



Oifig na mBóithre Náisiúnta Chorcaí
Cork National Roads Office

February 2023

Cork County Council Part 8 Development Report



Project Title:

**N71 GLASSLINN ROAD /CLARE O'LEARY WALK ACTIVE TRAVEL
EXTENSION**

Planning & Development Act 2000 (as amended) - Part XI
Planning & Development Regulations 2001 (as amended) - Part 8



Comhairle Contae Chorcaí
Cork County Council

Cork National Roads Office

Document Info Sheet

Project Title	N71 GLASSLINN ROAD /CLARE O'LEARY WALK ACTIVE TRAVEL EXTENSION
Document Title	Cork County Council Part 8 Development Report

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Prepared by:

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T45 WA44**

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¹ Contents in accordance with the requirements of the Planning and Development Act 2000 Part XI S.179(3)b

1. Introduction

Cork County Council is proposing to carry out works to extend an existing walkway in the townlands of Ballylangleigh and Curranure, Bandon. The existing amenity walkway, known as the Clare O’Leary Walk, currently extends to the east of Bandon Town, adjacent to the N71. The proposed works include extending the existing amenity walkway by approximately 900 metres to the footpath on the eastern boundary of Bandon Town on the N71, creating a 3m wide active travel route from Bandon Town Centre.

1.1 Purpose of this Report

The purpose of this report is to set out the Cork County Council Part 8 Development proposal for the N71 GLASSLINN ROAD /CLARE O’LEARY WALK ACTIVE TRAVEL EXTENSION.

1.2 Site Location

The proposed project is in the townlands of of Ballylangley and Curranure, Bandon and is highlighted on Figure 1 below.

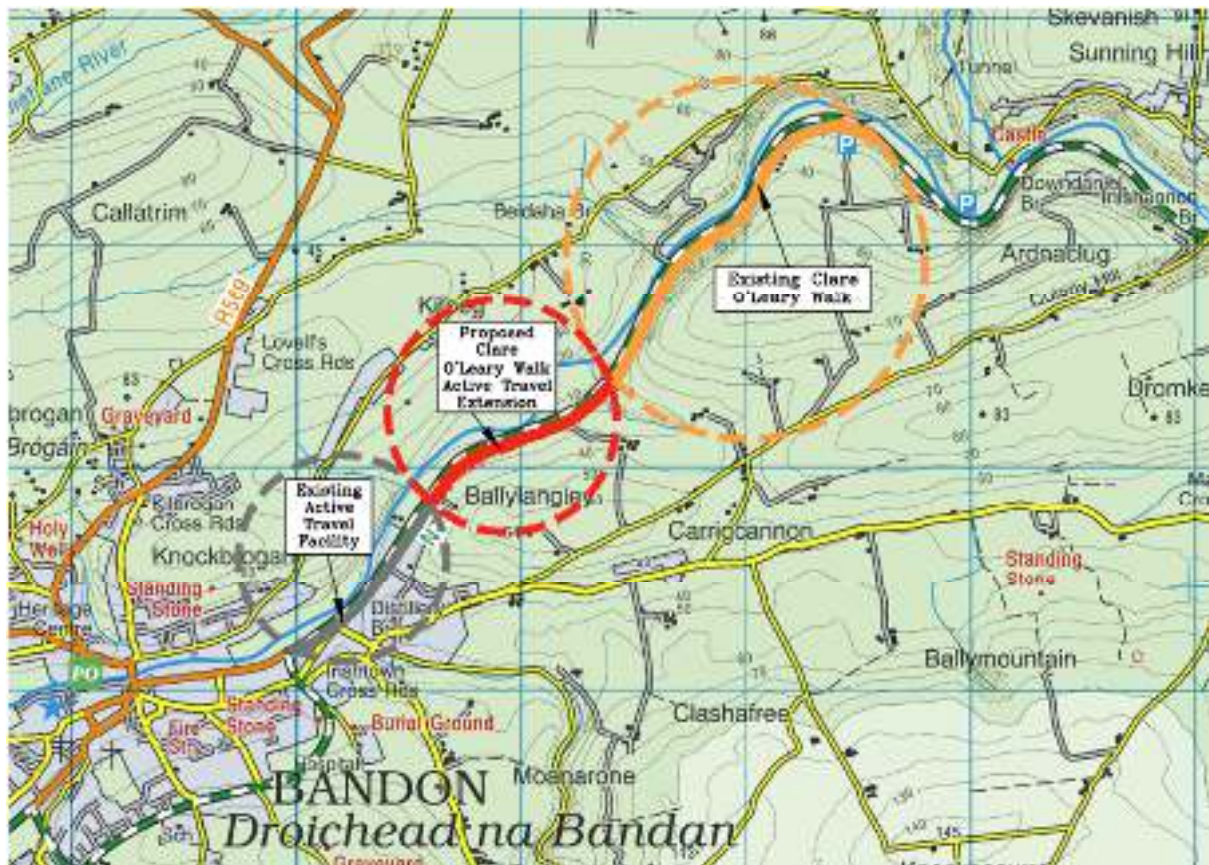


Figure 1 – Proposed Clare O’Leary Walk Active Travel Extension

1.3 Land Requirements

Cork County Council are purchasing the lands required to develop the walkway from the existing landowners. These land agreements are in place.

2. Part 8 Process

Section 179 of Part XI of the Planning and Development Act 2000, (as amended); and Part 8 of the Planning and Development Regulations 2001, (as amended) set out the requirements in respect of certain classes of development by or on behalf of local authorities. Part 8 of the Regulations comprises 7 Articles – 79 to 85. Article 80(1) lists the type of Developments to which Part 8 is required. The proposed development is covered under the above article.

2.1 Site Notices

In accordance with the Article 81 the Local Authority shall:

- (a) give notice of proposed development in a newspaper;
- (b) erect site notices on the land on which the proposed development would be situated.

Cork County Council Published a notice of the proposals in the **Southern Star** on **Saturday 18 February 2023**.

Three site notices were erected at various locations across the study area and will be maintained for the duration of the submission period. A copy of the Advertisement/Site Notice is attached (see 7.1 Appendix A).

2.2 Part 8 Consultations

Article 82(3) prescribes Statutory and Non-Statutory bodies to which a local authority should send notice of proposed development. These are summarised in the 7.2 Appendix B: Notification of Statutory Consultees.

2.3 Part 8 Documents

The following is the list of Part 8 documents contained in this application:

- Cork County Council Part 8 Development Report (this document);
- Cork County Council Planning Report (see 7.3 Appendix C)
- Report for the Screening of Appropriate Assessment & Environmental Impact Assessment Screening Report and Ecological Impact Assessment Report (see Appendix D, E, F); and
- Part 8 Drawings (as listed below in the drawing schedule)

Drawing Number	Drawing Title
CLA – Cover	Part 8 Drawings
CLA – Index	Schedule of Part 8 Drawings
CLA – PLP- 101	Proposed Project Location Map
CLA – PLP- 102	Project Location Map
CLA – PLP- 103	Project Location Map of Proposed & Existing Clare O'Leary Walk
CLA – PLP- 104	Plan Layout
CLA – PLP- 105	Plan Layout & Typical Cross Section
CLA – PLP- 106	Plan & Long Section Ch. 0.0m to Ch.500m
CLA – PLP- 107	Plan & Long Section Ch. 510m to Ch.880m

2.4 Submission Process

Cork County Council is required to make **full plans and particulars** of the proposed development available for inspection. These will be available from **Friday, 17th February 2023** until **Monday, 20th March 2023** online at the **Planning section** on Cork County Council website (www.corkcoco.ie) and also at the following locations:

- Bandon Municipal District Office, Bandon, Co Cork. P72 XK59
- Cork County Council, National Roads Office, Richmond, Glanmire, Cork. T45 WA44

Alternatively, a hard copy of the documents will be posted on request by emailing info@corkrdo.ie or by writing to: Senior Engineer, Cork County Council, National Roads Design Office, Richmond, Glanmire, Cork, T45 WA44.

Submissions or Observations can be made:

1. Using an **online submission form** at [https://www.yourcouncil.ie/service/Cork County Council own development Part 8s](https://www.yourcouncil.ie/service/Cork%20County%20Council%20own%20development%20Part%208s); or
2. By sending an email to info@corkrdo.ie; or
3. By sending a letter to **Senior Engineer, Cork County Council, National Roads Office, Richmond, Glanmire, Co. Cork. T45 WA44**.

All emails and letters must reach the Senior Engineer **on or before 4pm on Tuesday, 4th April 2023**.

All submissions must include a contact name and address. Submissions made as part of the process are to be accessible on request.

Any submissions or observations received by the Council are considered in the Part 8 Chief Executive's Report which is prepared and presented to the Councillors for adoption. The Chief Executive's Report lists those who made a submission together with the summary of their points made in the respective submission. The Report addresses each point and forms the local authority's response.

Arising from consideration of the representations, the Chief Executive's Report sets out whether or not it is proposed to proceed as originally planned or to proceed with a modified proposal. It is then a matter for the members of the Council (i.e. the Councillors) to grant or refuse planning.

3. Nature and Extent of Proposed Development

3.1 Project Context and Existing Conditions

The existing Clare O' Leary walk is an 'out & back' path and does not connect to the town of Bandon. The purpose of this project is to extend the walk to create a 3m wide active travel route to the town of Bandon, via the newly constructed footpath along the N71. The land required to construct the path is being purchased by Cork County Council, by agreement from the existing landowners.

3.2 Project Objectives

The purpose of this project is to extend the existing Clare O'Leary walkway to create a recreation and active travel link to Bandon Town. The Clare O'Leary Active Travel Route consists of the construction of approximately 900 linear metres of a 3m wide shared surface. This scheme is being developed to connect the existing pathway, with the newly constructed 3m wide footpath along the N71, which in turn connects to the Graham Norton walkway. When complete, there will be a 5km active travel route directly into the town of Bandon.

3.3 Project Specific Proposals

The proposal is for the development of a walkway 900m in length to the east of Bandon Town which runs from an existing walkway adjacent to the N71 (The Clare O'Leary Walk) to the eastern boundary of Bandon Town where the existing footpath terminates. Works consist of:

- Creating a 3m wide tarmac surfaced walkway which is a continuation of an established 1.8 km walkway along a section of the Old West Cork Railway line.
- Drainage and ducting works to be installed for the 900m length. Drainage is to the existing road drainage system on the adjoining N71. Ducting is for provision of future lighting which will be directional low level LED lighting. Any future lighting will be in accordance with Bat Conservation Guidelines Ireland and TII recommendations.
- Fencing to private property will be provided where necessary.
- There will be planting of whitethorn hedging along the boundary with private property, native trees and a number of pollinator areas. Seating will be provided at regular intervals along the route of the walkway.
- Signage will be provided in the form of an Information Board and signage.

The works will be carried out on the land owned by Cork County Council and Lands to be purchased from third parties.

4. Planning and Policy Context

4.1 Planning Context

The proposal is compliant with the priorities for the South West Region outlined in the document “Project Ireland 2040 National Planning Framework”;

- *Developing a more integrated network of greenways, blueways and peatways to support the diversification of rural and regional economies and promote more sustainable forms of travel and activity based recreation.*
- *Integrated planning, management and development of the areas traversed by the Wild Atlantic Way to maximise both the quality and integrity of the visitor experience and the added benefit in economic terms, especially for rural and local communities.*
- *Measures to support the integrated development of remoter parts of this region, particularly rural peninsular areas and towns on its western seaboard, including the ongoing investment in the transport and communications area, particularly in the roll-out of the national broadband scheme and further promotion and development of attractions to capitalise on underutilised potential in the tourism and local enterprise areas.*

4.1.1 Cork County Council Development Plan (CDP)

The adopted Cork County Council’s Cork County Development Plan (2022 – 2028) which came into effect in June 2022 promotes active travel, sustainable transport infrastructure that strengthens the connections between rural and urban areas, supports demand management measures to reduce car travel and promote best practice mobility management and travel planning via sustainable transport modes.

In regard to policy objectives, the value of walkways, recreational facilities, enhanced connectivity and active travel is recognised and supported by the National Planning Framework, the Regional Spatial & Economic Strategy for the Southern Region and the Cork County Development Plan, 2022. Relevant objectives set out in the Cork County Development Plan, 2022 include Objectives TO 10-8 ‘Walking/Cycling and Greenways’ and TM 12-2-2 (h) ‘Active Travel’

4.1.2 Project Funding

The funding for the project has been secured by Cork County Council from:

- Transport Infrastructure Ireland (TII)

5. Environmental Assessment of the Scheme

5.1 Appropriate Assessment Screening Report

The Screening exercise was completed by Flynn Furney Environmental Consultants in compliance with the relevant European Commission and national guidelines. The potential impacts during the construction and operation of the proposed scheme have been considered in the context of the European Sites potentially affected, their qualifying interests, Special Conservation Interests and Conservation Objectives.

Report for the Screening of Appropriate Assessment & Environmental Impact Assessment Screening Report can be found in 7.3 Appendix D and in 7.4 Appendix E of this report.

In accordance with Section 177U of the Planning and Development Act 2000 (as amended) and on the basis of the objective information provided in AA Screening Report, it is concluded beyond reasonable scientific doubt that the proposed works, individually or in combination with other plans/projects are not likely to have a significant effect on a European site (Natura 2000 site). It is therefore considered that a Stage 2 Appropriate Assessment under Section 177V of the Planning and Development Act 2000 (as amended), is not required.

As per Article 81 of the Planning and Development Regulations 2001 (as amended) an Environmental Impact Assessment (EIA) screening determination has been made and a determination has been made that an EIA Report is not required. In accordance with Article 120 (3), as amended by S.I. No. 296 of 2018, a person may, within 4 weeks from the date of this notice, apply to An Bord Pleanála for a screening determination as to whether the development would be likely to have significant effects on the environment. Such a submission should be addressed to the Secretary, An Bord Pleanála, 64, Marlborough Street, Dublin, 1.

6. Conclusion

The proposals which are the subject of this Part 8 Process provide a unique opportunity to deliver a continuous active travel route from the Clare O'Leary walkway to Bandon Town Centre.

The proposed works are consistent with proper planning and sustainable development of the area.

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7.1 Appendix A: Site Notice

SITE NOTICE



Cork County Council

PLANNING & DEVELOPMENT ACT 2000 (as amended) - Part XI

PLANNING & DEVELOPMENT REGULATIONS 2001 (as amended) - Part 8

Notice is hereby given, pursuant to the provisions of Part XI, Article 179 of the Planning & Development Act, 2000 (as amended) and Part 8, Article 81 of the Planning & Development Regulations, 2001 (as amended) that Cork County Council proposes to carry out the following development:

Project Title: N71 GLASSLINN ROAD /CLARE O'LEARY WALK ACTIVE TRAVEL EXTENSION

Location: Glasslinn N71 Road/Clare O'Leary Walk Active Travel Extension in the townlands of Ballylingley and Curranure, Bandon, Co. Cork.

Nature & Extent of Development (Overview):

The proposed extension of the existing Clare O'Leary Walk by approximately 900m to the footpath on the N71, creating a c.3m wide active travel route from Bandon Town Centre.

Locations and offices at which plans and particulars may be inspected from Friday 17th February to Monday 20th March, 2023:

1. Online on the Cork County Council website by going to the planning section at www.corkcoco.ie
2. Cork National Roads Office, Cork County Council, Richmond, Glanmire, Cork T45 WA44 (from 10am to 1pm and from 2pm to 4pm Monday to Friday – excluding public holidays (hard copy format)).
3. Cork County Council Local Area Engineers Office, Railway Place, Bandon, Co. Cork. P72 XK 59 (from 10am to 4pm – excluding public holidays (hard copy format)).

Alternatively, a copy of the documents will be posted on request by emailing info@corkrdo.ie or by writing to: Senior Engineer, Cork National Roads Office, Cork County Council, Richmond, Glanmire, Cork T45 WA44

Submissions or Observations with respect to the proposed development, dealing with proper planning and sustainable development of the area in which the development would be situated, may be made using the **online submission form** on www.yourcouncil.ie or, in writing to **Senior Engineer, Cork National Roads Office, Cork County Council, Richmond, Glanmire, Cork, T45 WA44** or emailed to info@corkrdo.ie so as to be received **on or before 4pm on Tuesday 4th April, 2023**.

In accordance with Article 120 of the Planning and Development Regulations, 2001 (as amended), a screening examination has been carried out and a determination has been made pursuant to Article 120(1B)(b)(i) that there is no real likelihood of significant effects on the environment arising from the proposed development and that an Environmental Impact Assessment (EIA) is not required. In accordance with Article 120 (3) of the Planning and Development Regulations, 2001 (as amended), any person may, **within 4 weeks** from the date of publication of this notice (18th February, 2023), apply to An Bord Pleanála for a screening determination as to whether the development would be likely to have significant effects on the environment. Such a submission should be addressed to the Secretary, An Bord Pleanála, 64, Marlborough Street, Dublin, 1.

In accordance with Article 83 of the Planning and Development Regulations, 2001 (as amended,) Cork County Council shall make available for inspection, and on request issue to any party, a copy of any submissions or observations received in respect of the proposed development. It shall, additionally, in accordance with Article 179 of the Planning and Development Act, 2000 (as amended) include in the published report of the Chief Executive to the Members of Cork County Council, a list of the persons or bodies who made submissions or observations with respect to the proposed development. Any personal information collected by Cork County Council in compliance with its statutory obligations under the Planning and Development Act, 2000 (as amended) and the Planning and Development Regulations, 2001 (as amended) shall be processed in line with the Council's privacy statement, which is available to view at www.corkcoco.ie.

Senior Engineer, Cork National Roads Office, Cork County Council.

15th February, 2023

7.2 Appendix B: Notification of Statutory Consultees

Prescribed Bodies
An Chomhairle Ealaíon
Fáilte Ireland
An Taisce
The Heritage Council
South Western Regional Fisheries Board
Waterways Ireland
Transport Infrastructure Ireland
Minister for Culture, Heritage and the Gaeltacht

7.3 Appendix C: Planner's Report

Comhairle Contae Chorcaí

Cork County Council

Rannóg Pleanála, Teach Norton,
Bóthar Chorcaí, An Sciobairín,
Co. Chorcaí P81 AT28.
Fón: (028) 40340 • Faics (028) 21660
Suíomh Greasain: www.corkcoco.ie
Planning Section, Norton House,
Cork Road, Skibbereen,
Co. Cork P81 AT28.
Tel: (028) 40340 • Fax: (028) 21660
Web: www.corkcoco.ie



Part 8	Planning Report
Address	Townlands of Ballylangley and Curranure, Bandon.
Proposal	To extend an existing public walkway, the Clare O'Leary Walk, adjacent to the N71.

Cork County Council is proposing to carry out works to extend an existing walkway in the townlands of Ballylangley and Curranure, Bandon. The existing amenity walkway, known as the Clare O'Leary Walk, currently extends to the east of Bandon Town, adjacent to the N71. The proposed works include extending the existing amenity walkway by approx. 900m to the footpath on the eastern boundary of Bandon Town on the N71, creating a 3m wide active travel route from Bandon Town Centre.

A detailed description of the proposed development and works, including ducting and drainage works, fencing, seating, lighting, signage and planting, have been provided in the accompanying Part 8 application report, documentation and drawings. In addition, the Part 8 documentation includes an 'Ecological Impact Assessment' report (EclA), Environmental Impact Assessment Screening Report and 'Appropriate Assessment Screening' report, completed by Flynn Furney Environmental Consultants.

It is noted that the Ecological Impact Assessment report does not raise any significant concerns regarding the proposal. A Habitats Directive Appropriate Assessment Screening Determination by the Ecological Officer (dated 13/01/23) has screened out the requirement for Appropriate Assessment.

In regard to policy objectives, the value of walkways, recreational facilities, enhanced connectivity and active travel is recognised and supported by the National Planning Framework, the Regional Spatial & Economic Strategy for the Southern Region and the Cork County Development Plan, 2022. Relevant objectives set out in the Cork County Development Plan, 2022 include Objectives TO 10-8 'Walking/Cycling and Greenways' and TM 12-2-2 (h) 'Active Travel':

County Development Plan Objective TO 10-8: Walking/Cycling and Greenways

Promote the development of greenways, walking and cycling routes throughout the County as an activity for both international visitors and local tourists in a manner that is compatible with nature conservation and other environmental policies.

County Development Plan Objective TM 12-2: Active Travel

TM 12-2-2: Promote and facilitate an active travel culture in the County where active travel is a viable choice.

h) Seek to improve connectivity within the County and region for walking routes and commuter cycling routes and recreational amenity functions.

Having reviewed the supporting documentation, the policies and objectives of the Cork County Development Plan, 2022 and mitigation measures set out in the Ecological Impact Assessment report, there is no objection in principle to the proposed development. The proposal would enhance the recreational and amenity value of the existing walkway, which is an important recreational asset for Bandon Town, as well as providing a sustainable and active travel route linking the existing Clare O'Leary amenity walkway to Bandon Town.

As such, the proposed development would be compatible with the Cork County Development Plan, 2022 and would be in accordance with the proper planning and sustainable development of the area.


G.O'Mahony
Senior Planner
09/02/23

7.4 Appendix D: Environmental Impact Assessment Screening Report and Determination

Environmental Impact Assessment Screening Report:

Clare O'Leary Walk, Bandon, Co Cork



By: Dr Deborah McCormick, Flynn Furney Environmental Consultants
For: Cork County Council
Date: August 25th, 2022

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1. Introduction

Works are proposed on the eastern edge of Bandon Town, Co Cork; it is proposed that an amenity walk be developed as a continuation of an existing walkway adjacent to the N71 on the approach to the town.

Flynn, Furney Environmental Consultants Ltd has been engaged by Cork County Council for the provision of an Environmental Impact Assessment Screening report for the proposed works. The principal requirement for these services is to assist the relevant authorities in forming an opinion as to whether the proposed works should be subject to Environmental Impact Assessment (EIA) and if so whether an Environmental Impact Assessment Report (EIAR) should be prepared in respect of it.

Cork County Council is the lead agency in the development of this project.

The screening process includes an assessment of the details of the proposal with reference to the relevant EIA legislation including the Planning & Development Regulations 2001 (as amended by Planning and Development Regulations 2015), the EIA Directive 2011/92/EU (as amended by Directive 2014/52/EU) and relevant EU Guidance including *Interpretation of definitions of project categories of annex I and II of the EIA Directive*, EU, 2015 and *Environmental Impact Assessment of Projects Guidance on Screening*, EU, 2017. The report provides a conclusion of the process and finally a recommendation.

2. Description of the proposed project

The proposal is for the development of a walkway 900m in length to the east of Bandon Town which runs from an existing walkway adjacent to the N71 (The Clare O'Leary Walk) to the eastern boundary of Bandon Town where the existing footpath terminates.



Figure 1 Location of proposed works at Bandon, Co Cork

2.1 More Detail

Works consist of creating a 3m wide tarmacadamed finished walkway which is a continuation of an established 1.8 km walkway along a section of the Old West Cork Railway line.

Drainage and ducting works to be installed for the 900m length. Drainage is to the existing road drainage system on the adjoining N71.

Ducting is for provision of future lighting which will be directional low level LED lighting. Lighting is in accordance with Bat Conservation Guidelines Ireland and TII recommendations.

Stockproof fencing to private property will be provided where necessary.

There will be planting of whitethorn hedging along the boundary with private property, native trees, and a number of pollinator areas. Seating will be provided at 200m intervals along the route of the walkway.

Signage will be provided in the form of an Information Board and signage.

