Appropriate Assessment for Variation 1

AA Conclusion Statement and Determination (July 2017)

Natura Impact Report (May 2017)
**Introduction**

Screening for Appropriate Assessment on Proposed Variation 1 was carried out by Galway City Council and concluded that an Appropriate Assessment was required for Proposed Variation 1. In accordance with the requirements of Part XAB, Section 177V of the Planning and Development Act, 2000 as amended, an Appropriate Assessment (AA) must be carried out before the Proposed Variation is made. In carrying out this AA, Galway City Council take into account the Natura Impact Report (NIR) for Proposed Variation 1 to the GCDP 2017-2023 (May 2017) and submissions received during the consultation process.

**Summary of how findings of the AA were factored**

Proposed Variation 1 is a minor modification to the mapped N6 GCRR specific objective, which was incorporated as part of the Galway Transport Strategy (GTS) into the Galway City Development Plan 2017-2023. It has been brought about as part of the further assessment of the design process of the N6 GCRR.

Throughout the preparation of the Galway City Development Plan 2017-2023, the AA process was integrated into the various stages of the plan process and guided the preparation of development scenarios for the city. The overarching core strategy of the Plan supports the strategies, policies and objectives for the protection of European sites. The AA Conclusion Statement and Determination of the GCDP 2017-2023 determined that risks to safeguarding the integrity of the qualifying interests and conservation objectives of the European sites were addressed by the inclusion of mitigation measures that will prioritise the avoidance of impacts in the first place and mitigate impacts where these cannot be avoided. In addition, the Plan includes mitigation measures to ensure that the impacts of plans and projects, which cannot be predicted at the Development Plan level, will be subject to separate assessment procedures in accordance with all applicable Directives, Regulations and Legislation.

The assessment presented in the NIR for Proposed Variation 1 to the GCDP 2017-2023 (May 2017) considers the Proposed Variation within the framework of the overall Plan, the AA Conclusion Statement and Determination of the GCDP 2017-2023 and its accompanying NIR report.

**Potential Impacts**

The N6 GCRR in the area of the Proposed Variation includes the tunnel at Galway Racecourse and cuttings at Castlegar and at Briarhill that may have potential indirect impacts on European sites, through hydro geological pathways. While the Proposed Variation is a minor modification of the NG GCRR Route Corridor Reservation, given that it is a section of the N6 GCRR specific objective previously screened in for AA, the potential impacts previously identified for the N6 GCRR were considered as a precautionary measure. (Section 3 of the NIR)

**Natura Impact Report for Proposed Variation 1 Findings**

The preparation of the NIR identified that the City Development Plan 2011-2017 contains a strong focus on the protection, sustainable use and management of natural heritage and a commitment for development to take place in an environmentally sustainable manner. The Proposed Variation relates to a minor modification of the N6 GCRR Route Corridor Reservation previously assessed and the NIR findings are that the Proposed Variation in the absence of mitigation measures has the potential to result in impacts to the integrity of the European sites. The risks to safeguarding the integrity of the qualifying interests and conservation objectives of the European sites have been addressed by mitigation measures already contained in the Development Plan. In addition, projects arising through the implementation of the specific objective, the potential impacts of which cannot be predicted at Development Plan level, will be subject to the AA process where further details of design and location are known. The assessment concluded that implementation of the overarching policies and objectives of the Development Plan ensure no negative in-combination effects to European sites are expected. Taking mitigation measures already incorporated into the Plan into consideration, the NIR concluded that the Proposed Variation will not have a significant adverse effect on the integrity of the European sites.*

*Except as provided for in Policy 4.2 - Protected Spaces: Sites of European, National and Local Ecological Importance*
Consideration of submissions
Under the Strategic Environmental Assessment (SEA) process, a scoping letter was sent to designated Environmental Authorities. Scoping submissions made by the Environmental Protection Agency (EPA) and the Department of Arts, Heritage, Regional, Rural and the Gaeltacht Affairs (DAHRRGA - now Department of Arts, Culture and the Gaeltacht DACG) included issues relating to the preparation of the NIR. These are summarised in Section 1 of the NIR of the Proposed Variation and were taken into account in the drafting of the Proposed Variation and associated environmental reports. The NIR also informed the accompanying SEA Environmental Report on the Proposed Variation. The Chief Executive’s Report on the Proposed Variations to Galway City Development Plan 2011-2017 (July 2017) also includes a summary of issues received by the EPA on the environmental reports of the Proposed Variation along with the CE response.

Reasons for choosing the plan as adopted
The SEA process is reported on separately and includes details on the evaluation of development scenarios considered. The AA process informed the evaluation of development scenarios. The Proposed Variation relates to a minor modification of the N6 GCRR route corridor reservation previously assessed and the Development Plan with its supporting policies and objectives, has been developed to achieve and implement a ‘Planned Growth’ scenario.

DECLARATION THAT THE PROPOSED VARIATION TO THE GCDP 2017-2023 AS ADOPTED WILL NOT ADVERSELY AFFECT THE INTEGRITY OF EUROPEAN SITES
The Proposed Variation relates to a minor modification of the N6 GCRR Route Corridor Reservation. The likely impacts to the integrity of the European sites that could arise have been examined. The Proposed Variation has fully integrated the findings of the AA process and Galway City Council is satisfied that robust and effective mitigation measures are already provided in the City Development Plan 2017-2023. In addition, projects arising through the implementation of the specific objective, the potential impacts of which cannot be predicted at Development Plan level, will be subject to the AA process where further details of design and location are known.

DETERMINATION UNDER ARTICLE 6(3) OF THE HABITATS DIRECTIVE AND PART XAB OF THE PLANNING AND DEVELOPMENT ACT (AS AMENDED)
Galway City Council, having examined the NIR for Proposed Variation 1 to the GCDP 2017-2023 (May 2017) along with submissions and observations received, are in agreement with the conclusion of the NIR. Galway City Council have determined that mitigation measures already contained in the Development Plan ensure that the Proposed Variation will not have a significant adverse effect on the integrity of European sites either alone or in combination with other plans and projects.*

MONITORING
Monitoring is to be carried out on an ongoing basis through the assessment of planning applications and environmental monitoring programmes. Monitoring measures are also integrated into the SEA monitoring process and apply to the Proposed Variation.

Planning Department
July 2017

*Except as provided for in Policy 4.2 - Protected Spaces: Sites of European, National and Local Ecological Importance
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Appendix 2  2A: Potential Impact Pathways to European Sites within 15km of GCDP 2017-2023 based on a Source-Pathway-Receiver model Source: Appendix A of NIR for GCDP 2017-2023

2B: Galway Transport Strategy Assessment of Affects and Table: Source-Pathway-Receptor Matrix—Potential Impact Pathways Connecting the Elements of the Galway Transport Strategy (GTS) to European Sites Source: Appendix A of Report Screening for Appropriate Assessment (AA) of Proposed Material Alterations to the Draft Plan (included in Appendix B of NIR for GCDP 2017-2023)

Appendix 3  Screening for AA of Proposed Variation 1
SECTION 1 INTRODUCTION

1.1 Overview

Galway City Council proposes two Variations to the Galway City Development Plan (GCDP) 2017-2023 under Section 13 of the Planning and Development Act 2000 (as amended). As part of this process, screening for Appropriate Assessment (AA) was carried out to determine whether or not the Proposed Variations would be likely to adversely affect the integrity of any European site and whether or not an AA is required. An Natura Impact Report (NIR) is prepared to inform the Appropriate Assessment process and is an assessment based on best scientific knowledge, of potential impacts in combination with other plans and projects on the conservation objectives of any European site and the provision, where necessary, of mitigation or avoidance measures to preclude adverse effects.

The Planning Authority concluded that an AA was required on Proposed Variation 1: Amend Specific Objective relating to the route corridor reservation for the N6 Galway City Ring Road (N6 GCRR) on the Land Use Zoning and Specific Objectives Map in the Ballybrit/Briarhill/Coolagh area and the N17 Tuam Road/Parkmore area of the city.

This Proposed Variation is a minor modification to the mapped N6 GCRR specific objective, which was incorporated as part of the Galway Transport Strategy (GTS) into the GCDP. It has been brought about as part of the further assessment of the design process of the N6 GCRR.

An NIR was previously prepared by RPS Group on behalf of Galway City Council to inform the AA of the GCDP 2017-2023. Input to the NIR was provided from Scott Cawley Ltd. on the incorporation of the Galway Transport Strategy (GTS) into the GCDP.

The assessment presented in this report considers the Proposed Variation within the framework of the overall Plan, the AA Conclusion Statement and Determination of the GCDP 2017-2023 and its accompanying NIR report. It also takes into account of submissions received from Environmental Authorities on the Proposed Variation. The findings of this assessment has informed the preparation of the SEA Environmental Report on the Proposed Variation.

The NIR concludes that the Proposed Variation in the absence of mitigation measures has the potential to affect the integrity of European Sites. The risks to safeguarding the integrity of the qualifying interests and conservation objectives of the European sites have been addressed by mitigation measures already contained in the GCDP. In addition, projects arising through the implementation of the specific objective, the potential impacts of which cannot be predicted at Development Plan level, will be subject to the AA process where further details of design and location are known.

1.2 Legislative Context

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, better known as the ‘Habitats Directive’, provides legal protection for habitats and species of European importance. Articles 3 to 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU-wide network of sites known as European sites. These are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild
Birds Directive (79/409/ECC) as codified by Directive 2009/147/EC. Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect European sites. Article 6(3) establishes the requirement for AA as follows: Any Plan or Project not directly connected with or necessary to the management of the [European] site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subjected to appropriate assessment of its implications for the site in view of the site’s conservation objectives. In light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, 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 and, if appropriate, after having obtained the opinion of the general public.

Article 6(4) states: If, in spite of a negative assessment of the implications for the [European] site and in the absence of alternative solutions, a Plan or Project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, Member States shall take all compensatory measures necessary to ensure that the overall coherence of European sites are protected. It shall inform the Commission of the compensatory measures adopted.

A summary of the AA process is provided in Figure 1. If at any stage in the process it is determined that there will be no significant effect on the integrity of a European site in view of the sites conservation objectives, the AA process is concluded.

Figure 1: Summary of Appropriate Assessment Process

Source: Strategic Environmental Assessment, Draft Implementation Manual on SEA Legislation and Procedure for Local and Regional Planning Authorities, Prepared for the EPA by Cavan County Council, Galway County Council and West Regional Authority (2013)
1.3 Galway City Development Plan 2017-2023

Throughout the preparation of the GCDP 2017-2023, the AA process was integrated into the various stages of the plan process and guided the preparation of development scenarios for the city. The overarching core strategy of the GCDP supports the strategies, policies and objectives for the protection of European sites. The AA Conclusion Statement and Determination of the GCDP 2017-2023 is provided in Appendix 1. It was determined that risks to safeguarding the integrity of the qualifying interests and conservation objectives of the European sites were addressed by the inclusion of mitigation measures that will prioritise the avoidance of impacts in the first place and mitigate impacts where these cannot be avoided. In addition, the Plan includes mitigation measures to ensure that the impacts of plans and projects, which cannot be predicted at the Development Plan level, will be subject to separate assessment procedures in accordance with all applicable Directives, Regulations and Legislation. These measures ensure that the AA process is carried out and that lower tier plan and project level effects will be subject to separate assessment procedures, when further details of design and location are known.

1.4 Proposed Variation 1 to GCDP 2017-2023

Proposed Variation 1 is presented in the Proposed Variations to the Galway City Development Plan 2017-2023 document and Figures 2-5. It is proposed to amend the specific objective relating to the route corridor reservation for the N6 GCRR on the Land Use Zoning and Specific Objectives Map in the Ballybrit/Briarhill/Cooolagh area and the N17 Tuam Road/Parkmore area of the city.

The core strategy of the GCDP facilitates sustainable co-ordinated development in line with national planning and transport policy and the Plan supports all transport measures proposed in the GTS including the N6 GCRR. The objectives of the GTS, reflected in Chapter 3 Transportation and throughout the Plan, are to help address the transportation challenges experienced in the city and the environs. The N6 GCRR is a critical transport measure included in the overall GTS and supports an integrated transport plan promoting improved accessibility, reduced congestion and sustainable transport solutions. A minor modification to the route corridor reservation will support the requirement for a transport solution.

