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STRATEGIC PLANNING AND ENVIRONMENTAL APPRAISAL OF CONCEPT PROPOSALS AT LOUGH MUCKNO, CASTLEBLAYNEY, CO. MONAGHAN

Strategic Planning and Environmental Appraisal Report

Prepared for:

Monaghan County Council



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EXECUTIVE SUMMARY

Introduction

In 2021, Stevens and Associates prepared report titled 'A Vision for Lough Muckno Estate' (termed the 'Vision' hereafter in this report) for Monaghan County Council (MCC) and Failte Ireland.

Monaghan County Council commissioned Fehily Timoney and Company (FT) to complete a strategic planning and environmental appraisal of the proposal options within this report.

The report presented two concept proposal options:

Concept proposal option 1 entitled 'Muckno Adventure Estate' proposes the development of four connected zones of activity, within which it -could be possible to undertake over 150 different outdoor adventure activities as well as experiences associated with nature, conservation, art, craft, music, food and drink, and health and well-being.

The four main zones for this concept are as follows:

- Zone 1: The Historic Estate
- Zone 2: Lough Muckno
- Zone 3: Concra Woods
- Zone 4: The Town – Castleblayney

Concept proposal option 2 entitled 'The Great Drumlin of Adventure' builds on concept proposal option 1. This concept proposal option -proposes the carrying out of additional substantial development at Lough Muckno Estate including a dome structure replicating the shape and profile of a drumlin.

An overview of concept proposal options components is outlined in Table 1

Table 1: Concept Proposal Components

Ref.	Concept Proposal Component
Concept Proposal Option 1	
1	Regeneration and repurposing of Hope Castle situated in Lough Muckno Estate
2	Use of Hope Castle and its curtilage as an Exhibition Venue, Sculpture Garden and Park, and Walled Garden.
3	Development of a Coach house café, retail area, and children's play area, at Hope Castle's coach house building.
4	General landscaping and development of greenways, parkland walks and cycle paths within Lough Muckno Estate.
5	Development of a water sports centre in Lough Muckno Estate.
6	Development of a cruise tour centre, and provision of water taxies, cruise boats and electric buggies within Lough Muckno Estate.



Ref.	Concept Proposal Component
7	Development of a fishing lodge and conservation centre within Lough Muckno Estate.
8	The development of dispersed lodges and recreational activities at islands in Lough Muckno.
9	Integration of Castleblayney Town with The Historic Estate via the Gatehouses to the estate.
10	Development of the Gatehouse as an information centre and retail area.
11	Development of a hotel, golf complex, lodges, a spa and a cookery school at Concra Wood Golf Club.
12	Development of a centre housing cultural and recreational activities at Market House situated in Market Square, Castleblayney.
13	Development of dispersed parking through Castleblayney Town to accommodate visitors to Castleblayney, relative to the scale of the development that takes place.
14	Development of Black Island Trails.
15	The development of a modest sized, open sided dome structure in the vicinity of Hope Castle housing several recreational and cultural activities, a café and potentially, a moderately scaled ice climbing wall.
Concept Proposal Option 2	
16	The development of a large-scale dome structure (potentially over Hope Castle) in Lough Muckno Estate, to be known as the Great Drumlin of Adventure.
17	Development of a spa and well-being centre, several café and retail facilities, exhibition areas, substantially scaled indoor ice climbing walls, a high ropes course, play areas, and auditorium, all within the domed area.
18	The development of a deep adventure digital and immersive attractions within the domed area in Lough Muckno Estate.
19	Development of a canyoning and water sports arena within the domed area in Lough Muckno Estate.

Purpose of Appraisal

The purpose of this appraisal is to identify any potential planning and environmental constraints associated with the concept proposals and, considering these constraints, identify concept proposal components that could potentially proceed, concept proposal components that could potentially proceed with mitigation measures and concept proposal components that do not comply with relevant County Development Policies and pose a significant environmental impact as presented.

Approach and Methodology

The scope, approach and methodology for the appraisal included:

1. An evaluation of the character and context of the locations in which the concept proposals will potentially take place has been carried out.



2. A programme of public and stakeholder consultation has been carried out for the purpose of informing the appraisal process. This included the carrying out of a public consultation event and several focussed consultation meetings with identified key stakeholders.
3. An evaluation of the planning and policy context relevant to the concept proposals has been undertaken.
4. An appraisal of baseline environment characteristics and sensitivities has been undertaken.
5. A strategic planning and policy appraisal has been undertaken having regard to the concept proposals. This appraisal involved evaluating whether concept proposal components comply with current relevant planning and policy objectives.
6. A Potential Mitigation Assessment has been undertaken to identify how to address the planning and environmental constraints in relation to the concept proposals. Three forms of mitigation solution have been considered. These are as follows:
 - Planning and Policy Amendments
 - Environmental Mitigation Measures
 - Concept Modifications

Public and stakeholder consultation was undertaken to provide members of the public and key stakeholders with an understanding of what both concept option proposals would involve and an opportunity to submit their views on planning and environmental aspects associated with the concept option proposals. The consultation undertaken informed FT's strategic planning and environmental appraisal.

The following forms of public and stakeholder consultation were undertaken:

Public consultation event was held in the Gate Lodge at Lough Muckno on 6th October 2022.

Questionnaires were given out during the public consultation event to provide members of the public with an opportunity to provide structured feedback on planning and environmental aspects relating to proposals.

Written Submissions and Observations were sought via project specific email address.

Focused Stakeholder Consultation: A series of focused stakeholder consultation meetings were held with parties identified as being key stakeholders. These stakeholders were:

- Concra Wood Golf Club (CWGC)
- Inland Fisheries Ireland (IFI)
- National Parks and Wildlife Services (NPWS)
- Coillte
- Fáilte Ireland (FI)

The planning and policy strategic assessment of Concepts Proposal Options 1 and 2 assessed compliance with relevant County Development Plan Objectives and other National Policy Statements.



Policy defined at national, regional and sectoral level is generally supportive of such tourism and recreation development at Lough Muckno and its environs. Policy defined in the following documents specifically is supportive of the concept proposals:

- Project Ireland 2040 – National Planning Framework (2018)
- People, Place and Policy – Growing Tourism to 2025
- Tourism Development & Innovation – A Strategy for Investment 2016-2022
- Northern & Western Regional Assembly - Regional Spatial and Economic Strategy 2020 – 2032 (RSES).

The National Planning Framework National Policy Objective 17 states the following:

- *Enhance, integrate and protect the special physical, social, economic and cultural value of built heritage assets through appropriate and sensitive use now and for future generations.*

This national objective generally requires that built heritage assets, such as Hope Castle and its Annex building, are managed and used in a manner which protects and enhances its value. The broad ambition of concept proposal components relating to Hope Castle and its Annex building is to ensure the social, economic and cultural heritage value of these buildings are protected and enhanced. The concept proposals therefore generally comply with this national objective.

The Monaghan County Development Plan 2019 – 2025 (CDP) is generally supportive of some level of tourism and recreation development at Lough Muckno and its environs. The CDP requires a high standard of development at the site which does not impact negatively on the existing character of the town or lake.

The environmental appraisal was undertaken by evaluating the baseline environment of the site. This evaluation included:

- Desk based research.
- A series of site walkovers.
- Insights from the public and stakeholder consultation.

A strategic appraisal of how the concept proposals will impact upon the baseline environment was conducted under the following ‘environmental topics’:

- Population and Human Health
- Material Assets
- Biodiversity
- Hydrology and Surface Water Quality
- Soils, Geology, and Hydrogeology
- Air Quality and Climate
- Noise
- Traffic and Transport
- Cultural Heritage



- Landscape and Visual Amenity
- Interactions, Indirect Impacts and Cumulative Impacts

The environment appraisal was informed by a series of specially commissioned reports. These reports are a Preliminary Ecological Appraisal Report, a Cultural Heritage Constraints Assessment and a Landscape and Visual Constraints/Considerations Report.

All potential environmental impacts associated with concept development components have been identified and characterised at high level, having regard to impact description criteria defined in the EPA's Guidance Document entitled 'Guidelines on the information to be contained in Environmental Impact Assessment Reports' (2022). This assessment has considered both construction phase and operational phase potential impacts associated with concept proposals. It has considered potential impact interactions and potential indirect impacts (i.e., interactions between one environmental aspect and another environmental aspect which can result in an environmental impact).

High level mitigation measures were identified to be considered to prevent environmental impacts on the receiving environment at or around the site if any of the concept proposal components were taken forward to project stage.

Mitigation solutions that have been considered are:

- Planning and Policy Amendments
- Environmental Mitigation Measures
- Concept Modifications

Table 2 presents the assessment conclusions and identifies concept proposal components that

- a) could potentially proceed with appropriate environmental mitigation.
- b) could potentially be considered with concept design modifications and/or planning policy amendments).
- c) concept proposal options that do not comply with relevant County Development Policies and pose a significant environmental impact as presented.

Table 2: Assessment Conclusions

Ref.	Concept Proposal Component	Assessment Conclusions
Concept Proposal Option 1		
1	Regeneration and repurposing of Hope Castle situated in Lough Muckno Estate.	Could potentially proceed as proposed with appropriate environmental mitigation.
2	Use of Hope Castle and its curtilage as an Exhibition Venue, Sculpture Garden and Park, and Walled Garden.	Could potentially proceed as proposed with appropriate environmental mitigation.



Ref.	Concept Proposal Component	Assessment Conclusions
Concept Proposal Option 1		
3	Development of a Coachouse café, retail area, and children's play area, at Hope Castle's coachouse building.	Could potentially proceed as proposed with appropriate environmental mitigation.
4	General landscaping and development of greenways, parkland walks and cycle paths within Lough Muckno Estate.	Could potentially proceed as proposed with environmental appropriate mitigation.
5	Development of a water sports centre in Lough Muckno Estate.	Could potentially be considered with design modifications, planning policy amendments and appropriate environmental mitigation.
6	Development of a cruise tour centre, and provision of water taxies, cruise boats and electric buggies within Lough Muckno Estate.	Could potentially be considered with design modifications, planning policy amendments and appropriate environmental mitigation.
7	Development of a fishing lodge and conservation centre within Lough Muckno Estate.	Could potentially be considered with design modification, planning policy amendments and appropriate environmental mitigation.
8	The development of dispersed lodges and recreational activities at islands in Lough Muckno.	Does not comply with relevant County Development Policies and poses a significant environmental impact as presented. Any new recreational activities should take into consideration the existing setting and character of the Estate.
9	Integration of Castleblayney Town with The Historic Estate via the Gatehouses to the estate.	Could potentially proceed with appropriate environmental mitigation.
10	Development of the Gatehouse as an information centre and retail area.	Could potentially proceed with appropriate environmental mitigation.
11	Development of a hotel, golf complex, lodges, a spa and a cookery school at Concra Wood Golf Club.	Could potentially be considered with design modifications, planning policy amendments and appropriate environmental mitigation.
12	Development of a centre housing cultural and recreational activities at Market House situated in Market Square, Castleblayney.	Could potentially proceed with appropriate environmental mitigation.
13	Development of dispersed parking through Castleblayney Town to accommodate visitors to Castleblayney, relative to the scale of the development that takes place.	Could potentially proceed with appropriate environmental mitigation.
14	Development of Black Island Trails.	Proceeding with appropriate environmental mitigation.
15	The development of a modest sized, open sided dome structure in the vicinity of Hope Castle housing several recreational and cultural activities, a café and potentially, a moderately scaled ice climbing wall.	Could potentially be considered with design modifications, planning policy amendments and appropriate environmental mitigation.



Ref.	Concept Proposal Component	Assessment Conclusions
Concept Proposal Option 1		
Concept Proposal Option 2		
16	The development of a large-scale dome structure (potentially over Hope Castle) in Lough Muckno Estate, to be known as the Great Drumlin of Adventure.	Does not comply with relevant County Development Policies and poses a significant environmental impact as presented. Any new structures would need to be designed to take into consideration the existing setting & character of the Estate and should not detract from the amenity value of the site.
17	Development of a spa and well-being centre, several café and retail facilities, exhibition areas, substantially scaled indoor ice climbing walls, a high ropes course, play areas, and auditorium, all within the domed area.	Does not comply with relevant County Development Policies and poses a significant environmental impact as presented. However, they could potentially still proceed if these activities were appropriately housed in built development that is appropriate to the setting and character of the estate.
18	The development the deep adventure attraction within the domed area in Lough Muckno Estate.	Does not comply with relevant County Development Policies and poses a significant environmental impact as presented. However, they could potentially still proceed if these activities were appropriately housed in built development that is appropriate to the setting and character of the estate.
19	Development of a canyoning and water sports arena within the domed area in Lough Muckno Estate.	Does not comply with relevant County Development Policies and poses a significant environmental impact as presented. However, they could potentially still proceed if these activities were appropriately housed in built development that is appropriate to the setting and character of the estate.

Recommendations and Next Steps

- MCC should explore the possibility of developing a Masterplan for the site. Such a Plan should be subject to SEA and AA, which would serve to define a framework of environmental protection measures specific to the site. This plan could be an addendum to the CDP.
- It is recommended that should MCC decide to proceed with the concept proposals they should be refined or reassessed in the manner detailed, having regard to the conclusions of this assessment.
- All development proposed for the site should be subject to Environmental Impact Assessment (EIA) and Appropriate Assessment (AA) Screening. This will serve to ensure that environmental and ecological protection criteria are considered in detail at project level.
- Any concept proposals that are progressed should be underpinned by sustainability, climate change and eco-friendly principles.
- Generally, it is recommended the any concept proposal for the site considers the following themes:



- Amenity and recreation
- Sustainability and climate change
- Circularity
- Biodiversity and heritage
- Education and sustainable practices
- Health and well-being

All proposals should be “exemplar developments” developments promoting sustainable tourism.



1. INTRODUCTION

1.1 Background and Purpose

In 2021, Stevens and Associates prepared report titled 'A Vision for Lough Muckno Estate' (termed the 'Vision' hereafter in this report) for Monaghan County Council (MCC) and Failte Ireland. This report presented two concept proposals.

MCC has commissioned Fehily Timoney and Company (FT) to complete a strategic planning and environmental appraisal of the two concept proposal options.

Broadly, the purpose of this appraisal is to identify any potential planning and environmental constraints associated with the concept proposals and, considering these constraints, identify concept proposal components that could potentially proceed, concept proposal components that may require planning and environmental mitigation measures or concept modifications if proceeding and concept proposal components that do not comply with relevant County Development Policies and pose a significant environmental impact as presented.

This report is informed by a public and stakeholder consultation process that was undertaken and by three sector specific specialist reports, as follows:

1. A Public and Stakeholder Consultation Report which is contained in Appendix 1.
2. Lough Muckno Preliminary Ecological Appraisal Report, Flynn Furney Environmental Consultants (December 2022) - This report is contained in Appendix 3.
3. Cultural Heritage Constraints Assessment for Concept Proposal Options at Lough Muckno Estate, Castleblayney. Co. Monaghan, Colm Flynn Archaeology (March 2023) - This report is contained in Appendix4.
4. Landscape and Visual Constraints and Considerations Report, Lough Muckno Tourism Vision, Macroworks (March 2023) - This report is contained in Appendix5.

1.2 Detailed Terms of Reference

An overview of the concept proposal options presented in this document and an overview of the scope, approach and methodology for the appraisal are provided hereunder.

Overview of the Concept Proposals Options

Concept proposal option 1 entitled 'Muckno Adventure Estate' proposes the development of four connected zones of activity, within which it -could be possible to undertake over 150 different outdoor adventure activities as well as experiences associated with nature, conservation, art, craft, music, food and drink, and health and well-being.

The four main zones for this concept are as follows:

- Zone 1: The Historic Estate
- Zone 2: Lough Muckno
- Zone 3: Concra Woods
- Zone 4: The Town – Castleblayney



This concept proposal option at its maximum scale could bring 200,000 - 250,000 visitors per annum to the area.

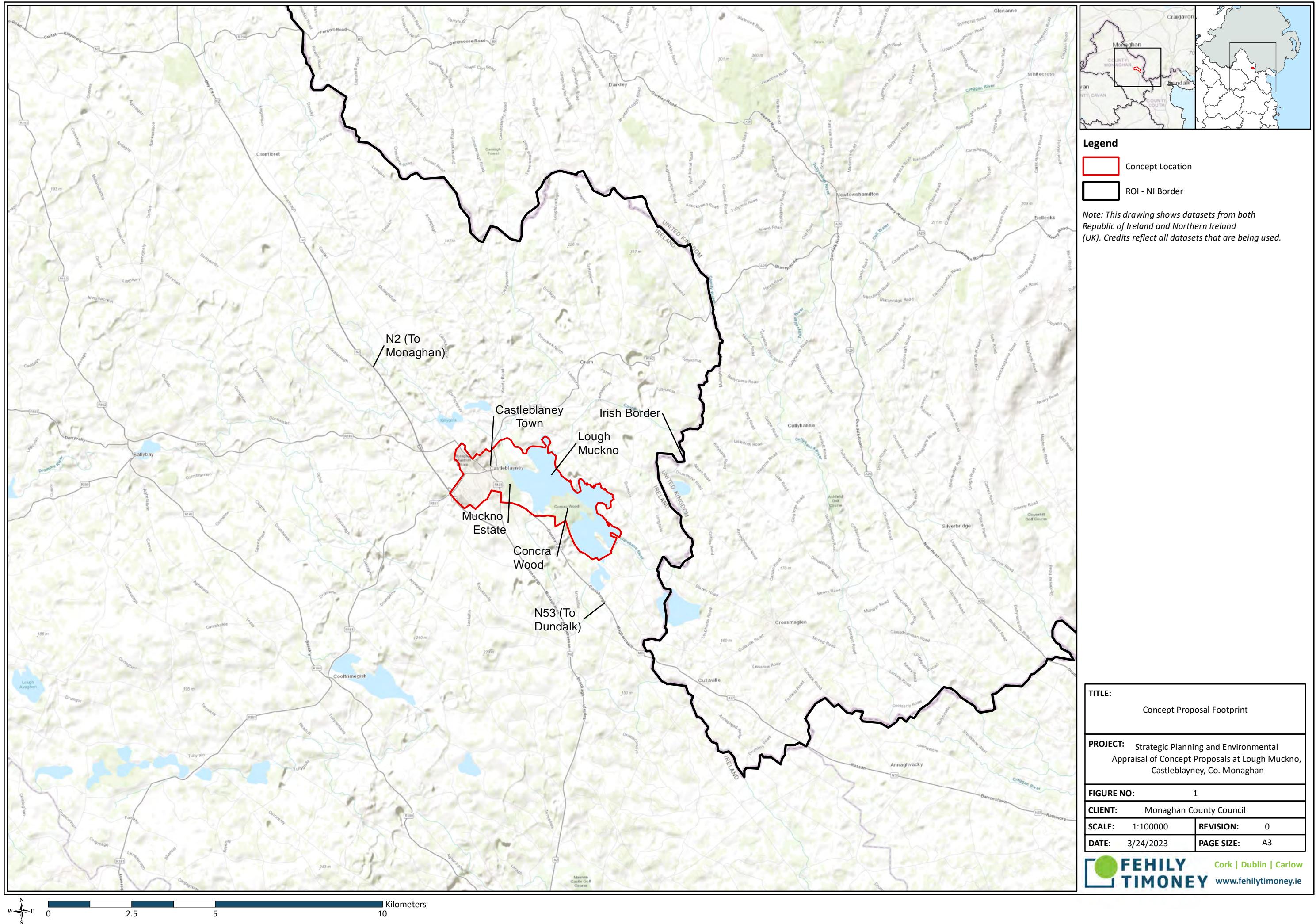
Concept proposal option 2 entitled 'The Great Drumlin of Adventure' builds on concept proposal option 1. This concept proposal option -proposes the carrying out of additional substantial development at Lough Muckno Estate including a dome structure replicating the shape and profile of a drumlin.

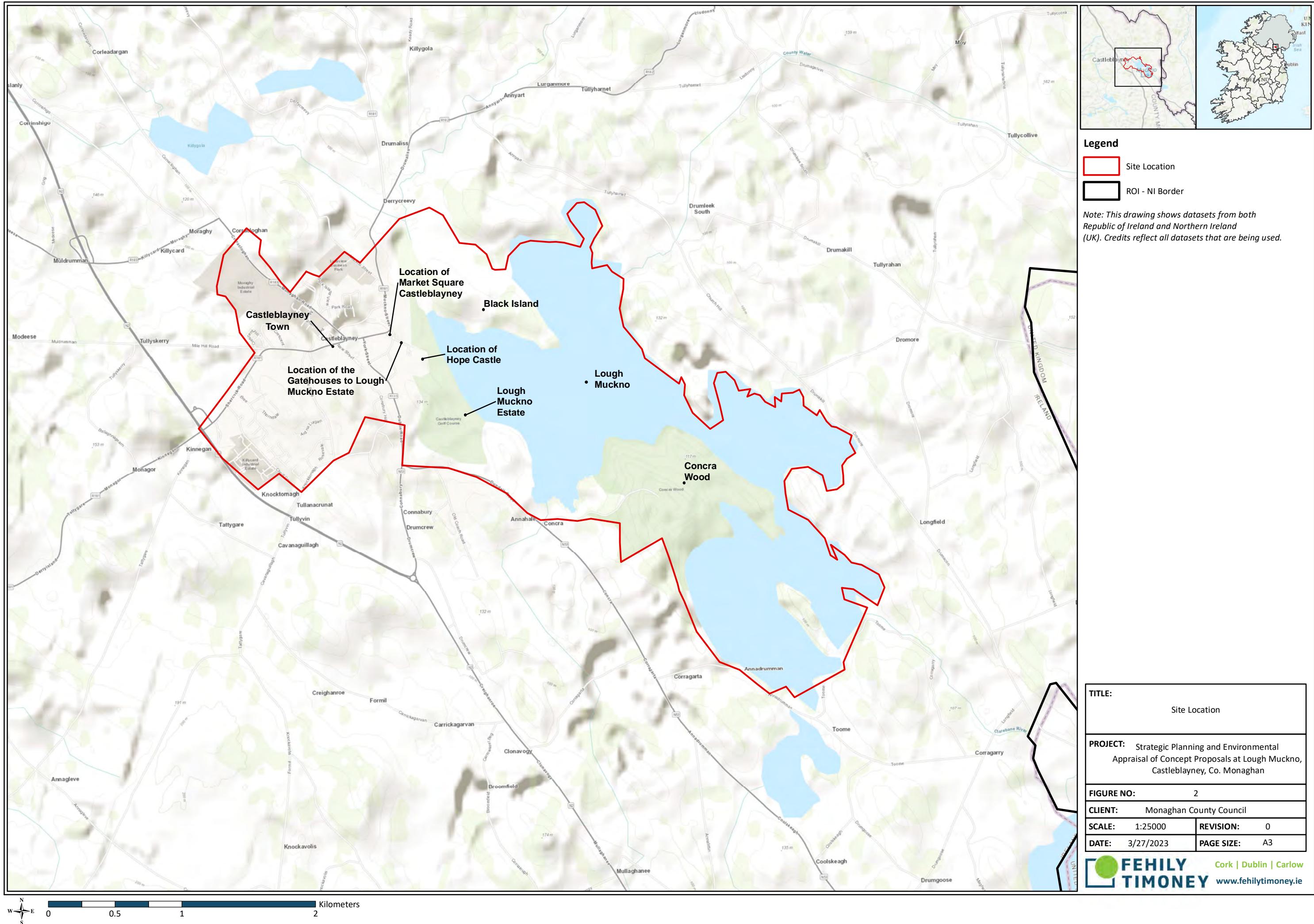
This concept proposal option at its maximum scale could bring up to 330,000 - 420,000 visitors per annum to the study area.

Further detail on the concept proposal components is provided in Section 2.

A high-level Concept Proposal Footprint map showing the proposed development area, and the wider surrounding area, is provided in Figure 1. For the purposes of this appraisal this area is termed the 'Site' from this point forward in the document.

A more detailed Site Location and Context Map showing the four main zones and key locations associated with the concept proposals is provided in Figure 2.







1.2.1 Scope, Approach and Methodology for the Appraisal

The scope, approach and methodology for the appraisal undertaken is defined as:

1. The concept proposal options have been evaluated, understood and defined at a high-level.
2. The study area relevant to the concept proposals has been defined and delineated.
3. An evaluation of the character and context of the locations in which the concept proposals will potentially take place has been carried out.
4. A programme of public and stakeholder consultation has been carried out for the purpose of informing the appraisal process. This included the carrying out of a public consultation event and several focussed consultation meetings with identified key stakeholders.
5. An evaluation of the planning and policy context relevant to the concept proposals has been undertaken.
6. An appraisal of baseline environment characteristics and sensitivities has been undertaken. A strategic appraisal of how the concept proposals will impact upon the baseline environment has been carried out under the following 'environmental topic' headings:
 - a. Population and Human Health
 - b. Material Assets
 - c. Biodiversity
 - d. Hydrology and Surface Water Quality
 - e. Soils, Geology, and Hydrogeology
 - f. Air Quality and Climate
 - g. Noise
 - h. Traffic and Transport
 - i. Cultural Heritage
 - j. Landscape and Visual Amenity
 - k. Interactions, Indirect Impacts and Cumulative Impacts

Likely potential impacts on the baseline environment associated with the proposals have been identified.

7. A strategic planning and policy appraisal has been undertaken having regard to the concept proposals. This appraisal involved evaluating whether concept proposal components comply with current relevant planning and policy objectives.
8. A Potential Mitigation Assessment has been undertaken to identify planning and environmental constraints in relation to the concept proposals. Three forms of mitigation solutions have been considered. These are as follows:
 - a. Planning and Policy Amendments
 - b. Environmental Mitigation Measures
 - c. Concept Modifications
9. Finally, Assessment Conclusions and Next Steps for MCC have been defined. A clear breakdown of the following has been provided:
 - d) Components of the concept proposal options that could potentially proceed with appropriate environmental mitigation.
 - e) Components of the concept proposal options that could potentially be considered with concept design modifications and/or planning policy amendments and environmental mitigation.



-
- f) Components of the concept proposal do not comply with relevant County Development Policies and pose a significant environmental impact as presented.

All the above stages of the assessment have been clearly and concisely reported upon in this document.

1.2.2 Report Structure

This report has been structured in a manner that accords with the scope, approach and methodology for the appraisal. The report structure is shown below:

- Section 2 - The Concept Proposals
- Section 3 - Site Context
- Section 4 - Stakeholder and Public Consultation
- Section 5 - Planning and Policy Context
- Section 6 - The Baseline Environment
- Section 7 - Strategic Planning and Environmental Appraisal
- Section 8 - Solutions Assessment
- Section 9 - Assessment Conclusions and Next Steps



2. THE CONCEPT PROPOSALS

An overview of the two concept proposal options defined in the Vision document has been provided in Section 0 of this report.

A more detailed breakdown of concept proposal options components has been provided in Table 2-1.

It is important to note that the concept proposals have only been broadly defined. The location, size and scale, precise characteristics and design of the concept proposals have not been defined with exactitude at this point in the process.

Table 2-1: Concept Proposal Components

Ref.	Concept Proposal Component
Concept Proposal Option 1	
1	Regeneration and repurposing of Hope Castle situated in Lough Muckno Estate
2	Use of Hope Castle and its curtilage as an Exhibition Venue, Sculpture Garden and Park, and Walled Garden.
3	Development of a Coach house café, retail area, and children's play area, at Hope Castle's coach house building.
4	General landscaping and development of greenways, parkland walks and cycle paths within Lough Muckno Estate.
5	Development of a water sports centre in Lough Muckno Estate.
6	Development of a cruise tour centre, and provision of water taxies, cruise boats and electric buggies within Lough Muckno Estate.
7	Development of a fishing lodge and conservation centre within Lough Muckno Estate.
8	The development of dispersed lodges and recreational activities at islands in Lough Muckno.
9	Integration of Castleblayney Town with The Historic Estate via the Gatehouses to the estate.
10	Development of the Gatehouse as an information centre and retail area.
11	Development of a hotel, golf complex, lodges, a spa and a cookery school at Concra Wood Golf Club.
12	Development of a centre housing cultural and recreational activities at Market House situated in Market Square, Castleblayney.
13	Development of dispersed parking through Castleblayney Town to accommodate visitors to Castleblayney, relative to the scale of the development that takes place.
14	Development of Black Island Trails.
15	The development of a modest sized, open sided dome structure in the vicinity of Hope Castle housing several recreational and cultural activities, a café and potentially, a moderately scaled ice climbing wall.



Ref.	Concept Proposal Component
Concept Proposal Option 2	
16	The development of a large-scale dome structure (potentially over Hope Castle) in Lough Muckno Estate, to be known as the Great Drumlin of Adventure.
17	Development of a spa and well-being centre, several café and retail facilities, exhibition areas, substantially scaled indoor ice climbing walls, a high ropes course, play areas, and auditorium, all within the domed area.
18	The development of a deep adventure digital and immersive attractions within the domed area in Lough Muckno Estate.
19	Development of a canyoning and water sports arena within the domed area in Lough Muckno Estate.



3. SITE CONTEXT

The defined 'site' for the concept proposals includes the town of Castleblayney; Lough Muckno Estate, including Black Island and White Island; Lough Muckno and its shoreline; and Concra Wood Golf Club.

The Vision document divides the site into four main zones of activity:

- Zone 1: The Historic Estate
- Zone 2: Lough Muckno
- Zone 3: Concra Woods
- Zone 4: The Town - Castleblayney

A Site Location and Context Map identifying these zones and key locations associated with the site overall has been provided in Figure 1 and Figure 2.

To provide some initial context for the site, a brief description of these zones and key locations is provided below. Further detail on the baseline environment across the site is provided in Section 6.

Lough Muckno

Lough Muckno is an inter-drumlin lake situated to the east/south-east of Castleblayney. It is the largest lake in Co. Monaghan. There are several inlets that flow into the lake and the lake itself flows eastward into the Fane-Clarebane River, then into Lough Ross, which is located ca. 2.1 km southeast of the site, and then to Dundalk Bay approximately 30 km east of the site. The lake is designated a proposed Natural Heritage Area (pNHA). It contains abundant and healthy fish stocks, and it is a popular location for angling. It has a long history of pollution and is known to be impacted by polluting discharges from agricultural, wastewater and urban sources. The lake is used as a water supply for the town of Dundalk.

Lough Muckno Estate

Lough Muckno Estate refers to the historic estate and lands associated with Hope Castle. It is under the ownership of Monaghan County Council. The Estate is situated immediately to the southeast of the town of Castleblayney. The Estate comprises an extensive parkland area overlooking Lough Muckno, which is situated immediately eastward. Several features of significant cultural and architectural heritage value are situated within the estate. The Estate contains a mix of mature woodlands and holds significant natural heritage value. It also holds significant visual amenity value given its location overlooking the lake. Several leisure and sporting activities are provided for in the Estate, at Castleblayney Outdoor Adventure Centre, for example.

Hope Castle and its Annex Building

Hope Castle and its Annex building are key features situated within the Estate. Hope Castle is situated towards the centre of the Estate. It is situated at a high elevated and visually prominent location overlooking Lough Muckno. Hope Castle's Annex building, which once consisted of stables, is situated to the west of Hope Castle behind a mature tree lining. Both Hope Castle and its Annex building are currently in a state of disuse and dilapidation.



Black Island and White Island

The Estate includes White Island and Black Island. White Island which is owned by Monaghan County Council is a low-lying peninsula situated downslope from Hope Castle that stretches into Lough Muckno. Black Island is a much larger, steeply sloped and well forested peninsula owned by Coillte. It is situated to the north of the Estate and overlooks Lough Muckno. A series of trails are routed around these areas, with more trail development currently being proposed for Black Island.

The Gatehouses to the Estate

The Estate and Hope Castle are connected to Castleblayney's town square to the northwest by a short, treelined, avenue running through the Estate. The Gatehouses to the Estate are situated at the point of connection between the Estate and the town. These are 19th century Gatehouses that are situated either side of the entrance to the Estate, just off the town square. They hold significant architectural and heritage value. The southern Gatehouse has been restored and is currently used by MCC as a meeting and event space. The northern Gatehouse is currently being restored and re-purposed as a public library and arts facility. These works are set to be completed in 2023.

Market Square

Market Square is the town square at the centre of Castleblayney. The square contains several architecturally significant buildings and is designated as a proposed Architectural Area of Conservation (ACA) under the Monaghan County Development Plan (CDP) 2019 - 2025. Market House is situated at the centre of the square and is considered the most architecturally significant building in the town. It is currently in a state of disuse and dilapidation, with plans progressed for its refurbishment.

Castleblayney Town

Castleblayney town is the third largest town in County Monaghan with a population of 3,607 in 2016. It is well connected to surrounding towns in the region including Dundalk, Monaghan, Carrickmacross and Armagh, all which are less than 30 km from Castleblayney. The town functions as a market/service centre and provides important residential, retailing, social and leisure functions for the town and the surrounding rural community, which extends cross-border into Co. Armagh under the CDP. It is designated as a Tier 2 Strategic Town under the CDP.

Concra Woods

Concra Wood is large area of land under the ownership of Concra Wood Golf Club situated ca. 1.3 km to the southeast of Castleblayney. It is linked to the town via the N53. It overlooks Lough Muckno, which is situated to the immediate east. An 18-hole golf course is situated at Concra Wood. The golf course is an attractive golf venue that was designed by the famous Irish professional golfers Christy O' Connor Snr and Christy O' Connor Junior. It attracts a significant number of visitors from the broader region. A series of trail routes exist at Concra Wood, and the area is commonly used by trail walkers. The shores of Concra Wood are also commonly used by anglers. These lands contain several significant cultural heritage features, including an early 19th century relict farm complex, a possible 17th century fortification and two follies.



4. STAKEHOLDER AND PUBLIC CONSULTATION

4.1 Overview

Public and stakeholder consultation was undertaken to provide members of the public and key stakeholders with an understanding of what both concept option proposals would involve and an opportunity to submit their views on planning and environmental aspects associated with the concept option proposals. The consultation undertaken informed FT's strategic planning and environmental appraisal.

The following forms of public and stakeholder consultation were undertaken:

Public consultation event: The first part of the public and stakeholder consultation event involved representatives from MCC's Tourism section and representatives from FT giving a presentation on the project to County Councillors. Following this, members of the public were invited to view an exhibit that FT set up. This exhibit display presented detail on the background to the project, all elements of each concept proposal option, planning and environmental aspects relating to the concept proposal options that need to be considered during any development process, and methods for members of the public to provide their views on the concept proposal options.

Submissions / Observations: Members of the public were provided with an opportunity to submit their views on planning and environmental aspects relating to the concept proposals. A project specific email address was set up by FT. Members of the public and stakeholders were made aware of the opportunity to submit their views to this email address during the public consultation event and across several media platforms, including via newspaper notices, notices published on MCC's website and social media pages, radio advertisements, and signs in the town of Castleblayney.

Questionnaires: Questionnaires were given out during the public consultation event to provide members of the public with an opportunity to provide structured feedback on planning and environmental aspects relating to proposals. The questionnaires included a combination of open-ended and multiple-choice questions.

Focused Stakeholder Consultation: A series of focused stakeholder consultation meetings were held with parties identified as being key stakeholders. The purpose of these meetings was to elicit detailed views and opinions on planning and environmental aspects associated with the concept proposals from parties who have a particular interest, concern or influence in relation to concept proposals. The meetings took place with the following organisations:

- Concra Wood Golf Club (CWGC)
- Inland Fisheries Ireland (IFI)
- National Parks and Wildlife Services (NPWS)
- Coillte
- Fáilte Ireland (FI)

The full report on the consultation undertaken is provided in Appendix 1. A summary of key findings from the consultation undertaken is provided below.



4.2 Key Findings

Public and stakeholder consultation outputs were distilled, interpreted and analysed. This process resulted in the identification of key findings, which are presented as:

- The public were generally in favour of development in Lough Muckno Estate and surrounding areas to a limited extent.
- Members of the public generally prefer that any development in Lough Muckno Estate and surrounding areas is of moderate scale relative to the full scale of Concept Proposal Option 2.
- There was strong disagreement with Concept Proposal Option 2 due to the perceived environmental risk posed by excessive development.
- There was a broad consensus that the development of a sizeable dome structure in Lough Muckno Estate is undesirable and unacceptable, generally, and in particular the construction of a Dome over Hope Castle.
- There was a broad consensus that any development taking place must not negatively impact the receiving environment in any significant way and that any development should accord with relevant planning and environmental criteria.
- The restoration of significant cultural heritage features such as Hope Castle and Market Square is important to many respondents.
- Many respondents are concerned about potential impact on landscape character, biodiversity and existing tourism and amenity features (such as angling amenity). Many respondents identified the need to protect the existing character and features in the area.
- Many respondents were of the strong view that maintaining access to various amenity features of Lough Muckno Estate was important.
- Many respondents considered that development at islands situated in Lough Muckno would be particularly impactful. Some respondents considered that developing accommodation on these Islands is inappropriate and unacceptable.
- Some respondents felt traffic and parking, and the need to provide education experiences were important matters.

Key discussion outputs from the focused stakeholder consultation meetings are outlined in the Table 4-1.



Table 4-1: Summary of Focussed Stakeholder Engagement

Consultee	Summary of Discussion Outputs
Concra Wood Golf Club (CWGC)	<ul style="list-style-type: none"> • Angling and walking trails are the significant recreational activities within Concra Wood. • Several significant cultural and architectural heritage features are present at the Concra Wood site. • Potential development could impact ecological receptors and mature trees of value. • A previous Environmental Impact Assessment was carried out for the existing clubhouse and golf club. • Concra Wood attracts a substantial number of tourists from the wider region. • With limited hotel accommodation in the region and the possibility of a hotel development associated with the concept proposals this could have could have significant benefit within the region. • Any development on-site should be informed and guided by a Traffic and Transport Assessment. • The development must accord with relevant development management standards relevant to ecological protection and biodiversity, cultural heritage and archaeology, traffic and transport and landscape and visual amenity, as well as supported by a Construction Environmental Management Plan.
Inland Fisheries Ireland (IFI)	<ul style="list-style-type: none"> • Productive fish stocks in Lough Muckno. Fishing takes place at the lough. • Need to ensure water quality protection during development. • Need to have regard to IFI Guidance on Near Stream Works for construction works near watercourses. • Need to retain and balance existing angling amenity with other recreational activity, possibly using zoning. • Feeder streams constitute particularly sensitive aquatic habitat. • Potential development of an angling lodge at Muckno Estate. • There is a salmonid spawning area downstream from Lough Muckno on the River Fane (for Trout and Salmon) at the border with Co. Louth approximately. • Lough Muckno captures large volumes of run-off from the surrounding area, impacting water quality in the lake. • Lough Muckno is one of the Water Framework Directive Surveillance monitoring sites for fish. Water quality classed as 'poor' in 2015.
National Parks and Wildlife Services (NPWS)	<ul style="list-style-type: none"> • The park has valuable ecological attributes but would not meet criteria for classifying it as a National Park. • Discussion on need to ensure water quality protection in the Lough during any development.
Coillte	<ul style="list-style-type: none"> • Overview of existing operations at Black Islands was provided. • Concept proposals for Black Island are generally low impact in nature. • Overview of Coillte's Recreation and Biodiversity strategy. • Coillte's ambitions with respect to Black Island as a site of recreation and biodiversity align broadly with MCC ambitions for the site.