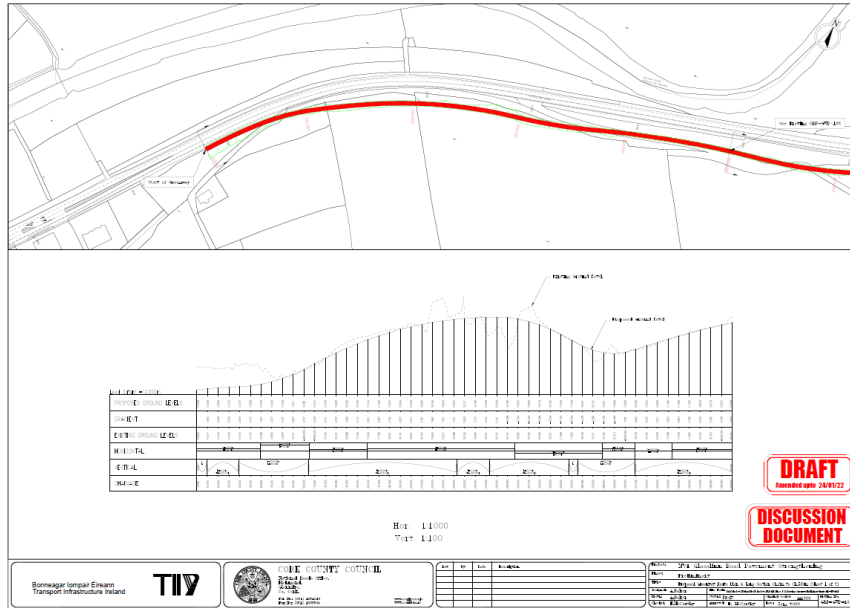


Figure 2 Plan of western part of the proposed walkway

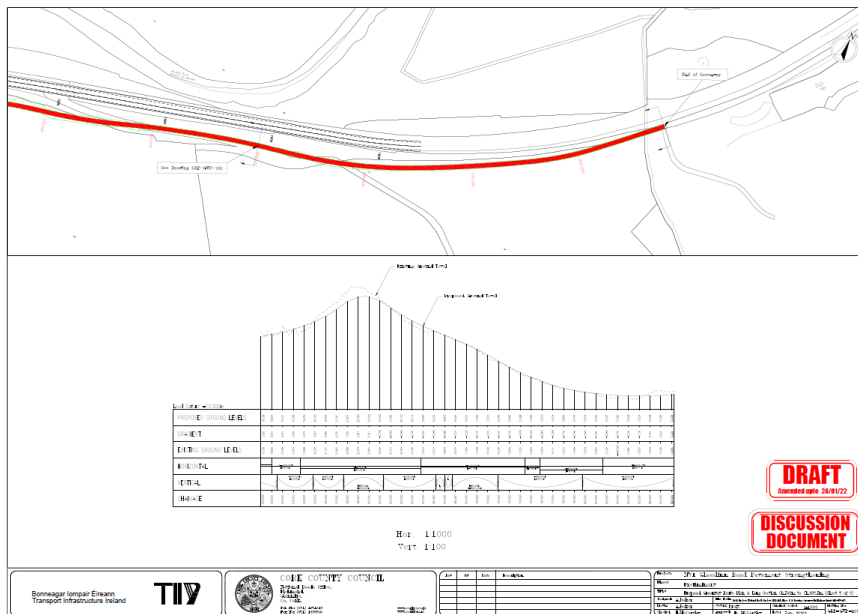


Figure 3 Plan of eastern part of proposed walkway

3. Relevant Legislation and Screening Methodology

Screening is the first stage in the EIA process, whereby a decision is made on whether or not EIA is required. This Screening Assessment was undertaken with regard to the following legislation and guidance:

- Roads Act 1993, the Roads Regulations 1994 and the EIA (Amendment) Regulations 1999;
- The Planning & Development Act 2000, the Planning & Development (Strategic infrastructure) Act 2006 and the Roads Act 2007;
- Guidance on EIA, Screening, European Commission, 2001
- EIA, Guidance for Consent Authorities regarding Sub-threshold Development, DoEHLG, 2003
- Environmental Impact Assessment of National Road Schemes – A Practical Guide (NRA, 2008).
- Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities, 2009.
- Guidelines on the Information to be Contained in an Environmental Impact Assessment Report (Draft) - EPA 2017
- European Directive EIA 2014/52/EU¹
- Transposition of 2014 EIA Directive (2014/52/EU) in the Land Use Planning and EPA Licencing Systems. Key Issues Consultation Paper by Department of Housing, Planning, Community and Local Government (DOHPCLG, 2017).

EIA requirements derive from the EIA Directive (Directive 2011/92/EU as amended by Directive 2014/52/EU). The amended Directive came into force on 16th May 2017 and regulations transposing it into national legislation have been enacted. No changes to the prescribed project types or thresholds are required under the amended Directive so the types and thresholds set out in the 2001-2010 Regulations remain in effect.

EIA legislation as it relates to the planning process has been largely brought together in Part X of the Planning and Development Acts 2000-2018 and Part 10 and Schedules 5, 6 and 7 of the Planning and Development Regulations 2001-2018. Part 1 of Schedule 5 to the Planning and Development Regulations lists project types included in Annex I of the Directive which automatically require EIA. Part 2 of the same Schedule, lists project types included in Annex II. Corresponding developments automatically require EIA if no threshold is given or if they exceed a given threshold. Developments which correspond to Part 2 project types by are below the given

¹ Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment (OJ L 124, 25.4.2015, p. 1).

threshold must be screening to determine whether they require EIA or not. This is done by consideration of criteria set out in Schedule 7.

EIA legislation sets down the types of projects that may require an EIAR. Annex I defines mandatory projects that require an EIAR and Annex II defines projects that are assessed on the basis of set mandatory thresholds for each of the project classes.

The EIA screening exercise initially assesses the development for Mandatory EIA using classifications defined in the appropriate legislation. Where no mandatory requirement is concluded, screening advances to sub-threshold development assessment, where the competent authority evaluates whether the project is likely to have a *significant* effect on the environment, with reference to its scale, nature, location, and context.

4. Screening and Assessment

4.1 Project Class

EIA legislation defines the types of projects that may require an EIAR. *Annex I* defines mandatory projects that require an EIAR and *Annex II* defines projects that are assessed on the basis of set mandatory thresholds for each of the project classes.

4.2 Infrastructure Projects

Schedule 5, Part 2 of the Planning and Development Regulations, 2001 includes this project type: *10. Infrastructure projects (b) (iv) Urban development which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere.*

(In this paragraph, "business district" means a district within a city or town in which the predominant land use is retail or commercial use.)

The EU Guidance on 'Interpretation of definitions of project categories of Annex I and II of the EIA Directive' (2015) interprets 'urban development' as taking 'account of, inter alia, the following:

- i. Projects with similar characteristics to car parks and shopping centres could be considered to fall under Annex II (10)(b). This could be the case, for example, of bus garages or train depots, which are not explicitly mentioned in the EIA Directive, but have similar characteristics to car parks.*
- ii. Construction projects such as housing developments, hospitals, universities, sports stadiums, cinemas, theatres, concert halls and other cultural centres could also be assumed to fall within this category. The underlying principle is that all these project categories are of an urban nature and that they may cause similar types of environmental impact.*
- iii. Projects to which the terms 'urban' and 'infrastructure' can relate, such as the construction of sewerage and water supply networks, could also be included in this category.*

The overall area of the proposed development is c.3,000m² (or 0.3 hectares). The site would not be considered to be located within the Central Business District of Bandon, or in a built-up area as the area of proposed works is on the outskirts with only scattered dwellings in the vicinity.

Therefore, the proposal would be considered to constitute a prescribed project type (urban infrastructure) but is considered significantly below the threshold of 20 hectares.

Conclusion: The proposed scheme does not fall within the mandatory requirement for an EIA as addressed in EU Directive 85/337/EEC (as amended by Directive 97/11/EC). These proposed works are thus assessed as a sub-threshold development.

4.3 Sub-Threshold Development - EIA Screening

A key determinant of the necessity for Environmental Impact Assessment of sub-threshold projects is whether or not such works are likely to have *significant* effects on the environment. The 1997 amending Directive (97/11/EC) introduced guidance for Member States in terms of deciding whether or not a development is likely to have a “significant effect on the environment.”

These criteria have been transposed fully into Irish legislation in the third schedule of the European Communities Environmental Impact Assessment (Amendment) Regulations 1999, (SI No.93 of 1999) and in Schedule 7 of the Planning & Development Regulations 2001 (SI No 600 of 2001) as amended by Planning & Development Regulations 2008. This has recently been updated by transposition of the 2014 EIA Directive (2014/52/EU) which amends Directive 2011/92/EU²). Guidance is provided by use of criteria set out in Annex III of the new Directive. These criteria as transposed in Irish legislation are grouped under three headings and are used to assist the screening process in determining whether a development is likely to have a significant effect on the environment. The three headings and criteria details as given in Annex III are given below:

Table 1 Annex III Screening criteria

Heading	Criteria
1. Characteristics of proposed development	<ul style="list-style-type: none">• the size and design of the entire proposed development• the cumulation with other existing and/or approved development• the use of natural resources• the production of waste• pollution and nuisances• the risk of major accidents (with regard to substances or technologies used)• the risks to human health
2. Location of proposed development	<p>The environmental sensitivity of geographical areas likely to be affected by proposed development, having regard in particular to:</p> <ul style="list-style-type: none">• the existing and approved land use• the relative abundance, availability, quality and regenerative capacity of natural resources in the area and its underground• the absorption capacity of the natural environment

² Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment (codification) (OJ L 26, 28.1.2012, p. 1).

	in particular, wetlands, coastal zones, mountain and forest areas, nature reserves and natural parks, areas protected under the Habitats Directive / Birds Directives, other protected areas, densely populated areas, protected landscapes of historical, cultural or archaeological significance.
3. Type and characteristics of potential impacts	<p>The potential significant effects of proposed development in relation to criteria set out under paragraphs 1 and 2 above, and having regard in particular to:</p> <ul style="list-style-type: none"> • the magnitude and spatial extent of the impact (geographical area and size of the affected population) • the nature of the impact • the transboundary nature of the impact • the intensity and complexity of the impact • the probability of the impact • the expected onset, duration, frequency and reversibility of impact • the cumulation of the impact with the impact of other existing and/or approved projects • the possibility of effectively reducing the impact

The project at Bandon is considered under the above criteria (as set out in Schedule 7) in the tables below.

Table 2 Screening assessment of proposed works at Milltown

CRITERIA (Schedule 7)		RELEVANCE	RATIONALE
1. Characteristics of Proposed Development:	The size of the proposed development	No	The site to be developed is small (c. 0.3 ha). The greater majority of the scheme footprint will be on lands already developed.
	The cumulation with the proposed development	No	The proposed works lies adjacent to a busy road (N71) on the outskirts of town as a link between two existing pedestrian walkways: Clare O'Leary Walk and a pedestrian footpath on the town edge. It additionally utilises the existing infrastructure of the Old West Cork Railway Line. No other plans or projects are known at the time of writing that could contribute to a cumulative impact.
	The use of natural resources	No	No significant natural resources will be required to complete the project.

	The production of waste	No	Waste produced during the construction process is anticipated to be insufficient to cause significant effects. Waste amounts will be very limited. Any materials will be brought to a construction and demolition recycling centre for reuse.
	Pollution and nuisance	No	Impacts such as noise and dust will be kept within acceptable standards and as such are anticipated to be negligible. No works are projected that could impact the nearby aquatic receptor.
	The risk of accidents having regard to substances or technologies used.	No	Any potential impacts are anticipated as being negligible given the nature of the proposed development.

CRITERIA (Schedule 7)		RELEVANCE	RATIONALE
2. Location of the Proposed Development: The environmental sensitivity of geographical areas likely to be affected by proposed development, having regard in particular to:	The existing land-use	No	Not a sensitive area as it uses an existing transport corridor (N71) and abandoned transport infrastructure in the form of the old railway line. There may be some minor impacts on the adjacent fields, which are highly modified grassland and arable cropland.
	The relative abundance, availability, quality and regenerative capacity of natural resources in the area and its underground	No	Negligible impacts are anticipated given existing development at site. The landscape is either built upon or heavily modified agricultural land.
	The absorption capacity of the natural environment, paying particular attention to the following areas: Wetlands, riparian areas, river mouths;	No	None of these habitat types occur within area of proposed development.

	Coastal zones	No	None of these habitat types occur within area of proposed development.
	Mountain and forest areas	No	None of these habitat types occur within area of proposed development.
	Nature Reserves and National Parks	No	None of these occur within area of proposed development.
	Areas classified or protected under legislation, including special protection areas designated pursuant to Directives 79/409/EEC and 92/43/EEC	No	Area proposed for development is not under such classification or protection. Nearest designated site is Kilrooskey Lough Cluster Special Area of Conservation (Site Code 001786). This is c. 0.35Km to the north of the proposed development. There is no potential for the development to impact on the SAC due to the nature and scale of the development. There is also a lack of any direct connection between the site and the SAC. An Appropriate Assessment Screening exercise was carried out (July 2022) and concluded that there will no likely significant effects on the above site or any Natura 2000 site.
	Areas in which the environmental quality standards laid down in legislation of the EU have already been exceeded.	No	N/A
	Densely populated areas	No	N/A
	Landscapes of historical, cultural archaeological significance	No	No such landscapes occur within this area. Additionally, the proposed development consists of surface works which will have no negative visual impact on the surrounding landscape once completed; existing and planted vegetation will screen any potential impact from outside the walkway.

CRITERIA (Schedule 7)		RELEVANCE	RATIONALE
3. Type and characteristics of potential impacts:	the magnitude and spatial extent of the impact (geographical area and size of the affected population)	No	Any potential impacts are considered to be insignificant, given the scale of the proposed development.
	The nature of the impact	No	Short-term visual impacts may be anticipated during construction phase. Some minor temporary disturbance is also probable during construction phase, but is not considered to be significant.
	the transboundary nature of the impact	No	N/A
	the intensity and complexity of the impact	No	Any impacts are considered insignificant given size and scale of development.
	the probability of the impact	No	No significant negative impacts are predicted.
	the expected onset, duration, frequency and reversibility of impact	No	No significant negative impacts are predicted.
	the cumulation of the impact with the impact of other existing and/or approved projects	No	No significant negative impacts are predicted.
	the possibility of effectively reducing the impact	No	No significant negative impacts are predicted.

5. CONCLUSION AND RECOMMENDATIONS

It is concluded that the **characteristics of the proposed development** would not be considered likely to have significant effects on the environment. This is based primarily on the limited size and scale of the proposed works and low potential to have significant impacts. No other projects emerged from the screening process with which the proposed works may have significant cumulative impacts.

It is concluded that there will be no significant direct or indirect impacts by virtue of the **location of the proposed development** on the receiving environment. This is based primarily upon the absence of any impacts predicted upon any protected sites such as Nature Reserves, parks or Natura 2000 Sites.

It is concluded that the **type and characteristics of the potential impacts** would not be considered significant. This is based primarily upon the very limited size and scale of the proposed works. The lack of sensitive receptors is also a significant factor in this assessment. Impacts on landscape, soils and geology are not considered significant, given the nature and scale of works.

Given the size and scale of the proposed development and the absence of other projects or plans that could interact with the present proposal known at time of writing, no significant **cumulative impacts** are considered likely.

The assessment has been carried out on the proposed works as a **sub threshold development**. The overall conclusion of this screening exercise is that there should be no specific requirement for a full Environmental Impact Assessment of the proposed development.

REFERENCES

DoEHLG. (2003) *'Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-threshold Development'*. Department of Environment, Heritage and Local Government, Dublin.

DOECLG (2015) *Planning and Development Regulations 2001-2013* (Unofficial Consolidation). Unpublished Report by Department of Environment, Community and Local Government.

NRA (2008) *Environmental Impact Assessment of National Roads Schemes – a practical guide*. National Roads Authority (Now Transport Infrastructure Ireland), Dublin.

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Part 8	Environmental Impact Assessment
Address	Townlands of Ballylängley and Curranure, Bandon.
Proposal	To extend an existing public walkway, the Clare O'Leary Walk, adjacent to the N71.

Cork County Council is proposing to carry out works to extend an existing walkway in the townlands of Ballylängley and Curranure, Bandon. The existing amenity walkway, known as the Clare O'Leary Walk, currently extends to the east of Bandon Town, adjacent to the N71. The proposed works include extending the existing amenity walkway by approx. 900m to the footpath on the eastern boundary of Bandon Town on the N71, creating a 3m wide active travel route from Bandon Town Centre.

A detailed description of the proposed development and works, including ducting and drainage works, fencing, seating, lighting, signage and planting, have been provided in the accompanying Part 8 application report in addition to documentation and drawings provided with the Part 8 proposal including an 'Ecological Impact Assessment' report (EclA), 'Environmental Impact Assessment Screening Report' and 'Appropriate Assessment Screening' report, completed by Flynn Furney Environmental Consultants, and the Habitats Directive Appropriate Assessment Screening Determination completed on 13/01/23 by the Ecological Officer.

EIA

The proposed development would not fall under any of the relevant classes as set out in Part 1 of Schedule 5 of the Planning and Development Regulations, 2001 as amended.

The proposed development was further reviewed against the classes of development specified in Part 2 of Schedule 5 of the Planning and Development Regulations, 2001 as amended and the proposed development would not fall under any of the relevant classes.

Having reviewed and considered the documentation and drawings provided with the Part 8 proposal and having regard to -

- a) the nature and scale of the proposed development which relates to the extension of an existing amenity walkway,
- b) the location of the proposed development outside of the development boundary of Bandon Town and adjacent to the N71,
- c) the existing pattern and extent of development and services in the vicinity of the proposal including the existing amenity walkway,
- d) the assessment and conclusions of the Habitats Directive Appropriate Assessment Screening Determination that the proposed works, individually or in combination with other plans/projects, are not likely to have a significant effect on a European site (Natura 2000 site),
- e) the mitigation measures proposed in the Ecological Impact Assessment Report,

it is considered that there is no real likelihood of significant effects on the environment arising from the proposed development and it is determined that an Environmental Impact Assessment is not required.


G. O'Mahony
Senior Planner
09/02/23

7.5 Appendix E: Report for the Screening of Appropriate Assessment and Determination



Appropriate Assessment Screening

Clare O'Leary Walk

By: Dr Deborah McCormick, Flynn Furney Environmental Consultants

For: Cork County Council

Date of Issue: 25th August 2022

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1. Introduction

This report comprises information in support of screening for Appropriate Assessment (AA) in line with the requirements of Article 6[3] of the EU Habitats Directive (EC 92/43/EEC) on the Conservation of Natural Habitats and of Wild Fauna and Flora; the Planning and Development (Amendment) Act 2010; and the European Union (Birds and Natural Habitats) Regulations 2011 as amended, for the development of a walkway adjacent to the N71 on the eastern approach to Bandon town, Co Cork.

This screening exercise aims to determine whether the proposed works have the potential to significantly impact upon the conservation objectives and overall integrity of any Natura 2000 sites. This assessment is based upon a desk study and field work carried out by suitably qualified ecologists. Also included is a general assessment of the ecological status of the site and the potential impacts of the proposed works on the ecology of the surrounding area, including Designated Sites.

The following definitions are used for the terms “impact” and “effect”:

Impact – Actions resulting in changes to an ecological feature, e.g. the construction activities of a development removing a hedgerow.

Effect – Outcome to an ecological feature from an impact, e.g. the effects on an animal population from loss of a hedgerow.

The Competent Authority is obliged to examine the likely significant effects individually or in combination, of the proposed development on European Designated Sites in light of their specific Qualifying Interests (QIs) and Conservation Objectives (COs). If AA screening determines that there is likely to be significant effects on one or more of these sites, or the impacts are uncertain, then full AA must be carried out for the proposed development, including the compilation of a Natura Impact Statement to inform the decision making.

For the purposes of this assessment, a “significant effect” is:

“...an effect that either supports or undermines biodiversity conservation objectives for ‘important ecological features’ ... or for biodiversity in general. Conservation objectives may be specific (e.g. for a designated site) or broad (e.g. national/local nature conservation policy) or more wide-ranging

(enhancement of biodiversity).

Effects can be considered significant at a wide range of scales from international to local. A significant effect is an effect that is sufficiently important to require assessment and reporting so that the decision maker is adequately informed of the environmental consequences of permitting a project.

In broad terms, significant effects encompass impacts on structure and function of defined sites, habitats or ecosystems and the conservation status of habitats and species (including extent, abundance and distribution).”

- CIEEM Guidelines for Ecological Impact Assessment in the UK and Ireland (2018)

Sections 4 and 5 of the report comprises the AA Screening that specifically focuses on the potential for impacts on Natura 2000 sites deemed to be at risk from the proposed development.

2. Background to Screening for Appropriate Assessment

2.1. European Designated Sites

Sites designated for the conservation of nature in Ireland include:

- Special Areas of Conservation (SACs);
- Special Protection Areas (SPAs), and;
- Natural Heritage Areas (NHAs)

SPAs and SACs form the Natura 2000 network of sites. It is these sites that are of relevance to the screening process for this Appropriate Assessment Screening.

SPAs and SACs are prime wildlife conservation areas in the country, considered to be important on a European as well as Irish level. SPAs and SACs are designated under EU Habitats Directive, transposed into Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), as amended.

Natural Heritage Area (NHA) is the basic designation for wildlife in Ireland. These are areas considered important for their habitats or species of plants and animals whose habitat requires protection and are protected by the Wildlife (Amendment) Act of 2000.

All European Designated Sites (henceforth simply referred to as “Designated Sites”) that are connected to the proposed development were considered during the desktop study in order to assess the potential for significant effects upon their QIs and COs. This stage of the process is used to determine whether any of

the Designated Sites can be regarded as not being relevant to the process of Appropriate Assessment of the project, having no potential to be significantly affected.

2.2. Legislative Context

The methodology for this screening statement is clearly set out in a document prepared for the Environment DG of the European Commission entitled ‘Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6 paragraphs 3 and 4 of the Habitats Directive 92/43/EEC’ (Oxford Brookes University, 2001). This report and contributory fieldwork were carried out in accordance with guidelines given by the Department of Environment, Heritage and Local Government (2009, amended February 2010).

The assessment process is given in Articles 6[3] and 6[4] of the Habitats Directive and is commonly referred to as “Appropriate Assessment” or AA.

Article 6 of the Habitats Directive sets out provisions which govern the conservation and management of Natura 2000 sites. Article 6[3] and 6[4] of the Habitats Directive set out the decision-making tests for plans and projects likely to affect Natura 2000 sites (Annex 1.1). Article 6[3] establishes the requirement for Appropriate Assessment:

“Any plan or project not directly connected with or necessary to the management of the [Natura 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans and projects, shall be subjected to appropriate assessment of its implications for the site in view of the site’s conservation objectives. In light of the conclusions of the assessment of the implication 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] continues:

“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 social or economic nature, the Member State 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.

It is the responsibility of the proponent of the plan or project to provide the relevant information (ecological surveys, research, analysis etc.) for submission to the 'competent national authority'. If satisfied that the information is complete and objective, the competent authority will use this information to screen the project, i.e. to determine if an AA is required and to carry out the AA, if one is deemed necessary. The competent authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned."

The appropriate assessment process has four stages. Each stage determines whether a further stage in the process is required. If, for example, the conclusions at the end of Stage One are that there will be no significant impacts on the Natura 2000 site, there is no requirement to proceed further. The four stages are:

1. Screening to determine if an appropriate assessment is required;
2. Appropriate assessment;
3. Consideration of alternative solutions, and;
4. Imperative reasons of overriding public interest/derogation.