1.5 Screening for AA of Proposed Variation 1

The aim of screening for AA is to determine whether or not a proposed plan or project is likely to adversely affect the integrity of any European site and to determine whether an AA is required. This is done by examining a proposed plan or project and the conservation objectives of any European sites that might potentially be affected. The Screening for AA Report for Proposed Variations to the Galway City Development Plan 2017-2023 2023 (April 2017), which has been integrated into this report, concluded that Proposed Variation 1 has the potential to give rise to significant effects upon the European sites, alone and or in-combination with other plans and projects. Appendix 3 provides a summary of the screening for AA of Proposed Variation 1. The conclusion of the Screening for AA Report also informed the Strategic Environmental Assessment (SEA) screening process and Proposed Variation 1 was screened in for SEA.

1.6 Consultation

Under the Strategic Environmental Assessment (SEA) process, a scoping letter was also sent to designated Environmental Authorities. This consultation identified the range of environmental issues and the level of detail to be included in the SEA Environmental Report. Scoping submissions made by the Environmental Protection Agency (EPA) and the Department of Arts, Heritage, Regional, Rural
and the Gaeltacht Affairs (DAHRRGA) included issues relating to the preparation of the NIR. These are summarised in **Table 1**. Submissions received were taken into account in the drafting of the Proposed Variation and associated environmental reports. The NIR also informed the accompanying SEA Environmental Report on the Proposed Variation.

**Table 1: Submissions from Environmental Authorities relating to the NIR**

<table>
<thead>
<tr>
<th>Environmental Authority</th>
<th>Relates to</th>
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<tr>
<td>DAHRRGA</td>
<td>Appropriate Assessment</td>
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<tr>
<td></td>
<td>- Variation should take into account the requirements of the Habitats Directive, national legislation, Government guidelines on AA and interpretation of legislation arising from case law.</td>
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<tr>
<td></td>
<td>- Advises on AA process, the information available to inform the AA, what the NIR Report should contain and duties of a Public Authority.</td>
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<tr>
<td></td>
<td>- Detailed notes on AA screening and content of an NIR/NIS are included.</td>
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<td>Strategic Environmental Assessment:</td>
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<td></td>
<td>- Legislative requirements of Appropriate Assessment process and its integration with SEA process</td>
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<td></td>
<td>- Integrate SEOs with obligations for Directives and National Plans</td>
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<td>- Monitoring measures for Biodiversity, flora and fauna</td>
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<tr>
<td>EPA</td>
<td>Variation should take into account the requirements of the Habitats Directive and Government guidelines on AA.</td>
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<td></td>
<td>Any findings or recommendations arising from AA should be incorporated into the SEA and Plan, as appropriate.</td>
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Figure 2 Map A: GCDP 2017-2023 Land Use Zoning and Specific Objectives Map- General Location of Proposed Variation 1 demarcated.
Figure 3 Map B: GCDP 2017-2023 Land Use Zoning and Specific Objectives Map - Relevant Section of existing N6 GCRR Specific Objective (demarcated in blue).
Figure 4 Map C: GCDP 2017-2023 Land Use Zoning and Specific Objectives Map - Proposed N6 GCRR Specific Objective (demarcated in red).
Figure 5 Map D: GCDP 2017-2023 Land Use Zoning and Specific Objectives Map - Existing N6 GCRR Specific Objective (demarcated in blue) and the Proposed Variation (demarcated in red).
SECTION 2  STAGE 1 - SCREENING FOR APPROPRIATE ASSESSMENT CONCLUSION

2.1  Introduction

The Proposed Variation, a minor modification to the N6 GCRR route corridor reservation, has been brought about as part of the further assessment of the design process of the N6 GCRR. The assessment presented in this report considers Proposed Variation 1 within the framework of the overall Plan taking account of the policies and objectives set out in the Plan. It relies on information contained in the NIR prepared for the recently adopted GCDP 2017-2023. The NIR was previously prepared by RPS Group on behalf of Galway City Council to inform the AA Conclusion Statement and Determination of the GCDP 2017-2023. It further draws on information contained in the Screening for Appropriate Assessment (AA) of Proposed Material Alterations to the Draft Plan. Input to the NIR was provided from Scott Cawley Ltd. on the incorporation of the Galway Transport Strategy (GTS) into the GCDP.

2.2  Screening for AA of Proposed Variation 1 to GCDP 2017-2023

In order to determine potential impacts from the Proposed Variation, information on the qualifying features, pertaining to potentially affected European sites were reviewed.

Section 3 of the NIR of the GCDP sets out European sites potentially affected by the Plan. A summary of potential impact pathways to European sites within 15km of the Plan boundary is provided in Appendix 2. The NIR of the GCDP sets out that the incorporation of the GTS including inserting the N6 GCRR specific objective on the Land Use Zoning and Specific Objectives Map were previously ‘screened in’ for AA.

Further details are provided in the Screening for Appropriate Assessment (AA) of Proposed Material Alterations to the Draft Plan. This included a discussion on the GTS where each of the projects proposed to be implemented under the GTS, including the N6 GCRR, were assessed with regards to the potential impact pathways and the likelihood of significant effects on European sites within the Zone of Influence (ZoI) of the GTS (see Appendix 2). The discussion outlines that the N6 GCRR in the area of the Proposed Variation includes the tunnel at Galway Racecourse and cuttings at Castlegar and at Briarhill that may have potential indirect impacts on European sites, through hydro geological pathways. Given that the Proposed Variation relates to a section of the N6 GCRR specific objective previously ‘screened in’ for AA under the GCDP review process, the potential impact pathways identified for the N6 GCRR and included in Appendix 2 are considered as a precautionary measure.

On the basis of the findings of these assessments, it is considered that the Proposed Variation, has the potential to give rise to significant effects upon European sites alone and or in-combination with other plans and projects. Therefore an Appropriate Assessment is required.
SECTION 3     STAGE 2 – NATURA IMPACT REPORT

3.1 Introduction
The European sites sites potentially impacted by Proposed Variation 1 to the GCDP 2017-2023 are outlined in Figure 1. These sites have been identified based on an analysis of the potential pathways and qualifying interests (receiver) of the European Sites (Appendix 2). A description of the European sites is also provided.

3.2 Description of European sites

Conservation Objectives of European sites
The integrity of a European site (referred to in Article 6.3 of the EU Habitats Directive) is determined based on the conservation status of the qualifying features of the SAC or SPA as set out above. European and National legislation places a collective obligation on Ireland and its citizens to maintain at favourable conservation status areas designated as SAC and SPA. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites. According to the EU Habitats Directive, favourable conservation status of a habitat is achieved when:

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

The favourable conservation status of a species is achieved when:

- Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Conservation Objectives for Galway Bay Complex SAC [Site Code: 000268]
Situated on the west coast of Ireland, the SAC 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. A number of small islands composed of glacial deposits are located along the eastern side. A diverse range of marine, coastal and terrestrial habitats, including several listed on Annex I of the EU Habitats Directive, occur within the site, making the area of high scientific importance. This large coastal site is of immense conservation importance, with many habitats listed on Annex I of the EU 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 salt marshes are amongst the best in the country. The site supports an important common seal colony and a breeding otter population, both species that are listed on Annex II of the EU Habitats Directive, and six regular Annex I EU Birds Directive species.

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1 Source: Section 3 of NIR of GCDP 2017-2023. The sources of data used in NIR to obtain information on European sites description are: Site details, features of interest and site documents at [http://www.npws.ie/protectedsites/](http://www.npws.ie/protectedsites/) and conservation status of Annex I habitat & Annex II species [http://www.npws.ie/article-17-reports-0/article-17-reports-2013](http://www.npws.ie/article-17-reports-0/article-17-reports-2013)
Figure 1: European sites potentially impacted by Proposed Variation 1 to the GCDP 2017-2023

Note: A distance of 15km is currently recommended in the Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities (DEHLG, 2010). The Zone of Influence (ZoI) for the Proposed Variation correlates with the ZoI identified for the NIR of the GCDP 2017-2023.
The site also has four Red Data Book plant species, plus a host of rare or scarce marine and lagoonal animal and plant species. The site supports two wintering species having populations of international importance and a further sixteen 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 seven of the regularly occurring species are listed on Annex I of the EU Birds Directive, such as red-throated diver, black-throated diver, great northern diver, golden plover, bar-tailed godwit, sandwich tern and common tern.

Site specific conservation objectives have been prepared for the Galway Bay Complex SAC (NPWS, 2013). The detailed conservation objectives for each of the qualifying interests are provided in the Conservation Objectives document available on the NPWS website, as follows: http://www.npws.ie/media/npwsie/content/images/protectedsites/conservationobjectives/CO000268_V1.pdf

Objective: To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.

**Inner Galway Bay SPA [Site Code: 004031]**

Galway Bay SPA is a very large, marine-dominated, site comprising the inner bay with subsidiary bays and inlets and it is a very important ornithological site. The shallow waters provide excellent habitat for great northern divers, black-throated divers, scaup, long-tailed duck and red-breasted merganser. All of these populations are of national importance. The intertidal areas and shoreline provides feeding and roosting habitat for wintering waterfowl, with brent goose having a population of international importance and a further eleven species having populations of national importance. Four of the regular wintering species are listed on Annex I of the EU Birds Directive - golden plover, bar-tailed godwit and the two diver species. Breeding birds are also of importance, with significant populations of sandwich terns and common terns, both also being listed on Annex I of the EU Directive. A large cormorant colony occurs on Deer Island. Site specific conservation objectives have been prepared for the Inner Galway Bay SPA. The detailed conservation objectives for each of the qualifying interests are provided in the Conservation Objectives document available on the NPWS website, as follows: http://www.npws.ie/media/npwsie/content/images/protectedsites/conservationobjectives/CO004031.pdf.

Objective: To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.

**Lough Corrib SAC [Site Code: 000297]**

Lough Corrib is situated to the north of Galway city and is the second largest lake in Ireland. This site is of major conservation importance and includes fourteen habitats listed on Annex I of the EU Habitats Directive. Six of these are priority habitats - petrifying springs, *Cladium* fen, active raised bog, limestone pavement, bog woodland and orchid-rich calcareous grassland. The other annexed habitats present include hard water lakes, lowland oligotrophic lakes, oligotrophic to mesotrophic lakes, floating river vegetation, alkaline fens, degraded raised bogs, Rhyhchosporion vegetation, *Molinia* meadows and old oak woodlands. Species present on the site that are listed on Annex II of this directive are sea lamprey, brook lamprey, Atlantic salmon, white-clawed crayfish, freshwater pearl mussel, otter, lesser horseshoe bat, slender naiad (also listed under the Flora (Protection) Order, 1999) and the moss *Drepanocladus vernicosus*. The shallow, lime-rich waters of the southern basin of the lake support one of the most extensive beds of stoneworts (Charophytes) in Ireland. The alkaline fen vegetation includes the slender cottongrass (*Eriophorum gracile*), a species protected under the Flora (Protection) Order, 1999. Wet meadows occur in seasonally flooded areas close to
the lakeshore. There are no site-specific Conservation Objectives for Lough Corrib SAC. However, the generic conservation objectives set out by the NPWS for the maintenance of habitats and species within European sites at favourable conservation status condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Objective: To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.

**Lough Corrib SPA [Site Code: 004042]**

Lough Corrib is one of the top ornithological sites in the country, and easily qualifies for international importance on the basis of numbers of wintering birds using it. It is also of international importance for its population of Pochard. There are a further seven species of wintering waterfowl that have populations of national importance. Its populations of breeding gulls and terns are also notable, with nationally important numbers of Common Tern, Arctic Tern, Common Gull and Black-headed Gull. The site is now the most important in the country for nesting Common Scoter. It is of note that several of the species which occur regularly are listed on Annex I of the E.U. Birds Directive, i.e. Whooper Swan, Greenland White-fronted Goose, Golden Plover, Common Tern and Arctic Tern. The site has been relatively well monitored for birds in recent years. Research is required into the reasons for the decline of the breeding gull populations. There are no site-specific Conservation Objectives for Lough Corrib SPA. However, the generic conservation objectives set out by the NPWS for the maintenance of habitats and species within European sites at favourable conservation status condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Objective: To maintain or restore the favourable conservation condition of the Annex I species for which the SPA has been selected.

