



Appropriate Assessment Screening Report

R392: Pedestrian & Cycle Route, Ballymahon, Co. Longford

December 2023 – January 2024



Project Details

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AVRIO Quality Information

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Where field investigations were carried out, these investigations have been restricted to a level of detail required to meet the stated objectives of the services. The results of any measurements taken may vary spatially or with time, and further confirmatory analyses should be made after any significant delay in issuing this report.

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1. Introduction

1.1 Background

AVRIO Environmental Management Limited, hereafter "AVRIO", has been appointed by CST Group to undertake an Appropriate Assessment Screening for a proposed development as part of a Pedestrian and Cycle Improvement scheme on the R392 in Ballymahon, County Longford (Irish Grid Reference: N 33260 81124). The proposed development, detailed fully below in section 2.4.1, includes the road and footpath works at lands located between the car park adjoining St Matthew's National School and continues on the R392 out of Ballymahon, past Ballymahon Vocational School to the junction with the L1128 in Ballymahon County Longford.

1.2 Requirement for an Appropriate Assessment

This Appropriate Assessment Screening was prepared for a proposed development for a new, shared pathway on both sides of the R392 in Ballymahon, County Longford as part of a Pedestrian & Cycle Route. Having regards to the location of the proposed development site and its proximity to sites designated under the Natura 2000 network, an Appropriate Assessment of the proposed development was prepared in accordance with Article 6 of the Habitats Directive. This report will allow the Competent Authority, in this case, Longford County Council, to undertake an Appropriate Assessment of the proposed development, as required under Article 6(3) of the Habitats Directive¹.

The purpose of the assessment is to determine the appropriateness of the proposed project in the context of the conservation status of a European protected site or sites. In Ireland, an Appropriate Assessment takes the form of a Natura Impact Statement (NIS), which is a statement of the likely impacts of the plan or project on a Natura 2000 site. The NIS comprises a comprehensive assessment of the plan or project, and it examines the direct and indirect impacts that the plan or project might have on its own or in combination with other plans or projects on one or more Natura 2000 sites in view of the site's conservation objectives.

1.3 The Aim of the Report

This Appropriate Assessment Screening has been prepared in accordance with the European Commission's Assessment of Plans and Projects Significantly affecting Natura 2000 Sites: Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC (EC, 2001) and Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (EC, 2018)² as well as the Department of the Environment's Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (DoEHLG, 2010)³, and it provides an assessment of the potential effects of a proposed development as part of a Pedestrian and Cycle Improvement scheme on the R392 in Ballymahon, Co. Longford. A NIS should provide the information required in order to establish whether or not a proposed development is likely to have

¹ EC (2000) Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg. European Commission

² EC (2001) Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Articles 6(3) and (4) of the Habitats Directive 92/43/EEC;

³DoEHLG (2010). Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities. Revision, February 2010. Department of the Environment, Heritage and Local Government;

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a significant impact on certain Natura 2000 sites in the context of their conservation objectives and specifically on the habitats and species for which the Natura 2000 conservation sites have been designated.

Accordingly, a comprehensive assessment of the potential impacts of this application was carried out in December 2023 by AVRIO. This assessment allowed areas of potential ecological value and potential ecological constraints associated with this proposed development to be identified and it also enabled potential ecological impacts associated with the proposed development to be assessed and mitigated for.

1.4 Regulatory Context

1.4.1 Relevant Legislation

1.4.1.1 The Birds Directive

The Birds Directive (Council Directive2009/147/EC) recognises that certain species of birds should be subject to special conservation measures concerning their habitats⁴. The Directive requires that Member States take measures to classify the most suitable areas as Special Protection Areas (SPAs) for the conservation of bird species listed in Annex 1 of the Directive. SPAs are selected for bird species (listed in Annex I of the Birds Directive), that are regularly occurring populations of migratory bird species, and the SPA areas are of international importance for these migratory birds.

1.4.1.2 The EU Habitats Directive

o The EU Habitats Directive (92/43/EEC) requires that Member States designate and ensure that particular protection is given to sites (Special Areas of Conservation) which are made up of or support particular habitats and species listed in annexes to this Directive. Farticles 6(3) and 6(4) of this Directive also call for the undertaking of an Appropriate Assessment for plans and projects not directly connected with or necessary to the management of, but which are likely to have a significant effect on any European designated sites (i.e. SACs and SPAs).

1.4.1.3 The Water Framework Directive

The Water Framework Directive (WFD) (2000/60/EC), which came into force in December 2000, establishes a framework for community action in the field of water policy. The WFD was transposed into Irish law by the European Communities (Water Policy) Regulations 2003 (S.I. 722 of 2003)⁶. The WFD rationalises and updates existing legislation and provides for water management on the basis of River Basin Districts (RBDs). RBDs are essentially administrative areas for coordinated water management and are comprised of multiple river basins (or catchments), with cross-border basins (i.e. those covering the territory of more than one Member State) assigned to an international RBD. The aim of the WFD is to ensure that waters achieve at least good status by 2021 and that status does not deteriorate in any waters.

⁴ European Communities (Conservation of Wild Birds) Regulations, 1985, SI 291/1985 & amendments – http://www.irishstatutebook.ie;

⁵ European Communities (Natural Habitats) Regulations, SI 94/1997, SI 233/1998 & SI 378/2005 – http://www.irishstatutebook.ie;

⁶ Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy.

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1.4.2 Appropriate Assessment & Habitats Directive

Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora – the 'Habitats Directive' - provides legal protection for habitats and species of European importance. Article 2 of the Directive requires the maintenance or restoration of habitats and species of European Community interest at a favourable conservation status⁷. Articles 3 - 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 Natura 2000. Natura 2000 sites 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/EEC)⁸.

Articles 6(3) and 6(4) of the Habitats Directive sets out the decision-making tests for plans or projects affecting Natura 2000 sites⁹. Article 6(3) establishes the requirement for Appropriate Assessment:

"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the 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) deals with the steps that should be taken when it is determined, as a result of appropriate assessment, that a plan/project will adversely affect a European site. Issues dealing with alternative solutions, imperative reasons of overriding public interest and compensatory measures need to be addressed in this case¹⁰.

Article 6(4) states:

"If in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member States shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted. Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission to other imperative reasons of overriding public interest."

⁷ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora

⁸ Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds

⁹ EC (2007a) Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission. Office for Official Publications of the European Communities, Luxembourg. European Commission

¹⁰ EC (2007b) Interpretation Manual of European Union Habitats. Version EUR 27. European Commission, DG Environment;



1.4.3 Screening for Appropriate Assessment

Screening is the process of determining whether an Appropriate Assessment is required for a plan or project. Under Part XAB of the Planning and Development Act, 2000, as amended, screening must be carried out by the Competent Authority. Section 177U of the Planning and Development Act, 2000, as amended, states¹¹

'A screening for appropriate assessment shall be carried out by the competent authority to assess, in view of best scientific knowledge, if that Land use plan or proposed development, individually or in combination with another plan or project is likely to have a significant effect on the European site'.

The Competent Authority's determination as to whether an Appropriate Assessment is required must be made on the basis of objective information and should be recorded.

The Competent Authority may request information to be supplied to enable it to carry out a screening.

Consultants or project proponents may provide for the competent Authority with the information necessary for them to determine whether an Appropriate Assessment is required and provide advice to assist them in the Article 6(3) Appropriate Assessment Screening decision.

Where it cannot be excluded beyond reasonable scientific doubt at the Screening stage, that a proposed plan or project, individually or in combination with other plans and projects, would have a significant effect on the conservation objectives of a European site, an Appropriate Assessment is required.

1.5 Statement of Authority

Katie Teague: This report has been prepared by Katie Teague. Katie is a placement student at AVRIO Environmental Management. Katie is currently undertaking an undergraduate degree in Environmental Management from Queens University Belfast. Katie has been undertaking environmental surveys in Northern Ireland and the Republic of Ireland since 2022, including Preliminary Ecological Appraisal (PEA), Preliminary Roost Assessments (PRA) and bat emergence/re-entry surveys on a variety of sites. Katie has experience contributing to habitat assessments including Phase I and Fossitt Habitat Surveys. Additionally, Katie has experience contributing to Habitat Regulation Assessment (HRA/AASR/NIS) and Invasive Species Surveys for a range of developments throughout Northern Ireland and the Republic of Ireland.

Amy Gallagher BSc (Hons), MSc, QCIEEM: This report has been reviewed by Amy Gallagher. The site surveys were carried out by Amy. Amy is an Ecologist at AVRIO Environmental Management. She holds a BSc (Hons) in Ecological Management and an MSc in Ecological Management and Conservation Biology from Queens University Belfast. Amy is an ecologist with over 4 years of experience within the environmental industry Amy is a qualifying member of the Chartered Institute of Ecology and Environmental Management (CIEEM), an organisation requiring peer review and a high standard of professional conduct. Amy has experience contributing to Ecological Impact Assessments (EcIA) including assessments for priority species such as Bats, Badger, Otter, Marsh Fritillary, Dragonfly and Damselfly, and habitats assessments including Phase I and Fossitt Habitat Surveys.

¹¹ DoEHLG (2010). Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities. Revision, February 2010. Department of the Environment, Heritage, and Local Government;

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Amy has experience in Habitat Regulation Assessment (HRA/AASR/NIS), Invasive Species Surveys and Management and production of site-specific mitigation proposals for a range of developments throughout Northern Ireland and the Republic of Ireland.

Fergal Maguire NDA, BSc (Hons), PIEMA: This report has been peer-reviewed by Fergal Maguire. Fergal is the General Manager and Principal Ecologist at AVRIO Environmental Management and Principal Environmental and Ecological Consultant. He holds an NDA and BSc (Hons) in Environmental Science from the Institute of Technology, Sligo. Fergal is a member of the Institute of Environmental Management & Assessment (IEMA), an organisation requiring peer review and a high standard of professional conduct. He has over 9 years of experience within the environmental industry. He has experience contributing to a number of Environmental Impact Assessments, environmental licence and surrender applications, including Industrial Emissions Licences (IEL), Integrated Pollution Control Licences (IPC) and Waste Licences for submission to the Irish Environmental Protection Agency (EPA), Northern Ireland Environment Agency (NIEA), Scottish Environment Protection Agency (SEPA), United Kingdom Environment Agency (E.A.) and a number of Local Authorities throughout the U.K. and Ireland. Fergal has extensive experience in the sustainable development and management of a number of IED licenced facilities throughout Ireland, the U.K. and greater Europe, as well as general consultancy within the waste management, environmental compliance, and ecological sectors. Fergal has extensive experience in Ecological Impact Assessments (EcIA), including priority species such as bats, badgers, otters, red squirrels, pine martens, and breeding birds, and habitats assessments, including Phase I and Fossitt Habitat Surveys. Fergal has extensive experience in Habitat Regulation Assessments (HRA/AASR/NIS), Ecological Clerk of Works (ECOW), Invasive Species Surveys and Management and production of site-specific mitigation proposals for a range of developments throughout Northern Ireland and the Republic of Ireland.