Stage 1: Screening for AA

This report provides a stage one Screening for Appropriate Assessment. It aims to establish whether the plan or project is directly connected with or necessary to the management of Designated Sites; or in view of best scientific knowledge, if the plan or project, individually or in combination with other plans or projects, is likely to have a significant effect on a Designated Site. This is done by examining the proposed plan or project and the COs of any Designated Sites that might potentially be affected.

The study is based on a preliminary impact assessment using both publicly available data and data collected during site surveys. This is followed by a determination of whether there is a risk that the effects identified could significantly impact any Natura 2000 sites, and if so an Appropriate Assessment (AA) is required. The need to apply the precautionary principle in making any key decisions in relation to the tests of AA has been confirmed by European Court of Justice case law. Therefore, where significant effects are likely, possible or uncertain at screening stage, a stage two AA will be required.

3. Methodology

3.1. Desk Study

A desktop study was carried out as part of this screening process to gain an understanding of the surrounding human and natural environments. This included a review of available data from a range of sources on the site and its immediate environs.

3.2. Data used to carry out the assessment

The following sources of data were employed:

- Environmental Protection Agency (EPA) Appropriate Assessment Tool;
- EPA Maps (to identify watercourses, hydrology and Natura 2000 site boundaries);
- NPWS protected species database and online mapping;
- The Geological Survey of Ireland hydrological and lidar data and map viewer;
- The National Biodiversity Data Centre archives;
- Inland Fisheries Ireland, and;
- An Bord Pleanála’s online database

3.3. SPR Model

This assessment was carried out using the source-pathway-receptor (SPR) approach, a standard tool in environmental assessment. The SPR concept in ecological impact assessment relates to the idea that for the risk of an impact to occur, a source is needed (e.g., a development site); an environmental receptor is present (a lake); and finally, there must a pathway between the source and the receptor (a watercourse linking the development site to the lake). Even though there might be a risk of an impact occurring, it does not necessarily mean that it will occur, and in the event that it does occur, it may not have significant effects on the receiving environment. Identification of a risk means that there is a possibility of ecological or environmental damage occurring, with the level and significance of the impact depending upon the nature and exposure to the risk and the characteristics of the receptor.

In this instance, the most relevant receptors are any relevant Natura 2000 sites with connectivity of the proposed works. These were considered during the desktop study stage of this screening assessment in order to assess the potential for significant effects upon their QIs and COs.

3.4. Field Survey

The field survey was carried out on 18th August 2022. Baseline ecological conditions were assessed. Habitats were classified according to A Guide to Habitats in Ireland (Fossitt, 2000). Where applicable, the habitat types and species usage were recorded (Smith et al. 2011; Scannell and Synnott, 1987; Wyse Jackson et al. 2016). Habitats were classified and dominant plant species noted according to the guidelines

given by the JNCC (2010) with reference to best practice guidance for habitat survey and mapping (Smith et al., 2011) and Census Catalogue of the Flora of Ireland (Scannell & Synnott, 1987).

4. Screening of Designated Sites

4.1. Site Location

The proposed development site is located to the east of Bandon town, from an existing walkway which runs adjacent to the N71 (the Clare O'Leary Walk) to the eastern boundary of the town where the existing footpath terminates (Fig. 1).



Figure 1 Overview of the proposed works area

4.2. Receiving Environment

A description of the habitats of significant ecological value that were observed within the immediate surroundings of the works area are listed below, with descriptions adapted from "A Guide to Habitats in Ireland" by Julie A. Fossitt, 2000.

A description of the habitats of significant ecological value that were observed within the immediate surroundings of the works area are listed below and depicted in Figure 2 below. A full list of plant species recorded during the survey is found below in Table 1.

The route starts at the end of the Clare O'Leary walk south of the N71. There is a stream at this location that is culverted under the existing path and adjacent road. This stream is known as the Kilbeg South Stream (**FW1**). It is a tributary to the Bandon River situated to the north.

The route moves East and crosses into the arable field (**BC1**) to the south of the road. This field is adjacent to the road and hedgerow (**WL1**) and begins to form a steep embankment with trees and scrub (**WS2**) as the elevation of the field increases. The route moves west as the field changes into improved grassland (**GA1**) which is flanked by an agricultural avenue which is treelined.

The route passes along this avenue and associated stone wall (**BL1**) and crosses over through a woodland (**WN2**) area into an improved agricultural grassland field (**GA1**). The wood area is situated between the field and road and contains some large mature Oaks. The route then moves into a scrub (**WS1**) area that has been subject to cutting. It moves from this scrub down to the adjacent road where it connects to a designated footpath area currently under construction. This last section has been recently cleared.

4.2.1 Surface water

The Kilbeg South stream crosses the works area at the eastern end of the proposed route, before it flows north to the Bandon River. It possesses relatively low fisheries potential with eel and stickleback likely present.

4.2.1. Groundwater

Groundwater vulnerability is a term used to represent the natural ground characteristics that determine the ease with which infiltrating water and potential contaminants may reach groundwater in a vertical or sub-vertical direction. Subsoil permeability indicates how readily water from the surface can permeate through to the groundwater below.

The proposed works area lies predominately within an area of High groundwater vulnerability, with some areas in the southern extent of the proposed works with rock found very close to the surface, and Moderate subsoil permeability (Figs. 3 and 4).

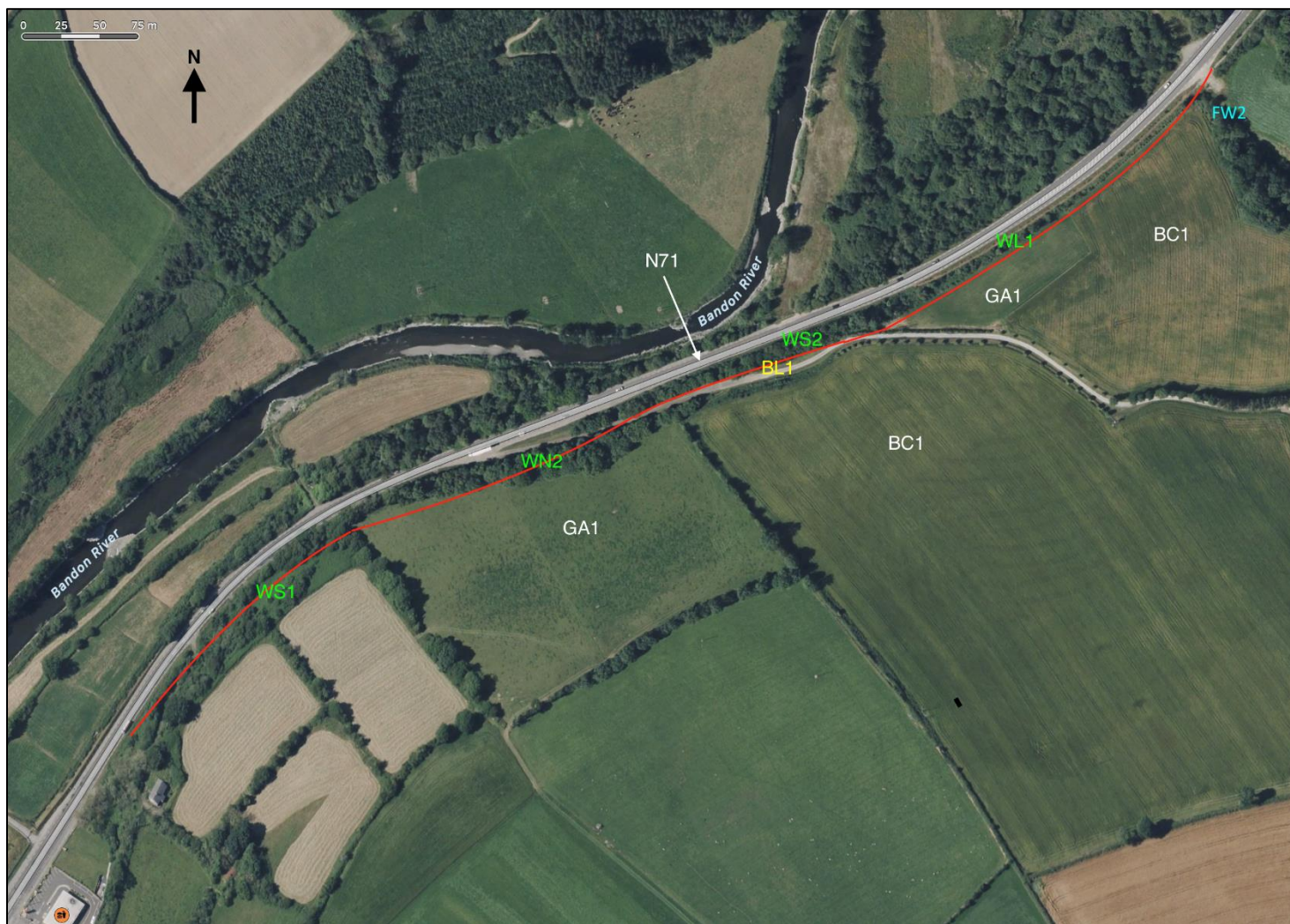


Figure 2 Habitat map of the proposed works area

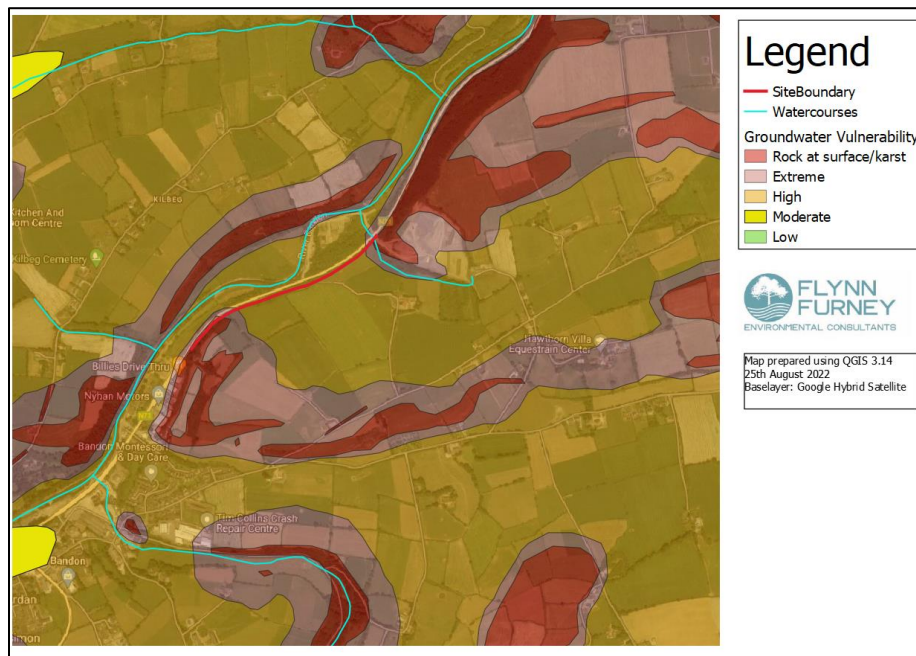


Figure 3 Groundwater vulnerability in the proposed works area

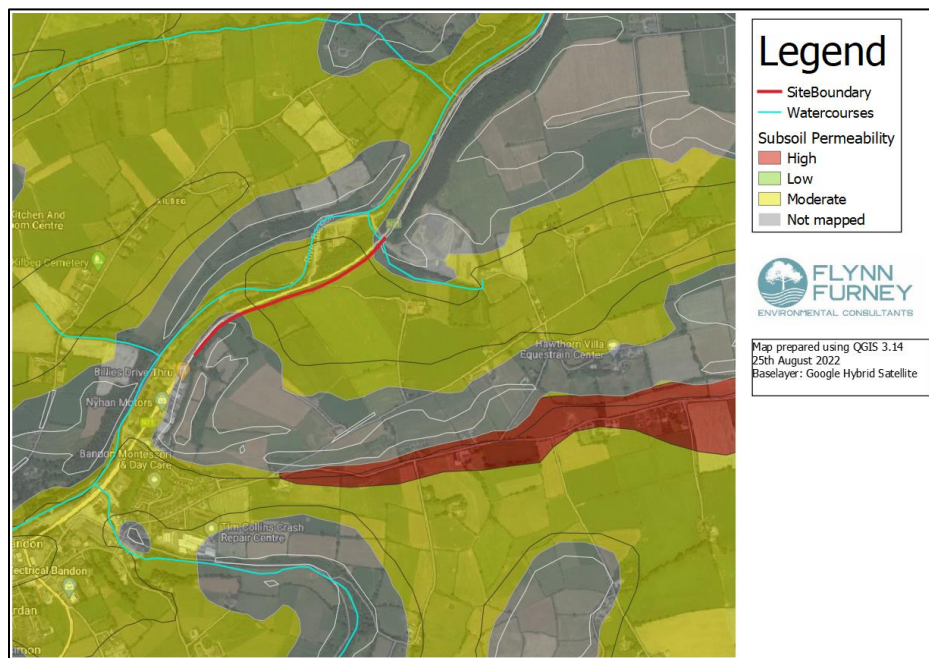


Figure 4 Subsoil permeability in the proposed works area

Table 1 Plant species recorded during surveys

Plant Species	Woodland figwort <i>Scrophularia nodosa</i>
Bindweed <i>Convolvulus</i> sp.	Woodland germander <i>Teucrium scorodonia</i>
Birdsfoot trefoil <i>Lotus corniculatus</i>	Yarrow <i>Achillea millefolium</i>
Bittersweet <i>Solanum dulcamara</i>	Trees
Bracken <i>Pteridium</i> sp.	Hawthorn <i>Crataegus monogyna</i>
Bramble <i>Rubus fruticosus</i> agg.	Ash <i>Fraxinus excelsior</i>
Broad leaved plantain <i>Plantago major</i>	Oak <i>Quercus</i> sp.
Bull thistle <i>Cirsium vulgare</i>	Sycamore <i>Acer pseudoplatanus</i>
Bush vetch <i>Vicia sepium</i>	Blackthorn <i>Prunus spinosa</i>
Cleavers <i>Galium aparine</i>	Elder <i>Sambucus nigra</i>
Cocksfoot <i>Dactylis</i> sp.	Grey willow <i>Salix cinerea</i>
Common dog violet <i>Viola riviniana</i>	Hazel <i>Corylus avellana</i>
Cow parsnip <i>Heracleum maximum</i>	Field elm <i>Ulmus minor</i>
Creeping buttercup <i>Ranunculus repens</i>	Holly <i>Ilex aquifolium</i>
Creeping thistle <i>Cirsium arvense</i>	Cranberry bush <i>Viburnum</i> sp.
Dandelion <i>Taraxacum</i> sp.	Beech <i>Fagus sylvatica</i>
Dock <i>Rumex</i> sp.	Privet <i>Ligustrum</i> sp.
Foxglove <i>Digitalis</i> sp.	Cypress <i>Cupressus x leylandii</i>
Gorse <i>Ulex</i> sp.	IAPS
Harts tongue fern <i>Asplenium scolopendrium</i>	Traveller's-joy <i>Clematis vitalba</i>
Herb Robert <i>Geranium robertianum</i>	Winter heliotrope <i>Petasites fragrans</i>
Honeysuckle <i>Lonicera</i> sp.	
Ivy <i>Hedera</i> sp.	
Kings Fern <i>Dryopteris affinis</i>	
Marsh woundwort <i>Stachys palustris</i>	
Narrow leaved plantain <i>Plantago lanceolata</i>	
Nettle <i>Urtica dioica</i>	
Oat Grass <i>Arrhenatherum elatius</i>	
Ragwort <i>Jacobaea vulgaris</i>	
Red clover <i>Trifolium arvense</i>	
Redshank <i>Persicaria maculosa</i>	
Scentless mayweed <i>Tripleurospermum inodorum</i>	
White clover <i>Trifolium repens</i>	
Wild Angelica <i>Angelica sylvestris</i>	
Wild carrot <i>Daucus carota</i>	
Willowherb <i>Epilobium</i> sp.	

4.2.3. Breeding Birds

All species of wild bird that occur naturally in Ireland are fully protected at all times by the Wildlife Act and relevant amending legislation. Similarly, all birds naturally occurring in the wild state are afforded a measure of protection by the EU Birds Directive, but derogations may reduce protection for specific reasons. As such, any vegetation clearance must be carried out outside of the bird nesting season (March 1st - August 31st).

A dedicated bird survey was not carried out for this project; the proposed works do not involve removal of trees/other vegetation that might support nesting species. Were this to be the case, a pre-construction nesting survey may need to be carried out, depending on the timing of works.

4.2.4. Amphibians

An amphibian survey was not carried out as part of this project, due to the lack of suitable habitat for spawning common frog *Rana temporaria* or smooth newt *Lissotriton vulgaris* within the proposed works area.

4.2.5. Mammals

Badger *Meles meles* faeces were noted on the adjacent footpath at the beginning of the proposed route at Clare O'Leary Walk. Rabbit burrows were present in the woodland area; no other signs of mammal activity were noted.

A number of mature trees along the route have potential for bat roosting; were mature trees to be disturbed as part of the proposed works, a pre-construction bat survey may be required.

4.2.6. Invasive Species

The Wildlife Acts, 1976 and 2000, contain a number of provisions relating to invasive non-native species (INNS), covering several sections and subsections of the Acts. It is prohibited, without licence, to plant or otherwise cause to grow in a wild state, in any place in the State, any species of flora, or the flowers, roots, seeds or spores of invasive flora listed on the Third Schedule. Articles 49 and 50 of the aforementioned Acts set out the legal implications associated with alien invasive species and Schedule 3 (the Third Schedule) of the regulations lists non-native species subject to the restrictions of Articles 49 and 50, which make it an offence to plant, disperse, allow dispersal or cause the spread of invasive species.

No Schedule 3 species were recorded during this survey. Two other non-native species which have been characterised as having invasive properties were recorded. Traveller's-joy *Clematis vitalba* is widespread in the locality and is found along the length of the route throughout adjoining vegetation. Winter heliotrope *Petasites fragrans* is also found along the road verges. The latter is spread through disturbance and rhizome fragmentation – if the proposed works involves disturbing this species, then a management plan to prevent its further spread should be considered.

4.3. Proposed Works

The proposal is for the development of a walkway 900m in length to the east of Bandon Town which runs from an existing walkway adjacent to the N71 (The Clare O'Leary Walk) to the eastern boundary of Bandon Town where the existing footpath terminates.

Works consist of creating a 3m wide tarmacadamed finished walkway which is a continuation of an established 1.8 km walkway along a section of the Old West Cork Railway line.

Drainage and ducting works to be installed for the 900m length. Drainage is to the existing road drainage system on the adjoining N71.

Ducting is for provision of future lighting which will be directional low level LED lighting. Lighting is in accordance with Bat Conservation Guidelines Ireland and TII recommendations.

Stockproof fencing to private property will be provided where necessary.

There will be planting of whitethorn hedging along the boundary with private property, native trees and a number of pollinator areas. Seating will be provided at 200m intervals along the route of the walkway. Signage will be provided in the form of an Information Board and signage.

4.4. Works, Site Characteristics and Risks to the Environment

The principal risks from the proposed works to the receiving environment are the mobilisation of fine sediment and the resulting contamination of surface and groundwaters with fines/nutrient and disturbance of the surrounding area resulting in negative impacts to one or more species, the latter a consideration both during the construction and operational phases of the project.

4.5. Nearby Designated Sites

All designated sites with the potential for connectivity with the proposed development were considered as part of this screening process (Fig. 5). Only one site with connectivity to the works area was found, *Bandon River SAC*; all others are a substantial distance from the works area with no reasonable pathway for any impact (Table 2).

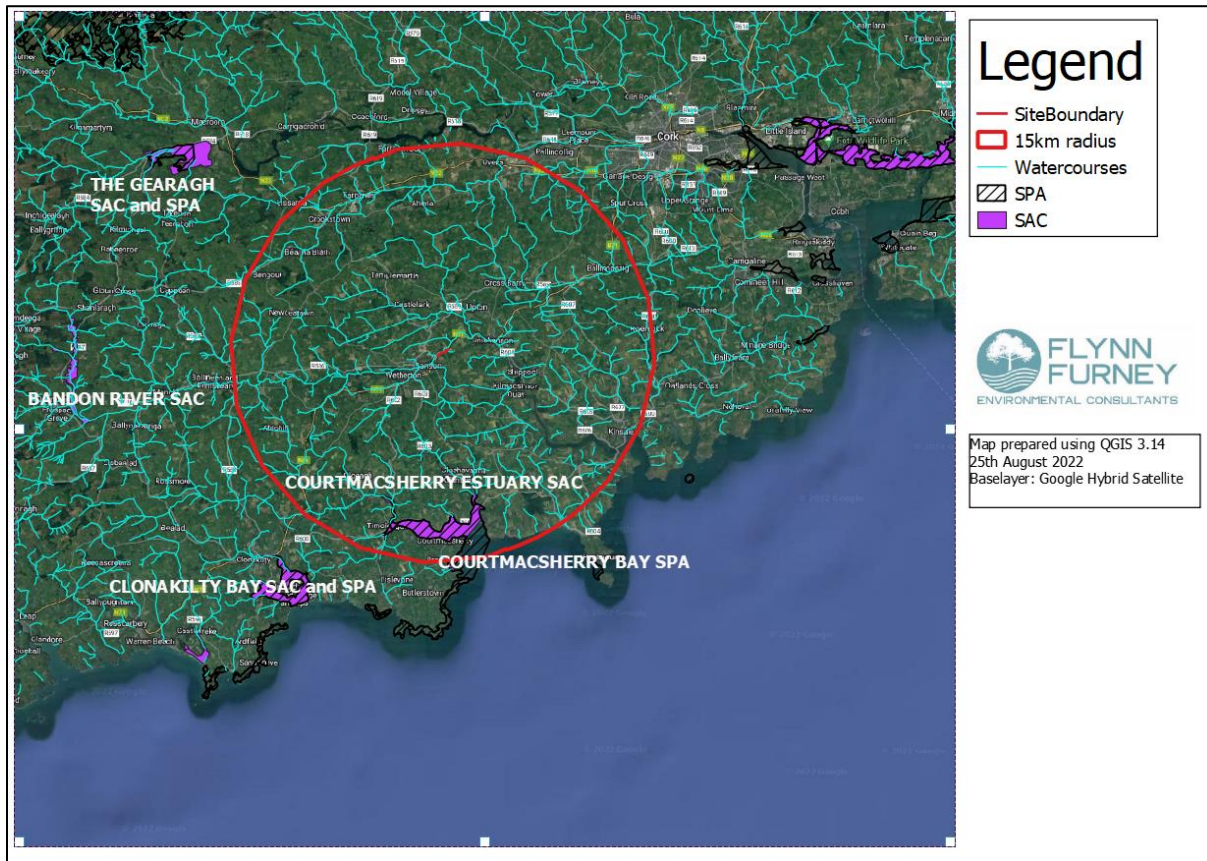


Figure 5 Designated sites in the vicinity of works area

Table 2 Designated sites with connectivity to the works area

Site Name and Code	Qualifying Interests (* denotes a priority habitat)	Distance (km)	Connectivity to Project
Bandon River SAC 002171	<ul style="list-style-type: none"> 1029 Freshwater Pearl Mussel <i>Margaritifera margaritifera</i> 1096 Brook Lamprey <i>Lampetra planeri</i> 3260 Water courses of plain to montane levels with the <i>Ranunculus fluitantis</i> and Callitricho-Batrachion vegetation 91E0 Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) 	28 (via the Bandon River)	European site is connected hydrologically to the proposed works area via the Kilbeg Stream and Bandon River; however, it lies upstream of the works area. With no instream works connected with the project, no reasonable pathway for impact exists

5. ASSESSMENT CRITERIA

5.1. Relation to management of nearby Designated Site(s)

The proposed project is not necessary to or connected with the management of any designated sites.