**Castletaylor Complex SAC [Site Code: 000242]**

This site is situated approximately 4km southeast of Kilcolgan and lies in gently undulating limestone topography. Although relatively small in area, the site contains a diverse range of habitats, including five EU Habitats Directive Annex I habitats - turloughs, limestone pavement, orchid-rich calcareous grassland, alpine heath and juniper scrub. The first three of these are listed as priority habitats under the Directive. The site supports an extensive area of sedge fen vegetation. The eastern and much of the southern parts of the site are dominated by dry broadleaved woodland. Some mature planted conifers are found to the south of the road. The turlough does not hold any significant wintering populations of birds, owing to the extreme oligotrophic conditions. There are no site-specific Conservation Objectives for Castletaylor Complex SAC. However, the generic conservation objectives set out by the NPWS for the maintenance of habitats and species within European sites at favourable conservation status condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Objective: To maintain or restore the favourable conservation condition of the Annex I species for which the SAC has been selected.

**Kiltiernan Turlough Complex SAC [Site Code: 001285]**

Kiltiernan Turlough is a simple, linear depression running south westwards from the main Galway-Limerick road. The site is listed for the Annex I priority habitat turloughs and, as such, the site is of considerable conservation significance. Kiltiernan Turlough is an example of a partly modified, relatively dry turlough, without any accumulation of peat. It includes a variety of typical dry turlough vegetation types and is notable for the presence of the rare plant species, alder buckthorn and fen violet. There are no site-specific Conservation Objectives for Kiltiernan Turlough Complex SAC. However, the generic conservation objectives set out by the NPWS for the maintenance of habitats...
and species within European sites at favourable conservation status condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Objective: To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.

Lough Fingall Complex SAC [Site Code: 000606]
This site is situated immediately south-east of Ballindeereen and within 2km of Galway Bay. This site is of great conservation importance for the presence of six habitats listed on Annex I of the EU Habitats Directive, including four priority habitats. The transitions and gradations between habitats, for example between turloughs, lakes and limestone pavement, gives rise to a range of physical conditions that favour many uncommon species. In addition, the site supports an internationally important population of Lesser Horseshoe bats. The site is of local importance for wintering waterfowl, particularly Lapwing (max. count 381 in 1995/96), and has breeding Lapwing (6 pairs 1996). Some scarce invertebrate species have been recorded from the Lough Fingall area. There are no site-specific Conservation Objectives for Lough Fingall Complex SAC. However, the generic conservation objectives set out by the NPWS for the maintenance of habitats and species within European sites at favourable conservation status condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Objective: To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.

Rahasane Turlough SAC [Site Code: 000322]
Rahasane Turlough lies in gently undulating land, approximately 2km west of Craughwell, Co. Galway. Rahasane Turlough is of international significance as an Annex I priority habitat under the EU Habitats Directive and it is of major ecological significance as an example of a large turlough, which still function naturally. There are no site-specific Conservation Objectives for Rahasane Turlough SAC. However, the generic conservation objectives set out by the NPWS for the maintenance of habitats and species within European sites at favourable conservation status condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Objective: To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.

Rahasane Turlough SPA [Site Code: 004089]
Rahasane Turlough SPA is of high ornithological importance and supports seven species of national importance. The wigeon and golden plover populations are of particular note as they each represent approximately 4% of the national totals of these species. The occurrence of Greenland white fronted goose, whooper swan and golden plover is of importance as these species are listed on Annex I of the EU Birds Directive. It is the most important turlough for birdlife in the country. In a relatively recent national survey, it was also rated very highly for its vegetation, and supports two rare species listed in the Irish Red Data Book. There are no site-specific Conservation Objectives for Rahasane Turlough SPA. However, the generic conservation objectives set out by the NPWS for the maintenance of habitats and species within European sites at favourable conservation status condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Objective: To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.
Objective: To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.

Cregganna Marsh SPA [Site Code: 004142]

Cregganna Marsh is situated 3km south of Oranmore, to the west of the Galway – Ennis road. The birds using this site form part of the Rahasane flock. Greenland white-fronted goose is an Annex I of the EU Birds Directive. The dominant habitats on the site are lowland wet grassland and improved grassland, but areas of limestone pavement and other exposed rock, hazel scrub, freshwater marsh, drainage ditches and dry grassland are also represented. The site is of major conservation importance as a feeding site for a nationally important flock of Greenland white-fronted geese. There are no site-specific Conservation Objectives for Cregganna Marsh SPA. However, the generic conservation objectives set out by the NPWS for the maintenance of habitats and species within European sites at favourable conservation status condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Objective: To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.

3.3 Existing Environment

Section 3.3 of the NIR of the GCDP provides a summation of relevant existing environmental information including in relation to the following: Water quality of rivers and lakes; Hydrogeological Features; Wastewater facilities; Surface water management and flood protection; Existing threats and pressures.

In summary the NIR of the GCDP outlines that potential impacts on European sites can be manifested in a number of ways either directly in the form of land take, trampling and disturbance by people themselves; or indirectly, for example, in the form of water quality deterioration resulting from construction emissions and sewage effluent. The relative importance of these potential impacts will vary from site to site depending on the particular circumstances of the site.

Water quality is a key environmental condition that determines the quality of habitat and distribution of species in a number of European sites within and adjacent to the city boundary. The provision of infrastructure is a key consideration including wastewater treatment and drainage systems facilities.

The NIR of the GCDP includes that the general impacts to the qualifying interests of European sites associated with elements potentially include:

- Run off of pollutants during construction and operational phases of development leading to reduced water quality and potential impacts at or downstream of the development. Given that Plan area which includes the area of the Proposed Variation is potentially hydrologically linked to a number of European sites, this is a particularly significant pathway for potential adverse impacts;
- Inadequate wastewater treatment resulting in pollution of freshwater and marine waters;
- Intensification and urbanisation leading to habitat fragmentation;
- A reduction in water quality in groundwater, springs and watercourses associated with the construction phase of new developments; and
- Surface water runoff from impermeable surfaces leading to reduced water quality in groundwater, springs or surface waters affecting qualifying habitats and species downstream.

An assessment on potential ex situ or indirect impacts on the provisions of Article 10 of the Habitats Directive was also undertaken (Section 3.4 of NIR of the GCDP). This took into account a number of Annex I habitats and Annex II species recorded within the Plan area as part of the N6 Galway City...
Transport Project Route Selection Report (Arup, 2015). These are listed in Table 3.4 of the NIR of the GCDP and shown in Figure 4.1 (b) of the SEA Addendum Environmental Report (2016). The NIR of the GCDP notes that while the requirements of Article 10 of the Habitats Directive are not specifically considered under the AA process (except in so far as they support a qualifying feature), the inclusion of policy protecting Annexed habitats, Local Biodiversity Areas, wildlife corridors and stepping stones under Policy 4.2 Protected Spaces: Sites of European, National and Local Ecological Importance have indirect positive impacts on the Natura 2000 network as ecological connectivity within the Plan area, which will in turn improve the coherence of the Natura 2000 network.

3.4 Potential Impacts of Proposed Variation to GCDP 2017-2023

Section 3.5 and 3.6 of the NIR of the GCDP includes a review of strategy, policies, objectives and zoning contained within the Plan. While the Proposed Variation is a minor modification of the NG GCRR route corridor reservation, given that it is a section of the N6 GCRR specific objective previously screened in for AA, the potential impacts previously identified for the N6 GCRR are considered as a precautionary measure.

Potential impacts of the incorporation of the GTS including inserting the N6 GCRR specific objective on the Land Use Zoning and Specific Objectives Map were previously identified in the NIR of the GCDP. This states that the N6 GCRR specific objective is an element of the GTS. The AA of the GTS identified that, in the absence of mitigation measures, the GTS had the potential to adversely affect the integrity of the following European Sites through a range of impact pathways: Lough Corrib SAC, Lough Corrib SPA, Galway Bay Complex SAC, Inner Galway Bay SPA, Ross Lake and Woods SAC, Cregganna Marsh SPA, Rahasane Turlough SAC, Rahasane Turlough SPA, Castletaylor Complex SAC, Kiltiernan Turlough SAC and Lough Fingall Complex SAC. Potential impacts identified included that many of the GTS elements are likely to be located immediately adjacent to or in close proximity to some of these European Sites, and in some cases must cross them. The proposed N6 GCRR crosses Lough Corrib SAC. The GTS therefore, has the potential to result in habitat loss, habitat fragmentation or disturbance/displacement effects to qualifying interest species (e.g. wintering birds and Otter). The N6 GCRR also has the potential to impact upon habitats in Lough Corrib SAC though air quality effects. Bridge structures associated with the proposed N6 GCRR have the potential to affect habitats as a result of shading effects where they cross Lough Corrib SAC, Galway Bay Complex SAC and Inner Galway Bay SPA. Bridge structures, particularly over the River Corrib, also pose a barrier effect and/or mortality risk to aquatic species in Lough Corrib SAC and Galway Bay Complex SAC and to bird species of Lough Corrib. Many of the GTS elements also have potential hydrological links to Ross Lake, Lough Corrib, the River Corrib and Galway Bay via the surface water network and therefore, could potentially affect water quality in Lough Corrib SAC, Lough Corrib SPA, Galway Bay Complex SAC, Inner Galway Bay SPA and Ross Lake and Woods SAC. Potential hydrogeological links could have wider ranging impacts upon European Sites selected for groundwater dependant wetland habitats and associated species, depending upon the scale and nature of any projects that may arise from the GTS. Of the GTS elements, the N6 GCRR will include tunnel elements and deep excavations and poses the greatest risk in that regard. The tunnel at Lackagh Quarry passes under Lough Corrib SAC and poses risk of surface level impacts upon an area of limestone pavement and calcareous grassland; both qualifying interest habitats of the SAC.

Further details are provided in the Screening for Appropriate Assessment (AA) of Proposed Material Alterations to the Draft Plan. This included a discussion on the GTS where each of the projects proposed to be implemented under the GTS, including the N6 GCRR, were assessed with regards to the potential impact pathways and the likelihood of significant effects on European sites within the Zone of Influence (ZoI) of the GTS (See Appendix 2). The discussion outlines that the N6 GCRR in the area of the Proposed Variation includes the tunnel at Galway Racecourse and cuttings at Castlegar.
and at Briarhill that may have potential indirect impacts on European sites, through hydro geological pathways.

The N6 GCRR project will also be assessed at project-level detailed design stage, where any potential impacts identified are mitigated at project level where necessary.

### 3.5 Potential In-combination Impacts

Section 3.6 of the NIR of the GCDP provides an assessment on potential cumulative and in-combination effects with other plans and projects. The assessment of in-combination effects takes into account of potential impact pathways to European sites within 15km identified in Appendix 2. The plans and projects reviewed are outlined in Table 2, details of the assessment are provided in Table 3.8 of NIR of the GCDP. The assessment in the NIR of the GCDP was that the Plan has robust protective strategies, policies and objectives to ameliorate any potential impacts. No other pathway was identified by which any plan or project could have a significant cumulative or in combination effect on European sites. Therefore, the NIR of the GCDP concluded that through the implementation of the overarching policies and objectives of the Plan no negative in-combination effects to European sites are expected through the implementation of the Plan.

The NIR was also cross–checked with the NIS prepared for the GTS (Scott Cawley Ltd., 2016), which considered cumulative and in-combination effects with other plans and projects.

The Proposed Variation relates to a minor modification of the N6 GCRR route corridor reservation previously assessed. Therefore implementation of the overarching policies and objectives of the GCDP ensure no negative in-combination effects to European sites. Any development is required to comply with the core strategy, proper planning and sustainability and with the requirements of relevant EU Directives/ environmental considerations.