Consultee	Summary of Discussion Outputs
	<ul style="list-style-type: none">• Presence of ecologically valuable habitats and species at the site present an opportunity.• Need to ensure potential development is supported by and guided by appropriate ecological assessment and Appropriate Assessment.• Clear-felling is not proposed for the site. Selective thinning is proposed instead.• Potential funding options for recreational projects on Black Island discussed (e.g., Funding for Outdoor Recreational Activities).• Any works being carried out on Coillte lands need to take place in accordance with the appropriate Coillte licence or permit, where required.
Fáilte Ireland (FI)	<p>Overview of the Public and Stakeholder Consultation outputs to date, scales and ambitions of Vision, and description of concept proposal options provided.</p> <p>Discussion was held between all on the focus, scope and level of detail associated with the Strategic Planning and Environmental Appraisal being undertaken.</p> <p>MCC to share assessment with FI once completed.</p> <p>Since 2021, FI has engaged with MCC with the view to developing a vision that will ensure that at Lough Muckno Estate is a visitor attraction for Castleblayney, Monaghan and Ireland's Ancient East.</p> <p>The overall aim is to build a credible, achievable and realistic vision for the Estate that has a compelling narrative that matches the strategic goals of Ireland and can become an exemplar component of the new type of tourism development that will be required by communities and tourists in the near future.</p>



5. PLANNING AND POLICY CONTEXT

5.1 Land Ownership

Land ownership will underpin the making of any future planning application for 'proposed development' (as defined in the Planning and Development Act, as amended) associated with the Concept Proposals. The site falls under the ownership of three parties.

Coillte own the lands encompassing Black Island.

Concra Wood Golf Club own the lands encompassing Concra Wood.

Monaghan County Council own all other lands within Lough Muckno Estate, including Hope Castle and its Annex building and the Gatehouse to the Estate; Lough Muckno and its shoreline; White Island and the Market House situated in Market Square. It is also in charge of all public areas in the town of Castleblayney.

5.2 Site Planning History / Other Significant Development in the Area

A 'Planning Search' has been completed to identify other relevant development at the site and in the surrounding area that has been proposed or granted planning permission in the last 5 years. Details of all such development are provided in Appendix 2

Only proposed or consented developments that are of scale and significance, and that may potentially interact or combine with the Concept Proposals in a substantive and meaningful way has been detailed. All other proposed or consented developments identified have been considered when carrying out the high-level cumulative environmental impact assessment reported upon in Section 7.1.5 of this report. Several of the proposed developments listed have already been constructed.

5.3 Policy Context

An overview of national, regional and county policy of relevance to the Concept Proposals is provided.

5.3.1 National and Regional Policy

Project Ireland 2040 – National Planning Framework (2018)

Project Ireland 2040 – National Planning Framework (NPF) is the Government's high-level strategic plan for shaping the future growth and development of the country to the year 2040. County Monaghan is situated within the Northern Regional Area which historically has a lower level of urbanisation compared to other regions. Addressing economic resilience and connectivity will be strategic priorities for this area.

The subject site is located in an area characterised in part by rural land use. The NPF recognises that rural areas make a major contribution to Ireland's identity and to the overall national development in economic, social, cultural and environmental terms.



The relevant key future planning and development and place-making policy priorities for the Northern and Western Region includes:

- *Supported by the Rural and Urban Regeneration and Development Fund, shaping and informing delivery of city, rural town and village rural rejuvenation priorities, harnessing publicly owned land and other assets that are not being used actively at present, such as former healthcare, military, transport and other complexes and combining the potential of such assets with community and wider private and public sector support and investment, to bring about the transformation of both urban and rural areas in an integrated manner.*

The document lists the National Strategy Outcomes. Regarding Ireland's rural fabric, these include outcomes like strengthened rural economies and communities and enhanced amenity and heritage. The overarching strategy of the NPF is inclusive of the following:

- *Targeting a level of growth in the country's Northern and Western and Southern Regions combined, to at least match that projected in the East and Midland Region*
- *Reversing town/village and rural population decline, by encouraging new roles and functions for buildings streets, and sites.*
- *Supporting the sustainable growth of rural communities, to include development in rural areas.*
- *Promoting new economic opportunities arising from digital connectivity and indigenous innovation and enterprise as well as more traditional natural ad resource assets (e.g., food energy, tourism), underpinned by the quality of life offering.*

The Irish countryside is, and will continue to be, a living and lived-in landscape focusing on the requirements of rural economies and rural communities, based on agriculture, forestry, tourism and rural enterprise, however, the NPF notes that creating the environment to support job creation in rural areas will be a key enabler to reinvigorating rural towns and villages and sustaining rural communities. Rural areas like Castleblayney support a mix of businesses of varying sizes, operating in a wide range of sectors from the traditional, such as agriculture and tourism, to more modern industries.

Tourism at Castleblaney is primarily focused on Lough Muckno. Section 9.3 of the NPF has regard to Ireland's natural heritage, noting that Ireland has an abundance of iconic natural heritage areas which are a key part of our cultural heritage and are integral to our tourism industry for their contribution to the attractiveness of places for economic investment. Given that the subject site encompasses the picturesque sight of Lough Muckno and Castleblayney's most distinctive feature, Hope Castle, these are of significant importance to the county's tourism industry. The objective below is applicable in this case:

National Policy Objective 17:

- *Enhance, integrate and protect the special physical, social, economic and cultural value of built heritage assets through appropriate and sensitive use now and for future generations.*



Ireland's natural resources are some of our greatest assets and through the development of the agriculture, food, forestry, tourism and renewable energy sectors, this will not only sustain rural employment, but also contribute to driving the national economy. Likewise, the built, cultural and natural assets which constitute the 'raw material' of the tourism industry are also essential to the 'production capability' of the sector. Tourism has the capacity to directly and indirectly sustain communities, create employment and deliver real social benefits for rural Ireland.

National Policy Objective 22:

- *Facilitate tourism development and in particular a National Greenways, Blueways and Peatways Strategy, which prioritises projects on the basis of achieving maximum impact and connectivity at national and regional level.*

The National Planning Framework recognises tourism as having important potential to contribute to cross border cooperation.

People, Place and Policy – Growing Tourism to 2025

The document sets out the key priorities for Irish Tourism up to 2025, recognising that tourism is one of Ireland's most important economic sectors and has significant potential to play a further role in Ireland's economic prosperity. In this document, it is indicated that the Government affirms that it will place tourism as a key element of its economic strategy, with development in the tourism sector reflecting the highest standards of environmental and economic sustainability. Moreover, by supporting tourism, the Government aims to maximise the wide-ranging economic and social benefits of the sector, by promoting Ireland, supporting enterprise and jobs and providing an attractive, competitive overall offering for tourists. The document defines a selection of distinct consumer segments that have a higher likelihood to select Ireland as a destination. These include:

- **Culturally Curious** – Travellers in the over 45 age group taking a holiday with their partner. They are out to broaden their minds and expand their experience by exploring new landscapes, history and culture.
- **Great Escapers** – these tend to be younger and are specifically interested in rural holidays. Great escapers are on holiday to take time out, and experience nature at close range.
- **Social Engineers** – Younger visitors who like to holiday in groups or as couples. Friends or colleagues looking for an exciting trip to a new and vibrant destination.

The provision of a tourism development at the four zones around Lough Muckno is aligned with the aforementioned policies and objectives.

Tourism Recovery Plan 2020-2023

The Plan was developed as a strategy for the recovery of the tourism industry that is recognised as being a vital sector of the economy that has been hardest hit by the Covid-19 pandemic. Protecting workers and retaining tourism jobs and skills will be vital to tourism's recovery.



The document comprises of immediate priority recommendations for survival and some recommendations for the stabilisation and recovery of this industry of which include:

- *Focus Government investment in tourism capital projects on improving product quality and innovation, and the development and enhancement of cultural and heritage experiences to attract a wide range of visitors to Ireland.*
- *As part of the development of the proposed National Outdoor Recreation Strategy Government should introduce new measures to facilitate access to public and private lands*
- *Schemes and supports which promote the concept of and business case for sustainable tourism both at the enterprise level and the consumer level should be identified for implementation during the sustainability and recovery phase, e.g., Origin Green.*

Tourism Development and Innovation – A Strategy for Investment 2016-2022

Fáilte Ireland sets-out its strategic plan for national tourism development in its publication ‘Tourism Development & Innovation – A Strategy for Investment 2016-2022’. This strategic plan has not yet been superseded by a more current plan.

The strategic objectives of the investment strategy are:

- *To successfully and consistently deliver a world class visitor experience.*
- *To support a tourism sector that is profitable and achieves sustainable levels of growth and delivers jobs.*
- *To facilitate communities to play an enhanced role in developing tourism in their locality, thereby strengthening and enriching local communities; and*
- *To recognise, value and enhance Ireland’s natural environment as the cornerstone of Irish tourism.*

Lough Muckno is part of Fáilte Ireland’s Ancient East Region.

The overarching theme of Fáilte Ireland’s strategy is on building memorable experiences for visitors and almost every tourism experience can be broken down into four components:

1. Product – must be authentic.
2. Service – must be high quality.
3. Story – must be distinctive.
4. Narration – must have unique character.

Lough Muckno, a natural landscape and Castleblayney, with a wealth of history embraces many of the necessary components, however the ‘Service’ component with regards to the area and its immediate surroundings may be weaker due to the lack of existing and suitable overnight tourist accommodations. The Concept proposals offers accommodation options to close this deficiency gap.

The strategy seeks to identify the areas of investment that should be focused on that will deliver sustainable growth in the Irish tourism sector resulting in higher revenue and more jobs.



It is a priority for investment to seek specific outcomes listed in Section 4.1 of the document which is inclusive of:

- *Engagement with the outdoors – access to the landscape, improving the visitor experience of State lands, and opportunities for outdoor activity businesses.*
- *Engagement with heritage – increased capacity at iconic attractions, enabling access to heritage and culture, and conservation and sustainability.*

The Concept Proposals proposes outdoor adventure activities and experiences associated with nature, conservation, art, craft, music, food and drink, and health and well-being. This is in line with the desired outcomes of the strategy to improve engagement with the outdoors and heritage, including both natural and cultural heritage.

Northern and Western Regional Assembly - Regional Spatial and Economic Strategy 2020 – 2032 (RSES)

The Northern and Western Region RSES provides a high-level development framework that supports the implementation of the National Planning Framework (NPF) and the relevant economic policies and objectives of Government for effective regional development. By introducing the concept of a Growth Framework, it also provides for the careful management and encouragement of development within rural areas, which this region is strongly defined by, to ensure that they remain and grow as vibrant communities.

Section 5.5 of this RSES as part of Growth Ambition No. 2 recognises that there is potential to develop attractions of scale and building existing recreational attractions outside of the National Parks in the region. Lough Muckno in Co. Monaghan is listed as one of the amenity attractions that have the capacity to develop additional visitor experiences and increase footfall.

5.3.2 County Policy

Monaghan County Development Plan 2019-2025

The Monaghan County Development Plan 2019 - 2025 (CDP) is the relevant statutory plan which guides the use and development of the subject site. The CDP references Castleblayney and Lough Muckno in several sections, but Section 12, which specifically deals with Castleblayney, contains the most substantive aims and policies regarding growth and development in the area. It also contains policies to the protection and preservation of the built and natural environment at the same time. The following aim for Castleblayney is defined in the CDP:

- *It is the aim of this Plan to assist and direct development in the town over the plan period with an emphasis on developing the town's main assets, which include its strategic location, both nationally and in relation to Northern Ireland, and its potential for tourism based on recreation in and around Lough Muckno.*

A list of policy objectives contained in the CDP which are of relevance to the site and the Concept Proposals is provided in Table 5-1.



Table 5-1: Relevant County Development Plan Policy Objectives

Policy Objective Ref.	Policy Objective
CBSO 1	<u>Castleblayney Settlement Plan</u> To promote Castleblayney as a prosperous and thriving local development and service town where the principles of environmental, economic and social sustainability including protection of the town's heritage, natural and built environment are enshrined.
SHO 2	<u>Settlement Plan Towns – Carrickmacross & Castleblayney</u> To promote the Strategic Towns as prosperous and thriving local development and service towns where the principles of environmental, economic and social sustainability including protection of the town's heritage and natural and built environment are enshrined.
PAP 1	<u>Areas of Primary Amenity</u> To restrict development in Areas of Primary Amenity to sites where it can be demonstrated to the satisfaction of the Planning Authority that the proposed development would not threaten the scenic or environmental quality of the area.
CBO 2	<u>Town Centre Development Objective</u> To encourage new developments which refurbish existing buildings in order to regenerate the town centre and to eliminate dereliction.
CBO 3	<u>Industry, Enterprise and Employment</u> Promote Castleblayney as a key industrial centre and employment centre.
CBO 5	<u>Tourism</u> To promote Lough Muckno and its environs as the premier tourist attraction in the town.
CBO 6	<u>Tourism</u> To accommodate sustainable tourism related projects in and around Lough Muckno which are compatible with Chapter 4, Economic Development of the Monaghan County Development Plan 2019-2025
CBO 7	<u>Tourism</u> To support the recommendations of the CHL Consulting Company Ltd Options & Appraisal Report on Hope Castle and its annex buildings to provide a pathway for the delivery of a destination tourism facility at Lough Muckno.
CBO 10	<u>Natural and Built Heritage</u> To provide for the restoration/reuse of Hope Castle and the Annex buildings during the lifetime of this plan, subject to the availability of resources.
CBO 11	<u>Natural and Built Heritage</u> Prohibit development within the environs of Lough Muckno, unless in exceptional circumstances, where it has been proven to the satisfaction of the Planning Authority that the integrity of the Lough and its surrounding landscape will not be threatened.
STO 2	<u>Tourism</u> Accommodate sustainable tourism related projects related to natural assets of the towns.
TMP 2	<u>Tourism</u> Applications for tourism development will be considered in line with usual planning criteria and will be subject to high standards of design and materials, particularly when sensitively located.



Policy Objective Ref.	Policy Objective
TMP 4	<p><u>Tourism</u></p> <p>To support the development of angling tourism initiatives throughout the County and particularly at Lough Muckno, building on the amenity and recreational potential of the angling sector. In this regard the Council shall facilitate the development and upgrading of angler access, stands, car parks and their associated facilities, in accordance and in consultation with relevant management strategies, key stakeholders and bodies including Inland Fisheries Ireland.</p>

The principle of promoting tourism and economic development in Castleblayney and at Lough Muckno is clearly defined in the CDP generally, and in Castleblayney's Settlement Plan contained in Section 12 of the CDP. The CDP requires that such development does not impact negatively on the existing character of the town or lake. More specifically, it requires that such development is carried out in a manner that protects and enhances the areas existing natural and cultural heritage value. Policy Objective CBO 11 for Lough Muckno, in particular, is generally prohibitionary in nature, which leads to some degree of conflict between this policy objective and several other policy objectives relating to tourism and economic development at Lough Muckno, namely CBO 5, CBO 6, CBO 7 and CBO 10. The nature of Policy Objective CBO 11 lends itself toward restricting the scale and extent of development close to Lough Muckno, however.

Generally, it can be reasonably concluded that the CDP requires a high standard of development at the site. All policy objectives should be carefully examined and balanced when planning development at the site.

In essence, this means that tourism and recreation development in and around the town and Lough Muckno needs to be credibly sustainable in nature. The CDP is generally supportive of synergies between tourism related projects and natural heritage at Lough Muckno.

The following excerpt from the CDP, which has regard to the general views of the public in the area, summarises these matters in a succinct and clear way:

- *Castleblayney has significant potential to capitalise on its assets for tourism related development. As well as being an environmental resource for Castleblayney, Lough Muckno possesses enormous potential to become an economic asset for the town. However, this requires sensitive management and a careful appraisal of all proposals submitted for the area. Any development proposals for the park should have regard to the public's wider desire for sustainable development, preservation of the natural and built environment, and maintenance of public access.*

Certain components of the Concept Proposals are clearly supported by the CDP, such as the restoration and repurposing of Hope Castle and its Annex building.

Certain components of the Concept Proposals will serve to support CDP Policy Objectives. For example, the restoration of Market House can serve to promote economic development in the town. Section 6 of the CDP identifies Lough Muckno and its environs as an Area of Primary Amenity (refer to policy PAP 1 for restrictions relating to these areas).



Castleblayney is identified as a Tier 2 Strategic Town, under the CDP. The town is one of the areas that are under the most pressure with respect to planning permission being sought for dwellings, which is evidenced by the level of residential development planning applications made in and around the town in recent years. The CDP emphasises the importance of continuing to protect the rural environs of urban areas like Castleblayney from excessive urban generated development.

It is stated in Section 12.11 of the CDP that '*Lough Muckno is a designated Area of Primary Amenity and is also a proposed Natural Heritage Area. It is an invaluable natural resource that has helped shape the development of Castleblayney and should be afforded the highest degree of protection.*' This statement reinforces the requirement that higher development management standards are applied at and around Lough Muckno.

Lough Muckno is a designated amenity lake under the CDP. The protection of the lake's bathing waters is therefore a requirement for development taking place in at the site.

The Indicative Forestry Statement by the Department of Agriculture, which is referenced by the CDP, does not identify Lough Muckno as being in the list of areas suitable for commercial forestry. The CDP notes that this presents a great opportunity to develop tourism facilities sensitively located in woods at the site.

Monaghan Destination and Experience Development Plan (MDEDP) 2022

The MDEDP is a five-year commercial destination and experience development plan created to support the development of unique and compelling destination experiences. The key objectives of DEDP's are to:

- *Ensure local experiences are brought to life through the development of the optimal mix of visitor experiences and tourism products that will attract domestic and international visitors and retain them for longer in Monaghan.*
- *Unlock the economic growth potential of an area by progressing a range of key initiatives that will motivate tourists to explore the wider area.*
- *Develop a sustainable basis for commercial tourism development centred on creating a strong portfolio of saleable experiences that will excite visitors and buyers alike.*
- *Create the conditions to encourage domestic and international visitors to engage actively in the community, interact with local people by immersing themselves in the destination.*
- *Strengthen the value of tourism to the local community by providing employment opportunities.*

The MDEDP sets out the strategies as well as ongoing and future project plans. With regards to Co. Monaghan, there is a focus on developing Castleblayney as a visitor hub and the development of Lough Muckno Estate as attractors to disperse visitors across the rural tourism economy. The Muckno Estate has been identified as an opportunity site for the potential development of an attraction of scale for Monaghan.



6. THE BASELINE ENVIRONMENT

6.1 Introduction

A high-level evaluation of the baseline environment has been carried out. This assessment has been informed by the following:

- Desk based research undertaken.
- A series of site walkovers.
- Insights from the public and stakeholder consultation undertaken.

6.2 Material Assets

A desk-based examination of Material Assets situated at the site and in the surrounding region was carried out to characterise the baseline Material Assets environment and facilitate an evaluation of how the Concept Proposals may impact on Materials Assets used by humans.

As outlined in Environmental Protection Agency (EPA) Guidance document '*Guidelines on the information to be contained in Environmental Impact Assessment Reports*', (2022), Material Assets in the context of Environmental Impact Assessment (EIA) refers to built services and infrastructure, typically considered under the following headings:

- Built Services
- Waste Management
- Roads and Traffic

This section considers the Built Services and Waste Management infrastructure provided in the environs of the site. Material Assets relating to Roads, Traffic and Transport have been dealt with separately in Section 6.9 of this document.

Due regard has been given to the following Built Services:

- Water supply infrastructure
- Wastewater management infrastructure
- Energy supply infrastructure
- Waste Management Infrastructure

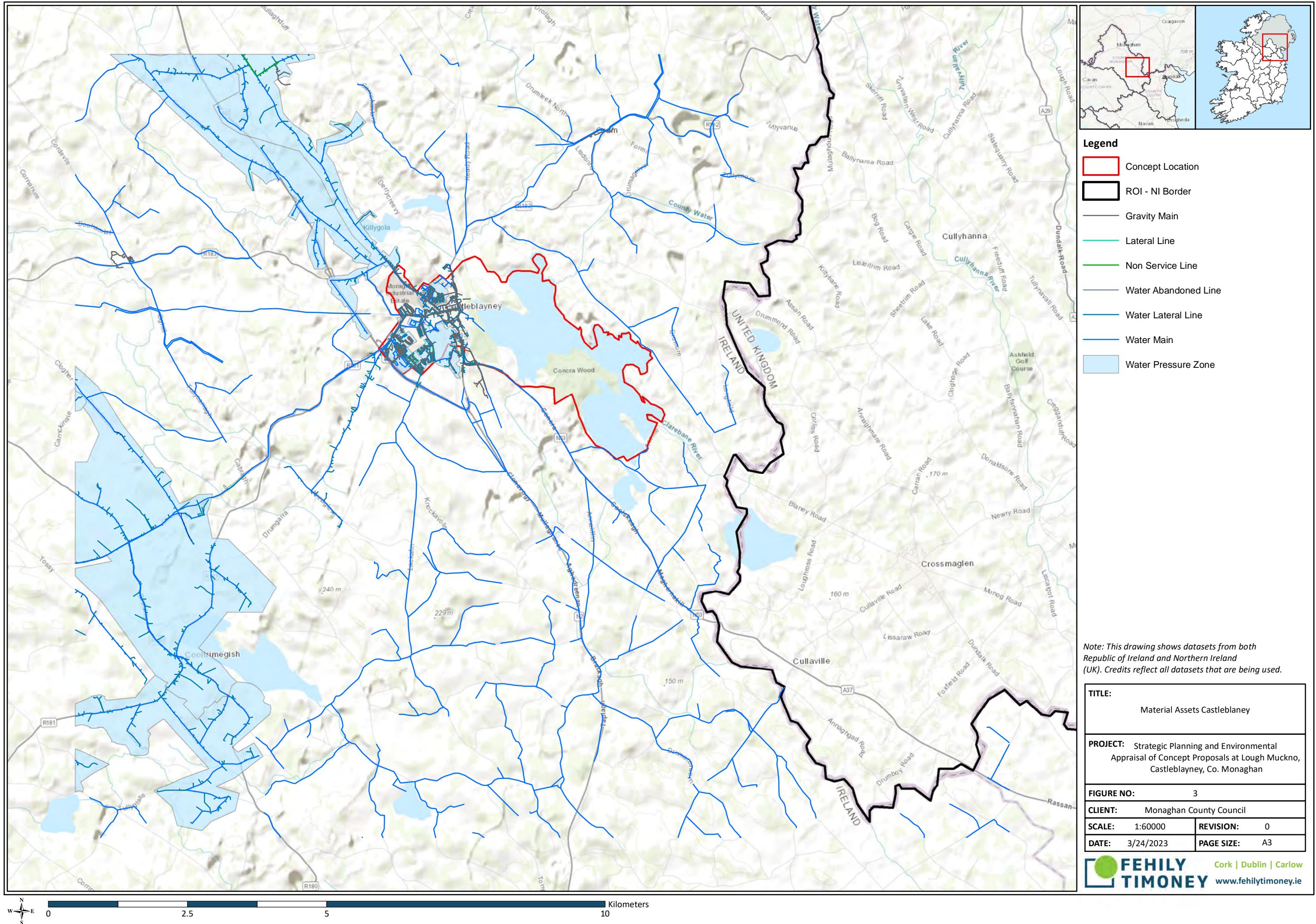
Statutory authorities and other relevant bodies were consulted during the study including Gas Networks Ireland, ESB and Uisce Éireann.



6.2.1 Water Supply Infrastructure

Castleblayney town is the third largest town in County Monaghan and is served by a comprehensive public water supply throughout the town. This water supply network extends to the surrounding area. The public water infrastructure in the locality is displayed in Figure 3. Mains water pipes that are of the same water pressure are identified in Figure 3 as Water Pressure Zones, for each specific zone.

In the past, there was a history of problematic water mains in Castleblayney with high levels of leakage. In recent years, Uisce Éireann has been working in partnership with Monaghan County Council to improve security and reliability of water supply in Castleblayney, as part of Uisce Éireann's national Leakage Reduction Programme. Recently in 2022, 220 metres of aged problematic water mains have been replaced with modern pipes and new water service connections along the R181 & L75065 at Market Square and Muckno Street, in Castleblaney town centre. In 2018, another 360 metres of problematic water mains pipes were also replaced on Muckno Street.





6.2.2 Wastewater Management Infrastructure

The Concept Proposals have the potential to increase foul outfalls to the public sewer network, served by Castleblayney Wastewater Treatment Plant (WWTP), located on Muckno Street, and the associated public sewer network.

To allow future growth in local population and economic activity in Castleblayney, the WWTP underwent a €6 million modernisation project which was completed in 2019. According to the most recent available information from the EPA, Castleblayney WWTP currently serves an agglomeration Population Equivalent (PE) of 6,356 and has a plant design capacity PE of 12,960, with a remaining capacity (PE) of 6,604.

The WWTP uses treatment type 3P - Tertiary P removal, consisting of preliminary treatment (screening & grit removal), Secondary treatment (Aeration) and Nutrient Removal (Chemical dosing for phosphorus removal).

Castleblayney WWTP is currently classified by the EPA as compliant with the Urban Wastewater Treatment Directive, however the WWTP is listed as one of 38 priority areas to prevent wastewater discharges from harming rivers, lakes, estuaries and coastal waters in the EPA publication "Urban Wastewater Treatment in 2021".

According to the most recent Annual Environmental Report (AER) available for Castleblayney (2020), there were no complaints of an environmental nature. There were two incidents reported to the EPA in 2020, namely a breach of ELV (Ammonia and Total Phosphorus), due to plant or equipment breakdown at the WWTP and an uncontrolled release caused by power failure.

The sewerage network in Castleblayney is expected to have sufficient reserve capacity to cater for additional flows.

6.2.3 Energy Supply Infrastructure

According to data available from Gas Networks Ireland, the public gas mains pipeline does not currently serve Castleblayney.

Electricity in Castleblayney is provided via Castleblayney 38 kV Substation on Mile Hill Road, Killycard, which has an installed capacity of 10 MVA and the numerous associated MV/LV substations throughout the town. The parent station for Castleblayney Substation is Dundalk and is served by the Castleblayney/Carrickmacross ex Dundalk parent feeder.

Castleblayney 38 kV Substation is currently classified on the ESB Availability Capacity Map as Black (having no demand capacity available). There are numerous MV/LV substations situated throughout Castleblayney classified as Green (greater than 200 kVA demand capacity available) and amber (between 20 and 200 kVA demand capacity available).

There are currently two public charge points for Electric Vehicles (EVs) located in Castleblayney, one on Market Street (serves DC Chademo, CSS Combo and type 2/AC43 EVs) and one on Castle Street (serves type 2/AC43 EVs only). Further public EV charge points are expected to be introduced in Castleblayney in the coming years, in line with increased demand for electric vehicles and Government targets outlined in the Climate Action Plan.



6.2.4 Waste Management Infrastructure in the Region

The Concept Proposals would give rise to additional waste generation in the environs of Castleblayney. The most likely waste generation from the concept proposals is C&D waste generated during construction activities and increased municipal waste during operations.

Waste management planning is the responsibility of local authorities under Part II of the Waste Management Act 1996 (as amended). Municipal waste is collected by the private sector throughout Monaghan County and its towns. Monaghan County Development Plan 2019-2025 details 11 Waste Management Policies (WMP1-WMP11) for the county.

Castleblayney is serviced by a network of Waste Management Infrastructure in the environs of the town itself, other towns in Co. Monaghan and surrounding counties.

According to NWCPO data, there are nine facilities with permits in Castleblayney currently on the Local Authority Waste Facility Register, which accept various waste types including municipal waste, C&D waste and End of Life Vehicles. There are thirteen Waste Collection Permit holders with registered addresses in Castleblayney. Three EPA Licensed Waste Facilities are located within 20km of Castleblayney according to EPA data, including Scotch Corner Landfill (W0020 - Landfill) Kabeyun Ltd (W0121 - Composting/Anaerobic Digestion) and Kilsaran Concrete (W0300 - Recycling/reclamation of other inorganic materials).

According to Repak, there are three bring banks and a lightbulb drop-off point location within 5km of Castleblayney Town. One of Monaghan's two Recycling Centres is located approx. 10km outside Castleblayney, operated on a concession-based contract by a private operator. The Centre can cater for a wide range of materials, including cardboard, plastic glass, scrap metal, textiles, batteries, green waste, waste oils, wood, waste electrical equipment, and builders' rubble.

6.3 Population and Human Health

The site is located in a predominantly rural area situated in the south-east of Co. Monaghan. The site is centred around Castleblayney town.

Castleblayney town is the third largest town in County Monaghan with a population of 3,607 in 2016. It is well connected to surrounding towns in the region including Dundalk, Monaghan, Carrickmacross and Armagh, all which are less than 30 km from Castleblayney. The town functions as a market/service centre and provides important residential, retailing, social and leisure functions for the town and the surrounding rural community, which extends cross-border into Co. Armagh. It is designated as a Tier 2 Strategic Town under the CDP.

The surrounding area is predominantly rural and dominated by agricultural lands with one off residential dwellings situated in the wider expanse on all sides. A variety of human land uses are situated in the vicinity of the application site.

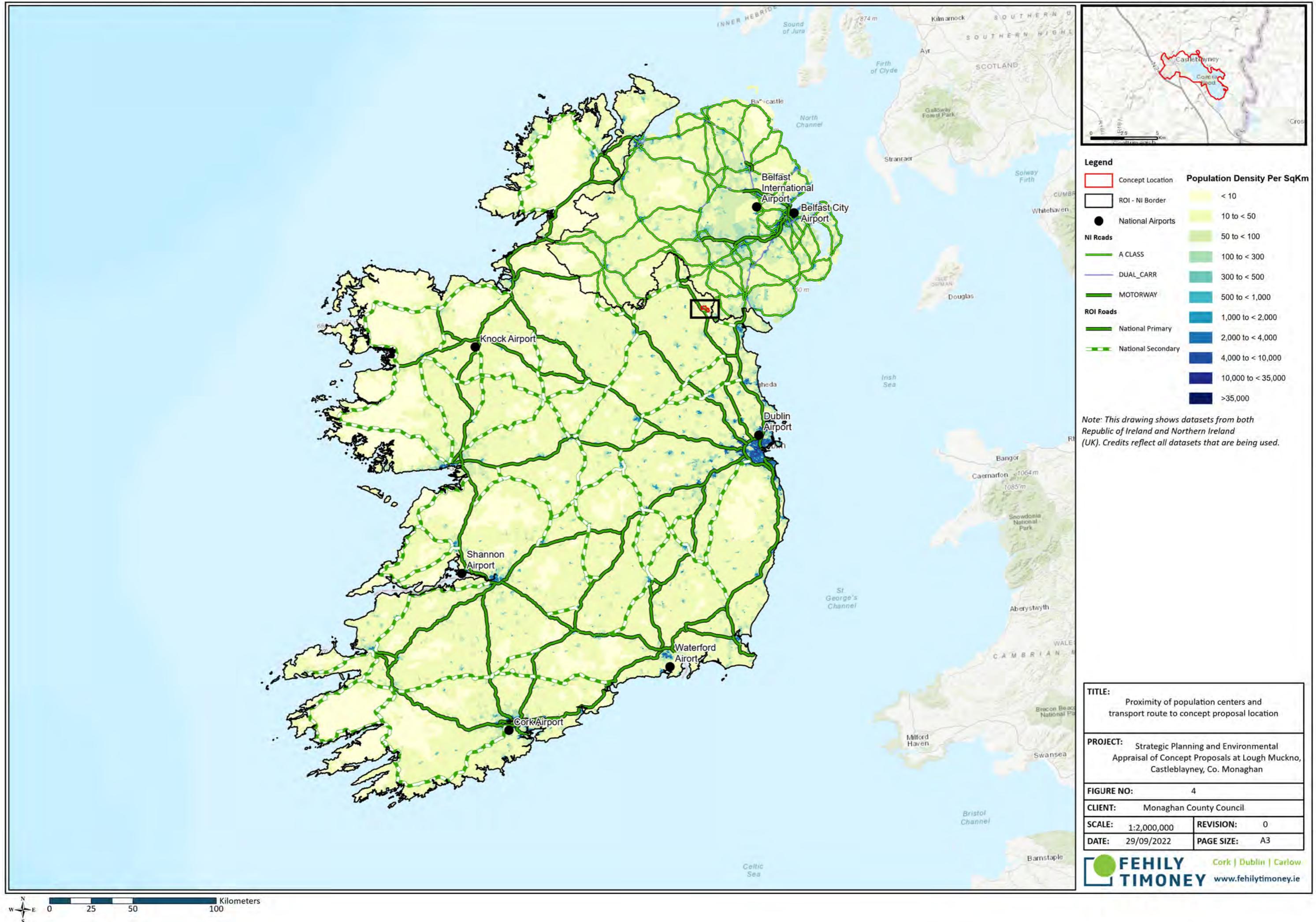
There are multiple sensitive residential receptors situated in and around the site in all cardinal directions, including residential dwelling situated in Castleblayney town, dwellings situated along various major and minor roads in the vicinity of the town and site, and one off-housing.



Other sensitive receptors within Castleblayney town include three hospitals or healthcare centres; six educational institutions that accommodate up to 1,400 schoolchildren from the locality and the wider area; St. Mary's Church and St. Maeldoid's Church, which are located adjacent to Upper York Street, and Iontas Arts, Theatre & Community Centre, which located 150 metres from the same street. A number of graveyards like Castleblayney First Presbyterian Churchyard, St. Maeldoid's Church Cemetery and Annyart Presbyterian Churchyard are located within the town and up to 1 km away. Several sports facilities and pitches and community open space areas are dotted around the town.

Lough Muckno Estate is situated immediately to the southeast of the town of Castleblayney. Lough Muckno, the largest lake in Co. Monaghan, is a designated Areas of Primary Amenity and pNHA serving as a water supply for Dundalk. It is situated immediately to the east of Castleblayney town. Multiple recreational and sporting activities are located around the Estate and the lake. Castleblayney Outdoor Adventure Centre, which is situated in the Estate provides for multiple water-based recreational and sporting activities including sailing, windsurfing and kayaking/canoeing as well as other outdoor activities such as orienteering, rope-assisted tree climbing and cycling. Several walking trails around the Estate exist, which extend to Black Island, White Island and Concra Wood. Concra Wood Golf Club, an 18-hole attractive golf venue, is an important feature that exists within the site. The area is popular for angling. Long stretches of the lake are used for angling, with multiple angling pitches being present around its shores. The area is commonly used for festivals, including angling festivals and festivals relating to the arts, music and culture, such as the Muckno Mania festival.

To allow for an understanding of the extent to which the site is connected to regional and national population centres and airports, a figure showing population density data and the location of significant airports regionally and nationally, and the main transport routes to the site is provided in Figure 4.





6.4 Biodiversity

In 2022, a Preliminary Ecological Appraisal Report encompassing Lough Muckno Estate, including Black Island and White Island was produced by Flynn Furney Environmental Consultants. This report was informed by ecological field surveying which was undertaken in September and October 2022. The purpose of the report was to characterise the baseline environment of the study area in terms biodiversity, identify ecological constraints for development and make recommendations on mitigation measures to implement during development planning processes to ensure development does not have a negative impact on the baseline biodiversity environment. The report is re-produced in Appendix 2 of this document. A summary of the key findings of this report that relate to the baseline biodiversity environment is provided in the sections below. The reader is asked to refer to this report for further insight into and detail on the baseline biodiversity environment for the study area.

6.4.1 Protected Sites

There are no protected European Sites within 15 km of the site. However, four European sites were identified to be hydrologically connected to the site. These are:

- Dundalk Bay SAC (004026)
- Dundalk Bay SPA (000455)
- Carlingford Shore SAC (002306)
- Carlingford Lough SPA (004078)

The pNHA of Lough Muckno is within the boundaries of the site of and includes the lake itself and parts of the surrounding wetland areas. Further 6 km downstream from the proposed site there is another pNHA called Lough Ross. A list of Protected Sites within 15 km of the site or hydrologically connected to the site is provided in Table 6-1.