5.2. Direct Or Indirect Impacts

The proposed project lies entirely outside the boundary of any European site. The closest site, *Courtmacsherry Estuary SAC 001230*, lies ca10km away with no connectivity. The works area is hydrologically connected with *Bandon River SAC 002171*, but the European site lies 28km upstream of the proposed works. Given the nature of the works, scale and distance from the sites and the lack of reasonable pathways for impact, the potential for direct or indirect impact on any European site is negligible.

5.2.1. Surface and groundwater pollution

The proposed works are connected hydrologically to *Bandon River SAC 002171*, but the site lies 28km upstream of the works area. Downstream, the Bandon River is not connected to any European site. No potential for impact on any European site exists.

5.2.3. Construction/installation of infrastructure and potential QI habitat loss

No infrastructure will be constructed or installed within a European site or affecting any supporting ecological features as part of this project

5.2.4. Invasive Species

No schedule 3 species were found within the boundary of the proposed works area or its environs.

5.3. Cumulative And In-Combination Impacts

A search of Cork County Council's planning application database on 25th August 2022 showed no developments other than light construction projects within the existing urban footprint in the vicinity of the works area. None of these have the potential, in-combination with the proposed works, to cause any impact to any Natura 2000 site, particularly in light of the lack of any reasonable connectivity of the receiving environment to any European site.

5.4. Likely Changes to the Designated Site(s)

No changes are predicted to any designated site, positive or negative.

6. Screening Conclusions

This report presents the information for the relevant authority, Cork County Council, to carry out a screening for AA. A recommendation that a stage II is/is not required is made below, based on the findings of this assessment, which are summarised in Table 4. It is for the relevant authority to reach one of the following conclusions:

- (i) A stage II AA of the proposed development is required if it *cannot* be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will not have a significant effect on any European Designated Sites.
- (ii) A stage II AA of the proposed development is not required if it *can* be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will not have a significant effect on any European Designated Sites.

Table 4: Assessment of likely effects on any Designated Sites

Assessment of Likely Effects	
Size and scale	The proposed works are less than 1km long, extremely small in relation to the nearest European sites.
Land-take	The works take place outside any European sites; no land is being taken for this project.
Distance from the Natura 2000 site or key features of the site;	The works area lies ca10km from the nearest European site.
Resource requirements (water abstraction etc.);	No resources are required from any European site for this project.
Emissions (disposal to land, water or air);	There is a slight potential for emissions to water from the proposed works; these will be constrained within the existing drainage network of the adjoining road and are unlikely to affect the nearest aquatic receptor. Given the distance from that receptor to the closest Natura 2000 sites, and the lack of any downstream connectivity, no impacts are predicted. No other emissions to land or water beyond those of a small construction project are expected, and none which will impact on any European site.

Excavation requirements;	There are no excavations within any European site.
Transportation requirements;	There are no requirements for any transportation of materials through any European site.
Duration of construction, operation, etc.;	As yet unknown, but likely to be less than a year.
Timing of works	As yet unknown, but given the distance from the works area to any European site, the timing will not influence any effect or lack thereof on any European site.
Cumulative or In-combination Impacts with other Projects and Plans	No projects are known that could in-combination with the proposed works cause any impact to any European site.

Based on the available information gathered during field and desk surveys, it is the professional opinion of the author that the likelihood of significant impacts arising from the proposed development on *Bandon River SAC 002171*, or any other European site, can be ruled out on the basis of the following:

- Nature and scale of the proposed works
- The distance from the proposed works area to the designated sites.
- The lack of downstream hydrological connectivity to the designated sites.

Therefore, it is the conclusion of this report that the proposed development will not have a significant effect on any Natura 2000 sites and progression to Stage II Appropriate Assessment is not required.

References

Bruce-White, C., & Shardlow, M., 2011. Impact of Artificial Light on Invertebrates. Buglife – The Invertebrate Conservation Trust. March 2011. ISBN 978-1-904878-99-5:
https://cdn.buglife.org.uk/2019/08/A-Review-of-the-Impact-of-Artificial-Light-on-Invertebrates-docx_0.pdf

CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management, Winchester. <https://cieem.net/wp-content/uploads/2019/02/Combined-EcIA-guidelines-2018-compressed.pdf>

European Commission DE (2021). Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC.

Environmental Protection Agency, Appropriate Assessment Tool:
<https://gis.epa.ie/EPAMaps/AAGeoTool>

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

Geological Survey of Ireland (accessed 2022) Maps and Data: <https://www.gsi.ie/en-ie/data-and-maps/Pages/default.aspx>

JNCC (2010) Handbook for Phase 1 Habitat Survey. Joint Nature Conservation Committee, Peterborough, UK.

National Biodiversity Data Centre (accessed 2022) Biodiversity Maps:
<https://maps.biodiversityireland.ie/>

National Planning Application Map Viewer: <https://myplan.ie/national-planning-application-map-viewer/>

National Roads Authority (2009) Ecological Surveying Techniques for Protected flora and fauna during the Planning of National Road Schemes. NRA (now Transport Infrastructure Ireland), Dublin.

NPWS (2019) Conservation Objectives: Bandon River SAC 002171. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.

Scannell, M J P and Synott, D M, 1987, Census Catalogue of the Flora of Ireland. Stationary Office, Dublin.

Smith, G.F., O'Donoghue, P., O'Hara, K. and Delaney, E., 2011. Best practice guidance for habitat survey and mapping. The Heritage Council: Ireland.

Wyse Jackson, M., FitzPatrick, Ú., Cole, E., Jebb, M., McFerran, D., Sheehy Skeffington, M. & Wright, M. (2016) Ireland Red List No. 10: Vascular Plants. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, Dublin, Ireland.

**Habitats Directive Appropriate Assessment
Screening Determination**

**Extension to Clare O’Leary Walk - Bandon
Part 8**



Cork County Council
Comhairle Contae Chorcaí

Completed by: Sharon Casey
Cork County Council.

Date: 13/01/2023

This document contains the Habitats Directive screening determination of Cork County Council in respect of a proposed extension to a public walkway adjacent to the N71 on the eastern approach to Bandon. The determination is based on the information provided in the AA Screening Report and Ecological Survey Reports prepared by Flynn Furney Environmental Consultants and associated drawings prepared in respect of the proposed scheme and which will be placed on display with the Part 8 documentation. This screening determination should be read in conjunction with those reports and drawings.

In accordance with Regulation 250 of the Planning and Development Regulations, Local Authorities are required to carry out screening for appropriate assessment of proposed development to assess, in view of best scientific knowledge, if the proposed development, individually or in combination with another plan or project is likely to have a significant effect on one or more European¹ sites. The Local Authority is required to determine that appropriate assessment of the proposed development is required if it cannot be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will have a significant effect on one or more European sites.

These requirements derive from Article 6(3) of the Habitats Directive which states that

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.

EU and National Guidance sets out two main stages to the assessment process which are as follows:

Stage One: Screening

The process which identifies what might be likely impacts arising from a plan or project on a European site, either alone or in combination with other projects or plans and considers whether these impacts are likely to be significant. No further assessment is required where the risk of significant impacts on European sites can be objectively ruled out during the screening stage.

Stage Two: Appropriate Assessment

Where the possibility of significant impacts has not been discounted by the screening process, a more detailed assessment is required. This is called an Appropriate Assessment and requires the compilation of a **Natura Impact Statement** by the project proponent, which is a report of scientific evidence and data relating to European sites for which significant negative impacts have not been previously screened out. This is used to identify and classify any implications of the plan or project for these sites in view of their Conservation Objectives. The Appropriate Assessment must include a determination as to whether or not the project would adversely affect the integrity of any European site or sites. The plan or project may only be consented if adverse effects on the integrity of European sites can be objectively ruled out during the Appropriate Assessment process. The plan or project may not be consented on foot of an Appropriate Assessment, if it is found that it will give rise to adverse impacts on one

¹“European Site” means— (a) a candidate site of Community importance; (b) a site of Community importance; (c) a candidate special area of conservation; (d) a special area of conservation; (e) a candidate special protection area, or (f) a special protection area.

or more European sites, or if uncertainty remains in relation to potential impacts on one or more European sites.

Name of the project
Clare O’Leary Walk Extension – Bandon.
Description of the project
Extension to existing public walkway (Clare O’Leary Walk) on the eastern boundary of Bandon Town. The proposed extension extends for 900m. The works will require the creation of a 3m wide tarmacadamed finished walkway. Drainage and ducting works to be installed for the extent of the route. Surface water is to be diverted into the existing road drainage network. LED lighting is proposed and will conform to Bat Conservation and TII Recommendations. Stockproof fencing to private lands is proposed. It is also proposed to plant Whitethorn hedging along the boundary of private property. It is proposed to install seating at 200m intervals. Signage, including an information board is also proposed as is control of two invasive species identified along the route (Clematis and Winter Heliotrope).
Site Context
<p>The proposed route extends from the eastern boundary of Bandon for 900m on the southern boundary of the N71 to link to the existing Clare O’Leary walk. Information provided by Flynn Furney indicates that the new route will pass through an arable field, improved agricultural grassland, an area of woodland and an area of immature woodland. The route will pass over the Kilbeg South Stream over an existing culvert. It is understood that no instream works are proposed or required. The north eastern portion of the route (closest to Innishannon) is located adjacent to the Bandon Valley Above Innishannon proposed Natural Heritage Area (Site Code 1740).</p> <p>Figure 1: Site Context</p> <p>(Red pin drops indicate start and end of route. Blue hatching indicates boundary of pNHA). Route runs along southern side of N71 between Bandon and Innishannon.</p>

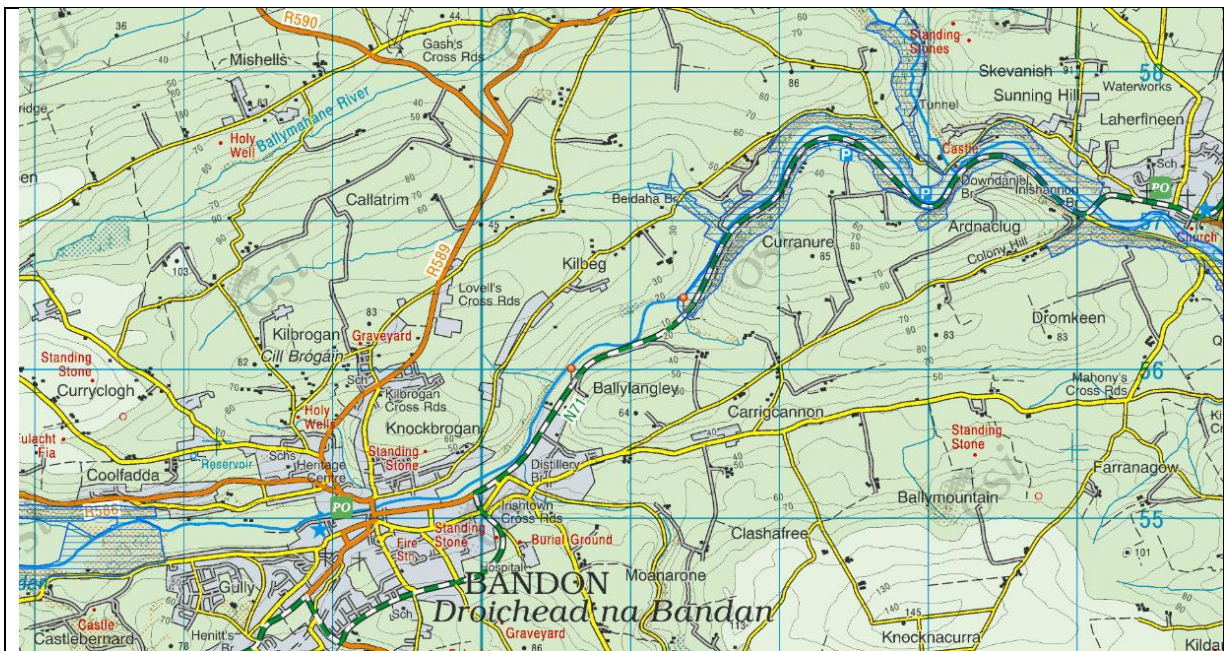


Figure 2: Site Context



Flooding and Drainage

The site may partially overlap with Flood Zone A (Bandon River).



Name and location of EU sites subject to screening

The submitted AA Screening report identifies one EU designated site with potential linkage to the proposed works area. This is the Bandon River Special Area of Conservation (Site Code 2171). This site is located 28km upstream of the proposed works area. The SAC is designated for the protection of the following habitats and species:

- Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation [3260]
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae) [91E0]
- *Margaritifera margaritifera* (Freshwater Pearl Mussel) [1029]
- *Lampetra planeri* (Brook Lamprey) [1096]

No other sites with potential to be impacted have been identified.

Is the project directly connected with or necessary to the management of the sites listed above?

No.

Describe how the project (alone or in combination) is likely to affect the Natura 2000 Site

An assessment of potential significant effects of the development on the Bandon River SAC has been carried out within the submitted screening report. This assessment rules out potential for significant negative effects on this designated site for the following reasons:

1. Nature and scale of the proposed works;
2. Distance from the proposed works to EU sites;
3. Lack of downstream hydrological connectivity to EU sites.

Are there other projects or plans that together with the project being assessed that could affect these sites (provide details)?

No potential for impact on any EU site identified. Therefore, there is no potential for the project to contribute to negative impacts which could be significant when considered in combination with impacts on such sites arising from other sources.

Screening Report Conclusion

The report as submitted states in conclusion that the proposed walk either alone or in-combination with other plans and/or projects, does not have the potential to significantly affect any European site, in light of their conservation objectives. Therefore, a Stage 2 Appropriate Assessment is deemed not to be required.

Cork County Council evaluation and overall conclusion that there are no significant effects on European Sites foreseen as a result of the proposal.

The primary issues of ecological concern to designated European sites as a result of the proposal are activities have the potential to give rise to significant negative impacts on the qualifying

interests associated with these sites e.g. disturbance / displacement of qualifying species, impact to water quality by introducing and toxic pollutants such as hydrocarbons, or increasing turbidity, silt or nutrients into aquatic systems.

Cork County Council is satisfied on the basis of the objective information provided in the Appropriate Assessment Screening Report that the proposed project does not pose a risk of significant impacts to any Natura 2000 site for the following reasons:

- There is no spatial overlap between the proposed development site and any EU sites;
- No direct loss, alteration or fragmentation of habitats will occur within any EU sites;
- The site is located sufficiently distant from any EU site to be satisfied that there is no risk of activities associated with the project causing disturbance to qualifying species;
- There is no risk of impact to surface water quality or freshwater habitats within any EU sites. This evaluation is made taking account of the lack of hydrological linkage between the works site and any EU site.
- No potential for in-combination effects have been identified.

It is therefore determined that Appropriate Assessment is not required.

7.6 Appendix F: Ecological Impact Assessment Report

Ecological Impact Assessment

Bandon, Co. Cork.

Project: N71 Glaslinn Road/ Clare O'Leary Walkway Extension

By: Jason Nash, Flynn Furney Environmental Consultants

For: Cork County Council

Date: February 2023

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1. Introduction

The following report details the findings of an Ecological Impact Assessment (EcIA) carried out at the proposed site of works for the Clare O'Leary Walk, Bandon, Co. Cork. The location of the proposed works is shown in Figure 1.

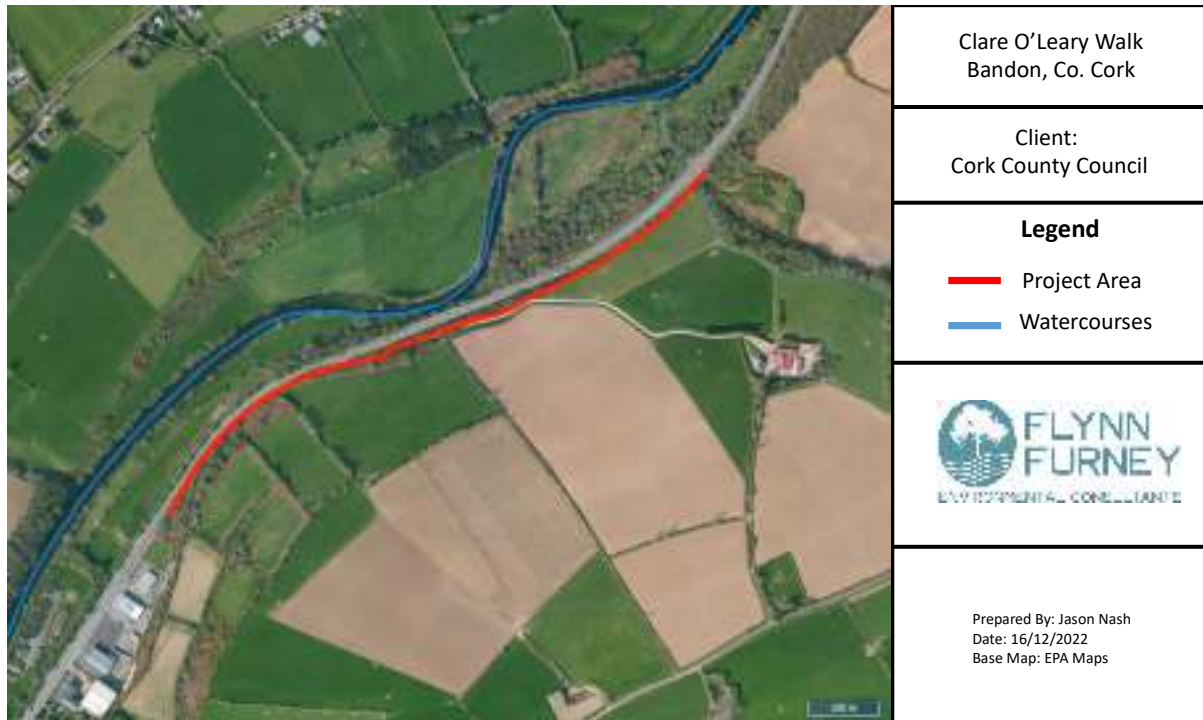


Figure 1: Location of Proposed Works for the Clare O'Leary Walk, Bandon, Co. Cork.

The site was surveyed by ecologists of Flynn Furney Environmental Consultants in December 2022. The purpose of this EcIA is to provide a description of the existing ecological status of the proposed route of works and areas of works to achieve sightlines for 2 no. existing entrances. The alignment of the route has been optimised to minimise disruption to the environment/habitats while also achieving the required horizontal and vertical alignment to meet TII design standards. To meet the current TII design standards and improve the safety of the 2 no. existing entrances along the N71, along with crossing the proposed active travel route, the sightlines need to be improved. Vegetation clearance is required to achieve the minimum sightlines of 160m in either direction and these areas were surveyed also. The level and type of impact of the proposed works are assessed in relation to the ecology that exists in the locality.

The surveys carried out allow an overview of habitats, and the likelihood of Annex I habitats (EU Habitats Directive), Annex II species (EU Habitats Directive), Annex I Bird Species (EU Birds Directive) or 'steppingstones/Ecological Corridors' (as covered under Annex 10 of the EU Habitats Directive) and species and habitats of national and local importance occurring on or in the immediate vicinity of the proposed development to be identified.

1.1. Outline Description of the Proposed Site of Works

The Clare O'Leary walk is located between Bandon and Innishannon. On the Innishannon side, this walk is located at Grid Reference 51.7686705, -8.6901292 and on the Bandon side it is located at 51.7580307, -8.7049859.

This project proposes to extend the Clare O'Leary Walk, from Grid Reference 51.7580307, -8.7049859 to an existing pedestrian pathway just east of Billie Cahalane's Service Station, at Grid Reference 51.7537690, -8.7159159.

1.2. Description of the Works

The proposal is for the development of a walkway 900m in length to the east of Bandon Town which runs from an existing walkway adjacent to the N71 (The Clare O'Leary Walk) to the eastern boundary of Bandon Town where the existing footpath terminates. Works consist of:

- Creating a 3m wide tarmacadamed finished walkway which is a continuation of an established 1.8 km walkway along a section of the Old West Cork Railway line.
- Drainage and ducting works to be installed for the 900m length. Drainage is to the existing road drainage system on the adjoining N71. Ducting is for provision of future lighting which will be directional low level LED lighting. Any future lighting will be in accordance with Bat Conservation Guidelines Ireland and TII recommendations.
- Stockproof fencing to private property will be provided where necessary.
- There will be planting of whitethorn hedging along the boundary with private property, native trees and a number of pollinator areas. Seating will be provided at regular intervals along the route of the walkway.
- Signage will be provided in the form of an Information Board and signage.

1.3. Objectives of this EcIA

Cork County Council, the client, commissioned the present ecological assessment works. The objectives of the present studies, in cognisance of CIEEM guidelines (2018) were as follows:

- To map and describe existing habitats.
- To identify sensitive areas within the site.
- To identify potential ecological constraints/impacts.
- To identify ways to avoid the above and mitigate against if necessary.
- To make recommendations for best practice in undertaking construction works.

This EcIA report should be read in conjunction with the Appropriate Assessment Screening and Environmental Impact Assessment Screening, also drawn up for the client for this project (Flynn Furney Environmental Consultants, 2022).

2. Legislative Context

2.1. European Council Directives

2.1.1 Council Directive on the Conservation of Natural Habitats of Wild Fauna and Flora (92/43/EEC) (The Habitats Directive)

The main aim of the Directive is to promote the maintenance of biodiversity through the conservation of natural habitats and wild species listed on the Annexes of the Directive. Member States are required to take measures to maintain or restore, at favourable conservation status, biodiversity whilst taking account of economic, social, cultural requirements and regional and local characteristics.

It gives effect to site and species protection measures through establishment of the Natura 2000 network and designation of European Sites including Special Areas of Conservation (SAC) and Special Protected Areas (SPA). It also establishes a list of species (other than birds) whose habitats must be protected to secure their survival. These priority species and habitats are subject to a higher level of protection.

The Directive also requires appropriate assessment of any plan or project not directly connected with or necessary to the management of a European Site, but likely to have significant effects upon a European site, either individually or in combination with other plans or projects.

2.2.2. Council Directive on the Conservation of Wild Birds (2009/147/EC) (The Birds Directive)

The Directive provides a framework for the conservation and management of, and human interactions with, wild birds in Europe. It makes provisions for the maintenance of the wild bird populations across their natural range; conserves the habitats for rare or vulnerable species listed in Annex I and of migratory species through the classification of SPAs and provides protection for all wild birds.

2.2. Irish Legislation

2.2.1 The European Communities (Birds and Natural Habitats) (Amendment) Regulations 2015 (S.I. No. 355 of 2015)

The European Communities (Birds and Natural Habitats) (Amendment) Regulations provides that the following shall be considered together as one:

- Wildlife Act 1976
- Wildlife (Amendment) Acts of 2000, 2010 and 2012
- European Communities (Birds and Natural Habitats) (Restrictions of the Use of Poison Bait) Regulations 2010
- European Communities (Birds and Natural Habitats) Regulations 2011

- European Communities (Birds and Natural Habitats) (Amendment) Regulations of 2013, 2015
- Wildlife (Amendment) Bill 2021

2.2.2. European Communities (Birds and Natural Habitats) Regulations 2011 to 2015

The Regulations give effect to requirements relating to the designation of protected sites under the Birds Directive and Habitats Directive. The Regulations provide for the protection and management of European Sites and place obligations on all public authorities to have regard to the requirements of the Habitats Directive beyond the realms of planning related consents issued under the Planning and Development Act 2000, as amended (the PDA). The Regulations also provide for the protection of species of European importance.