2. Methodology

2.1 Appropriate Assessment

In addition to the guidelines referenced above, the following relevant documents were also considered in the preparation of this report:

- 1. Council of the European Commission (1992) Council Directive 92/43/EEC of 21st May 1992 on the conservation of natural habitats and of wild fauna and flora. Official Journal of the European Communities. Series L 20, pp. 7-49.¹²
- 2. EC (2000) Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg.¹³
- 3. European Commission (2001). Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC.¹⁴
- 4. European Commission (2006). Nature and Biodiversity Cases: Ruling of the European Court of Justice. 15
- 5. EC (2007) Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC Clarification of the concepts of alternative solutions, imperative reasons of overriding public interest, compensatory measures, and overall coherence. Opinion of the commission.¹⁶
- 6. EC (2013) Interpretation Manual of European Union Habitats. Version EUR 28. European Commission. 17
- 7. European Commission (2018). Managing Natura 2000 Sites: The Provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. 18
- 8. Department of Environment, Heritage, and Local Government (2009). Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. 19
- 9. National Parks and Wildlife Service (2019). Article 17: The Status of EU Protected Habitats and Species in Ireland. 20
- 10. European Communities (Natural Habitats) (Amendment) Regulations 2005²¹;

¹² EC (2002) Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg. European Commission;

¹³ EC (2002) Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg. European Commission;

¹⁴ EC (2001) Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Articles 6(3) and (4) of the Habitats Directive 92/43/EEC;

¹⁵ EC (2006) Nature and Biodiversity Cases: Ruling of the European Court of Justice, Office for Official Publications of the European Communities, Luxembourg. European Commission;

¹⁶ EC (2007a) Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission. Office for Official Publications of the European Communities, Luxembourg. European Commission;

¹⁷ EC (2013) Interpretation Manual of European Union Habitats. Version EUR 28. Office for Official Publications of the European Communities, Luxembourg. European Commission.

¹⁸ EC (2018). Managing Natura 2000 Sites: The Provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. Office for Official Publications of the European Communities, Luxembourg. European Commission.

¹⁹ DOEHLG (2010). Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities. Revision, February 2010. Department of the Environment, Heritage and Local Government

²⁰ NPWS (2019). The Status of EU Protected Habitats and Species in Ireland. Volume 1: Summary Overview. Unpublished NPWS report.

²¹ EC (1997) 2006. The European Communities (Natural Habitats)(Amendment) Regulations 2005.

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The EC Guidance sets out a number of principles as to how to approach decision-making during the process. The primary one is 'the precautionary principle, which requires that the conservation objectives of Natura 2000 should prevail where there is uncertainty.²²

When considering the precautionary principle, the emphasis for assessment should be on objectively demonstrating with supporting evidence that:

- o There will be no significant effects on a Natura 2000 site;
- o There will be no adverse effects on the integrity of a Natura 2000 site;
- o There is an absence of alternatives to the project or plan that is likely to have an adverse effect on the integrity of a Natura 2000 site; and
- o There are compensation measures that maintain or enhance the overall coherence of Natura 2000.

This translates into a four-stage process to assess the impacts, on a designated site or species, of a policy or proposal.²³

The EC Guidance states that "each stage determines whether a further stage in the process is required". Consequently, the Council may not need to proceed through all four stages in undertaking the Appropriate Assessment.

The four-stage process is:

Stage 1: Screening – The process which identifies the likely impacts upon a Natura 2000 site of a project or plan, either alone or in combination with other projects or plans, and considers whether or not these impacts are likely to be significant;

Stage 2: Appropriate Assessment – The consideration of the impact on the integrity of the Natura 2000 site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts;

Stage 3: Assessment of Alternative Solutions – The process which examines alternative ways of achieving objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site;

Stage 4: Assessment where no alternative solutions exist and where adverse impacts remain – An assessment of the compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

²² DEHLG (2009) Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. DEHLG, Dublin;

²³ DEHLG (2010). Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities. Revision, February 2010. Department of the Environment, Heritage and Local Government;

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In complying with the obligations set out in Articles 6(3) and following the guidelines described above, this Natura Impact Statement has been structured as a stage-by-stage approach as follows:

- Description of the proposed project;
- o Identification of the Natura 2000 sites close to the proposed development;
- o Identification and description of any individual and cumulative impacts on the Natura 2000 sites likely to result from the project;
- O Assessment of the significance of the impacts identified above on-site integrity. Exclusion of sites where it can be objectively concluded that there will be no significant effects;
- o Description of proven mitigation measures.

2.2 Desk Study

Information pertaining to the proposed site and the surrounding environment was studied and assessed prior to the completion of this assessment. The following data sources were accessed in order to complete a thorough examination of potential impacts:

- o National Parks and Wildlife Service (NPWS) online map viewer²⁴;
- o Mammals, Amphibians and Reptiles website²⁵;
- Ordnance Survey Ireland Map Viewer: Geohive²⁶;
- o Environmental Protection Agency Geographic Information System (EPAGIS)²⁷;
- National Biodiversity Data Centre (NBDC)²⁸;
- o NPWS Article 17 Metadata and GIS Database²⁹;
- o Geological Survey Ireland, Department of the Environment, Climate and Communications Map Viewer³⁰;
- o CST Group³¹.

²⁴ National Parks and Wildlife Service: National Parks & Wildlife Service (npws.ie)

²⁵ Mammals, Amphibians and Reptiles: http://www.habitas.org.uk/nimars/

²⁶ Ordnance Survey Ireland Map Viewer - GeoHive: https://webapps.geohive.ie/mapviewer/index.html

²⁷ Environmental Protection Agency Geographic Information System: https://gis.epa.ie/EPAMaps/

²⁸ National Biodiversity Data Centre: www.biodiversityireland.ie

²⁹ NPWS Article 17 Metadata and GIS Database: https://www.npws.ie/maps-and-data/habitat-and-species-data/article-17

³⁰ Geological Survey Ireland Map Viewer: https://dcenr.maps.arcgis.com/apps/MapSeries/index

³¹ Site Plans provided by CST Group



2.3 Site Location & Current Use

The proposed development site is located on the R392 in Ballymahon, Co. Longford (IGR: N 15273 57491). The proposed route will commence at the car park adjoining St. Matthews National School and continue on the R392 out of Ballymahon past Ballymahonal Vocational School to the junction with the L1128.

The site is located approx. 7.6km southwest of Abbeyshrule village centre, 18km south of Longford town centre and 20km northeast of Athlone town centre (IGR: N 15273 57491). The surrounding area encompasses a variety of features, including roadways, residential dwellings, St. Matthews National School, Ballymahon Vocational School, commercial complexes associated with Ballymahon, treelines, and hedgerows. The Inny River (IE_SH_26I011350) flows approx. 813m to the southeast of the development, which is a tributary of Lough Ree which flows into the Shannon River.

There are no SACs within 2km of the application site; the closest is Lough Ree SAC which is situated 4.64km southwest of the application site. There are no SPAs within 2km of the application site; the closest is Lough Ree SPA which is situated 5km southwest of the application site. There are no Natural Heritage Areas (NHA) or proposed Natural Heritage Areas (pNHA) within 2km of the application site; the closest is Forthill Bog NHA which is situated 8.36km northwest of the application site.

The site and immediate environs consist of Buildings & Artificial Surfaces (BL3), Stone Walls and Other Stonework (BL1), Amenity Grassland (GA2) Scattered Trees and parkland (WD5) Ornamental/Non-Native Shrub (WS3), Hedgerows (WL1) and Treelines (WL2). Pictures 1-6 below illustrate the proposed development area and the surrounding habitat.



Picture 1: Stone Walls and Other Stonework (BL1) on-site



Picture 2: Amenity Grassland (GA2) on-site





Picture 3: Buildings & Artificial Surfaces (BL3) on-site



Picture 5: Cherry Laurel within Hedgerow (WL1) bounding the site.



Picture 4: Scattered Trees and parkland (WD5) on-site



Picture 6: Treeline (WL2) bounding the site.





Figure 1: The location of the proposed development site, and surrounding environs, in Ballymahon, Co. Longford

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2.4 Characteristics of the Proposed Development

2.4.1 Description of the Project

The development is part of a Pedestrian and Cycle Improvement scheme, which is part of Longford County Council's Active Travel programme. It involves the provision of a new, shared pathway in Ballymahon town, County Longford. The proposed shared pathway route is expected to connect the Active Travel proposal from the car park adjoining St Matthew's National School and continues on the R392 out of Ballymahon, past Ballymahon Vocational School to the junction with the L1128. The provision of improved walking and cycling facilities will provide a safer alternative route of connectivity, while separation from routes of high vehicular concentration within Ballymahon Town.

The proposed development commences at the car park adjoining St Matthew's National School and continues on the R392 out of Ballymahon past Ballymahon Vocational School to the junction with the L1128.

To facilitate the scheme the width of the R392 will be reduced over the length of the proposed shared path and some boundaries along the southern side of the R392 will be set back. The scheme also includes the upgrading of an existing controlled pedestrian crossing outside St Matthew's National School and the construction of a new controlled crossing and tabletop junction outside the Ballymahon Vocational School. The proposed scheme makes provision for footpath/pathway widening and new footpath/pathway construction, upgrade to existing lighting, road crossing, drainage, and service relocation.

The proposal includes:

- o Construction of a 3.0m shared surface pavement either side of the R392
- Construction of a proposed bus bay and concrete footpath outside of Ballymahon Vocational School
- o Construction of a new boundary wall to match style of existing wall to the south of the R392
- Demolishment of existing wall outside of St Matthew's National School
- o Relocation of ESB poles to rear of the footpath
- Construction of four coloured ramps
- o All other associated site works.