<table>
<thead>
<tr>
<th>Table 2: Plans/Projects assessed in NIR of GCDP for Potential Cumulative &amp; In-Combination Effects²</th>
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<tbody>
<tr>
<td>Regional Planning Guidelines for the West Region 2010 - 2022</td>
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<tr>
<td>Galway County Development Plan 2015 -2021</td>
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<tr>
<td>Clare County Development Plan 2011-2017</td>
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<tr>
<td>NPWS Conservation Objectives</td>
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<tr>
<td>Inland Fisheries Ireland (IFI) Corporate Plan 2011-2015</td>
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<tr>
<td>Groundwater Pollution Reduction Programmes</td>
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<td>Surface Water Pollution Reduction Programmes</td>
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<tr>
<td>West Catchment Flood Risk Assessment and Management Study</td>
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<tr>
<td>Catchment Flood Risk Management Plans</td>
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<tr>
<td>Greenway and cycleway plans identified in the GTS including: Galway to Dublin Greenway Plan, Galway to Oughterard Greenway, Oughterard to Clifden Greenway, and Galway City to Barna Greenway.</td>
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<tr>
<td>N59 Moycullen Bypass road project</td>
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<tr>
<td>Wind farms development proposal in close proximity to the Plan area</td>
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<td>Local planning applications</td>
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<tr>
<td>Port of Galway Development/Galway Harbour Extension</td>
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<td>Sailín to Silverstrand Coastal Protection Scheme</td>
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²Note: The GCDP has incorporated the GTS at Material Alteration stage of the GCDP review process.
Section 4 of the NIR of the GCDP sets out mitigation measures to protect habitats and species. This includes details on: Recommended mitigation measures; Assessment of mitigation measures (timescale, effectiveness and implementation); Monitoring measures to safeguard integrity of sites; and Residual Impacts. It outlines that the overarching core strategy of the GCDP supports the strategies, policies and objectives for the protection of European and Nationally protected sites and protected habitats and species occurring outside these sites, as outlined in Chapter 4 Natural Heritage, Recreation and Amenity and supported by the core strategy in Chapter 1 of the GCDP.

Chapter 4 Natural Heritage, Recreation and Amenity includes the aim to ‘Ensure better integration of environmental and natural resource considerations in the Development Plan through the SEA process and provide the highest level of protection for European Sites, taking account of Article 6 of the Habitats Directive’. Strategy includes ‘Conserve, protect and enhance the designated and non-designated sites and natural habitats, while enabling the sustainable development of the city’ and ‘Monitor the significant environmental effects of the implementation of the Development Plan through the Strategic Environmental Assessment (SEA) process in accordance with Article 10 of the EU SEA Directive (2000/42EC). The aim and strategy are to be read collectively with key policies set out under Policy 4.1 Green Network and Policy 4.2 Protected Spaces: Sites of European, National and Local Ecological Importance. Strategy and policies support and inform each other, they in turn inform specific objectives and development management standards of the Plan including specific development standards 11.30 Environmental Impact Assessment and 11.31 Appropriate Assessment. Mitigation strategies/policies which have been included in the GCDP or strategies/policies that incorporate mitigation measures are provided in Table 3, full details of mitigation measures are provided in Section 4 of the NIR of the GCDP.

The NIR of the GCDP also sets out an assessment of mitigation measures to ameliorate potential impacts from the inclusion of the N6 GCRR specific objective on the Land Use and Zoning Map. This states that the N6 GCRR is an element of the GTS. An AA has been carried out in relation to the GTS which concluded that the GTS, either alone or in-combination with any other plans or projects, and in consideration of the mitigation measures therein, will not adversely affect the integrity of any European sites. Therefore, no additional mitigation measures are required to address any potential impacts on European sites as part of its inclusion within the GCDP.

The NIR of the GCDP also outlines that mitigation measures proposed for the GTS and transportation elements of the Plan are outlined in full in the Natura Impact Statement (NIS) prepared for the GTS (Scott Cawley Ltd., 2016) and are cross referenced in Table 4.4 and Table 4.5 of the NIR (which also outlines the mitigatory policies and objectives provided in the Plan).

Taking this into consideration and that the Proposed Variation relates to a minor modification of the N6 GCRR route corridor reservation previously assessed, no additional mitigation measures are required to address any potential impacts on European sites from the Proposed Variation 1: Amend Specific Objective relating to the route corridor reservation for the N6 Galway City Ring Road (N6 GCRR) on the Land Use Zoning and Specific Objectives Map in the Ballybrit/Briarhill/Cooleagh area and the N17 Tuam Road/Parkmore area of the city.
Table 3: Strategies and Policies contained in the GCDP to Protect the Natura 2000 Network

<table>
<thead>
<tr>
<th>Plan/Project</th>
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<tbody>
<tr>
<td>Chapter 3: Transportation Strategy</td>
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<tr>
<td>Chapter 4: Natural Heritage, Recreation and Amenity Strategy</td>
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<tr>
<td>Policy 4.1: Green Network</td>
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<tr>
<td>Policy 4.2: Protected Spaces: Sites of European, National and Local Ecological Importance</td>
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<tr>
<td>Policy 4.3: Blue Spaces: Coast, Canals and Waterways</td>
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<td>Policy 4.4.1: Green Spaces: Urban Woodlands and Trees</td>
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<td>Policy 4.5.1: Community Spaces: Greenways and Public Rights of Way</td>
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<td>Policy 4.6.2: Open Spaces: Agricultural Lands</td>
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<tr>
<td>Chapter 5: Economic Activity - Policy 5.1-Enterprise</td>
</tr>
<tr>
<td>Chapter 7: Community and Culture - Policy 7.2 - Creative City</td>
</tr>
<tr>
<td>Chapter 9: Environment and Infrastructure - Strategy</td>
</tr>
<tr>
<td>Policy 9.3: Flood Risk Assessment</td>
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<tr>
<td>Policy 9.5: Sustainable Building Design and Construction</td>
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<td>Policy 9.6: Water Quality</td>
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<td>Policy 9.7: Water Services</td>
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<tr>
<td>Policy 9.9: Safe Environment - Control of Major Accident Hazards Directive (Seveso III Directive)</td>
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<tr>
<td>Policy 9.10: Air Quality and Noise</td>
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<tr>
<td>Policy 9.11: Light Pollution</td>
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<td>Policy 9.12: Waste Management</td>
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<tr>
<td>Policy 9.13: Telecommunication</td>
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<tr>
<td>Policy 9.14: Energy and Associated Infrastructure</td>
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</table>
SECTION 4 CONCLUSION AND MONITORING

4.1 Conclusion

The Proposed Variation relates to a minor modification of the N6 GCRR route corridor reservation. The findings of the assessment conclude that, in the absence of mitigation measures, there may be potential indirect impacts on European sites, through hydro geological pathways. Given also that the Proposed Variation is a section of the N6 GCRR route corridor reservation previously ‘screened in’ for AA under the GCDP review process, the potential impact pathways identified for the N6 GCRR are also considered. The risks to safeguarding the integrity of the qualifying interests and conservation objectives of the European sites have been addressed by mitigation measures already contained in the GCDP. In addition, projects arising through the implementation of the specific objective, the potential impacts of which cannot be predicted at Development Plan level, will be subject to the AA process where further details of design and location are known.

Taking mitigation measures already incorporated into the CGDP into consideration, it is considered that the Proposed Variation will not have a significant adverse effect on the integrity of the European sites.

4.2 Monitoring

Monitoring measures are integrated into the SEA monitoring process and apply to the Proposed Variation. In this regard, Strategic Environmental Objectives and Targets are linked to indicators, which facilitate the monitoring process. Stakeholders responsible for monitoring of indicators are also identified (See SEA Environmental Report of Proposed Variation). The monitoring process is integrated with the normal review of the GCDP. A preliminary report on SEA monitoring is to be prepared to coincide with the Chief Executive’s Report to Elected Members on progress achieved in securing Development Plan objectives and targets, within two years of the making of the Plan.

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3 Except as provided for in Policy 4.2 - Protected Spaces: Sites of European, National and Local Ecological Importance
APPENDIX 1

AA Conclusion Statement and Determination of the GCDP 2017-2023
Appropriate Assessment Conclusion Statement

Introduction

In accordance with Article 6(3) of the Habitats Directive and Section 177U of the Planning and Development Act, 2000-2015 (as amended), RPS Group Ltd. on behalf of Galway City Council carried out a screening for Appropriate Assessment report of the Draft Galway City Development Plan 2017-2023 to inform whether Appropriate Assessment (AA) was required. The assessment by Galway City Council concluded that the Draft Plan, alone or in combination with other plans and projects, would be likely to have significant adverse impacts on eleven European sites, therefore a Appropriate Assessment (AA) was required.

Proposed Material alterations to draft strategy, policies and objectives and land use zoning were also screened for AA and it was concluded that an AA was also required for Proposed Material Alterations to the Draft Plan relating to the implementation of measures included in the Galway Transport Strategy (GTS), Chapter 3 Transportation, Chapter 4 Natural Heritage, Recreation and Amenity and Chapter 5 Economic Activities.

A Natura Impact Report (NIR) of the Galway City Development Plan (GCDP) 2017-2023 was prepared by RPS Group Ltd. on behalf of Galway City Council to inform the Appropriate Assessment. Input to the NIR was provided from Scott Cawley Ltd on Galway Transport Strategy (GTS) related Proposed Material Alterations. Throughout the development plan process, the NIR has been revised and updated to assess the potential impacts of all strategies/policies/objectives and changes to land use zoning. It is based on best scientific knowledge, of the potential impacts of the Plan in combination with other plans and projects on the conservation objectives of relevant European site and the provision, where necessary, of mitigation or avoidance measures to preclude adverse effects.

In accordance with the requirements of Part XAB, Section 177V of the Planning and Development Act, 2000 as amended, an Appropriate Assessment (AA) must be carried out by Galway City Council as the competent authority before the plan is made. In carrying out this AA, Galway City Council take into account the NIR prepared by ecological consultants and submissions received during the Draft Plan public consultation process. This includes submissions from the DAHRRGA (formerly DAHG) and a review of submissions in consultation with ecological consultants.

Summary of how findings of the AA were factored into the plan

Throughout the preparation of the Plan, the AA process was integrated into the various stages of the plan process and has guided preparation of development scenarios for the city. A NIR accompanied the Draft GCDP 2017-2023 on public display and addressed Stage 1 Screening for AA and Stage 2 Natura Impact Report. The Draft NIR was revised and up-dated to reflect recommended amendments to the Draft GCDP (May 2016), the Proposed Material Alterations to the Draft GCDP 2017-2023 (August 2016), and submissions and observations made on the Draft Plan. This approach enabled the assessment of land use zoning, refinement of policies and objectives to include measures proposed to avoid or mitigate impacts on European sites.

The report was prepared in line with the requirements of Article 6(3) of the EU Habitats Directive (Directive 92/43/EEC) on the Conservation of Natural Habitats and of Wild Fauna and Flora; the Planning and Development Act 2000 (as amended); and the European Communities (Birds and

**Potential Impacts**

The NIR identified that the key European sites potentially affected are those located within the Plan boundary: Galway Bay Complex SAC, Inner Galway Bay SPA, Lough Corrib SAC and Lough Corrib SPA. Seven other sites, located at a distance to the Plan boundary, were identified as potentially being at risk of significant impact through hydrogeological pathways. Six European sites were ‘screened out’ for significant effects due to lack of connectivity between the Draft Plan area and the sites based on their conservation objectives and potential impact pathway.

The NIR assessment identified that potential impacts on the European sites can be manifested in a number of ways either directly in the form of land take, trampling and disturbance by people themselves; or indirectly, for example, in the form of water quality deterioration resulting from construction, emissions and sewage effluent. The relative importance of these potential impacts will vary from site to site depending on the particular circumstances of the site. Impacts to the qualifying interests of European sites associated with elements of the Plan potentially include:

- Run off of pollutants during construction and operational phases of development leading to reduced water quality and potential impacts at or downstream of the development. Given that the Plan area is potentially hydrologically linked to a number of European sites, this is a particularly significant pathway for potential adverse impacts;
- Inadequate wastewater treatment resulting in pollution of freshwater and marine waters;
- Intensification and urbanisation leading to habitat fragmentation;
- A reduction in water quality in groundwater, springs and watercourses associated with the construction phase of new developments; and
- Surface water runoff from impermeable surfaces leading to reduced water quality in groundwater, springs or surface waters affecting qualifying habitats and species downstream.