2.2.4. Wildlife Acts 1976 to 2012

The Acts provides for *inter alia* the protection of wildlife. The Acts prohibit the intentional killing, taking or injuring of certain wild birds or wild animals; or the intentional destruction, uprooting or picking of certain wild plants.

2.2.5. Wildlife Amendment Bill 2016

The purpose of the Bill is to provide for the implementation of a reconfiguration of the Raised Bog Natural Heritage Area Network arising from (i) the proposals from the Review of Raised Bog Natural Heritage Area Network published in January 2014; (ii) an assessment of the effects on the environment of the proposals arising from the Review and, if required, any other screening for an assessment or as the case may be, assessment, including public consultation undertaken and (iii) observations or submissions received during the course of public consultation.

3. Survey Methodology

A walkover survey of the proposed route was carried out in December 2022. Habitats were identified, mapped and classified and dominant plant species noted in accordance with the guidelines given by the JNCC (2007) and The Heritage Council (2010). Bat habitat, riparian birds and mammal surveys followed guidance as per NRA/TII guidance documents. Habitats were classified as per Fossitt (2000). Assessment of ecological impact followed CIEEM (2018), NRA (2006) and EPA (2002).

3.1. Survey Constraints

There was some seasonal constraint to the timings of the surveys. This report's findings are constrained by seasonal limitations as some surveying techniques are not permissible or optimal at this time of year and some species (e.g. flora) are also not evident at the time of survey. However, the author is satisfied all Invasive Alien Plant Species within the area were detected at the time of surveying.

3.2. Desktop Study

A desktop study was carried out as part of this assessment process. This included a review of available literature on the site and its immediate environs. Sources of information included the National Parks and Wildlife Service databases on protected sites and that of the National Biodiversity Data Centre. Designated sites were identified using the current boundary shapefiles downloaded from the NPWS website. Records of species from within the relevant Km squares were also obtained. This data was gathered using an intersect setting. Other online mapping reviewed included Geohive maps, aerial photography and EPA shapefile datasets (www.gis.epa.ie). The results of the desktop study are given in the Appendices.

4. Results

4.1. Land Designations

Sites designated for the conservation of nature in Ireland include:

- Special Areas of Conservation (SACs) and:
- Special Protection Areas (SPAs).
- Natural Heritage Areas (NHAs)
- proposed Natural Heritage Areas (pNHAs)

SPAs and SACs form the *Natura 2000* network of sites. SPAs and SACs are prime wildlife conservation areas in the country, considered to be important on a European as well as Irish level. SPAs and SACs are designated under EU Habitats Directive, transposed into Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), as amended.

Natural Heritage Area (NHA) is the basic designation for wildlife in Ireland. These are areas considered important for their habitats or species of plants and animals whose habitat needs protection. They first entered into European Law under the 1976 Wildlife Act, then were transposed into Irish law with the 1997 Natural Habitats Regulations (S.I. No. 94 of 1997) finally gaining full statutory backing in Ireland with the passing of the Wildlife (Amendment) Act 2000.

pNHA sites were published on a non-statutory basis in 1995 but have not since been statutorily proposed or designated. These sites are designated as being of significance for species and habitats. While not afforded the same protection as sites protected under the Habitats Directive, they are subject to protection through the following mechanisms:

- Agri-environmental farm planning schemes such as GLAS (Formally the Rural Environment Protection Scheme)
- Forest Service requirement for NPWS approval before they will pay afforestation grants on pNHA lands
- Recognition of the ecological value of pNHAs by Planning and Licencing Authorities.
- Cork County Development Plan, Policy BE 15-2, which aligns with mandatory objective requirements of Section 10 (2) (c) to reference Article 10 of the Habitats Directive.

A short 14m section of the site under survey is within the Bandon Valley Above Innishannon pNHA. This is located at the eastern end of the route where the proposed new route joins the established and existing Clare O'Leary Walk. D designated sites within 15km of the proposed works are shown in Figure 3 and table 1 below.

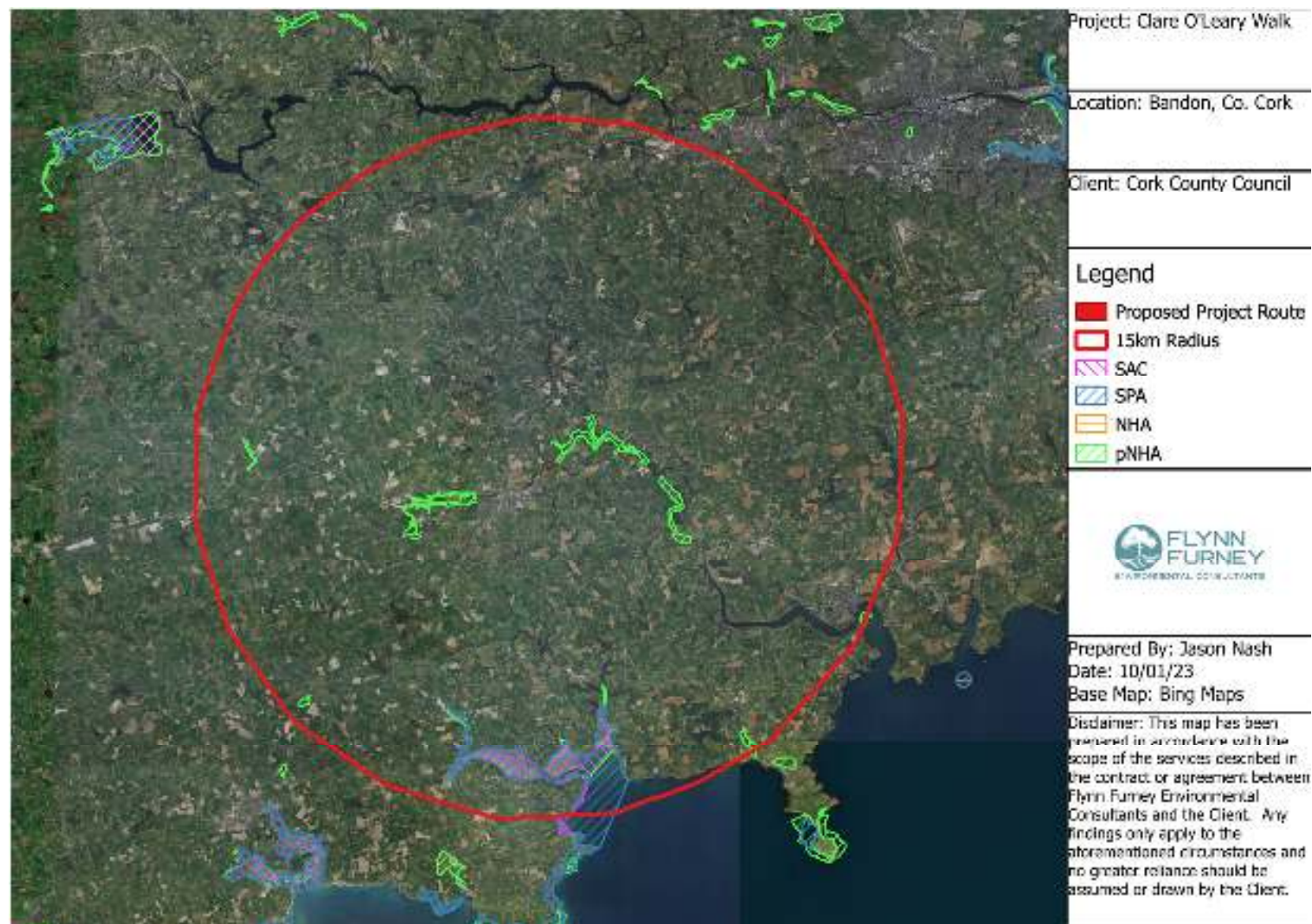


Figure 3: Designated Sites Within 15km.

Table 1: Natura 2000 Sites and Proposed Natural Heritage Areas occurring within 15km of proposed works

SITE CODE	SITE NAME	DESIGNATION	DISTANCES FROM THE PROPOSED WORKS SITES	POTENTIAL FOR IMPACT FROM PROPOSED WORKS	RATIONALE
001230	Courtmacsherry Estuary	SAC	9.8km	Nil	Distance
004219	Courtmacsherry Bay	SPA	10.5km	Nil	Distance
001740	Bandon Valley Above Innishannon	pNHA	Within	Nil	Works are contained to a 30m section, along existing artificial surfaces only, which have no ecological value.
001034	Bandon Valley West of Bandon	pNHA	3km	Nil	Distance
001515	Bandon Valley Below Innishannon	pNHA	5km	Nil	Distance
001230	Courtmacsherry Estuary	pNHA	9.5km	Nil	Distance
001062	Killaneer House Glen	pNHA	12.2km	Nil	Distance
001035	Bandon Valley South of Dunmanway	pNHA	14.0km	Nil	Distance
001037	Batemans Lough	pNHA	13.8km	Nil	Distance
001053	Garrettstown Marsh	pNHA	14km	Nil	Distance
001060	James Fort	pNHA	14.6km	Nil	Distance

4.2. Assessment of Habitats within and surrounding the works area

4.2.1. Overall Site and Environs Description

The proposed route starts at the end of the Clare O'Leary walk south of the N71. There is a stream at this location that is culverted under the existing path and adjacent road. This stream is known as the Kilbeg South Stream (FW1). It is a tributary to the Bandon River situated to the north.

The proposed walk moves East and crosses into the arable field (BC1) to the south of the road. This field is adjacent to the road and hedgerow (WL1) and begins to form a steep embankment with trees and scrub (WS2) as the elevation of the field increases. The route moves west as the field changes into improved grassland (GA1) which is flanked by an agricultural avenue which is treelined.

It then passes along this avenue (BL3) and associated stone wall (BL1) and crosses over through a woodland (WN2) area into an improved agricultural grassland field (GA1). The

wood area is situated between the field and road and contains some large mature Oaks. The route then moves traverses a treeline (WL2) and progresses into a dense bracken (HD1) area that has been subject to cutting of surrounding trees for overhead powerlines. It moves from this area, passes through a short area of scrub (WS1) and down to the adjacent road where it connects to a designated footpath area currently under construction. This last section has been recently cleared and a grassy verge (GS2) is now established on the eastern side of the existing path.

Table 2: Habitats recorded on site (Fossitt).

Code	Habitat Type
FW1	Upland/Eroding Rivers
BC1	Arable Crops
WL1	Hedgerow
WS1	Scrub
WS2	Immature Woodland
GA1	Improved Agricultural Grassland
BL3	Buildings & Artificial Surfaces
BL1	Stone Walls & Other Stonework
WN2	Oak-Ash-Hazel Woodland
WL2	Treeline
HD1	Dense Bracken
GS2	Grassy Verge

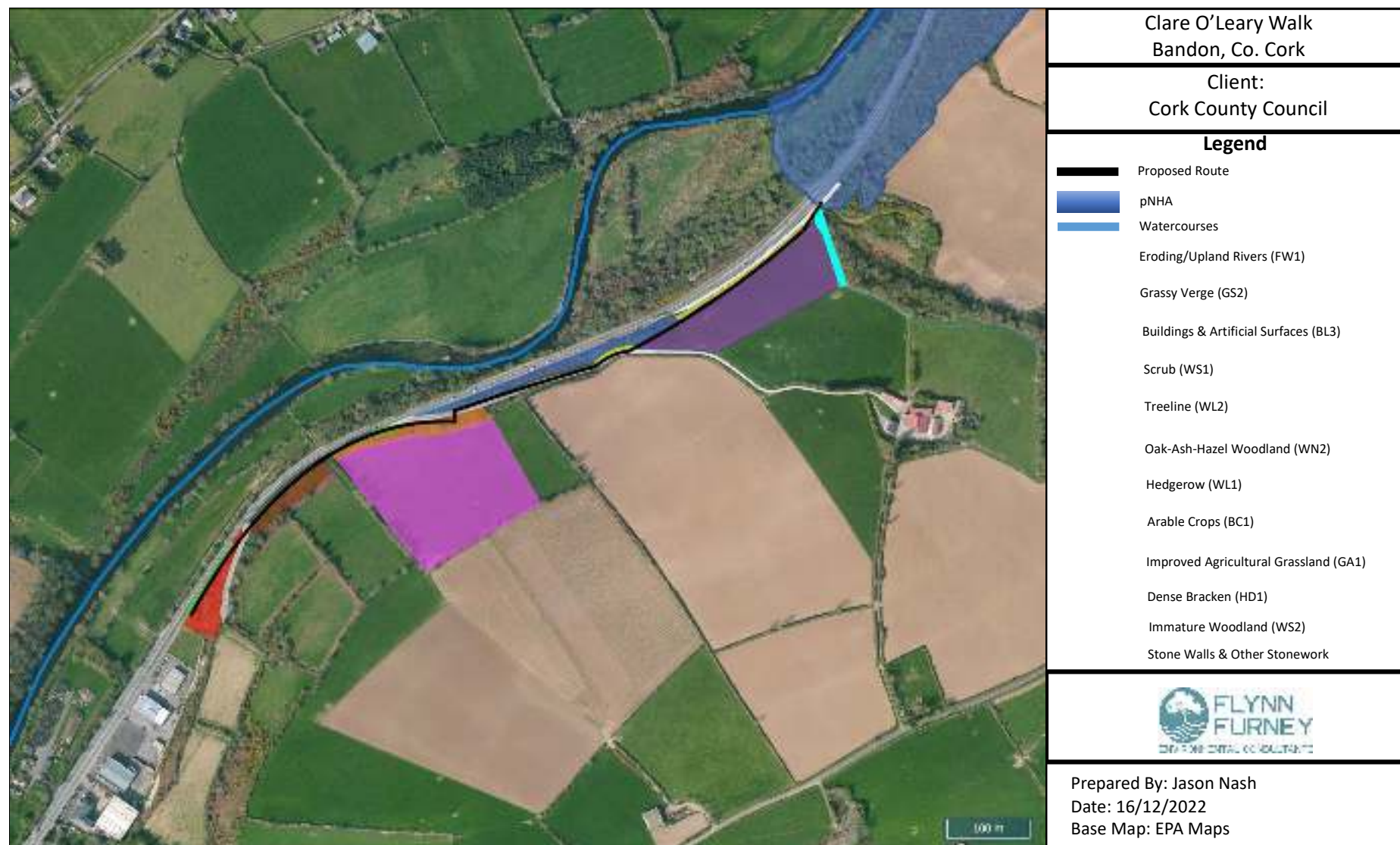


Figure 4: Habitat Map.

4.3. Description of Habitat types located at the proposed site

4.3.1.

FW1	Eroding/Upland Rivers
-----	-----------------------

The Kilbeg South Stream is located on the eastern side of the proposed route. It is culverted under an existing path and adjacent N71 road. It is a tributary of the River Bandon situated to the north. There are no proposed works for this stream.

4.3.2.

BC1	Arable Crops
-----	--------------

A field representing this habitat type is present along the eastern side of the route. Approx. 260m of the route is proposed to traverse this habitat.

4.3.3.

WL2	Treeline
-----	----------

There are two discrete treelines within the vicinity of the proposed route. One treeline will be traversed by the route, at Grid ref.: 51.75509274770461, -8.713447958525839. This is composed of Hawthorn & Hazel. A treeline, which is subject to maintenance, situated between an area of dense bracken and the N71 road at Grid ref.: 51.75489350500486, -8.71441891818997 is due to be removed to facilitate sight lines. This contains two Holly, three Hawthorn, 1 Hazel and 13 Willow.

4.3.4.

WS2	Immature Woodland
-----	-------------------

A narrow belt of immature woodland is present on the northern side of the proposed route, adjacent to the N71 road, at Grid ref.: 51.7563244175736, -8.709285145827556. This habitat is approx. 300m in length. Works are not due to take place within this habitat type.

4.3.5.

WL1	Hedgerow
-----	----------

Two sections are present along the proposed route, beside an old road which diverts off the N71 and at the eastern side of the route. Both will be traversed. The location beside an old road is Grid ref.: 51.75641628925918, -8.708222562068624. This is composed of Privet and Cypress. The second is north of the arable field at the eastern end of the route, spanning 50m in length, at Grid ref.: 51.757187964737355, -8.70640468766039. This is mainly comprised of bramble and Ash, growing on an earth/stone bund, which is subject to regular maintenance from the landowner which has resulted in low ecological quality.

4.3.6.

BL1	Stone Walls & Other Stonework
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A short section of an old stone wall is present to the north of the proposed route, beside an old road/agricultural avenue, which diverts off the N71. Its location is Grid ref.: 51.75621207147284, -8.709239119288135.

4.3.7.

BL3	Buildings & Artificial Surfaces
-----	---------------------------------

An old road, which is now an agricultural avenue, which diverts off the N71 at Grid ref.: 51.755664639096935, -8.71213037163307. The proposed route will follow this road for a distance of approx. 240m. Works are proposed to take place along an existing path, which forms the existing Clare O'Leary Walk, for a distance of approx. 30m, at Grid ref.: 51.75801681435075, -8.705041300204035.

4.3.8.

WN2	Oak-Ash-Hazel Woodland
-----	------------------------

This habitat is situated on a slope between an agricultural field and old road/agricultural avenue at Grid ref.: 51.755598225798146, -8.711840693056537. This is dominated by Hazel trees, with large mature Oak also present. The proposed route will traverse this habitat for a distance of c. 40m. This will result in the removal of approx. 35 Hazel, 2 Oak & 5 Holly trees to facilitate the construction of the walkway.

4.3.9.

GA1	Improved Agricultural Field
-----	-----------------------------

The proposed route crosses this habitat on the western side of the Oak-Ash-Hazel habitat for a distance of approx. 125m. It is present at Grid ref.: 51.75535913713804, -8.712575618330106.

4.3.10.

HD1	Dense Bracken
-----	---------------

A linear strip of this habitat type is present at Grid ref.: 51.75493408748999, -8.714056197704519. This area has been subject to maintenance cutting of surrounding trees for overhead powerlines. The proposed route will cross a section of the habitat type approx. 110m in length.

4.3.11.

WS1	Scrub
-----	-------

The proposed route progresses in a westerly direction through one area of scrub for a distance of approx. 15m, which equates to an area approx. 0.021ha dominated by Blackthorn, Willow and Bramble. Some of this area has been recently cleared and is subject to maintenance along the avenue. It is located at Grid ref.: 51.754150391722725, -8.715354386867975.

4.3.12.

GS2	Grassy Verge
-----	--------------

There are four linear strips of this habitat type present at Grid refs.: 51.753974390387846, -8.715654794279097, 51.75561007582278, -8.712371389167913, 51.75620749243732, -8.709131324645252 and 51.754703499432125, -8.714797741675868. The former will be crossed as the proposed route meets an existing footpath on the western end. The latter two areas will be scraped for the construction of the greenway.

Table 2: Floral Species Recorded.

Plant Species	
	Woodland figwort <i>Scrophularia nodosa</i>
Bindweed <i>Convolvulus</i> sp.	Woodland germander
Birdsfoot trefoil <i>Lotus corniculatus</i>	<i>Teucrium scorodonia</i>
Bittersweet <i>Solanum dulcamara</i>	Yarrow <i>Achillea millefolium</i>
Bracken <i>Pteridium</i> sp.	Trees
Bramble <i>Rubus fruticosus</i> agg.	Hawthorn <i>Crataegus monogyna</i>
Broad leaved plantain <i>Plantago major</i>	Ash <i>Fraxinus excelsior</i>
Bull thistle <i>Cirsium vulgare</i>	Oak <i>Quercus</i> sp.
Bush vetch <i>Vicia sepium</i>	Sycamore <i>Acer pseudoplatanus</i>
Cleavers <i>Galium aparine</i>	Blackthorn <i>Prunus spinosa</i>
Cocksfoot <i>Dactylis</i> sp.	Elder <i>Sambucus nigra</i>
Common dog violet <i>Viola riviniana</i>	Grey willow <i>Salix cinerea</i>
Cow parsnip <i>Heracleum maximum</i>	Hazel <i>Corylus avellana</i>
Creeping buttercup <i>Ranunculus repens</i>	Field elm <i>Ulmus minor</i>
Creeping thistle <i>Cirsium arvense</i>	Holly <i>Ilex aquifolium</i>
Dandelion <i>Taraxacum</i> sp.	Cranberry bush <i>Viburnum</i> sp.
Dock <i>Rumex</i> sp.	Beech <i>Fagus sylvatica</i>
Foxglove <i>Digitalis</i> sp.	Privet <i>Ligustrum</i> sp.
Gorse <i>Ulex</i> sp.	Cypress <i>Cupressus x leylandii</i>
Harts tongue fern <i>Asplenium scolopendrium</i>	IAPS
Herb Robert <i>Geranium robertianum</i>	Traveller's-joy <i>Clematis vitalba</i>
Honeysuckle <i>Lonicera</i> sp.	Winter heliotrope <i>Petasites fragrans</i>
Ivy <i>Hedera</i> sp.	
Kings Fern <i>Dryopteris affinis</i>	
Marsh woundwort <i>Stachys palustris</i>	
Narrow leaved plantain <i>Plantago lanceolata</i>	
Nettle <i>Urtica dioica</i>	
Oat Grass <i>Arrhenatherum elatius</i>	
Ragwort <i>Jacobaea vulgaris</i>	
Red clover <i>Trifolium arvense</i>	
Redshank <i>Persicaria maculosa</i>	
Scentless mayweed <i>Tripleurospermum inodorum</i>	
White clover <i>Trifolium repens</i>	
Wild Angelica <i>Angelica sylvestris</i>	
Wild carrot <i>Daucus carota</i>	
Willowherb <i>Epilobium</i> sp.	

4.4. Fauna

4.4.1. Mammal Activity

Eurasian Badger (*Meles meles*) faeces were noted on the adjacent footpath at the beginning of the proposed route at Clare O'Leary Walk. Rabbit (*Oryctolagus cuniculus*) burrows were present in the woodland area; no other signs of mammal activity were noted.

4.4.2. Breeding Birds

A dedicated bird survey was not carried out for this project. Rookeries and heronries were not observed. The proposed works involve removal of trees/other vegetation that might support nesting species. A pre-construction nesting survey may need to be carried out, depending on the timing of works. Several nest boxes are also present within a woodland area which will need to be removed outside of the bird nesting season. Some birds which are likely to utilise the study area include Blue tit (*Cyanistes caeruleus*), Blackbird (*Turdus merula*), Goldcrest (*Regulus regulus*), Hooded crow (*Corvus cornix*), Buzzard (*Buteo buteo*), Song thrush (*Turdus philomelos*), Herring Gull (*Larus argentatus*) and Stonechat (*Saxicola rubicola*).

4.4.3. Amphibians and Reptiles

An amphibian survey was not carried out as part of this project, due to the lack of suitable habitat for spawning common frog (*Rana temporaria*) or smooth newt (*Lissotriton vulgaris*) within the proposed works area.

No impact to any amphibians and reptiles is expected as a result of the proposed development.

4.4.4. Aquatic Species

The Kilbeg South stream crosses the works area at the eastern end of the proposed route, before it flows north to the Bandon River via a culvert underneath the N71 road. This stream exits a culvert on the northern side of the road, which is perched and detrimental to fish migration. Furthermore, this stream flows over a rip-rap section of riverbank along the Bandon River before cascading into the Bandon River. This also poses an obstacle to fish migration, bar in high flows. It possesses relatively low fisheries potential with three-spined stickleback (*Gasterosteus aculeatus*) likely present downstream of the N71 road and European eel (*Anguilla Anguilla*) potentially present also. Fish species may not be present in the section of stream directly adjacent to the proposed route.

