-bellied brent goose, other than that occurring from natural patterns of variation.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[A050] Wigeon (*Anas penelope*)

- Long term population trend stable or increasing.
- No significant decrease in the range, timing or intensity of use of areas by wigeon, other than that occurring from natural patterns of variation.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[A052] Teal (*Anas crecca*)

- Long term population trend stable or increasing.
- No significant decrease in the range, timing or intensity of use of areas by teal, other than that occurring from natural patterns of variation.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[A056] Shoveler (*Anas clypeata*)

- Long term population trend stable or increasing.
- No significant decrease in the range, timing or intensity of use of areas by shoveler, other than that occurring from natural patterns of variation.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[A069] Red-Breasted Merganser (*Mergus serrator*)

- Long term population trend stable or increasing.
- No significant decrease in the range, timing and intensity of use of areas by red-breasted merganser, other than that occurring from natural patterns of variation.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[A137] Ringed Plover (*Charadrius hiaticula*)

- Long term population trend stable or increasing.
- No significant decrease in the range, timing or intensity of use of areas by ringed plover, other than that occurring from natural patterns of variation.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[A140] Golden Plover (*Pluvialis apricaria*)

- Long term population trend stable or increasing.
- No significant decrease in the range, timing or intensity of use of areas by golden plover, other than that occurring from natural patterns of variation.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[A142] Lapwing (*Vanellus vanellus*)

- Long term population trend stable or increasing.
- No significant decrease in the range, timing or intensity of use of areas by lapwing, other than that occurring from natural patterns of variation.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[A149] Dunlin (*Calidris Alpina alpina*)

- Long term population trend stable or increasing.
- No significant decrease in the range, timing or intensity of use of areas by dunlin, other than that occurring from natural patterns of variation.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[A157] Bar-tailed Godwit (*Limosa lapponica*)

- Long term population trend stable or increasing.
- There should be no significant decrease in the range, timing or intensity of use of areas by bartailed godwit, other than that occurring from natural patterns of variation.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[A160] Curlew (*Numenius arquata*)

- Long term population trend stable or increasing.
- There should be no significant decrease in the range, timing or intensity of use of areas by curlew, other than that occurring from natural patterns of variation.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[A162] Redshank (*Tringa tetanus*)

- Long term population trend stable or increasing.

- There should be no significant decrease in the range, timing or intensity of use of areas by redshank, other than that occurring from natural patterns of variation.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[A169] Turnstone (*Arenaria interpres*)

- Long term population trend stable or increasing.
- There should be no significant decrease in the range, timing or intensity of use of areas by turnstone, other than that occurring from natural patterns of variation.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[A179] Black-headed Gull (*Chroicocephalus ridibundus*)

- Long term population trend stable or increasing.
- There should be no significant decrease in the range, timing and intensity of use of areas used by black-headed gull other than that occurring from natural patterns of variation.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[A182] Common Gull (*Larus canus*)

- Long term population trend stable or increasing.
- No significant decrease in the range, timing or intensity of use of areas by the common gull, other than that occurring from natural patterns of variation.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[A191] Sandwich Tern (*Sterna sandvicensis*)

- No significant decline in breeding population abundance: apparently occupied nests.
- No significant decline in productivity rate: fledged young per breeding pair.
- No significant decline in distribution: breeding colonies.
- No significant decline in prey biomass available.
- No significant increase in barriers to connectivity.
- Human activities should occur at levels that do not adversely affect the breeding sandwich tern population.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

[A193] Common Tern (*Sterna hirundo*)

- No significant decline in breeding population abundance: apparently occupied nests.
- No significant decline in productivity rate: fledged young per breeding pair.
- No significant decline in distribution: breeding colonies.
- No significant decline in prey biomass available.
- No significant increase in barriers to connectivity.
- Human activities should occur at levels that do not adversely affect the breeding little tern population.

Predicted Impacts – Direct/indirect impacts/effects are not predicted for this QI due to the small scale of the works proposed, the existing urban environment, the significant intervening distance and lack of identifiable ecological/hydrological connector/ receptor pathways between this QI and the application site.

5 SOILS, GEOLOGY & HYDROGEOLOGY

5.1 GEOLOGY

The Geological Survey of Ireland (GSI) website was consulted for available geological / hydrological information. Given the existing development on site and in the area, topsoil on site is classed as Urban and subsoils are classed as Man-made. The groundwater vulnerability within the site is moderate to high throughout the site. Vulnerability is a term used to represent the intrinsic geological and hydrogeological characteristics that determine the ease at which groundwater may be contaminated by human activities.

5.2 WATERBODIES

Table 5.1 details information gleaned from catchments.ie on the water status of the Clarinbridge groundwater waterbody. This concludes that the Clarinbridge ground waterbody is of good status.

Table 5.1 Clarinbridge Groundwater Waterbody Information	
Name	Clarinbridge
Code	IE_WE_G_0008
Catchments	29 Galway Bay South East 30 Corrib
Longitude	53.2932876
Latitude	-8.761284
Cycle 1 RBD	Western
Local Authority	Galway County Council
Waterbody Category	Groundwater
WFD Risk	Not at risk
Protected Area	N/A
High Status Objective	No
Heavily Modified	N/A
Artificial	N/A
Area (km ²)	N/A
Length (km)	N/A
Transboundary	No
Canal	No
GW 2016-2021 Overall Groundwater Status	Good

5.3 FLOOD RISK

There is no identifiable potential flood risk on the site. No impacts are predicted in this regard.

6 OTHER PLANS AND PROJECTS IN THE AREA

It is a requirement of the Appropriate Assessment process to consider the 'in combination' effects of the proposed development with other plans and projects in the area. **Table 6.1** below gives details of the other plans and projects in the area which may be affecting the Lough Corrib SAC, Galway Bay Complex SAC and Inner Galway Bay SPA Natura 2000 sites.

Table 6.1: Other Plans and Projects Affecting the Natura 2000 Sites

Name of Plan or Project	Key policies/issues/objectives directly related to the relevant Natura 2000 sites	Potential cumulative or in-combination effects on the relevant Natura 2000 sites
Galway City Development Plan 2023-2029	Designated Sites, Habitats and Species, Policies and Objectives, Natural Heritage and Biodiversity Policies and Objectives, Natural Water Systems Policies	Positive Impact
River Basin Management Plan for Ireland 2022-2027	The River Basin Management Plan for Ireland, sets out a number of objectives and measures for all national water bodies which aim: (1) to prevent the deterioration of water bodies and to protect, enhance and restore them with the aim of achieving at least good status and (2) to achieve compliance with the requirements for designated protected areas.	Positive impact
NPWS Conservation Management Plans	Site-Specific Conservation objectives have been published for Lough Corrib SAC, Galway Bay Complex SAC and Inner Galway Bay SPA and its aims and objectives are outlined from Page 22 to 43 above.	Positive impacts
Inland Fisheries Ireland (IFI) Corporate Plan 2021-2025	Goals: To protect, manage and conserve Ireland's inland fisheries and sea angling resources and to maximize their sustainability and natural biodiversity. To play a leadership role in achieving our climate action and biodiversity goals.	Positive impact
Planning Applications in the area	A search was carried out on Galway City Council's and An Coimisiún Pleanála's online planning query system on the 18 th of September 2025. It was ascertained that the following local planning applications have been granted within a 300m radius of the site in the past 5 years. PI ref: 20137 Development Description: "Permission for development which will consist of the replacement of the existing telephone kiosk with a new telephone kiosk with integral communication unit and a 1.53 sq. metre digital advertising display" Grant Date: 1/9/2020 PI ref: 224 Development Description: "Permission for retention which will consist of retaining change of use of former betting shop to offices at Ground Floor Level" Grant Date: 20/4/2022 PI ref: 2460304 Development Description: "Permission for development which consists of; alteration to shopfront including new signage at ground floor level, 5 Prospect Hill, Galway, H91 HC1H." Grant Date: 8/1/2025	Neutral Impact