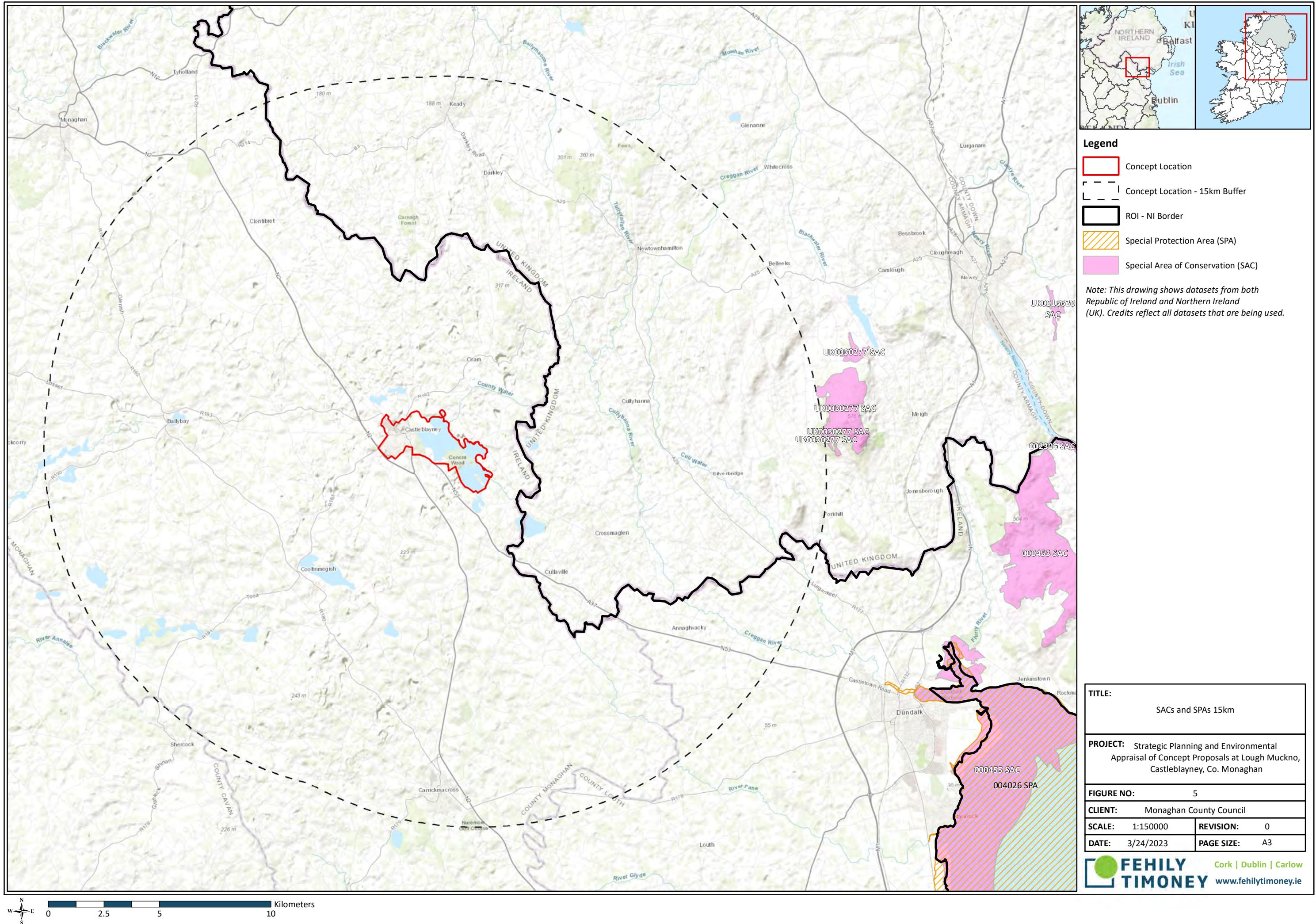
Table 6-1: Protected Sites within 15 km of the site or hydrologically connected to the site

Site Code	Site Name	Distance (km)
000563	Proposed Natural Heritage Areas: Muckno Lake	0
001607	Proposed Natural Heritage Areas: Lough Smiley	1.3
001600	Proposed Natural Heritage Areas: Drumakill Lough	2.3
001495	Proposed Natural Heritage Areas: Lough Ross	5.2
001605	Proposed Natural Heritage Areas: Lough Egish	6.2
001666	Proposed Natural Heritage Areas: Tassan Lough	6.6
001268	Proposed Natural Heritage Areas: Cordoo Lough	10.3
001599	Proposed Natural Heritage Areas: Creevy Lough	11.6
001595	Proposed Natural Heritage Areas: Loughbawn House Loughs	13.1
000001	Proposed Natural Heritage Areas: Dromore Lakes	13.5
002077	Proposed Natural Heritage Areas: Naferty Fen	14.1



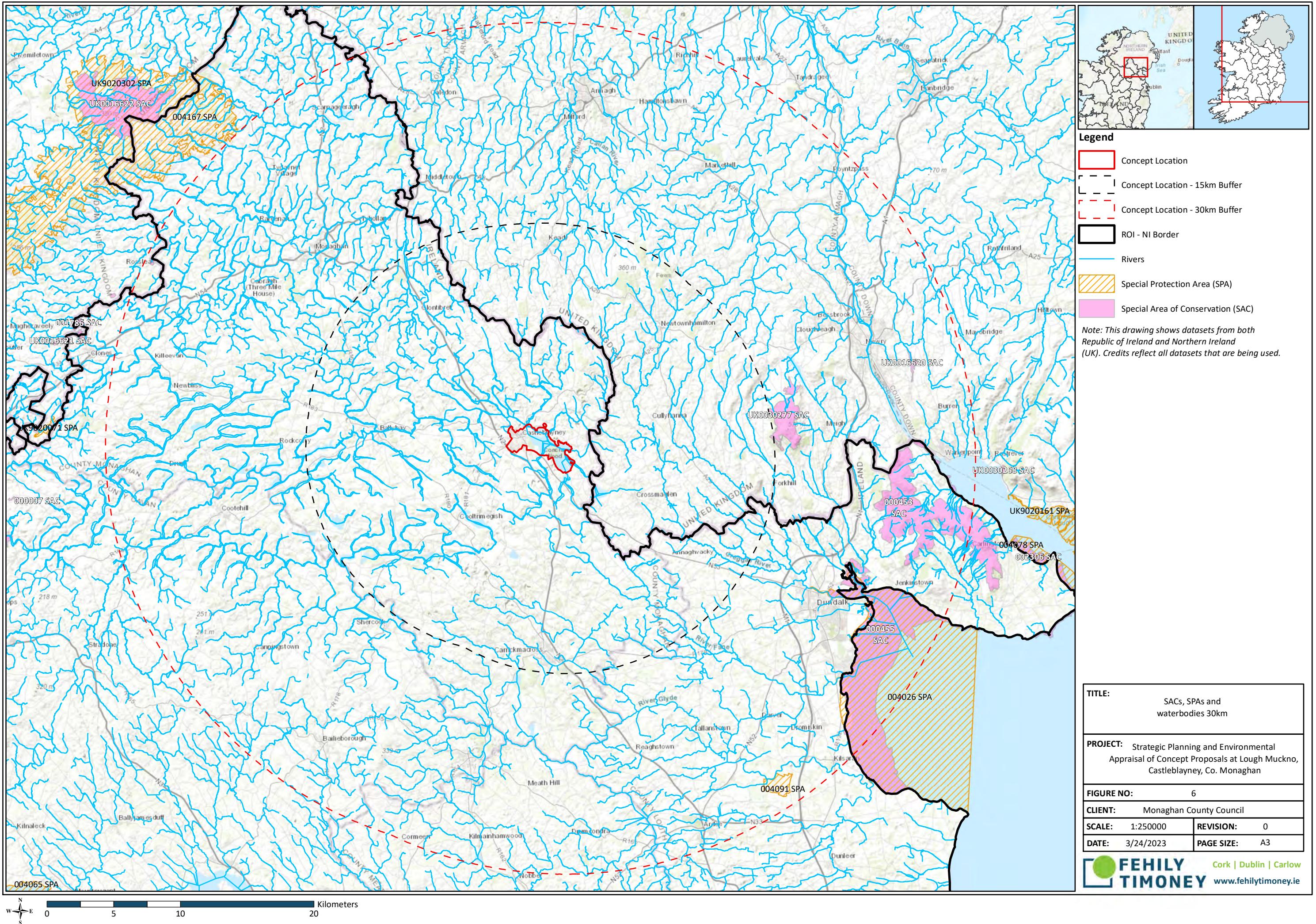
Site Code	Site Name	Distance (km)
001671	Proposed Natural Heritage Areas: Spring and Corcrin Loughs	14.6
0455	Special Area of Conservation: Dundalk Bay SAC	29.1 (straight-line distance) 38.5 (hydrological distance)
004026	Special Protection Areas: Dundalk Bay SPA	29.1 (straight-line distance) 38.5 (hydrological distance)
002306	Special Area of Conservation: Carlingford Shore SAC	39 (straight-line distance) 53 (hydrological distance)
004078	Special Area of Conservation: Carlingford Lough SPA	42 (straight-line distance) 56 (hydrological distance)

A figure showing the location of SACs and SPAs within 15 km of the site is provided in Figure 5.



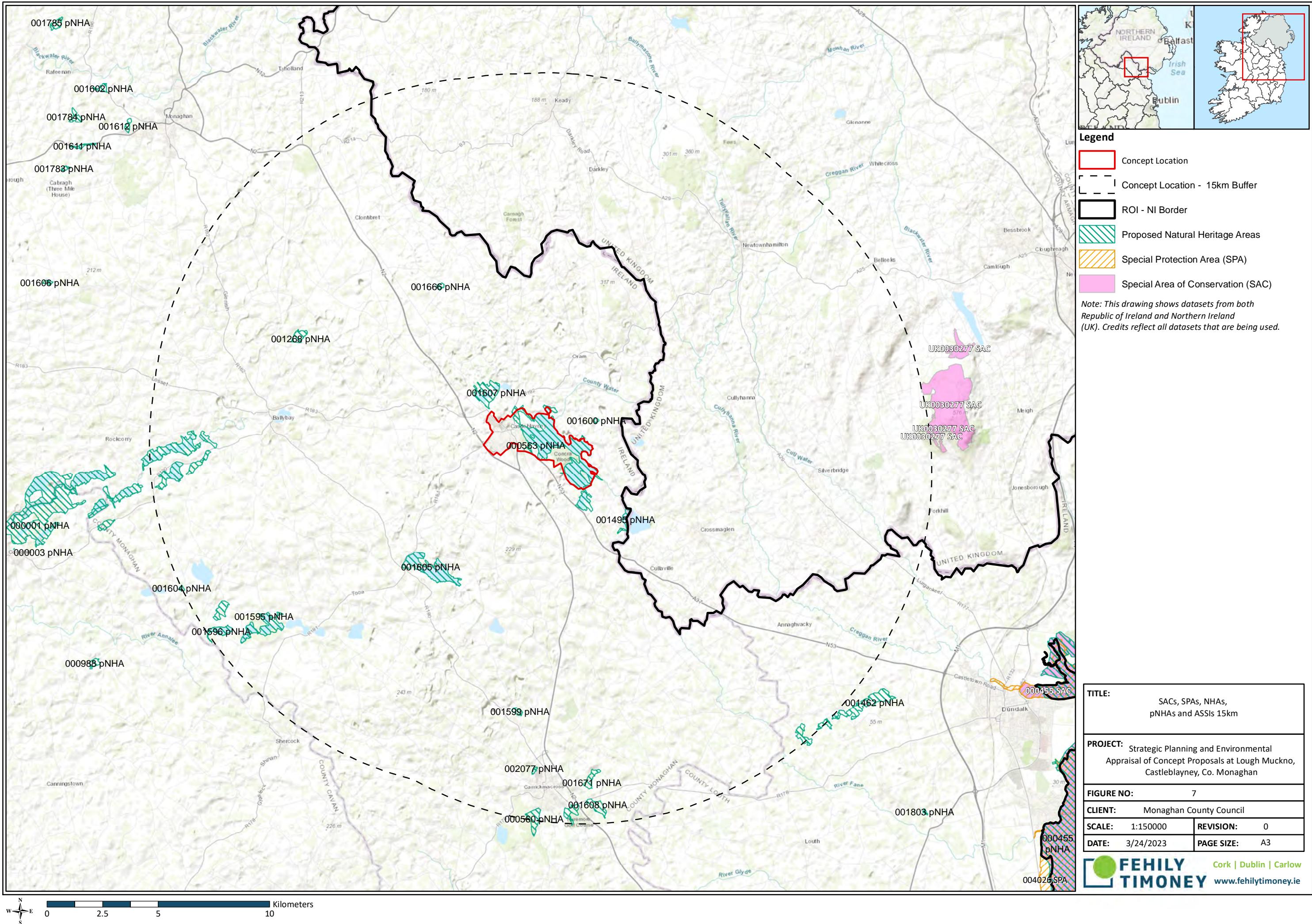


A figure showing the location of SACs and SPAs within 30 km of the site and connecting water bodies is provided in Figure 6.





A figure showing the location of SACs, SPAs, pNHAs and Northern Irish ASSIs within 15 km of the site is provided in Figure 7.





6.4.2 Habitats and Species

The main habitats identified at the site were deciduous woodland, conifer woodland and scattered trees and parklands. Additional examples of habitats encountered include riparian woodland, reed and large sedge swamps and wet grasslands. No European protected areas or habitats were identified at the site. Overall, the site habitat types encountered within the site boundary were relatively common both locally and nationally.

The field survey did not identify any protected species. No rare, threatened, or protected species of plants as per the Red Data List were found within any habitats within the site.

Several invasive species were noted during the field survey, including Japanese knotweed (*Fallopia japonica*) and Rhododendron (*Rhododendron ponticum*).

Based upon the site survey, the site is of moderate to high biodiversity value.

Further detail on the field surveying undertaken is provided in the Flynn Furney report including mapping showing the location and extent of habitats present at the site and the location of species/evidence of species identified at the site.

The Preliminary Ecological Appraisal was also informed by a review of bird distribution data for the site and surrounding area defined in the Bird Atlas 2007 - 2011. Species recorded within 2 km distance of the site that are protected in Annex I of the EU Birds Directive, or subject to serious population declines in the Birds of Conservation Concern in Ireland (BoCCI) red list were identified.

Four Annex I wintering species include Whooper Swan (*Cygnus cygnus*), Kingfisher (*Alcedo atthis*), Peregrine Falcon (*Falco peregrinus*) and Golden Plover (*Pluvialis apricaria*) have been identified in the study area.

Some of the banks along the rivers within the study area may be suitable for Kingfisher, which require muddy banks close to water for nesting.

A further three bird species, listed on the BoCCI Red list, winter in the area and include Lapwing (*Vanellus vanellus*), Yellowhammer (*Emberiza citronella*) and Black Headed Gull (*Larus ridibundus*) have been identified in the study area.

Lapwing winter on farmland, wetlands and flat coastal areas. Yellowhammer nests are usually placed low on the ground, among hedgerows or woodland fringes. Black Headed Gull winter on a variety of habitats. All the above species may potentially occur within the study area.

The main findings of the appraisal with respect to the baseline biodiversity environment are listed below:

- There is potential for bird nesting within trees and vegetated areas, especially the marsh/wet grassland areas around the edge of the lake. The vegetated reed fringe within the study area generally provides suitable habitats for nesting birds.
- There is potential for bat roosting in several mature trees and in some old buildings (e.g., Hope Castle and its Annex). Several bat species have been recorded in the area.
- Though no evidence of badgers was observed during the field survey, this area has a lot of potential as a badger habitat.
- Though no evidence of red squirrel was observed during the field survey, this area has a lot of potential as a red squirrel habitat.
- Evidence of Otter and Pine Martin was found on Black Island.
- Evidence of Kingfisher and Great Spotted Woodpecker was found on Black Island.



6.5 Hydrology and Surface Water Quality

The site is situated in the Newry-Fane-Glyde-Dee Catchment (WFD Catchment Region No. 06) and within the FANE_O20 sub-basin and the FANE_SC_010 sub-catchment.

The site centres around Lough Muckno, which is the major water body present within the site. Lough Muckno is an inter-drumlin lake situated to the east/south-east of Castleblayney. It is the largest lake in Co. Monaghan. The lake is designated a proposed Natural Heritage Area (pNHA). It contains abundant and healthy fish stocks, and it is a popular location for angling. It is known to be impacted by polluting discharges from agricultural, wastewater and urban sources. The lake is used as a water supply for the town of Dundalk.

There are six inlets into the Lough Muckno – Derrycreevy River from Drumillard Lough and Gentle Owen's Lake Stream from Muckno Mill Lough feed from the northwest, County Water from the north, Drumacon River from the east, Annahale Stream from the west and Toome River from the south. Lough Muckno itself flows eastward into the Fane-Clarebane River, then into Lough Ross, which is located ca. 2.1 km southeast of the site, and then to Dundalk Bay approximately 30 km east of the site. There may be some connectivity between Lough Muckno and Drumcrew Lough, situated about 700m to the west, through groundwater flow.

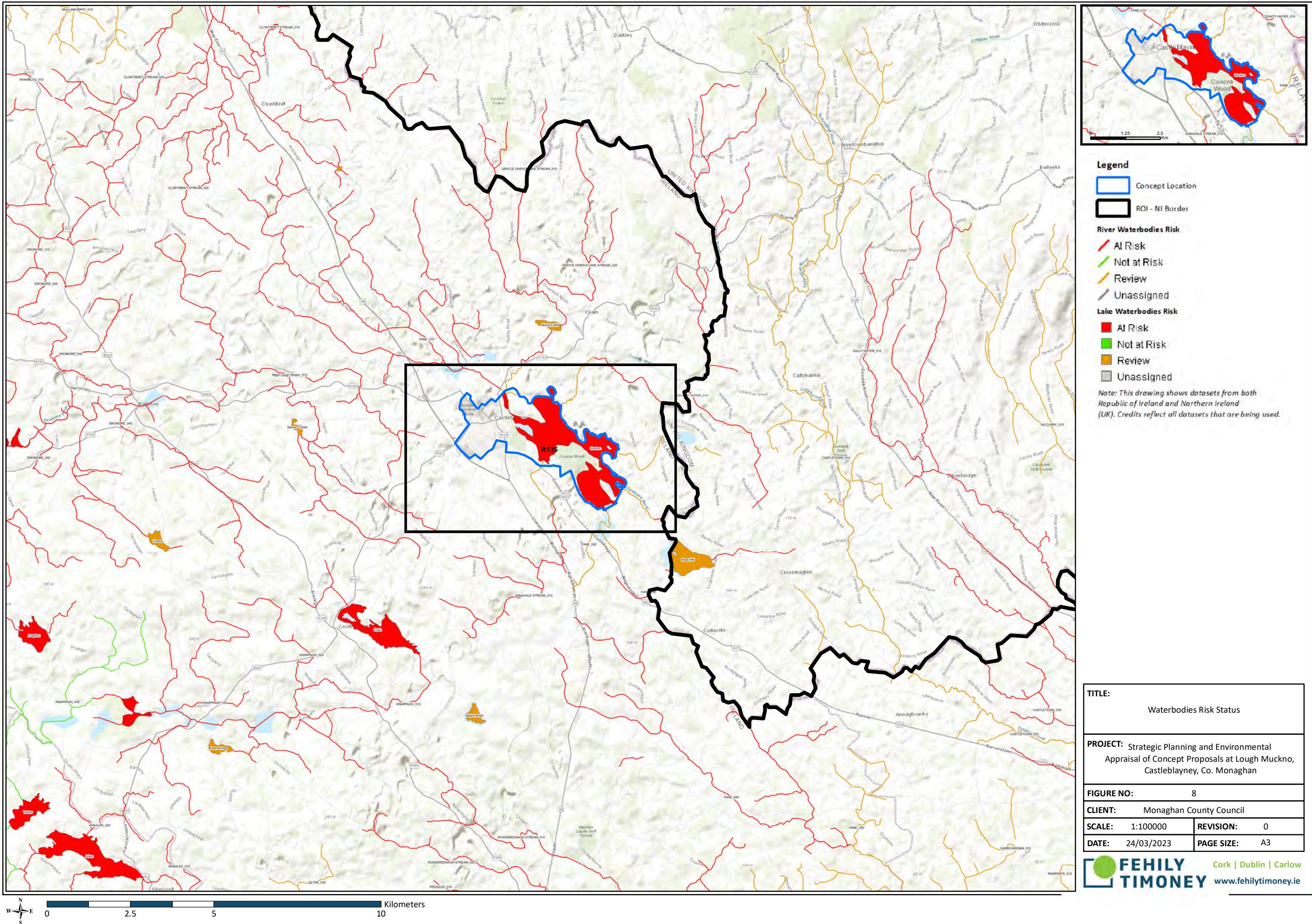
Water quality monitoring at Lough Muckno is carried out by the EPA under the Water Framework Directive. There are 22 national water monitoring stations located on the shores and the middle of the lake. The most recent water quality monitoring data from 2018 and the EPA's publication 'Ireland's Environment – An Integrated Assessment 2020' shows a 'bad' ecological status for the lake. The assessment was completed in 2020 by the EPA Catchments Unit in conjunction with other public bodies and was primarily based on monitoring data up to the end of 2018.

The water bodies surrounding Lough Muckno also have monitoring stations. The latest water quality monitoring conducted at these stations show that River Derrycrevy, County Water, Annahale Stream and Fane-Clarebane River are all of "poor" status (Q-value 3) and Gentle Owen's Lake Stream is of 'moderate' status (Q-value 3-4).

Accordingly, these water bodies, including Lough Muckno and the River Fane, have a status of 'at risk', where these waterbodies are projected to fail in meeting their Water Framework Directive (WFD) objectives by 2027.

The Drumacon and Toome Rivers do not have existing monitoring stations.

A map showing these rivers and their associated risk status is provided in Figure 8.





A UWU Emission Point for Stormwater Overflow into Lough Muckno is located at the easting-northing coordinates of (ITM 282879 320154). Lough Muckno is a designated nutrient sensitive area under the Urban Wastewater Treatment Directive.

Other lakes near to the site include Drumakill lake, a small lake located 5 km east of Castleblayney and approximately 1 km east of Lough Muckno, Drumcrew Lough, a small lake located about 600 metres west of Lough Muckno, and Lough Ross, 2 km downstream southeast of Lough Muckno.

The site comprises lands zoned as having a Low and Medium Probability of Flooding under the OPW's Flood Maps. According to the OPW's Flood Hazard Mapping, six past single flood events have occurred from 2008 to 2015 in the areas surrounding Lough Muckno (Derrycreevy, Castleblayney, Annadrummond, Toome and Drumleek South) and one recurring flood event on the shores of Drumakill. Within Annadrummond (ITM 7190603 -747714), a small stream flowing southward from Lough Muckno is classified by the OPW as having medium probability of flooding.

6.6 Soils, Geology and Hydrogeology

According to Teagasc, GSI and EPA web mapping, the subsoil type at the site is mainly composed of 'Acid Brown Earths' and Lower Palaeozoic sandstone and shale till, which includes inter-drumlin peat and peaty gleys especially along the western shores of Lough Muckno. These soil types are acidic and are generally poorly drained. As such, the subsoil permeability of the overall site has been classified as 'low'.

The site is underlain by sandstone, non-calcareous shale and greywacke. The underlying bedrock formation is principally Silurian sandstone southeast and west of the site as well as Silurian greywacke in the middle of Lough Muckno. A small part of Ordovician black shale borders the south-eastern sandstone and greywacke areas, while shale with minor rhyolitic tuff underlies most of Castleblayney town. The area surrounding Moragh Quarry is composed of non-calcareous bedrock at or close to the surface. Castleblayney town is also underlain with surface bedrock.

The groundwater aquifer underlying the site is classified as a 'PI – Poorly Productive Aquifer' by the Geological Survey of Ireland (GSI). This category of groundwater aquifer is described as 'bedrock which is generally unproductive except for local zones.' A large portion of the area has a groundwater vulnerability of low/medium, mostly surrounding Lough Muckno. The area between Castleblayney town and Drumillard Little is mainly of high/extreme groundwater vulnerability. Moragh Quarry which is located within the subject site is classified as 'X - a subset for extreme vulnerability.' This is due to presence of bed rock at or near the surface.

6.7 Air Quality and Climate

The site is situated in the air quality zone, Zone D – Rural Ireland. The Air Quality Index for Health (AQIH) for the eastern part of this zone has a status of '3 – Good'. The existing air quality environment at and around the site is characterized by the presence of a moderately sized town (Castleblayney), several significant transport routes (N53, N2, R181, R182 and R183), and predominantly agricultural land use with interspersed one-off housing.



The closest EPA Ambient Air Quality monitoring stations are in Kilkitt, which is about 10.8 km west of the site, and Monaghan town, which is approximately 20.4 km northwest of the site. The Kilkitt monitoring station is representative of a typical rural location in Ireland and serves to characterise the rural hinterland surrounding Castleblayney. The Monaghan town monitoring location is representative of a moderately sized town situated in the region. Air quality monitoring results at this station are likely to be a good indication of air quality associated with the town of Castleblayney, another moderately sized town in Co. Monaghan; although it is noted that Monaghan town is approximately twice the size of Castleblayney town in terms of population, so such results may in fact give a conservative representation of Castleblayney's air quality.

These stations record readings of PM2.5, Sulphur dioxide, Carbon monoxide and Oxides of nitrogen. From July 2020 until present day, there have been no limit value exceedances for any monitored air quality parameters at either station. The overall ambient air quality has been classed as 'Good' at both stations on an ongoing basis; with the exception of a number of 'Fair' status recordings in Kilkitt during school holidays in October 2021 and January and February 2022 for one-week intervals.

There are two IPC licensed industrial facilities within the site, namely MC-Building Chemicals Müller and Partners and Kingspan Insulation Limited. Both these facilities are situated to the southeast of Castleblayney town, just off the N2. The MC-Building Chemicals Müller and Partners facility does not generate any emissions to air. There are 10 emission points at the Kingspan Insulation Limited facility. All emissions from this facility were compliant with emission limit values prescribed in the IPC licence for the facility as of 2021 (the last year reported upon).

Several licensed pig and chicken farming installations are dotted around the wider region. These facilities naturally generate some levels of odour but are unlikely to have an odour impact on the site given their distance from the site.

The N2 and N53 routes by-pass Castleblayney town and Lough Muckno. They are defined by the EPA as major roads that exceed a flow threshold of 3 million passages per year. These routes, and to a lesser degree, the R181, R182 and R183 routes, would be sources of vehicle related emissions to air in the wider study area.

The main space heating fuel for residential dwellings in the county is heating oil. Its use is prevalent across detached, semi-detached and terraced housing. The most prevalent space heating fuel used in Castleblayney is heating oil also. Some residential dwellings in and around the site also likely use solid fuel either as a main or more likely, secondary heating fuel. The use of these fuels locally would be a source of emissions to air locally and likely characterise the air quality environment of the town to some degree. The impact of solid fuel burning on the air quality environment in Ireland, particularly in villages and towns, is well known and understood.

6.8 Noise

The wider noise environment is characterised by the presence of a small town, several significant transport routes and wider area dominated by rural land use activities. In the main, the noise environment of Lough Muckno Estate, including Black Island and White Island, and Concra Wood can be categorised as a moderately quiet noise environment. The noise environment of Castleblayney town is likely to be somewhat higher due to typical town activities, including vehicle movements throughout the town. Noise levels at town locations characterised by commercial/industrial activity are likely to be somewhat higher still.

The N2 and N53 routes in the vicinity of Castleblayney town are defined by the EPA as major roads that exceed a flow threshold of 3 million passages per year. Therefore, areas next to or near these roads experience loud volumes of traffic at a range of 65 to 74 dB during the day. The extent of the noise levels from these roads goes to approximately a 300-metre radius at maximum.



6.9 Traffic and Transport

6.9.1 Transport Routes serving the Site.

The town of Castleblayney is the main transport node at and around the site.

The N53, a national secondary road, which originates at Dundalk town enters Castleblayney to its southwest. The Contra Wood site access road can be accessed from the N53.

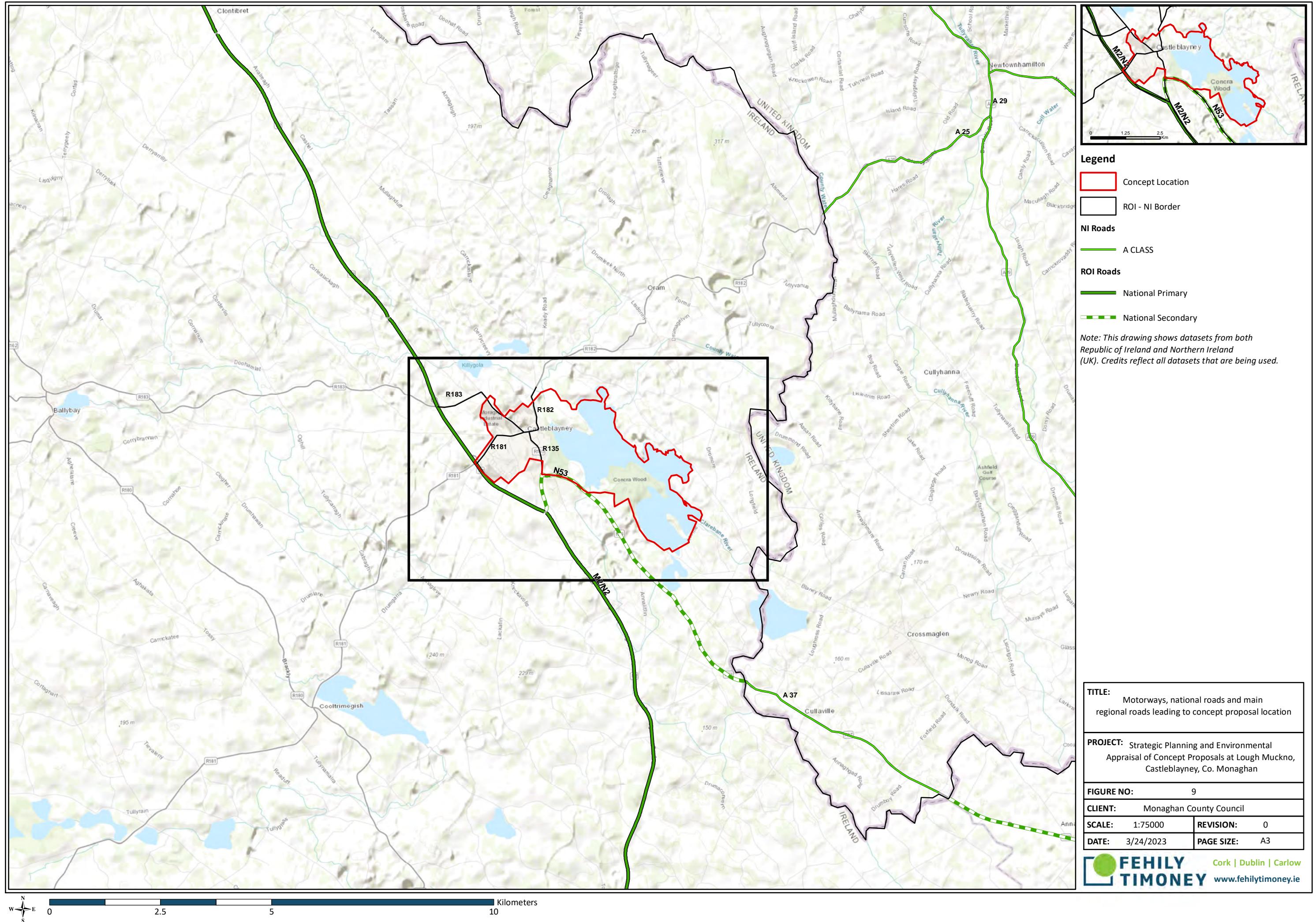
The N2 Dublin to Monaghan town road, a national primary road, is situated along the western fringe of the town travelling in a southeast to northwest direction. The N2 intersects with the N53 at a roundabout junction approximately 1 km to the south of Castleblayney (Lat/Long: 54.104046/6.731826).

Most of the traffic entering the town travels originates from these roads.

The town can also be accessed from the west by the R181, the north/northeast by the R182, and the northwest by the R183. These routes serve local areas to the west, northwest, north and northeast of the site, including cross-border areas further afield.

Lough Muckno Estate can be accessed using several combinations of routes running in and around Castleblayney. The main access routes used to the Estate would be a combination of the Dublin Road/R181. The site access point is situated just east of Market Square at the centre of the town. Hope Castle, at the centre of the Estate, is accessed from here by a short, treelined, avenue running through the Estate. From here, Black Island and White Island are accessed using the trail walking routes traversing the Estate.

A map showing the location of these transport routes is provided in Figure 9.





6.9.2 Parking at the Site

There are approximately 24 disabled parking bays around Castleblayney town. The three main public parking lots around the town are ‘Upper Commons’ by Church Street (ca. 80 spaces), ‘Urban Council’ by Castleblayney Health Centre (ca. 80 spaces), and McGrath Rd Parking (ca. 60 spaces). Only 2 Eco Car Charging Points are available within the town, located in the ‘Upper Commons’ parking area.

There is one short term parking lot by York Street (ca. 40 bays). Short-term kerbside parking stretch along Main St, Monaghan Road, and areas north of Market Square in Muckno St and Main St.

Delineated unrestricted kerbside parking exists along York St, Upper York St and Thomas St. Most kerbside parking across the town roads is non-delineated, stretching along roads namely Beech Corner, Church St, Henry St, New St, Connabury Cl, Monaghan Road, Muckno St and the surrounds of Market Square.

The closest available parking spaces to the Lough Muckno Estate area are ‘Upper Commons’ and ‘Urban Council’.

A Traffic and Parking Study covering Castleblayney town centre was carried out recently in support of a Part 8 planning application relating to the restoration of Market House, which was made by Monaghan County Council in October 2022. This study involved the carrying out of 12 hours of junction turning counts and car parking accumulation surveys at 14 car parking locations in the town.

The results indicated that several parking areas near the proposed site of Market House have ample spare capacity, even during peak hours. At the time the car parking surveys were undertaken the car parking inside Lough Muckno was closed to the public. Despite this, most car parking areas in the surroundings of Market Square remained with spare capacity.

6.9.3 Public Transport serving the Site.

Two modes of public transport are provided in Castleblayney and the surrounding area, bus and taxi.

The Bus Eireann Monaghan to Dundalk 162 bus route passes through the town. This route operates Monday to Friday, leaving the town for Dundalk once in the morning at 07:55, and returning to the town from Dundalk once in the evening at 18:00.

The Bus Eireann Drogheda to Monaghan 182 route also passes through the town. This route also operates on Monday to Friday, with the bus leaving the town for Monaghan seven times across the day.

Several private bus operators also provide services in the surrounding region, including Matthews Coach Hire, McConnon Travel and Collins Coaches.

Several taxi companies currently serve the Castleblayney area, including four located in town (GT Taxis, JB Cabs, Kat Cabs and Direct Cabs), and several situated in the surrounding region (O'Briens Taxis, McCabes Taxi's, O'Grady Cab Service and Birdy's Taxi & Chauffeur Hire, and Castle Cabs).



6.9.4 Future Public Transport Provisions

Several public transport improvements are proposed for the wider area under the National Transport Authority's Connecting Ireland Rural Mobility Plan, as follows:

- Enniskillen to Dundalk regional public transport route, serving Castleblayney.
- Clones to Oram local public transport route, serving Castleblayney.
- Carrickmacross to Castleblayney local public transport route.

Connecting Ireland is a major public transport initiative developed by the National Transport Authority (NTA) with the aim of increasing connectivity, particularly for people living outside our major cities and towns. The plan aims to improve mobility in rural areas, and it will do this by providing better connections between villages and towns by linking these areas with an enhanced regional network connecting cities and regional centres nationwide. Connecting Ireland has delivered 38 new and enhanced bus services across various counties to date. The rest of the plan will be implemented across the nation between the years 2023 and 2026.

6.9.5 Boating on Lough Muckno

Lough Muckno can be accessed by boat at three locations - Lough Muckno Estate, Annadrummond and the mouth of the Fane-Clarebane River (which is a private access point). Boating access at the existing slipway in Lough Muckno is currently restricted due to spatial limitations and safety concerns. There is an increased level of boating access at Annadrummond, however both the Annadrummond and Fane-Clarebane access points have several constraints associated with them, including presence of only a short access ramp and the lack of parking and toilet facilities at both locations.

6.10 Cultural Heritage

The existing Cultural Heritage environment at the site has been characterised in detail in the Constraints Assessment for Concept Proposal Options at Lough Muckno Estate report produced by Colm Flynn Archaeology, which is contained in Appendix 3.

A brief overview of the baseline Cultural Heritage environment is provided below:

- The area includes several buildings that are contained in the Record of Protected Structures for County Monaghan (RPS) and are also included in the National Inventory of Architectural Heritage (NIAH), including Market House in Market Square, and Hope Castle and its Annex buildings in Lough Muckno Estate.
- The area also includes several archaeological sites that are contained in the Record of Monuments and Places (RMP).

6.11 Landscape and Visual Amenity

The existing Landscape and Visual environment at the site have been characterised in the Landscape and Visual Constraints and Considerations Report produced by Macroworks, which is contained in Appendix 4.



A brief overview of the baseline Landscape and Visual environment is provided below:

- In the context of a 2 km radius study area at the site, the most dominating landscape feature is Lough Muckno and its associated islands, peninsulas and riparian vegetation, which ranges from natural and semi-natural woodland, marshland and improved agricultural grassland.
- Another key feature is the substantial settlement of Castleblayney, which has its focus around a market square and Hope Castle at the north-western end of the lake.
- Black Island is the largest island within the Lough and its domed, wooded form is located adjacent to the east of Castleblayney where it serves as a key recreational amenity.
- The rural hinterland of Castleblayney and Lough Muckno predominately consists of rolling drumlin farmland that rises away from the waterbody and provides a pleasant pastoral enclosure to the overall setting.
- There is a reasonable spread of rural / residential dwellings beyond the settlement that generally try to take advantage of elevated views across the Lough, especially on its eastern side. There are a series of small loughs and marshy areas to the north of Castleblayney that drain towards Lough Muckno.



7. STRATEGIC PLANNING AND ENVIRONMENTAL APPRAISAL

7.1 Introduction

This section presents a planning and environmental strategic assessment of Concepts Proposal Options 1 and 2 to assess compliance with relevant County Development Plan Objectives and other National Policy Statements and to determine any potential environmental impact on the environmental baseline of the site.

7.1.1 Strategic Planning and Policy Appraisal

Policy defined at national, regional and sectoral level is generally supportive of such tourism and recreation development at Lough Muckno and its environs. Policy defined in the following documents specifically is supportive of the concept proposals:

- Project Ireland 2040 – National Planning Framework (2018)
- People, Place and Policy – Growing Tourism to 2025
- Tourism Development & Innovation – A Strategy for Investment 2016-2022
- Northern & Western Regional Assembly - Regional Spatial and Economic Strategy 2020 – 2032 (RSES).

The National Planning Framework National Policy Objective 17 states the following:

- *Enhance, integrate and protect the special physical, social, economic and cultural value of built heritage assets through appropriate and sensitive use now and for future generations.*

This national objective generally requires that built heritage assets, such as Hope Castle and its Annex building, are managed and used in a manner which protects and enhances its value. The broad ambition of concept proposal components relating to Hope Castle and its Annex building is to ensure the social, economic and cultural heritage value of these buildings are protected and enhanced. The concept proposals therefore generally comply with this national objective.

The Monaghan County Development Plan 2019 – 2025 (CDP) is generally supportive of some level of tourism and recreation development at Lough Muckno and its environs. The CDP requires a high standard of development at the site which does not impact negatively on the existing character of the town or lake. All CDP policy objectives relevant to the concept proposals are listed in Table 5.1 of Section 5.3.2 of this document.

An evaluation of CDP policy objectives which broadly support concept proposal components, and CDP policy objectives that may be contravened by concept proposal components has been undertaken. This evaluation is presented in Table 7-1.