4.4.5. Bats

Trees containing bat (*Chiroptera sp.*) potential were detected within the project works area. Two mature Oak trees contained low bat potential. One of these trees was within the clearance zone, at approximate Grid Reference 51.7555589, -8.7118121, whilst the other was a short distance to the east of the clearance zone, at approximate Grid Reference 51.7556485, -8.7111094. Bat potential was assessed using the Hundt Good Practise Guidelines. Criteria used is detailed in table below:

Table 1. Hundt criteria

Category	Tree characteristics
Category 1*	Trees with multiple, highly suitable features capable of supporting large roosts
Category 1	Trees with definite bat potential, supporting fewer suitable features than category 1* trees or with potential for use by single bats
Category 2	Trees with no obvious potential, although the tree is of a size and age that elevated surveys may result in cracks or crevices being found; or the tree supports some features which may have limited potential to support bats
Category 3	Trees with no potential to support bats

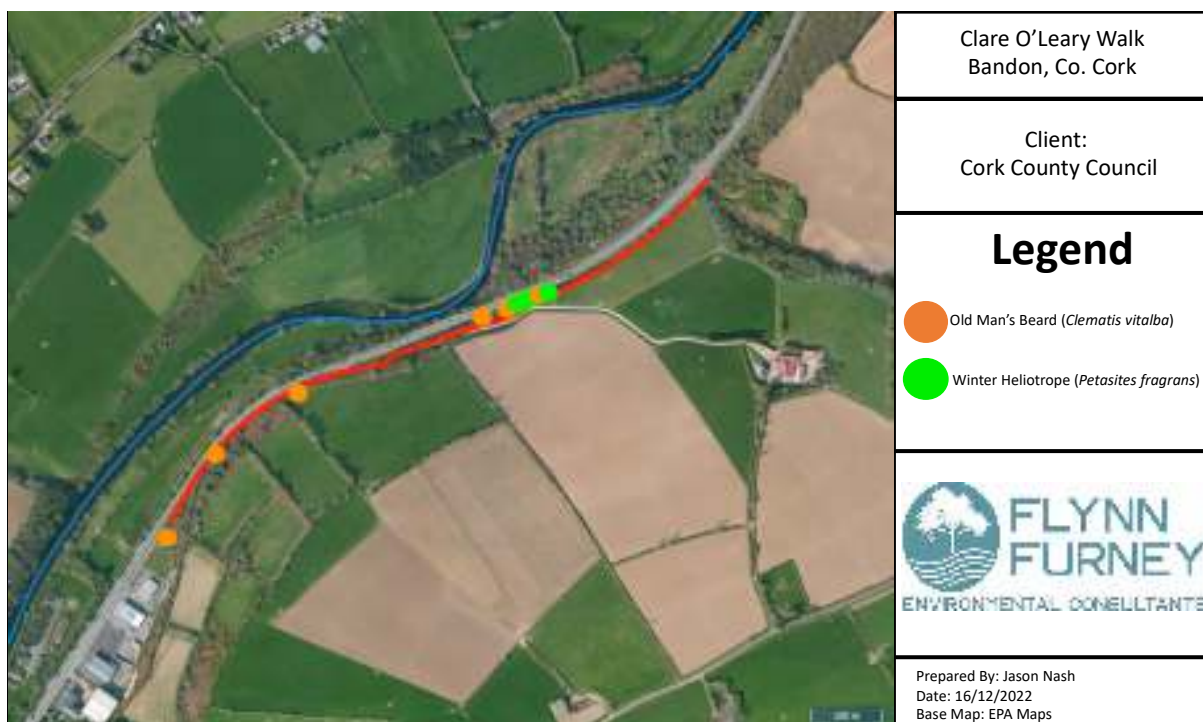
4.4.6. Tree assessment

The proposed route traverses one area of Oak-Ash-Hazel Woodland. This is dominated by Hazel trees, with large mature Oak also present. Treelines are present which are composed of Hawthorn, Blackthorn, Hazel, Holly and Willow. Stunted Blackthorn and Willow is present in scrub areas.

4.4.7. Invasive alien plant species

No invasive alien plant species (IAPS), listed under the 3rd Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 were recorded along the route.

Two other IAPS were recorded adjacent to and along the route. Old Man's Beard (*Clematis vitalba*) was recorded growing on trees and vegetation within areas to be cleared. Winter Heliotrope (*Petasites fragrans*) was recorded along the N71, adjacent to the proposed route.

**Figure 5: IAPS Locations**

5. Predicted Impacts and Significance

The impacts which may be expected from any construction works are assessed below. These possible impacts have been assessed under the CIEEM (2018) and the National Roads Authority guidelines (NRA, 2006). Criteria for assessment of duration of impacts used (EPA 2022). These provide guidance on assessing impact significance upon features of sites proposed for works and those adjacent. Impact significance must be given in context of their respective ecological value of the site and features under study.

The 'ecological value' of an area or feature is defined with reference to geographical context. That is, whether it is of value locally, regionally, nationally or internationally. This is assessed by ecologists on reviewing survey outcomes. Key criteria are the presence of designated sites, the site or feature containing protected species or areas of high biodiversity. The criteria for ecological value are given in Table 5 below.

Table 7: Ecological Value Criteria

Ecological Value	Criteria
International	<ul style="list-style-type: none"> ▪ 'European Sites' including Special Areas of Conservation (SAC) & Special Protection Areas (SPA). ▪ Sites that satisfy the criteria for designation as a 'European Site' (see Annex III of the Habitats Directive, as amended). ▪ Features essential to maintaining the coherence of the Natura 2000 Network. ▪ Sites containing 'best examples' of the habitat types listed in Annex I of the Habitats Directive. ▪ Resident or regularly occurring populations (assessed to be important at the national level) of the following: <ul style="list-style-type: none"> ○ Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive; and/or ○ Species of animal and plants listed in Annex II and/or IV of the Habitats Directive. ▪ Ramsar Sites ▪ World Heritage Sites (Convention for the Protection of World Cultural & Natural Heritage, 1972). ▪ Sites hosting significant species populations under the Bonn Convention ▪ Sites hosting significant populations under the Berne Convention
National	<ul style="list-style-type: none"> ▪ Areas of Special Scientific Interest (ASSI) or Natural Heritage Area (NHA). ▪ National Nature Reserves (NNR). ▪ Marine Nature Reserves (MNR). ▪ Area of Outstanding Natural Beauty (AONB). ▪ Refuge for species protected under the Wildlife (Northern Ireland) Order 1985 (as amended). ▪ Undesignated sites fulfilling the criteria for designation as an ASSI; NNR; MNR; and/or refuge for species protected under the Wildlife (Northern Ireland) Order 1985 (as amended). ▪ Resident or regularly occurring populations (important at the national level) of the following: <ul style="list-style-type: none"> ○ Species protected under Wildlife (Northern Ireland) Order 1985 or Wildlife Act 1976, as amended); and/or ○ Species listed on the relevant Red Data list. ▪ Sites containing 'viable areas' of the habitat types listed in Annex I of the Habitats Directive.
Regional	<ul style="list-style-type: none"> ▪ Sites of Local Nature Conservation Importance (SLNCI). ▪ Areas subject to a Tree Preservation Order.

Ecological Value	Criteria
	<ul style="list-style-type: none"> ▪ Resident or regularly occurring populations (assessed to be important at the Regional level) of the following: <ul style="list-style-type: none"> ○ Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive; ○ Species of animal and plants listed in Annex II and/or IV of the Habitats Directive; ○ Species protected under the Wildlife (Northern Ireland) Order 1985 (as amended); and/or ○ Species listed on the relevant Red Data list. ▪ Sites containing areas of the habitat types listed in Annex I of the Habitats Directive that do not satisfy the criteria for valuation as of International or National importance. ▪ Regionally important populations of species or viable areas of semi-natural habitats or natural heritage features identified in the National or Local Biodiversity Action Plan (BAP), if these have been prepared. ▪ Sites containing semi-natural habitat types with high biodiversity in a regional context and a high degree of naturalness, or populations of species that are uncommon within the region. ▪ Sites containing habitats and species that are rare or are undergoing a decline in quality or extent at a national level.
Local	<ul style="list-style-type: none"> ▪ Locally important populations of priority species or habitats or features of natural heritage importance identified in the Local BAP, if this has been prepared. ▪ Resident or regularly occurring populations (assessed to be important at the Local level) of the following: <ul style="list-style-type: none"> ○ Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive; ○ Species of animal and plants listed in Annex II and/or IV of the Habitats Directive; ○ Species protected under the Wildlife (Northern Ireland) Order 1985 (as amended); and/or ○ Species listed on the relevant Red Data list. ▪ Sites containing semi-natural habitat types with high biodiversity in a local context and a high degree of naturalness, or populations of species that are uncommon in the locality. ▪ Sites or features containing common or lower value habitats, including naturalised species that are nevertheless essential in maintaining links and ecological corridors between features of higher ecological value. ▪ Sites containing small areas of semi-natural habitat that are of some local importance for wildlife. ▪ Sites or features containing non-native species that are of some importance in maintaining habitat links.

The area under survey would meet the classification of being of *Local Importance* overall. This classification is due mainly to this area only overlapping the Bandon Valley Above Innishannon pNHA for a distance of approx. 30m along an artificial surface with no ecological value.

Ecological Impact Assessment must also consider the *significance* of effects that may be expected arising from a proposed development. CIEEM guidelines (2018) define a significant effect as: "an effect that either supports or undermines biodiversity conservation objectives for 'important ecological features'... or for biodiversity in general. Conservation objectives may be specific (e.g. for a designated site) or broad (e.g. national/local nature conservation policy)

or more wide-ranging (enhancement of biodiversity). Effects can be considered significant at a wide range of scales from international to local".

It also states that: "an effect that is sufficiently important to require assessment and reporting so that the decision maker is adequately informed of the environmental consequences of permitting a project. A significant effect is a positive or negative ecological effect that should be given weight in judging whether to authorise a project: it can influence whether permission is given or refused and, if given, whether the effect is important enough to warrant conditions, restrictions or further requirements such as monitoring".

The criteria for assessment of significance of effects is given in the following table (EPA, 2022). It should be noted that significant effects may also include beneficial effects.

5.1. Significance Criteria

Table 8: Criteria for Assessing Significance of Effects

Impact Significance	Effect	Criteria
Significant Negative Effect	Major Adverse	<ul style="list-style-type: none"> Loss of, permanent damage to or adverse impact on any part of a site of international or national importance; Loss of a substantial part or key feature of a site of regional importance; Loss of favourable conservation status (FCS) of a legally protected species; Loss of or moderate damage to a population of nationally rare or scarce species.
	Moderate Adverse	<ul style="list-style-type: none"> Temporary disturbance to a site of international or national importance, but no permanent damage; Loss of or permanent damage to any part of a site of regional importance; Loss of a key feature of local importance; A substantial reduction in the numbers of legally protected species such that there is no loss of FCS but the population is significantly more vulnerable; Reduction in the amount of habitat available for a nationally rare or scarce species, or species that are notable at a regional or county level.
No Significant Effect	Minor Adverse	<ul style="list-style-type: none"> Temporary disturbance to a site of regional value, but no permanent damage; Loss of, or permanent damage to, a feature with some ecological value in a local context but that has no nature conservation designation; A minor impact on legally protected species but no significant habitat loss or reduction in FCS; A minor impact on populations of nationally rare or scarce species or species that are notable at a regional or county level.
	Negligible	<ul style="list-style-type: none"> No impacts on sites of international, national or county importance; Temporary disturbance or damage to a small part of a feature of local importance; Loss of or damage to land of negligible nature conservation value; No reduction in the population of legally protected, nationally rare, nationally scarce or notable (regional level) species on the site or its immediate vicinity. Beneficial and adverse impacts balance such that resulting impact has no overall affect upon feature.
	Minor Beneficial	<ul style="list-style-type: none"> A small but clear and measurable gain in general wildlife interest, e.g. small-scale new habitats of wildlife value created where none

Impact Significance	Effect	Criteria
		existed before or where the new habitats exceeds in area that habitats lost.
Significant Positive Effect	Moderate Beneficial	<ul style="list-style-type: none"> ▪ Larger new scale habitats (e.g. net gains over 1 ha in area) created leading to significant measurable gains in relation to the objectives of biodiversity action plans.
	Major Beneficial	<ul style="list-style-type: none"> ▪ Major gains in new habitats (net gains of at least 10 ha) of high significance for biodiversity being those habitats, or habitats supporting viable species populations, of national or international importance cited in Annexes I and II of the habitats Directive or Annex I of the Birds Directive.

5.2. Impact duration

The duration of impact must also be considered when assessing overall ecological impacts. Criteria for assessment of duration of impacts used (EPA, 2022), the following terms are defined when quantifying duration:

- Temporary: up to 1 year
- Short-term: from 1-7 years
- Medium-term: 7-15 years
- Long-term: 15-60 years
- Permanent: over 60 years

The likelihood of impacts should also be defined. Assessment of likelihood of impact followed CIEEM guidelines. These assesses likelihood as follows:

- Almost Certain: probability estimated at greater than 95%
- Probable or Likely: probability estimated between 50% and 95%
- Unlikely: probability estimated between 5% and 50%
- Extremely Unlikely: probability estimated at less than 5%

The following sections give the evaluation of habitat areas encountered with consideration of impacts from the proposed project to habitats on and surrounding the site.

6. Evaluation of Significance of Impacts

6.1. Habitats

This section describes the significance of impacts on the habitats recorded during surveys. The table below summarises the potential for the proposed project to have impacts on these in terms of effect, duration and likelihood. These are then detailed further.

Table 9: Evaluation of Significance of Impacts on Habitats

Habitat Types	Impact Significance	Effect	Duration	Likelihood
Eroding/Upland Rivers	No Significant Effect	Minor adverse	Temporary	Probable/Likely
Arable Crops	No Significant Effect	Minor adverse	Permanent	Almost Certain
Treeline	No Significant Effect	Minor adverse	Permanent	Almost Certain
Immature Woodland	No Significant Effect	Negligible	Permanent	Almost Certain
Hedgerow	No Significant Effect	Minor adverse	Permanent	Almost Certain
Stone Walls & Other Stonework	No Significant Effect	Negligible	Permanent	Almost Certain
Buildings & Artificial Surfaces	No Significant Effect	Minor adverse	Permanent	Almost Certain
Oak-Ash-Hazel Woodland	No Significant Effect	Minor adverse	Permanent	Almost Certain
Improved Agricultural Field	No Significant Effect	Minor adverse	Permanent	Almost Certain
Dense Bracken	No Significant Effect	Minor adverse	Permanent	Almost Certain
Scrub	No Significant Effect	Minor adverse	Permanent	Almost Certain
Grassy Verge	No Significant Effect	Minor adverse	Permanent	Almost Certain

6.1.1. Eroding/Upland Rivers

Habitat Types	Impact Significance	Effect	Duration	Likelihood
Eroding/Upland Rivers	No Significant Effect	Minor adverse	Temporary	Probable/Likely

There are no plans to disturb the Kilbeg South Stream to facilitate works. As works will take place within close proximity to his watercourse, specific consideration should be given to silt and hydrocarbon control measures.

Mitigation for this habitat loss is detailed in Chapter 7 below.

6.1.2. Arable Crops

Habitat Types	Impact Significance	Effect	Duration	Likelihood
Arable Crops	No Significant Effect	Minor adverse	Permanent	Almost Certain

Works are due to take place along a 260m section of this habitat type to facilitate the construction of the proposed walkway. Features of ecological interest are not present within this habitat type at this location.

6.1.3. Treeline

Habitat Types	Impact Significance	Effect	Duration	Likelihood
Treeline	No Significant Effect	Minor adverse	Permanent	Almost Certain

There are two discrete treelines within the vicinity of the proposed route. One treeline, approx. 35m in length, will be traversed by the route, at Grid ref.: 51.75509274770461, -8.713447958525839. This is composed of Hawthorn & Hazel. A treeline, which is approx. 125m in length and subject to maintenance, situated between an area of dense bracken and the N71 road at Grid ref.: 51.75489350500486, -8.71441891818997 is due to be removed to facilitate sight lines. This contains two Holly, three Hawthorn, 1 Hazel and 13 Willow.

In accordance with Table 8 above, this significance of impact has been selected as '*No Significant Effect*' and '*Minor Adverse*' due to '*Loss of, or permanent damage to, a feature with some ecological value in a local context but that has no nature conservation designation*'.

Mitigation for this habitat loss is detailed in Chapter 7 below.

6.1.4. Immature Woodland

Habitat Types	Impact Significance	Effect	Duration	Likelihood
Immature Woodland	No Significant Effect	Negligible	Permanent	Almost Certain

There are no plans to disturb the Immature Woodland to facilitate works.

6.1.5. Hedgerow

Habitat Types	Impact Significance	Effect	Duration	Likelihood
Hedgerow	No Significant Effect	Minor adverse	Permanent	Almost Certain

Two sections are present along the proposed route, beside an old road which diverts off the N71 and at the eastern side of the route. Both will be traversed. The location beside an old road is Grid ref.: 51.75641628925918, -8.708222562068624. This is composed of Privet and Cypress. The second is north of the arable field at the eastern end of the route, spanning 50m in length, at Grid ref.: 51.757187964737355, -8.70640468766039. This is mainly comprised

of bramble and Ash, growing on an earth/stone bund, which is subject to regular maintenance from the landowner which has resulted in low ecological quality.

In accordance with Table 8 above, this significance of impact has been selected as '*No Significant Effect*' and '*Minor Adverse*' due to '*Loss of, or permanent damage to, a feature with some ecological value in a local context but that has no nature conservation designation*'.

Mitigation for this habitat loss is detailed in Chapter 7 below.

6.1.6. Stone Walls & Other Stonework

Habitat Types	Impact Significance	Effect	Duration	Likelihood
Stone Walls & Other Stonework	No Significant Effect	Negligible	Permanent	Almost Certain

There are no plans to disturb the existing stone wall to facilitate works.

6.1.7. Buildings & Artificial Surfaces

Habitat Types	Impact Significance	Effect	Duration	Likelihood
Buildings & Artificial Surfaces	No Significant Effect	Minor adverse	Permanent	Almost Certain

The proposed route will follow this habitat for a distance of approx. 250m. Features of ecological interest are not present within this habitat type at this location.

6.1.8. Oak-Ash-Hazel Woodland

Habitat Types	Impact Significance	Effect	Duration	Likelihood
Oak-Ash-Hazel Woodland	No Significant Effect	Minor adverse	Permanent	Almost Certain

This habitat is situated on a slope between an agricultural field and old road/agricultural avenue at Grid ref.: 51.755598225798146, -8.711840693056537. This is dominated by Hazel trees, with large mature Oak also present. The proposed route will traverse this habitat for a distance of c. 40m which will result in a loss of habitat approx. 0.134ha on size. This will result in the removal of approx. 35 Hazel, 2 Oak & 5 Holly trees to facilitate the construction of the walkway.

In accordance with Table 8 above, this significance of impact has been selected as '*No Significant Effect*' and '*Minor Adverse*' due to '*Loss of, or permanent damage to, a feature with some ecological value in a local context but that has no nature conservation designation*'.

Mitigation for this habitat loss, as well as associated faunal species, is detailed in Chapter 7 below.

6.1.9. Improved Agricultural Field

Habitat Types	Impact Significance	Effect	Duration	Likelihood
Improved Agricultural Field	Significant Positive Effect	Minor adverse	Permanent	Almost Certain

The proposed route crosses this habitat for a distance of approx. 125m. Features of ecological interest are not present within this habitat type at this location.

6.1.10. Dense Bracken

Habitat Types	Impact Significance	Effect	Duration	Likelihood
Dense Bracken	No Significant Effect	Minor adverse	Permanent	Almost Certain

A linear strip of this habitat type is present at Grid ref.: 51.75493408748999, - 8.714056197704519. This area has been subject to maintenance cutting of surrounding trees for overhead powerlines. The proposed route will cross a section of the habitat type approx. 110m in length and result in the removal of approx. 0.142ha.

6.1.11. Scrub

Habitat Types	Impact Significance	Effect	Duration	Likelihood
Scrub	No Significant Effect	Minor adverse	Permanent	Almost Certain

The proposed route progresses in a westerly direction through one area of scrub for a distance of approx. 15m, which equates to an area approx. 0.021ha, which is dominated by Blackthorn, Hawthorn, Willow and Bramble. Some of this area has been recently cleared and is subject to maintenance along the avenue. Works will result in the permanent removal of some scrub habitat.

In accordance with Table 8 above, this significance of impact has been selected as '*No Significant Effect*' and '*Minor Adverse*' due to '*Loss of, or permanent damage to, a feature with some ecological value in a local context but that has no nature conservation designation*'.

Mitigation for this habitat loss, as well as associated faunal species, is detailed in Chapter 7 below.

6.1.10. Grassy Verge

Habitat Types	Impact Significance	Effect	Duration	Likelihood
Grassy Verge	No Significant Effect	Minor adverse	Permanent	Almost Certain

Grassy verge habitat will be crossed at the western end of the proposed route. Features of ecological interest are not present within this habitat type at this location.

6.1.11. Cumulative Effects (Habitats)

There are no other plans or projects known to the authors at time of writing that would, in combination with the above predicted impacts, give rise to significant cumulative effects on the habitats within the receiving environment.

6.2. Impacts on Fauna

This section describes the significance of impacts on the species recorded during surveys. The table below summarises the potential for the proposed project to have impacts on these in terms of effect, duration and likelihood. These are then detailed further.

Table 10: Evaluation of Significance of Impacts on Fauna

Group / Species	Impact Significance	Effect	Duration	Likelihood
Mammals	No Significant Effect	Minor adverse	Temporary	Probable/Likely
Rationale: Evidence of badger as one faeces was located on a pre-existing path. Setts are not present. Rabbit burrows are present however they are not protected. Works may cause temporary disturbance to badgers but it is predicted that this will be minimal in duration due to the mitigation measures prescribed in the next chapter.				
Breeding Birds	No Significant Effect	Minor adverse	Temporary	Almost certain
Rationale: Clearance of sections of habitat containing bird nesting potential is required. Bird nesting potential will be reduced because of this. Trees which contain nest boxes are also present. Mitigation measures are prescribed in the next chapter.				
Wetland, Over-wintering and Wading Birds	No Significant Effect	Negligible	Temporary	Almost certain
Rationale: No suitable habitat for these species occurs within or close to proposed site of works.				
Amphibians and Reptiles	No Significant Effect	Negligible	Temporary	Almost certain
Rationale: No suitable habitat for these species occurs within or close to proposed site of works.				

Fish Species	No Significant Effect	Minor adverse	Temporary	Unlikley
Rationale: There are no plans to disturb the Kilbeg South Stream to facilitate works. As works will take place within close proximity to his watercourse and it is hydrologically connected to the Bandon River, mitigation measures are prescribed in the next chapter.				
Bats	No Significant Effect	Minor adverse	Temporary	Almost certain
Rationale: Trees containing bat (<i>Chiroptera sp.</i>) potential were detected within the project works area. Two mature Oak trees contained low bat potential are located within the Oak-Ash-Hazel Woodland. Mitigation measures are prescribed in the next chapter.				