A Construction Environmental Management Plan will be produced to ensure that all construction activities on-site will adhere to best practice environmental guidance to prevent pollution of nearby watercourses from the development. The Construction Environmental Management Plan (CEMP) will follow the below guidance and include a Pollution Prevention Plan (PPP) identifying locations of all pollution prevention measures to be implemented.

All works for the project will be carried out in accordance with relevant GPPs and PPGs as seen below:

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- > GPP 1: Understanding your environmental responsibilities Good environmental practices;
- > GPP 2: Above-ground oil storage tanks;
- > GPP 3: Use and design of oil separators in surface water drainage systems;
- > GPP 4: Treatment and disposal of wastewater where there is no connection to the public foul sewer;
- > GPP 5: Works and maintenance in or near water;
- > GPP 6: Working on construction and demolition sites;
- > GPP 8: Safe storage and disposal of used oils;
- GPP 13 Vehicle washing and cleaning;
- > GPP 20: Dewatering underground ducts and chambers;
- > GPP 21: Pollution incident response planning;
- ➤ GPP 22: Dealing with spills;
- > GPP 26 Safe storage drums and intermediate bulk containers;
- ➤ NIEA Pollution Prevention Guidance Notes (PPG's)
 - o PPG 7: Safe Storage The safe operation of refuelling facilities;
 - o PPG 18: Managing fire water and major spillages;
- > CIRIA Report C532 Control of Water Pollution from construction sites;
- CIRIA Report C741 Environmental Good Practice on Site guide (4th Edition);
- BS6031:2009 Code of Practice for Earthworks;
- ➤ BS 5930 2015: Code of Practice for Site Investigations.

Non-Scheduled Invasive species were identified outwith the proposed site boundary. In the unlikely event that site plans are altered to include these locations within the proposed development area, these non-scheduled invasive species will be managed in line with best practice guidelines, outlined in Appendix A when they come in contact with works.

Appendix B attached details the current Site Layout Plan.



2.4.2 Description of the Baseline Ecological Environment

Assessing the impacts of any project and associated activities requires an understanding of the ecological baseline conditions prior to and at the time of the project proceeding. Ecological baseline conditions are those existing in the absence of proposed activities³².

A walkover of the site was undertaken on the 18th of December 2023 by a qualified ecologist, and habitats present were identified in accordance with the Heritage Council's 'Guide to Habitats in Ireland'³³. Plant nomenclature for vascular plants follows 'New Flora of the British Isles, while mosses and liverworts nomenclature follow 'Mosses and Liverworts of Britain and Ireland - a field guide'.

The walkover survey was designed to detect the presence, or likely presence, of a range of protected species and habitats. The walkover survey comprehensively covered the entire study area of the subject development and surrounding habitats.

2.4.2.1 Habitats

0

Habitats located within the site and immediate environs include:

Buildings and Artificial Surfaces (BL3)

- o Stone Wall and Other Stonework (BL1)
- o Scattered Trees and Parkland (WD5)
- Treeline (WL2)

o Amenity Grassland (GA2)

- o Hedgerow (WL1)
- Ornamental/Non-Native Shrub (WS3)

2.4.2.3 Invasive Species (Flora) Survey

Throughout the habitat survey, the site was searched for invasive weed species, focusing on those species listed on the Third Schedule of Regulations 49 and 50 of the European Communities (Birds and Natural Habitats) Regulations 2011³⁴. Invasive species included in this list include Japanese Knotweed (*Fallopia japonica*), Giant Hogweed (*Heracleum mantegazzianum*), Giant Knotweed (*Fallopia sachalinensis*), Giant Rhubarb (*Gunnera manicata*), Himalayan Balsam (*Impatiens glandulifera*), Himalayan Knotweed (*Fallopia bohemica*) and Rhododendron (*Rhododendron ponticum*).

³² CIEEM, 2018, Guidelines for Ecological Impact Assessment in the UK and Ireland. Terrestrial, Freshwater, Coastal and Marine;

³³ Fossitt, J. A. (2000). A Guide to Habitats in Ireland, Dublin: The Heritage Council:

³⁴ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora [Habitats Directive] and Directive 2009/147/EC [codified version of Directive 79/409/EEC as amended] [Birds Directive] transposed into Irish law as European Communities [Birds and Natural Habitats] Regulations 2011 [SI 477/2011].

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The invasive species survey carried out by AVRIO did not identify any invasive species listed under the Third Schedule on-site or within the survey area, however a non-scheduled invasive species was noted bounding the site. Cherry Laurel (*Prunus laurocerasus*) was identified in a hedgerow located at IGR: N 15223 57522 and in a hedgerow located at IGR: N 15076 57635. Cherry Laurel is listed as a high impact invasive by Invasive Species Ireland.

Whilst this species is not listed under on the Third Schedule of Regulations 49 and 50 of the European Communities (Birds and Natural Habitats) Regulations 2011, they should be managed appropriately. Appendix A attached include an Invasive Species Management Strategy for Cherry Laurel.





Site Boundary

WD5-Scattered Trees and parkland

GA2- Amenity Grassland

BL3-Buildings and Artifical Surfaces

BL1-Stonewall and other Stonework

H Fence

••• WL1-Hedgerow

── WL2-Treeline

Target Note-Cherry Laurel

Project Title:

AEMP- 2000311 R392 Pedestrian & Cycle Route Ballymahon, Co. Longford

Drawing Title:

Fossitt Habitat Map

Drawn By:	Checked By:		
KT	AG		
Project No:	Drawing No:		
2000311	Figure 2		
Scale: 1/2000	Date: 19th December 2023		



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2.4.2.4 Protected Species (Fauna) Survey

AVRIO

Bat Roost Assessment for Trees

Trees on-site lacked suitable roosting features for bats and were assessed as having negligible suitability.

Bat Roost Assessment for Walls

All walls on site have been assessed as having negligible suitability for roosting bats due to insufficient roosting features.

Bat Roost Assessment for Buildings

No buildings were present within the site boundary. Buildings were identified outwith the surveyed area; however, no buildings are to be removed or modified as part of the proposed development.

Badger (Meles meles) Activity Survey and Habitat Suitability Assessment

No badger setts, latrines or snuffle holes were identified within the site's boundary or within a 30m buffer of the site. The site itself is deemed as sub-optimal for the species. The habitats within the surroundings are deemed of moderate suitability for badgers; badger may access the site for commuting and foraging from time to time.

Otter (Lutra lutra) Activity Survey and Habitat Suitability Assessment

No otter spraints, footprints, paths/slides, holts, or urination 'green spots' were identified within the immediate vicinity of the site. There were no watercourses identified on site and the site is in an urban location. The site was deemed as sub-optimal for otter.

Breeding Birds Habitat Suitability Survey

No nests or breeding birds were identified on-site. Areas of scrub are considered optimal locations for breeding birds. Any removal of scrub will need to be undertaken outside of the breeding season (March-August inclusive).

Smooth Newt (Lissotriton vulgaris) Habitat Suitability Assessment

A survey of the site and the immediate environs was undertaken to assess the habitat suitability for smooth newt. There were no watercourses on site. Assessments conclude the habitat on-site and the immediate environs are sub-optimal for smooth newt.

Red Squirrel (Sciurus vulgaris) Habitat Suitability Assessment

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A survey of the site and the immediate environs was undertaken to assess the habitat suitability for red squirrel. The site lacked suitable mature trees for red squirrels to utilise and possessed no habitat connectivity to wider suitable environs. Assessments conclude the habitat on-site and the immediate environs are of poor suitability for red squirrels.

Pine Marten (Martes martes) Habitat Suitability Assessment

A survey of the site and the immediate environs was undertaken to assess the habitat suitability for pine marten. The site lacked suitable mature trees for pine marten to utilise and possessed no habitat connectivity to wider suitable environs. Assessments conclude the habitat on-site and the immediate environs are of poor suitability for pine marten.

Common Lizard (Zootoca vivipara) Habitat Suitability Assessment

A survey of the site and the immediate environs was undertaken to assess the habitat suitability for common lizards. The habitat on-site and within the surrounding environment was deemed to be of poor suitability for common lizards.

2.4.3 Description of the Baseline Geological Environment

2.4.3.1 Bedrock Geology

The site is situated on bedrock known as the 'Waulsortian Limestones' which consists of unbedded lime-mudstone. It is sometimes informally known as "reef" limestones, although inaccurate and is dominantly pale grey, crudely bedded or massive limestone.

2.4.3.2 Aquifer Classification

The aquifer of this site is classified as a 'Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones'. A description of this aquifer is detailed below:

'Locally Important Aquifers: Locally important aquifers are capable of supplying locally important abstractions (e.g., smaller public water supplies, group schemes), or good yields (100-400 m3/d). In the bedrock aquifers, groundwater predominantly flows through fractures, fissures, joints, or conduits. Locally important sand/gravel aquifers are typically >1 km2, and groundwater flows between the sand and gravel grains. This group is subdivided into the following types: Lm Locally Important Bedrock Aquifer, Generally Moderately Productive Ll Locally Important Bedrock Aquifer, Moderately Productive only in Local Zones Lk Locally Important Karstified Bedrock Aquifer Lg Locally Important Sand/Gravel Aquifer³⁸.

2.4.3.3 Groundwater Vulnerability

Groundwater Vulnerability is a term used to represent the natural ground characteristics that determine the ease with which groundwater may be contaminated by human activities. More scientifically, groundwater vulnerability embodies the characteristics of the intrinsic geological and hydrogeological features at a site that determine the ease of contamination of groundwater. The vulnerability category assigned to a site, or an area is thus based on the relative ease with which infiltrating water and potential contaminants may reach groundwater in a vertical or sub-vertical direction. As all groundwater is hydrologically connected to the land surface, it is the effectiveness of this

December 2023 – January 2024



connection that determines the relative vulnerability to contamination. Groundwater that readily and quickly receives water (and contaminants) from the land surface is considered to be more vulnerable than groundwater that receives water (and contaminants) more slowly, and consequently in lower quantities. Additionally, the slower the movement and the longer the pathway, the greater is the potential for attenuation of many contaminants³⁵.