Table 7-1: Evaluation of CDP Policy Objectives relevant to the Concept Proposals

Ref.	Concept Proposal Component	Planning and Policy that supports the Concept Proposal Component / Planning and Policy supported by the Concept Proposal Component	Planning and Policy that may be contravened by the Concept Proposal Component
1	Regeneration and repurposing of Hope Castle situated in Lough Muckno Estate	CBSO 1, SHO 2, CBO 2, CBO 3, CBO 5, CBO 6, CBO 7, CBO 10	None
2	Use of Hope Castle and its curtilage as an Exhibition Venue, Sculpture Garden and Park, and Walled Garden.	CBSO 1, SHO 2, CBO 2, CBO 3, CBO 5, CBO 6, CBO 7, CBO 10	None
3	Development of a Coach house café, retail area, and children's play area, at Hope Castle's coach house building.	CBSO 1, SHO 2, CBO 2, CBO 3, CBO 5, CBO 6, CBO 7, CBO 10	None
4	General landscaping and development of greenways, parkland walks and cycle paths within Lough Muckno Estate.	CBSO 1, SHO 2, CBO 5, CBO 6	None
5	Development of a water sports centre in Lough Muckno Estate.	CBO 3, CBO 5	PAP 1, CBO 11
6	Development of a cruise tour centre, and provision of water taxies, cruise boats and electric buggies within Lough Muckno Estate.	CBO 3, CBO 5	PAP 1, CBO 11
7	Development of a fishing lodge and conservation centre within Lough Muckno Estate.	CBO 3, CBO 5	PAP 1, CBO 11
8	The development of dispersed lodges and recreational activities at islands in Lough Muckno.	CBO 3, CBO 5	PAP 1, CBO 11
9	Integration of Castleblayney Town with The Historic Estate via the Gatehouses to the estate.	CBSO 1, SHO 2, CBO 5, CBO 6	None
10	Development of the Gatehouse as an information centre and retail area.	CBSO 1, SHO 2, CBO 5, CBO 6	None
11	Development of a hotel, golf complex, lodges, a spa and a cookery school at Concra Wood Golf Club.	CBO 3, CBO 5	PAP 1, CBO 11
12	Development of a centre housing cultural and recreational activities at Market House situated in Market Square, Castleblayney.	CBSO 1, SHO 2, CBO 2, CBO 3, CBO 5, CBO 6	None



Ref.	Concept Proposal Component	Planning and Policy that supports the Concept Proposal Component / Planning and Policy supported by the Concept Proposal Component	Planning and Policy that may be contravened by the Concept Proposal Component
13	Development of dispersed parking through Castleblayney Town to accommodate visitors to Castleblayney, relative to the scale of the development that takes place.	CBO 3, CBO 5	None
14	Development of Black Island Trails.	CBSO 1, SHO 2, CBO 5, CBO 6	None
15	The development of a modest sized, open sided dome structure in the vicinity of Hope Castle housing several recreational and cultural activities, a café and potentially, a moderately scaled ice climbing wall.	CBO 3, CBO 5	PAP 1, CBO 11
16	The development of a large-scale dome structure (potentially over Hope Castle) in Lough Muckno Estate, to be known as the Great Drumlin of Adventure.	CBO 3, CBO 5	CBSO 1, SHO 2, PAP 1, CBO 6, CBO 11, STO 2
17	Development of a spa and well-being centre, several café and retail facilities, exhibition areas, substantially scaled indoor ice climbing walls, a high ropes course, play areas, and auditorium, all within the domed area.		
18	The development the deep adventure attraction within the domed area in Lough Muckno Estate.		
19	Development of a canyoning and water sports arena within the domed area in Lough Muckno Estate.		



Concept proposal 1 components 1, 2 ,3, 4, 9, 10, 12, 13, 14 are generally supported by policy objectives defined in the CDP.

Concept proposal 1 components 5, 6, 7, 8 and 10 are supported by some CDP policy objectives, but risk contravening other CDP objectives. Whether or not such components contravene policy objectives PAP 1 and CBO 11 will depend on the exact nature, scale, character and design of the proposed built development that will make up these components, and the proposed level of activity intensification associated with the components.

Concept proposal 2 components 16, 17, 18 and 19 contravene several CDP policy objectives. In summary, this is due to the scale of the Dome structure proposed. However, some or all of the activities proposed to take place within the Dome could be reassessed with the view to accommodating them elsewhere within the Estate.

7.1.2 Strategic Environmental Appraisal

A strategic environmental appraisal of the concept proposals was undertaken to determine any impact upon the baseline environment. This appraisal has been carried out under the following ‘environmental topic’ headings:

- Population and Human Health
- Material Assets
- Biodiversity
- Hydrology and Surface Water Quality
- Soils, Geology, and Hydrogeology
- Air Quality and Climate
- Noise
- Traffic and Transport
- Cultural Heritage
- Landscape and Visual Amenity
- Interactions, Indirect Impacts and Cumulative Impacts

All potential environmental impacts associated with concept development components have been identified and characterised at high level, having regard to impact description criteria defined in the EPA’s Guidance Document entitled ‘Guidelines on the information to be contained in Environmental Impact Assessment Reports’ (2022). This assessment has considered both construction phase and operational phase potential impacts associated with concept proposals. It has considered potential impact interactions and potential indirect impacts (i.e., interactions between one environmental aspect and another environmental aspect which can result in an environmental impact). The impact appraisal assumes the absence of any form of design mitigation or environmental mitigation.

The assessment has been suitably informed by the findings of the Preliminary Ecological Appraisal Report, the Cultural Heritage Constraints Assessment and the Landscape and Visual Constraints/Considerations Report contained in Appendix 3, 4 and 5 respectively.



The strategic environmental appraisal undertaken for concept proposal option 1 (components 1 - 15) is reported upon in Table 7-2. The strategic environmental appraisal undertaken for concept proposal option 2 (components 16 - 19) is reported upon in Table 7-3. These tables been structured so that the potential impact each concept proposal component has on each environmental topic is addressed in order.

An appraisal of potential cumulative impacts (i.e., in-combination impacts) has been carried out, assuming the co-occurrence of all concept proposal components, and having regard to other committed development within the study area (as detailed in Section 5.2). This appraisal is reported upon separately, in Section 7.1.5.

It is important to note that the concept proposals have only been broadly defined. The location, size and scale, precise characteristics and design of the concept proposals have not been defined with exactitude at this point. As such, the impact assessment undertaken is high-level and strategic in nature. It focusses on the broad vision and concepts for the site as presented in the report 'A Vision for Lough Muckno Estate', and not on development projects that have been designed and clearly defined.



7.1.3 Strategic Environmental Appraisal of Concept Proposal Option 1 (Components 1 - 15)

Table 7-2: Strategic Environmental Appraisal of Concept Proposal Option 1 (Components 1 - 15)

1. Regeneration and repurposing of Hope Castle situated in Lough Muckno Estate	
Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Material Assets	The regeneration and repurposing of Hope Castle has the potential to increase the number of visitors to the Estate. This will lead to an increase in demand for water supply, wastewater treatment capacity, energy supply and waste management facilities and services.
Population and Human Health	No significant, negative impact envisaged given scale and nature of development. The regeneration and repurposing of Hope Castle would have a positive impact for people by enhancing amenity value associated with the building and its surroundings.
Biodiversity	Construction works associated with this component may generate noise which could impact on surrounding sensitive ecological receptors. Construction works associated with this component may generate dust which could impact on surrounding sensitive ecological receptors. Construction works associated with this component may result in the generation of surface water discharges containing polluting material (e.g., silt, cement, oil). These discharges could be released to the receiving surface water environment and may have an impact the aquatic ecology present in surface waters. Construction works associated with this component may result in the generation of light pollution, which may impact on surrounding ecological receptors (e.g., bats). Hope Castle has moderate bat roost and bird nesting habitat potential. Construction works could disturb, damage or destroy this habitat.
Hydrology and Surface Water Quality	Construction works associated with this component may result in the generation of surface water discharges containing polluting material (e.g., silt, cement, oil). These discharges could be released to the receiving surface water environment and impact on water quality.
Soils, Geology and Hydrogeology	No significant impact envisaged given scale and nature of development.
Air Quality and Climate	No significant impact envisaged given scale and nature of development.



Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Noise	Construction noise will occur from construction plant and activities which may increase noise levels at nearby Noise Sensitive Locations (NSLs). This will be short term and temporary. Any vibration arising from such activities will be significantly below any thresholds for structural damage to property and is unlikely to be perceptible at nearby receptors.
Traffic and Transport	No significant impact envisaged given scale and nature of development.
Landscape and Visual Impact	This component does not have any potential to significantly affect landscape character or visual amenity.
Cultural Heritage	The sensitive and appropriate refurbishment and repurposing of Hope Castle BH01 could result in a positive impact on the architectural heritage by ensuring the long-term survival of this asset.
2. Use of Hope Castle and its curtilage as an Exhibition Venue, Sculpture Garden and Park, and Walled Garden	
Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Material Assets	The regeneration and repurposing of Hope Castle has the potential to increase the number of visitors to the Estate. This will lead to an increase in demand for water supply, wastewater treatment capacity, energy supply and waste management facilities and services.
Population and Human Health	No significant, negative impact envisaged given scale and nature of development.
	The regeneration and repurposing of Hope Castle would have a positive impact for people by enhancing amenity value associated with the building and its surroundings.
Biodiversity	No significant impact envisaged given scale and nature of development.
Hydrology and Surface Water Quality	No significant impact envisaged given scale and nature of development.
Soils, Geology and Hydrogeology	No significant impact envisaged given scale and nature of development.
Air Quality and Climate	No significant impact envisaged given scale and nature of development.
Noise & Vibration	The use of Hope Castle and its surroundings as an amenity attraction may lead to an increase in road traffic and people which could potentially generate noise. However, given the scale and nature of the development, the existing local soundscape and distance to nearby NSLs, this is not expected to be significant. Vibration will be minimal with no significant vibration impacts envisaged.



Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Traffic and Transport	The use of Hope Castle and its surroundings as an amenity attraction may lead to an increase in parking demand and congestion in the town and the Estate.
Landscape and Visual Impact	This component does not have any potential to significantly affect landscape character or visual amenity.
Cultural Heritage	This proposal would result in a positive impact on the architectural heritage by ensuring the long-term survival of these assets.
3. Development of a Coach house café, retail area, and children's play area, at Hope Castle's coachouse building.	
Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Material Assets	The regeneration and repurposing of Hope Castle's coach house buildings has the potential to increase the number of visitors to the Estate. This will lead to an increase in demand for water supply, wastewater treatment capacity, energy supply and waste management facilities and services.
Population and Human Health	No significant, negative impact envisaged given scale and nature of development. This development would have a positive impact for people by enhancing amenity value associated with the building its surroundings.
Biodiversity	Construction works associated with this component may generate noise which could impact on surrounding sensitive ecological receptors. Construction works associated with this component may generate dust which could impact on surrounding sensitive ecological receptors. Construction works associated with this component may result in the generation of surface water discharges containing polluting material (e.g., silt, cement, oil). These discharges could be released to the receiving surface water environment and may have an impact on the aquatic ecology present in surface waters. Construction works associated with this component may result in the generation of light pollution, which may impact on surrounding ecological receptors (e.g., bats). The Coach house (otherwise known as the Annex) building has moderate bat roost and bird nesting habitat potential. Construction works could disturb, damage or destroy this habitat.
Hydrology and Surface Water Quality	Construction works associated with this component may result in the generation of surface water discharges containing polluting material (e.g., silt, cement, oil). These discharges could be released to the receiving surface water environment and impact on water quality.
Soils, Geology and Hydrogeology	No significant impact envisaged given scale and nature of development.



Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Air Quality and Climate	No significant impact envisaged given scale and nature of development.
Noise & Vibration	<p>Construction noise will occur from construction plant and activities which may increase noise levels at nearby Noise Sensitive Locations (NSLs). This will be short term and temporary. Any vibration arising from such activities will be significantly below any thresholds for structural damage to property and is unlikely to be perceptible at nearby receptors.</p> <p>The operational phase of the development may give rise to increased noise levels from people socialising and children playing, however, given the scale and nature of the development and distance to nearby NSLs, the impact of this is not expected to be significant. Vibration will be minimal with no significant vibration impacts envisaged.</p>
Traffic and Transport	The use of the Coach house/Annex as an amenity attraction may lead to an increase in parking demand and congestion in the town and the Estate.
Landscape and Visual Impact	This component does not have any potential to significantly affect landscape character or visual amenity.
Cultural Heritage	This proposal is appropriate and would result in a positive impact on the architectural heritage by ensuring the long-term survival of this asset.
4. General landscaping and development of greenways, parkland walks and cycle paths within Lough Muckno Estate.	
Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Material Assets	The development of greenways, parkland walks and cycle paths within Lough Muckno Estate has the potential to increase the number of visitors to the Estate. This will lead to an increase in demand for water supply, wastewater treatment capacity, energy supply and waste management facilities and services.
Population and Human Health	<p>No significant, negative impact envisaged given scale and nature of development.</p> <p>This development would have a positive impact for people by enhancing amenity value associated with the Estate.</p>



Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Biodiversity	The landscaping and minor construction works associated with this component may generate noise which could impact on surrounding sensitive ecological receptors.
	The landscaping and minor construction works associated with this component may generate dust which could impact on surrounding sensitive ecological receptors.
	The landscaping and minor construction works associated with this component may result in the generation of surface water discharges containing polluting material (e.g., silt, cement, oil). These discharges could be released to the receiving surface water environment and may have an impact on the aquatic ecology present in surface waters.
	The landscaping and minor construction works associated with this component may result in the generation of light pollution, which may impact on surrounding ecological receptors (e.g., bats).
	Habitats present in Lough Muckno Estate, including woodlands, mature trees, hedgerows, the lake, nearby streams and wetland habitat have the potential to provide for bat roosting, foraging and commuting; bird nesting; and mammal habitat. The landscaping and minor construction works associated with this development could disturb, damage or destroy this habitat. This development may also involve loss of habitat due to the removal of woodland, trees or hedgerow.
	The landscaping and minor construction works associated with this component may cause the spread of invasive species, which have been found to be present at various locations in the Estate.
	This component is likely to involve the provision of additional lighting in the Estate on an ongoing basis (i.e., around walking and cycle paths). Such lighting may negatively impact surrounding sensitive ecological receptors (e.g., bats).
Hydrology and Surface Water Quality	The landscaping and minor construction works associated with this component may result in the generation of surface water discharges containing polluting material (e.g., silt, cement, oil). These discharges could be released to the receiving surface water environment and impact on water quality.
Soils, Geology and Hydrogeology	No significant impact envisaged given scale and nature of development.
Air Quality and Climate	No significant impact envisaged given scale and nature of development.
	This concept proposal component will not have a significant impact in terms of climate change.



Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Noise & Vibration	<p>Construction noise will occur from construction plant and activities which may increase noise levels at nearby Noise Sensitive Locations (NSLs). This will be short term and temporary. Any vibration arising from such activities will be significantly below any thresholds for structural damage to property and is unlikely to be perceptible at nearby receptors.</p> <p>The operational phase of the development may give rise to an increase in noise from pedestrians/cyclists. However, given the scale and nature of the development and distance to nearby NSLs the impact of this is expected to be minimal. Operational vibration will be minimal with no significant vibration impacts envisaged.</p>
Traffic and Transport	The increased use of the Estate as an amenity attraction may lead to an increase in parking demand and congestion in the town and the Estate.
Landscape and Visual Impact	This component does not have any potential to significantly affect landscape character or visual amenity.
Cultural Heritage	This proposal is sensitive to the receiving archaeological and built heritage environment and would positively contribute to the setting of the extant built heritage assets.
5. Development of a water sports centre in Lough Muckno Estate.	
Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Material Assets	This development will increase the demand for water supply, energy supply and wastewater treatment capacity.
	This development has the potential to increase the number of visitors to the Estate. This will lead to an increase in demand for waste management facilities and services.
Population and Human Health	This development would have a positive impact for people by enhancing amenity recreational value in the Estate.
	This component could negatively impact existing angling amenity at the lake.
	This development could potentially negatively impact on landscape character and visual amenity at the Estate and lake, which in turn could impact on peoples' experience and enjoyment of the area.



Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Biodiversity	The construction works associated with this component may generate noise which could impact on surrounding sensitive ecological receptors.
	The construction works associated with this component may generate dust which could impact on surrounding sensitive ecological receptors.
	The construction works associated with this component may result in the generation of surface water discharges containing polluting material (e.g., silt, cement, oil). These discharges could be released to the receiving surface water environment and may have an impact the aquatic ecology present in surface waters.
	The construction works associated with this component may result in the generation of light pollution, which may impact on surrounding ecological receptors (e.g., bats)
	Habitats present in Lough Muckno Estate, including woodlands, mature trees, hedgerows, the lake, nearby streams and wetland habitat have the potential to provide for bat roosting, foraging and commuting; bird nesting; and mammal habitat. The construction works associated with this development could disturb, damage or destroy this habitat. This development may also involve loss of habitat due to the removal of woodland, trees or hedgerow.
	The construction works associated with this component may cause the spread of invasive species, which have been found to be present at various locations in the Estate.
	The carrying out of water sports activities at Lough Muckno may negatively impact sensitive habitats present at Lough Muckno (e.g., wetlands around the fringes of Lough Muckno), or sensitive species present at or using habitats in Lough Muckno (e.g., bird species).
	This facility, once constructed and operational, may generate light pollution, which may impact on surrounding ecological receptors (e.g., bats).
Hydrology and Surface Water Quality	Construction works associated with this component may result in the generation of surface water discharges containing polluting material (e.g., silt, cement, oil). These discharges could be released to the receiving surface water environment and impact on water quality.
	The development of a sizeable structure and associated hard stand areas in the Estate will increase the level of surface water run-off which could increase the risk of flooding.
	The carrying out of water sports activities at Lough Muckno may impinge on water quality. (e.g., due to littering, disturbance of sediment, or chemical pollution).



Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Soils, Geology and Hydrogeology	The construction of a significantly sized building may result in soil disturbance and the release of discharges containing polluting material (e.g., silt, cement oil) to exposed soils and groundwater.
Air Quality and Climate	The significant construction works that may be carried out during the construction of this building may generate airborne dust which could affect local air quality or cause nuisance.
	This concept proposal component will not have a significant impact in terms of climate change.
Noise & Vibration	<p>Noise during construction will occur from construction plant and activities which may increase noise levels at nearby Noise Sensitive Locations (NSLs). This will be short term and temporary. Any vibration arising from such activities will be significantly below any thresholds for structural damage to property and is unlikely to be perceptible at nearby receptors.</p> <p>The operational phase of the development may give rise to an increase in noise from people and motorboats/engines. However, the impact of this is not expected to be significant given the scale and nature of the development and distance to nearby NSLs. Operational vibration will be minimal with no significant vibration impacts envisaged.</p>
Traffic and Transport	The increased use of the Estate as an amenity attraction may lead to an increase in parking demand and congestion in the town and the Estate.
Landscape and Visual Impact	There may be localised negative physical effects during construction of built elements associated with the water sports centre as well as permanent landcover change
	There will be an increase in intensity and diversity of built development within the estate that could draw from its heritage character if not designed sympathetically
	There may be localised negative impacts on visual amenity for estate users during construction. Thereafter, there may be an increase in intensity and diversity of built development within estate views that could draw from visual amenity
Cultural Heritage	The scale of this proposal risks may adversely impact on both archaeological and architectural heritage.
6. Development of a cruise tour centre, and provision of water taxies, cruise boats and electric buggies within Lough Muckno Estate	
Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Material Assets	This development will increase the demand for water supply, energy supply and wastewater treatment capacity.
	This development has the potential to increase the number of visitors to the Estate. This will lead to an increase in demand for waste management facilities and services.



Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Population and Human Health	This development would have a positive impact for people by enhancing amenity and recreational value in the Estate.
	This component could negatively impact existing angling amenity at the lake.
	This development could potentially negatively impact on landscape character and visual amenity at the Estate and lake, which in turn could impact on peoples' experience and enjoyment of the area.
Biodiversity	The construction works associated with this component may generate noise which could impact on surrounding sensitive ecological receptors.
	The construction works associated with this component may generate dust which could impact on surrounding sensitive ecological receptors.
	The construction works associated with this component may result in the generation of surface water discharges containing polluting material (e.g., silt, cement, oil). These discharges could be released to the receiving surface water environment and may have an impact on the aquatic ecology present in surface waters.
	The construction works associated with this component may result in the generation of light pollution, which may impact on surrounding ecological receptors (e.g., bats).
	Habitats present in Lough Muckno Estate, including woodlands, mature trees, hedgerows, the lake, nearby streams and wetland habitat have the potential to provide for bat roosting, foraging and commuting; bird nesting; and mammal habitat. The construction works associated with this development could disturb, damage or destroy this habitat. This development may also involve loss of habitat due to the removal of woodland, trees or hedgerow.
	The construction works associated with this component may cause the spread of invasive species, which have been found to be present at various locations in the Estate.
	The carrying out of boating activities at Lough Muckno may negatively impact sensitive habitats present at Lough Muckno (e.g., wetlands around the fringes of Lough Muckno), or sensitive species present at or using habitats in Lough Muckno (e.g., bird species).
	This building, once constructed and operational, may generate light pollution, which may impact on surrounding ecological receptors (e.g., bats).



Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Hydrology and Surface Water Quality	Construction works associated with this component may result in the generation of surface water discharges containing polluting material (e.g., silt, cement, oil). These discharges could be released to the receiving surface water environment and impact on water quality.
	The carrying out of boating activities at Lough Muckno may impinge on water quality. (e.g., due to littering, disturbance of sediment, or chemical pollution).
	The development of a sizeable structure and associated hard stand areas in the Estate will increase the level of surface water run-off which could increase the risk of flooding.
Soils, Geology and Hydrogeology	The construction of a significantly sized building may result in significant soil disturbance and the release of discharges containing polluting material (e.g., silt, cement oil) to exposed soils and groundwater.
Air Quality and Climate	The significant construction works that may be carried out during the construction of this building may generate airborne dust which could affect local air quality or cause nuisance.
	This concept proposal component will not have a significant impact in terms of climate change.
Noise & Vibration	<p>Construction noise will occur from construction plant and activities which may increase noise levels at nearby Noise Sensitive Locations (NSLs). This will be short term and temporary. Any vibration arising from such activities will be significantly below any thresholds for structural damage to property and is unlikely to be perceptible at nearby receptors.</p> <p>The operational phase of the development may give rise to an increase in noise from people and motorboats/engines. However, the impact of this is not expected to be significant given the scale and nature of the development and distance to nearby NSLs. Operational vibration will be minimal with no significant vibration impacts envisaged.</p>
Traffic and Transport	The increased use of the Estate as an amenity attraction may lead to an increase in parking demand and congestion in the town and the Estate.
Landscape and Visual Impact	There may be localised negative physical effects during construction of built elements associated with the cruise tour centre as well as permanent landcover change.
	There will be an increase in intensity and diversity of built development within the estate that could draw from its heritage character if not designed sympathetically.
	There may be localised negative impacts on visual amenity for estate users during construction. Thereafter, there may be an increase in intensity and diversity of built development within estate views that could draw from visual amenity.
Cultural Heritage	This concept proposal element will result in minimal risk of impacts on archaeological or architectural heritage assets.



7. Development of a fishing lodge and conservation centre within Lough Muckno Estate.

Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Material Assets	This development, will increase the demand for water supply, energy supply and wastewater treatment capacity.
	This development has the potential to increase the number of visitors to the Estate. This will lead to an increase in demand for waste management facilities and services.
Population and Human Health	This development would have a positive impact for people by enhancing amenity and recreational value in the Estate.
	This development could potentially negatively impact on landscape character and visual amenity at the Estate and lake, which in turn could impact on peoples' experience and enjoyment of the area.
Biodiversity	The construction works associated with this component may generate noise which could impact on surrounding sensitive ecological receptors.
	The construction works associated with this component may generate dust which could impact on surrounding sensitive ecological receptors.
	The construction works associated with this component may result in the generation of surface water discharges containing polluting material (e.g., silt, cement, oil). These discharges could be released to the receiving surface water environment and may have an impact the aquatic ecology present in surface waters.
	The construction works associated with this component may result in the generation of light pollution, which may impact on surrounding ecological receptors (e.g., bats).
	Habitats present in Lough Muckno Estate, including woodlands, mature trees, hedgerows, the lake, nearby streams and wetland habitat have the potential to provide for bat roosting, foraging and commuting; bird nesting; and mammal habitat. The construction works associated with this development could disturb, damage or destroy this habitat. This development may also involve loss of habitat due to the removal of woodland, trees or hedgerow.
	The construction works associated with this component may cause the spread of invasive species, which have been found to be present at various locations in the Estate.
	This building, once constructed and operational, may generate light pollution, which may impact on surrounding ecological receptors (e.g., bats).



Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Hydrology and Surface Water Quality	Construction works associated with this component may result in the generation of surface water discharges containing polluting material (e.g., silt, cement, oil). These discharges could be released to the receiving surface water environment and impact on water quality.
	The development of a sizeable structure and associated hard stand areas in the Estate will increase the level of surface water run-off which could increase the risk of flooding.
Soils, Geology and Hydrogeology	The construction of a significantly sized building may result in significant soil disturbance and the release of discharges containing polluting material (e.g., silt, cement oil) to exposed soils and groundwater.
Air Quality and Climate	The significant construction works that may be carried out during the construction of this building may generate airborne dust which could affect local air quality or cause nuisance.
	This concept proposal component will not have a significant impact in terms of climate change.
Noise & Vibration	<p>Construction noise will occur from construction plant and activities which may increase noise levels at nearby Noise Sensitive Locations (NSLs). This will be short term and temporary. Any vibration arising from such activities will be significantly below any thresholds for structural damage to property and is unlikely to be perceptible at nearby receptors.</p> <p>Noise and vibration during the operational phase of the development is expected to be minimal with no significant impacts at nearby sensitive receptors envisaged.</p>
Traffic and Transport	The increased use of the Estate as an amenity attraction may lead to an increase in parking demand and congestion in the town and the Estate.
Landscape and Visual Impact	There will be localised negative physical effects during construction of built elements associated with the fishing lodge and conservation centre as well as permanent landcover change.
	There will be an increase in intensity and diversity of built development within the estate that could draw from its heritage character if not designed sympathetically.
	There will be localised negative impacts on visual amenity for estate users during construction. Thereafter, there will be an increase in intensity and diversity of built development within estate views that could draw from visual amenity.
Cultural Heritage	This proposal is in line with one of the original functions of the estate. As such it is appropriate and sensitive to the history of the site.



8. The development of dispersed lodges and recreational activities at islands in Lough Muckno.

Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Material Assets	This development will lead to a demand for water supply, energy supply and wastewater treatment capacity at islands in Lough Muckno, locations with are remote from mains supply systems.
	This development will lead to a demand for waste management facilities and services at islands in Lough Muckno.
Population and Human Health	This development wouldl have a positive impact for people by enhancing amenity and recreational value at and around the lake.
	This development could potentially negatively impact on landscape character and visual amenity at the Estate and lake, which in turn could impact on peoples' experience and enjoyment of the area.
Biodiversity	The construction works associated with this component may generate noise which could impact on surrounding sensitive ecological receptors.
	The construction works associated with this component may generate dust which could impact on surrounding sensitive ecological receptors.
	The construction works associated with this component may result in the generation of surface water discharges containing polluting material (e.g., silt, cement, oil). These discharges could be released to the receiving surface water environment and may have an impact the aquatic ecology present in surface waters.
	The construction works associated with this component may result in the generation of light pollution, which may impact on surrounding ecological receptors (e.g., bats).
	Habitats present in Lough Muckno Estate, including woodlands, mature trees, hedgerows, the lake, nearby streams and wetland habitat have the potential to provide for bat roosting, foraging and commuting; bird nesting; and mammal habitat. The construction works associated with this development could disturb, damage or destroy this habitat. This development may also involve loss of habitat due to the removal of woodland, trees or hedgerow.
	These buildings, once constructed and operational, may generate light pollution, which may impact on surrounding ecological receptors (e.g., bats).
	The intensification of human activity, including recreational activity at the islands may impinge on sensitive habitats or species.



Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Hydrology and Surface Water Quality	Construction works associated with this component may result in the generation of surface water discharges containing polluting material (e.g., silt, cement, oil). These discharges could be released to the receiving surface water environment and impact on water quality.
	Wastewater generated at this development could be released to the receiving surface water environment and impact on water quality.
	The carrying out of boating activities at Lough Muckno may impinge on water quality. (e.g., due to littering, disturbance of sediment, or chemical pollution).
Air Quality and Climate	No significant impact envisaged given scale and nature of development.
	This concept proposal component will not have a significant impact in terms of climate change.
Noise & Vibration	<p>Construction noise will occur from construction plant and activities which may increase noise levels at nearby Noise Sensitive Locations (NSLs). This will be short term and temporary. Any vibration arising from such activities will be significantly below any thresholds for structural damage to property and is unlikely to be perceptible at nearby receptors.</p> <p>The operational phase of the development may give rise to an increase in noise from people and motorised equipment during recreational activities. However, this is not expected to be significant given the scale and nature of the development and distance to nearby NSLs. Operational vibration will be minimal with no significant vibration impacts envisaged.</p>
Traffic and Transport	The increased use of the lake as an amenity attraction may lead to an increase in parking demand and congestion in the town and the Estate.
Landscape and Visual Impact	There may be dispersed localised negative physical effects during construction of built elements associated with the fishing lodge and conservation area as well as permanent landcover change.
	There will be an increase in intensity and diversity of built development within the estate that could draw from its heritage character if not designed sympathetically.
	There will be localised negative impacts on visual amenity for estate users during construction. Thereafter, there will be an increase in intensity and diversity of built development within estate views that could draw from visual amenity if not designed sympathetically.
Cultural Heritage	This concept proposal element is unlikely to result in adverse impacts on the built and archaeological heritage of the area.



9. Integration of Castleblayney Town with The Historic Estate via the Gatehouses to the estate.

Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Material Assets	No significant impact envisaged given nature of this proposal.
Population and Human Health	This component would have a positive impact for people by enhancing amenity and recreational value in the town and Estate.
Biodiversity	No significant impact envisaged given nature of this proposal.
Hydrology and Surface Water Quality	No significant impact envisaged given nature of this proposal.
Soils, Geology and Hydrogeology	No significant impact envisaged given nature of this proposal.
Air Quality and Climate	<p>No significant impact envisaged given nature of this proposal.</p> <p>This concept proposal component will not have a significant impact in terms of climate change.</p>
Noise & Vibration	The increased use of the town and estate may give rise to an increase in noise from increased traffic flows on the surrounding road network. Operational vibration will be minimal with no significant vibration impacts envisaged.
Traffic and Transport	The increased use of the town and Estate as an amenity attraction may lead to an increase in parking demand and congestion in the town and the Estate.
Landscape and Visual Impact	There may be localised negative physical effects during construction / demolition of built elements associated with the integration of the historic estate and town.
	There may be localised negative impacts on landscape character during construction, but the character of both the town centre and estate setting should be enhanced by the improved integration.
	There may be localised negative impacts on visual amenity during construction. Thereafter, visual amenity should be enhanced by the integration measures.
Cultural Heritage	This concept proposal element is unlikely to result in adverse impacts on the built and archaeological heritage of the area.



10. Development of the Gatehouse as an information centre and retail area.

Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Material Assets	No significant impact envisaged given scale and nature of development.
Population and Human Health	This component would have a positive impact for people by enhancing amenity and recreational value in the town and Estate.
Biodiversity	No significant impact envisaged given scale, nature and location of development.
Hydrology and Surface Water Quality	No significant impact envisaged given scale and nature of development.
Soils, Geology and Hydrogeology	No significant impact envisaged given scale and nature of development.
Air Quality and Climate	<p>No significant impact envisaged given scale, nature and location of development.</p> <p>This concept proposal component will not have a significant impact in terms of climate change.</p>
Noise & Vibration	The increased use of the town and information centre/retail area may give rise to an increase in noise from increased traffic flows on the surrounding road network. Operational vibration will be minimal with no significant vibration impacts envisaged.
Traffic and Transport	The increased use of the town and Estate as an amenity attraction may lead to an increase in parking demand and congestion in the town and the Estate.
Landscape and Visual Impact	There may be localised negative physical effects to the Gatehouse and immediate surrounds during construction, but the fabric of the Gatehouse and its immediate landscape setting will be enhanced thereafter.
	There may be localised negative impacts on landscape character during construction, but the character of the No.2 Gatehouse and its setting will be enhanced thereafter.
	There may be localised negative impacts on visual amenity for estate users during construction, but the visual amenity of the Gatehouse and its setting will be enhanced thereafter.
Cultural Heritage	This concept proposal element is appropriate and unlikely to result in adverse impacts on the built and archaeological heritage of the area.



11. Development of a hotel, golf complex, lodges, a spa and a cookery school at Contra Wood Golf Club.

Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Material Assets	This development could significantly increase the demand for water supply, energy supply and wastewater treatment capacity.
	This development has the potential to increase the number of visitors to the Estate. This will lead to an increase in demand for waste management facilities and services.
Population and Human Health	This development would have a positive impact for people by enhancing amenity and recreational value at Contra Wood.
	This development could potentially negatively impact on landscape character and visual amenity at Contra Wood and the lake, which in turn could impact on peoples' experience and enjoyment of the area.
Biodiversity	The construction works associated with this component may generate noise which could impact on surrounding sensitive ecological receptors.
	The construction works associated with this component may generate dust which could impact on surrounding sensitive ecological receptors.
	The construction works associated with this component may result in the generation of surface water discharges containing polluting material (e.g., silt, cement, oil). These discharges could be released to the receiving surface water environment and may have an impact the aquatic ecology present in surface waters.
	The construction works associated with this component may result in the generation of light pollution, which may impact on surrounding ecological receptors (e.g., bats).
	Habitats present in Contra Wood, including woodlands, mature trees, hedgerows, the lake, nearby streams and wetland habitat have the potential to provide for bat roosting, foraging and commuting; bird nesting; and mammal habitat. The construction works associated with this development could disturb, damage or destroy this habitat. This development may involve loss of habitat due to the removal of woodland, trees or hedgerow.
	The construction works associated with this component may cause the spread of invasive species, which could potentially be present at various locations in Contra Wood.
	Built development, once constructed and operational, may generate light pollution, which may impact on surrounding ecological receptors (e.g., bats).



Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Hydrology and Surface Water Quality	Construction works associated with this component may result in the generation of surface water discharges containing polluting material (e.g., silt, cement, oil). These discharges could be released to the receiving surface water environment and impact on water quality.
	The development of sizeable structures and associated hard stand areas in Contra Wood may increase the level of surface water run-off which could increase the risk of flooding.
Soils, Geology and Hydrogeology	The construction of a significantly sized building may result in significant soil disturbance and the release of discharges containing polluting material (e.g., silt, cement oil) to exposed soils and groundwater.
Air Quality and Climate	The significant construction works that may be carried out during the construction of this building may generate airborne dust which could affect local air quality or cause nuisance.
	This concept proposal component will not have a significant impact in terms of climate change.
Noise & Vibration	<p>Construction noise will occur from construction plant and activities which may increase noise levels at nearby Noise Sensitive Locations (NSLs). This will be short term and temporary. Any vibration arising from such activities will be significantly below any thresholds for structural damage to property and is unlikely to be perceptible at nearby receptors.</p> <p>The operational phase of the development may give rise to an increase in noise at nearby NSLs from people and road traffic. Operational vibration will be minimal with no significant vibration impacts envisaged.</p>
Traffic and Transport	This development will lead to an increase in visitors to Contra Wood and an increase the number of vehicles using the junction between the N53 and the site access road leading to Contra Wood.. The intensification of traffic movements at this junction may result in traffic congestion
	There is no pedestrian route connecting Contra Wood and the town, which may pose a significant traffic hazard for pedestrians travelling between the two locations.
Landscape and Visual Impact	There may be substantial physical effects to the golf course and its shoreline during construction as well as permanent landcover change / vegetation loss thereafter.
	There may be localised negative impacts on landscape character during construction. There will be a noticeable increase in the scale, intensity and diversity of built development within the golf course and its wider setting that could draw from its heritage character if not sited / designed sympathetically.
	There may be negative impacts on visual amenity for golfers and lough users during construction. Thereafter, there will be an increase in the scale, intensity and diversity of built development along the golf course shoreline that could draw from visual amenity.



Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Cultural Heritage	This development may impinge on views from Hope Castle. Any large-scale developments at this location risk impacting on subterranean archaeology.
12. Development of a centre housing cultural and recreational activities at Market House situated in Market Square, Castleblayney.	
Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Material Assets	No significant impact envisaged given scale and nature of development.
Population and Human Health	<p>This development would have a positive impact for people by enhancing amenity and recreational value at Market House and Market Square.</p> <p>Construction/restoration works associated with this development may lead to the generation of dust in the town centre, which may impact air quality or cause nuisance. This could impact on people using the town centre during the construction period</p>
Biodiversity	No significant impact envisaged given scale, nature and location of development.
Hydrology and Surface Water Quality	No significant impact envisaged given scale and nature development.
Soils, Geology and Hydrogeology	No significant impact envisaged given scale and nature development.
Air Quality and Climate	<p>Construction/restoration works associated with this development may lead to the generation of dust in the town centre, which may impact air quality or cause nuisance during the construction period.</p> <p>This concept proposal component will not have a significant impact in terms of climate change.</p>
Noise & Vibration	<p>Construction noise will occur from construction plant and activities which may increase noise levels at nearby Noise Sensitive Locations (NSLs). This will be short term and temporary. Any vibration arising from such activities will be significantly below any thresholds for structural damage to property and is unlikely to be perceptible at nearby receptors.</p> <p>The operational phase of the development may give rise to an increase in noise from people during recreational activities. However, this is not expected to be significant given the scale and nature of the development and distance to nearby NSLs. Operational vibration will be minimal with no significant vibration impacts envisaged.</p>
Traffic and Transport	The increased use of the town as an amenity attraction may lead to an increase in parking demand and congestion in the town.



Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Landscape and Visual Impact	This component does not have any potential to significantly affect landscape character or visual amenity.
Cultural Heritage	This concept proposal element is appropriate and unlikely to result in adverse impacts on the built and archaeological heritage of the area.
13. Development of dispersed parking through Castleblayney Town to accommodate visitors to Castleblayney, relative to the scale of the development that takes place.	
Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Material Assets	No significant impact envisaged given scale and nature of development.
Population and Human Health	No significant impact envisaged given scale and nature of development.
Biodiversity	No significant impact envisaged given scale, nature and location of development.
Hydrology and Surface Water Quality	The potential development of parking areas on greenfield sites will lead to an increase in surface water run-off, which may increase the risk of flooding.
	The development of sizeable parking areas may increase the risk of vehicle oil spilling, becoming entrained in surface water run-off and being discharged to the receiving surface water environment.
Soils, Geology and Hydrogeology	No significant impact envisaged given scale and nature development.
Air Quality and Climate	No significant impact envisaged given scale and nature development.
	This concept proposal component will not have a significant impact in terms of climate change.
Noise & Vibration	The increased use of the town and parking areas may give rise to an increase in noise from increased traffic flows on the surrounding road network. Vibration will be minimal with no significant vibration impacts envisaged.
Traffic and Transport	No significant impact envisaged given scale and nature development.
Landscape and Visual Impact	This component does not have any potential to significantly affect landscape character or visual amenity.
Cultural Heritage	This concept proposal element is unlikely to result in adverse impacts on the built and archaeological heritage of the area.