	PI ref: 22291 Development Description: "Permission for development which consist of the change of use from a dentists surgery to two number residential apartments on the first floor of a four-story building" Grant Date: 30/3/2023 PI ref: 21195 Development Description: "Permission for development which will consist of: for the proposed replacement of existing external curtain wall glazing system / panels on the North-East (side) and North-West (rear) elevations of the existing Bank of Ireland (Protected Structure ref. No. 3805) with all associated site works" Grant Date: 13/9/2021 PI ref: 21287 Development Description: "Permission for development which will consist of partial change of use of ground floor from café to guesthouse" Grant Date: 24/11/2021 PI ref: 20328 Development Description: "E.O.D. on PL Ref: 15/196: Permission for (1) The demolition of existing building containing 6 no. existing apartments and (2) The construction of a three storey apartment development. The development will consist of: A) 1 no. ground floor 2 bedroom apartment, with rear garden and storage building B) 1 no. 4 bedroom apartment at first and second floor levels, with rear garden and storage building and roof terrace. C) All associated site works" Grant Date: 29/1/2021 PI ref: 22146 Development Description: "Permission for development which will consist of alterations and extension to existing house and shed, including: a) demolition of rear sunroom, b) ground floor extension, c) shed extension, d) internal and external alterations, and e) all associated site works" Grant Date: 18/8/2022 PI ref: 20235 Development Description: "Permission for revisions to previously granted residential development under PI. Ref 18/47 and An Bord Pleanala number ABP 301960-18 at this site. The new proposal will consist of: (A) An increase in unit numbers from 19 no. granted units to a total of 27 no. Residential units. (B) Previously approved 3 storey Duplex block to Saint Brendan's Avenue containing: 1 no. 3 bedroom duplex; 4 no. 2 bedroom duplex; 1 no. 2 bedroom own door apartment and 3 no. 1 bedroom own door apartments with amendments to rear to allow for lift and communal stairs to first floor. (C) Replacement of the previously approved 4 storey duplex block to the rear of the site (containing 4 no. 1 bedroom apartments & 4 no. 3 bedroom Duplexes) and 2 storey block to the courtyard (containing 2 no. 2 bed apartments) with a new 6 storey apartment block and larger communal courtyard. New apartment block to contain: 12 no. 2 bedroom apartments and 6 no. 1 bedroom apartments with revised access onto rear laneway. (D) This application also includes revisions to cycle store, bin stores and landscaping including larger shared communal courtyard, provision of all associated surface water and foul drainage services and connections, ancillary to the residential development as well as all associated site development works and services" Grant Date: 14/12/2020	
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	PI ref: 21366 Development Description: "Permission for development which will consist of: 1. Construct a new porch to front elevation of terrace house (3.02m2) 2. Demolish the existing rear extension (2.93m2) 3. Construct a new extension to ground floor and first floor levels to rear of dwelling (81.95m2) 4. And all associated site works" Grant Date: 26/4/2022 PI ref: 2360062 Development Description: "Permission for development which consists of construct a single storey extension to the back of existing dwelling house" Grant Date: 12/12/2023 PI ref: 2560103 Development Description: "Permission for development which consists of: permission for an extension to rear of the existing dwelling at 16 Corrib Terrace, Woodquay, Co. Galway" Grant Date: 14/7/2025 PI ref: 2267 Development Description: "Permission for retention which will consist of retention of demolition to rear wall of house and existing rear extension. Construction of new rear single and two storey extension. Modifications to existing house and all associated site works to house" Grant Date: 21/6/2022 PI ref: 2266 Development Description: "Permission for retention which will consist of retention of first floor level rear extension" Grant Date: 21/6/2022 PI ref: 2329 Development Description: "Permission and Retention for development which consists of 1) Change of Use from previously approved residential and office use to residential only at 1st and 2nd floor levels, 2) Retention of residential accommodation in lieu of external balcony at 1st floor level (area 12sqm), 3) Reconfiguration of existing residential accommodation to form 1 no.1 bedroomed studio apartment at 1st floor level and 1 bedroomed apartment at 1st and 2nd floor levels" Grant Date: 20/6/2023 PI ref: 23100 Development Description: "Permission for development which consists of the following:- (i) Demolition of existing building structures, (ii) Maintaining original wall located within zone of archaeological potential (SMR GA094-100--), features include (GA094-119--) and (GA094-120--), (iii) Permission for construction of 5 residential units over three floors, consisting of 1 No. studio apartment, 3 No. 1 bedroom apartments, 1 no. 2 bedroom apartment, associated private open spaces, bicycle storage and waste refuge. (iv) Connection to public services/utilities and all associated site works" Grant Date: 20/7/2023 PI ref: 2360163 Development Description: "Permission for development which consist of (1) Change of use of former educational use to student accommodation (2) Construction of a new second floor extension over existing first floor as part of the student accommodation proposal (3) Minor alterations to front elevation and	
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	(4) All associated site works and services. The Convent of Mercy grounds and graveyard is located to the west of the building, and are listed as a Protected Structure (RPS No. 9603)" Grant Date: 19/2/2025 PI ref: 21170 Development Description: "Permission for retention which will consist of retaining the use of a ground floor unit" Grant Date: 17/8/2021 PI ref: 20229 Development Description: "Permission for development which will consist of retention permission of existing rooflight on front elevation" Grant Date: 14/12/2020 PI ref: 2460231 Development Description: "Permission for development at 16-18 William Street, Galway, a protected structure, Galway City Council RPS ref no. 10801. The development will consist of the replacement of the existing non original windows on the first, second and third floors of the front (south) elevation. The windows are to be replaced with new painted hardwood framed windows. The development will include ancillary works to facilitate the development" Grant Date: 16/10/2024 PI ref: 22144 Development Description: "Permission for the development which will consist of 1. Change use of existing 3 no. offices and file store to 4 no studio apartments at 1st/2nd & 3rd floor levels, 2. Retain existing apartment and convert to 1 bedroom unit at 2nd floor level, 3. Provide for 1sq. metre window opening section to rear external wall at 1st/2nd & 3rd floor landings, 4. Allow for all related site services/drainage" Grant Date: 19/12/2022 PI ref: 22150 Development Description: "Permission for development which will consist of: (a) demolition and replacement of existing single storey storage building (23m2) with new purpose built single storey building including infill of the space between the existing building and the building to be demolished (9m2) all to match existing at rear of AIB bank and (b) internal modifications and non-structural remodelling of the banking hall adjacent to but not including the Lynch's Castle structure (a protected structure - Ref No. 9313)" Grant Date: 1/9/2022 PI ref: 2460152 Development Description: "Permission for development which consist of: alterations to an existing commercial premises at No. 38-39 (McCambridge's) Shop Street, Galway, a Protected Structure (No. 9309) to include the following: a) demolition of 2 No. sections of centre (infill) wall, b) removal of 3 No. cold rooms and internal partitions, c) removal of the coffee servery counter and d) relocation of various display counters, shelving units and all associated minor finishes works" Grant Date: 22/8/2024 PI ref: 2460390 Development Description: "Permission for development which consists of the replacement of existing fascia board and shopfront signage at the front and rear of the Boots Unit. The proposed signage at the front includes: (a) new pressed	
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	aluminium fascia board and new illuminated signage including: "Boots", the words "Beauty" and "Pharmacy" either side of the main "Boots" sign. The letters are individually illuminated (b) illuminated green cross sign (c) Projecting "Boots" sign in pressed aluminium, illuminated letters and fixing brackets. The new signage at the rear of the premises includes: (d) new pressed aluminium fascia board and new illuminated signage including "Boots", the words "Beauty" and "Pharmacy" either side of the main Boots sign. The letters are individually illuminated. All works necessary to install the new signage. The site is located in an Architectural Conservation Area" Grant Date: 10/6/2025 PI ref: 2358 Development Description: "Permission for development which consists of: Change of use of part of first floor (GIA 59m2/635ft2) from Photographers Studio to a one bedroom residential apartment. First Floor Entrance door relocated to location of adjacent First Floor Window. First Floor Window relocated to location of adjacent First Floor Entrance Door" Grant Date: 29/5/2023 PI ref: 2560069 Development Description: "Permission for development which consists of: remedial works and repairs, including new roof slating and flashings, chimney stack repairs, removal of cement renders and pointing, external masonry repointing and replastering, internal replastering and/or thermal lining, replacement gutters and downpipes, replacement of selected external windows and doors; and all associated ancillary works. This is a protected structure and is located in an architectural conservation area and within a prescribed area of archaeological notification." Grant Date: 20/8/2025 PI ref: 2560105 Development Description: "Permission for development which consists of: change of use to convert the ground floor office unit to a restaurant/bar, including an accessible toilet, commercial kitchen and all associated works" Grant Date: 18/7/2025 PI ref: 2062 Development Description: "Planning permission is sought for the development which will consist of (a) retention of change of use of Office/Retail to a Language School (b) permission for window signage at protected structures reference: 3804" Grant Date: 9/3/2021 PI ref: 22105 Development Description: "Permission for retention which will consist of retention and development at Unit 225/Unit 226 in the Eyre Square Shopping Centre. The proposed development is located adjacent to a segment of the 17th Century Bastion Wall (RPS Ref. 301). The development consists of: To retain and use the existing plant deck and install new plant structures over the second floor being part of the existing retail unit (previously granted permission under planning reference 21/331" Grant Date: 21/7/2022 PI ref: 2360116 Development Description: "Permission for development which consists of permission and retention permission for development at No.s 1-3 Merchants Road, Galway, H91 AT0V. The development consists of (1) retention permission	
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	for a change of use from restaurant to a bar and distillery; entrance doorway onto Merchants Road; fire exit onto Forthill Street; and signage on the north-western and north-eastern elevations; and (2) planning permission for new signage on the north-western elevation. The proposed development consists of or comprises the carrying out of works to a Protected Structure (RPS No. 5801, NIAH Reg. No. 30314075)." Grant Date: 29/2/2024 PI ref: 2510 Development Description: "Permission for development which consists of, (1) Amendments to the ground floor layout including reconfiguration of the bathrooms and creation of a fire escape corridor, (2) Alterations to the existing fenestration and conversion of a window into a doorway at ground floor level on the south-western elevations, (3) Alterations to the layout at fourth floor level including the insertion of alternative fire escape corridor, (4) Change of use at 5th floor from an existing leisure centre to 13 no. bedrooms (5) The construction of an additional 6th floor containing 6 no. bedrooms, fire escape corridor, and plant areas and; (6) all other associated site development and servicing works" Grant Date: 31/7/2025 PI ref: 2287 Development Description: "Permission for development which will consist of changes to previously approved planning permission ref no. 14/18 (extended under 19/175). Ceannt Railway Station is a protected structure (RPS 10001). The changes include: 1. Partial removal of three no. internal walls in the northern buildings to increase visibility and thus assist with both passenger flow and wayfinding and accessibility. 2. The partial removal of some of the existing concrete floor on the eastern side of the station building and the subsequent lowering of same by approx. 180 mm to be at the same level throughout and thus assist with passenger accessibility" Grant Date: 30/6/2022 PI ref: 2360132 Development Description: "Permission for development which consists of to 1. Replace existing shop front with new shop front including associated signage to front façade and gable end of No.1 Eyre Square, 2. Relocation of entrance door on front façade of No. 1 Eyre Square, 3 Retain existing shop front with new associated signage to No. 2 Prospect Hill, 4. Alteration to existing entrance door from No.2 Prospect Hill, 5. The removal of existing stone cladding and replaced with a painted nap render finish to front façade and gable end of No. 1 Eyre Square, 6. Replace existing windows and doors with new timber windows and doors to ground floor, first floor, second floor & third floor levels of No. 1 Eyre Square and to ground floor, first floor & second floor levels of No. 2 Prospect Hill, 7. And all associated site works, at No. 1 Eyre Square & No.2 Prospect Hill Galway" Grant Date: 12/3/2024 ABP ref: 314597 Development Description: "BusConnects Galway Cross-City Link Scheme." Grant Date: 27/9/2024 ABP ref: 310568 Development Description: "10 year permission - construction of mixed use regeneration project including 376 no. apartments , retail units, cafe/restaurant/bar units, Hotel, office use, childcare facility, car parking and other services and associated site works. (Protected Structure). NIS and EIAR submitted with the planning application."	
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	Grant Date: 28/6/2023 ABP ref: 318992 Development Description: "Demolition of existing warehouse and restaurant and construction of 10-11 storey extension. Natura Impact Statement (NIS) submitted with appeal." Grant Date: 26/9/2025 ABP ref: 312920 Development Description: "Change of use from residential apartments to apart-hotel. Internal alteration to include reception area, staff storage room and associated site works." Grant Date: 15/6/2023 ABP ref: 310684 Development Description: "Demolition of the nightclub building and construction of 7 storey extension to building to provide 44 hotel bedrooms." Grant Date: 28/6/2021 ABP ref: 318327 Development Description: "Retention of 11 Ensuite Bedrooms which was originally under Planning Ref. 93/713, a doctor's surgery and a 6 bed duplex apartment." Grant Date: 23/10/2023 Having regard to the small scale of the proposed works, no cumulative impacts are predicted during the demolition, construction and operational phase of this development.	
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7 SCREENING MATRIX FOR APPROPRIATE ASSESSMENT IN LINE WITH EU COMMISSION GUIDANCE