The Geological Survey Ireland classifies the groundwater vulnerability across the majority of the development site to be in the vulnerability category of 'Moderate'.

2.4.3.4 Groundwater Flow Direction

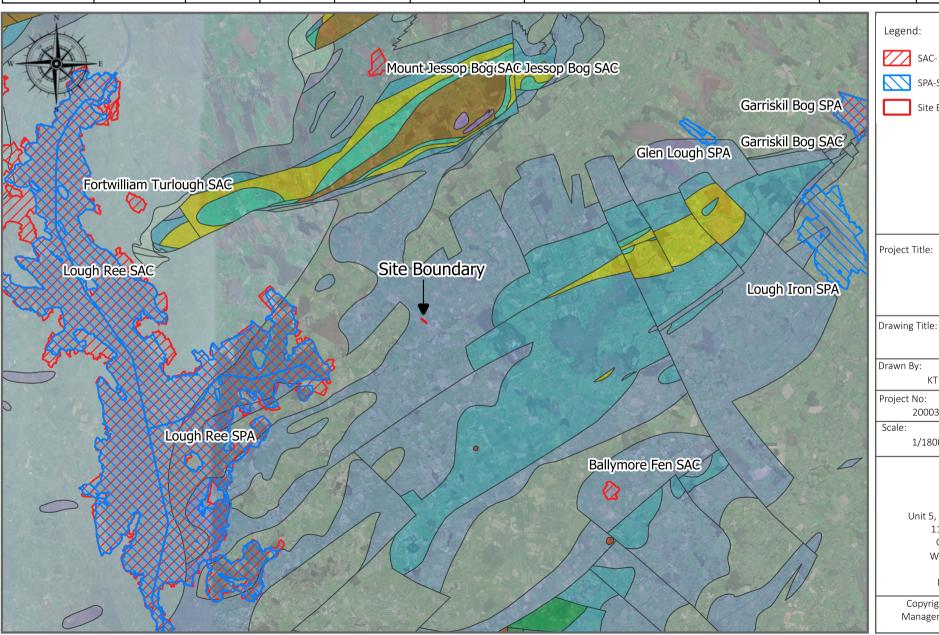
Exact directions of groundwater flow have not been established for the site in question, however, for the purposes of this assessment the precautionary principle is implemented, and a worst-case scenario is used.

The direction of groundwater flow follows a path through an aquifer from areas of high-water levels to areas where water levels are low. Water flows through aquifers to discharge points some distance down-gradient at a spring or offshore into the sea³⁶.

 $^{^{35}\,}GSI\,Groundwater\,Resources\,Bedrock\,Aquifers-https://data.gov.ie/dataset/gsi-groundwater-resources-bedrock-aquifers-https://dataset/gsi-groundwater-resources-bedrock-aquifers-bedrock-aquife$

³⁶ Geological Survey Ireland Map Viewer: https://dcenr.maps.arcgis.com/apps/MapSeries/index

1	Locally Important uifer			Bedrock Polygons 100k ITM 2018: Waulsortian Limestones			National Groundwater Vulnerability		
Aquifer Category	Category Description	New Code Unit Name Description Formation Lithological Description		Soil Permability Code	Depth to Bedrock (m)	Vulnerability Category			
Locally Important Aquifer(LI)	Moderately Productive only in Local Zones'	CDWAUL	Waulsortian Limestones	Massive unbedded lime-mudstone	Waulsortian Limestones	Sometimes informally called "reef" limestones, although inaccurate. Dominantly pale-grey, crudely bedded or massive limestone.	М	N/A	Moderate



SAC- Special Area of Conservation



SPA-Special Protected Area



Site Boundary

AEMP-2000311

R392, Ballymahon, Co. Longford

Hydrogeology Map

Drawn By:	Checked By:		
KT	AG		
Project No:	Drawing No:		
2000311	Figure 3		
Scale:	Date:		
1/180000	20th December 2023		



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3. Identification of Relevant European Sites

3.1 Identification of the European Sites within the Likely Zone of Impact

The following methodology was used to establish which European Sites are within the Likely Zone of Impact of the proposed development:

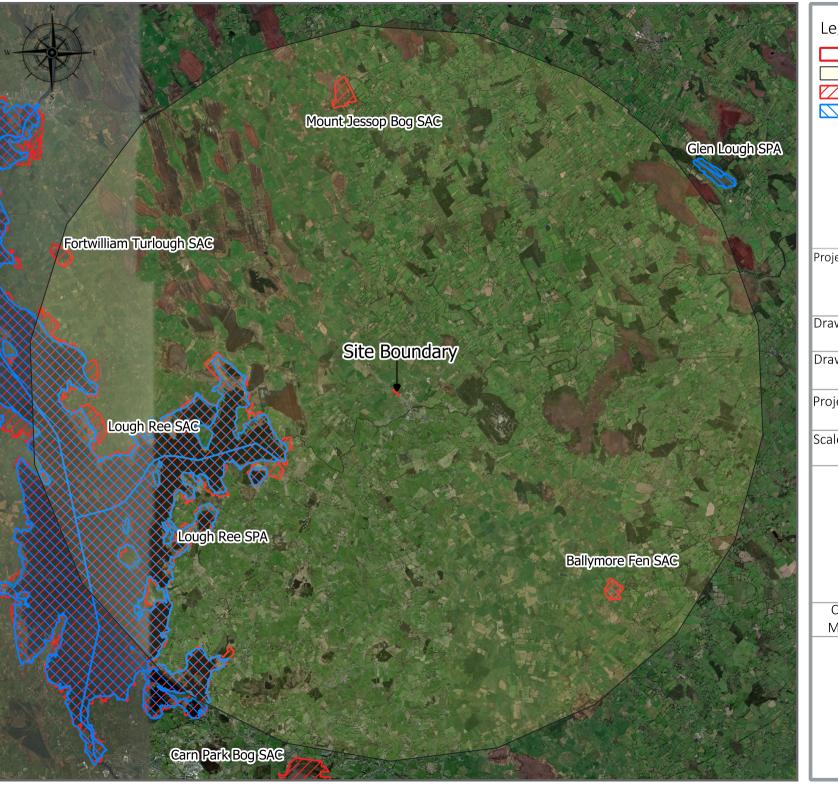
- The most up-to-date GIS spatial datasets for European designated sites and water catchments were downloaded from the NPWS website³⁷ and the EPA website³⁸ on 17th of December 2023. These datasets were utilised to identify European Sites that could feasibly be affected by the proposed development;
- o All European Sites within a distance of 15km surrounding the development site were identified and are detailed in Figure 4 below. In addition, the potential for connectivity with European Sites at distances greater than 15km from the proposed development was also considered. In this case, the proposed project does not give rise to the potential for likely significant effects on European Sites located beyond the 15km zone;
- o In relation to Special Protection Areas, in the absence of any specific European or Irish guidance in relation to such sites, the Scottish Natural Heritage (SNH) Guidance, 'Assessing Connectivity with Special Protection Areas (SPA)' (2016) was consulted³⁹. This document provides guidance in relation to the identification of connectivity between proposed developments and Special Protection Areas. The guidance considers the distances species may travel beyond the boundary of their SPAs and provides information on dispersal and foraging ranges of bird species that are frequently encountered when considering plans and projects;
- Table 3-1 provides details of all relevant European Sites identified in the preceding steps and assesses which are within the likely Zone of Impact. The assessment considers any likely direct or indirect impacts of the proposed development, both alone and in combination with other plans and projects, on European Sites by virtue of the following criteria: size and scale, land-take, distance from the European Site or key features of the site, resource requirements, emissions, excavation requirements, transportation requirements and duration of construction, operation and decommissioning were considered in this screening assessment;
- The site synopses and conservation objectives, as per the appropriate datasets, were consulted and reviewed when preparing this report (17th December 2023). Figure 4 details the location of the proposed development in relation to all European sites within 15km in the Republic of Ireland;

Where potential pathways for Significant Effect are identified, the site is included within the Likely Zone of Impact, and further assessment is required.

³⁷NPWS Protected Site Synopses and maps available on http://www.npws.ie/en/ProtectedSites/;

³⁸ EPA maps available on EPA Maps

³⁹ Scottish Natural Heritage (SNH) (July 2013) Assessing Connectivity with Special Protection Areas (SPA);



Legend:

Site Boundary

15km Zone of Influence

SAC-Special Area of Conservation

SPA-Special Protected Area

Project Title:

AEMP- 2000311 R392 Pedestrian & Cycle Route Ballymahon, Co. Longford

Drawing Title:

Natura 2000 Sites within 15km

Drawn By:	Checked By:		
KT	AG		
Project No:	Drawing No:		
2000311	Figure 4		
Scale: 1/155000	Date: 19th December 2023		



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Table 3-1: Identification of designated sites within 15km Buffer of the application site

European Sites and distance from subject development	Qualify Interests/Special Conservation Interests for which the European site has been designated (Sourced from NPWS online Conservation Objectives, www.npws.ie on the 17/12/2023)	Conservation Objectives	Likely Zone of Impact Determination
Special Areas of Conservation (SAC) Lough Ree SAC [000440] Distance: 4.64km	 [3150] Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [6210] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [7110] Active raised bogs [7120] Degraded raised bogs still capable of natural regeneration. [7230] Alkaline fens [8240] Limestone pavements [91D0] Bog woodland [91E0] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [1355] Lutra lutra (Otter) 	Detailed conservation objectives for this site (Version 1, August 2016) were reviewed as part of the assessment and are available at www.npws.ie	This development is located 4.64km to the east of this SAC. There is no spatial overlap or no direct land take from this SAC. No direct impacts are anticipated. No direct hydrological connection exists between the site of the proposed development and the SAC. The proposed site is hydrogeologically connected to Inny River (IE_SH_26I011350), which flows approximately 813m to the southeast of the development. The site is hydrogeologically connected to Inny River via percolation of water through a Locally Important Aquifer with bedrock which is moderately productive only in local zones with a moderate groundwater vulnerability status. Inny River (IE_SH_26I011350) is a tributary of Lough Ree SAC. This feature is a potential pollutant pathway from the development site to the SAC. Indirect impacts are anticipated. However, the mitigation built-in at the design stage by CST Group negates any indirect impacts to this SAC. This site is not within the Likely Zone of Impact, and no further assessment is required.
Ballymore Fen SAC [002313] Distance 11.8km	> [7140] Transition mires and quaking bogs	Detailed conservation objectives for this site (Version 1, October 2018) were reviewed as part of the assessment and are available at www.npws.ie	This development site is located 11.8km to the northwest of this SAC. There is no spatial overlap or no direct land take from this SAC. No direct impacts are anticipated. No hydrological connection exists between the site of the proposed development and the SAC. No hydrogeological connection exists between the site of the proposed development and the SAC. This site is not within the Likely Zone of Impact, and no further assessment is required.