14. Development of Black Island Trails.

Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Material Assets	No significant impact envisaged given scale and nature of development.
Population and Human Health	This development would have a positive impact for people by enhancing amenity and recreational value at Market House and Market Square.
Biodiversity	The landscaping and minor construction works associated with this component may generate noise which could impact on surrounding sensitive ecological receptors.
	The landscaping and minor construction works associated with this component may generate dust which could impact on surrounding sensitive ecological receptors.
	The landscaping and minor construction works associated with this component may result in the generation of surface water discharges containing polluting material (e.g., silt, cement, oil). These discharges could be released to the receiving surface water environment and may have an impact on the aquatic ecology present in surface waters.
	The landscaping and minor construction works associated with this component may result in the generation of light pollution, which may impact on surrounding ecological receptors (e.g., bats).
	Habitats present in Lough Muckno Estate, including woodlands, mature trees, hedgerows, the lake, nearby streams and wetland habitat have the potential to provide for bat roosting, foraging and commuting; bird nesting; and mammal habitat. The landscaping and minor construction works associated with this development could disturb, damage or destroy this habitat. This development may also involve loss of habitat due to the removal of woodland, trees or hedgerow.
	The landscaping and minor construction works associated with this component may cause the spread of invasive species, which have been found to be present at various locations in the Estate.
Hydrology and Surface Water Quality	The landscaping and minor construction works associated with this component may result in the generation of surface water discharges containing polluting material (e.g., silt, cement, oil). These discharges could be released to the receiving surface water environment and impact on water quality.
Soils, Geology and Hydrogeology	No significant impact envisaged given scale and nature of development.
Air Quality and Climate	No significant impact envisaged given scale and nature of development.
	This concept proposal component will not have a significant impact in terms of climate change.



Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Noise & Vibration	Light construction works associated with this development may generate noise which could increase noise levels at nearby NSLs. This will be short term and temporary. Any vibration arising from such activities will be significantly below any thresholds for structural damage to property and is unlikely to be perceptible at nearby receptors.
Traffic and Transport	The increased use of Black Island as an amenity attraction may lead to an increase in parking demand and congestion in the town and the Estate.
Landscape and Visual Impact	This component does not have any potential to significantly affect landscape character or visual amenity.
Cultural Heritage	This proposal risks impinging on subterranean archaeology that may be present along shoreline areas.
15. The development of a modest sized, open sided dome structure in the vicinity of Hope Castle housing several recreational and cultural activities, a café and potentially, a moderately scaled ice climbing wall.	
Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Material Assets	This development, which is assumed to be significant in magnitude, will significantly increase the demand for water supply, energy supply and wastewater treatment capacity.
	This development has the potential to increase the number of visitors to the Estate. This may lead to an increase in demand for waste management facilities and services.
Population and Human Health	This development would have a positive impact for people by enhancing amenity and recreational value in the Estate.
	This development could potentially negatively impact on landscape character and visual amenity at and around the Estate, which in turn could impact on peoples' experience and enjoyment of the area.
Biodiversity	The construction works associated with this component may generate noise which could impact on surrounding sensitive ecological receptors.
	The construction works associated with this component may generate dust which could impact on surrounding sensitive ecological receptors.
	The construction works associated with this component may result in the generation of surface water discharges containing polluting material (e.g., silt, cement, oil). These discharges could be released to the receiving surface water environment and may have an impact the aquatic ecology present in surface waters.
	The construction works associated with this component may result in the generation of light pollution, which may impact on surrounding ecological receptors (e.g., bats)



Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
	Habitats present in the Estate, including woodlands, mature trees, hedgerows, the lake, nearby streams and wetland habitat have the potential to provide for bat roosting, foraging and commuting; bird nesting; and mammal habitat. The construction works associated with this development could disturb, damage or destroy this habitat. This development will involve loss of some habitat due to the removal of woodland, trees or hedgerow.
	Potential for the spread of Invasive species
	Built development, once constructed and operational, may generate light pollution, which may impact on surrounding ecological receptors (e.g., bats).
Hydrology and Surface Water Quality	Construction works associated with this component may result in the generation of surface water discharges containing polluting material (e.g., silt, cement, oil). These discharges could be released to the receiving surface water environment and impact on water quality.
	The development of sizeable structures and associated hard stand areas in the Estate will increase the level of surface water run-off which could increase the risk of flooding.
Soils, Geology and Hydrogeology	The construction of a significantly sized building may result in significant soil disturbance and the release of discharges containing polluting material (e.g., silt, cement oil) to exposed soils and groundwater.
Air Quality and Climate	The significant construction works that may be carried out during the construction of this building may generate airborne dust which could affect local air quality or cause nuisance.
	The potential significant increase in traffic levels associated with this development may lead to a reduction in air quality in the town due to vehicle related emissions.
	This concept proposal component will not have a significant impact in terms of climate change.
Noise & Vibration	<p>Noise during the construction of a significantly sized building will occur from construction plant and activities which may increase noise levels at nearby Noise Sensitive Locations (NSLs). This will be short term and temporary. Any vibration arising from such activities will be significantly below any thresholds for structural damage to property and is unlikely to be perceptible at nearby receptors.</p> <p>The operational phase of the development may give rise to an increase in noise from people socialising and during recreational activities. However, this is not expected to be significant given the scale and nature of the development and distance to nearby NSLs. Operational vibration will be minimal with no significant vibration impacts envisaged.</p>
Traffic and Transport	This development may lead to a significant increase in parking demand and congestion in the town and the Estate.



Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Landscape and Visual Impact	There will likely be negative physical effects to the dome site during construction, and permanent landcover change thereafter.
	There will be a noticeable increase in the scale intensity and diversity of built development within the estate that could draw from its heritage character if not sited / designed sympathetically.
	There will be a noticeable increase in the scale intensity and diversity of built development within the estate that could draw from residential amenity for estate users if not sited / designed sympathetically.
Cultural Heritage	The scale of this concept proposal option element may likely result in significant impacts (direct and indirect visual) on the archaeological and architectural heritage of the area.

7.1.4 Strategic Environmental Appraisal of Concept Proposal Option 2 (Components 16 - 19)

Note: All components of concept proposal option 2 relate to the construction of a large-scale dome and the housing of activities within the constructed dome. As such, all components were aggregated when carrying out the appraisal.

However, some or all of the activities proposed to take place within the Dome could be reassessed with the view to accommodating them elsewhere within the Estate.



Table 7-3: Strategic Environmental Appraisal of Concept Proposal Option 2 (Components 16 - 19)

16. The development of a large-scale dome structure (potentially over Hope Castle) in Lough Muckno Estate, to be known as the Great Drumlin of Adventure. 17. Development of a spa and well-being centre, several café and retail facilities, exhibition areas, substantially scaled indoor ice climbing walls, a high ropes course, play areas, and auditorium, all within the domed area. 18. The development the deep adventure attraction within the domed area in Lough Muckno Estate. 19. Development of a canyoning and water sports arena within the domed area in Lough Muckno Estate.	
Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
Material Assets	<p>The construction phase of the development will generate a substantial level of construction related waste which will need to be managed.</p> <p>This development will significantly increase the demand for water supply, energy supply and wastewater treatment capacity.</p> <p>This development has the potential to significantly increase the number of visitors to the Estate. This will lead to an increase in demand for waste management facilities and services.</p>
Population and Human Health	<p>This development would have a positive impact for people by enhancing amenity and recreational value in the Estate.</p> <p>This development is likely to negatively impact on landscape character and visual amenity at and around the estate, which in turn will likely negative impact on peoples' experience and enjoyment of the area.</p>
Biodiversity	<p>The substantial construction works associated with this component is likely generate a significant level of noise which will likely impact on surrounding sensitive ecological receptors.</p> <p>The substantial construction works associated with this component is likely generate a significant level of dust which may impact on surrounding sensitive ecological receptors.</p> <p>The substantial construction works associated with this component may result in the generation of surface water discharges containing polluting material (e.g., silt, cement, oil). These discharges could be released to the receiving surface water environment and may have an impact the aquatic ecology present in surface waters.</p> <p>The substantial construction works associated with this component has potential to generate high levels of light pollution, which may impact on surrounding ecological receptors (e.g., bats).</p> <p>Habitats present in Lough Muckno Estate, including woodlands, mature trees, hedgerows, the lake, nearby streams and wetland habitat have the potential to provide for bat roosting, foraging and commuting; bird nesting; and mammal habitat. The substantial construction works associated with this development is likely to disturb, damage or destroy this habitat. This development will involve loss of habitat due to the removal of woodland, trees or hedgerow.</p>



Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
	<p>The substantial construction works associated with this component may cause the spread of invasive species, which have been found to be present at various locations in the Estate.</p> <p>This large-scale Dome structure, once constructed and operational, may generate high levels light pollution, which may impact on surrounding ecological receptors (e.g., bats).</p>
Hydrology and Surface Water Quality	Construction works associated with this component may result in the generation of surface water discharges containing polluting material (e.g., silt, cement, oil). These discharges could be released to the receiving surface water environment and impact on water quality.
Soils, Geology and Hydrogeology	<p>The development of sizeable structures and associated hard stand areas in the Estate may increase the level of surface water run-off which could increase the risk of flooding.</p> <p>The construction of a large-scale dome structures may =result in soil disturbance due to the earthworks required, which may affect soil stability or lead to the release of discharges containing polluting material (e.g., silt, cement oil) to exposed soils and groundwater.</p>
Air Quality and Climate	<p>The construction works that will be required during the construction of the dome may generate levels of airborne dust which could affect local air quality or cause nuisance.</p> <p>The potential increase in traffic levels associated with this development may lead to a reduction in air quality in the town due to vehicle related emissions.</p> <p>This concept proposal component will not have a significant impact in terms of climate change.</p>
Noise & Vibration	<p>The amount of construction associated with this component will increase noise at nearby NSLs from construction plant and activities. Any vibration arising from such activities will be significantly below any thresholds for structural damage to property and is unlikely to be perceptible at nearby receptors.</p> <p>The operational phase of the development may give rise to an increase in noise from increased road traffic on the surrounding road network and from people during recreational/social activities. Operational vibration will be minimal with no significant vibration impacts envisaged.</p>
Traffic and Transport	This development will lead to an increase in parking demand and congestion in the town and the Estate.
Landscape and Visual Impact	<p>There will be substantial physical effects to the estate during construction of the dome and associated features as well as permanent landcover change / vegetation loss.</p> <p>There may be negative impacts on landscape character during construction. Thereafter, there may be an increase in the scale, intensity and diversity of built development within the estate and its wider setting. This development represents landscape transformation with the potential to impact negatively on sensitive landscape elements and naturalistic / heritage character.</p>



Environmental Topic	Potential Significant Environmental Impacts (in the absence of mitigation)
	There may be negative impact on visual amenity for residents, visitors and recreationalists during construction. The permanent presence of the dome and associated development would represent dramatic visual change that has the potential to adversely impact on aspects of visual amenity within the estate. However, it is also a visually striking, high-quality feature that may be perceived as improving visual amenity for some viewers – even providing an alternative improved frame of reference for the Castle to be appreciated.
Cultural Heritage	These concept proposal option elements are likely to result in very significant impacts (direct and indirect visual) on the archaeological and architectural heritage of the area.



7.1.5 Cumulative Impacts

The co-occurrence of all concept proposal components in addition to other committed development in the area (as detailed in Section 5.2) may result in cumulative effects on the environment. Cumulative effects are defined in the EPA 'Guidance on Information to be contained in EIARs' (2022) as the addition of many minor or insignificant effects, including effects of other projects, to create larger, more significant effects.

The co-occurrence of particularly significant concept proposal components, namely components involving the construction of significant built development, or which result in an intensification of activity, may have either a significant, a very significant or profound effect on the receiving environment at the site (in the absence of environmental mitigation), with the exact magnitude of effect being dependent on the combination of components developed and the exact design, scale and character of each component.

Concept proposals components which could be considered as significant by virtue of their scale, or the level of activity associated with them are as follows:

- 5: Development of a water sports centre in Lough Muckno Estate.
- 6: Development of a cruise tour centre, and provision of water taxies, cruise boats and electric buggies within Lough Muckno Estate.
- 7: Development of a fishing lodge and conservation centre within Lough Muckno Estate.
- 8: The development of dispersed lodges and recreational activities at islands in Lough Muckno.
- 11: Development of a hotel, golf complex, lodges, a spa and a cookery school at Concra Wood Golf Club.
- 15: The development of a modest sized, open sided dome structure in the vicinity of Hope Castle housing several recreational and cultural activities, a café and potentially, a moderately scaled ice climbing wall.
- 16: The development of a large-scale dome structure (potentially over Hope Castle) in Lough Muckno Estate, to be known as the Great Drumlin of Adventure.
- 17: Development of a spa and well-being centre, several café and retail facilities, exhibition areas, substantially scaled indoor ice climbing walls, a high ropes course, play areas, and auditorium, all within the domed area.
- 18: The development the deep adventure attraction within the domed area in Lough Muckno Estate.
- 19: Development of a canyoning and water sports arena within the domed area in Lough Muckno Estate.

The co-occurrence of concept proposal components in addition to committed residential, commercial and waste management activity development in the town of Castleblayney may result in a cumulative impact that is collectively significant. Such development, when combined, may increase in traffic in the town, and (in the case of co-occurring residential development) may lead to an increase in water supply and energy supply demand, putting the existing mains supply systems serving the area under pressure. This is more likely in the event the large-scale components of concept proposal option 2 are advanced. Similarly, noise emissions from the construction works and increased road traffic associated with the proposal components, when combined with existing noise sources in Castleblayney including existing road traffic and commercial operations/construction works associated with other developments may result in a potential cumulative noise impact at nearby NSLs.



Potential mitigations measures to address the planning and environmental constraints identified in relation to the concept proposals are presented hereunder.

Three forms of mitigation have been considered. These are as follows:

1. Planning and Policy Amendments - Measures to address CDP contraventions.
2. Environmental Mitigation Measures - The adoption of Environmental Mitigation Measures (including embedded or design and additional mitigation measures) to avoid, prevent, reduce or offset Potential Significant Environmental Impacts, and to ensure conformance with relevant planning policy.
3. Concept Modifications - Changes to the concept proposals to ensure future development is not likely to have a significant impact on the environment (where mitigation is not possible), or proposed development contravenes CDP.

The sections below define and describe the proposed solutions under these three headings.

7.2 Measures to address Potential Planning and Policy Contraventions

The purpose of CDP policy objectives defined below are to protect the environment and the environs of Lough Muckno.

- PAP 1: To restrict development in Areas of Primary Amenity to sites where it can be demonstrated to the satisfaction of the Planning Authority that the proposed development would not threaten the scenic or environmental quality of the area.
- CBO 11: Prohibit development within the environs of Lough Muckno, unless in exceptional circumstances, where it has been proven to the satisfaction of the Planning Authority that the integrity of the Lough and its surrounding landscape will not be threatened.

As discussed earlier in this report, this potentially leads to some degree of conflict between these policy objective and several other policy objectives relating to the promotion of tourism and economic development at Lough Muckno, namely CBO 5, CBO 6, CBO 7 and CBO 10.

It is recommended that policy objectives relating to Lough Muckno are reviewed in the next iteration of the CDP to allow for consideration of tourism and recreation development proposals at the site which are not detrimental to the area.

7.3 High Level Environmental Management and Mitigation Measures

High level mitigation measures were identified to be considered to prevent environmental impacts on the receiving environment at or around the site if any of the concept proposal components were taken forward to project stage. These are detailed in Table 7.4.



Table 7-4: High Level Environmental Management and Mitigation Measures to address Potential Significant Environmental Impacts

Ref	Environmental Mitigation Measures to avoid, prevent, reduce or offset Potential Significant Environmental Impacts
EMM1	A Waste Management Plan for the Estate should be prepared for all developments which results in an intensification of activity at the site.
EMM2	A Construction and Environmental Management Plan (CEMP) should be prepared for all construction works that take place at the site. This plan should contain measures relating to ecological protection, noise and dust minimisation, surface water management, protection of soils and groundwater, archaeology, architectural and cultural heritage management, and construction waste and traffic management, with the purpose of the plan being to ensure that construction works do not have any significant, negative impact on the receiving environment.
EMM3	A CEMP should be prepared for the construction phase with noise limits from construction activities observed at nearby NSLs. Construction works should follow the best practice noise and vibration management guidelines outlined in BS5228-1 and BS5228-2, including switching off machinery while not in use, scheduling works to minimise noise during sensitive hours, controlling drop heights, maintaining road surfaces, proactively engaging with the local community and routine noise monitoring.
EMM4	All construction works taking place near or at surface water bodies should be carried out in accordance with Inland Fisheries Ireland Guidelines on Protection of Fisheries during Construction Works in or adjacent to Water.
EMM5	All developments taking place at the site that have the potential to significantly impact ecological receptors should be subject to Ecological Impact Assessment to confirm whether such development will have a negative impact on ecology. Where negative impacts are likely, appropriate ecological mitigation measures should be adopted. This assessment should be informed by habitat and species surveying, as appropriate, having regard to ecological sensitivities at and around a development location. Further detail on the type of surveys required for the variety of ecologically sensitive areas at the site is provided in Section 4 – Recommendations, of the Preliminary Ecological Appraisal Report supporting this document (which is contained in Appendix 2).
EMM6	The removal of any vegetation should be scheduled outside of the nesting bird season. The bird nesting season runs from 1st March to 31st September. The cutting of trees, bushes and hedgerows is restricted during this period and due care should be taken to ensure that any such activities do not result in an offence being committed under the Wildlife Act (1976) or the Wildlife Amendment Act (2000). If works need to be undertaken within the main breeding season, clearance must be preceded by an inspection of the vegetation by an experienced ecologist to identify evidence of bird breeding activity (taken as the commencement of nest building through to fledging) along with consultation with NPWS. If such is found, work must be delayed until young birds have fledged.
EMM7	All development at the site which has the potential to impact on mature trees should be subject to Arboricultural Impact Assessment. To compensate for the loss/removal of trees, woodland or hedgerow, additional planting should be included in the designs to compensate for this loss and ensure landscape connectivity with the wider surroundings is maintained.
EMM8	All landscaping should be native and should designed to enhance ecological connectivity.



Ref	Environmental Mitigation Measures to avoid, prevent, reduce or offset Potential Significant Environmental Impacts
EMM9	A Traffic and Transport Assessment and a Parking Demand Assessment should be prepared for any development which could lead to an intensification of activity at the site and increased traffic
EMM10	Where any development taking place at the site has the potential to emit light (either during the construction or operational phase of the development) that may negatively impact sensitive ecological receptors, lighting related restrictions and mitigation measures, including design mitigation measures, should be defined for the development and implemented. Further detail on the type of lighting restrictions that can be employed to prevent light having a significant negative impact on sensitive ecological receptors is provided in the Section 4 – Recommendations, of the Preliminary Ecological Appraisal Report supporting this document (which is contained in Appendix 2).
EMM11	All development taking place in the Estate or at Black Island or White Island should be subject to Invasive Species surveying. Where invasive species are identified, an Invasive Species Management Plan should be developed for the development.
EMM12	A Material Asset Impact Assessment/Engineering Report should be prepared for any larger scale development which has the potential to significantly increase demand for water supply, energy supply or wastewater treatment capacity.
EMM13	All significant built development should be provided with stormwater attenuation systems to ensure that stormwater run-off discharges from the development site are limited to greenfield run-off rates. Sustainable Drainage Systems which serve to attenuate stormwater run-off and promote/enhance biodiversity at the same time should be generally promoted at the site. As an added benefit, such systems can be designed to cater for and treat urban stormwater run-off associated with the town of Castleblayney, which is a known source of pollution that affects lake water quality.
EMM14	A Visitor Management Plan should be prepared for all significantly scaled activities and experiences proposed at Lough Muckno. Such a plan should define measures to ensure the level and location of activity, including water-based activity, is appropriately restricted and managed. Such a plan should contain measures relating to litter prevention, ecological protection and management, water quality protection, noise limitation, education and cultural heritage preservation and protection. In particular, a Visitor Management Plan should be prepared for proposed activities associated with concept proposal component 6. This plan should serve to ensure these activities do not disturb or damage sensitive ecological receptors in the area (e.g., wetland area around the shores of the lake) and do not result in an over-intensification of activity at the lake that would disturb the natural character of the area. Such Visitor Management Plans could restrict the location and level of water-based activity so as not impact on existing angling amenity at the lake.
EMM15	All activity providers should be required to adhere to an Environmental Code of Conduct.
EMM16	Operational noise from people during social and recreational activities should be controlled through the Visitor Management Plan, including designated personnel responsible for managing crowd noise, strategically displaying signage, etc. Noise from road traffic during the operational phase should be managed in accordance with a Traffic Management Plan. Parking zones and vehicle routes should be located away from nearby NSLs with speed limits enforced on site.



Ref	Environmental Mitigation Measures to avoid, prevent, reduce or offset Potential Significant Environmental Impacts
EMM18	Any built development taking place at the site should be designed in a manner that promotes positive effects on landscape character and visual amenity and uses natural and flowing forms (including biophilic design principles) that integrate seamlessly with designed and then natural landscape elements. Materials best suited to that type of approach will be natural and robust giving a strong sense of permanence and integration. Green roofs and Sustainable Urban Drainage System (SUDs) principals should also be incorporated.
EMM19	Prior to the lodging of any planning applications associated with large-scale elements outlined for Concept Proposal Area, the proposal should be submitted to the Development Applications Unit of the Department of Housing, Local Government and Heritage, for review and comment. This will allow for the identification of any significant issues regarding cultural heritage in advance of the planning process, whether under Part VIII of the Planning and Development Act 2000, or another planning process.
EMM20	Prior to the commencement of any works that affect any of the built heritage assets (BH01-BH33) discussed in the supporting Cultural Heritage Constraints Assessment report (Appendix 3), a Declaration under Section 57 of the Planning and Development Act 2000 may be required to be published by MCC.
EMM21	A design team including a Conservation Architect Grade 1 and Conservation Engineer, should be appointed to assist with any elements of the Concept Proposal Area that include the built heritage assets.
EMM22	An architectural heritage impact assessment should be completed in advance of any developments within the Concept Proposal Area that impact on architectural heritage assets. This assessment should be completed by a conservation engineer / architect / archaeologist, experienced in built heritage assessment.
EMM23	Any conservation, repair, and alteration works to Hope Castle, or any of the architectural heritage assets within the development area and discussed in this report, should be carried out in accordance with the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous) Provisions Act (1999), the document 'Architectural Heritage Protection: Guidelines for Planning Authorities' (Department of Arts, Heritage and the Gaeltacht, 2011), and the Advice Series on Historic Buildings published by the National Monuments Service of the Department of Housing, Local Government, and Heritage. In general, any conservation and repair work to architectural heritage assets within the development area should be carried out in line with the principals of the Burra Charter: 'as much as necessary, and as little as possible'. Professionals experienced and qualified in working on historic properties should be employed to carry out conservation, repair or refurbishment works to any built heritage assets.
EMM24	The National Monuments Service of the Department of Housing, Local Government, and Heritage state that avoidance of direct impacts on known archaeology allowing for preservation in situ, is the preferable approach, regarding development projects. Consequently, any proposed development works in the vicinity of the known archaeological sites AH01-AH10, as identified in the supporting Cultural Heritage Constraints Assessment report (Appendix 3), should minimise the extent of the ground disturbance works, associated with the development.



Ref	Environmental Mitigation Measures to avoid, prevent, reduce or offset Potential Significant Environmental Impacts
EMM25	In advance of any proposed development at or in the vicinity of Hope Castle, a GPR / geophysical archaeological survey should be undertaken in the vicinity of the extant Hope Castle. This survey should examine the environs of Hope Castle with the intention of identifying the original location of the seventeenth century Blayney Castle and its associated bawn wall. This will allow for appropriate planning and routing of underground services, and avoidance of any direct impacts, allowing for preservation in situ of the archaeology.
EMM26	Any ground disturbance works for proposed new buildings, structures, and underground utilities within the concept area should be subject to advanced archaeological impact assessment. This assessment should be compiled by an archaeologist that is eligible to hold an archaeological licence issued under the National Monuments Acts (1930-2014). This will allow for the advanced identification and any direct negative impacts on the archaeology, and the implementation of appropriate mitigation measures. Archaeological mitigation measures may include pre-construction geophysical surveying, and archaeological test trenching. In instances where adverse impacts on subterranean archaeology cannot be avoided, archaeological excavation under licence issued by the National Monuments Service, may be required.
EMM27	Any Archaeological Impact Assessments or Architectural Heritage Impact Assessments carried out as part of any proposed development should take account of the cumulative impacts of the concept proposal option elements on the existing cultural, archaeological and architectural heritage.
EMM28	A Traffic and Transport Assessment should be prepared for any significant development taking place at Concra Wood which may lead to a significant increase in traffic volumes entering and exiting the site. Such an assessment should be appropriately informed by traffic surveys, a topographical survey, junction analysis (e.g., using Picady software) and trip generation analysis (e.g., using TRICS software). The junction between the N53 and the site access road to Concra Wood may require upgrading in an appropriate manner, having regard to the analysis and assessment undertaken. It is likely a junction upgrade may be required ((e.g., development of a right hand turning lane or roundabout). At a minimum, new road markings, and additional lighting and signage could be required. Consideration should also be given to creating a pedestrian/cycling route between Concra Wood and the town to facilitate safe travel between the two locations.



7.3.1 Climate Change Impact and Mitigation

Overall, the concept proposals are unlikely to have any significant impact on climate change given the scale of the proposals versus the scale of the climate change challenge. It is likely that most concept proposals components, if not all, would have a negligible impact in terms of climate change. Notwithstanding this, the Climate Action and Low Carbon Development Act (as amended) and the latest National Climate Action Plan (CAP23) require that greenhouse gas emissions are reduced by 51% by 2030 and by 100% by 2050. All development taking place under this project must therefore be provided with an adequate level of renewable, decarbonised energy, either from the grid, or from on-site renewable energy facilities.

Generally, in relation to development taking place under this project, energy efficient design principles and the provision of rooftop solar panel installations should be promoted and supported as a policy.

More broadly, MCC should support the development of additional renewable energy infrastructure projects in the county to facilitate a transition to decarbonised grid electricity. It is noted that MCC is currently preparing a Local Authority Climate Action Plan, which is likely to support this objective broadly.

In line with the above, it is important to ensure that the tourism and recreation related proposals do not lead to an increase in private vehicle related greenhouse gas emissions. The following broad measures are suggested to ensure this does not occur:

- An adequate level of electric charging points should be provided at car parking locations to be developed.
- Broadly, MCC should support and promote the provision of additional public transport services for Castleblayney town and the surrounding region.
- A Mobility Management Plan should be prepared for all significant development which has the potential to attract large numbers of visitors to the site.
- MCC should seek to partner with private transport operators in providing additional transport services for the town and region (i.e., to and from other population centres), wherever significant development which has the potential to attract large numbers of visitors to the site is to take place.

7.4 Concept Modifications

The adoption and implementation of the defined Environmental Mitigation Measures in Table 7.4 will ensure that any potential significant environmental effects associated with the following concept proposals components are adequately mitigated against:

- 1: Regeneration and repurposing of Hope Castle situated in Lough Muckno Estate
- 2: Use of Hope Castle and its curtilage as an Exhibition Venue, Sculpture Garden and Park, and Walled Garden.
- 3: Development of a Coach house café, retail area, and children's play area, at Hope Castle's coach house building.
- 4: General landscaping and development of greenways, parkland walks and cycle paths within Lough Muckno Estate.
- 9: Integration of Castleblayney Town with The Historic Estate via the Gatehouses to the estate.
- 10: Development of the Gatehouse as an information centre and retail area.
- 12: Development of a centre housing cultural and recreational activities at Market House situated in Market Square, Castleblayney.



- 13: Development of dispersed parking through Castleblayney Town to accommodate visitors to Castleblayney, relative to the scale of the development that takes place.
- 14: Development of Black Island Trails. It should be noted that this development has commenced.

Even with the adoption of the defined environmental mitigation measures, some of the concept proposals components still have the potential to have a significant environmental impact on the receiving environment. These concept proposal components are listed below:

- 5: Development of a water sports centre in Lough Muckno Estate.
- 6: Development of a cruise tour centre, and provision of water taxies, cruise boats and electric buggies within Lough Muckno Estate.
- 7: Development of a fishing lodge and conservation centre within Lough Muckno Estate.
- 8: The development of dispersed lodges and recreational activities at islands in Lough Muckno.
- 11: Development of a hotel, golf complex, lodges, a spa and a cookery school at Concra Wood Golf Club.
- 15: The development of a modest sized, open sided dome structure in the vicinity of Hope Castle housing several recreational and cultural activities, a café and potentially, a moderately scaled ice climbing wall.
- 16: The development of a large-scale dome structure (potentially over Hope Castle) in Lough Muckno Estate, to be known as the Great Drumlin of Adventure.
- 17: Development of a spa and well-being centre, several café and retail facilities, exhibition areas, substantially scaled indoor ice climbing walls, a high ropes course, play areas, and auditorium, all within the domed area.
- 18: The development of the deep adventure attraction within the domed area in Lough Muckno Estate.
- 19: Development of a canyoning and water sports arena within the domed area in Lough Muckno Estate.

With respect to concept proposal components 5, 6, 7, and 8, the development of each of these components on their own is likely to have a relatively minor landscape and visual impact, however collectively, the development of all these components together could have a significant impact on landscape character and visual amenity at the site, which is a designated Area of Primary Amenity.

With respect to concept proposal components 11 and 15, the development of these components on their own could have a significant impact on landscape character and visual amenity.

As is discussed in the Landscape and Visual Constraints/Consideration Report (contained in Appendix 4), the development of the above components has the potential to either impart a positive or negative effect on landscape and visual environment, depending on the scale, location and design of the components.

Concept proposal component 16 is likely to have a very significant impact on the receiving landscape and visual, ecological, and cultural heritage environment at the site.



Having regard to the above, the following Concept Modifications could be considered if it is proposed to proceed with :

- Any built development associated with concept proposal components 5, 6, 7, and 11 should only be of a moderate scale and situated so that it does not impinge on views from or toward Hope Castle.
- If proceeding, the built elements associated with the concept proposals components 5, 6, and 7 would be consolidated into a single moderately scaled structure to reduce the magnitude of landscape and visual impact.
- The built development associated with concept proposal component 11 should be set back from the shoreline of Lough Muckno, to minimise visual impact and impact on sensitive ecological receptors that may be contained along the shoreline.

The dispersed lodges associated with concept proposal component 8 do not comply with relevant County Development Policies and pose a significant environmental impact as presented.

Concept proposal component 16 is a large scale feature that has the potential to impact negatively upon the existing setting of the Estate. Due to potential very significant impact on the receiving environment at the site, the concept proposal component 16 does not comply with relevant County Development Policies and poses a significant environmental impact as presented.

- Concept proposal components 17, 18 and 19 could still potentially proceed if these activities are appropriately housed in built development that is appropriate to the setting and character of the estate.

It is important to re-state that any built development associated with the concept proposals should be designed in a manner that promotes sustainability, positive effects on landscape character and visual amenity and uses natural and flowing forms (including biophilic design principles) that integrate seamlessly with both the built and natural landscape elements – to ensure conformance with planning policy and relevant environmental protection criteria. Materials best suited to that type of approach will be natural and robust giving a strong sense of permanence and integration. Green roofs and Sustainable Urban Drainage System (SUDs) are also recommended. ..

The Environmental Mitigation Measures (defined in Table 7-4 and the Concept Modifications defined in Section 7.4 would if implemented broadly serve to ensure the concept proposal components do not have a significant negative impact on the receiving environment at the site. This in turn, would ensure the concept proposal components better align with planning policy defined in the CDP.



8. ASSESSMENT CONCLUSIONS AND NEXT STEPS

8.1 Assessment Conclusions

An overview of concept proposal components that

- a) could potentially proceed with appropriate environmental mitigation.
- b) could potentially be considered with concept design modifications and/or planning policy amendments).
- c) concept proposal options that do not comply with relevant County Development Policies and pose a significant environmental impact as presented.

are outlined in Table 8-1.

Table 8-1: Assessment Conclusions

Ref.	Concept Proposal Component	Assessment Conclusions
Concept Proposal Option 1		
1	Regeneration and repurposing of Hope Castle situated in Lough Muckno Estate.	Could potentially proceed as proposed with appropriate environmental mitigation.
2	Use of Hope Castle and its curtilage as an Exhibition Venue, Sculpture Garden and Park, and Walled Garden.	Could potentially proceed as proposed with appropriate environmental mitigation.
3	Development of a Coachouse café, retail area, and children's play area, at Hope Castle's coachouse building.	Could potentially proceed as proposed with appropriate environmental mitigation.
4	General landscaping and development of greenways, parkland walks and cycle paths within Lough Muckno Estate.	Could potentially proceed as proposed with environmental appropriate mitigation.
5	Development of a water sports centre in Lough Muckno Estate.	Could potentially be considered with design modifications, planning policy amendments and appropriate environmental mitigation.
6	Development of a cruise tour centre, and provision of water taxies, cruise boats and electric buggies within Lough Muckno Estate.	Could potentially be considered with design modifications, planning policy amendments and appropriate environmental mitigation..
7	Development of a fishing lodge and conservation centre within Lough Muckno Estate.	Could potentially be considered with design modification, planning policy amendments and appropriate environmental mitigation.
8	The development of dispersed lodges and recreational activities at islands in Lough Muckno.	Does not comply with relevant County Development Policies and poses a significant environmental impact as presented.



Ref.	Concept Proposal Component	Assessment Conclusions
	Concept Proposal Option 1	
		Any new recreational activities should take into consideration the existing setting and character of the Estate.
9	Integration of Castleblayney Town with The Historic Estate via the Gatehouses to the estate.	Could potentially proceed with appropriate environmental mitigation.
10	Development of the Gatehouse as an information centre and retail area.	Could potentially proceed with appropriate environmental mitigation.
11	Development of a hotel, golf complex, lodges, a spa and a cookery school at Concra Wood Golf Club.	Could potentially be considered with design modifications, planning policy amendments and appropriate environmental mitigation.
12	Development of a centre housing cultural and recreational activities at Market House situated in Market Square, Castleblayney.	Could potentially proceed with appropriate environmental mitigation.
13	Development of dispersed parking through Castleblayney Town to accommodate visitors to Castleblayney, relative to the scale of the development that takes place.	Could potentially proceed with appropriate environmental mitigation.
14	Development of Black Island Trails.	Proceeding with appropriate environmental mitigation.
15	The development of a modest sized, open sided dome structure in the vicinity of Hope Castle housing several recreational and cultural activities, a café and potentially, a moderately scaled ice climbing wall.	Could potentially be considered with design modifications, planning policy amendments and appropriate environmental mitigation.
	Concept Proposal Option 2	
16	The development of a large-scale dome structure (potentially over Hope Castle) in Lough Muckno Estate, to be known as the Great Drumlin of Adventure.	<p>Does not comply with relevant County Development Policies and poses a significant environmental impact as presented.</p> <p>Any new structures will need to be designed to take into consideration the existing setting & character of the Estate and should not detract from the amenity value of the site.</p>
17	Development of a spa and well-being centre, several café and retail facilities, exhibition areas, substantially scaled indoor ice climbing walls, a high ropes course, play areas, and auditorium, all within the domed area.	<p>Does not comply with relevant County Development Policies and poses a significant environmental impact as presented.</p> <p>However, they could potentially still proceed if these activities were appropriately housed in built development that is appropriate to the setting and character of the estate.</p>



Ref.	Concept Proposal Component	Assessment Conclusions
Concept Proposal Option 1		
18	The development the deep adventure attraction within the domed area in Lough Muckno Estate.	<p>Does not comply with relevant County Development Policies and poses a significant environmental impact as presented.</p> <p>However, they could potentially still proceed if these activities were appropriately housed in built development that is appropriate to the setting and character of the estate.</p>
19	Development of a canyoning and water sports arena within the domed area in Lough Muckno Estate.	<p>Does not comply with relevant County Development Policies and poses a significant environmental impact as presented.</p> <p>However, they could potentially still proceed if these activities were appropriately housed in built development that is appropriate to the setting and character of the estate.</p>

8.2 Final Recommendations

Several final recommendations have been made and these are listed below:

- MCC should explore the possibility of developing a Masterplan for the site. Such a Plan should be subject to SEA and AA, which would serve to define a framework of environmental protection measures specific to the site. This plan could be an addendum to the CDP.
- It is recommended that should MCC decide to proceed with the concept proposals they should be refined or reassessed in the manner detailed, having regard to the conclusions of this assessment.
- All development proposed for the site should be subject to Environmental Impact Assessment (EIA) and Appropriate Assessment (AA) Screening. This will serve to ensure that environmental and ecological protection criteria are considered in detail at project level.
- Any concept proposals that are progressed should be underpinned by sustainability, climate change and eco-friendly principles.
- Generally, it is recommended the any concept proposal for the site considers the following themes:
 - Amenity and recreation
 - Sustainability and climate change
 - Circularity
 - Biodiversity and heritage
 - Education and sustainable practices
 - Health and well-being

All proposals should be “exemplar developments” developments promoting sustainable tourism.