Having established the extent of the proposed project and the details of the Natura 2000 sites, a screening assessment for possible impacts can be generated. This section follows the format of the Screening Matrix provided in Annex 2 of the following document;

"Assessment of plans and projects significantly affecting Natura 2000 sites- Methodology guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, European Commission, 2001".

Table 7.1: Step Three: Assessment of Likely Significant Effects

(a) Identify all potential direct and indirect impacts that may have an effect on the conservation objective of a European site taking into account the size/scale of the project under the following headings:	
Impacts:	Possible significance of Impacts (Duration/Magnitude)
Construction Phase (Examples) • Vegetation Clearance • Demolition • Surface water runoff from excavation/infill • Dust, noise, vibration • Lighting disturbance • Impact on groundwater • Storage of excavation/construction materials • Access to site • Pests	No direct/ indirect impacts/ effects are predicted on the Lough Corrib SAC, Galway Bay Complex SAC and Inner Galway Bay SPA during the demolition and construction phase of this development. This is due to the existing urban environment, significant built-up intervening distance to European sites and the lack of identifiable hydrological/ecological connector/ receptor pathways between the application site and these Natura 2000 sites. The proposed development involves the demolition of the existing tourist office and public toilets and the redevelopment of these public services. Considering the small scale of the proposed works (the proposed gross floor area for the tourist office and the public toilets is 104 sqm, and the proposed gross floor area for the changing places is 17 sqm) and the established urban activities within Galway City, no impacts are predicted on any Natura 2000 site during the course of the development. Due to the small scale of the proposed works, cumulative noise impacts are not anticipated during the proposed demolition and construction phases of this development. Having regard to the established urban environment, the vibrant uses in the area, together with the small scale of the proposed works, it is concluded that noise disturbance would not impact QI Species associated with the Natura 2000 sites.
Operation Phase (Examples) • Direct emissions to air and water • Surface water runoff containing contaminant/sediment • Lighting Disturbance • Noise/vibration • Changes to water/groundwater due to drainage/abstraction • Presence of people, vehicles and activities • Physical presence of structures (collision risks) • Potential for accidents/incidents	No direct/ indirect impacts/ effects are predicted on the Lough Corrib SAC, Galway Bay Complex SAC and Inner Galway Bay SPA during the operational phase of this development. This is due to the existing urban environment, significant built-up intervening distance to European sites and the lack of identifiable hydrological/ecological connector/ receptor pathways between the application site and these Natura 2000 sites. The proposed development involves the demolition of the existing tourist office and public toilets and the redevelopment of these public services. Considering the small scale of the proposed works (the proposed gross floor area for the tourist office and the public toilets is 104 sqm, and the proposed gross floor area for the changing places is 17 sqm) and the established urban activities within Galway City, no impacts are predicted on any Natura 2000 site during the course of the development. Due to the small scale of the proposed works, cumulative noise impacts are not anticipated during the proposed operational phase of this development. Having regard to the established urban environment, the vibrant uses in the area, together with the small scale of the proposed works, it is concluded that noise disturbance would not impact QI Species associated with the Natura 2000 sites. Surface water will be managed through permeable paving, soakaways and a rainwater rill. All rainwater from impermeable areas will be collected via a series of underground pipes. There is existing development on site, and the proposed redevelopment of the tourist office is small in scale. Considering this, no impacts are predicted with regards to storm water runoff.

	The existing public toilets will be demolished and reconstructed to the west of the proposed tourist office building. The existing foul sewer connections will be removed and replaced following the construction of the public toilets. No impacts are predicted in this regard.
In combination/ other:	No likely significant in-combination effects are identified.
(b) Describe any likely changes to the European site:	
Examples of the type of changes to give consideration to include: • Reduction/fragmentation of habitat • Disturbance to QI species • Habitat/species fragmentation • Reduction/fragmentation in species density • Changes in key indicators of conservation status value • Changes to areas of sensitivity/threats to QI • Interference with the key relationships that define the structure or ecological function of the site	No direct/ indirect impacts/ effects are predicted on the Lough Corrib SAC, Galway Bay Complex SAC and Inner Galway Bay SPA during the demolition, construction and operational phase of this development. This is due to the existing urban environment, significant built-up intervening distance to European sites and the lack of identifiable hydrological/ecological connector/ receptor pathways between the application site and these Natura 2000 sites. The proposed development involves the demolition of the existing tourist office and public toilets and the redevelopment of these public services. Considering the small scale of the proposed works (the proposed gross floor area for the tourist office and the public toilets is 104 sqm, and the proposed gross floor area for the changing places is 17 sqm) and the established urban activities within Galway City, no impacts are predicted on any Natura 2000 site during the course of the development. Due to the small scale of the proposed works, cumulative noise impacts are not anticipated during the proposed demolition, construction and operational phases of this development. Having regard to the established urban environment, the vibrant uses in the area, together with the small scale of the proposed works, it is concluded that noise disturbance would not impact QI Species associated with the Natura 2000 sites.
(c) Are 'mitigation' measures necessary to reach a conclusion that likely significant effects can be ruled out at screening?	
☐ Yes ☒ No	

The findings of the screening matrix are summarized in **Table 7.2** below.