Mount Jessop Bog SAC [002202] Distance 11.9km	 [7120] Degraded raised bogs still capable of natural regeneration. [91D0] Bog woodland 	Detailed conservation objectives for this site (Version 1, February 2016) were reviewed as part of the assessment and are available at www.npws.ie	This development is located 11.9km to the south of this SAC. There is no spatial overlap or no direct land take from this SAC. No direct impacts are anticipated. No hydrological connection exists between the site of the proposed development and the SAC. No hydrogeological connection exists between the site of the proposed development and the SAC. This site is not within the Likely Zone of Impact, and no further assessment is required.
Fortwilliam Turlough SAC [000448] Distance 14.4km	➤ [3180] Turloughs	Detailed conservation objectives for this site (Version 1, February 2018) were reviewed as part of the assessment and are available at www.npws.ie	This development site is located 14.4km to the southeast of this SAC. There is no spatial overlap or no direct land take from this SAC. No direct impacts are anticipated. No hydrological connection exists between the site of the proposed development and the SAC. No hydrogeological connection exists between the site of the proposed development and the SAC. This site is not within the Likely Zone of Impact, and no further assessment is required.
Special Protected Areas (SPA)			
Lough Ree SPA [004064] Distance: 5km	 [A004] Little Grebe (Tachybaptus ruficollis) [A038] Whooper Swan (Cygnus cygnus) [A050] Wigeon (Anas penelope) [A052] Teal (Anas crecca) [A053] Mallard (Anas platyrhynchos) [A056] Shoveler (Anas clypeata) [A061] Tufted Duck (Aythya fuligula) [A065] Common Scoter (Melanitta nigra) [A067] Goldeneye (Bucephala clangula) [A125] Coot (Fulica atra) [A140] Golden Plover (Pluvialis apricaria) [A142] Lapwing (Vanellus vanellus) [A193] Common Tern (Sterna hirundo) [A999] Wetland and Waterbirds 	Detailed conservation objectives for this site (Version 1, October 2022) were reviewed as part of the assessment and are available at www.npws.ie	This development is located 5km to the east of this SPA. There is no spatial overlap or no direct land take from this SPA. No direct impacts are anticipated. No direct hydrological connection exists between the site of the proposed development and the SPA. The proposed site is hydrogeologically connected to Inny River (IE_SH_26I011350), which flows approximately 813m to the southeast of the development. The site is hydrogeologically connected to Inny River via percolation of water through a Locally Important Aquifer with bedrock which is moderately productive only in local zones with a moderate groundwater vulnerability status. Inny River (IE_SH_26I011350) is a tributary of Lough Ree SPA. This feature is a potential pollutant pathway from the development site to the SPA. Indirect impacts are anticipated. However, the mitigation built-in at the design

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stage by CST Group negates any indirect impacts to this SPA.
This site is not within the Likely Zone of Impact, and no further assessment is required.

3.2 Identifying Impacted Qualifying Features from Designated Sites

The following designations have been identified as having a hydrogeological connection to Inny River (IE_SH_26I011350) which is a tributary of Lough Ree SAC and Lough Ree SPA. No direct impacts are anticipated on these designations, as proposed works will be undertaken outwith their boundaries. Indirect impacts are expected on these designations. Tables 3-2 and Table 3-3 identify the qualifying features of these designations that may be impacted by the proposed works.

Table 3-2: Identification of Impacted Qualifying Features of Lough Ree SAC

Qualifying Interests (QI)	Pathway	Conservation Status	Threats & Pressures	Conservation Objectives	Attribute	Target	Potential for Effects
[3150] Natural Eutrophic lakes with Magnopotami on or Hydrocharition – type vegetation	This qualifying interest occurs in lowland, baserich lakes, and is characterised by a high abundance and diversity of pondweeds. The development site is connected to this QI via the Inny River which is hydrogeologically connected to the development site and flows into Lough Ree SAC. Therefore, there is a potential pollution pathway between the application site and this Qualifying Interest.	According to the NPWS 2019 Status of EU Protected Habitats & Species in Ireland, the overall status of this qualifying interest is "inadequate and stable"	The main threats and pressures include changes in water body conditions, pollution of surface water e.g., eutrophication, fishing and harvesting of aquatic resources, direct destruction/redu ction of habitats due to construction of infrastructure, dredging of shipping channels, and the creation of facilities for the regulation of hydrodynamism	To restore the favourable conservation condition of Natural eutrophic lakes with Magnopotamion or Hydrocharition — type vegetation in Lough Ree SAC.	Habitat Area Habitat Distribution Typical Species Vegetation composition: characteristic zonation Vegetation distribution: maximum depth Hydrological regime: water level fluctuations Lake substratum quality Water quality: transparency	Area stable, subject to natural processes No decline, subject to natural processes Typical species present, in good condition, and demonstrating typical abundances and distribution All characteristic zones should be present, correctly distributed and in good condition Maintain maximum depth of vegetation, subject to natural processes Maintain appropriate natural hydrological regime necessary to support the habitat Maintain appropriate substratum type, extent and chemistry to support the vegetation Maintain/restore appropriate Secchi transparency. There should be no decline in Secchi depth/transparency	No potential for Effects A hydrogeological pathway exists between the application site and this QI. The proposed site is hydrogeologically connected to Inny River (IE_SH_26I011350) which flows approx. 813m to the southeast of the development, and is a tributary of this SAC, potentially affecting this QI. However, in-built mitigation implemented in the design stage by CST Group hinders the impact of this potential pollution pathway to negligible. There will be no adverse impacts on this QI as a result of the proposed on-site works.



Qualifying Interests (QI)	Pathway	Conservation Status	Threats & Pressures	Conservation Objectives	Attribute	Target	Potential for Effects
					Water quality: nutrients	Maintain the concentration of nutrients in the water column to sufficiently low levels to support the habitat and its typical species	
					Water quality: phytoplankton biomass	Maintain appropriate water quality to support the habitat, including good chlorophyll <i>a</i> status	
					Water quality: phytoplankton composition	Maintain appropriate water quality to support the habitat, including good phytoplankton composition status	
					Water quality: attached algal biomass	Maintain trace/absent attached algal biomass (<5% cover) and good phytobenthos status	
					Water quality: macrophyte status	Restore good macrophyte status	
					Acidification status	Maintain appropriate water and sediment pH, alkalinity and cation concentrations to support the habitat, subject to natural processes	
					Water Colour	Maintain appropriate water colour to support the habitat	
					Dissolved organic carbon (DOC)	Maintain appropriate organic carbon levels to support the habitat	
					Turbidity	Maintain appropriate turbidity to support the habitat	
					Fringing habitat: area	Maintain the area and condition of fringing habitats necessary to support the natural structure and functioning of the lake habitat	
[6210] Semi-natural	This qualifying interest comprises species-rich	According to the NPWS 2019	The main threats and pressures	To maintain the favourable	Habitat Area	Area stable or increasing, subject to natural processes	No potential for Effects Given the lack of pathways, type
dry grasslands and scrubland	plant communities on shallow, well-drained calcareous substrates. Within this SAC, this particular qualifying interest is not located	Protected grazing or Habitats & overgrazing by Species in Ireland, the overall status grazing agricultural	conservation condition of Semi-	Habitat Distribution	No decline subject to natural processes	and scale of development, and characteristics of this habitat,	
facies on calcareous substrates			livestock, gragicultural gr	pecies in Ireland, livestock, agricultural	grassiarius ariu i	Vegetation Composition: typical species	At least seven positive indicator species present, including two "high quality" species



Qualifying Interests (QI)	Pathway	Conservation Status	Threats & Pressures	Conservation Objectives	Attribute	Target	Potential for Effects	
(Festuco- Brometalia)	within the watercourses associated with this SAC, and therefore is not hydrologically connected to it.	this SAC, and is not deteriorating".	and afforestation.	cc	Vegetation composition: negative indicator species	Negative indicator species collectively not more than 20% cover, with cover by an individual species not more than 10%		
	There is no pathway between this qualifying				Vegetation composition: non- native species	Cover of non-native species not more than 1%		
	interest and the application site				Vegetation composition: woody species and bracken	Cover of woody species (except certain listed species) and bracken (Pteridium aquilinum) not more than 5% cover		
					Vegetation structure: broadleaf herb: grass ratio	Broadleaf herb component of vegetation between 40 and 90%		
						Vegetation structure: sward height	At least 30% of sward between 5cm and 40cm tall	
						Vegetation structure: litter	Litter cover not more than 25%	
					Physical structure: bare soil	Not more than 10% bare soil		
					Physical structure: disturbance	Area showing signs of serious grazing or other disturbance less than 20m²		
[7110] Active Raised Bog	Raised bogs are accumulations of deep acid peat (3-12m) that originated in shallow lake basins or topographic depressions. Their principal supply of water and nutrients is from rainfall, therefore no hydrological connection exists. Within this SAC, this particular qualifying	According to the NPWS 2019 Status of EU Protected Habitats & Species in Ireland, the overall status of this qualifying interest is "bad and deteriorating".	The main pressures on this qualifying interest are peat extraction, drainage, afforestation, and burning. Climate change is recognised as an additional threat in the future.	To restore the favourable conservation condition of Active Raised Bog in Lough Ree	As of 02/01/2024, no conserva Qualifying Interest are docume	tion attributes and associated targets for this ented on the NPWS website ⁴⁰ .	No potential for Effects Given the lack of pathways, type and scale of development, and characteristics of this habitat, there will be no impact on this qualifying interest.	