The provision of infrastructure is a key consideration including wastewater treatment and drainage systems facilities. An assessment of the potential cumulative and in-combination effects of the GCDP is also provided in the NIR.

**NIR Findings**

The preparation of the NIR identified that the GCDP contains a strong focus on the protection, sustainable use and management of natural heritage and a commitment for development to take place in an environmentally sustainable manner.

The NIR findings are that the Plan implementation has the potential to result in impacts to the integrity of the European sites, if unmitigated. The risks to safeguarding the integrity of the qualifying interests and conservation objectives of the European sites have been addressed by the inclusion of measures that will prioritise the avoidance of impacts in the first place and the mitigation of impacts where these cannot be avoided. In addition, all lower level plans and projects
arising through the implementation of the Plan will themselves be subject to the Appropriate Assessment process. An assessment on the potential cumulative and in-combination effects of the Draft Plan concluded that through the implementation of the overarching policies and objectives of the Plan no negative in-combination effects from other plans and projects to European sites are expected through the implementation of the Plan. Having incorporated mitigation measures, the NIR concluded that it is considered that the GCDP 2017-2023 will not have a significant adverse effect on the integrity of the European sites.*

**Consideration of submissions**

As part of the AA process and in the preparation of the NIR report, consultation took place with the Environmental Protection Agency (EPA), and Department of Arts, Heritage, Regional, Rural and the Gaeltacht (DAHRRGA) (formerly the Department of Arts, Heritage and the Gaeltacht (DAHG)). Under the Strategic Environmental Assessment (SEA) process, a scoping letter was also sent to designated Environmental Authorities.

Submissions relating to habitats protected under National and European legislation were received from the DAHRRGA (formerly DAHG), Department of Communications, Climate Action & Environment (DCCAE formerly the Department of Communications Energy and Natural Resources (DCENR)) and Geological Service Ireland (GSI). These were taken into account in the drafting of the Development Plan and NIR and are summarised in Section 1 of the NIR. Part 1 of the Chief Executives (CE) Report on Submissions to the Draft Plan, May 2016 also includes a summary of issues relating to the NIR of the Draft GCDP along with the CE response.

A revised and updated NIR accompanied the Proposed Material Alterations to the Draft Development Plan September 2016 on public display. A submission received from the DAHRRGA on the NIR was reviewed in consultation with RPS Group Ltd. ecological consultants. Section 3 of the CE’S Report on the Consultation Process of the Proposed Material Alterations to the Draft GCDP 2017-2023 includes a summary of issues relating to the NIR along with the CE response. The review concluded that robust and effective strategies, policies and objectives have been provided in the Plan to mitigate potential impacts on the integrity of the European Sites. It also highlighted that mitigation measures proposed for the GTS and transportation elements of the Plan and outlined in the Natura Impact Statement prepared for the GTS (Scott Cawley Ltd., 2016) have been cross referenced in the NIR, which also includes the mitigatory policies and objectives provided in the Plan.

**Reasons for choosing the plan as adopted**

During the preparation of the development plan process both the SEA Environmental Report and the NIR have been closely aligned. For the purposes of the Development Plan review, three alternative development strategies for the city were evaluated in order to achieve the best sustainable development option. The alternatives considered were as follows:

- Scenario 1 – Market-led Growth
- Scenario 2 – Protectionist Approach
- Scenario 3 – Planned Growth

* Except as provided for in Policy 4.2 - Protected Spaces: Sites of European, National and Local Ecological Importance
The SEA process is reported on separately in the SEA Statement and includes an evaluation of scenarios considered. The NIR informed the evaluation of scenarios and the ‘Planned Growth’ scenario was considered to be the preferred development option which best achieves the sustainable and balanced development of the city. The GCDP, with its supporting policies and objectives, has been developed to achieve and implement this preferred plan scenario.

DECLARATION THAT THE PLAN AS ADOPTED WILL NOT ADVERSELY AFFECT THE INTEGRITY OF EUROPEAN SITES

The likely impacts to the integrity of the European sites that could arise from measures proposed in the Plan have been examined. The Plan has fully integrated the findings of the AA process throughout and Galway City Council is satisfied that robust and effective mitigation measures have been provided in the GCDP.

The overarching Core Strategy of the Plan supports the strategies, policies and objectives for the protection of European and nationally protected sites. As a result of the AA process a number of policies have been introduced and existing policies and objectives amended to strengthen the protection afforded to European sites. Strategies, policies and objectives contained in the Plan are proposed to ensure ecological connectivity within the Plan area is maintained or improved (which will in turn improve the coherence of the Natura 2000 network) and measures are contained to avoid or reduce the potential for impacts of the Plan, either alone or in-combination with any other plans or projects on the integrity of European sites. Certain policies will also have a neutral or positive effect on European sites. The Plan also includes mitigation measures to ensure that the impacts of plans and projects, which cannot be predicted at the Development Plan level, will be subject to separate assessment procedures in accordance with all applicable Directives, Regulations and Legislation. These measures will ensure that AAs are carried out and that lower tier plan and project level effects will be subject to separate assessment procedures, when further details of design and location are known.

Conclusion

Galway City Council, having examined the NIR of the Development Plan along with submissions and observations received, are in agreement with the conclusion of the NIR.

Galway City Council have determined that having incorporated mitigation measures, the GCDP 2017 -2023 will not have a significant adverse effect on the integrity of European sites either alone or in combination with other plans and projects. This is based on best scientific knowledge, including the nature of potential impacts that may arise from the Plan and the implementation of mitigation measures proposed therein.

Monitoring

The AA process will continue to apply in the implementation of the Plan and monitoring measures are integrated into the SEA monitoring process. Monitoring commences once the Development Plan comes into force and continues over the period of the Plan. The monitoring process shall be carried out on an ongoing basis through the assessment of planning applications and environmental monitoring programmes. Indicators identified in the SEA monitoring are indicative and may change.
over the period of the Plan, taking into consideration factors such as changes to monitoring programmes over time and the monitoring arrangements of other stakeholders.

A review of the monitoring programme is integrated into the development plan review process. A preliminary report on SEA monitoring will be prepared to coincide with the Chief Executive’s Report to Elected Members on progress reached in achieving Plan objectives and targets, within two years of the making of the Plan.
Galway City Council has prepared a City Development Plan 2017-2023. As part of the preparation of the Plan, an Appropriate Assessment Determination in accordance with Article 6(3) of the EC Habitats Directive and Section 177V of the Planning and Development Act 2000 (as amended) is made.

This Determination takes into account the Natura Impact Report prepared by RPS Group Ltd on behalf of the Council, with input from Scott Cawley Ltd in relation to the implementation of measures included in the Galway Transport Strategy incorporated into the Plan. It also takes into account submissions and observations received during the Plan public consultation process.

It is determined that risks to safeguarding the integrity of the qualifying interests and conservation objectives of the European sites have been addressed by the inclusion of mitigation measures that will prioritise the avoidance of impacts in the first place and mitigate impacts where these cannot be avoided. In addition, all lower level plans and projects arising through the implementation of the Plan will themselves be subject to the AA process, when further details of design and location are known.

Having incorporated mitigation measures, it is considered that the Galway City Development Plan 2017-2023 by itself or in combination with other plans or projects, will not have a significant adverse effect on the integrity of the European sites.*

Signed: ____________
Ms. Caroline Phelan
A/Director of Services
Planning & Transportation
Galway City Council

Date: __________
1st December 2016

* Except as provided for in Policy 4.2 - Protected Spaces: Sites of European, National and Local Ecological Importance
APPENDIX 2

(2A) Potential impact pathways to European Sites within 15km of GCDP 2017-2023 (based on a Source-Pathway-Receiver model)

(2B) Galway Transport Strategy Assessment of Affects and Table: Source-Pathway-Receptor Matrix: Potential Impact Pathways Connecting the Elements of the Galway Transport Strategy (GTS) to European Sites
Appendix 2A: Potential impact pathways to European Sites within 15km of GCDP 2017-2023 (based on a Source-Pathway-Receiver model)

Source: Appendix A of NIR of GCDP 2017-2023

A Source-Pathway-Receiver model was used to determine which European sites are at risk of being impacted by the Plan. In this model the Source represents the Policies/Objectives of the Plan with the potential to result in impacts. The pathway (proximity, hydrological/ hydrogeological, aerial, disturbance pathways) represents the process by which such impacts might negatively affect the Receiver i.e. qualifying interests of European sites. Each European site has been reviewed to establish whether or not the Plan is likely to have a significant effect on the integrity of the site as defined by its structure and function, qualifying interest and its conservation objectives.

There are seventeen European sites located within 15km of the Plan area. The Table below presents the European sites, the qualifying interests of same and the potential impact pathways.