Table 7.2 Stage 1 - Screening Matrix for the Proposed Development

Brief Description of the Project or Plan
Location: The proposed site lies in Kennedy Park, Eyre Square, within Galway City Center (Easting: 529971.24, Northing: 725423.62). Distance from Designated Site: The site for the proposed development is approximately 333 meters east of the Lough Corrib SAC (Site code: 000297), and 480 meters northwest of the Galway Bay Complex SAC (Site code: 000268) and the Inner Galway Bay SPA (Site code: 004031). Brief Description of the Project: Planning permission is being sought for <i>"the demolition of the existing public toilet block and tourist kiosk within the pedestrian area of Eyre Square/Kennedy Park, and the construction of a new tourist information centre and public toilets, as well as the construction of a new Changing Places facility as an extension to the existing substation. The development is to include new public seating, a performance space, and associated landscape elements."</i> A Site Layout Plan for the proposed development is included as Appendix A to this report.

Brief Description of the Natura 2000 Site

Site Designation Status: The Lough Corrib SAC and Galway Bay Complex SAC are designated under EU Habitats Directive (92/43/EEC). The Inner Galway Bay SPA is designated under the EU Birds Directive (2009/147/EC).

Qualifying Features

The Lough Corrib SAC is of conservation significance due to the presence of 15 habitats listed under Annex I of the EU Habitats Directive and 9 species listed under Annex II of the same directive. The Galway Bay Complex SAC is of conservation significance due to the presence of fourteen habitats listed under Annex I of the EU Habitats Directive and seven species listed under Annex II of the same directive.

The Inner Galway Bay SPA is of conservation significance due to the presence of 21 bird species listed under Annex I of the EU Bird's Directive.

Qualifying Habitats

Lough Corrib SAC

- Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*) [3110]
- Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or *Isoeto-Nanojuncetea* [3130]
- Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140]
- Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation [3260]
- Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (* important orchid sites) [6210]
- Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) [6410]
- Active raised bogs [7110]
- Degraded raised bogs still capable of natural regeneration [7120]
- Depressions on peat substrates of the *Rhynchosporion* [7150]
- Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* [7210]
- Petrifying springs with tufa formation (*Cratoneurion*) [7220]
- Alkaline fens [7230]
- Limestone pavements [8240]
- Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles [91A0]
- Bog woodland [91D0]

Galway Bay Complex SAC

- Mudflats and sandflats not covered by seawater at low tide [1140]
- Coastal lagoons [1150]
- Large shallow inlets and bays [1160]
- Reefs [1170]
- Perennial vegetation of stony banks [1220]
- Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]
- Salicornia and other annuals colonising mud and sand [1310]
- Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) [1330]
- Mediterranean salt meadows (*Juncetalia maritimi*) [1410]
- Turloughs [3180]
- Juniperus communis formations on heaths or calcareous grasslands [5130]
- Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (* important orchid sites) [6210]
- Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* [7210]
- Alkaline fens [7230]
- Limestone pavements [8240]

Qualifying Species**Lough Corrib SAC**

- *Margaritifera margaritifera* (Freshwater Pearl Mussel) [1029]
- *Austropotamobius pallipes* (White-clawed Crayfish) [1092]
- *Petromyzon marinus* (Sea Lamprey) [1095]
- *Lampetra planeri* (Brook Lamprey) [1096]
- *Salmo salar* (Salmon) [1106]
- *Rhinolophus hipposideros* (Lesser Horseshoe Bat) [1303]
- *Lutra lutra* (Otter) [1355]
- *Najas flexilis* (Slender Naiad) [1833]
- *Hamatocaulis vernicosus* (Slender Green Feather-moss) [6216]

Galway Bay Complex SAC

- *Lutra lutra* (Otter) [1355]
- *Phoca vitulina* (Harbour Seal) [1365]

Inner Galway Bay SPA

- Black-throated Diver (*Gavia arctica*) [A002]
- Great Northern Diver (*Gavia immer*) [A003]
- Cormorant (*Phalacrocorax carbo*) [A017]
- Grey Heron (*Ardea cinerea*) [A028]
- Light-bellied Brent Goose (*Branta bernicla hrota*) [A046]
- Wigeon (*Anas penelope*) [A050]
- Teal (*Anas crecca*) [A052]
- Red-breasted Merganser (*Mergus serrator*) [A069]
- Ringed Plover (*Charadrius hiaticula*) [A137]
- Golden Plover (*Pluvialis apricaria*) [A140]
- Lapwing (*Vanellus vanellus*) [A142]
- Dunlin (*Calidris alpina*) [A149]
- Bar-tailed Godwit (*Limosa lapponica*) [A157]
- Curlew (*Numenius arquata*) [A160]
- Redshank (*Tringa totanus*) [A162]
- Turnstone (*Arenaria interpres*) [A169]
- Black-headed Gull (*Chroicocephalus ridibundus*) [A179]
- Common Gull (*Larus canus*) [A182]
- Sandwich Tern (*Sterna sandvicensis*) [A191]
- Common Tern (*Sterna hirundo*) [A193]

Full details of the site are found in the Lough Corrib SAC, Galway Bay Complex SAC and Inner Galway Bay SPA Site Synopses included as Appendix B, Appendix C, and Appendix D to this report.

Unit Size:

Lough Corrib SAC: 25188.15757 ha

Galway Bay Complex SAC; 14402.77315 ha

Inner Galway Bay SPA: 11 904,00 ha

ASSESSMENT CRITERIA**Describe the individual elements of the project likely to give rise to impacts on the Natura 2000 site.**

No direct/ indirect impacts/ effects are predicted on the Lough Corrib SAC, Galway Bay Complex SAC and Inner Galway Bay SPA during the demolition, construction and operational phase of this development. This is due to the existing urban environment, significant built-up intervening distance to European sites and the lack of identifiable hydrological/ecological

connector/ receptor pathways between the application site and these Natura 2000 sites. The proposed development involves the demolition of the existing tourist office and public toilets and the redevelopment of these public services. Considering the small scale of the proposed works (the proposed gross floor area for the tourist office and the public toilets is 104 sqm, and the proposed gross floor area for the changing places is 17 sqm) and the established urban activities within Galway City, no impacts are predicted on any Natura 2000 site during the course of the development.

Due to the small scale of the proposed works, cumulative noise impacts are not anticipated during the proposed demolition, construction and operational phases of this development. Having regard to the established urban environment, the vibrant uses in the area, together with the small scale of the proposed works, it is concluded that noise disturbance would not impact QI Species associated with the Natura 2000 sites.

Describe any likely direct, indirect or secondary impacts of the project on the Natura 2000 site by virtue of the following:

- Size and Scale

The application site comprises an overall area of 360 sqm and the proposed gross floor area for the tourist office and the public toilets is 104 sqm, and the proposed gross floor area for the changing places is 17 sqm. At this size and scale, and due to the fact that the works will be located within a built up location, entirely outside the designated area, it is not expected that the development will have any significant impact (direct, indirect or secondary in nature) on the Natura 2000 site in this regard.

- Land-Take

The proposed works will be entirely located outside of the designated site and so there will be no impacts in this regard.

- Distance from Natura 2000 site or key features of the site

The application site lies approximately 333 meters east of the Lough Corrib SAC (Site code: 000297), and 480 meters northwest of the Galway Bay Complex SAC (Site code: 000268) and the Inner Galway Bay SPA (Site code: 004031).

- Resource Requirements

It is not expected that the proposed development will have any significant impact (direct, indirect or secondary in nature) on the designated sites in this regard.

- Emissions

Surface water will be managed through permeable paving, soakaways and a rainwater rill. All rainwater from impermeable areas will be collected via a series of underground pipes. There is existing development on site, and the proposed redevelopment of the tourist office is small in scale. Considering this, no impacts are predicted with regards to storm water runoff.

The existing public toilets will be demolished and reconstructed to the west of the proposed tourist office building. The existing foul sewer connections will be removed and replaced following the construction of the public toilets. No impacts are predicted in this regard.

- Excavation Requirements

No impacts are expected on the Natura 2000 site in this regard.