 $^{^{40}\,}Lough\,Ree\,SAC\,Conservation\,Objectives: \\ \underline{https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000440.pdf}$



Qualifying Interests (QI)	Pathway	Conservation Status	Threats & Pressures	Conservation Objectives	Attribute	Target	Potential for Effects
	interest is not located within the watercourse associated with this SAC, and therefore the development site is not hydrologically connected to this QI. There is no pathway between this qualifying interest and the application site						
[7120] Degraded Raised Bogs	Raised bogs are accumulations of deep acid peat (3-12m) that	According to the NPWS 2019 Status of EU	The main pressures on Degraded raised	To restore the favourable conservation	Habitat Area	Restore the area of active raised bog to 70.1ha, subject to natural processes	No potential for Effects Given the lack of pathways, type and scale of development, and
still capable of natural regeneration	originated in shallow lake basins or topographic depressions. Their principal supply of water	Protected Habitats & Species in Ireland, the overall status	bog come from peat extraction, drainage, afforestation and	extraction, hage, estation and ing. Climate ge is Degraded raised bogs still capable of natural regeneration in Lough Ree	Habitat Distribution	Restore the distribution and variability of active raised bog across the SAC	characteristics of this habitat, there will be no impact on this qualifying interest.
	and nutrients is from rainfall, therefore no hydrological connection	of this qualifying interest is "bad and	burning. Climate change is recognised as an		High Bog Area	No decline in the extent of high bog necessary to support the development and maintenance of active raised bog	
	exists. Within this SAC, this particular qualifying interest is not located	deteriorating".	additional threat in the future.		Hydrological Regime: Water Levels	Restore appropriate water levels throughout the site	
	within the watercourse associated with this SAC, and therefore the				Hydrological Regime: Flow Patterns	Restore, where possible, appropriate high bog topography, flow directions, and slopes	
	development site is not hydrologically connected to this QI. There is no pathway				Transitional areas between High bog and adjacent mineral soils (including cutover areas)	Restore adequate transitional areas to support/protect active raised bog and the services it provides	
	between this qualifying interest and the application site				Vegetation quality: central ecotope, active flush, soaks, bog woodland	Restore 35.1ha of central ecotope/active flush/soaks/bog woodland as appropriate	
					Vegetation quality: microtopographical features	Restore adequate cover of high-quality microtopographical features	



Qualifying Interests (QI)	Pathway	Conservation Status	Threats & Pressures	Conservation Objectives	Attribute	Target	Potential for Effects
					Vegetation quality: bog moss (Sphagnum) species	Restore adequate cover of bog moss (Sphagnum) species to ensure peat-forming capacity	
					Typical ARB species: flora	Restore, where appropriate, typical active raised bog flora	
					Typical ARB species: fauna	Restore, where appropriate, typical active raised bog fauna	
					Elements of local distinctiveness	Maintain features of local distinctiveness, subject to natural processes	
					Negative physical indicators	Negative physical features absent or insignificant	
					Vegetation composition: native negative indicator species	Native negative indicator species at insignificant levels	
					Vegetation composition: non- native invasive species	Non-Native invasive species at insignificant levels and not more than 1% cover	
					Air quality: nitrogen deposition	Air quality surrounding bog close to natural reference conditions. The total N deposition should not exceed 5kg N/ha/yr	
					Water Quality	Water quality on the high bog and in transitional areas close to natural reference conditions	
[7230] Alkaline Fens	Alkaline fens are surface- water and groundwater fed, and occupy where	According to the NPWS 2019 Status of EU	The main pressures facing this qualifying	To maintain the favourable conservation	Habitat Area	Area stable or increasing, subject to natural processes	No potential for Effects A hydrogeological pathway exists between the application
	there is a high water table, and base-rich, calcareous water supply.	Protected Habitats & Species in Ireland, the overall status	interest are land abandonment (and associated succession),	condition of Alkaline Fens in Lough Ree SAC	Habitat Distribution	No decline, subject to natural processes	site and this QI. The proposed site is hydrogeologically connected to
	Areas of this habitat are adjacent to the watercourse and Alkiline Fens may be subject to	of this qualifying interest is "bad	overgrazing, drainage, and pollution.		Hydrological Regime	Appropriate natural hydrological regimes are necessary to support the natural structure and functioning of the habitat	Inny River (IE_SH_26I011350) which flows approx. 813m to the southeast of the



Qualifying Interests (QI)	Pathway	Conservation Status	Threats & Pressures	Conservation Objectives	Attribute	Target	Potential for Effects
micresis (Qi)	potential pathways during periods of flooding.	and deteriorating".	Tressures		Peat Formation	Active peat formation, where appropriate	development, and is a tributary of this SAC, potentially affecting this QI.
	The development site is connected to this QI via the Inny River which is hydrogeologically				Water Quality: Nutrients	Appropriate water quality to support the natural structure and functioning of the habitat	However, in-built mitigation implemented in the design stage by CST Group hinders the impact of this potential
	connected to the development site and flows into Lough Ree SAC.				Vegetation Structure: Typical Species	Maintain vegetation cover of typical species including brown mosses and vascular plants	pollution pathway to negligible. There will be no adverse impacts on this QI as a result of
	Therefore, there is a potential pollution pathway between the application site and this				Vegetation Composition: Trees and Shrubs	Cover of scattered native trees and shrubs less than 10%	the proposed on-site works.
	Qualifying Interest.				Physical Structure: Disturbed Bare Ground	Cover of disturbed bare ground less than 10%. Where tufa is present, disturbed bare ground less than 1%	
					Physical Structure: Drainage	Areas showing signs of drainage as a result of drainage ditches or heavy trampling less than 10%	
[8240] Limestone Pavements	This qualifying feature typically consists of blocks of rock, known as	According to the NPWS 2019 Status of EU	The main pressures to this qualifying	To maintain the favourable conservation	Habitat Area	Area stable or increasing, subject to natural processes	No potential for Effects Given the lack of pathways, type and scale of development, and
	clints, separated by fissures or grikes. Sometimes due to weathering, this structure	Protected Habitats & Species in Ireland, the overall status	interest consist of the conversion of this habitat to agricultural land	condition of Limestone Pavements in Lough Ree SAC	Distribution	No decline, subject to natural processes	characteristics of this habitat, there will be no impact on this qualifying interest.
	is less defined, especially in the 'shattered' variant of pavement. Limestone	of this qualifying interest is "inadequate and	and housing construction, as well as scrub	J	Vegetation Composition: Typical Species	Bryophyte cover at least 50% of wooded pavement	
	pavement can occur as areas of exposed rock with very little vegetation or in association with	stable".	encroachment caused by undergrazing		Vegetation Composition: Bryophyte layer	Collective cover of negative indicator species on the exposed pavement not more than 1%	
	grassland, heath, scrub, or woodland communities. Within this SAC, this				Vegetation Composition: Non-Native Species	Cover of non-native species not more than 1% on exposed pavement; on wooded pavement not more than 10% with no regeneration	
	particular qualifying interest is not located within the watercourse				Vegetation Composition: Scrub	Scrub cover no more than 25% of exposed pavement	



Qualifying Interests (QI)	Pathway	Conservation Status	Threats & Pressures	Conservation Objectives	Attribute	Target	Potential for Effects
	associated with this SAC, and therefore the development site is not				Vegetation Composition: Bracken Cover	Bracken (<i>Pteridium aquilinum</i>) cover no more than 10% on exposed pavement	
	hydrologically connected to this QI. There is no pathway between this qualifying				Vegetation Structure: Woodland Canopy	Canopy cover on wooded pavement at least 30%	
	interest and the application site.				Vegetation Structure: Dead Wood	Sufficient quantity of dead wood on wooded pavement to provide habitat for saproxylic organisms	
					Physical Structure: Disturbance	No evidence of grazing pressure on wooded pavement	
					Indicators of Local Distinctiveness	Indicators of local distinctiveness are maintained	
[91D0] Bog Woodland	This qualifying interest is generally identified by stands of birch trees	According to the NPWS 2019 Status of EU	There are several low-level pressures to this	To restore the favourable conservation	Habitat Area	Area stable or increasing, subject to natural processes	No potential for Effects A hydrogeological pathway exists between the application
	(Betula pubescens) with extensive Sphagnum and pleurocarpous moss carpets on the woodland	Protected Habitats & Species in Ireland, the overall status	qualifying interest. These are drainage issues, invasive	condition of Bog Woodland in Lough Ree SAC	Habitat Distribution	No decline, subject to natural processes	site and this QI. The proposed site is hydrogeologically connected to
	floor. The water table is close to the surface of the woodland floor creating	of this qualifying interest is "favourable and	species, and loss of habitat due to burning.		Vegetation Composition: Positive Indicator Species	Birch (Betula pubescens), bog moss (Sphagnum spp.) and at least five other species present	Inny River (IE_SH_26I011350) which flows approx. 813m to the southeast of the development, and is a tributary
	swampy flushed conditions. This QI may be subject to potential pathways	stable".	However, none of these are considered significant		Vegetation Composition: Negative Indicator Species	Both native and non-native invasive species are absent or under control. Total cover should be less than 10%	this QI. However, in-built mitigation
	during periods of flooding. The development site is		enough at a national level to affect long-term viability.		Woodland Structure: Cover and Height of Birch	A minimum 30% cover of birch (<i>Betula pubescens</i>) with a median canopy height of 4m	implemented in the design stage by CST Group hinders the impact of this potential pollution pathway to negligible.
	connected to this QI via the Inny River which is hydrogeologically connected to the		viability.		Woodland Structure: Dwarf Shrub Cover	Dwarf shrubs cover more than 50%	There will be no adverse impacts on this QI as a result of the proposed on-site works.
	development site and flows into Lough Ree SAC.				Woodland Structure: Ling Cover	Ling (<i>Calluna vulgaris</i>) covers not more than 40%	



Qualifying Interests (QI)	Pathway	Conservation Status	Threats & Pressures	Conservation Objectives	Attribute	Target	Potential for Effects
	Therefore, there is a potential pollution pathway between the				Woodland Structure: Bryophyte Cover	Bryophyte cover at least 50%, with bog moss (<i>Sphagnum spp</i> .) cover at least 25%	
	application site and this Qualifying Interest.				Woodland Structure: Tree Size Classes	Each size class present	
					Woodland Structure: Senescent and Dead Wood	Senescent or dead wood present	
[91E0] Alluvial forest with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	This qualifying interest is most common in Ireland in the form of Riparian forests of Ash and Alder of temperate and Boreal Europe lowland and hill watercourses. They are periodically inundated by the annual rise of river levels but otherwise, have well-drained and aerated soils during low water. Areas of this habitat are adjacent to the watercourse and Alluvial Forest may be subject to potential pathways during periods of flooding. The development site is connected to this QI via the Inny River which is hydrogeologically connected to the development site and flows into Lough Ree SAC. Therefore, there is a potential pollution pathway between the	According to the NPWS 2019 Status of EU Protected Habitats & Species in Ireland, the overall status of this qualifying interest is "bad and deteriorating".	The main threats and pressures include Invasive alien species, in particular sycamore (Acer pseudoplatanus), beech (Fagus sylvatica), Indian balsam (Impatiens glanduilifera), and currant species (Ribes nigrum and R. rubrum). The QI is also subject to small area losses due to clear-felling	To restore the favourable conservation condition of Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) * in Lough Ree SAC	As of 02/01/2024, no conserva Qualifying Interest are docume	ented on the NPWS website ⁴¹ .	No potential for Effects A hydrogeological pathway exists between the application site and this QI. The proposed site is hydrogeologically connected to Inny River (IE_SH_26I011350) which flows approx. 813m to the southeast of the development, and is a tributary of this SAC, potentially affecting this QI. However, in-built mitigation implemented in the design stage by CST Group hinders the impact of this potential pollution pathway to negligible. There will be no adverse impacts on this QI as a result of the proposed on-site works.