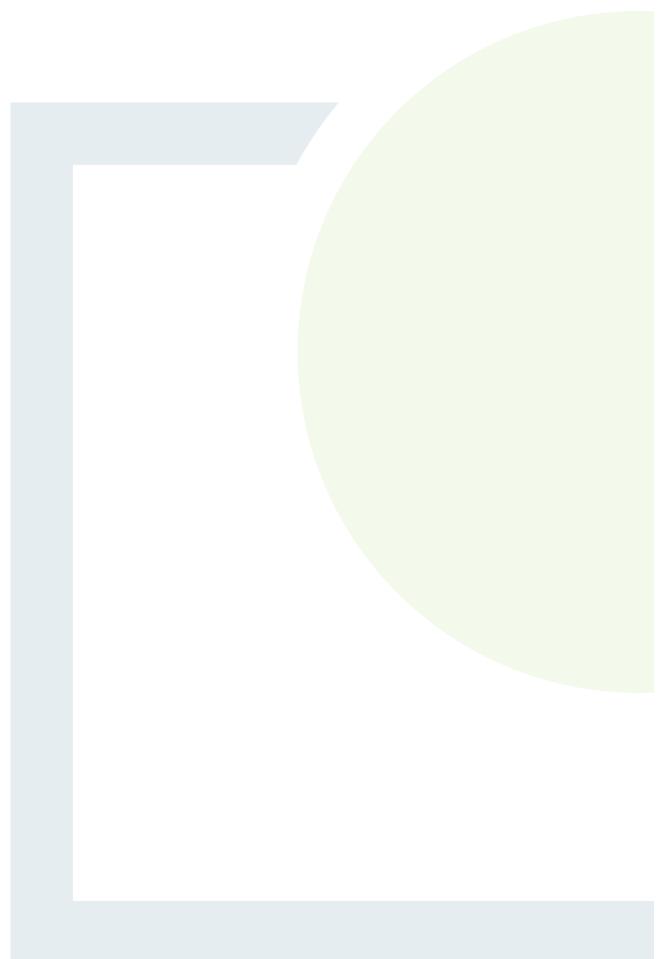


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& PLANNING**

APPENDIX 1

**Public and Stakeholder
Consultation Event Report**





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CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE &
PLANNING

STRATEGIC PLANNING AND ENVIRONMENTAL APPRAISAL OF CONCEPT PROPOSALS AT LOUGH MUCKNO ESTATE, CASTLEBLAYNEY, CO. MONAGHAN

Public and Stakeholder Consultation Report

Prepared for:

Monaghan County Council



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PUBLIC AND STAKEHOLDER CONSULTATION REPORT

REVISION CONTROL TABLE, CLIENT, KEYWORDS AND ABSTRACT

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Client: Monaghan County Council

Keywords: Lough Muckno, Monaghan, Castleblayney, Lough Muckno Estate, Planning, Environment, Tourism, Recreation, Amenity.

Abstract: Public and Stakeholder Consultation Report summarising the public and stakeholder consultation undertaken to inform the carrying out of a strategic planning and environmental appraisal of concept proposal options defined for the Lough Muckno Estate in Monaghan County Council's 'Vision for Muckno Estate' document.

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1. INTRODUCTION

1.1 Background

In 2021, Stevens and Associates prepared report titled 'A Vision for Lough Muckno Estate' (termed the 'Vision' hereafter in this report) for Monaghan County Council (MCC) and Failte Ireland. This report presented two concept proposals.

MCC has commissioned Fehily Timoney and Company (FT) to complete a strategic planning and environmental appraisal of the two concept proposal options.

Public and stakeholder consultation has been undertaken to provide members of the public and key stakeholders with an understanding of what both concept option proposals would involve and an opportunity to submit their views on planning and environmental aspects associated with the concept option proposals. The consultation undertaken will inform FT's strategic planning and environmental appraisal, which is expected to be completed in February 2023.

1.2 Overview of the Concept Proposals

Concept proposal option 1 entitled 'Muckno Adventure Estate' proposes the development of four connected zones of activity, within which it could be possible to undertake over 150 different outdoor adventure activities as well as experiences associated with nature, conservation, art, craft, music, food and drink, and health and well-being.

The four main zones for this concept are as follows:

- Zone 1: The Historic Estate
- Zone 2: Lough Muckno
- Zone 3: Concra Woods
- Zone 4: The Town – Castleblayney

This concept proposal option at its maximum scale could bring 200,000 - 250,000 visitors per annum to the area.

Concept proposal option 2 entitled 'The Great Drumlin of Adventure' builds on concept proposal option 1. This concept proposal option -proposes the carrying out of additional substantial development at Lough Muckno Estate including a dome structure replicating the shape and profile of a drumlin.

This concept proposal option at its maximum scale could bring up to 330,000 - 420,000 visitors per annum to the study area.



2. OVERVIEW OF PUBLIC AND STAKEHOLDER CONSULTATION UNDERTAKEN

The following forms of public and stakeholder consultation were undertaken:

1. The carrying out of a public consultation event in relation to the concept proposal options defined in the 'Vision for Muckno Estate' at The Gatehouse, Lough Muckno Estate, Castleblayney on the 6th of October.
2. Providing members of the public and stakeholder with an opportunity to make submissions / observations on planning and environmental aspects relating to the concept proposals.
3. Providing members of the public and stakeholders with an opportunity to provide focused feedback on planning and environmental aspects relating to the concept proposals via structured questionnaires.
4. Conducting focused consultation meetings with key stakeholders.

2.1 Public Consultation Event

A public and stakeholder consultation event for the project took place at The Gatehouse, Lough Muckno Estate, Castleblayney, Co. Monaghan on the 6th of October 2022 from 2:30 pm to 6:30 pm.

Firstly, a presentation was made to the County Councillors. This presentation was given by representatives from MCC's Tourism section and representatives from FT.

Following this, members of the public were invited to view an exhibit that FT set up. This exhibit display presented detail on the background to the project, all elements of each concept proposal option, the planning and environmental aspects relating to the concept proposal option that need to be addressed during the development process, and methods for members of the public to provide their views on the concept proposal options. The layout of this exhibit display is presented for information purposes in Figure 2-1.



Figure 2-1: Public consultation exhibition set-up at the Gatehouse.



2.2 Submissions / Observations

Members of the public were provided with an opportunity to submit their views on planning and environmental aspects relating to the concept proposals. A project specific email address was set up by FT. Members of the public and stakeholders were made aware of the opportunity to submit their views to this email address during the public consultation event and across several media platforms, including via newspaper notices, notices published on MCC's website and social media pages, radio advertisements, and signs in the town of Castleblayney. The deadline for the submissions was set for the 20th of October and members of the public and stakeholders were advised of this in all communications.

2.3 Questionnaires

Questionnaires were given out during the public consultation event to provide members of the public with an opportunity to provide structured feedback on planning and environmental aspects relating to proposals. The questionnaires included a combination of open-ended and multiple choice questions on the following:

- Awareness of the 'Vision for Muckno Estate' document prior to knowledge of the public consultation event,
- Preferred concept proposal option,
- Level of agreement with concept proposal options,
- Ranking the importance of each defined planning and environmental aspect relating to the concept proposals (using a 1 to 10 rating scale),
- General views on planning and environmental aspects,
- Views on measures that can be incorporated into the proposals to alleviate any concerns.

Those completing questionnaires were also asked to provide their contact details to allow for follow up queries to be posed to them, where necessary. The questionnaire template document is provided in Appendix 2.

2.4 Focused Stakeholder Consultation

A series of focused stakeholder consultation meetings were held with parties identified as being key stakeholders. The purpose of these meeting was to elicit detailed views and opinions on planning and environmental aspects associated with the concept proposals from parties who have a particular interest, concern or influence in relation to concept proposals.

Focused stakeholder consultation meetings took place with the following organizations:

- Concra Wood Golf Club
- Inland Fisheries Ireland
- National Parks and Wildlife Services (NPWS)
- Coillte

More detail on the focussed stakeholder consultation which took place is provided in Section 3.3.



3. SUMMARY OF PUBLIC AND STAKEHOLDER CONSULTATION

3.1 Consultation with County Councillors and Public Consultation Event

The first part of the public and stakeholder consultation event involved representatives from MCC's Tourism section and representatives from FT giving a presentation on the project to County Councillors. MCC provided detail on the project background, contextual issues and the two concept proposal options. FT provided detail on planning and environmental aspects associated with the concept proposal option and how these aspects should be addressed during the development process.

The presentation team fielded questions from County Councillors upon completion of the presentation. Several key issues were raised during questions.

Following the presentation to the County Councillors, members of the public were invited to view an exhibit that FT set up. A total number of 104 attendees were present for the public consultation event. There was a high level of engagement and discussion with members of the public during the course of the event. Key themes and outputs from the day, gathered from personal interactions with those in attendance included:

- Impact of dome structure in terms of landscape character and visual amenity. A substantial number of the attendees had a strong negative view of the possibility of a dome structure being built in the estate.
- Importance of public consultation feedback.
- Need to ensure sustainable tourism development.
- Need to ensure adequate parking provisions in and around the town of Castleblayney.
- Need to robustly address planning and environmental aspects.
- Importance of identifying what should be developed.
- Need to achieve a consensus and broad agreement on any proposed development.
- Need to ensure access to Lough Muckno Estate is maintained.
- Need to consider local folklore.
- Opportunities to promote educational activities.
- Need for robust discussion on potential impacts on biodiversity and landscape character.
- Impact on natural amenity value.
- Impact on ecology and biodiversity.
- Existing water quality at Lough Muckno.
- Need to avoid over-development at Islands in Lough Muckno.
- A substantial number of the attendees believed that Concept Proposal 2 was excessive and disproportionate and do not want to see development of this scale in the estate.



3.2 Online Submissions and Questionnaires

The key themes from email and questionnaire submissions are largely consistent with those gathered from personal interactions during the public consultation event. Most questionnaires were handed in on the day. 6 questionnaires were posted in after the event. 31 written submissions / observations were submitted to the project specific email address before the response deadline on the 20th of October. In total, 92 individual responses by questionnaires and written submissions /observations sent to the project specific email address were received during the time period for public consultation responses. There were also a number of group submissions and duplicate submissions (which were considered as one).

3.2.1 Analysis and Results

Among the number of respondents by questionnaire, 76% were aware of the 'Vision for the Muckno Estate' prior to the public consultation event. 85% of the respondents were residents of Castleblayney and its surroundings within 5km.

Table 3-1 shows the responses to Question 3 of the questionnaire regarding the level of agreement with MCC's broad intentions and vision for the Lough Muckno Estate. Table 3-2 shows the responses to Question 4 of the questionnaire relating to each respondent's preferred concept proposal option. The number of people who selected each choice were added up and weighed against the total number of questionnaire responses in percentage terms.

Table 3-1: Percentage of people who agree/disagree with the concept proposal options.

Agree/Disagree with Proposals	
Strongly disagree	19%
Disagree	9%
Neutral	9%
Agree	27%
Strongly Agree	24%
No response	12%

Table 3-2: Percentage of preference for each concept proposal option.

Preferred Concept	
Concept 1	48%
Concept 2	15%
Neither	25%
No response	12%

19% of respondents strongly disagreed and 9% of respondents disagree with MCC's broad intention and vision mainly due to a concern about overdevelopment and negative environment impacts associated with both concept proposals options.



27% of respondents agreed and 24% of respondents strongly agreed with MCC's broad intention and vision. Respondents who agree with the broad intention and vision in general typically only agree on condition that what is ultimately developed does not have a negative impact on biodiversity or the environment generally.

48% of the respondents preferred Concept Proposal Option 1 which is generally reflective of a desire to see development occurring that is of a more moderate scale. In some cases, respondents only agreed to certain elements of Concept Proposal Option 1, e.g., restoring Hope Castle, restoring Market House.

Only 15% of the respondents preferred Concept Proposal Option 2.

25% of respondents preferred neither concept proposal option, mainly due to concerns about potential environmental impacts. The main concern with Concept Proposal Option 2 was the possible development of a Dome structure covering Hope Castle. A substantial number of respondents believed that Concept Proposal Option 2 was excessive in scale and would have significant negative impact on landscape character and visual amenity, and biodiversity.

The level of concern associated with planning and environmental aspects (as defined by respondents) was determined by quantifying the number of times a particular aspect was raised in submitted questionnaires and submissions /observations. The outputs from this analysis are presented in Table 3-3 and Figure 3-1.



Table 3-3: Total number of times planning and environmental aspects were raised in submitted questionnaires and submissions /observations

Planning and Environmental Aspect	Total number of times planning and environmental aspects were raised in submitted questionnaires and submissions /observations														
	Restoration	Natural and visual amenity	Biodiversity	Public accessibility	Culture & History	Recreational and educational amenity	Water Quality	Existing tourism	Pollution (Air, Noise)	Traffic	Nature tourism / Eco-tourism etc.	Renewables / Energy	Economy	Employment	
Questionnaires	21	18	21	13	8	11	8	4	6	6	2	1	0	0	
Emails	15	17	13	10	5	1	3	5	3	1	3	1	1	1	
Total	36	35	34	23	13	12	11	9	9	7	5	2	1	1	

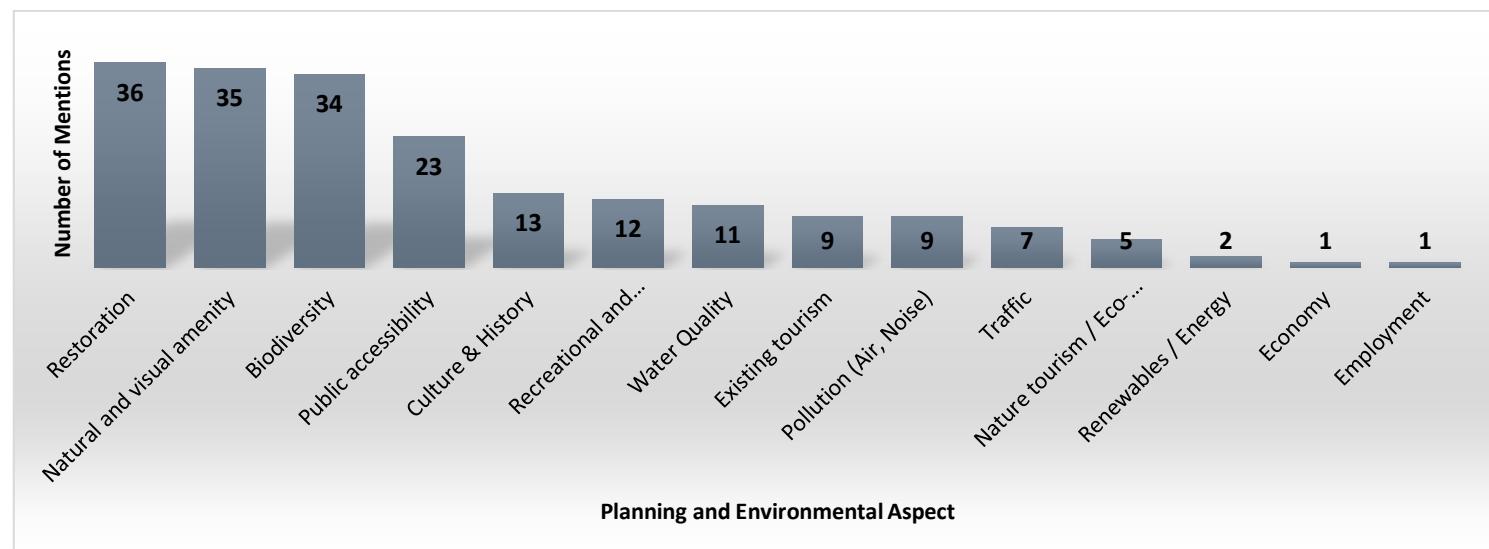


Figure 3-1: Total number of times planning and environmental aspects were raised in submitted questionnaires and submissions /observations



Table 3-3 and Figure 3-1 illustrate the level of concern for the environmental and planning aspects from left (most-mentioned) to right (least-mentioned).

The rankings are based on the number of mentions in both submissions by email and the open-ended questions of the questionnaires. The numbers across both response methods were added up and ranked highest to lowest according to the total number of mentions. This would represent the level of concern towards the environmental and planning aspects.

An analysis of the responses from questionnaires and submissions to the project specific email address show that the top three concerns are:

- Restoring the existing buildings (mainly Hope Castle, Market House and the Annex buildings) in Castleblayney.
- Maintaining and preserving the natural landscape and visual amenity.
- Protecting and enhancing biodiversity.

Concern was also expressed about the following:

- Maintaining accessibility to their local amenities
- Retaining existing cultural heritage
- Retaining recreational and educational amenities
- Protecting water quality in Lough Muckno
- Protecting existing tourism facilities.
- Ensuring proper management of traffic

Several innovative ideas were also raised by respondents, e.g., incorporating nature tourism/eco-tourism into the concept proposals and/or utilising Lough Muckno as a renewable energy source.

Respondents completing the questionnaire were also asked to rank the importance of defined planning and environmental aspects relating to the concept proposals using a multiple choice 1 to 10 rating scale. The level of concern associated with planning and environmental aspects was also quantified by averaging chosen ratings associated with each aspect for all respondents. The outputs from this analysis are presented in Table 3-4 and Figure 3-2.



Table 3-4: Average Rating of Defined Planning and Environmental Aspects

Average Rating of Planning and Environmental Aspects based on Questionnaire Responses											
Planning and Environmental Aspects	Existing tourism & recreation	Landscape and visual amenity	Biodiversity	Hydrology & surface water quality	Adequate provision of services	Cultural heritage	Local air quality	Soils, geology & groundwater	Traffic	Climate	Alignment with planning policy
Score	9.49	9.37	9.29	9.19	9.14	9.14	9.09	9.08	8.92	8.78	7.82

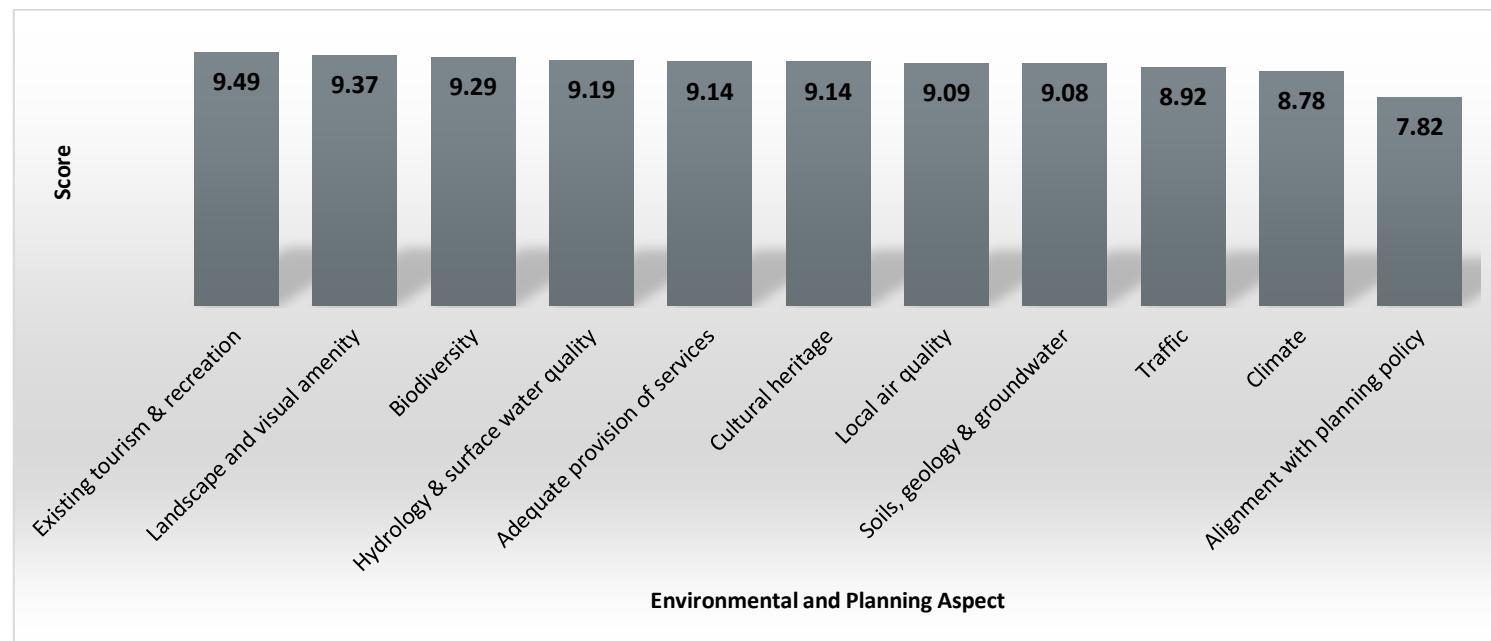


Figure 3-2: Average Rating of Defined Planning and Environmental Aspects



Results show that existing tourism and recreation, landscape and visual amenity, and biodiversity are of highest importance among the defined environmental and planning aspects as gathered from the questionnaire responses.

3.3 Focused Stakeholder Consultation

The following focused stakeholder consultation meetings took place:

- Concra Wood Golf Club (CWGB). In-person Consultation Meeting. Address: Concra Wood Golf Club, Concra, Dundalk Road, Co. Monaghan, A75 HX98. Date: 13/12/2023 Attendees: Dympna Condra (MCC), Richard Deeney (FT), Paul Shortt (CWGC) and Darren McQuillan (CWGC).
- Inland Fisheries Ireland (IFI). In-person Consultation Meeting. Address: The Gatehouse, Lough Muckno Estate, Castleblayney, Co. Monaghan. Date: 13/12/2023. Attendees: Dympna Condra (MCC), Richard Deeney (FT), Michaela Kirrane (IFI).
- National Parks and Wildlife Services (NPWS). Remote Consultation Meeting. Date 05/12/2022. Attendees: Dympna Condra (MCC), Richard Deeney (FT), Maurice Easkin (NPWS).
- Coillte. Remote Consultation Meeting. Date: 13/01/2022. Attendees: Dympna Condra (MCC), Richard Deeney (FT), Paul Jordan (Coillte), David Stirrat (Coillte), Katie Pender (Coillte), Jesper Peterson (Coillte).
- Fáilte Ireland (FI). 13/02/2023. Attendees: Dympna Condra (MCC), Richard Deeney (FT), Shane Dineen (FI), Shane Raferty (FI), Michael Fitzsimmons (FI), Mark Mohan (FI).

A summary of discussion outputs from the focussed stakeholder consultation is presented in Table 3-5.



Table 3-5: Summary of Stakeholder Consultation

Consultee	Summary of Discussion Outputs
Concra Wood Golf Club (CWGB)	<p>CWGB representatives provided an overview of the club organization. They advised on potential locations for potential development on their lands (to north of the site access road as you enter the site). There is an 8 acre site and a separate 6 acre site earmarked for potential development. They advised that angling and trail walking are significant recreational activities that take place within the footprint of the lands owned by Concra Wood.</p> <p>They provided an overview of significant cultural heritage features present on-site, including Lord Blayney's farm building, a folly known as 'the temple,' McMahon's castle, and an architecturally significant relict stone road that leads from the site to the town of Castleblayney along the shore. FT noted that potential development could potentially impact of ecological receptors and mature trees of value. Any development should therefore be subject and informed by suitable Ecological Impact Assessment and Arbocultural Assessment.</p> <p>CWGB advised that a previous Environmental Impact Assessment was carried out for the development of the existing clubhouse and golf club (around ca. 2023).</p> <p>They noted that Concra Wood attracts a substantial number of tourists from the wider region. The golf club is an attractive golf venue that was designed by the Irish professional golfers Christy O' Connor Snr and Christy 'O' Connor Junior.</p> <p>They noted that there is currently a lack of hotel accommodation in the region and the possible hotel development associated with the concept proposals could be of significant benefit to the area as it will facilitate visitors and tourists staying in the area.</p> <p>FT noted that any development taking place on-site should be informed and guided by a Traffic and Transport Assessment. It was noted the site is access point is at a national road.</p> <p>FT noted that the development must accord with relevant development management standards relevant to ecological protection and biodiversity, cultural heritage and archaeology, traffic and transport and landscape and visual amenity. The construction of sizeable built development should be supported by the development of a Construction Environmental Management Plan given site sensitivities and the presence of Lough Muckno in close proximity to the potential development site.</p>
Inland Fisheries Ireland (IFI)	<p>MK advised that fish stocks in Lough Muckno are very productive, abundant and healthy. Coarse fishing and some trout fishing take place at the Lough.</p> <p>FT noted the need to ensure water quality protection during any development project generally. The need for satisfactory wastewater management was identified. Noted that Castleblayney WWTP has capacity to accept additional loading of wastewater. Noted that substantial wastewater loadings (e.g., at potential hotel development) for example should preferably be sent to the public WWTP.</p>



Consultee	Summary of Discussion Outputs
	<p>MK advised on the need to have regard to IFI Guidance on Near Stream works when carrying out construction works pertaining to potential development near watercourses in the area.</p> <p>A discussion was held on the need to balance existing angling amenity with other recreational activities in the area. DC noted the possibility of using zoning to ensure recreational activities are carried out harmoniously and do not impinge on one another. The need to retain existing angling amenity was noted. Long stretch around the lough are currently used for angling.</p> <p>MK noted that feeder streams constitute particularly sensitive aquatic habitat as they act as spawning grounds for fish.</p> <p>A discussion was held on the potential development of an angling lodge at Muckno Estate. MK noted a similar type of development, an angling centre of excellence, was situated in Westmeath.</p> <p>MK noted that there is a salmonid spawning area downstream from Lough Muckno on the River Fane (for Trout and Salmon) at the border with Co. Louth approximately. Several angling clubs are active at this along this stretch of the River.</p> <p>MK noted that Lough Muckno is an inter-drumlin lake and therefore captures large volumes of run-off from the surrounding area. This is having an impact on water quality in the lake.</p> <p>Following the meeting, MK forwarded further detail on water monitoring and quality at Lough Muckno. She noted that Lough Muckno is one of the Water Framework Directive Surveillance monitoring sites for fish and provided the last monitoring report for the Lough (from 2015). The lake's water quality was classed as 'Poor' based on the low numbers of salmon and trout in the lake. MK noted the presence of good stocks of perch, roach, bream, roach x bream hybrids and pike. Further, MK noted that Lough Muckno continues to be a well promoted and popular coarse angling amenity with on-going development of angler access locations.</p>
National Parks and Wildlife Services (NPWS)	<p>Introductions took place and RD and DC provided an overview of the Concept Proposal Options and the project generally. RD provided an overview of the strategic planning and environmental appraisal process and the status of the evaluation.</p> <p>ME noted that he did not have an opportunity to consider the Concept Proposals elements and associated ecological consideration in-depth in advance of the meeting but intended on doing so and providing feedback in January 2023. He noted that whilst the park has valuable ecological attributes it would not meet criteria for classifying it as a National Park.</p> <p>A general discussion was held on the need to ensure water quality protection in the Lough during the course of any potential development to prevent adverse impacts on aquatic ecology.</p>
Coillte	<p>DC and RD provided an overview of the background to, purpose and status of Strategic Planning and Environmental Appraisal being carried out by FT. Coillte provided an overview of their existing operations at Black Islands. They noted it is a commonly used amenity area.</p> <p>I was generally noted that concept proposals for Black Islands are generally low impact in nature (e.g., trail development).</p>



Consultee	Summary of Discussion Outputs
	<p>Coillte provided an overview of the Recreation and Biodiversity strategy for the organization. They aspire to develop a number internationally significant visitor destinations at sites under their ownership in Ireland, however specific sites for such development have not been identified currently.</p> <p>They noted that ambitions with respect to Black Island as a site of recreation and biodiversity align broadly with MCC ambitions for the site. They noted the presence of ecologically valuable habitats and species at the site and the opportunity.</p> <p>FT noted the need to ensure potential development is supported by and guided by appropriate ecological assessment and Appropriate Assessment. Coillte noted that clear-felling is not proposed for the site and that selective thinning is proposed instead to improve forest function and maintain and enhance biodiversity.</p> <p>A discussion was held on potential funding options for recreational projects on Black Island (e.g., Funding for Outdoor Recreational Activities). Coillte noted that any works or being carried out on Coillte lands take place in accordance with the appropriate Coillte licence or permit, where required.</p>
Fáilte Ireland (FI)	<p>MCC provided background detail on the Vision for Lough Muckno. FT provided an overview of the Public and Stakeholder Consultation outputs to date. A general discussion was held on the scale and ambitions associated with the Vision. A description of the concept proposal options was provided.</p> <p>RD provided detail on the Strategic Planning and Environmental Appraisal process. A discussion was held between all on the focus, scope and level of detail associated with the appraisal being undertaken.</p> <p>FT advised that they can share the assessment with FI once it is completed and FI are receptive to this. FI referred FT to FI's EIAR Guidelines which can be used to assist with evaluating the potential impact of tourism related development projects.</p>



4. KEY FINDINGS

Public and stakeholder consultation outputs have been distilled, interpreted and analysed. This process has resulted in the identification of several key findings, which are presented below:

- The public were generally in favour of development in Lough Muckno Estate and surrounding areas to a limited extent.
- Members of the public generally prefer that any development in Lough Muckno Estate and surrounding areas is of moderate scale relative to the full scale of Concept Proposal Option 2.
- There was strong disagreement with Concept Proposal Option 2 due to the environmental risk posed by excessive development.
- Concept Proposal Option 1 is generally the more preferred option and in a significant number of instances (20 instances exactly) only certain elements of Concept Proposal Option 1 were viewed as appropriate.
- There was a broad consensus that the development of a sizeable dome structure in Lough Muckno Estate is undesirable and unacceptable, generally, and in particular the construction of a Dome over Hope Castle.
- There was a broad consensus that any development taking place must not negatively impact the receiving environment in any significant way and that any development should accord with relevant planning and environmental criteria.
- The restoration of significant cultural heritage features such as Hope Castle and Market Square is important to many respondents.
- Many respondents are concerned about potential impact on landscape character, biodiversity and existing tourism and amenity features (such as angling amenity). Many respondents identified the need to protect the existing character and features in the area.
- Many respondents were of the strong view that maintaining access to various amenity features of Lough Muckno Estate was important.
- Many respondents felt that development at islands situated in Lough Muckno would be particularly impactful. Some respondents felt that developing accommodation on these Islands is inappropriate and unacceptable.
- Some respondents felt traffic and parking, and the need to provide education experiences were important matters.



5. NEXT STEPS

The completed questionnaires and submissions received were recorded, considered and assessed by FT. FT will now progress and complete their strategic planning and environmental appraisal of the concept proposal options. A report on the appraisal undertaken and the public consultation results will be produced. The completed report will be considered by MCC to assist in determining the next steps in delivering a proposal for Lough Muckno Estate and its environs. This report will be made available to the public.

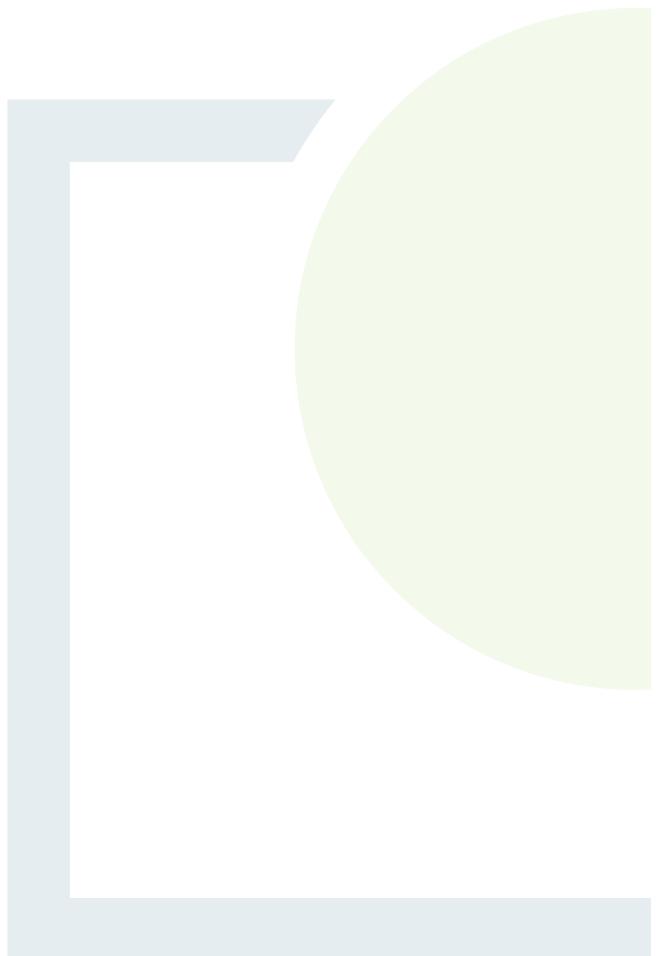


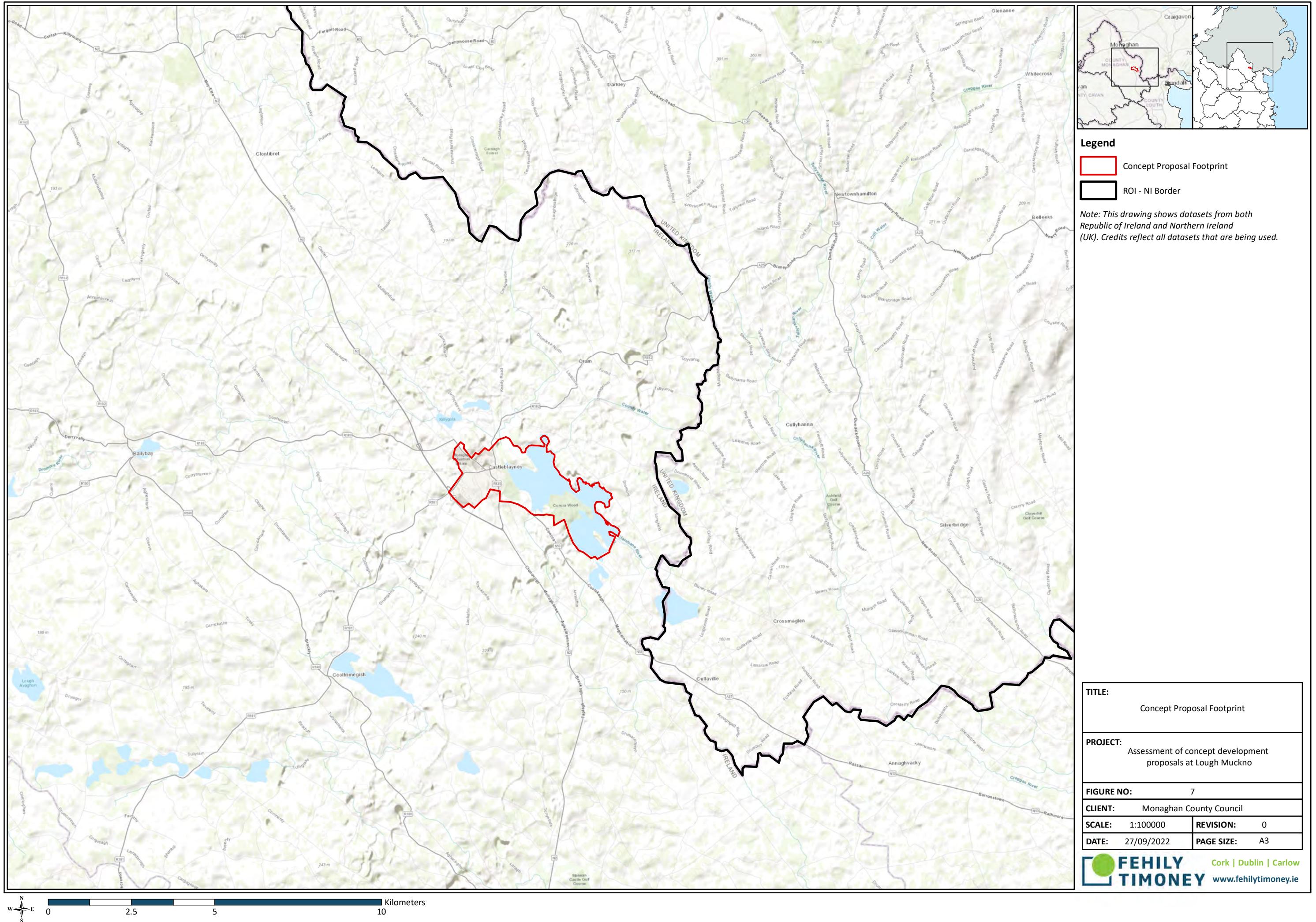
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APPENDIX 1

Concept Proposal Footprint





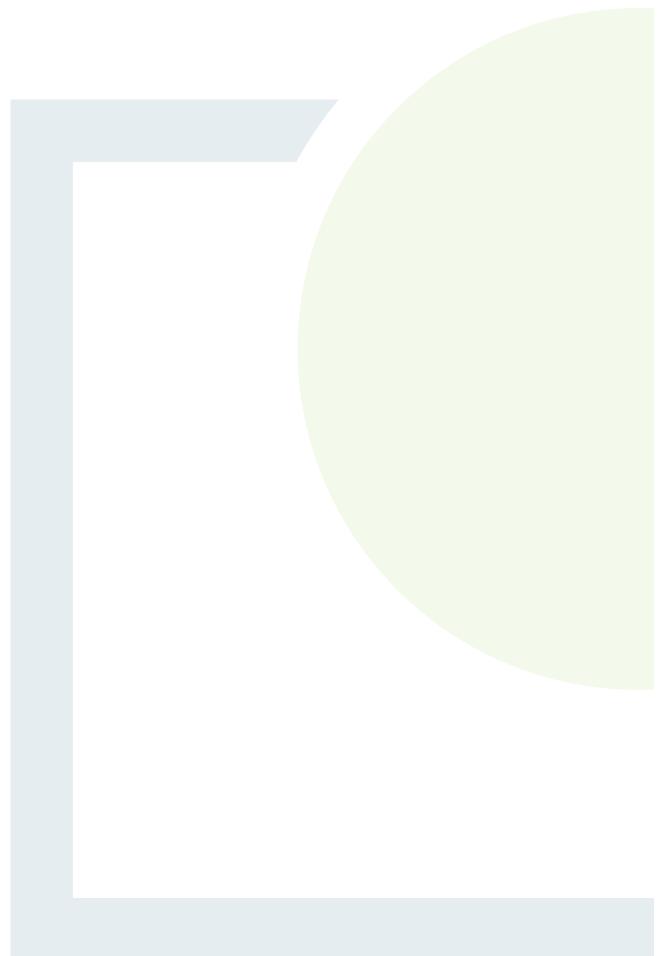


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APPENDIX 2

**Public Consultation Event
Questionnaire**





STRATEGIC PLANNING AND ENVIRONMENTAL APPRAISAL OF CONCEPT PROPOSALS AT MUCKNO ESTATE AND ITS ENVIRONS

PUBLIC CONSULTATION

EVENT QUESTIONNAIRE

Please complete this questionnaire and return to a member of the event team. Alternatively return to Tourism Section, Monaghan County Council or email to loughmuckno@ftco.ie. Kindly sign GDPR compliance section of this form.

Name: _____

Address: _____

Phone (optional): _____

Email (optional): _____

Prior to being notified of this public consultation event, were you aware of the Vision for the Lough Muckno Estate?

Yes No

Do you reside in the town of Castleblayney or the surrounding area (within 5 km)?

Yes No

Can you indicate how much you agree or disagree with the Monaghan County Council's (MCC) broad intention and vision to carry out tourism and recreation development at Lough Muckno Estate, Castleblayney, Co. Monaghan?

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

What is your preferred concept proposal option?