- Transportation Requirements

During the construction phase of the proposed development, there will be a slight increase in the volume of traffic in the area for a short time. It is not expected that this slight increase will result in direct, indirect or secondary impacts on the Natura 2000 site.

- Duration of construction, operation, decommissioning

The construction phase of the proposed development will last approximately 6-12 months. It is expected that the development will remain in use for at least 50 years. Neither the operation nor the eventual decommissioning of the proposed development is likely to result in direct, indirect or secondary impacts on the Natura 2000 sites.

Describe any likely changes to the site arising as a result of the following;

- **Reduction of Habitat**
The Natura 2000 sites should not have any changes in habitat.
- **Disturbance to Key Species**
There no identifiable suitable habitats for key species on site. There will be no changes in this respect.
- **Habitat or Species Fragmentation**
There will be no changes in this respect.
- **Reduction in species density**
There will be no changes in this respect.
- **Changes in key indicators of conservation value**
There will be no changes in this respect.
- **Climate change**
There will be no changes in this respect.

Describe any likely impacts on the Natura 2000 site as a whole in terms of the following:

- **Interference with key relationships that define the structure and function of the site**
No potential impacts which are likely to interfere with the key relationships that define the structure or function of the site are expected.

Provide Indicators of significance as a result of the identification of effects set out above in terms of the following;

- **Loss**
No loss is expected.
- **Fragmentation**
No fragmentation is expected.
- **Disruption**
No disruption is expected.
- **Disturbance**
No disturbance is expected.
- **Change to key elements of the site.**
No change is expected

Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is not known.

No direct/ indirect impacts/ effects are predicted on the Lough Corrib SAC, Galway Bay Complex SAC and Inner Galway Bay SPA during the demolition, construction and operational phase of this development. This is due to the existing urban environment, significant built-up intervening distance to European sites and the lack of identifiable hydrological/ecological connector/ receptor pathways between the application site and these Natura 2000 sites. The proposed development involves the demolition of the existing tourist office and public toilets and the redevelopment of these public services. Considering the small scale of the proposed works (the proposed gross floor area for the tourist office and the public toilets is 104 sqm, and the proposed gross floor area for the changing places is 17 sqm) and the established urban activities within Galway City, no impacts are predicted on any Natura 2000 site during the course of the development.

Due to the small scale of the proposed works, cumulative noise impacts are not anticipated during the proposed demolition, construction and operational phases of this development. Having regard to the established urban environment, the vibrant uses in the area, together with the small scale of the proposed works, it is concluded that noise disturbance would not impact QI Species associated with the Natura 2000 sites.

8 CONCLUSIONS

Planning is being sought for “the demolition of the existing public toilet block and tourist kiosk within the pedestrian area of Eyre Square/Kennedy Park, and the construction of a new tourist information centre and public toilets, as well as the construction of a new Changing Places facility as an extension to the existing substation. The development is to include new public seating, a performance space, and associated landscape elements” in Kennedy Park, Eyre Square, within Galway City Center (Easting: 529971.24, Northing: 725423.62). A Site Layout Plan for the proposed development is included as **Appendix A** to this report. The screening exercise examined impacts on the Lough Corrib SAC, Galway Bay Complex SAC and Inner Galway Bay SPA Natura 2000 sites.

No direct/ indirect impacts/ effects are predicted on the Lough Corrib SAC, Galway Bay Complex SAC and Inner Galway Bay SPA during the demolition, construction and operational phase of this development. This is due to the existing urban environment, significant built-up intervening distance to European sites and the lack of identifiable hydrological/ecological connector/ receptor pathways between the application site and these Natura 2000 sites. The proposed development involves the demolition of the existing tourist office and public toilets and the redevelopment of these public services. Considering the small scale of the proposed works (the proposed gross floor area for the tourist office and the public toilets is 104 sqm, and the proposed gross floor area for the changing places is 17 sqm) and the established urban activities within Galway City, no impacts are predicted on any Natura 2000 site during the course of the development.

Due to the small scale of the proposed works, cumulative noise impacts are not anticipated during the proposed demolition, construction and operational phases of this development. Having regard to the established urban environment, the vibrant uses in the area, together with the small scale of the proposed works, it is concluded that noise disturbance would not impact QI Species associated with the Natura 2000 sites.

Surface water will be managed through permeable paving, soakaways and a rainwater rill. All rainwater from impermeable areas will be collected via a series of underground pipes. There is existing development on site, and the proposed redevelopment of the tourist office is small in scale. Considering this, no impacts are predicted with regards to storm water runoff.

The existing public toilets will be demolished and reconstructed to the west of the proposed tourist office building. The existing foul sewer connections will be removed and replaced following the construction of the public toilets. No impacts are predicted in this regard.

Therefore, the conclusion of this screening exercise is that no significant effects are expected on the qualifying interests or conservation objectives of the surrounding Natura 2000 sites, as a result of the proposed development in question, alone or in combination with the other plans and projects in the area, and therefore, a Natura Impact Statement is **not** required in this case.

This report is therefore issued as a 'Finding of No Significant Effects' (FONSE) statement, in accordance with the EU Commission's methodological guidance (EC, 2001



APPENDIX B

NPWS Site Synopses for Lough Corrib SAC

Site Name: Lough Corrib SAC

Site Code: 000297

Lough Corrib is situated to the north of Galway city and is the second largest lake in Ireland, with an area of approximately 18,240 ha (the entire site is 20,556 ha). The lake can be divided into two parts: a relatively shallow basin, underlain by Carboniferous limestone, in the south, and a larger, deeper basin, underlain by more acidic granite, schists, shales and sandstones to the north. The surrounding lands to the south and east are mostly pastoral farmland, while bog and heath predominate to the west and north. A number of rivers are included within the cSAC as they are important for Atlantic Salmon. These rivers include the Clare, Grange, Abbert, Sinking, Dalgan and Black to the east, as well as the Cong, Bealanabrack, Failmore, Cornamona, Drimneen and Owenriff to the west. In addition to the rivers and lake basin, adjoining areas of conservation interest, including raised bog, woodland, grassland and limestone pavement, have been incorporated into the site.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes): [3110] Oligotrophic Waters containing very few minerals [3130] Oligotrophic to Mesotrophic Standing Waters [3140] Hard Water Lakes [3260] Floating River Vegetation [6210] Orchid-rich Calcareous Grassland* [6410] Molinia Meadows [7110] Raised Bog (Active)* [7120] Degraded Raised Bog [7150] Rhynchosporion Vegetation [7210] Cladium Fens* [7220] Petrifying Springs* [7230] Alkaline Fens [8240] Limestone Pavement* [91A0] Old Oak Woodlands [91D0] Bog Woodland* [1029] Freshwater Pearl Mussel (*Margaritifera margaritifera*) [1092] White-clawed Crayfish (*Austropotamobius pallipes*) [1095] Sea Lamprey (*Petromyzon marinus*) [1096] Brook Lamprey (*Lampetra planeri*) [1106] Atlantic Salmon (*Salmo salar*) [1303] Lesser Horseshoe Bat (*Rhinolophus hipposideros*) [1355] Otter (*Lutra lutra*) [1393] Slender Green Feather-moss (*Drepanocladus vernicosus*) [1833] Slender Naiad (*Najas flexilis*)

The shallow, lime-rich waters of the southern basin of Lough Corrib support one of the most extensive beds of stoneworts (*Charophytes*) in Ireland, with species such as *Chara aspera*, *C. hispida*, *C. delicatula*, *C. contraria* and *C. desmacantha* mixed with submerged pondweeds (*Potamogeton perfoliatus*, *P. gramineus* and *P. lucens*), Shoreweed (*Littorella uniflora*) and Water Lobelia (*Lobelia dortmanna*). These *Chara* beds are an important source of food for waterfowl. In contrast, the northern basin contains more oligotrophic and acidic waters, without *Chara* species, but with Shoreweed, Water Lobelia, Pipewort (*Eriocaulon aquaticum*), Quillwort (*Isoetes lacustris*), Alternate Water-milfoil (*Myriophyllum alternifolium*) and Slender Naiad (*Najas flexilis*). The last-named is listed under the Flora (Protection) Order, 2015, and is an Annex II species under the E.U. Habitats Directive.