 $^{^{41} \,} Lough \, Ree \, SAC \, Conservation \, Objectives: \\ \underline{https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000440.pdf}$



Qualifying Interests (QI)	Pathway	Conservation Status	Threats & Pressures	Conservation Objectives	Attribute	Target	Potential for Effects	
	application site and this Qualifying Interest.							
[1355] Otter (<i>Lutra</i>	There is a population of Otters which utilise the	According to the NPWS 2019	Impacts on otters	To maintain the favourable	Distribution	No significant decline	No potential for Effects	
Otter (Lutra lutra)	lake habitat associated with this SAC. The development site is	Status of EU Protected Habitats &	of EU and pesticides of watercourses & that otters utilise, conflicts with fishermen i.e., getting tangled in fishing gear infrastructure developments e.g., roads,	des of conservation conditions of	Extent of Terrestrial Habitat	No significant decline. Area mapped and calculated as 330.6ha along riverbanks/lake shoreline/around pools	A hydrogeological pathway exists between the application site and this QI. The proposed site is	
	connected to this QI via the Inny River which is hydrogeologically connected to the	Species in Ireland, the overall status of this qualifying interest is		fishermen i.e., Ree SAC getting tangled in	fishermen i.e., getting tangled in fishing gear infrastructure developments e.g., roads,	Extent of freshwater (river) habitat	No significant decline. Length mapped and calculated as 22.7km	hydrogeologically connected to Inny River (IE_SH_26I011350) which flows approx. 813m to
	development site and flows into Lough Ree SAC. Therefore, there is a	"favourable and stable"		5,		Extent of freshwater (lake) habitat	No significant decline. Area mapped and calculated as 2097.4ha	the southeast of the development, and is a tributary of this SAC, potentially affecting this QI.
	potential pollution pathway between the		housing		Couching sites and holts	No significant decline	However, in-built mitigation implemented in the design	
	application site and this Qualifying Interest.				Fish biomass available	No significant decline	stage by CST Group hinders the impact of this potential pollution pathway to negligible.	
					Barriers to connectivity	No significant increase	There will be no adverse impacts on this QI as a result of the proposed on-site works.	

Table 3-3 Identification of Impacted Qualifying Features of Lough Ree SPA

Special Conservation Interest	Pathway	Conservation Status – as of the I-WeBS National Trends Report 1994/5 – 2019/20, the International Waterbird Census, and Seabird Survey Ireland	Threats & Pressures	Conservation Objectives	Potential for Effects
[A004] Little Grebe (Tachybaptus ruficollis)	is connected to this SPA via the Inny River	Nationally in the Republic of Ireland, the current population trend, last recorded in 2019/20, for this species has had a 38.2% increase since 1994/5. (I-WeBS National Trends). Lough Ree is of national importance to Little Grebe.	associated with the species mentioned include significant	conservation condition of Little Grebe listed as Special Conservation Interest for	No Potential for Effects A hydrogeological pathway exists between the application site and these Qls. The proposed site is hydrogeologically connected to Inny River (IE_SH_26I011350) which flows approx. 813m to the southeast of the

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[A038] Whooper Swan (<i>Cygnus cygnus</i>)	flows into Lough Ree SPA Pollution of the Inny River caused by works on-site will have adverse impacts on the water quality within Lough Ree SPA, as well as habitats	Overall Trend Statistics (1978-2018) show there has been a moderate increase in the population numbers, as well as a moderate increase in population over the previously published surveyed 10 years (2009-2018). (International Waterbird Census) Lough Ree is of national importance to Whooper Swan.	beach sand and gravel extraction, boat disturbance (commercial and recreational) – injury from boats and a potential increase in pollution of water, lack of coastal protection schemes, drainage, dredging, enhanced bird competitions, fishing (commercial and recreational), loss of intertidal habitat, loss of open	To maintain or restore the favourable conservation condition of Whooper Swan listed as Special Conservation Interest for Lough Ree SPA	development, and is a tributary of this SAC, potentially affecting these QIs. Potential pollution of the watercourse onsite leading to a potential degradation in water quality may impact fish populations within the SPA, reducing the bird species' food availability, and may increase competition between the species and anglers within the SPA, ultimately leading
[A050] Wigeon (Anas penelope)	within the SPA. This may cause a loss of suitable habitat and/or food availability to the species listed as "special conservation interest".	Nationally in the Republic of Ireland, the current population trend, last recorded in 2019/20, for this species has had an 18.2% decline since 1994/5. (I-WeBS National Trends) Lough Ree is of national importance to Wigeon conservation	water habitat, alteration of habitat quality of inter-tidal habitat, alteration of habitat quality of open water habitat, loss of high tide roosts, threat of introduced species, introduction of power cables, disturbance caused by recreational activities, disturbance by research	To maintain or restore the favourable conservation condition of Wigeon listed as Special Conservation Interest for Lough Ree SPA	to the loss of suitable habitat for the species withing Lough Ree SPA. However, in-built mitigation implemented in the design stage by CST Group hinders the impact of this potential pollution pathway to negligible. There will be no adverse impacts on Lough Ree SPA as a
[A052] Teal (Anas crecca)	There will be no direct pathways i.e., noise disturbance or landtake, due to the distance from the application site to the	Nationally in the Republic of Ireland, the current population trend, last recorded in 2019/20, for this species has had a 19.4% increase since 1994/5. (I-WeBS National Trends). Lough Ree is of national importance to Teal	activities, alteration of system dynamics and wildfowling.	To maintain or restore the favourable conservation condition of Teal listed as Special Conservation Interest for Lough Ree SPA	result of the proposed on-site works. There will be no adverse impacts on these QIs as a result of the proposed on-site works.
[A053] Mallard (Anas platrhynchos)	SPA.	Nationally in the Republic of Ireland, the current population trend, last recorded in 2019/20, for this species has had a 19.1% decline since 1994/5. (I-WeBS National Trends). Lough Ree is of national importance to Mallard		To maintain or restore the favourable conservation condition of Mallard listed as Special Conservation Interest for Lough Ree SPA	
[A056] Shoveler (Anas clypeata)		Nationally in the Republic of Ireland, the current population trend, last recorded in 2019/20, for this species has had a 10.8% decline since 1994/5. (I-WeBS National Trends) Lough Ree is of national importance to Shoveler		To maintain or restore the favourable conservation condition of Shoveler listed as Special Conservation Interest for Lough Ree SPA	
[A061] Tufted Duck (Aythya fuligula)		Nationally in the Republic of Ireland, the current population trend, last recorded in 2019/20, for this species has had a 17.9% decline since 1994/5. (I-WeBS National Trends) Lough Ree is of national importance to Tufted Duck		To maintain or restore the favourable conservation condition of Turfed Duck listed as Special Conservation Interest for Lough Ree SPA	

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[A065]	Overall Trend Statistics (1978-2018) show the	To maintain or restore the favourable	
Common Scoter	population numbers of this species have	conservation condition of Common Scoter	
(Melanitta	remained stable, as well as a moderate	listed as Special Conservation Interest for	
nigra)	increase in population over the previously	Lough Ree SPA	
	published surveyed 10 years (2009-2018).		
	(International Waterbird Census)		
[A067]	Nationally in the Republic of Ireland, the	To maintain or restore the favourable	
Goldeneye	current population trend, last recorded in	conservation condition of Goldeneye	
(Bucephala	2019/20, for this species has had a 66.9%	listed as Special Conservation Interest for	
clangula)	decline since 1994/5. (I-WeBS National	Lough Ree SPA	
Clarigata	Trends)		
	Lough Ree is of national importance to		
	Goldeneye		
	,		
[A125]	Nationally in the Republic of Ireland, the	To maintain or restore the favourable	
Coot (Fulica	current population trend, last recorded in	conservation condition of Coot listed as	
atra)	2019/20, for this species has had a 23.2%	Special Conservation Interest for Lough	
	decline since 1994/5. (I-WeBS National Trends)	Ree SPA	
	'		
	Lough Ree is of national importance to Coot		
[A140]	Nationally in the Republic of Ireland, the	To maintain or restore the favourable	
Golden Plover	current population trend, last recorded in	conservation condition of Golden Plover	
(Pluvialis	2019/20, for this species has had a 57.8%	listed as a Special Conservation Interest	
apricaria)	decline since 1994/5. (I-WeBS National	for Lough Ree SPA	
	Trends)		
	Lough Ree is of national importance to Golden		
	Plover		
[A142]	Nationally in the Republic of Ireland, the	To maintain or restore the favourable	
	current population trend, last recorded in	conservation condition of Lapwing listed	
Lapwing (Vanellus	2019/20, for this species has had a 63.9%	as a Special Conservation Interest for	
vanellus)	decline since 1994/5. (I-WeBS National	Lough Ree SPA	
vanenasj	Trends)	ŭ	
	Lough Ree is of national importance to		
	Lapwing		
[4402]	, ,	T	
[A193]	Accurate information not available on-line as	To maintain or restore the favourable	
Common Tern	of 22/12/23.	conservation condition of Common Tern	
(Sterna Hirundo)	Lough Ree supports a nationally important	listed as Special Conservation Interest for	
	population of Common Terns (90 pairs in	Lough Ree SPA	
	1995).		