<table>
<thead>
<tr>
<th>Site Code</th>
<th>Site Name</th>
<th>Status</th>
<th>Qualifying Habitats</th>
<th>Qualifying Species</th>
<th>Approximate Distance from Plan Boundary</th>
<th>Hydrological/ Hydrogeological Pathway?</th>
<th>Aerial Pathway?</th>
<th>Disturbance Pathway?</th>
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<tbody>
<tr>
<td>000268</td>
<td>Galway Bay Complex SAC</td>
<td>SAC</td>
<td>Mudflats and sandflats not covered by seawater at low tide [1140]</td>
<td>Lutra lutra (Otter) [1355]</td>
<td>Within Plan boundary Potential for Direct and Indirect Impacts</td>
<td>Yes. Potential exists for indirect impacts to occur via hydrological pathways to all marine habitats and species and direct impacts to coastal receptors along the southern boundary of the Plan study area that overlaps with the northern extents of the Galway Bay Complex SAC. Potential exists for indirect groundwater</td>
<td>Yes. The site has the potential for some aerial impacts due to its location/land coverage. Coastal habitats and marine species are the most likely to be potentially affected within the Plan area.</td>
<td>Yes. Otter are known to be present within the SAC and Plan boundary plan overlap and likely migrate between Galway Bay Complex SAC and Lough Corrib SAC. Harbour Seal are also likely to be potentially affected within</td>
</tr>
<tr>
<td>Site Code</td>
<td>Site Name</td>
<td>Status</td>
<td>Qualifying Habitats</td>
<td>Qualifying Species</td>
<td>Approximate Distance from Plan Boundary</td>
<td>Hydrological/Hydrogeological Pathway?</td>
<td>Aerial Pathway?</td>
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<td>000297</td>
<td>Lough Corrib SAC</td>
<td>SAC</td>
<td>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]</td>
<td><em>Margaritifera margaritifera</em> (Freshwater Pearl Mussel) [1029] <em>Austropotamobius pallipes</em> (White-clawed Crayfish) [1092] <em>Petromyzon marinus</em> (Sea Lamprey) [1095] <em>Lampetra planeri</em> (Brook Lamprey) [1096] <em>Salmo salar</em> (Salmon) [1106] <em>Rhinolophus hipposideros</em> (Lesser Horseshoe Bat) [1303] <em>Lutra lutra</em> (Otter) [1355] <em>Drepanocladus vernicosus</em> (Slender Green Feather-moss)</td>
<td>Adjacent to Plan boundary Potential for Direct and Indirect Impacts</td>
<td>Yes. The Lough Corrib SAC flows through the Plan boundary area. The potential exists for groundwater dependent habitats such as Alkaline Fens [7230] which overlap with the Plan area via limestone bedrock aquifer. Active Raised Bog [7110] is present within the same bedrock aquifer and could potentially be impacted by indirect impacts. Habitats that could potentially be impacted from the Plan include: Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (*)</td>
<td>Yes. The site has the potential for some aerial impacts due to its location/land coverage. All Qualifying species have the potential for indirect effects to occur as a result of works part of the Plan. Also, Lesser Horseshoe Bat foraging routes could potentially be impacted by the Plan.</td>
<td>Yes. Otter are known to be present within the SAC and Plan boundary plan overlap and likely migrate between Lough Corrib SAC and Galway Bay Complex SAC. Migrating Salmon, Sea and Brook Lamprey may also be impacted as a result of works part of the Plan.</td>
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<td>Site Code</td>
<td>Site Name</td>
<td>Status</td>
<td>Qualifying Habitats</td>
<td>Qualifying Species</td>
<td>Approximate Distance from Plan Boundary</td>
<td>Hydrological/ Hydrogeological Pathway?</td>
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<td>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]</td>
<td>[1393] <em>Najas flexilis</em> (Slender Naiad) [1833]</td>
<td>important orchid sites) [6210], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410], Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210], Alkaline fens [7230], Limestone pavements [8240]. All water dependent species could potentially be impacted by the Plan.</td>
<td>impacts to occur as a result of aerial sourced impacts such as dust deposition and construction machinery emissions to habitats including: Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometaalia) (*) important orchid sites) [6210], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410], Calcareous fens with Cladium mariscus and species of the</td>
<td>impacted as a result of the Plan.</td>
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<td>Site Code</td>
<td>Site Name</td>
<td>Status</td>
<td>Qualifying Habitats</td>
<td>Qualifying Species</td>
<td>Approximate Distance from Plan Boundary</td>
<td>Hydrological/ Hydrogeological Pathway?</td>
<td>Aerial Pathway?</td>
<td>Disturbance Pathway?</td>
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<tr>
<td>002244</td>
<td>Ardrahan Grassland SAC</td>
<td>SAC</td>
<td>Alpine and Boreal heaths [4060] Juniperus communis formations on heaths or calcareous grasslands [5130] Limestone pavements [8240]</td>
<td>-</td>
<td>13.8km from plan boundary. Potential Indirect Impacts</td>
<td>Yes. Potential hydrogeological pathways exist for indirect impacts through groundwater bedrock aquifer connectivity to the Plan area.</td>
<td>No. This site is at a distance unlikely to create aerial impacts.</td>
<td>No disturbance is anticipated to occur sourced from works within the plan boundary area.</td>
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<tr>
<td>000242</td>
<td>Castletaylor Complex SAC</td>
<td>SAC</td>
<td>Turloughs [3180] Alpine and Boreal heaths [4060] 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] Limestone pavements [8240]</td>
<td>-</td>
<td>13.0km from plan boundary. Potential Indirect Impacts</td>
<td>Yes. Potential hydrogeological pathways exist for indirect impacts through groundwater bedrock aquifer connectivity to the Plan area.</td>
<td>No. This site is at a distance unlikely to create aerial impacts.</td>
<td>No disturbance is anticipated to occur sourced from works within the plan boundary area.</td>
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<tr>
<td>A</td>
<td>Connemara Bog Complex SAC</td>
<td>SAC</td>
<td>Coastal lagoons [1150] Reefs [1170] Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Natural dystrophic lakes and ponds [3160] Water courses of plain to montane levels with the Euphydryas aurinia (Marsh Fritillary) [1065] Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355] Najas flexilis (Slender Naiad)</td>
<td>Euphydryas aurinia (Marsh Fritillary) [1065] Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355] Najas flexilis (Slender Naiad)</td>
<td>7.3km from plan boundary. No Impacts</td>
<td>No hydrological or hydrogeological pathways</td>
<td>No. This site is at a distance unlikely to create aerial impacts.</td>
<td>No. Disturbance is not anticipated to occur sourced from works within the plan boundary area.</td>
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<tr>
<td>Site Code</td>
<td>Site Name</td>
<td>Status</td>
<td>Qualifying Habitats</td>
<td>Qualifying Species</td>
<td>Approximate Distance from Plan Boundary</td>
<td>Hydrological/ Hydrogeological Pathway?</td>
<td>Aerial Pathway?</td>
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<tr>
<td>001926</td>
<td>East Burren Complex SAC</td>
<td>SAC</td>
<td>Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140] Turloughs [3180] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260] Alpine and Boreal heaths [4060] 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]</td>
<td>Euphydryas aurinia (Marsh Fritillary) [1065] Rhinolophus hipposideros (Lesser Horseshoe Bat) [1303] Lutra lutra (Otter) [1355]</td>
<td>12.6km from Plan Boundary. No impacts</td>
<td>No hydrological or hydrogeological pathways</td>
<td>No</td>
<td>No disturbance is anticipated to occur sourced from works within the plan boundary area.</td>
</tr>
<tr>
<td>Site Code</td>
<td>Site Name</td>
<td>Status</td>
<td>Qualifying Habitats</td>
<td>Qualifying Species</td>
<td>Approximate Distance from Plan Boundary</td>
<td>Hydrological/Hydrogeological Pathway?</td>
<td>Aerial Pathway?</td>
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<td>001271</td>
<td>Gortnandarragh Limestone Pavement SAC</td>
<td>SAC</td>
<td>Limestone pavements [8240]</td>
<td>-</td>
<td>13km from Plan Boundary. No impacts</td>
<td>No. There is a surface water connection to the Plan boundary area through Lough Corrib and the Gortmore Stream sourced from the SAC. Due to the upstream location and distance from the Plan area, it not anticipated that any significant impacts will occur to the Qualifying features of the SAC.</td>
<td>No. This site is at a distance unlikely to create aerial impacts.</td>
<td>No disturbance is anticipated to occur sourced from works within the plan boundary area.</td>
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<tr>
<td>001285</td>
<td>Kiltiernan Turlough SAC</td>
<td>SAC</td>
<td>Turloughs [3180]</td>
<td></td>
<td>12km from Plan Boundary. Potential Indirect</td>
<td>Yes. Potential hydrogeological pathways exist for indirect impacts through groundwater</td>
<td>No. This site is at a distance unlikely to create aerial impacts.</td>
<td>No disturbance is anticipated to occur sourced from works within the plan boundary area.</td>
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<tr>
<td>Site Code</td>
<td>Site Name</td>
<td>Status</td>
<td>Qualifying Habitats</td>
<td>Qualifying Species</td>
<td>Approximate Distance from Plan Boundary</td>
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<td>000606</td>
<td>Lough Fingall Complex SAC</td>
<td>SAC</td>
<td>Turloughs [3180] Alpine and Boreal heaths [4060] 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] Limestone pavements [8240]</td>
<td><em>Rhinolophus hipposideros</em> (Lesser Horseshoe Bat) [1303]</td>
<td>9.5km from Plan Boundary Potential Indirect Impacts</td>
<td>Yes. Potential hydrogeological pathways exist for indirect impacts through groundwater bedrock aquifer connectivity to the Plan area.</td>
<td>No. This site is at a distance unlikely to create aerial impacts.</td>
<td>No disturbance is anticipated to occur sourced from works within the plan boundary area.</td>
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<tr>
<td>000322</td>
<td>Rahasane Turlough SAC</td>
<td>SAC</td>
<td>Turloughs [3180]</td>
<td>-</td>
<td>12km from Plan Boundary Potential Indirect Impacts</td>
<td>Yes. Potential hydrogeological pathways exist for indirect impacts through groundwater bedrock aquifer connectivity to the Plan area.</td>
<td>No. This site is at a distance unlikely to create aerial impacts.</td>
<td>No disturbance is anticipated to occur sourced from works within the plan boundary area.</td>
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<tr>
<td>001312</td>
<td>Ross Lake and Woods SAC</td>
<td>SAC</td>
<td>Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140]</td>
<td><em>Rhinolophus hipposideros</em> (Lesser Horseshoe Bat) [1303]</td>
<td>13.5km from Plan Boundary. No Impacts</td>
<td>No. Indirect connectivity exists between the SAC and the various lake waterbodies (approx. 7) and Lough Corrib before discharging into the plan boundary area. However, due to the upstream location and distance from the Plan area, it not</td>
<td>No. This site is at a distance unlikely to create aerial impacts.</td>
<td>No disturbance is anticipated to occur sourced from works within the plan boundary area.</td>
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<td>Site Code</td>
<td>Site Name</td>
<td>Status</td>
<td>Qualifying Habitats</td>
<td>Qualifying Species</td>
<td>Approximate Distance from Plan Boundary</td>
<td>Hydrological/ Hydrogeological Pathway?</td>
<td>Aerial Pathway?</td>
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<td>000020</td>
<td>Black Head – Poulsallagh Complex SAC</td>
<td>SAC</td>
<td>Reefs [1170] Perennial vegetation of stony banks [1220] Water courses of plain to montane levels with the Ranunculion fluitantis and Calitricho-Batrachion vegetation [3260] Alpine and Boreal heaths [4060] 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] Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510] Petrifying springs with tufa formation (Cratoneurion) [7220] Limestone pavements [8240] Submerged or partially submerged sea caves [8330]</td>
<td><em>Petalophyllum ralfsii</em> (Petalwort) [1395]</td>
<td>13km from Plan Boundary</td>
<td>No Impacts</td>
<td>No. Tenuous connectivity exists through the Galway Bay Complex SAC. Any potential indirect impact threats are not expected to impact the qualifying features due to the combination of the assimilative capacity of Galway Bay and the distance from the Plan area.</td>
<td>No.</td>
</tr>
<tr>
<td>000054</td>
<td>Moneen Mountain SAC</td>
<td>SAC</td>
<td>Turloughs [3180] Alpine and Boreal heaths [4060] Juniperus communis formations on heaths or calcareous grasslands [5130] Calaminarian grasslands of the Violetalia calaminariae [6130]</td>
<td><em>Euphrydas aurinia</em> (Marsh Fritillary) [1065] <em>Rhinolophus hipposideros</em> (Lesser Horseshoe Bat) [1303]</td>
<td>13km from Plan Boundary</td>
<td>No Impacts</td>
<td>No hydrological or hydrogeological pathways</td>
<td>No.</td>
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<tr>
<td>Site Code</td>
<td>Site Name</td>
<td>Status</td>
<td>Qualifying Habitats</td>
<td>Qualifying Species</td>
<td>Approximate Distance from Plan Boundary</td>
<td>Hydrological/Hydrogeological Pathway?</td>
<td>Aerial Pathway?</td>
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<td>004042</td>
<td>Lough Corrib SPA</td>
<td>SPA</td>
<td>Wetland and Waterbirds [A999]</td>
<td>Gadwall (<em>Anas strepera</em>) [A051]</td>
<td>Within Plan Boundary</td>
<td>Yes. Potential exists for impacts to the qualifying habitat (Wetlands [A999]) and impacts to the Qualifying species as a result of the Plan.</td>
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<td>Shoveler (<em>Anas clypeata</em>) [A056]</td>
<td>Potential Direct and Indirect Impacts</td>
<td>Yes. The site is located where there is a likelihood of aerial impacts. Potential exists for direct</td>
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<td>Pochard (<em>Aythya ferina</em>) [A059]</td>
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<td>Yes. There is potential for impacts to occur the qualifying species present within the SPA and Plan</td>
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<td></td>
<td>Tufted Duck (<em>Aythya fuligula</em>)</td>
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<td>Site Code</td>
<td>Site Name</td>
<td>Status</td>
<td>Qualifying Habitats</td>
<td>Qualifying Species</td>
<td>Approximate Distance from Plan Boundary</td>
<td>Hydrological/Hydrogeological Pathway?</td>
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<tr>
<td>004089</td>
<td>Rahasane Turlough SPA</td>
<td>SPA</td>
<td>Wetland and Waterbirds [A999]</td>
<td>Gadwall (Anas strepera) [A051] Whooper Swan (Cygnus cygnus) [A038]</td>
<td>12km from Plan Boundary Potential Indirect</td>
<td>Yes. The potential exists for indirect impacts through groundwater bedrock aquifer connectivity to impacts to the qualifying habitat (Wetlands [A999]) and indirect impacts to the Qualifying species as a result of the Plan.</td>
<td>No. This site is at a distance unlikely to create aerial impacts.</td>
<td>No disturbance is anticipated to occur sourced from works within the plan</td>
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<td>[A061] Common Scoter (Melanitta nigra) [A065] Hen Harrier (Circus cyaneus) [A082]</td>
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<tr>
<td>Site Code</td>
<td>Site Name</td>
<td>Status</td>
<td>Qualifying Habitats</td>
<td>Approximate Distance from Plan Boundary</td>
<td>Hydrological/ Hydrogeological Pathway?</td>
<td>Aerial Pathway?</td>
<td>Disturbance Pathway?</td>
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<td>004142</td>
<td>Cregganna Marsh SPA</td>
<td>SPA</td>
<td>Wigeon (<em>Anas penelope</em>) [A050] Golden Plover (<em>Pluvialis apricaria</em>) [A140] Black-tailed Godwit (<em>Limosa limosa</em>) [A156]</td>
<td>Impacts</td>
<td>Yes. The potential exists for indirect impacts through groundwater bedrock aquifer connectivity to the Plan area</td>
<td>No</td>
<td>No disturbance is anticipated to occur sourced from works within the plan boundary area.</td>
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</table>
Appendix 2B: Galway Transport Strategy Assessment of Affects and Table: Source-Pathway-Receptor Matrix—Potential Impact Pathways Connecting the Elements of the Galway Transport Strategy (GTS) to European Sites