Large areas of reedswamp vegetation, dominated by varying mixtures of Common Reed (*Phragmites australis*) and Common Club-rush (*Scirpus lacustris*), occur around the margins of the lake. Reedswamp usually grades into species-rich marsh vegetation characterised by Slender Sedge (*Carex lasiocarpa*), Water Mint (*Mentha aquatica*), Water Horsetail (*Equisetum fluviatile*) and Bogbean (*Menyanthes trifoliata*). Of particular note are the extensive beds of Great Fen-sedge (*Cladium mariscus*) that have developed over the marly peat deposits in sheltered bays, particularly in the southeast corner of the lake. Alkaline fen vegetation is more widespread around the lake margins and includes, amongst the typically diverse range of plants, the Slender Cottongrass (*Eriophorum gracile*), a species protected under the Flora (Protection) Order, 2015. Wet meadows dominated by Purple Moor-grass (*Molinia caerulea*) occur in seasonally flooded areas close to the lake shore. These support species such as Sharp-flowered Rush (*Juncus acutiflorus*), Jointed Rush (*J. articulatus*), Carnation Sedge (*Carex panicea*), Devil's-bit Scabious (*Succisa pratensis*), Creeping Bent (*Agrostis stolonifera*) and Tormentil (*Potentilla erecta*), amongst others.

This large site contains four discrete raised bog areas and is selected for active raised bog, degraded raised bog, Rhynchosporion and bog woodland. Active raised bog comprises areas of high bog that are wet and actively peat-forming, where the percentage cover of bog mosses (*Sphagnum spp.*) is high, and where some or all of the following features occur: hummocks, pools, wet flats, Sphagnum lawns, flushes and soaks. Degraded raised bog corresponds to those areas of high bog whose hydrology has been adversely affected by peat cutting, drainage and other land use activities, but which are capable of regeneration. The Rhynchosporion habitat occurs in wet depressions, pool edges and erosion channels where the vegetation includes White Beak-sedge (*Rhynchospora alba*) and/or Brown Beak-sedge (*R. fusca*), and at least some of the following associated species, Bog Asphodel (*Narthecium ossifragum*), sundews (*Drosera spp.*), Deergrass (*Scirpus cespitosus*) and Carnation Sedge.

At Addergoole, on the eastern shores of Lough Corrib, there is an important area of western raised bog. This bog area is one of the most westerly, relatively intact raised bogs in the country. There are also other substantial areas of raised bog along various tributaries of the Corrib in east Co. Galway, namely Slieve Bog, Lough Tee Bog and Killaclogher bog. The active parts of these bogs mostly correspond to the wettest areas, where there are well-developed surface features with hummocks, lawns and pools. It is in such areas that Rhynchosporion vegetation is best represented. The dominant species is the aquatic bog moss *Sphagnum cuspidatum*, which is usually accompanied by Bogbean, White Beak-sedge, Bog Asphodel, Common Cottongrass (*Eriophorum angustifolium*), Bog Sedge (*Carex limosa*) and Great Sundew (*Drosera anglica*). Brown Beak-sedge, a locally rare plant of wet bog pools, has been recorded from a number of the bog areas within the site. At Addergoole a substantial bog lake or soak occurs and this is infilling with large rafts of Rhynchosporion vegetation at present. This area is associated with an important area of wet bog woodland dominated by Downy Birch (*Betula pubescens*).

The largest part of the uncut high bog comprises degraded raised bog. Degraded bog is dominated by a raised bog flora which tends to be rather species-poor because of disturbance and/or drying-out. The most conspicuous vascular plant

species are usually Carnation Sedge, Heather (*Calluna vulgaris*), Cottongrasses, Cross-leaved Heath (*Erica tetralix*), Bog Asphodel and Deergrass. Bog-rosemary (*Andromeda polifolia*) and Cranberry (*Vaccinium oxycoccos*), two species indicative of raised bog habitat, are frequent on both degraded and active areas of raised bog. Sphagnum cover is generally low within degraded areas due to a combination of drying-out and frequent burning.

Limestone pavement occurs along much of the shoreline in the lower Corrib basin, and supports a rich and diverse flora, including Herb-Robert (*Geranium robertianum*), Bloody Crane's-bill (*G. sanguineum*), Carlina Thistle (*Carlina vulgaris*), Spring Gentian (*Gentiana verna*), Wild Thyme (*Thymus praecox*), Rustyback (*Ceterach officinarum*), Wood Sage (*Teucrium scorodonia*), Slender St. John's-wort (*Hypericum pulchrum*), Quaking-grass (*Briza media*) and Blue Moor-grass (*Sesleria albicans*). Areas of Hazel (*Corylus avellana*) scrub occur in association with exposed limestone pavement and these include species such as Hawthorn (*Crataegus monogyna*), Buckthorn (*Rhamnus catharticus*), Spindle (*Euonymus europaeus*), with occasional Juniper (*Juniperus communis*). Three Red Data Book species are also found in association with limestone scrub - Alder Buckthorn (*Frangula alnus*), Shrubby Cinquefoil (*Potentilla fruticosa*) and Wood Bitter-vetch (*Vicia orobus*), the latter is also protected under the Flora (Protection) Order, 2015.

Open areas of orchid-rich calcareous grassland are also found in association with the limestone exposures. These can support a typically rich vegetation, including many orchids such as Pyramidal Orchid (*Anacamptis pyramidalis*), Common Spotted-orchid (*Dactylorhiza fuchsii*), Early-purple Orchid (*Orchis mascula*), Frog Orchid (*Coeloglossum viride*), Fragrant Orchid (*Gymnadenia conopsea*), Marsh Helleborine (*Epipactis palustris*), Greater Butterfly-orchid (*Platanthera chlorantha*) and Irish Lady's-tresses (*Spiranthes romanzoffiana*). The latter is protected under the Flora (Protection) Order, 2015.

The Hill of Doon, located in the north-western corner of the lake, is a fine example of a Sessile Oak (*Quercus petraea*) woodland. The understorey is dominated by Sessile Oak, Holly (*Ilex aquifolium*) and occasional Juniper. There are occasional Yew (*Taxus baccata*) and Ash (*Fraxinus excelsior*), and a well-developed ground layer dominated by Bilberry (*Vaccinium myrtillus*), Hard Fern (*Blechnum spicant*) and Wood Rush (*Luzula sylvatica*). Woodland also occurs on some of the islands in the lake.

A number of the rivers in the site support submerged and floating vegetation of the *Ranunculon fluitantis* and *Callitricho-Batrachion*, including mosses. For example, in the River Corrib species such as Shining Pondweed (*Potamogeton lucens*), Perfoliate Pondweed (*Potamogeton perfoliatus*), Small Pondweed (*P. berchtoldii*), Yellow Waterlily (*Nuphar lutea*), White Water-lily (*Nymphaea alba*) and stoneworts (*Chara spp.*) occur.

The rare and Annex II-listed Slender Green Feather-moss (*Drepanocladus [Hamatocaulis] vernicosus*) is found at the fen at Gortachalla, north-east of Moycullen. Here it is widespread around the margins, and this constitutes a large and significant population in the national context. A very large population of another rare moss, *Pseudocalliergon trifarium*, is also found in this area.

The lake is rated as an internationally important site for waterfowl. Counts from 1984 to 1987 revealed a mean annual peak total of 19,994 birds. In the past a maximum peak of 38,281 birds was recorded. The lake supports internationally important numbers of Pochard (average peak 8,600) and nationally important numbers of the following species: Coot (average peak 6,756), Mute Swan (average peak 176), Tufted Duck (average peak 1,317), Cormorant (average peak 110) and Greenland Whitefronted Goose (average peak 83). The latter species is listed on Annex I of the E.U. Birds Directive. The Coot population is the largest in the country and populations of Tufted Duck and Pochard are second only to Lough Neagh. Breeding pairs of Common Scoter on the lake number 30-41 (1995 data), as well as breeding populations of Arctic Tern and Common Tern. Other bird species of note recorded from or close to the lake recently include Hen Harrier, Whooper Swan, Golden Plover and Kingfisher. All of these species are listed on Annex I of the E.U. Birds Directive.

Otter and Irish Hare have been recorded regularly within this site. Both of these species are listed in the Red Data Book and are legally protected by the Wildlife Act, 1976. Otter is also listed on Annex II of the E.U. Habitats Directive. Lough Corrib is considered one of the best sites in the country for Otter, due to the sheer size of the lake and associated rivers and streams, and also the generally high quality of the habitats. Atlantic Salmon (*Salmo salar*) use the lake and rivers as spawning grounds. Although this species is still fished commercially in Ireland, it is considered to be endangered or locally threatened elsewhere in Europe and is listed on Annex II of the E.U. Habitats Directive. Lough Corrib is also a well-known fishing lake with a very good Trout (*Salmo trutta*) fishery. The lake has a population of Sea Lamprey (*Petromyzon marinus*), a scarce, though probably under-recorded species listed on Annex II of the E.U. Habitats Directive. Brook Lamprey (*Lampetra planeri*), also listed on Annex II, are also known from a number of areas within the site.