Concept Proposal Option 1	Concept Proposal Option 2	Neither



On a scale of 1 to 10 (with 1 being slightly important and 10 being very important) please outline the level of importance you attach to the following planning and environmental aspects:

- Alignment with planning policy (e.g. Monaghan County Development Plan, Castleblayney Settlement Plan)

1	2	3	4	5	6	7	8	9	10
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- Adequate provision of services (e.g. water supply, power supply, wastewater infrastructure provision)

1	2	3	4	5	6	7	8	9	10
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- Traffic (e.g. traffic levels, road safety, parking provisions)

1	2	3	4	5	6	7	8	9	10
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- Cultural Heritage

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

- Landscape and Visual Amenity

1	2	3	4	5	6	7	8	9	10
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- Biodiversity (e.g. protection of habitats, flora and fauna)

1	2	3	4	5	6	7	8	9	10
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➤ **Hydrology and Surface Water Quality**

1	2	3	4	5	6	7	8	9	10
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➤ **Climate**

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

➤ **Local Air Quality**

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

➤ **Soils, Geology and Groundwater**

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

➤ **Existing Tourism and Recreation (e.g. angling, walking trails, etc.)**

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

➤ **Other, Please Specify:**

--



In your opinion, what is the most important planning / environmental aspect relevant to the concept proposal options, and why?

What, in your view, could be incorporated into the concept option proposals to alleviate any concerns you may have with the proposals?



Do you have any other comments in relation to the concept option proposals?

Making a Submission on the Concept Proposal Options

Community Engagement is a key component of this development project. MCC wishes to provide the wider community with an understanding of what each concept proposal option involves and wishes to provide members of the public with an opportunity to submit their views on planning and environmental aspects of the project

Detailed submissions or observations can made until 20th October 2022 via the following email address:

- loughmuckno@ftco.ie

GDPR Compliance

Your contact details have been collected to facilitate MCC's understanding of planning and environmental aspects in relating to the Vision for Muckno Estate that matter to members of the public. The details will only be used for the purposes of contacting you in relation to the scheme, which may include some or all of the following:

1. Notifying you of future consultation opportunities.
2. Clarifying information you have provided to the project team and obtaining further inputs.

Your details will be securely kept on file for the duration of the project

Signature:	I agree to the above use and retention of my contact details
------------	--

Monaghan County Council is committed to protecting your privacy. Any personal information which you provide will be treated with the highest standards of security and confidentiality, in accordance with the Data Protection Acts 1988 - 2018.

THANK YOU FOR YOUR CO-OPERATION AND INPUT



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APPENDIX 2

**Site Planning History / Other
Significant Development in
the Area**

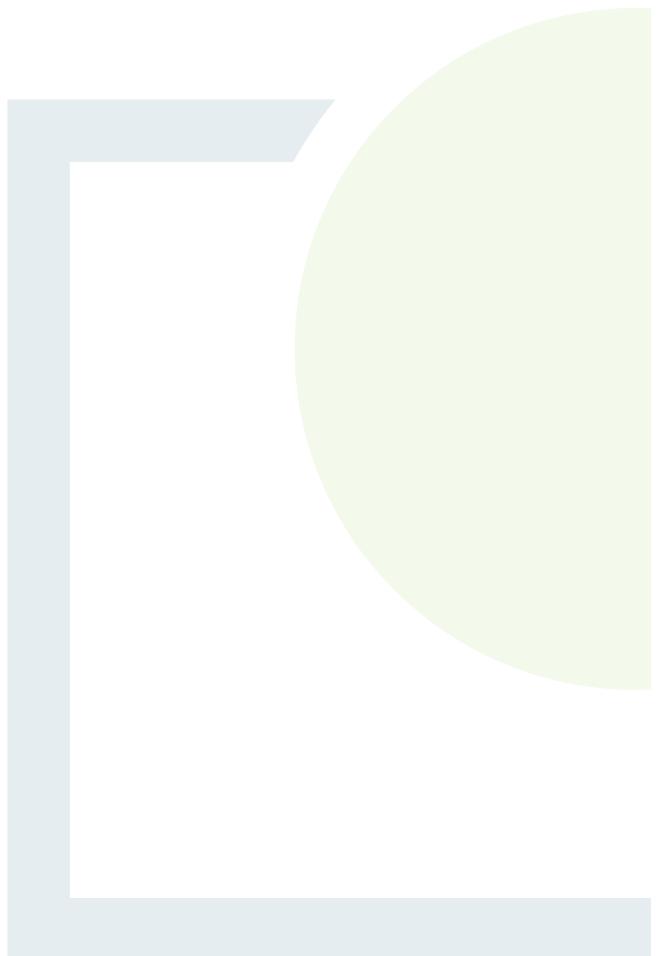


Table 1: Site Planning History / Other Significant Development in the Area

Planning File Reference	Applicant	Address	Development Description (as listed on MCC's Planning Portal)	Decision	Decision Date	Relevance
22475	Blayney Rovers FC C/O Pauline Hughes	Drumillard Castleblayney, Monaghan Little, Co.	Permission for the importation of soil, stone, concrete, and inert waste along with construction and demolition material to raise existing ground levels and all ancillary site development works (in connection with a waste permit application).	Granted (Conditional)	20/12/2022	This Grant of Permission relates to a waste activity occurring centrally in the town of Castleblayney.
228006	Monaghan County Council	Market House/ Court House, Onomy & Drumillard Little, Castleblayney	Development consisting of the change of use, refurbishment and restoration of the former Castleblayney Market House/Court House (a protected structure) into a public facility providing cultural, retail, hospitality, offices use and associated ancillary spaces. Works will include new floors, internal walls, stairs and lift within the existing building, a new roof top events space and open air viewing deck, the provision of solar PV panels at roof level along the southern elevation and the restoration of the bell tower, alterations and improvements to the public realm of Upper and Lower Market Square environs to include the realignment of vehicular carriageways, alterations to traffic and parking layouts, pedestrian crossing facilities, expansion of the plaza surrounding the Big Tom statue, upgrading and widening of footpaths, landscaping works, public lighting works and new street furniture, and all associated site works.	Granted (Conditional)	01/11/2022	Market House is a key feature associated with the Concept Proposals.

Planning File Reference	Applicant	Address	Development Description (as listed on MCC's Planning Portal)	Decision	Decision Date	Relevance
			In accordance with Article 81(2) (ca) and 120 (1B) (b) (i) of the above-mentioned regulations, Monaghan County Council, as the competent authority, has concluded from a Screening Determination, which is based on an examination of the nature, size and location of the proposed development, that there is no real likelihood of significant effects on the environment arising from the proposed development, and as such has determined that an Environmental Impact Assessment is not required.			
229015	Killycard Developments Ltd	Bree, Castleblayney, Co Monaghan	To construct 53 2-storey residential units that includes 5no detached 3 bedroomed houses, 32no semi-detached 3 bedroomed houses, 10no semi-detached 2 bedroomed houses, 4no 2 bedroomed terraced houses and 2no 3 bedroomed terraced houses and all ancillary site development works.	Granted (Conditional)	19/8/2022	This Grant of Permission relates to a significant residential development in the town.
21171	CMcB Builders Ltd	Annahale, Castleblayney, Co. Monaghan	To consist of a development consisting of 7 no. serviced sites with all associated site development works including entrances, footpaths and boundary treatments. Significant further information relates to a revised site location and layout plans	Granted (Conditional)	20/9/2021	This Grant of Permission relates to a noteworthy residential development in the town.
2083	Flamewood Ltd. T/A McCaughey Foods	Monaghan Road, Moraghy, Castleblayney	The infilling of lands with works proposed consisting of the importation of soil, stone, concrete and inert waste along with construction and demolition material to raise existing ground levels and all ancillary	Granted (Conditional)	10/5/2021	This Grant of Permission relates to a waste activity occurring centrally

Planning File Reference	Applicant	Address	Development Description (as listed on MCC's Planning Portal)	Decision	Decision Date	Relevance
			site development works (in connection with a waste permit application). Significant further information relates to report on settlement pond decommissioning management plan.			in the town of Castleblayney.
20126	Pierce Hughes	Lakeview Business Park, Drumillard Big Td. & Drumillard Little Td., Castleblayney	Works consisting of the importation of soil, stone, concrete and inert waste along with construction and demolition material to raise existing ground levels, and all ancillary site development works (in connection with a waste permit application). Significant Further information relates to the submission of a Flood Risk Assessment	Granted (Conditional)	27/1/2021	This Grant of Permission relates to a waste activity occurring centrally in the town of Castleblayney.
19322	Berwat Construction Ltd.	Shercock Killycard, Castleblayney Road,	To retain the site works which have commenced and permission for a residential development of 52 no. houses on a site of 3.5ha at Shercock Road, Killycard, Castleblayney, Co. Monaghan. The site subject to this application forms part of a residential development known as Castle Park which was previously granted planning permission under Reg Reference numbers: 08/225 and ref 19/155. The development also consists of associated siteworks and landscaping. Significant further information relates to the submission of an acoustic report and road safety audit.	Granted (Conditional)	19/3/2020	This Grant of Permission relates to a significant residential development in the town.

Planning File Reference	Applicant	Address	Development Description (as listed on MCC's Planning Portal)	Decision	Decision Date	Relevance
18368	JC Developments (NI) Ltd	Onomy and Annahale Townlands, Castleblayney, Co. Monaghan	<p>Permission for (a) site works to facilitate the proposed development to include excavation and general site preparation works, (b) Use of existing entrance serving Church Heath along with provision of internal access roads and footpath to facilitate vehicular and pedestrian access, (c) Provision of a residential development over 3no. phases comprising 43no. dwellings in total (d) provision of associated garden areas and in-curtilage works for each dwelling to include boundary fencing and boundary walls as required. (e) Provision of residential communal open space areas to include all hard and soft landscaping works within the site which includes public lighting, public seating, planting and boundary treatments. (f) Associated site works and attenuation systems as well as all ancillary site works development/construction works to facilitate site drainage and foul networks for connection to the existing foul, storm and public water networks. Significant further Information relates to a reduction of numbers from 43 No. to 35 No., the open space has been amended to provide for a formal play area, a Traffic and transport assessment has been carried out with a road safety audit.</p>	Granted (Conditional)	24/1/2019	This Grant of Permission relates to a significant residential development in the town.

Planning File Reference	Applicant	Address	Development Description (as listed on MCC's Planning Portal)	Decision	Decision Date	Relevance
			Revisions to the internal site layout to ensure all road layout to ensure all road layouts comply with the relevant design standards. Additional design details in respect of storm water attenuation. A site-specific flood risk assessment has been submitted.			
18475	Michael Agnew	Toome, Castleblayney, Co Monaghan	Permission for an agricultural shed with underground effluent storage tank and all associated site development work	Granted (Conditional)	30/11/2018	Agricultural development in close proximity to Lough Muckno.
18223	John & Martin O'Brien	Railway Connabury, Castleblayney Road,	To construct 26 no. 2/3 bed detached, semi-detached and terraced dwellings at 2 storey and new vehicular entrance off Railway Road inclusive of all associated site development works including alterations to ground levels, internal road(s), car parking, footpaths, open space, public lighting, landscaping and boundary treatments. Significant further information relates to the submission of an updated concept statement, the revision of site layout, public open space and house types.	Granted (Conditional)	5/11/2018	This Grant of Permission relates to a significant residential development in the town.
188006	Monaghan County Council	Annadrumman & Toome, Castleblayney, Co. Monaghan	To raise the existing road level of local roads LP3720-0 & LP4410-0, over a length of 1 kilometre, to mitigate the flooding issues in the area.	Granted (Conditional)	3/9/2018	These are roads adjacent to Lough Muckno and which connect to Congra.

Planning File Reference	Applicant	Address	Development Description (as listed on MCC's Planning Portal)	Decision	Decision Date	Relevance
188005	Monaghan County Council	Hope Castle Gate Lodge No 2, Market Square, Castleblayney	Renovate and restore Gate Lodge No 2 (a protected structure) for use as a Branch Library and community space to include the following works: 1. Removal of non-original two storey lean-to at rear of building, 2. Construct extension, part single storey and part two storey, with further part basement below to the side and rear of the original building, 3. External works including lighting and signage; and new works linking library to existing car park to the rear with ramps, steps, hard and soft landscaping and all associated site works.	Granted (Conditional)	2/7/2018	Hope Castle Gate Lodge is a key feature associated with the Concept Proposals.
17349	Cornonagh Management Ltd	Bree Road & Rosevale, Bree TD, Castleblayney	The construction of 26 no. two storey dwellings incorporating: (1) 2 no. 4 bed semi-detached (Type A) and 6 no. 3 bed semi-detached (Type B) with individual entrances onto Bree road; (2) 2 no. 4 bed semi-detached (Type A), 10 no. 3 bed semi-detached (Type B) and 6 no. 3 bed terraced (Type C), construct a new entrance and service road onto Rosevale; (3) Ancillary works including boundary fencing, tarmacadam paving areas for car parking/circulation, footpaths and street lighting, connections to existing public foul and storm drainage and all associated site works.	Granted (Conditional)	13/3/2018	This Grant of Permission relates to a significant residential development in the town.

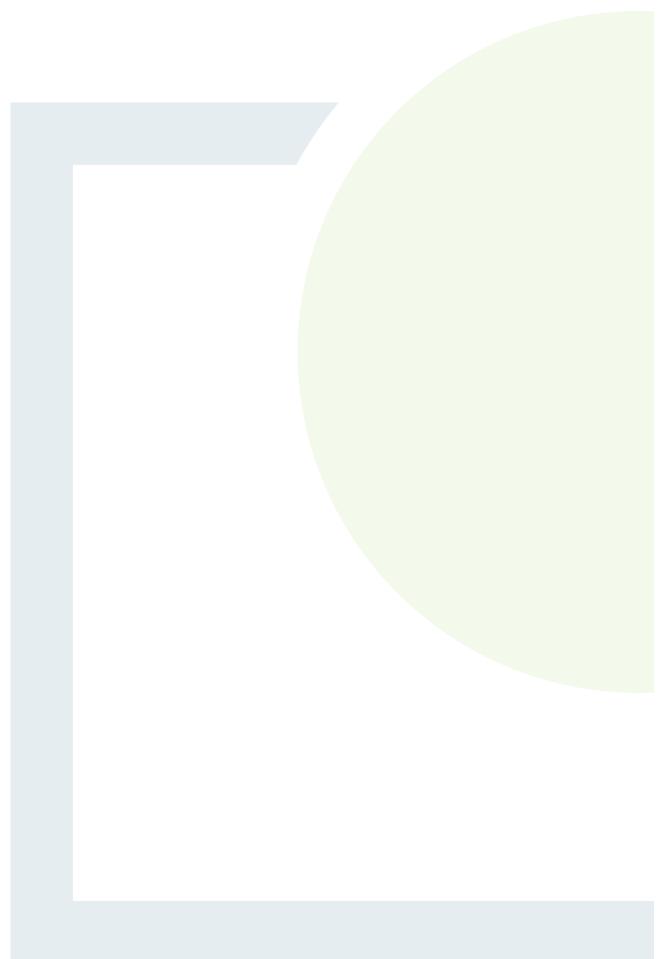
Planning File Reference	Applicant	Address	Development Description (as listed on MCC's Planning Portal)	Decision	Decision Date	Relevance
178013	Monaghan County Council	Drumillard Little, Castleblayney, Monaghan Co.	To construct a fire station (including a training tower) and ancillary accommodation and site works. The site works include a new entrance from the R183, all service connections and boundary treatments	Granted (Conditional)	5/3/2018	This Grant of permission relates to a noteworthy development in the town.
17509	Muckno Adventure Limited	Onomy/Muckno, Castleblayney, Monaghan Co	Installation of an inflatable water park on Lough Muckno adjacent to the existing Castleblayney Ski & Wakeboard Club facility, with a maximum height of 5.1m. The dimensions of the inflatable structure will cover an area of 17m x 20m and will be surrounded by safety buoys.	Granted (Conditional)	26/1/2018	This Grant of permission relates to a noteworthy recreational feature associated with Lough Muckno.



CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING

APPENDIX 3

Lough Muckno Preliminary
Ecological Appraisal Report,
Flynn Furney Environmental
Consultants (December 2022)





Lough Muckno

Preliminary Ecological Appraisal Report

By: Flynn Furney Environmental Consultants

For: Monaghan County Council

Date of Issue: 09/12/2022

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Statement of Authority

This Preliminary Ecological Appraisal has been carried out by suitable qualified and experienced professionals of Flynn Furney Environmental Consultants. These were: Erin McCrudden BSc, Louise McElwain BSc, MSc and Billy Flynn, BSc, MSc, MCIEEM, CEnv.

1 Introduction

1.1 Background

Monaghan County Council has commissioned Flynn Furney to provide the baseline ecological conditions and the constraints of the proposed development in Lough Muckno, Castleblayney, Co. Monaghan. This Preliminary Ecological Appraisal Report (PEAR) was prepared for the proposed site of development in Lough Muckno, Castleyblayney as part of Monaghan Tourism's work to develop a potential tourism and recreation proposal for the Muckno Estate in County Monaghan.

The site was surveyed by Ecologists of Flynn Furney Environmental Consultants in September and October 2022. Surveys were carried out investigate whether any Annex I habitats (EU Habitats Directive), Annex II species (EU Habitats Directive), Annex I Bird Species (EU Birds Directive) or 'stepping stones/Ecological Corridors' (as covered under Annex 10 of the EU Habitats Directive) or locally important habitats are likely to be impacted upon by the proposed development.

1.2 Purpose and Scope of the Report

This report and contributing work has been carried out according to guidelines given by CIEEM (2017). This preliminary ecological appraisal provides a summary of the ecological surveys undertaken in September and October of 2022 by qualified ecologists from Flynn Furney Environmental Consultants. The key objectives of this Preliminary Ecological Appraisal are to:

1. Identify the likely ecological constraints associated with a project;
2. Identify any mitigation measures likely to be required, following the Mitigation Hierarchy (avoidance, minimisation, restoration and offsets);
3. Identify any additional surveys that may be required to inform an Ecological Impact Assessment (EcIA); and
4. Identify the opportunities offered by a project to deliver ecological enhancement.

The PEA carried out for this project shall mainly focus on points 1, 2 and 4, as they are the most relevant to the project goals and the client may pursue further ecological/environmental assessments closer to development, though additional surveys (point 3) will be recommended if deemed necessary.

Under normal circumstances it is not appropriate to submit a PEAR in support of a planning application because the scope of a PEAR is unlikely to fully meet planning authority requirements in respect of biodiversity policy and implications for protected species.

1.3 Site Context and Description

This is the largest of County Monaghan's lakes and it is located to the south and east of Castleblaney town, close to the town's centre. It is located in the mid Monaghan town of Castleblayney just off the N2 (the main Dublin/Derry Road). There are two wooded islands within the site, these are Black and White Island. The site itself is part of a former estate, and remains of the original structures such as Hope Castle can be found on the western region of the site. The majority of the land to be developed is under tree cover, both mixed deciduous woodland and conifer plantations. See Figure 2.2. Lough Muckno is a proposed Natural Heritage Area (pNHA, site code 0563), one of 40 no. sites of this

designation status in the county. The lake is Co. Monaghan's largest at over 350ha in area with depths of up to 20m reported. Lough Muckno is listed among sites for which a Conservation Plan is to be developed in the Co. Monaghan Biodiversity and Heritage Strategic Plan (2020-2025).

The previous Co. Monaghan Local Biodiversity Action Plan (Aulio Wann, 2007) described the site as one of the five 'major' lakes of the county. It was described as a 'Limestone lake important for water flea and breeding birds. Wintering ground for wild fowl, [with] few marginal fens.' However, the Monaghan Fen Survey (Foss & Crushell, 2007) did not report any fen habitats around this lake. The Monaghan Wetlands Survey (Barron, 2006) highlights the value of the habitat corridor formed by the River Fane on leaving the lake but does not describe any habitat areas within the proposed works areas.

The county development plan for Monaghan (2019-2025) lists Lough Muckno as an Area of Primary Amenity (PA2) and a Key Amenity Lake Area as the park provides facilities for fishing, walking trails, water sports and picnic areas. The plan also lists the development of angling tourism here as an action (TMP4) and for the development of recreation-based tourism in and around Lough Muckno (Pg.50). The plan also describes the lough as an invaluable natural resource that should be afforded the highest degree of protection.

The NPWS describes this area as 'important for waterfowl with Mute swans, Mallard and Teal all seen in previous surveys. A moderate number (500) of wintering waterfowl have been recorded on the site (AFF). A previous bird count showed the following birds to be present, Great Crested Grebe, Little Grebe, Cormorant, Mallard, Teal, Shoveler, Tufted Duck, Pollard, Goldeneye, Mute Swan, Coot and Lapwing. Unfortunately, it seems likely however that the number of birds has declined dramatically over the years due to the development of the lake for recreation' (NPWS, 2009).

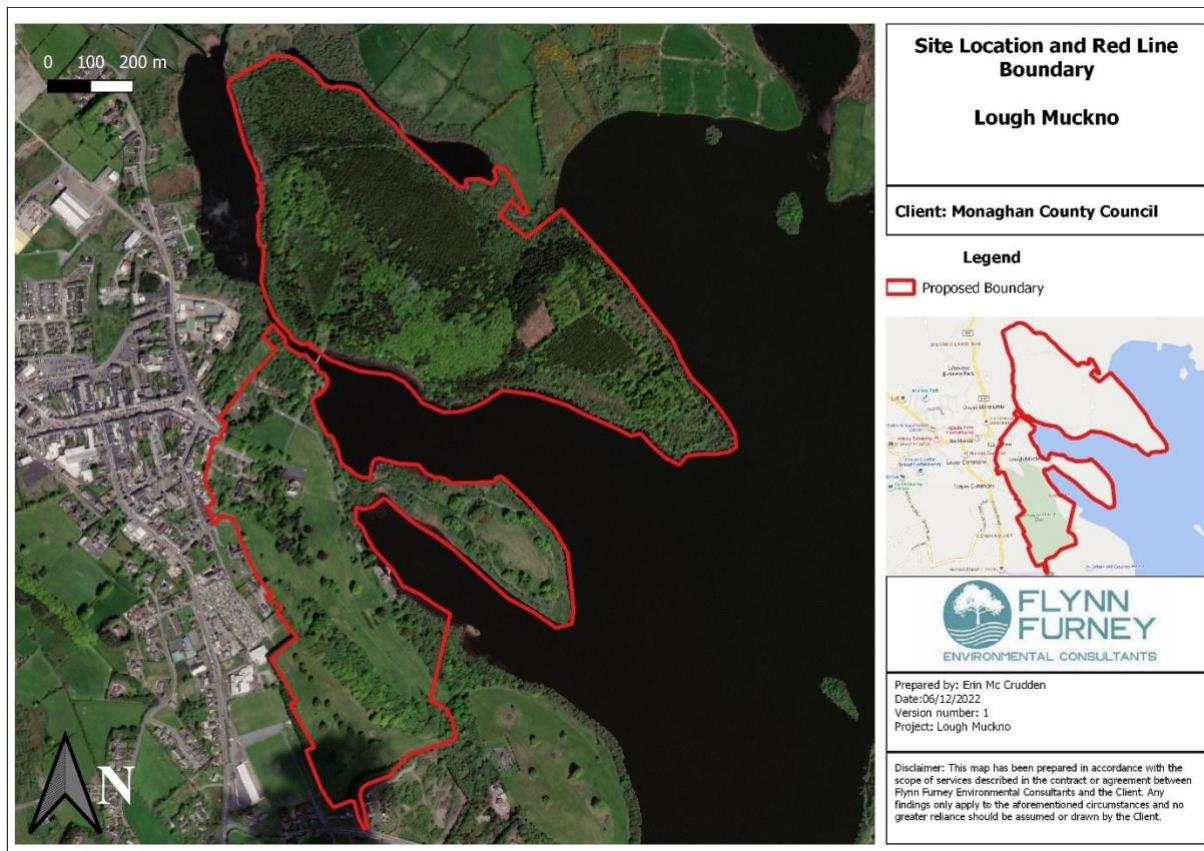


Figure 1.1: Site Location and Red Line Boundary

1.4 Proposed Works

The proposed works are not confirmed at the time of writing this report.

2 Methodology

2.1 Desk Based Studies

A desk-based review of information was completed, which included the following sources of information:

- The National Parks and Wildlife Service (NPWS) website was consulted to obtain the most up to date detail on conservation objectives for the Natura 2000 sites relevant to this assessment (National Parks and Wildlife Service, 2019);
- The National Biodiversity Data Centre (NBDC) website was consulted with regard to species distributions (National Biodiversity Data Centre, 2019);
- The EPA Envision website was consulted to obtain details about watercourses in the vicinity of the Site (<http://gis.epa.ie/Envision/>) (EPA, 2019); and,
- The EPA Catchments website was also consulted to obtain details about watercourses in the vicinity of the Site (<https://www.catchments.ie/maps/>) (EPA, 2019).

2.2 Field Based Assessment

A site walkover survey was undertaken by qualified ecologists in September and October to gain a better understanding of the environment and to identify any sensitive environmental factors. Survey methodology was carried out in line with the Handbook for Phase 1 Habitat Surveys (JNCC, 2010) and the habitats present onsite were identified and classified utilising Fossitt's Guide (Fossitt, 2000). The survey was extended to identify the presence of notable/protected species and invasive alien species within the study area.

3 Results

3.1 Desk Study Results

A biodiversity desk study was undertaken in relation to the site, collating existing data for the site itself and the surrounding area within a 15 km radius. The sources consulted and the type of information obtained are summarised in Table 1.

3.1.1 Statutory Protected Sites

European Designated Sites

There were no found statutory protected Sites within 15 km of the site. However, four European protected sites were identified to be hydrologically connected to the site, these were:

- Dundalk Bay SAC (004026)
- Dundalk Bay SPA (000455)
- Carlingford Shore SAC (002306)
- Carlingford Lough SPA (004078)

Under European legislation (Habitats and Birds Directives) both Special Areas of Conservation (SACs) and Special Protected Areas (SPAs) are legally protected from damage. See Figure 2.1 below showing European designated sites connected to the proposed site.

This was identified due to the hydrological connection through the River Fane which flows from the southern end of Lough Muckno downstream into Dundalk Bay. Impacts to the designated sites are

quite unlikely due to the great distance. The main ecological risk to the designated sites is a reduction in water quality as a result of the construction or operation of the various developments, which could have negative indirect ecological consequences on the qualifying interests of the designated sites. Appropriate water quality protection measures will be required in order to avoid/ minimize impacts on water quality (See mitigation measures below).

Other Designated Sites

Under the Wildlife Amendment Act (2000), Natural Heritage Areas (NHAs) in Ireland are legally protected from damage from the date they are formally proposed for designation. No NHAs were found within 15km of the site, however, twelve pNHAs were identified within 15km of the site. The proposed NHAs (pNHAs) have not been statutorily proposed or designated under the Wildlife Act (as amended). However, they are afforded some protection under planning legislation and objectives are included in the current County Monaghan Development Plan specifically aimed at protecting pNHAs or providing complimentary protective measures that enhance the network of pNHAs.

The pNHA of Lough Muckno (site code: 0563) (NPWS, 2009) is within the boundaries of the proposed site of development which includes the lake itself and parts of the surrounding wetland areas. It is noted that there has been a decline in bird population around the site due to the development for recreation. Further 6km downstream from the proposed site there is another pNHA called Lough Ross (NPWS,2009). These pNHAs would be provided protection from the Monaghan Development Plan 2019-2025. See Figure 2.2 below showing pNHAs in the vicinity of the site.

Table 1: Protected sites within 15km or hydrologically connected to the works.

Site Code	Site Name	Distance (km)
000563	Proposed Natural Heritage Areas: Muckno Lake	0
001607	Proposed Natural Heritage Areas: Lough Smiley	1.3
001600	Proposed Natural Heritage Areas: Drumakill Lough	2.3
001495	Proposed Natural Heritage Areas: Lough Ross	5.2
001605	Proposed Natural Heritage Areas: Lough Egish	6.2
001666	Proposed Natural Heritage Areas: Tassan Lough	6.6
001268	Proposed Natural Heritage Areas: Cordoo Lough	10.3
001599	Proposed Natural Heritage Areas: Creevy Lough	11.6
001595	Proposed Natural Heritage Areas: Loughbawn House Loughs	13.1
000001	Proposed Natural Heritage Areas: Dromore Lakes	13.5
002077	Proposed Natural Heritage Areas: Naferty Fen	14.1
001671	Proposed Natural Heritage Areas: Spring And Corcrin Loughs	14.6

000455	Special Area of Conservation: Dundalk Bay SAC	29.1 (straight-line distance) 38.5 (hydrological distance)
004026	Special Protection Areas: Dundalk Bay SPA	29.1 (straight-line distance) 38.5 (hydrological distance)
002306	Special Area of Conservation: Carlingford Shore SAC	39 (straight-line distance) 53 (hydrological distance)
004078	Special Area of Conservation: Carlingford Lough SPA	42 (straight-line distance) 56 (hydrological distance)

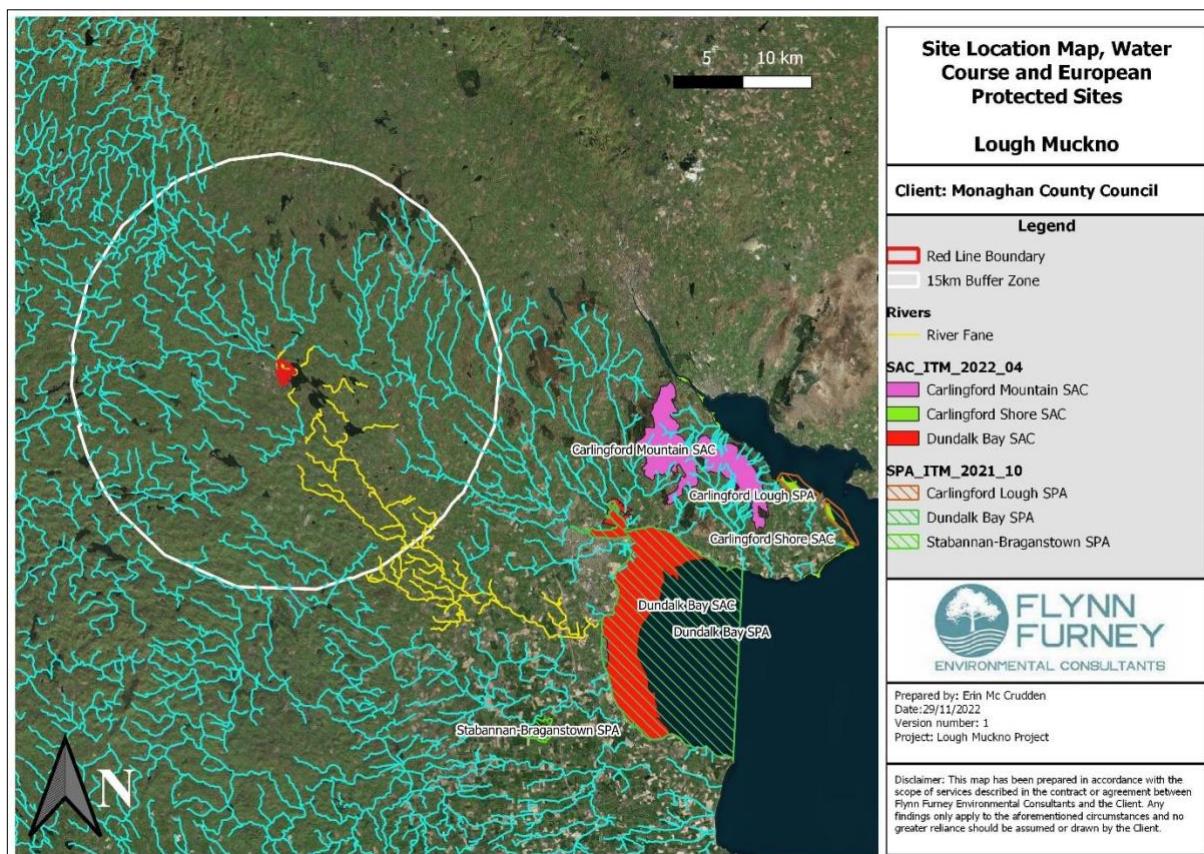


Figure 2.1: No European Designated Sites within 15 km of the site. However, the River Fane (in yellow) hydrologically connects the site to four SACs/SPAs.

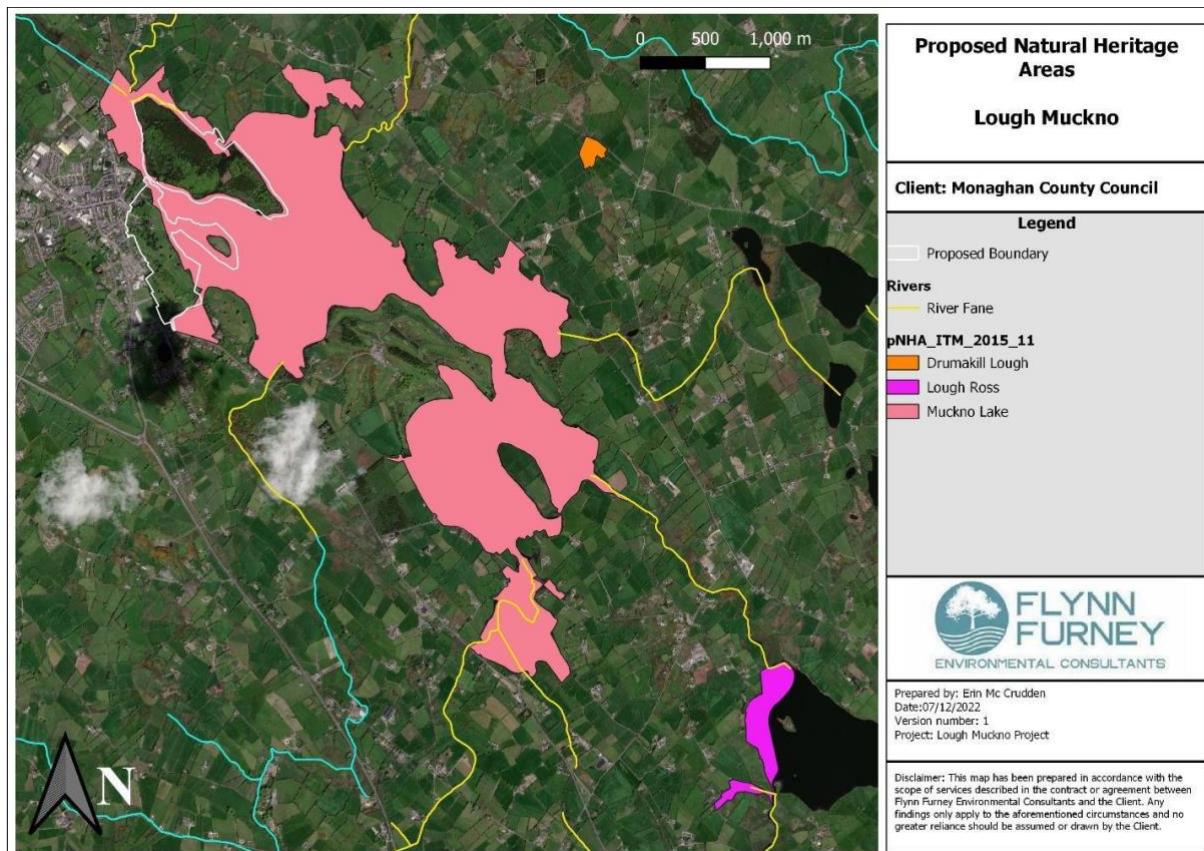


Figure 2.2: Hydrological connection through the River Fane to pNHAs.

The construction phase of the scheme has the potential to impact on the water quality of the study area watercourses through:

- Release or run-off of suspended solids from site preparation or development of construction.
- Accidental release of cement or contaminated materials from the site to the study area watercourses.
- Unintentional discharge of oil/diesel from the site to the study area watercourses.

Water quality protection measures will be required in order to avoid/ minimize impacts on water quality downstream.

- Appropriate measures shall be required to prevent pollution incidents and silt mobilisation.
- The removal and disposal of any river/estuarine sediment should follow the guidelines for handling waste under the Waste Management Acts as amended. A strict chain of custody must accompany all excavated materials taken off site for disposal.

3.1.2 Watercourses in the Vicinity of the Site

The Fane River (Code: UKGBNI1NB060608229) flows from Lough Muckno into Crossmaglen in Armagh and continues downstream to discharge into Dundalk Bay SAC and SPA. Adjacent to Dundalk Bay is also Carlingford Lough SPA and Carlingford Shore SAC. The River Fane has a 'poor' Q-value status as it leaves Lough Muckno and improves to a 'high' status further downstream. As this river interacts with multiple protected areas it is afforded similar protection. The four European designated sites mentioned above contain habitats and species that are water dependant.

Lough Muckno is a designated nutrient sensitive area under the Urban Wastewater Treatment Directive and is at risk of failing to meet the Water Framework Directive (WFD) objectives by 2027 (EPA Maps, 2022). The proposed site is located within the Newry, Fane, Glyde and Dee catchment (Catchment_ID: 06) and the Fane sub catchment (Sub_Catchment_ID: FANE_SC_010) (EPA Maps, 2022).

3.2 Field Survey

3.2.1 Habitats

The site is surrounded largely by agricultural grassland and urban areas. The site is adjacent to Castleblayney which contains a high proportion of built structures for residential and commercial use. The surrounding agricultural grasslands are used for pasture, particularly for cattle.

The main habitats identified within the site were deciduous woodland, conifer woodland and scattered trees and parklands. Additional examples of habitats encountered include riparian woodland, reed and large sedge swamps, wet grasslands, etc. Further habitats are discussed in detail below in Tables 1,2 & 3.

These surveys considered a broad survey area to ensure all other important features that could be impacted by the development due to connectivity to the proposed development site were considered. These included significant treelines and hedgerows, mammal paths, streams and other watercourses feeding and surrounding the application site. The areas surveyed are split into three regions:

1. Black Island
2. White Island
3. Hope Castle Grounds and former Golf Club Area.

Figure 3.1 and 3.2 below displays the habitat maps of Lough Muckno.