Source: Screening for Appropriate Assessment (AA) of Proposed Material Alterations to the Draft Plan, which is included in Appendix B of NIR of GCDP 2017-2023

Galway Transport Strategy Assessment of Affects

The GTS consists of a number of project elements, generated by a series of guiding principles, strategic objectives and strategic aims under an overall vision “to create a connected city region driven by smarter mobility”. The various projects that are proposed to be implemented through the GTS can be grouped under the following headings: the N6 Galway City Ring Road (GCCR), the Bearna Greenway, the Galway to Dublin Cycleway (Galway City to Oranmore)\(^4\), the Galway to Oughterard Greenway\(^5\), the public transport network, the non-greenway elements of the cycle network and the pedestrian network. Each of these have individual project elements associated with strategic aims which were all analysed to identify impact pathways (and their ZoI) by which GTS could potentially impact on European sites, considering the Site’s Qualifying Interests (QIs)/Special Conservation Interests (SCIs) and the conservation objectives supporting their conservation condition.

The ZoI of the GTS with respect to the Natura 2000 network includes all European sites within the GTS study area boundary, European sites within the same groundwater bodies as the GTS which support groundwater dependent habitats (in poorly productive bedrock the ZoI is considered to be more local, compared with karst areas where a more precautionary approach is taken to include the whole groundwater body), and those with potential hydrological connections to European sites (e.g. surface water features such as rivers, streams and drainage features). The Source-Pathway-Receptor Matrix of the potential impact pathways connecting the elements of the Galway Transport Strategy (GTS) to European sites is provided in Appendix A.

In the absence of mitigation measures and considering the absence of detailed design for the majority of strategy elements, the GTS is likely to have a significant effect on the following European sites:

**Lough Corrib Special Area of Conservation (SAC)**

The N6 GCCR, the Galway to Oughterard Greenway, and a number of other proposed bridges over the River Corrib associated with the public transport, cycle and pedestrian networks (along the line of the Old Clifden Railway and at the Salmon Weir Bridge) will cross the Lough Corrib SAC and therefore some level of disturbance, habitat loss and fragmentation is likely to occur.

The N6 GCCR and the Galway to Oughterard Greenway also lie within the same karst groundwater body as a portion of the SAC (from Oughterard to Galway City) and could potentially interact with, and impact upon, the existing hydrogeological regime which may support wetland habitats within

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\(^4\) The GTS includes that portion of the Galway to Dublin Cycleway between Galway City and Oranmore.

\(^5\) The GTS includes that portion of the Galway to Oughterard Greenway between Galway City and Moycullen.
the European site. Of particular risk to the existing groundwater regime is the proposed tunnel beneath the SAC at Menlough immediately west of Lackagh Quarry, associated with the N6 GCRR, which is within the same groundwater body that supports the QI Annex I/priority Annex I (*) habitats at the Coolagh Lakes—namely Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140], Calcareous fens with Cladium mariscus and species of the Caricion davallianae * [7210], and Alkaline fen [7230].

Other elements of the N6 GCRR with potential karst groundwater impacts are the tunnel at Galway Racecourse and cuttings at Castlegar and at Briarhill, all of which have the potential to interact with groundwater that could affect groundwater dependent habitats in Lough Corrib SAC.

The N6 GCRR, the Galway to Oughterard Greenway, and a number of other proposed bridges over the River Corrib associated with the public transport, cycle and pedestrian networks (along the line of the Old Clifden Railway and at the Salmon Weir Bridge) will either cross the River Corrib and/or many other surface water features that drain to the SAC potentially affecting water quality and supported QI aquatic species and habitats.

If non-native invasive plant species are present in areas associated with any elements of the GTS, these could potentially be spread to habitats within the SAC during construction works.

Similarly to the N6 GCRR, the Galway to Oughterard Greenway and a number of other proposed bridges over the River Corrib associated with the public transport, cycle and pedestrian networks (along the line of the Old Clifden Railway and at the Salmon Weir Bridge) will cross the SAC, or will be within close proximity to it. There is the potential that construction works and/or operation could disturb/displace aquatic QI species (Otter, Atlantic salmon and lamprey) from important habitat areas and/or breeding/resting sites. Shading impacts on habitats within the SAC could also occur where the road is elevated. Where the N6 GCRR crosses, or is in close proximity to, the SAC there is a risk of air quality impacts associated with the operation of the scheme affecting fauna species and/or habitats.

The N6 GCRR will require a new bridge structure across the River Corrib the construction of which has the potential to result in some level of barrier effect and there is also a mortality risk posed to aquatic QI species (Otter, Atlantic salmon and lamprey) associated with constructing a bridge over the SAC and the potential for construction-related debris to fall from the bridge works. Similarly new bridges proposed in the GTS across the River Corrib along the line of the Old Clifden Railway, at the Salmon Weir Bridge, and south of Wolfe Tone Bridge—associated with the public transport, cycle and pedestrian networks—pose the same risk.

**Lough Corrib Special Protection Area (SPA)**

Whilst the specific alignment of the Galway to Oughterard Greenway has not yet been determined, it is envisaged that it will utilise the disused Galway to Clifden rail line along much of its length. If it crosses the Lough Corrib SAC there is the potential for direct impacts on habitats to occur. Although this is remote from the SPA boundary, it could potentially be within a distance of the SPA where disturbance associated with either construction works or operation of the greenway could displace SCI bird species from important habitat areas within the SPA itself or from important “ex-situ sites”.

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7 The need to consider use of habitat areas outside of an SPA by SCI bird species is set out in Section 3.1 and 5.2 of the Inner Galway Bay Special Protection Area (Site Code 4031), Conservation Objectives Supporting Document, Version 1 (National Parks & Wildlife Service,
remote from it. If important ex-situ sites are identified, then there is the potential for habitats therein to be affected.

This greenway also lies within the same karst groundwater body as a section of the SPA and could potentially interact with, and impact upon, the existing hydrogeological regime which may support wetland habitat within the SPA, or at ex-situ sites.

This greenway will cross many surface water features that drain to Lough Corrib and construction works have the potential to affect water quality in receiving watercourses and downstream in Lough Corrib which in turn could impact upon the SCI bird species; if non-native invasive plant species are present along the greenway, these could be spread to the SPA during construction.

The N6 GCRR will require a new bridge structure across the River Corrib which could pose bird collision risk to SCI bird species commuting or foraging along the River Corrib corridor. Similarly new bridges proposed in the GTS across the River Corrib along the line of the Old Clifden Railway, at the Salmon Weir Bridge, south of Wolfe Tone Bridge,—associated with the public transport, cycle and pedestrian networks—have the potential to pose a bird collision risk to SCI bird species and affect water quality in the receiving environment.

The N6 GCRR along with elements associated with the public transport network, non-greenway elements of the cycle network, pedestrian and rail networks may be located within or in close proximity to important “ex-situ sites”, and could result in disturbance to SCI species or affect supporting habitats (e.g. via hydrogeological or hydrological impact pathways) such that the conservation objectives supporting their conservation status are undermined.

**Inner Galway Bay SPA**

Whilst the specific alignments of the Bearna Greenway and the Galway to Dublin Cycleway have not yet been determined, it is likely to generally follow the coastline. If it crosses the SPA there is the potential for habitat loss and fragmentation. If within, or in close proximity to, the SPA disturbance associated with either construction works or operation of the greenways could displace SCI bird species from important habitat areas within the SPA itself, or from important “ex-situ sites” remote from it.

The Galway to Dublin Cycleway also lies within the same karst groundwater body as most of the SPA and could potentially interact with, and impact upon, the existing hydrogeological regime which may support wetland habitat within the SPA or at ex-situ sites.

The greenways and the N6 GCRR will cross many surface water features which drain to Galway Bay and construction works have the potential to affect water quality in receiving watercourses and the marine environment which in turn could impact upon SCI species or their supporting habitats in Galway Bay; a risk of construction impacts to water quality is also associated with many elements of the public transport network, non-greenway elements of the cycle network and pedestrian networks, and a risk of operational impacts to water quality is also associated with the N6 GCRR.

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2013d); and in the absence of a site specific conservation objectives document for many other SPAs potentially affected by GTS, this is applied for all. These areas are termed ‘ex-situ’ sites and are defined as areas of habitat situated within the immediate hinterland of the SPA, or in areas ecologically connected to it, which support SCI bird species.
If non-native invasive plant species are present in areas associated with any elements of the GTS, these could potentially be spread to habitats within the SPA during construction works.

The N6 GCRR will require a new bridge structure across the River Corrib which could pose bird collision risk to SCI bird species commuting or foraging along the River Corrib corridor. Similarly new bridges proposed in the GTS across the River Corrib along the line of the Old Clifden Railway, at the Salmon Weir Bridge, south of Wolfe Tone Bridge—associated with the public transport, cycle and pedestrian networks—have the potential to pose a bird collision risk to SCI bird species and affect water quality in the receiving environment.

The N6 GCRR along with elements associated with the public transport network, non-greenway elements of the cycle network and pedestrian networks which due to their locations relative to the SPA boundary, or where they may be located within or in close proximity to important “ex-situ sites”, may result in disturbance to SCI species or affect supporting habitats (e.g. via hydrogeological or hydrological impact pathways) such that the conservation objectives supporting their conservation status is undermined.

**Galway Bay Complex SAC**

Whilst the specific alignments of the Bearna Greenway and the Galway to Dublin Cycleway have not yet been determined, it is likely to generally follow the coastline. If it crosses the SAC there is the potential for habitat loss and fragmentation. If within, or in close proximity to the SAC, disturbance associated with either construction works or operation of the greenways could displace QI species from important habitat areas and/or breeding/resting sites—for example, the harbour seal haul out site at Lough Atalia, and Otter holts or couch sites. Given the proximity of the N6 GCRR to Bearna Woods, there is the potential for disturbance to Otter within the SAC there.

There are also elements associated with the public transport network, non-greenway elements of the cycle network and pedestrian networks which due to their locations relative to the SAC boundary may result in habitat impacts or disturbance to QI species—for example, transport infrastructure upgrades along the Coast Road (R336), Grattan Road and at South Park.

The greenways also lies within the same karst groundwater body as a portion of the SAC and could potentially interact with, and impact upon, the existing hydrogeological regime which may support terrestrial wetland habitat within the European site.

The greenways and the N6 GCRR will cross many surface water features which drain to Galway Bay and construction works have the potential to affect water quality in receiving watercourses and the marine environment which in turn could impact upon QI habitats and species in Galway Bay; a risk of construction impacts to water quality is also associated with many elements of the public transport network, non-greenway elements of the cycle network and pedestrian networks, and a risk of operational impacts to water quality is also associated with the N6 GCRR.

If non-native invasive plant species are present in areas associated with any elements of the GTS, these could potentially be spread to habitats within the SAC during construction works.

New bridge proposed, one in the vicinity of the railway bridge at Salmon Weir Bridge and a second south of Wolfe Tone Bridge —associated with the cycle and pedestrian networks—has the potential
to result in some level of barrier effect and there is also a mortality risk posed to Otter and Harbour seal associated with constructing a bridge over the SAC and the potential for construction-related debris to fall from the bridge works.