A population of Freshwater Pearl Mussel (*Margaritifera margaritifera*), a species listed on Annex II of the E.U. Habitats Directive, occurs within the site. White-clawed Crayfish (*Austropotamobius pallipes*), also listed on Annex II, is well distributed throughout Lough Corrib and its in-flowing rivers over limestone. A summer roost of Lesser Horseshoe Bat, another Annex II species, occurs within the site - approximately 100 animals were recorded here in 1999.

The main threats to the quality of this site are from water polluting activities resulting from intensification of agricultural activities on the eastern side of the lake, uncontrolled discharge of sewage which is causing localised eutrophication of the lake, and housing and boating development, which is causing the loss of native lakeshore vegetation. The raised bog habitats are susceptible to further degradation and drying out due to drainage and peat cutting and, on occasions, burning. Peat cutting threatens Addergoole Bog and already a substantial area of it has been cut away. Fishing and shooting occur in and around the lake. Introduction of exotic crayfish species or the crayfish fungal plague (*Aphanomyces astaci*) could have a serious impact on the native crayfish population. The bat roost is susceptible to disturbance or development.

Despite these ongoing issues, however, Lough Corrib is one the best examples of a large lacustrine catchment system in Ireland, with a range of habitats and species still well represented. These include 15 habitats which are listed on Annex I

Appropriate Assessment Screening Report for proposed development at Kennedy Park, Eyre Square, Galway City.
of the E.U. Habitats Directive, six of which are priority habitats, and nine species which are listed on Annex II. The lake is also internationally important for birds and is designated as a Special Protection Area.

APPENDIX C

NPWS Site Synopses for Galway Bay Complex SAC

Site Name: Galway Bay Complex SAC

Site Code: 000268

Situated on the west coast of Ireland, this site comprises the inner, shallow part of a large bay which is partially sheltered by the Aran Islands. The Burren karstic limestone fringes the southern sides and extends into the sublittoral. West of Galway city the bedrock geology is granite. There are numerous shallow and intertidal inlets on the eastern and southern sides, notably Muckinish, Aughinish and Kinvarra Bays. A number of small islands composed of glacial deposits are located along the eastern side. These include Eddy Island, Deer Island and Tawin Island. A diverse range of marine, coastal and terrestrial habitats, including several listed on Annex I of the E.U. Habitats Directive, occur within the site, making the area of high scientific importance. The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes): [1140] Tidal Mudflats and Sandflats [1150] Coastal Lagoons* [1160] Large Shallow Inlets and Bays [1170] Reefs [1220] Perennial Vegetation of Stony Banks [1230] Vegetated sea cliffs of the Atlantic and Baltic coasts [1310] Salicornia Mud [1330] Atlantic Salt Meadows [1410] Mediterranean Salt Meadows [3180] Turloughs* [5130] Juniper Scrub [6210] Orchid-rich Calcareous Grassland* [7210] Cladium Fens* [7230] Alkaline Fens [8240] Limestone Pavement* [1355] Otter (*Lutra lutra*) [1365] Common (Harbour) Seal (*Phoca vitulina*).

Galway Bay South holds a very high number of littoral communities (12). They range from rocky terraces, to sandy beaches with rock or sand dunes behind. The intertidal sediments of Galway Bay support good examples of communities that are moderately exposed to wave action. A well-defined talitrid amphipod zone in the Version date: 10.12.2015 2 of 5 000268_Rev15.Docx upper shore gives way to an intertidal, mid shore zone with sparse epifauna or infauna. On the lower, flat part of the shore, the tubes of the deposit-feeding terebellid worm, *Lanice conchilega*, are common on the surface. Nereid and cirratulid polychaete worms (*Hediste diversicolor*, *Arenicola marina*), small crustaceans and bivalves (*Angulus tenuis*, *Cerastoderma edule* and *Macoma balthica*) are present. The area has the country's only recorded example of the littoral community characterized by *Fucus serratus* with sponges, ascidians and red seaweeds on tide-swept lower eulittoral mixed substrata. This community has very high species richness (85 species), as do the sublittoral fringe communities on the Finavarra reef (88 species). The rare Purple Sea Urchin *Paracentrotus lividus* and the foliose red alga *Phyllophora sicula* are present at Finavarra, whereas the red alga *Rhodomenia delicatula* and the rare brown

alga, *Ascophyllum nodosum* var. *mackii*, occur in Kinvarra and Muckinish Bays. Sublittorally, the area has a number of distinctive and important communities. Of particular note is that Ireland's only reported piddock (bivalve mollusc) bed thrives in the shallows of Aughinish Bay. The rare sponge, *Mycale contarenii*, is also found here. There is further interest in an extensive maerl bed of *Phymatolithon calcareum* which occurs in the strong tidal currents of Muckinish Bay. There is also maerl off Finavarra Point and in Kinvarra Bay (*Lithothamnion corallioides*, *Lithophyllum dentatum* and *Lithophyllum fasciculatum*). An oyster bed in Kinvarra Bay and seagrass (*Zostera* spp.) beds off Finavarra Point are also important features. Other significant habitats which occur include secondary maerl beds and communities strongly influenced by tidal streams.

Saltmarshes are frequent within this extensive coastal site, with both E.U. Habitats Directive types, 'Atlantic Salt Meadow' and 'Mediterranean Salt Meadow' well represented. Most of the saltmarshes are classified as the bay type, with the substrate being mud or mud/sand. There is one lagoon type and one estuary type. Lagoon saltmarshes are the rarest type found in Ireland. The best examples of saltmarsh are located in inner Galway bay, east of a line running between Galway city and Kinvarra. In this area the coastline is highly indented, thus providing the sheltered conditions necessary for extensive saltmarsh development. Common saltmarsh species include Thrift (*Armeria maritima*), Red Fescue (*Festuca rubra*), Common Scurvygrass (*Cochlearia officinalis*), Lax-flowered Sea-lavender (*Limonium humile*), Common Saltmarsh-grass (*Puccinellia maritima*), Saltmarsh Rush (*Juncus gerardi*) and Sea Rush (*Juncus maritimus*). On the lower levels of the saltmarshes and within pans there occurs Glasswort (*Salicornia europaea* agg.). A noteworthy feature of the saltmarsh habitat within this site is the presence of dwarfed brown seaweeds in the vegetation. These are also known as "turf fucoids" and typical species include *Fucus* spp., *Ascophyllum nodosum* and *Pelvetia canaliculata*. A number of locally rare vascular plant species also grow in saltmarsh areas within the site. These include Reflexed Saltmarsh-grass (*Puccinellia distans*) and Sea-purslane (*Halimione portulacoides*), which are both relatively rare in the western half of the country.

Shingle and stony beaches can be found throughout the site, with the best examples along the more exposed shores to the south and west of Galway city and to the north and east of Finavarra, Co. Clare. In general, these shingle shorelines are sparsely vegetated and frequently occur interspersed with areas of sandy beach and/or bedrock shore. The associated flora is dominated by plant species of frequently disturbed maritime habitats. To the south and west of Galway city, typical plants include Curled Dock (*Rumex crispus*), Common Couch (*Elymus repens*), Sea Sandwort (*Honkenya peploides*), Sea Beet (*Beta vulgaris* subsp. *maritima*), Sea Mayweed (*Matricaria maritima*), Silverweed (*Potentilla anserina*) and Oraches (*Atriplex* spp.). Two rare plant species are associated with the habitat: Henbane (*Hyoscyamus niger*), a threatened species listed in the Irish Red Data Book, grows on shingle beach to the south of Lough Atalia; there are also old records for the threatened plant species Seakale (*Crambe maritima*).

Soft coastal cliffs reaching heights in excess of 10m occur at Rusheen. These support coastal grassland with very sparse vegetation cover. Species recorded include Sea Plantain (*Plantago maritima*), Creeping Bent (*Agrostis stolonifera*), False Oat-grass (*Arrhenatherum elatius*), Cock's Foot (*Dactylis glomerata*), Red Fescue, Common Bird's-foot-trefoil (*Lotus corniculatus*), and the lichens *Ramalina* sp. and *Xanthoria parietina*. They are considered highly representative of the rarer soft type of sea cliffs in Ireland.

An excellent range of lagoons of different types, sizes and salinities occurs within the site. This habitat is given priority status on Annex I of the E.U. Habitats Directive. One unusual type of lagoon, karstic rock lagoon, is particularly well represented. This type of lagoon is common on the Aran Islands, but on mainland Ireland, all but one are confined to this site. Additionally, the best example of all karstic lagoons in the country, Lough Murree, is found at this site. The flora of the habitat is rich and diverse, reflecting the range of salinities in the different lagoons. It is typically brackish, with two species of Tasselweed (*Ruppia* spp.), two Red Data charophytes *Chara canescens* and *Lamprothamnion papulosum*, and *Chaetomorpha linum*, an alga (all lagoonal specialists). The fauna of the lagoon is also rich, diverse and lagoonal. At least 10 lagoonal specialist species were recorded in 1996 and 1998 from the combined habitat of all the lagoons, which is one of the highest number for any lagoonal habitat in the country. Many of the species appear to be rare. The lagoons within this site are excellent examples of the habitat type and of high conservation importance.