6.2.1. Cumulative Effects (Fauna)

There are no other plans or projects known to the authors at time of writing that would, in combination with the above predicted impacts, give rise to significant cumulative effects on the species of fauna recorded within the receiving environment.

6.3. Impacts: Conclusion

6.3.1. Impacts on Designated Sites

An Appropriate Assessment Screening was carried out on the proposed works at this site. In conclusion, impacts to Natura 2000 sites were not considered to be likely as a result of the proposed project. It is therefore concluded that a full Appropriate Assessment (Stage II) was not required and works may proceed as planned.

6.3.2. Impacts on Habitats

An impact significance of '*No Significant Effect*' is predicted for all habitat types. '*Minor Adverse*' impacts of a '*Temporary*' nature are predicted for eroding/upland rivers. '*Minor Adverse*' impacts of a '*Permanent*' nature are predicted for Arable Crops, Treeline, Hedgerow, Buildings & Artificial Surfaces, Oak-Ash-Hazel Woodland, Improved Agricultural Field, Dense Bracken, Scrub and Grassy Verge. '*Negligible*' impacts are predicted for Immature Woodland and Stone Walls & Other Stonework. Appropriate mitigation measures are prescribed in Chapter 7 below as impacts detailed above cannot be avoided.

6.3.3. Impacts on Fauna

An impact significance of '*No Significant Effect*' are predicted on all faunal species. '*Minor Adverse*' impacts are predicted for mammals, breeding birds, fish species and bats. No impacts are predicted for Wetland, Over-wintering and Wading Birds and Amphibians & Reptiles. Appropriate mitigation measures are prescribed in Chapter 7 below.

6.3.4. Cumulative Effects

There are no other plans or projects known to the author at time of writing that would, in combination with the above predicted impacts give rise to significant cumulative effects on the receiving environment.

7. Impact Mitigation

7.1. Mitigation

A number of measures are proposed to mitigate against any potential impacts described in the above section. These measures are considered best practice, are not necessary for the protection of any designated sites and are detailed below.

Table 11: Schedule of Agreed Mitigation for Habitats

Habitat	Mitigation Measure (s)	Rationale
Eroding/Upland Rivers	<ul style="list-style-type: none"> Area of works to be limited. Machinery will be checked and maintained before works commence. Any earth works which have the potential to release silt to the Kilbeg South Stream will be de-lined and protected using silt fencing. Re-fuelling of machinery is to take place a safe distance away from any river, stream or drain. Spill kits to be kept onsite at all times. 	<ul style="list-style-type: none"> The Bandon River, adjacent to the survey area and proposed route, possesses a mosaic of habitats which are favourable to species of high conservation interest, such as Atlantic salmon. Mitigation measures are required for the conservation of habitats and to conserve habitats for protected species.
Arable Crops	<ul style="list-style-type: none"> Area of works to be delineated and limited. 	<ul style="list-style-type: none"> To limit impacts on habitat type.
Treeline	<ul style="list-style-type: none"> Area of works to be delineated and limited. To avoid negative impacts on surrounding trees which are not due to be cleared, the route design will be cognisant of the following Guidelines: <ul style="list-style-type: none"> NRA. Guidelines for the Protection & Preservation of Trees, Hedgerows & Scrub Prior to, During and Post Construction of National Roads. The route design will have input from relevant project engineers, a landscape designer, an arborist and ecologist. Clearance works to be undertaken in consultation with an ecologist. Landscaping post works will take the opportunity to re-establish stands of trees which were removed during the pre-works clearance stage. An estimated treeline length of 108m will be removed and it is estimated a total length of 865m of treeline/hedgerow habitat, incorporating tree species which were originally removed, will be replanted. Estimated outline of vegetation removal/planting is included in Appendix A below. Any trees which are damaged or removed, due to unforeseen circumstances, will be recorded and replaced as part of the landscaping plan. 	<ul style="list-style-type: none"> To limit impacts on habitat type.

	<ul style="list-style-type: none"> • Future maintenance plans will follow best practise procedures. This will be informed by relevant project engineers, a landscape designer, an arborist and ecologist. • Old Man's Beard (<i>Clematis vitalba</i>) is present along the route. Whilst it is not part of the Third Schedule listed on Sections 49 and 50 of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011), it is advised that trees within the proposed route are grubbed up and buried onsite or mulched and brought to a licensed landfill. 	
Immature Woodland	<ul style="list-style-type: none"> • None required. 	<ul style="list-style-type: none"> • Habitat type will not be affected by works.
Hedgerow	<ul style="list-style-type: none"> • Area of works to be delineated and limited. • Clearance works to be undertaken in consultation with an ecologist. • Landscaping post works will take the opportunity to re-establish stands of native trees and spinose plants Hawthorn, Blackthorn and Holly. Estimated outline of vegetation removal/planting is included in Appendix A below. • Future maintenance plans will follow best practise procedures. This will be informed by relevant project engineers, a landscape designer, an arborist and ecologist. • Old Man's Beard (<i>Clematis vitalba</i>) is present along the route. Whilst it is not part of the Third Schedule listed on Sections 49 and 50 of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011), it is advised that trees within the proposed route are grubbed up and buried onsite or mulched and brought to a licensed landfill. 	<ul style="list-style-type: none"> • To limit impacts on habitat type.
Stone Walls & Other Stonework	<ul style="list-style-type: none"> • None required. 	<ul style="list-style-type: none"> • Habitat type will not be affected by works.
Buildings & Artificial Surfaces	<ul style="list-style-type: none"> • None required. 	<ul style="list-style-type: none"> • Habitat type does not possess ecological value.
Oak-Ash-Hazel Woodland	<ul style="list-style-type: none"> • Area of works to be delineated and limited. • Clearance works to be undertaken in consultation with an ecologist. • To avoid negative impacts on surrounding trees which are not due to be cleared, the route design will be cognisant of the following Guidelines: <ul style="list-style-type: none"> ◦ NRA. Guidelines for the Protection & Preservation of Trees, Hedgerows & Scrub Prior to, During and Post Construction of National Roads. • The route design will have input from relevant project engineers, a landscape designer, an arborist and ecologist. 	<ul style="list-style-type: none"> • To limit impacts on habitat type.

	<ul style="list-style-type: none"> Landscaping post works will take the opportunity to re-establish stands of trees which were removed during the pre-works clearance stage. An estimated woodland area of 0.134ha will be removed and it is estimated an area 0.142ha will be replanted with Oak & Hazel. This area to be replanted is located in an area of dense bracken which needs to be removed to facilitate works. Estimated outline of vegetation removal/planting is included in Appendix A below. Future maintenance plans will follow best practise procedures. This will be informed by relevant project engineers, a landscape designer, an arborist and ecologist. Old Man's Beard (<i>Clematis vitalba</i>) is present along the route. Whilst it is not part of the Third Schedule listed on Sections 49 and 50 of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011), it is advised that trees within the proposed route are grubbed up and buried onsite or mulched and brought to a licensed landfill. 	
Improved Agricultural Field	<ul style="list-style-type: none"> Area of works to be delineated and limited. 	<ul style="list-style-type: none"> To limit impacts on habitat type.
Dense Bracken	<ul style="list-style-type: none"> Area of works to be delineated and limited. Clearance to be conducted under ecological supervision. To preserve the seed base, the initial scrape of material from this area can be stockpiled and reinstated post works. It is to be reinstated in the area which will be replanted with Oak/Hazel woodland. Works will follow the advice of an ecologist. Estimated outline of vegetation removal/planting is included in Appendix A below. 	<ul style="list-style-type: none"> To limit impacts on habitat type.
Scrub	<ul style="list-style-type: none"> Area of works to be delineated and limited. Clearance to be conducted under ecological supervision. Hawthorn, blackthorn and willow may be replanted in suitable areas post works. It is estimated an area 0.144ha will be removed and it is estimated a total length of 865m of treeline/hedgerow habitat will be replanted. Estimated outline of vegetation removal/planting is included in Appendix A below. 	<ul style="list-style-type: none"> To limit impacts on habitat type.
Grassy Verge	<ul style="list-style-type: none"> Areas of this habitat removed to facilitate works will be re planted with certified, native wildflower plants during the landscaping phase of works. 	<ul style="list-style-type: none"> Increase the ecological value within areas of this habitat type.

* The following guidance documents are provided as a non-exhaustive list for reference:

- IFI (2016). Guidelines on Protection of Fisheries During Construction Works In And Adjacent To Waters. Inland Fisheries Ireland.
- NRA. Guidelines for the Protection & Preservation of Trees, Hedgerows & Scrub Prior to, During and Post Construction of National Roads.

Table 12 : Schedule of Recommended Mitigation for Fauna

Species	Mitigation Measure (s)	Rationale
Mammals	<ul style="list-style-type: none"> • No holts or setts exist within the proposed works area. • Ecological surveys will be required prior to any works commencing. • Extent of works area to be limited. • Hours of works are not to include dawn or dusk. • Machinery to be switched off when not in use. 	<ul style="list-style-type: none"> • Badger faeces were recorded within the survey area. • These mitigation measures limit disturbance.
Breeding Birds	<ul style="list-style-type: none"> • If feasible, vegetation clearance should avoid the bird nesting season between March 1st & August 31st. • Once vegetation clearance commences, areas with the highest potential for nesting birds, such as hedgerows and scrub, will be cleared first. If clearance is required during the bird nesting season, bird nesting surveys will be undertaken by an ecologist prior to works commencing. Vegetation shall then be removed within 48 hours of the survey. Any vegetation not removed will require a subsequent survey. • Should a nest be found, best practise dictates that NPWS should be notified and the nest be retained. Hazard tape should be erected 15m either side of the nest to retain the nest until the brood period has ended. This will be checked and determined by the site ecologist. • Nest boxes are present in an area of woodland at Grid Reference 51.755624551191886, - 8.711616853589337. These should be removed prior to the bird nesting season commencing and relocated to a suitable area. • Hours of works are not to include dawn or dusk. • Machinery to be switched off when not in use. 	<ul style="list-style-type: none"> • Nesting habitat present. • These mitigation measures limit disturbance.
Fish Species	<ul style="list-style-type: none"> • Area of works to be limited. • Machinery will be checked and maintained before works commence. • Any earth works which have the potential to release silt to the Kilbeg South Stream should be de-lineated and protected using silt fencing. • Re-fuelling of machinery is to take place a safe distance away from any river, stream or drain. • Spill kits to be kept onsite at all times. 	<ul style="list-style-type: none"> • The Bandon River is a recognised salmonid river. • These mitigation measures limit disturbance, injury/mortality to fish species, limit release of suspended solids, limit release of hydrocarbons and limit damage caused to instream habitats.

Bats	<ul style="list-style-type: none">• Two mature Oak trees were recorded as having low to medium bat potential. These are located in the Oak-Ash-Hazel Woodland. An emergence survey, at an appropriate time of year (May to October), will be conducted prior to removal.• NPWS to be consulted with regards to the survey results and further mitigation which may be required to be undertaken with their approval.• Erect a suitable number of bat boxes in appropriate locations, as advised by an ecologist.	<ul style="list-style-type: none">• Bat habitat present.• These mitigation measures limit disturbance.
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7.2 Residual Impacts After Mitigation

If the above mitigation is implemented correctly, it is considered that there should be no significant residual impacts upon habitats and fauna along the proposed route for the Clare O'Leary Walk. Mitigation measures are site specific and are designed to ensure negative effects are not observed within the receiving environment.

8. Discussion

This impact assessment, along the proposed active travel route and the works areas to achieve the adequate sight lines required for 2 no. existing entrances, considers the works to be of '*negligible*' to '*minor adverse*' impact.

This route was originally chosen and designed to minimise disruption to the receiving environment. Works to habitats as a result of achieving adequate sightlines for 2 no. existing entrances are unavoidable and mitigation has taken these impacts into consideration.

It is considered that any '*minor adverse*' impacts, which was highlighted in Chapter 6, has been suitably mitigated for in Chapter 8 and no significant residual impacts, post works and through the operational phase, are foreseen.

The mitigation measures prescribed in Chapter 8 above will ensure that the negative effects incurred upon habitats and species will be minimal and temporary in duration. These mitigation measures are required as disturbance to habitats and fauna could not be ruled out. Mitigation has been carefully considered and adapted to be site specific to the proposed route for the Clare O'Leary Walk and works areas required for improving the sightlines, which is required for the safety of the 2 no. existing entrances. These measures are varied and take into consideration recognized best practice procedures. Some facets of works will be supervised by an ecologist and pre-construction surveys are advised so new mammal activity, such as a badger sett, is detected.

The project offers a new opportunity to raise public awareness of the value of biodiversity and every effort through the implementation of landscaping plans and installation of signage detailing local flora and fauna, should be taken.

Mitigation outlined in Chapter 7 has aimed to quantify the areas and lengths of different habitats to be removed and how they will be replanted in suitable locations. Undertaking this exercise helps to ensure there will be no net biodiversity loss as a result of the works. Implementing a suitable and varied planting strategy, along with altering the current maintenance regime which is evident along some treelines, will establish an overall biodiversity net gain. This commitment is underlined by the volume of areas to be replanted in comparison to the areas to be removed. It is estimated hedgerow, treeline, woodland and scrub habitat to be removed equate to an area c. 0.338ha whilst areas to be planted equate to c. 0.354ha. The bracken area which requires removal will be replanted within close vicinity to the area it was removed from. Whilst the project is ongoing, any other opportunities for replanting will be utilised and grassy verge areas, which at present have minimal ecological value, will be planted with certified, native wildflower meadows adapted to grow at a low height which will not impact upon sight lines. Areas to be replanted have not taken wildflower areas for replanting into consideration at this juncture and this will add more to the biodiversity value of the area.

Significant negative impacts were not predicted for any habitats or species.

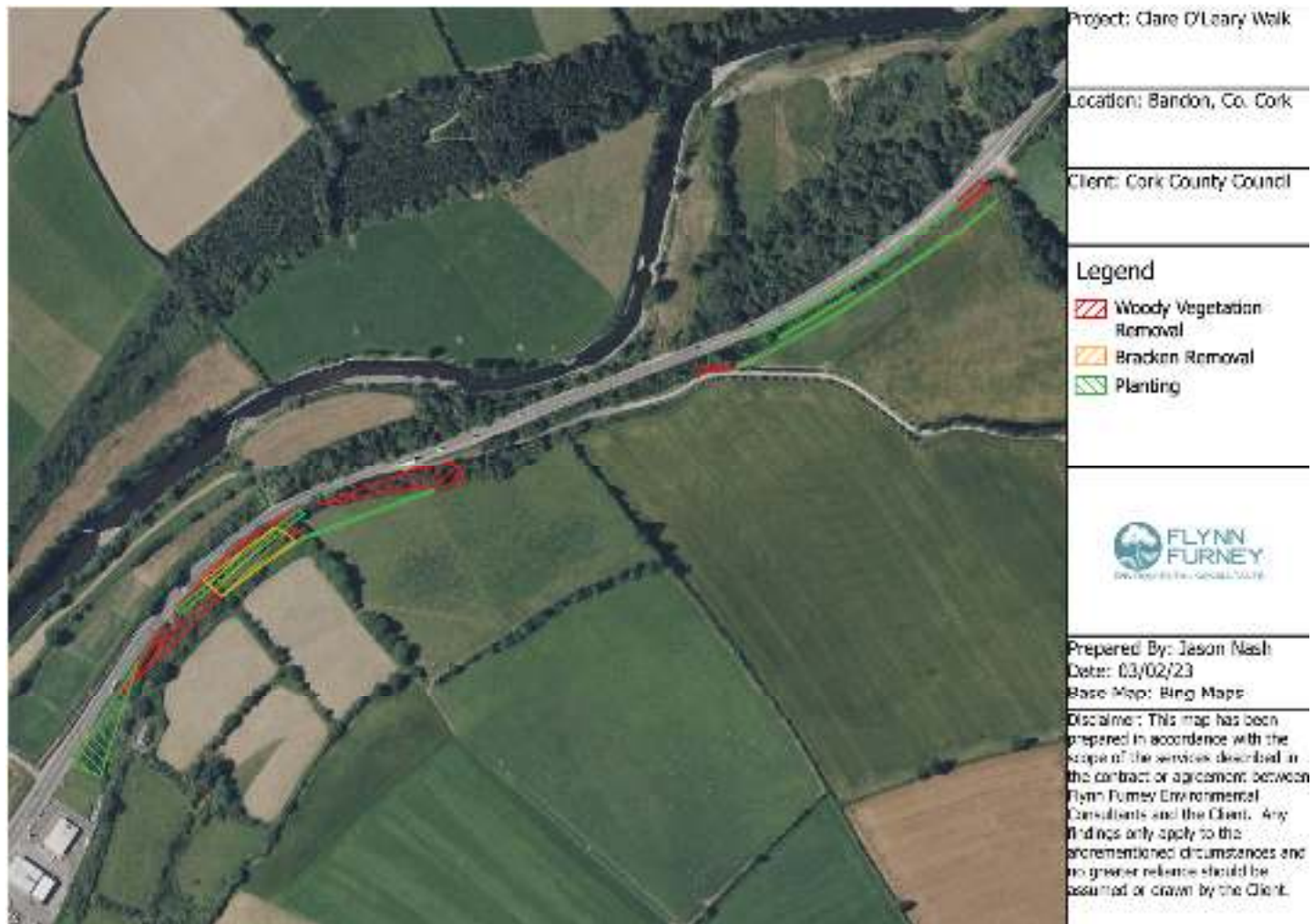
Initial consultations have taken place with Michael McPartland, Senior Environmental Officer for IFI and Kathryn Freeman, Ranger for NPWS. Liaison will continue throughout the project.

9. References

- CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester, UK.
- European Commission DE, 2001. Assessment of plans and projects significantly affecting Natura 2000 sites.
- Fossitt, J.A. (2000) *A Guide to Habitats in Ireland*. The Heritage Council, Kilkenny.
- IFI (2016). Guidelines on Protection of Fisheries During Construction Works In And Adjacent To Waters. Inland Fisheries Ireland
- JNCC (2010) *Handbook for Phase 1 Habitat Survey*. Joint Nature Conservation Committee, Peterborough, UK.
- National Roads Authority (2005) Guidelines for the Crossing of Watercourses during the Construction of National Road Schemes
- National Roads Authority (2009). *Guidelines For The Assessment of Ecological Impacts Of National Road Schemes*. NRA, Dublin (now Transport Infrastructure Ireland).
- Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes (2009)
- Parnell, J. & Curtis, T. (2012) *Webb's An Irish Flora*. Cork University Press, Cork.
- Scannell, M J P and Synott, D M, (1987) *Census Catalogue of the Flora of Ireland*. Stationary Office, Dublin
- SEPA (2008). Engineering in the Water - Environment Good Practice Guide Construction of River Crossings. WAT-SG-25: First edition. Scottish Environmental Protection Agency ^[1]_{SEPA}
- SEPA (2009). Engineering in the Water - Environment Good Practice Guide Temporary Construction Methods. WAT-SG-29: First edition. Scottish Environmental Protection Agency
- Smith, G.F., O'Donoghue, P., O'Hora, K. and Delaney, E., (2011) *Best practice guidance for habitat survey and mapping*. The Heritage Council: Ireland.
- Wyse Jackson, M., FitzPatrick, Ú., Cole, E., Jebb, M., McFerran, D., Sheehy Skeffington, M. & Wright, M. (2016). Ireland Red List No. 10: Vascular Plants. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, Dublin, Ireland.
- https://www.epa.ie/publications/monitoring--assessment/assessment/EIAR_Guidelines_2022_Web.pdf

Appendix A

Estimated Vegetation Removal and Planting Areas



Appendix B

National Biodiversity Data

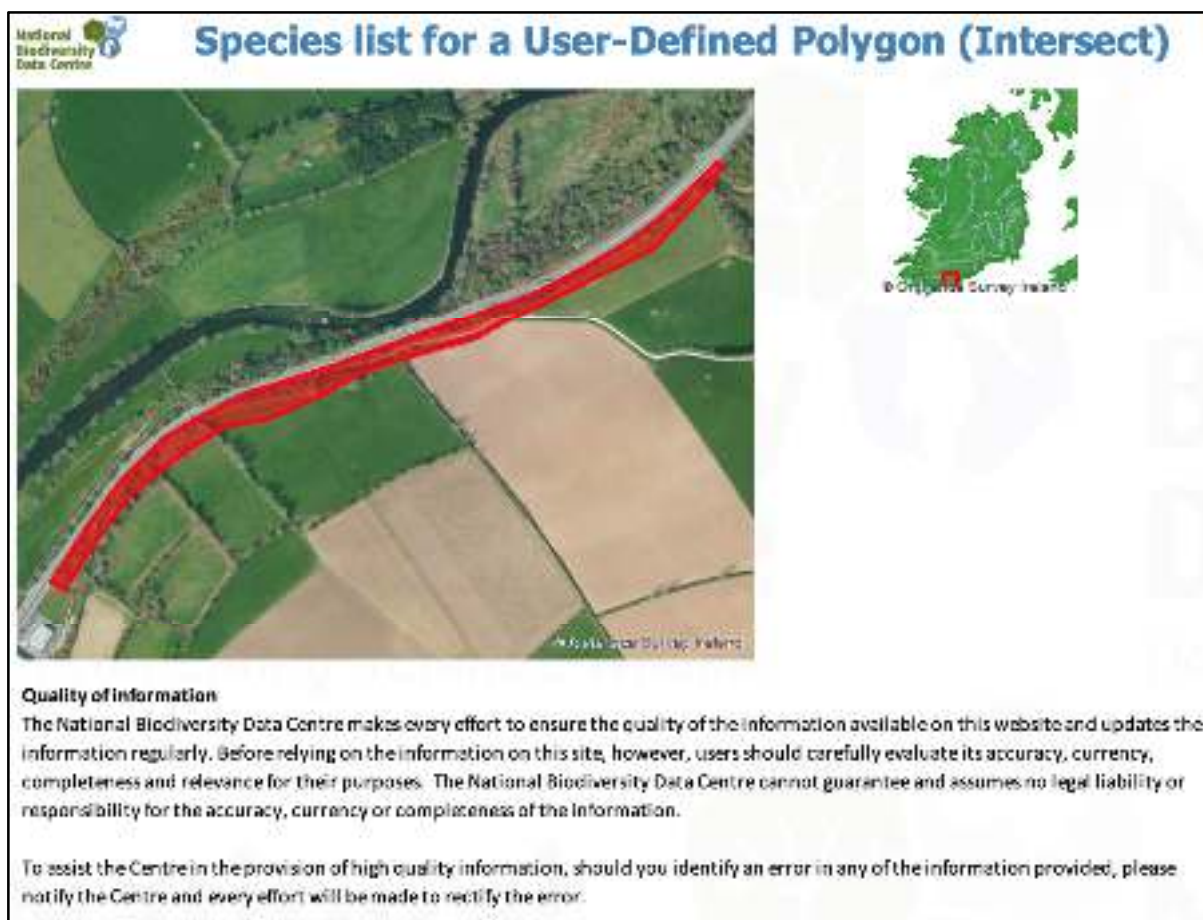


Figure 5: The defined polygon areas for which a desktop search of National Biodiversity Data Centre data was conducted, using the 'Intersect' function.

The table below shows the records of species recorded in squares intersected by the survey area (note that many of these records were recorded outside of the site boundary, in the tetrad intersected by the study area (See Figure 5).