*Ross Lake and Woods SAC*

Whilst the specific alignment of the Galway to Oughterard Greenway has not yet been determined, it is envisaged that it will utilise the disused Galway to Clifden rail line along much of its length. If it crosses the SAC, or lies within 6km of the Lesser horseshoe roost for which the site is designated (potentially the key habitat area supporting the roost), there is the potential for habitat loss and fragmentation to occur which could affect the SACs Lesser horseshoe population. Construction works and/or lighting that may form part of the scheme design has the potential to result in disturbance to the Lesser horseshoe bat population within their home range. Lighting could also result in a barrier effect to foraging or commuting patterns. These impacts could potentially affect the conservation condition of this QI species in the SAC.

The greenway also lies within the same karst groundwater body as the SAC and could potentially interact with, and impact upon, the existing hydrogeological regime which may support wetland habitat within the SAC; including the QI habitat Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140].

The greenway will cross many surface water features that drain to Ross Lake and construction works have the potential to impact on water quality, affecting both the QI habitat (Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.) and habitats supporting the QI Lesser horseshoe population; if non-native invasive plant species are present along the greenway, these could be spread to the SAC during construction affecting habitats.

*Rahasane Turlough SAC, Castletaylor Complex SAC, Kiltiernan Turlough SAC, Lough Fingall Complex SAC*

The N6 GCRR includes a tunnel beneath Lough Corrib SAC at Menlough immediately west of Lackagh Quarry, a tunnel at Galway Racecourse, and deep cuttings at Castlegar and at Briarhill, all of which have the potential to interact with karst groundwater bodies that support the QI wetland habitats of these SACs: Turloughs [*3180] at Rahasane Turlough SAC, Castletaylor Complex SAC and Kiltiernan Turlough SAC; Turloughs and Cladium fen [7210] at Lough Fingall Complex SAC. The Galway City to Oranmore section of the Galway to Dublin Cycleway also lies within these groundwater bodies and could potentially impact on the existing hydrogeological regime.

*Cregganna Marsh SPA, Rahasane Turlough SPA*

The N6 GCRR includes a tunnel beneath Lough Corrib SAC at Menlough immediately west of Lackagh Quarry, a tunnel at Galway Racecourse, and deep cuttings at Castlegar and at Briarhill, all of which have the potential to interact with karst groundwater bodies that support wetland habitats in these SPAs. Wetland habitats in both sites support the SCI bird species; the wetland habitats [A999] are listed as a QI of Rahasane Turlough SPA. The Galway City to Oranmore section of the Galway to Dublin Cycleway also lies within these groundwater bodies and could potentially impact on the existing hydrogeological regime.
### Table: Source-Pathway-Receptor Matrix—Potential Impact Pathways Connecting the Elements of the Galway Transport Strategy (GTS) to European Sites

Source: Appendix A of Report *Screening for Appropriate Assessment (AA) of Proposed Material Alterations to the Draft Plan*, which is included in Appendix B of *NIR of GCDP 2017-2023*

<table>
<thead>
<tr>
<th>Potential Impact Pathway</th>
<th>Galway to Dublin Cycleway (Galway City to Oranmore)</th>
<th>Galway to Oughterard Greenway</th>
<th>Public Transport Network All Elements of the GTS</th>
<th>Cycle Network Non-Greenway Elements of the GTS</th>
<th>Pedestrian Network All Elements of the GTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Habitat Loss</strong></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Direct loss of habitat (terrestrial or freshwater) in European Site – habitat fragmentation is directly associated with this impact pathway</td>
<td>Lough Corrib SAC</td>
<td>Galway Bay Complex SAC Inner Galway Bay SPA</td>
<td>Lough Corrib SAC Lough Corrib SPA Ross Lake and Woods SAC</td>
<td>Lough Corrib SAC Galway Bay Complex SAC Inner Galway Bay SPA</td>
<td>Lough Corrib SAC Galway Bay Complex SAC Inner Galway Bay SPA</td>
</tr>
<tr>
<td><strong>Habitat degradation – hydrogeology</strong></td>
<td>Lough Corrib SAC Lough Corrib SPA Inner Galway Bay SPA Cregganna Marsh SPA Rahasane Turlough SAC Rahasane Turlough SPA Castletaylor Complex SAC Kiltiernan Turlough SAC Lough Fingall Complex SAC</td>
<td>Lough Corrib SPA Galway Bay Complex SAC Inner Galway Bay SPA</td>
<td>Lough Corrib SPA Galway Bay Complex SAC Inner Galway Bay SPA Cregganna Marsh SPA Rahasane Turlough SAC Rahasane Turlough SPA Castletaylor Complex SAC Kiltiernan Turlough SAC Lough Fingall Complex SAC</td>
<td>Lough Corrib SAC Galway Bay Complex SAC Inner Galway Bay SPA</td>
<td>Galway Bay Complex SAC Inner Galway Bay SPA</td>
</tr>
<tr>
<td><strong>Habitat degradation – tunnelling/excavation</strong></td>
<td>Lough Corrib SAC</td>
<td>Galway Bay Complex SAC Inner Galway Bay SPA</td>
<td>Lough Corrib SAC Galway Bay Complex SAC Inner Galway Bay SPA Ross Lake and Woods SAC</td>
<td>Lough Corrib SAC Galway Bay Complex SAC Inner Galway Bay SPA</td>
<td>Galway Bay Complex SAC Inner Galway Bay SPA</td>
</tr>
<tr>
<td><strong>Habitat degradation – water quality impacts during construction</strong></td>
<td>Lough Corrib SAC Galway Bay Complex SAC Inner Galway Bay SPA</td>
<td>Galway Bay Complex SAC Inner Galway Bay SPA</td>
<td>Lough Corrib SAC Galway Bay Complex SAC Inner Galway Bay SPA Ross Lake and Woods SAC</td>
<td>Lough Corrib SAC Galway Bay Complex SAC Inner Galway Bay SPA</td>
<td>Lough Corrib SAC Galway Bay Complex SAC Inner Galway Bay SPA</td>
</tr>
<tr>
<td><strong>Habitat degradation – water quality impacts during operation</strong></td>
<td>Lough Corrib SAC Galway Bay Complex SAC Inner Galway Bay SPA</td>
<td>Galway Bay Complex SAC Inner Galway Bay SPA</td>
<td>Lough Corrib SAC Galway Bay Complex SAC Inner Galway Bay SPA Ross Lake and Woods SAC</td>
<td>Lough Corrib SAC Galway Bay Complex SAC Inner Galway Bay SPA</td>
<td>Lough Corrib SAC Galway Bay Complex SAC Inner Galway Bay SPA</td>
</tr>
<tr>
<td><strong>Habitat degradation – shading</strong></td>
<td>Lough Corrib SAC</td>
<td>Galway Bay Complex SAC Inner Galway Bay SPA</td>
<td>Lough Corrib SAC Galway Bay Complex SAC Inner Galway Bay SPA Ross Lake and Woods SAC</td>
<td>Lough Corrib SAC Galway Bay Complex SAC Inner Galway Bay SPA</td>
<td>Lough Corrib SAC Galway Bay Complex SAC Inner Galway Bay SPA</td>
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<tr>
<td>Habitat degradation – air quality</td>
<td>Lough Corrib SAC</td>
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<tr>
<td>A reduction in air quality affecting fauna species and/or habitats (vegetation composition and structure)</td>
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</table>

<table>
<thead>
<tr>
<th>Habitat degradation – non-native invasive species</th>
<th>Lough Corrib SAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introducing or spreading non-native invasive species affecting habitats (vegetation composition and structure)</td>
<td>Lough Corrib SPA Galway Bay Complex SAC Inner Galway Bay SPA</td>
</tr>
<tr>
<td>Disturbance/displacement</td>
<td>Lough Corrib SAC Galway Bay Complex SAC Inner Galway Bay SPA</td>
</tr>
<tr>
<td>Disturbance to fauna resulting in displacement from important habitat areas (e.g. breeding/resting places or foraging areas)</td>
<td>Lough Corrib SPA Galway Bay Complex SAC Inner Galway Bay SPA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Barrier effect</th>
<th>Lough Corrib SAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>New structures creating a barrier to fauna species movement (e.g. within foraging areas or along commuting routes)</td>
<td>Lough Corrib SAC Ross Lake and Woods SAC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mortality risk</th>
<th>Lough Corrib SAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortality/road traffic collision risk to fauna species</td>
<td>Lough Corrib SPA Galway Bay Complex SAC Inner Galway Bay SPA</td>
</tr>
</tbody>
</table>

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As one of the key principles of the GTS is to “To promote and encourage sustainable transport, and in particular to make it convenient and attractive to walk, cycle or use public transport”, the may be an overall positive impact compared with the “Do-nothing” scenario in urban and suburban areas of Galway City and the associated European sites (Lough Corrib SAC, Galway Bay Complex SAC and Inner Galway Bay SPA).
APPENDIX 3

Screening for AA of Proposed Variation 1
The aim of screening for AA is to determine whether or not a proposed plan or project is likely to adversely affect the integrity of any European site and to determine whether an AA is required. This is done by examining a proposed plan or project and the conservation objectives of any European sites that might potentially be affected. The Screening for AA Report for Proposed Variations to the Galway City Development Plan 2017-2023 2023 (April 2017) has been integrated into the NIR report, Table 1 provides a summary of the screening for AA of the Proposed Variation. It has been evaluated in the context of potential impacts identified in the NIR of the GCDP 2017-2023 and Screening for Appropriate Assessment (AA) of Proposed Material Alterations to the Draft Plan.

Proposed Variation 1 Amend Specific Objective relating to the reserved route corridor for the N6 GCRR on the Land Use Zoning and Specific Objectives Map in the Ballybrit/Briarhill/Coolagh area and the N17 Tuam Road/Parkmore area of the city.

The NIR of the GCDP sets out that the incorporation of the GTS including inserting the N6 GCRR specific objective on the Land Use Zoning and Specific Objectives Map was previously ‘screened in’ for AA. A summary of potential impacts is provided in Section 3 of the NIR of the GCDP. Further details are provided in the Screening for Appropriate Assessment (AA) of Proposed Material Alterations to the Draft Plan. This included a discussion on the GTS where each of the projects proposed to be implemented under the GTS, including the N6 GCRR, were assessed with regards to the potential impact pathways and the likelihood of significant effects on European sites within the Zone of Influence (ZoI) of the GTS. The discussion outlines that the N6 GCRR in the area of the Proposed Variation includes the tunnel at Galway Racecourse and cuttings at Castlegar and at Briarhill that may have potential indirect impacts on European sites, through hydro geological pathways. Given that the Proposed Variation relates to a section of the N6 GCRR specific objective previously ‘screened in’ for AA under the GCDP review process, the potential impact pathways identified for the N6 GCRR are considered as a precautionary measure.

Table 1 Summary of Screening for AA of Proposed Variation to the GCDP 2017-2023

<table>
<thead>
<tr>
<th>Proposed Variation</th>
<th>Relates to</th>
<th>Summary</th>
<th>Screening for AA Outcome and Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>PV1</td>
<td>Map A</td>
<td>Amend Specific Objective - N6 Galway City Ring Road (N6 GCRR)</td>
<td>This Proposed Variation is likely to significantly affect European sites taking into consideration potential indirect impacts through hydro geological pathways. The Proposed Variation relates to a section of the N6 GCRR specific objective previously ‘screened in’ for AA under the GDCP review process</td>
</tr>
</tbody>
</table>

Screened in for AA in relation to following sites:
- Lough Corrib SAC
- Lough Corrib SPA
- Inner Galway Bay SPA
- Galway Bay Complex SAC
- Cregganna Marsh SPA
- Rahasane Turlough SAC
- Rahasane Turlough SPA
- Castletaylor Complex SAC
- Kiltiernan Turlough Complex SAC
- Lough Fingall Complex SAC

Taking this into consideration, the potential impacts previously identified under the GCDP review process and the precautionary principle embedded in the AA process, it is considered that the Proposed Variation has the potential to give rise to significant effects upon European sites, alone and or in-combination with other plans and projects. An Appropriate Assessment is therefore required.