Other terrestrial habitats within this site which are of conservation importance include Great Fen-sedge (*Cladium mariscus*)-dominated fen and Black Bog-rush (*Schoenus nigricans*)-dominated alkaline fen at Oranmore, a turlough of moderate size at Ballinacourty, limestone pavement at Ballyconry, Gleninagh North and Newquay, dry calcareous grassland with orchids (best examples occurring west of Salthill), Juniper (*Juniperus communis*) scrub formations at Oranmore, wet grassland and an area of deciduous woodland at Barna. The orchid-rich grassland occurs on a series of small drumlin hills found to the west of Galway City, and is largely confined to the sides of the hills. Calcicole species such as Kidney Vetch (*Anthyllis vulneraria*), Harebell (*Campanula rotundifolia*), Spring Gentian (*Gentiana verna*), Common Spottedorchid (*Dactylorhiza fuchsii*), Lesser Twayblade (*Listera ovata*), Pyramidal Orchid (*Anacamptis pyramidalis*), Yellow-wort (*Blackstonia perfoliata*) and Greater Knapweed (*Centaurea scabiosa*) are found here, among others. Juniper is also found in this area.

Areas of alkaline and *Cladium* fen as best represented near Oranmore, and species such as Great Fen-sedge, Common Reed (*Phragmites australis*), Purple Moor-grass (*Molinia caerulea*), Bogbean (*Menyanthes trifoliata*) and Long-stalked Yellow-sedge (*Carex lepidocarpa*) are found along with the usually dominant, Black Bog-rush. The turlough at Ballinacourty floods to about 25 ha in winter and has vegetation with a typical zonation. Wetland species such as Amphibious Bistort (*Polygonum amphibium*), Common Marsh-bedstraw (*Galium palustre*) and Marsh Cinquefoil (*Potentilla palustris*) are found near the swallow-hole, with species of wet grassland close to the flood limit (e.g. Silverweed, *Potentilla*

anserina, Water Mint, *Mentha aquatica* and Creeping Bent, *Agrostis stolonifera*). Sedges (*Carex* spp.) dominate in between.

Inner Galway Bay provides extensive good quality habitat for Common Seal (maximum count of 317 in the all-Ireland survey of 2003). This species is listed on Annex II of the E.U. Habitats Directive. The seals use a range of haul-out sites distributed through the bay - these include inner Oranmore Bay, Rabbit Island, St. Brendan's Island, Tawin Island, Kinvarra Bay, Aughinish Bay and Ballyvaughan. The site provides optimum habitat for Otter, also an Annex II-listed species.

Galway Bay is a very important ornithological site. The shallow waters provide excellent habitat for Great Northern Divers (35), Black-throated Divers (28), Scaup (39), Long-tailed Duck (27) and Red-breasted Merganser (232). (Figures given are peak average maxima over the 3 winters 1994/95 to 1996/97). All of these populations are of national importance. The intertidal areas and shoreline provides feeding and roosting habitat for wintering waterfowl, with Brent Goose (517) having a population of international importance and a further 11 species having populations of national importance. Four of the regular wintering species are listed on Annex I of the E.U. Birds Directive - Golden Plover, Bar-tailed Godwit and the two diver species. Breeding birds are also of importance, with significant populations of Sandwich Terns (81 pairs in 1995) and Common Terns (99 pairs in 1995), both also being listed on Annex I of the E.U. Birds Directive. A large Cormorant colony (approx. 300 pairs in 1989) occurs on Deer Island.

Fishing and aquaculture are the main commercial activities within the site. A concern is that sewage effluent and detritus of the aquaculture industry could be deleterious to benthic communities. Reef and sediment communities are vulnerable to disturbance or compaction from tractors accessing oyster trestles. The *Paracentrotus lividus* populations have been shown to be vulnerable to over-fishing. Extraction of maerl in Galway Bay is a threat. Owing to the proximity of Galway city, shoreline and terrestrial habitats are under pressure from urban expansion and recreational activities. Eutrophication is probably affecting some of the lagoons and is a continued threat. Drainage is a general threat to the turlough and fen habitats. Bird populations may be disturbed by aquaculture activities.

This large coastal site is of immense conservation importance, with many habitats listed on Annex I of the E.U. Habitats Directive, four of which have priority status lagoon, *Cladium* fen, turlough and orchid-rich calcareous grassland). The examples of shallow bays, reefs, lagoons and saltmarshes found within this site are amongst the best in the country. The site supports an important Common Seal colony and a breeding Otter population (Annex II species), and six regular Annex I E.U. Birds Directive species. The site also has four Red Data Book plant species, plus a host of rare or scarce marine and lagoonal animal and plant species.

APPENDIX D

NPWS Site Synopses for Inner Galway Bay SPA

Site Name: Inner Galway Bay SPA

Site Code: 004031

Inner Galway Bay SPA is a very large, marine-dominated site situated on the west coast of Ireland. The inner bay is protected from exposure to Atlantic swells by the Aran Islands and Black Head. Subsidiary bays and inlets (e.g. Poulinaclough, Aughinish and Kinvarra Bays) add texture to the patterns of water movement and sediment deposition, which lends variety to the marine habitats and communities. The terraced Carboniferous (Viséan) limestone platform of the Burren sweeps down to the shore and into the sublittoral. The long shoreline is noted for its diversity, and comprises complex mixtures of bedrock shore, shingle beach, sandy beach and fringing salt marshes. Intertidal sand and mud flats occur around much of the shoreline, with the largest areas being found on the sheltered eastern coast between Oranmore Bay and Kinvarra Bay. A number of small islands and rocky islets in the Bay are included within the site.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Black-throated Diver, Great Northern Diver, Cormorant, Grey Heron, Light-bellied Brent Goose, Wigeon, Teal, Redbreasted Merganser, Ringed Plover, Golden Plover, Lapwing, Dunlin, Bar-tailed Godwit, Curlew, Redshank, Turnstone, Black-headed Gull, Common Gull, Sandwich Tern and Common Tern. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.

Inner Galway Bay supports an excellent diversity of wintering wetland birds, with divers, grebes, cormorants, dabbling duck, sea duck and waders all well represented. There are internationally important wintering populations of Great Northern Diver (88) and Light-Bellied Brent Goose (676) and nationally important wintering populations of an additional sixteen species i.e. Black-throated Diver (36), Cormorant (266), Grey Heron (102), Wigeon (1,168), Teal (700), Redbreasted Merganser (249), Ringed Plover (335), Golden Plover (2,030), Lapwing (3,969), Dunlin (2,155), Bartailed Godwit (447), Curlew (697), Redshank (505), Turnstone (182), Black-headed Gull (1,941) and Common Gull (1,066) - all figures given are five year mean peaks for the seasons 1995/96 to 1999/2000. Of note is that the populations of Red-breasted Merganser and Ringed Plover represent 6.8% and 2.3% of the respective all-Ireland totals. Other species which occur in notable numbers include Little Grebe (35), Longtailed Duck (21), Scaup (44) and Herring Gull (216). In addition, the following species also use the site: Great Crested Grebe (16), Mallard (200), Common Scoter (87), Oystercatcher (576), Grey Plover (60), Black-tailed Godwit (46), Mute Swan (150) and Great Black-backed Gull (129). The site provides both feeding and roost sites for most of the species. Little Egret, a species which has recently colonised Ireland, also occurs at this site.

The site has several important populations of breeding birds, most notably colonies of Sandwich Tern (81 pairs in 1995) and Common Tern (98 pairs in 1995 on Green Island and 46 pairs in 2001 on Mutton Island). A large Cormorant colony occurs on Deer Island - this had 200 pairs in 1985 and 300 pairs in 1989.

Inner Galway Bay SPA is of high ornithological importance with two wintering species having populations of international importance and a further sixteen wintering species having populations of national importance. The breeding colonies of Sandwich Tern, Common Tern and Cormorant are also of national importance. Also of note is that six of the regularly occurring species are listed on Annex I of the E.U. Birds Directive, i.e. Black-throated Diver, Great Northern Diver, Golden Plover, Bartailed Godwit, Sandwich Tern and Common Tern. Inner Galway Bay is a Ramsar Convention site and part of the Inner Galway Bay SPA is a Wildfowl Sanctuary.