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[A999] Wetland and Waterbirds	Lough Ree SPA is of high ornithological importance for both wintering and breeding birds. It supports nationally important populations of eleven wintering waterfowl species. Parts of Lough Ree SPA are Wildfowl Sanctuaries.	conservation condition of the wetland habitat at Lough Ree SPA as a resource for the regularly occurring migratory	
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3.2 Natura 2000 Impact Assessment

The potential impacts of the proposed development on the Natura 2000 sites identified above are described in Table 3-4 below.

Table 3-4: Natura 2000 Impact Assessment

Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on nearby Natura 2000 site:

The proposed works will have no impact upon the integrity of the site structure of the designated sites identified, i.e., Lough Ree SAC, Ballymore Fen SAC, Mount Jessop Bog SAC, Fortwilliam Turlough SAC, and Lough Ree SPA.

There are no individual elements of the proposed project that are likely to give rise to negative impacts on these sites if designed in mitigation in section 2.4 above is implemented. The application site is, at its closest to Lough Ree SAC at a distance of 4.64km and Lough Ree SPA at a distance of 5km; however, it is considered that the designed-in mitigation in section 2.4 above, will prevent a direct source – pathway – receptor linkage between the works site and the designated sites identified, therefore, no impacts will occur.

Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the nearby Natura 2000 sites by virtue of:

Size & Scale: Given the size and scale of the works and no direct source—pathway—receptor linkage between the works site and any designated site due to the in-built mitigation measures, no impacts will occur.

Land-take: There will be no land-take from any designated site. There will be no interference with the boundaries of any designated site.

Distance from Natura 2000 Site (or key features of the site): At its closest point, the proposed works site is situated at a distance of 4.64km from Lough Ree SAC and 5km from Lough Ree SPA which is the closest designated sites. This distance is adequate to predict that there will be no impacts upon these designated sites, provided measures detailed within in section 2.4 above are adhered to. The project design implementing the above measures removes any direct source-pathway-receptor linkages between designated sites and the development site.

Resource Requirements (water abstraction etc.): No resources will be taken from any Natura 2000 site, and there are no resource requirements that will impact any designated site.

Emissions: Neither the construction nor the operation of the proposed works will result in any emissions to the identified SACs or SPAs. There will be no run-off (untreated or other) from the works site directly to any SAC, SPA, pSPA or RAMSAR site. There are no direct source-pathway-receptor linkages between designated sites and the development site.



Excavation Requirements: Excavated material from the construction will be used on-site. Any remaining material will be disposed of in a responsible manner at a licensed facility away from any designated sites or areas of conservation value.

Transportation requirements: There will be no additional transportation requirements resulting from the proposed development and associated works that will have any impact on the Natura 2000 sites identified.

In-Combination / Cumulative Impacts: The proposed application was considered in combination with other developments or proposed developments in the area, and potential cumulative impacts were considered. A number of planning applications associated with the development of Ballymahon, have been granted planning permission or are under review in the preceding five years, and where necessary, these applications were accompanied by Appropriate Assessment reports (Stage I / Stage II). Any future individual application that has the potential to impact upon a Natura 2000 site will be subject to Appropriate Assessment (AA) as required under Articles 6(3) of the Habitats Directive. The proposed development will not lead to any cumulative impacts upon any designated site when considered in combination with other developments that have been adequately screened for AA or where mitigation measures have been included as part of a Stage 2 AA for these developments.

Duration of Construction, Operation & Decommissioning: Once construction begins, the development should be complete within 18 months.

Describe any likely changes to the nearby Natura 2000 sites arising as a result of:

Reduction of habitat area: The proposed development lies outside the boundaries of any Natura 2000 site identified above. There will be no reduction of designated habitat area within any SAC, SPA, pSPA or RAMSAR site. There will be no impacts upon the habitats qualifying interests of the designated sites within 15km of the development. All of the site features are outside of the zone of influence of the development provided measures detailed within in section 2.4 above are adhered to. The project design implementing the measures detailed within in section 2.4 above, removes any direct source-pathway-receptor linkages between designated sites and the development site. There will be no interference with the boundaries of any SAC, SPA, pSPA or RAMSAR site.

Disturbance to Key Species: All designated sites identified lay outside of the zone of influence of the development; therefore, there will be no disturbance to key species associated with any designated site.

Habitat or species fragmentation: There will be no habitat or species fragmentation within any SAC, SPA, pSPA or RAMSAR site. No ecological corridors between the proposed site and any designated site exist, which could cause habitat, or species fragmentation, therefore, no habitat or species fragmentation will occur.

Reduction in species density: There will be no reduction in species density within any SAC, SPA, pSPA or RAMSAR site.

Changes in key indicators of conservation value (water quality etc.): There will be no negative impacts on surface or groundwater quality within any SAC, SPA, pSPA or RAMSAR site. The project design implementing the measures detailed within in section 2.4 above, removes any direct source-pathway-receptor linkages between designated sites and the development site. There will be no negative impacts upon the water quality in any designated site.

Describe any likely impacts on the nearby Natura 2000 sites as a whole in terms of:

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Interference with the key relationships that define the structure or function of the site: It is not considered likely that there will be any impacts on the key relationships that define the structure or function of any Natura 2000 sites identified.

Provide indicators of significance as a result of the identification of effects set out above in terms of:

Loss - Estimated percentage of lost area of habitat: None

Fragmentation: None

Disruption & disturbance: None

Change to key elements of the site (e.g., water quality etc.): None



4. Article 6(3) Appropriate Assessment Screening Statement & Conclusions

The findings of this Screening Assessment are presented following the European Commission's Assessment of Plans and Projects Significantly affecting Natura 2000 Sites: Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC (EC, 2001) and Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (EC, 2018) as well as the Department of the Environment's Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (DoEHLG, 2010).

In order to assess the impact on the Natura 2000 sites, a standard source-pathway-receptor model is utilised. Therefore, in order for an impact to be established, all three of these elements must be present. Therefore, in order for an impact to be established, all three of these elements must be present. Where mitigation measures are put in place to ensure that one or all of these elements are removed, the potential impact is deemed to be not relevant or significant.

Five Natura 2000 sites are present within 15km of the site, including:

Lough Ree SAC

Mount Jessop Bog SAC

Lough Ree SPA

Fortwilliam Turlough SAC

Ballymore Fen SAC

The test of likely significance (TOLS) has concluded that the source-pathway-receptor mechanism in addition to considering other elements highlighted above, cannot be established for these sites, provided the projects designed-in mitigation measures detailed within in section 2.4 above are adhered to as part of the works. These measures remove any direct source-pathway-receptor linkages between these designated areas and the works site removing any potential impact. Due to the benign nature of the development, all of these designations highlighted above can be screened out. No designated sites have been identified as within the likely zone of impact, and as such, no further appropriate assessment is required⁴².

⁴² NPWS Protected Site Synopses and maps available on http://www.npws.ie/en/ProtectedSites/;



5. Appropriate Assessment Conclusions

In accordance with Article 6(3) of the Habitats Directive, the relevant case law established best practices and the precautionary principle, this NIS Stage 1 Screening Report has examined the details of the project in relation to the relevant Natura 2000 sites within 15km of the application site.

In view of the best scientific knowledge and on the basis of objective information, it can be concluded that this application, whether individually or in combination with other plans and projects, will have no impact upon any Natura 2000 sites. The integrity of these sites will be maintained, and the habitats and species associated with these sites will not be adversely affected. It is of the opinion of this author that this application does not need to proceed to Stage II of the Appropriate Assessment process, provided that the mitigation measures in-built into the design process of this development are adhered to, including Implementation of a Construction Environmental Plan (CEMP) to ensure that all construction activities on-site will adhere to best practice environmental guidance.



Appendices

Appendix A – Invasive Species Management Strategy

Cherry Laurel (*Prunus laurocerasus*) which is a non-scheduled, non-native invasive species were identified outwith the proposed site boundary. In the unlikely event that site plans are altered to include these locations within the proposed development area, these non-scheduled invasive species will be managed in line with best practice guidelines outlined below.

Cherry Laurel Background

Cherry Laurel is listed as a high-impact invasive by the National Biodiversity Data Centre. Cherry Laurel (*Prunus laurocerasus*) is also listed in England and Wales (Schedule 9 of the Wildlife and Countryside Act 1981). It reproduces through seeds, which are distributed by birds and other animals, and it also spreads laterally by layering (growing roots from stems where they touch the ground). When cut, Cherry Laurel will sucker from the roots and re-sprout from the cut stems. Cherry Laurel grows in sun or shade, moist or dry soils, but does best in moist, well-drained soils. Cherry Laurel is considered an invasive species of high impact because it shades out native plants and degrades habitats. Very fast-growing and tolerant of disturbance and a wide range of conditions, Cherry laurel is a strong competitor and thrives in Ireland's climate.

Management Options for Cherry Laurel

1. <u>Physical Control</u>

Small plants can be dug up when the soil is moist. To control larger plants, cut stems and trunks by hand or chainsaw, cut as close to the ground as possible and remove stems to make it easier to control re-growth. Stems can be chipped and used as mulch or taken to a landfill. Leaving stems on moist ground might result in some stem-rooting.

2. <u>Chemical Control</u>

Direct stump treatment by painting or spot spraying freshly cut low stumps with a herbicide immediately after being cut. Glyphosate (20% solution) or tryclopyr (8% solution) are known to be effective during suitable weather conditions, i.e., dry weather. The herbicide concentrations used, and timings of applications vary according to which chemical is used. Glosphate optimal treatment time is between November and April, and triclopyr is suitable all year round. 43

⁴³Kent Wildlife Trust: https://www.kentwildlifetrust.org.uk/sites/default/files/2018-06/KWT%20Land%20Mgt%20Advice Sheet%209%20-%20Woodland%20management%20-%20control%20of%20rhododendron.pdf

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Appendix B – Current Site Plan