Feature name	Species group	Species name	Record count	Date of last record	Title of dataset	Designation
Custom	alga	Horned Wrack (Fucus ceranoides)	1	31/12/1960	Seaweeds of Ireland	
Custom	bird	Barn Owl (Tyto alba)	1	31/07/1991	The Second Atlas of Breeding Birds in Britain and Ireland: 1988-1991	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Custom	bird	Barn Swallow (Hirundo rustica)	5	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	Bar-tailed Godwit (Limosa lapponica)	1	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	Black-billed Magpie (Pica pica)	7	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Blackcap (Sylvia atricapilla)	3	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Black-headed Gull (Larus ridibundus)	2	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Custom	bird	Black-tailed Godwit (Limosa limosa)	1	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	Blue Tit (Cyanistes caeruleus)	6	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Cattle Egret (Bubulcus ibis)	1	31/12/2011	Bird Atlas 2007 - 2011	

Custom	bird	Chaffinch (Fringilla coelebs)	7	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Coal Tit (Periparus ater)	6	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Common Blackbird (Turdus merula)	7	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Common Bullfinch (Pyrrhula pyrrhula)	6	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Common Buzzard (Buteo buteo)	2	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Common Chiffchaff (Phylloscopus collybita)	5	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Common Coot (Fulica atra)	2	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section II Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	Common Grasshopper Warbler (Locustella naevia)	2	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	Common Greenshank (Tringa nebularia)	2	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List

Custom	bird	Common Kestrel (Falco tinnunculus)	6	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	Common Kingfisher (Alcedo atthis)	3	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	Common Linnet (Carduelis cannabina)	4	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	Common Moorhen (Gallinula chloropus)	5	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Common Pheasant (Phasianus colchicus)	7	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section I Bird Species
Custom	bird	Common Raven (Corvus corax)	3	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Common Redshank (Tringa totanus)	2	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List

Custom	bird	Common Shelduck (<i>Tadorna tadorna</i>)	5	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	Common Snipe (<i>Gallinago gallinago</i>)	4	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section III Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	Common Starling (<i>Sturnus vulgaris</i>)	6	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	Common Swift (<i>Apus apus</i>)	3	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	Common Whitethroat (<i>Sylvia communis</i>)	2	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Common Wood Pigeon (<i>Columba palumbus</i>)	7	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section I Bird Species
Custom	bird	Eurasian Collared Dove (<i>Streptopelia decaocto</i>)	5	31/12/2011	Bird Atlas 2007 - 2011	

Custom	bird	Eurasian Curlew (Numenius arquata)	2	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section II Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Custom	bird	Eurasian Hobby (Falco subbuteo)	1	01/06/2010	Rare birds of Ireland	
Custom	bird	Eurasian Jackdaw (Corvus monedula)	7	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Eurasian Jay (Garrulus glandarius)	3	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Eurasian Oystercatcher (Haematopus ostralegus)	2	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	Eurasian Siskin (Carduelis spinus)	2	31/07/1991	The Second Atlas of Breeding Birds in Britain and Ireland: 1988-1991	
Custom	bird	Eurasian Sparrowhawk (Accipiter nisus)	4	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Eurasian Spoonbill (Platalea leucorodia)	1	31/12/1860	Rare birds of Ireland	
Custom	bird	Eurasian Teal (Anas crecca)	1	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section II Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	Eurasian Treecreeper (Certhia familiaris)	3	31/12/2011	Bird Atlas 2007 - 2011	

Custom	bird	Eurasian Wigeon (Anas penelope)	1	29/02/1984	The First Atlas of Wintering Birds in Britain and Ireland: 1981/82-1983/84.	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section II Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	Eurasian Woodcock (Scolopax rusticola)	1	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section III Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	European Goldfinch (Carduelis carduelis)	4	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	European Greenfinch (Carduelis chloris)	6	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	European Robin (Erithacus rubecula)	6	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Fieldfare (Turdus pilaris)	2	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Garden Warbler (Sylvia borin)	1	31/07/1972	The First Atlas of Breeding Birds in Britain and Ireland: 1968-1972.	
Custom	bird	Goldcrest (Regulus regulus)	7	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Great Black- backed Gull (Larus marinus)	2	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List

Custom	bird	Great Cormorant (Phalacrocorax carbo)	1	29/02/1984	The First Atlas of Wintering Birds in Britain and Ireland: 1981/82-1983/84.	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	Great Tit (Parus major)	5	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Grey Heron (Ardea cinerea)	5	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Grey Wagtail (Motacilla cinerea)	5	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Hedge Accentor (Prunella modularis)	5	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Herring Gull (Larus argentatus)	2	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Custom	bird	Hooded Crow (Corvus cornix)	7	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	House Martin (Delichon urbicum)	3	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	House Sparrow (Passer domesticus)	5	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	Lesser Black-backed Gull (Larus fuscus)	1	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	Lesser Redpoll (Carduelis cabaret)	3	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Little Bittern (Ixobrychus minutus)	1	06/06/1868	Rare birds of Ireland	

Custom	bird	Little Egret (<i>Egretta garzetta</i>)	3	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species
Custom	bird	Little Grebe (<i>Tachybaptus ruficollis</i>)	1	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	Long-eared Owl (<i>Asio otus</i>)	2	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Long-tailed Tit (<i>Aegithalos caudatus</i>)	3	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Mallard (Anas <i>platyrhynchos</i>)	7	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section I Bird Species
Custom	bird	Meadow Pipit (<i>Anthus pratensis</i>)	4	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Mew Gull (<i>Larus canus</i>)	1	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	Mistle Thrush (<i>Turdus viscivorus</i>)	2	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Mute Swan (<i>Cygnus olor</i>)	6	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List

Custom	bird	Northern Lapwing (Vanellus vanellus)	2	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section II Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Custom	bird	Peregrine Falcon (Falco peregrinus)	2	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species
Custom	bird	Redwing (Turdus ilicatus)	2	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Reed Bunting (Emberiza schoeniclus)	3	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Rock Pigeon (Columba livia)	4	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species
Custom	bird	Rook (Corvus frugilegus)	7	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Sand Martin (Riparia riparia)	3	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	Sedge Warbler (Acrocephalus schoenobaenus)	3	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Sky Lark (Alauda arvensis)	2	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List

Custom	bird	Song Thrush (<i>Turdus philomelos</i>)	5	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Spotted Flycatcher (<i>Muscicapa striata</i>)	3	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	Stock Pigeon (<i>Columba oenas</i>)	3	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	Stonechat (<i>Saxicola torquata</i>)	3	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Water Rail (<i>Rallus aquaticus</i>)	2	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Custom	bird	White Wagtail (<i>Motacilla alba</i>)	6	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	White's Thrush (<i>Zoothera dauma</i>)	1	05/12/1842	Rare birds of Ireland	
Custom	bird	White-throated Dipper (<i>Cinclus cinclus</i>)	3	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Willow Warbler (<i>Phylloscopus trochilus</i>)	4	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Winter Wren (<i>Troglodytes troglodytes</i>)	6	31/12/2011	Bird Atlas 2007 - 2011	
Custom	bird	Yellowhammer (<i>Emberiza citrinella</i>)	4	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Custom	fern	Black Spleenwort (<i>Asplenium adiantum-nigrum</i>)	2	11/08/1994	Species Data from the National Vegetation Database	

Custom	fern	Bracken (Pteridium aquilinum)	9	26/08/1994	Species Data from the National Vegetation Database	
Custom	fern	Broad Buckler- fern (Dryopteris dilatata)	6	11/08/1994	Species Data from the National Vegetation Database	
Custom	fern	Hard-fern (Blechnum spicant)	6	26/08/1994	Species Data from the National Vegetation Database	
Custom	fern	Hart's-tongue (Phyllitis scolopendrium)	5	26/08/1994	Species Data from the National Vegetation Database	
Custom	fern	Hay-scented Buckler-fern (Dryopteris aemula)	3	04/08/1994	Species Data from the National Vegetation Database	
Custom	fern	Intermediate Polypody (Polypodium interjectum)	1	09/08/1994	Species Data from the National Vegetation Database	
Custom	fern	Male-fern (Dryopteris filix- mas)	9	26/08/1994	Species Data from the National Vegetation Database	
Custom	fern	Soft Shield-fern (Polystichum setiferum)	9	26/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Annual Meadow- grass (Poa annua)	2	11/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Ash (Fraxinus excelsior)	3	10/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Bell Heather (Erica cinerea)	3	09/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Bitter-vetch (Lathyrus linifolius)	3	09/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Blackthorn (Prunus spinosa)	5	11/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Bramble (Rubus fruticosus agg.)	13	26/08/1994	Species Data from the National Vegetation Database	

Custom	flowering plant	Broad-leaved Dock (<i>Rumex obtusifolius</i>)	8	26/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Broad-leaved Willowherb (<i>Epilobium montanum</i>)	2	10/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Canadian Waterweed (<i>Elodea canadensis</i>)	2	14/07/2006	National Invasive Species Database	Invasive Species: Invasive Species Invasive Species: Invasive Species >> High Impact Invasive Species Invasive Species: Invasive Species >> Regulation S.I. 477 (Ireland)
Custom	flowering plant	Cat's-ear (<i>Hypochaeris radicata</i>)	2	26/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Cleavers (<i>Galium aparine</i>)	8	11/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Clustered Dock (<i>Rumex conglomeratus</i>)	2	10/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Cock's-foot (<i>Dactylis glomerata</i>)	11	26/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Common Bird's-foot-trefoil (<i>Lotus corniculatus</i>)	5	09/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Common Couch (<i>Elytrigia repens</i>)	3	26/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Common Dog-violet (<i>Viola riviniana</i>)	9	26/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Common Knapweed (<i>Centaurea nigra</i>)	3	26/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Common Mouse-ear (<i>Cerastium fontanum</i>)	1	04/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Common Nettle (<i>Urtica dioica</i>)	9	26/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Common Ragwort (<i>Senecio jacobaea</i>)	2	26/08/1994	Species Data from the National Vegetation Database	

Custom	flowering plant	Common Sedge (Carex nigra)	1	04/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Common Sorrel (Rumex acetosa)	11	26/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Corn Mint (Mentha arvensis)	2	08/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Creeping Bent (Agrostis stolonifera)	9	26/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Creeping Buttercup (Ranunculus repens)	7	26/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Creeping Cinquefoil (Potentilla reptans)	9	26/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Creeping Thistle (Cirsium arvense)	5	26/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Curled Dock (Rumex crispus)	1	09/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Cut-leaved Crane's-bill (Geranium dissectum)	2	26/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Dog-rose (Rosa canina)	2	10/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Dove's-foot Crane's-bill (Geranium molle)	1	10/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Eared Willow (Salix aurita)	2	04/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	False Oat-grass (Arrhenatherum elatus)	10	26/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	False-brome (Brachypodium sylvaticum)	1	04/08/1994	Species Data from the National Vegetation Database	

Custom	flowering plant	Foxglove (<i>Digitalis purpurea</i>)	1	09/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Germander Speedwell (<i>Veronica chamaedrys</i>)	10	11/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Gorse (<i>Ulex europaeus</i>)	12	26/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Greater Bird's-foot-trefoil (<i>Lotus pedunculatus</i>)	7	26/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Greater Plantain (<i>Plantago major</i>)	7	11/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Greater Stitchwort (<i>Stellaria holostea</i>)	5	11/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Groundsel (<i>Senecio vulgaris</i>)	1	10/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Hawthorn (<i>Crataegus monogyna</i>)	9	26/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Heath Bedstraw (<i>Galium saxatile</i>)	1	08/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Hedge Bindweed (<i>Calystegia sepium</i>)	1	04/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Hedge Woundwort (<i>Stachys sylvatica</i>)	5	11/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Herb-Robert (<i>Geranium robertianum</i>)	7	11/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Himalayan Knotweed (<i>Persicaria wallichii</i>)	1	12/10/2015	National Invasive Species Database	Invasive Species: Invasive Species Invasive Species: Invasive Species >> Medium Impact Invasive Species Invasive Species: Invasive Species >> Regulation S.I. 477 (Ireland)
Custom	flowering plant	Hogweed (<i>Heracleum sphondylium</i>)	6	26/08/1994	Species Data from the National Vegetation Database	

Custom	flowering plant	Holly (<i>Ilex aquifolium</i>)	1	10/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Honeysuckle (<i>Lonicera periclymenum</i>)	3	10/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Ivy (<i>Hedera helix</i>)	9	11/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Knotgrass (<i>Polygonum aviculare</i>)	1	11/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Marsh Cudweed (<i>Gnaphalium uliginosum</i>)	1	11/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Meadow Buttercup (<i>Ranunculus acris</i>)	1	11/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Meadow Vetchling (<i>Lathyrus pratensis</i>)	6	10/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Meadowsweet (<i>Filipendula ulmaria</i>)	2	11/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Navelwort (<i>Umbilicus rupestris</i>)	1	11/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Nipplewort (<i>Lapsana communis</i>)	1	10/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Pedunculate Oak (<i>Quercus robur</i>)	1	10/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Perennial Ryegrass (<i>Lolium perenne</i>)	1	09/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Perennial Sow-thistle (<i>Sonchus arvensis</i>)	1	10/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Perforate St John's-wort (<i>Hypericum perforatum</i>)	2	08/08/1994	Species Data from the National Vegetation Database	

Custom	flowering plant	Purple-loosestrife (Lythrum salicaria)	4	09/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Red Clover (Trifolium pratense)	1	11/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Redshank (Persicaria maculosa)	1	11/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Ribwort Plantain (Plantago lanceolata)	9	11/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Rough Meadow-grass (Poa trivialis)	2	04/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Rumex sanguineus	1	11/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Salix cinerea	1	04/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Selfheal (Prunella vulgaris)	2	10/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Silverweed (Potentilla anserina)	8	26/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Slender St John's-wort (Hypericum pulchrum)	2	11/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Smooth Sow-thistle (Sonchus oleraceus)	1	04/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Soft-rush (Juncus effusus)	3	26/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Sticky Mouse-ear (Cerastium glomeratum)	1	11/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Sycamore (Acer pseudoplatanus)	1	10/08/1994	Species Data from the National Vegetation Database	Invasive Species: Invasive Species Invasive Species: Invasive Species >> Medium Impact Invasive Species

Custom	flowering plant	Taraxacum aggregate	4	11/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Toad Rush (Juncus bufonius)	1	11/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Tormentil (Potentilla erecta)	2	04/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Tufted Hair-grass (Deschampsia cespitosa)	1	10/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Tufted Vetch (Vicia cracca)	5	11/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	White Clover (Trifolium repens)	6	11/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Wild Strawberry (Fragaria vesca)	5	26/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Wood Avens (Geum urbanum)	1	09/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Wood Sage (Teucrium scorodonia)	11	26/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Yarrow (Achillea millefolium)	1	11/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Yellow Pimpernel (Lysimachia nemorum)	2	08/08/1994	Species Data from the National Vegetation Database	
Custom	flowering plant	Yorkshire-fog (Holcus lanatus)	11	26/08/1994	Species Data from the National Vegetation Database	
Custom	insect - butterfly	Orange-tip (Anthocharis cardamines)	1	24/04/1976	Distribution Atlas of Butterflies in Ireland 1979 (An Foras Forbartha)	
Custom	insect - butterfly	Purple Hairstreak (Neozephyrus quercus)	1	23/08/1970	Distribution Atlas of Butterflies in Ireland 1979 (An Foras Forbartha)	

Custom	insect - butterfly	Small Tortoiseshell (<i>Aglais urticae</i>)	2	31/12/1978	Distribution Atlas of Butterflies in Ireland 1979 (An Foras Forbartha)	
Custom	insect - butterfly	Speckled Wood (<i>Pararge aegeria</i>)	1	24/04/1976	Distribution Atlas of Butterflies in Ireland 1979 (An Foras Forbartha)	
Custom	insect - flea (Siphonaptera)	<i>Ctenophthalmus</i>	1	31/12/1996	Fleas (Siphonaptera) of Ireland	
Custom	insect - flea (Siphonaptera)	<i>Ctenophthalmus</i> (<i>Ctenophthalmus</i>) <i>nobilis</i> subsp. <i>nobilis</i>	1	31/12/1996	Fleas (Siphonaptera) of Ireland	
Custom	insect - flea (Siphonaptera)	<i>Ctenophthalmus</i> (<i>Ctenophthalmus</i>) <i>nobilis</i> subsp. <i>vulgaris</i>	1	31/12/1996	Fleas (Siphonaptera) of Ireland	
Custom	insect - flea (Siphonaptera)	<i>Nosopsyllus</i> (<i>Nosopsyllus</i>) <i>fasciatus</i>	1	31/12/1996	Fleas (Siphonaptera) of Ireland	
Custom	insect - louse (Phthiraptera)	<i>Trichodectes</i> (<i>Stachiella</i>) <i>ermineae</i>	1	31/12/1987	Lice (Phthiraptera) of Ireland	
Custom	insect - orthopteran	Common Ground-hopper (<i>Tetrix undulata</i>)	1	31/08/1976	Grasshoppers, Crickets and Allied Insects (Orthoptera) of Ireland	
Custom	insect - stonefly (Plecoptera)	<i>Amphinemura</i> <i>sulcicollis</i>	1	30/05/1980	Stoneflies (Plecoptera) of Ireland	
Custom	insect - stonefly (Plecoptera)	<i>Isoperla</i> <i>grammatica</i>	1	30/05/1980	Stoneflies (Plecoptera) of Ireland	
Custom	insect - stonefly (Plecoptera)	<i>Siphonoperla</i> <i>torrentium</i>	1	30/05/1980	Stoneflies (Plecoptera) of Ireland	
Custom	liverwort	Bifid Crestwort (<i>Lophocolea bidentata</i>)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	liverwort	Common Pouchwort (<i>Calypogeia fissa</i>)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern

Custom	liverwort	Crescent-cup Liverwort (Lunularia cruciata)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	liverwort	Dilated Scalewort (Frullania dilatata)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	liverwort	Even Scalewort (Radula complanata)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	liverwort	Forked Veilwort (Metzgeria furcata)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	liverwort	Hutchins' Hollywort (Jubula hutchinsiae)	1	31/12/2002	Bryophytes of Ireland	
Custom	liverwort	Jagged Germanderwort (Riccardia chamedryfolia)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	liverwort	Ladder Flapwort (Nardia scalaris)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	liverwort	Minute Pouncewort (Cololejeunea minutissima)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	liverwort	Moon-leaved Pincerwort (Cephalozia lunulifolia)	1	31/12/2002	Bryophytes of Ireland	Threatened Species: Least concern
Custom	liverwort	Notched Pouchwort (Calypogeia arguta)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	liverwort	Overleaf Pellia (Pellia epiphylla)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	liverwort	Sea Scalewort (Frullania teneriffae)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	liverwort	Straggling Pouchwort (Saccogyna viticulosa)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern

Custom	liverwort	Tamarisk Scalewort (Frullania tamarisci)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	liverwort	Two-horned Pincerwort (Cephalozia bicuspidata)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	liverwort	Western Pouncewort (Lejeunea lamacerina)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	liverwort	White Earwort (Diplophyllum albicans)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	mollusc	Arion (Carinarion) circumscriptus	1	30/09/1969	All Ireland Non-Marine Molluscan Database	
Custom	mollusc	Arion (Kobeltia)	1	30/09/1969	All Ireland Non-Marine Molluscan Database	
Custom	mollusc	Jenkins' Spire Snail (Potamopyrgus antipodarum)	1	30/09/1969	All Ireland Non-Marine Molluscan Database	Invasive Species: Invasive Species Invasive Species: Invasive Species >> Medium Impact Invasive Species
Custom	mollusc	Netted Slug (Deroceras reticulatum)	1	30/09/1969	All Ireland Non-Marine Molluscan Database	
Custom	mollusc	Strawberry Snail (Trochulus striolatus)	1	30/09/1969	All Ireland Non-Marine Molluscan Database	
Custom	mollusc	Two-toothed Door Snail (Clausilia bidentata)	1	30/09/1969	All Ireland Non-Marine Molluscan Database	
Custom	moss	Aloe Haircap (Pogonatum aloides)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Bank Haircap (Polytrichum formosum)	1	28/03/1966	Bryophytes of Ireland	

Custom	moss	Big Shaggy-moss (Rhytidiadelphus triquetrus)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Bird's-claw Beard-moss (Barbula unguiculata)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Broom Fork-moss (Dicranum scoparium)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Bruch's Pincushion (Ulota bruchii)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Common Feather-moss (Eurhynchium praelongum)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Common Haircap (Polytrichum commune)	1	28/03/1966	Bryophytes of Ireland	
Custom	moss	Common Pocket-moss (Fissidens taxifolius)	1	28/03/1966	Bryophytes of Ireland	
Custom	moss	Common Smoothcap (Atrichum undulatum)	1	28/03/1966	Bryophytes of Ireland	
Custom	moss	Common Striated Feather-moss (Eurhynchium striatum)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Common Tamarisk-moss (Thuidium tamariscinum)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Ctenidium molluscum var. molluscum	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Cylindric Beard-moss (Didymodon insulanus)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Cypress-leaved Plait-moss (Hypnum cupressiforme)	1	28/03/1966	Bryophytes of Ireland	
Custom	moss	Fissidens bryoides	1	28/03/1966	Bryophytes of Ireland	

Custom	moss	Flat Neckera (Neckera complanata)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Fountain Apple-moss (Philonotis fontana)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Frizzled Pincushion (Ulota phyllantha)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Green-tufted Stubble-moss (Weissia controversa)	1	28/03/1966	Bryophytes of Ireland	
Custom	moss	Hart's-tongue Thyme-moss (Plagiommium undulatum)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Heath Plait-moss (Hypnum jutlandicum)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Heath Star Moss (Campylopus introflexus)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Isoetecium myosuroides var. myosuroides	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Juniper Haircap (Polytrichum juniperinum)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Lateral Cryphaea (Cryphaea heteromalla)	2	31/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Lesser Bird's-claw Beard-moss (Barbula convoluta)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Marsh Bryum (Bryum pseudotriquetrum)	1	28/03/1966	Bryophytes of Ireland	
Custom	moss	Neat Feather-moss (Scleropodium purum)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Pointed Spear-moss	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern

		(Calliergonella cuspidata)				
Custom	moss	Redshank (Ceratodon purpureus)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Rough-stalked Feather-moss (Brachythecium rutabulum)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Rusty Swan-neck Moss (Campylopus flexuosus)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Silky Forklet-moss (Dicranella heteromalla)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Silky Wall Feather-moss (Homalothecium sericeum)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Springy Turf-moss (Rhytidiadelphus squarrosus)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Supine Plait-moss (Hypnum cupressiforme var. resupinatum)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Swan's-neck Thyme-moss (Mnium hornum)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Urn Haircap (Pogonatum urnigerum)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Wall Screw-moss (Tortula muralis)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Wood Bristle-moss (Orthotrichum affine)	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	moss	Zygodon viridissimus var. viridissimus	1	28/03/1966	Bryophytes of Ireland	Threatened Species: Least concern
Custom	terrestrial mammal	Eurasian Badger (Meles meles)	3	31/12/2015	Badger Setts of Ireland Database	Protected Species: Wildlife Acts

Custom	terrestrial mammal	Irish Stoat (<i>Mustela erminea</i> subsp. <i>hibernica</i>)	1	10/11/1984	Atlas of Mammals in Ireland 2010-2015	
Custom	terrestrial mammal	Sika Deer (<i>Cervus</i> <i>nippon</i>)	1	31/12/2008	Deer of Ireland Database	Invasive Species: Invasive Species Invasive Species: Invasive Species >> High Impact Invasive Species Invasive Species: Invasive Species >> Regulation S.I. 477 (Ireland) Protected Species: Wildlife Acts



Comhairle Contae Chorcaí
Cork County Council



Oifig na mBóithre Náisiúnta Chorcaí
Cork National Roads Office