○ Black Island

Table 2: Black Island Habitats

Habitat Type	Description	Fossitt Code
Conifer Plantation	<p>This category is used for areas that support dense stands of planted conifers where the broadleaved component is less than 25% and the overriding interest is commercial timber production. Conifer plantations are characterised by even-aged stands of trees that are usually planted in regular rows, frequently within angular blocks. Species diversity is low and single species stands are common. The majority of planted conifers are non-native species such as Sitka Spruce (<i>Picea sitchensis</i>), Lodgepole Pine (<i>Pinus contorta</i>), Norway Spruce (<i>Picea abies</i>) and Larches (<i>Larix spp.</i>) Conifer plantations may be fringed with narrow bands of broadleaved trees, most of which are also planted. Any distinct blocks of broadleaved trees should be recorded separately in the appropriate woodland category.</p> <p>Some sections of conifer woodland contained a peaty soil and thus</p>	WD4

	<p>vegetation associated with bog woodland was abundant. Birch (<i>Betula spp.</i>) species have started to colonise the canopy and shrub layer. Dwarf shrubs such as Ling Heather (<i>Calluna vulgaris</i>) or Bilberry (<i>Vaccinium myrtillus</i>) may occur in the field layer, usually in association with Bracken (<i>Pteridium aquilinum</i>), Bramble (<i>Rubus fruticosus agg.</i>), Ivy (<i>Hedera helix</i>) and Purple Moor-grass (<i>Molinia caerulea</i>). Ground flora is characterised by extensive cover of mosses (<i>Sphagnum</i> and <i>Polytrichum spp.</i>), sedges and rushes: Star Sedge (<i>Carex echinata</i>), Soft Rush (<i>Juncus effusus</i>) and ferns (<i>Dryopteris dilatatae</i>), (<i>Blechnum spicant</i>).</p>	
(Mixed) Broadleaved Woodland	<p>This general category includes woodland areas with 75-100% cover of broadleaved trees, and 0-25% cover of conifers. In the broadleaved woodland habitat this category is used for Beech dominated woodlands which were found inside Coillte lands. This is a high forest community (above 20m) which is dominated by rows of planted (<i>Fagus sylvatica</i>). The only field layer constants are Ivy (<i>Hedera helix</i>) and Bramble (<i>Rubus fruticosus agg.</i>), although Violets (<i>Viola riviniana/reichenbachiana</i>) and Soft-Shield ferns (<i>Polystichum setiferum</i>) were occasional. Amongst the deep and extensive Beech litter, other herbs are scant, with Dog's Mercury (<i>Mercurialis perennis</i>), Wood Avens (<i>Geum urbanum</i>), Primrose (<i>Primula vulgaris</i>), Woodrush (<i>Luzula sylvatica</i>) and Lords and Ladies (<i>Arum maculatum</i>) occasionally found.</p> <p>In the mixed broadleaved woodland areas, the canopy layer contained an abundance of Oak (<i>Quercus spp.</i>) with frequent Birch (<i>Betula spp.</i>), Sycamore (<i>Acer pseudoplatanus</i>) and Beech (<i>Fagus sylvatica</i>). There is also a Hazel (<i>Corylus avellana</i>) understory.</p> <p>Spring visitors to these stands may, however, encounter lush displays of Bluebells (<i>Hyacinthoides nonscripta</i>). The bryophyte layer is typically rather weak, although it was not studied in detail as part of this survey it usually comprises (<i>Kindbergia praelonga</i>), (<i>Eurhynchium striatum</i>), (<i>Thamnobryum alopecurum</i>) and (<i>Thuidium tamariscinum</i>) in these woodland types. Fungi such as Porcelain Fungus (<i>Oudemansiella mucida</i>), Fly Agaric (<i>Amanita muscaria</i>) and Common Puffball (<i>Lycoperdon perlatum</i>) were also identified.</p>	WD1
Riparian Woodland	<p>The riparian margins of woodland have a lower canopy height. This category includes wet woodlands of river margins (gallery woodland) and low islands that are subject to frequent flooding, or where water levels fluctuate as a result of tidal movement (in the lower reaches of rivers and lakes). Canopy cover included a mix of Willow (<i>Salix spp.</i>), Rowan (<i>Sorbus aucuparia</i>), Birch (<i>Betula spp.</i>) and Pines (<i>Pinus spp.</i>) Meadowweet (<i>Filipendula ulmaria</i>), Reed Canary Grass (<i>Phalaris arundinacea</i>), Water Mint (<i>Mentha Aquatica</i>) were abundant. Purple Lostriffe (<i>Lythrum salicaria</i>), Flag Iris (<i>Iris pseudacorus</i>), Angelica (<i>Angelica sylvestris</i>), Marsh Ragwort (<i>Senecio aquaticus</i>) and Nettle (<i>Urtica dioica</i>) were frequent. This is a high-quality habitat with a species-rich ground flora but does not correspond to the Annex 1 alluvial woodland types.</p>	WN5
Reed Swamp	<p>Reedbeds are very important habitats for birds. They are breeding sites for many nationally rare species and used as winter roost sites for several birds</p>	FS1

	<p>of prey. They also support a number of rare invertebrates. Reed swamps can often be found around the edges of the lake. This category is used for species-poor stands of herbaceous vegetation that are dominated by Common Reed (<i>Phragmites australis</i>).</p>	
Marsh/Wet Grassland	<p>Marsh is found on level ground near riverbanks, lakeshores, and in other places where mineral or shallow peaty soils are waterlogged, and where the water table is close to ground level for most of the year. Unlike swamps, standing water is not a characteristic feature except, perhaps, during very wet periods or in winter months. Marsh is comparatively species-rich and supports a high proportion of wetland species. Wet grasslands occur on wet or waterlogged mineral or organic soils that are poorly drained or, in some cases, subjected to seasonal or periodic flooding. This habitat on site often lies somewhere between, or grading between, the two.</p> <p>Robust broadleaved herbs dominate, and common components found here include Lesser Water Parsnip (<i>Berula erecta</i>), Gipsywort (<i>Lycopus europaeus</i>), Hemp-agrimony (<i>Eupatorium cannabinum</i>), Greater Burnet Saxifrage (<i>Pimpinella saxifraga var. major</i>), Purple Loosestrife (<i>Lythrum salicaria</i>), Meadowsweet (<i>Filipendula ulmaria</i>), Water Figwort (<i>Scrophularia auriculata</i>) and Nettle (<i>Urtica dioica</i>). Other occasional species include Water Forget-Me-Not (<i>Myosotis scorpioides</i>), Yellow Iris (<i>Iris pseudacorus</i>), Marsh Woundwort (<i>Stachys palustris</i>), Water Mint (<i>Mentha aquatica</i>) and Common Marsh-bedstraw (<i>Galium palustre</i>).</p>	GM1/GS4
Immature woodland	Immature woodland includes areas that are dominated by young or sapling trees that have not yet reached the threshold heights (5 m, or 4 m in the case of wetland areas). Trees in this area included Birch (<i>Betula spp.</i>), Oak (<i>Quercus spp.</i>), Beech (<i>Fagus sylvatica</i>) and Hazel (<i>Corylus avellana</i>).	WS2
Recently-felled Woodland	This category should be used for areas of plantation or other woodland that have been clear-felled but have not been replanted or converted to another land use. Common colonisers of open ground among the tree stumps and brash (discarded woody material) included Rosebay Willowherb (<i>Epilobium angustifolium</i>) and ferns.	WS5
Scrub	This habitat type includes areas that are dominated by at least 50% cover of shrubs, stunted trees or brambles. The canopy height is generally less than 5 m in such areas. Scrub can occur in areas where management has been neglected or is irregular. Climbing plants such as Bramble (<i>Rubus fruticosus agg.</i>) and Dog Rose (<i>Rosa canina</i>) were dominant in these areas. The herb layer contained coarse grasses (<i>Poaceae spp.</i>) and plants such as Nettles (<i>Urticaceae spp.</i>), Red Campion (<i>Silene dioica</i>) and Willow Herb (<i>Epilobium spp.</i>).	WS1

○ White Island

Table 3: White Island Habitats

Habitat Type	Description	Fossitt Code
Reed Swamp	See above, as per Black Island.	FS1
Wet Grassland	Areas fringing the lake are classified as a mix of these habitat types. Common grasses include Bents (<i>Agrostis spp.</i>), Meadow-grasses (<i>Poa spp.</i>), Meadow Foxtail (<i>Alopecurus pratensis</i>) and Cocks-foot (<i>Dactylis glomeratus</i>) and False-Oat grass (<i>Arrhenatherum elatius</i>). Forbs included Plantain (<i>Plantago Major</i>) & (<i>Plantago lanceolata</i>), Stitchwort (<i>Stellaria holostea</i>), Birds-foot trefoil (<i>Lotus corniculatus</i>), Greater Willowherb (<i>Epilobium hirsutum</i>) and an abundance of Buttercup (<i>Ranunculus spp.</i>)	GS4
Riparian Woodland	These lower stretches of the island are permanently wet or subject to frequent flooding and are dominated by Willow (<i>Salix spp.</i>) With frequent occurrence of Alder (<i>Alnus glutinosa</i>). The field layer is characterised by broadleaved herbs such as Nettle (<i>Urtica dioica</i>), Creeping Buttercup (<i>Ranunculus repens</i>), Meadowsweet (<i>Filipendula ulmaria</i>) and Wild Angelica (<i>Angelica sylvestris</i>).	WN5
Tall Herb Swamp	Tall-herb swamps are comparatively species-rich stands of herbaceous vegetation that occur in wet areas where the water table is above the ground surface for most of the year. Tall or robust broadleaved herbs dominate. This habitat type on White Island was low-to-moderate quality due to the dominance of nettles and does not correspond to the Annex 1 type hydrophilous tall herb. Nettles were dominant, indicating a nutrient-rich area. Greater Willowherb (<i>Epilobium hirsutum</i>) was frequent, and Meadowsweet was occasional (<i>Filipendula ulmaria</i>).	FS2
(Mixed) Broadleaved Woodland	Areas of mixed broadleaf woodland contained trees ranging from mature to immature. Species mixes were variable containing Beech (<i>Fagus sylvatica</i>), Sycamore (<i>Acer pseudoplatanus</i>), Alder (<i>Alnus glutinosa</i>) and some specimen Oaks (<i>Quercus spp.</i>).	WD1
Scattered Trees and Parkland	The area mapped as scattered trees was dominated mostly by amenity type grassland and mature Oak trees. Mature trees in this area were of high bat roosting potential. Patches of deadwood are providing an invaluable habitat for biodiversity and must be preserved.	WD5

○ Hope Castle Grounds and Golf Club Area

Table 4: Hope Castle Grounds and Golf Club Area Habitats

Habitat Type	Description	Fossitt Code
Riparian Woodland	<p>This section of woodland is subject to frequent inundations of water during periods of high rain, while the lower stretches remain wet year-round. Willow (<i>Salix spp.</i>) is the abundant canopy species, but Alder is also present. Bramble and Hazel are abundant in the shrub layer. Nettle was abundant along with frequent Flag Iris (<i>Iris pseudacorus</i>), Angelica (<i>Angelica sylvestris</i>), Marsh ragwort (<i>Senecio aquaticus</i>) and Ferns such as Male Fern (<i>Dryopteris filix-mas</i>).</p>	WN7
(Mixed) Broadleaved Woodland	<p>Nearer the lake (transitioning into wet woodland) this habitat type contained Oak, Sycamore and Birch in the canopy layer, with a Willow and Hazel understorey. Rhododendron (<i>Rhododendron ponticum</i>) was occasional here. In terms of ground cover, Ivy and Nettle were abundant along with common woodland, forbs such as Opposite-leaved Golden Saxifrage (<i>Chrysosplenium oppositifolium</i>), Wood Sorrel (<i>Oxalis acetosella</i>) and ferns.</p> <p>The largest section of broadleaf woodland is near the old golf club. The main tree species in the canopy here were Sycamore and Beech, but Birch, Hazel and Willow species were also present. Rhododendron is noted to be occasional to frequent here, especially at the woodland edge with impacts to biodiversity. This is a valuable habitat area located on the side of a drumlin and includes many mature trees. Some of these are very large, including Beech up to 20m in height with a crown spread of around 15m. Toward the south of the woodland, the canopy appears dominated by semi-mature and mature Birch and there is quite a bit of bramble scrub under such canopy.</p> <p>Here Rhododendron is also locally abundant, and this has a significant negative impact on the ground flora here. Further to the north, Beech becomes dominant, and Rhododendron appears to be shaded out. The ground flora is still poor (as is often the case in Beech woodland) with only Ivy and Wood Sorrell being frequent. Bramble is encroaching in some areas. Bracken is occasional here. Birch retains a presence in the canopy and Hawthorn (<i>Crataegus monogyna</i>) is occasional in the understorey. It was noted that this would be highly suitable Badger sett location and a detailed survey for this species would be recommended. Both Sycamore and Beech are regenerating. Furthest to the north of this woodland Beech appears mostly to be confined to the west of the area (on the slope) and the remainder of the canopy is dominated by Birch. The Rhododendron once more dominates the understorey which diminishes the value of this area in ecological terms. A treeline of Limes (<i>Tilia cordata</i>) forms the western boundary of the woodland.</p> <p>Other sections of mixed broadleaf woodland nearer the castle contained Sycamore, Horse Chesnut (<i>Aesculus hippocastanum</i>), Pine, Cyprus (<i>Cupressaceae</i> family) and Yew (<i>Taxus baccata</i>). A Yew was also noted.</p>	WD1

	<p>Patches of Cherry Laurel (<i>Prunus laurocerasus</i>) were spreading in the understorey, with impacts to ground flora. Ground flora was mostly composed of Ivy (<i>Hedra helix</i>) with a layer of conifer needles.</p> <p>This is a very variable area which has a high degree of non-natives although some areas correspond to wet willow/alder woodland. Part of this is woodland is within the Lough Muckno pNHA (NPWS, 2009). Near the playground, the woodland is dominated by Horse Chestnut and Sycamore although some young Oaks have been planted here during playground construction. Horse Chestnut is regenerating, and an occasional young Ash (<i>Fraxinus excelsior</i>) has self-seeded. There is a patch of Snowberry (<i>Symphoricarpos albus</i>) (an invasive species) here and Rhododendron is also encroaching from the margins of the woodland. Birch is very occasional. Both Ash and Alder become more frequent toward the east. As the woodland becomes wetter it is denser and Alder-dominated. The canopy here would naturally be Alder and Ash but there is also frequent Sycamore and Horse Chestnut. Rhododendron and Sycamore removal should be carried out here, but no other intervention is recommended.</p> <p>In this area near the playground there is also a mixed woodland canopy dominated by Sycamore but there is also Willow and Birch. Ash is occasional. Holly (<i>Ilex aquifolium</i>) rarely occurs. There is a limited amount of bramble scrub with Great Willowherb, Willow and Cherry Laurel. It should be noted that Japanese Knotweed (<i>Fallopia japonica</i>) is viable and spreading here and treatment of this invasive species should continue.</p>	
Treeline	<p>There is a mixed treeline comprised of large mature Lodgepole Pine and Sycamore. Ash is occasional. There is an understorey of Elder (<i>Sambucus nigra</i>), Rowan and Cherry Laurel. In the area there is a double treeline of large mature Broad-leaved Lime of c. 20m in height with a crown spread of around 10m. These trees are in good condition. In addition, there is a double treeline of mixed species which are Lime, Sycamore, Leyland Cypress (<i>Cupressocyparis leylandii</i>) and Cherry Laurel.</p> <p>There is also a mixed treeline of Lime, Holly, Rowan (<i>Sorbus aucuparia</i>) and Leyland Cypress near Hope Castle. Sycamore is regenerating here, and this area is becoming a small mixed woodland. There is another area with some Lawson's Cypress and Elder in the understorey, but Sycamore is mostly dominant. Furthermore, there is a mixed treeline alongside the footpath toward the golf course. It is mixed but almost entirely evergreen, made up of Leyland Cypress and Sitka Spruce. Some of the Cypress are very tall and may be over 25m in height. Bramble scrub has developed adjacent the tennis courts here.</p> <p>There is a mixed treeline along a footpath containing Sycamore, Elm, Beech and Rowan. The understorey of this is made up of Elder, Rhododendron and Cherry Laurel. A double treeline on the boundary of the demesne is made up of mostly of mature Limes (<i>Tilia cordata</i>) with some Leyland Cypress. There is a double treeline dominated by Leyland Cypress with other occasional species such as Birch and Scots Pine. While the species is not native or of high ecological value, this is a very effective boundary and also a good ecological corridor. There is a very mixed treeline of Lodgepole Pine, Maritime Pine (<i>Pinus pinaster</i>), Birch, a single Poplar (<i>Salicaceae spp.</i>) and Willow. There is also young Cherry (<i>Prunus avium</i>) in the area.</p>	WL2

Scattered Trees and Parkland	<p>This area would not conform to amenity grassland given its lack of management; nor woodland, given the scattered nature of the trees here which are of a mixture of species. However, there are some large mature trees here including some very large mature Ash of c.20m in height with a crown spread of up to c.8m. Ash Die-back disease was noted in these. There is also a large mature Beech with multiple boles, Scots Pine (<i>Pinus sylvestris</i>), Lodgepole Pine, a semi-mature Pendunculate Oak (<i>Quercus robur</i>), occasional Willow (Sallies), Common Birch and mature Sycamores. Occasional Oak seedlings were noted here.</p> <p>This category is used for situations where scattered trees, standing alone or in small clusters, cover less than 30% of the total area under consideration but are a prominent structural or visual feature of the habitat. This parkland originates from former planting and landscaping and the proportion of non-native trees is high. The largest area mapped is under this category and mature trees such as oak, beech and sycamore were present. Mature trees in this area were of high bat roosting potential.</p> <p>Additionally, the orchard area near the entrance is mapped under this category. This is an orchard with a variety of Apple trees scattered throughout. This is a former orchard which has been in use as a car park. There are mature Apple (<i>Malus domestica</i>) trees scattered among fallow grassland with Willow trees occasional. Some piles of earth, gravel and woodchip have been left here. Some occasional non-native species (e.g. small amounts of Montbretia (<i>Crocosmia</i> spp.) where its corms may have been dumped and Cotoneaster (<i>Cotoneaster horizontalis</i>- on orchard walls) were noted. Great Willow-herb (<i>Epilobium hirsutum</i>) was frequent, and Docks (<i>Rumex</i> spp.) were locally frequent.</p> <p>The grassland here was similar to a dry meadow type habitat. Dry meadows that are rarely fertilised or grazed and are mown only once or twice a year for hay are now rare in Ireland. Most have been improved for agriculture and this type of grassland is now best represented on grassy roadside verges, on the margins of tilled fields, on railway embankments, in churchyards and cemeteries, and in some neglected fields or gardens. These areas are occasionally mown (or treated with herbicides in the case of some railway embankments), and there is little or no grazing or fertiliser application. This pattern of management produces grasslands with a high proportion of tall, coarse and tussocky grasses such as False Oat-grass (<i>Arrhenatherum elatius</i>), Cock's-foot (<i>Dactylis glomerata</i>), Yorkshire-fog (<i>Holcus lanatus</i>) and Smooth Meadow-grass (<i>Poa pratensis</i>). Ground flora included frequent Ox-eye daisy (<i>Leucanthemum vulgare</i>), Birds-foot trefoil, Bush Vetch (<i>Vicia sepium</i>) and Herb-Robert (<i>Geranium robertianum</i>).</p>	WD5

Built Land	<p>Hope Castle and curtilage contains some remnant amenity grassland which has gone to seed. There are also several young Sycamores here. There is some recolonising bare ground and bare ground. Here there are many Willow saplings as well as Great Willowherb, Coltsfoot (<i>Tussilago farfara</i>) and Dandelion (<i>Taraxacum vulgaria</i>). There is occasionally Leyland Cypress. Hope Castle has moderate bat roost habitat potential. There is also nesting bird habitat. No Swallows (<i>Hirundo rustica</i>) were observed but it was noted that this building is suitable for this species. The building would also offer nesting habitat for Barn Owl (<i>Asio flammeus</i>) and the surrounding and adjacent grassland would be suitable foraging habitat for this species. The tennis courts near the castle are recolonising bare ground with lots of bramble scrub as well as Birch, Willow and Sycamore seedlings.</p> <p>There is also a new footpath that runs immediately adjacent the stone wall on the site boundary.</p>	BL3
Neutral Grassland	<p>This is uncut and unseeded grassland (it was formerly amenity grassland). It would now be classified as 'dry neutral grassland.' Cocksfoot was a dominant grass species here but there was also Annual Meadow Grass (<i>Poa annua</i>) and Perennial Rye-grass (<i>Lolium perenne</i>). Common Knapweed (<i>Centaurea nigra</i>) was frequent to abundant. Ribwort Plantain (<i>Plantago lanceolata</i>) was frequent and Docks (<i>Rumex spp.</i>) occasional. Birdsfoot Trefoil was locally frequent. There are informal paths through this area.</p> <p>There is also an area of uncut grassland (formerly amenity grassland) near the former Golf Course. There are occasional non-native Cypress and Pine trees. The ground flora is dominated by grasses, Yorkshire Fog and Annual Meadow Grass most common. Dandelion is frequent, Cat's-ear (<i>Hypochaeris radicata</i>), Ragwort (Asteraceae family) and Creeping Buttercup are occasional. Common Knapweed and Ribwort Plantain are locally frequent.</p>	GS1
(Mixed) Broadleaved Woodland	<p>A very small area of woodland has developed here. However, it is likely that this was formerly a double treeline along a pathway. It is very mixed with a high proportion of non-natives – Leyland Cypress and Sycamore are most frequent, and Cherry Laurel is occasional, generally on the edges. There is also Cherry and Yew. Bramble-dominated scrub is developing on the edges.</p>	WD1
Scrub	<p>There is an area of raised ground, and a new footpath has been routed through this. There is Birch on the eastern boundary of this and then Rhododendron. There is a single Sessile Oak (<i>Quercus petraea</i>) adjacent.</p> <p>There is also an area at the southern end of the boundary. This area is a mixture of emerging woodland and scrub. It is mostly Willow but also Birch. The scrub here is Bramble-dominated but there is also much Bracken. Japanese Knotweed occurs here in at least three different stands. These stands may possibly occur outside the boundary of the County Council lands.</p>	WS1
Ornamental/Non	There is a moderate area of Japanese Knotweed at the southern extent of	WS3

-Native	the proposed site extending into a mixed broadleaved woodland. There is also a patch of Rhododendron toward the playground along the footpath.	
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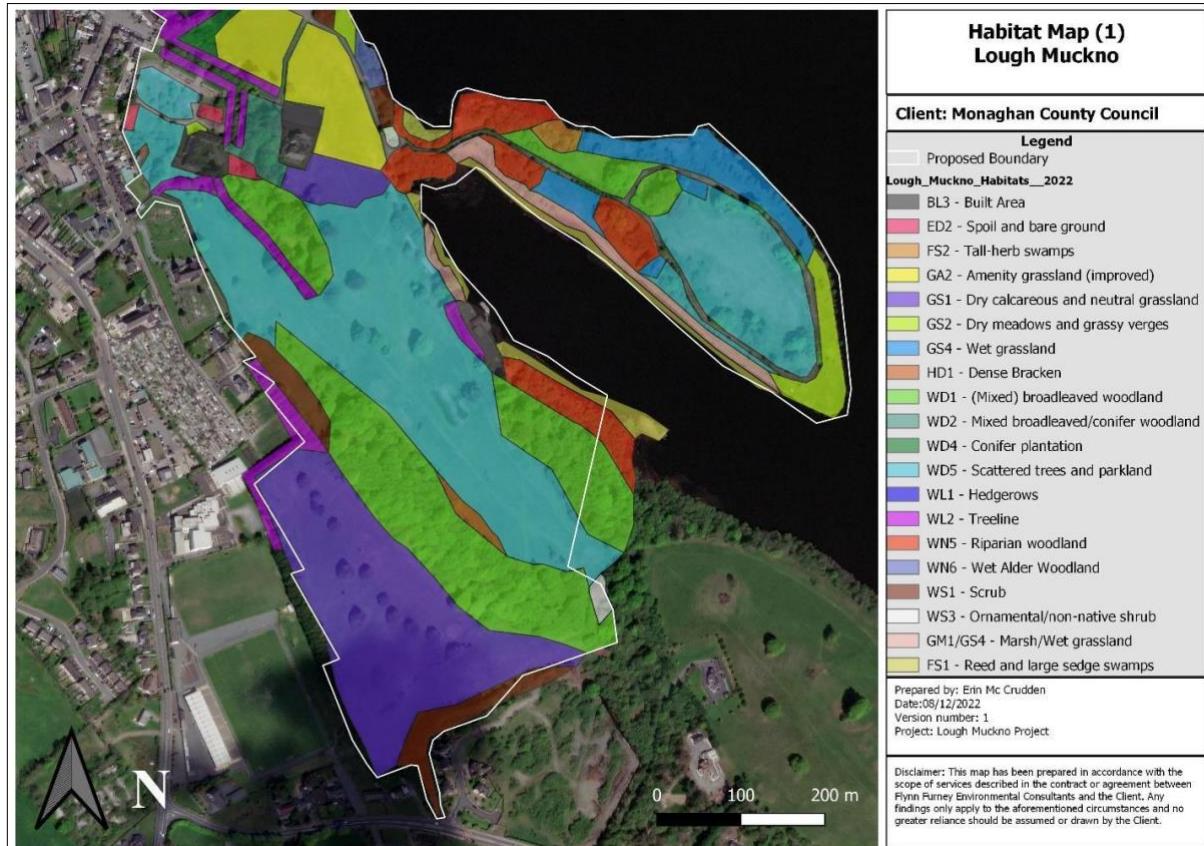


Figure 3.1: Lough Muckno Habitat Map (1)

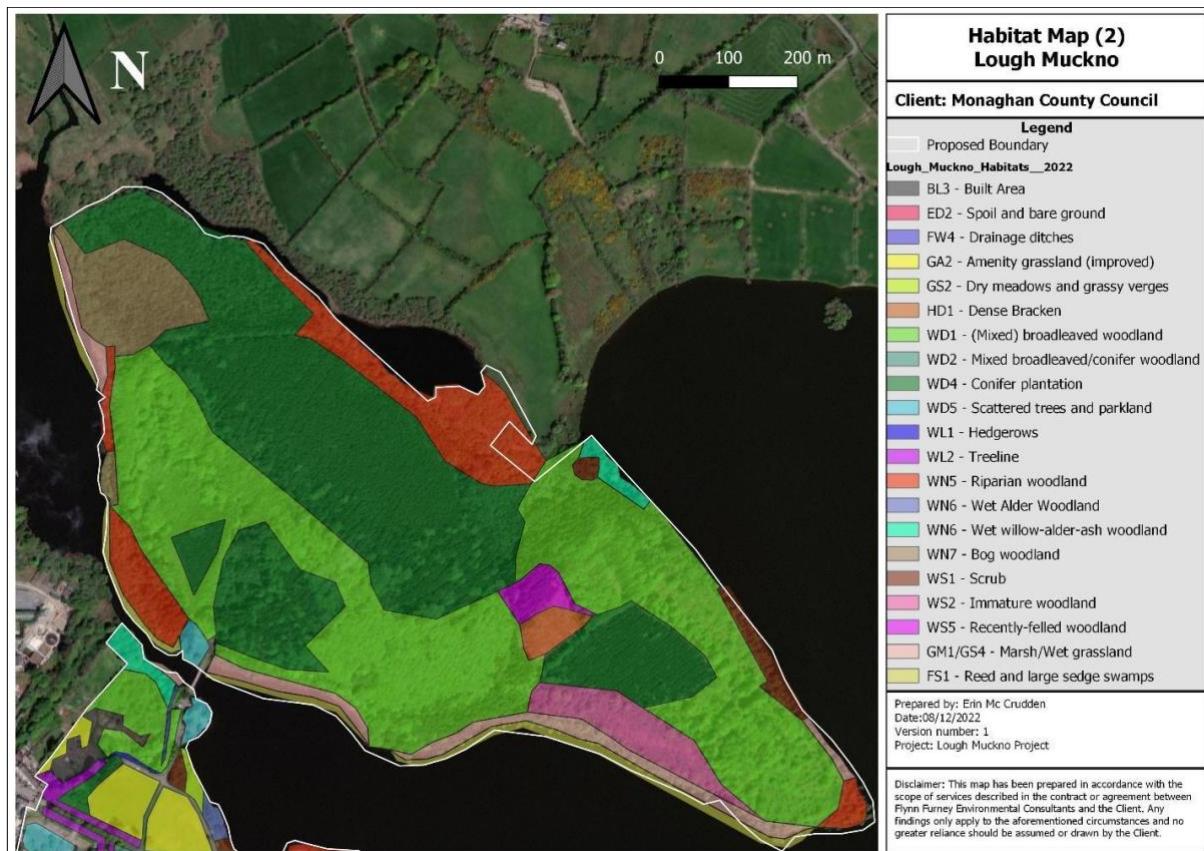


Figure 3.2: Lough Muckno Habitat Map (2)

No European protected areas or habitats were identified with the survey area. However, the pNHA termed “Muckno Lake” is found within the boundaries of the site, this would be protected within the Monaghan County Development Plan 2019-2025. Downstream 6km from Lough Muckno the River Fane flows into another pNHA called Lough Ross. Overall, the site habitat types encountered within the site boundary were relatively common both locally and nationally.

3.2.2 Flora and Fauna

The field survey did not identify any protected species. No rare, threatened, or protected species of plants as per the Red Data List (Wyse Jackson et al., 2016) were found within any habitats within the survey area.

Several stands on invasive species were noted during the field survey, including two third schedule species: Japanese knotweed (*Fallopia japonica*) and Rhododendron (*Rhododendron ponticum*). The locations of these species are noted in the maps in Figures 6.1 and 6.2, an invasive species management plan will be required to deal with the removal and treatment of these species. Additional invasive species found will be discussed further below.

No protected habitats of ecological significance are located at this site and the proposed development will not encroach on any protected areas and is unlikely to result in any significant impacts. However, based upon the Site survey, the Site is considered to be of moderate to high biodiversity value and some recommendations for its conservation/improvement will be expanded in the Ecological Opportunities Plan.

The field survey also aimed at identifying the presence/potential presence of notable and or protected species of fauna, and identified the following:

- Potential for bird nesting within trees and vegetated areas, especially the marsh/wet grassland areas around the edge of the lake.
- Potential for bat roosting in several mature trees and in some old buildings. Several bat species have been recorded in the area.
- Though no evidence of badgers was observed during the field survey, this area has a lot of potential as a badger habitat.
- Though no evidence of red squirrel was observed during the field survey, this area has a lot of potential as a red squirrel habitat.
- Evidence of Otter and Pine Martin on Black Island.
- Evidence of Kingfisher and Great Spotted Woodpecker.

The flora and fauna found will be discussed below in further detail.

3.3 Species

3.3.1 Bats

Previously the NBDC records in the area noted the presence of Pipistrelle spp. (*Pipistrellus spp*), Daubenton's Bat (*Myotis daubentonii*), Natterer's Bat (*Myotis nattereri*), Soprano Pipistrelle (*Pipistrellus pygmaeus*) and Lesser Noctule (*Nyctalus leisleri*), also called Leisler's Bat.

Potential habitats suitable for bats within the study area were identified, these were two areas (White Island and Golf Club Grounds) with numerous mature Beech, Oak and Sycamore trees, the hedgerows within the study area were species low-quality regarding suitability for bats. The habitats in and around the study area such as the woodlands and the lake provide highly suitable foraging, commuting and resting locations for bat species. Further detailed surveys and studies would be required to establish the status of the bat species in the area due to the high foraging potential. It should be noted that there is good continuity of the habitats within the area for bats. See Figure 4.1 for locations of mature trees.

The possibility that construction of the works could disturb, damage or destroy habitats gives rise to a potential constraint consideration in design. If the development occurs in this area and will likely involve the clearing of these trees and, given the potential for these trees to support roosting bats and the legal protection afforded to bats (see below), any trees in the immediate vicinity of any development on site must be surveyed to confirm presence or absence of roosting bats. Should roosting bats be identified, a derogation licence will be required for the works that could result in an impact to a known roost in advance of the works.

In addition, the onsite habitats such as the lake and nearby streams and wet areas, provide foraging opportunities for bats with the network of surrounding woodlands providing good connectivity within the wider landscape. The design and works will need to take into account the potential presence of

roosting and commuting bats within the wider area and the lighting design should be designed in a sympathetic manner. Outline recommendations are provided below.

Legislative Context

All Irish bats species are protected by law under the Wildlife Act 1976 and its subsequent amendments. They are afforded full protection under this act, which makes it a criminal offence for anyone without a licence to:

- Kill, injure or handle a bat;
- Possess a bat (whether alive or dead);
- Disturb a roosting bat; and,
- Damage, destroy or obstruct access to any place used by bats for shelter, whether they are present or not.

In addition to domestic legislation bats are also protected under the EU Habitats Directive (92/43/EEC). All Irish bats are listed in Annex IV of the Habitats Directive and the lesser horseshoe bat is further listed under Annex II, which make it an offence to:

- Deliberately capture, injure or kill any bat; or,
- Deliberately disturb a bat, in particular any disturbance which is likely to;
 - a. Impair their ability:
 - (i) to survive, to breed or reproduce, or to rear or nurture their young, or;
 - (ii) to hibernate or migrate.
 - b. Affect significantly the local distribution or abundance of the bat species; or,
- Damage or destroy a breeding site or resting place of a bat.

Therefore the destruction, alteration or evacuation of a known bat roost is a notifiable action under current legislation and a derogation licence has to be obtained from the National Parks and Wildlife Service before works can commence.

Furthermore, it should also be noted that any works interfering with bats and especially their roosts, including for instance, the installation of lighting in the vicinity of the latter, may only be carried out under a license to derogate from Regulation 23 of the Habitats Regulations 1997, (which transposed the EU Habitats Directive into Irish law) issued by National Parks and Wildlife Services (NPWS).



Figure 4.1: Location of Mature Trees

3.3.2 Terrestrial Mammals

Evidence of Otter and Pine Marten spraint were found during field work. No mammal refugia (e.g. setts of Badger *Meles meles* or Otter *Lutra lutra* holts) were found within the survey area. Previous records from the NBDC indicate the presence of Red Squirrel and Badger around the area. Figure 5.1 below shows the evidence of mammals found during the survey of Lough Muckno.

Legislative Context

Badgers, Otters, Red Squirrel and Pine Marten are a legally protected species under Irish legislation. These mammals are protected under the provisions of the Wildlife (Amendment) Act 2000. It is an offence to:

- Intentionally kill, injure or take (handle) any protected wild animal;
- Intentionally interfere with or destroy the breeding place or resting place of any protected wild animal;
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by any protected wild animal; and
- Possess or control any live or dead specimen or anything derived from a protected species.

These mammals are also listed as a protected species on the Convention on the Conservation of European Wildlife and Natural Habitats (commonly referred to as the 'Bern Convention'), to which Ireland is signatory.

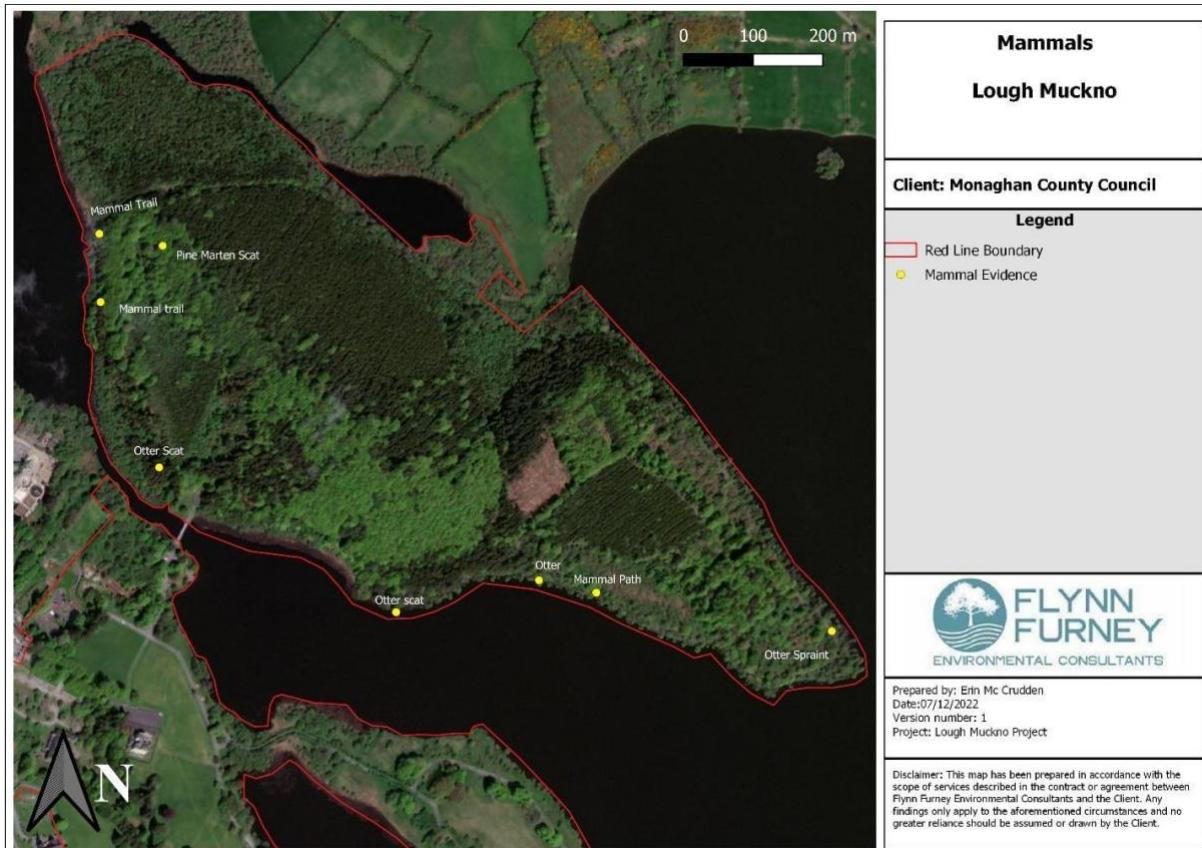


Figure 5.1: Evidence of Mammals

3.3.3 Invasive species

As part of the field survey, the lands within and in the immediate vicinity of the site boundary were assessed for the presence of invasive species. Two species listed on the Third Schedule were found during the survey, these were Japanese Knotweed and Rhododendron. Other invasive species recorded as present were Snowberry, Cherry Laurel and Pheasant Berry, also known as Himalayan Honeysuckle (*Leycesteria formosa*). These are low-medium impact invasive species but do not require an INNS management plan. None of these species will lead to any impacts to any designated sites due to the large distance between. It should be noted there is an extensive patch of Japanese Knotweed on the southern end of the site, a patch of Rhododendron near playground and a variety of invasive species within another area adjacent to the playground. Locations of the invasive species can be seen below in Figure 6.1 and 6.2.

- Site operatives and management should be made aware of the locations of these stands. Care should be taken in these areas with equipment to prevent the further spread of the invasive species.

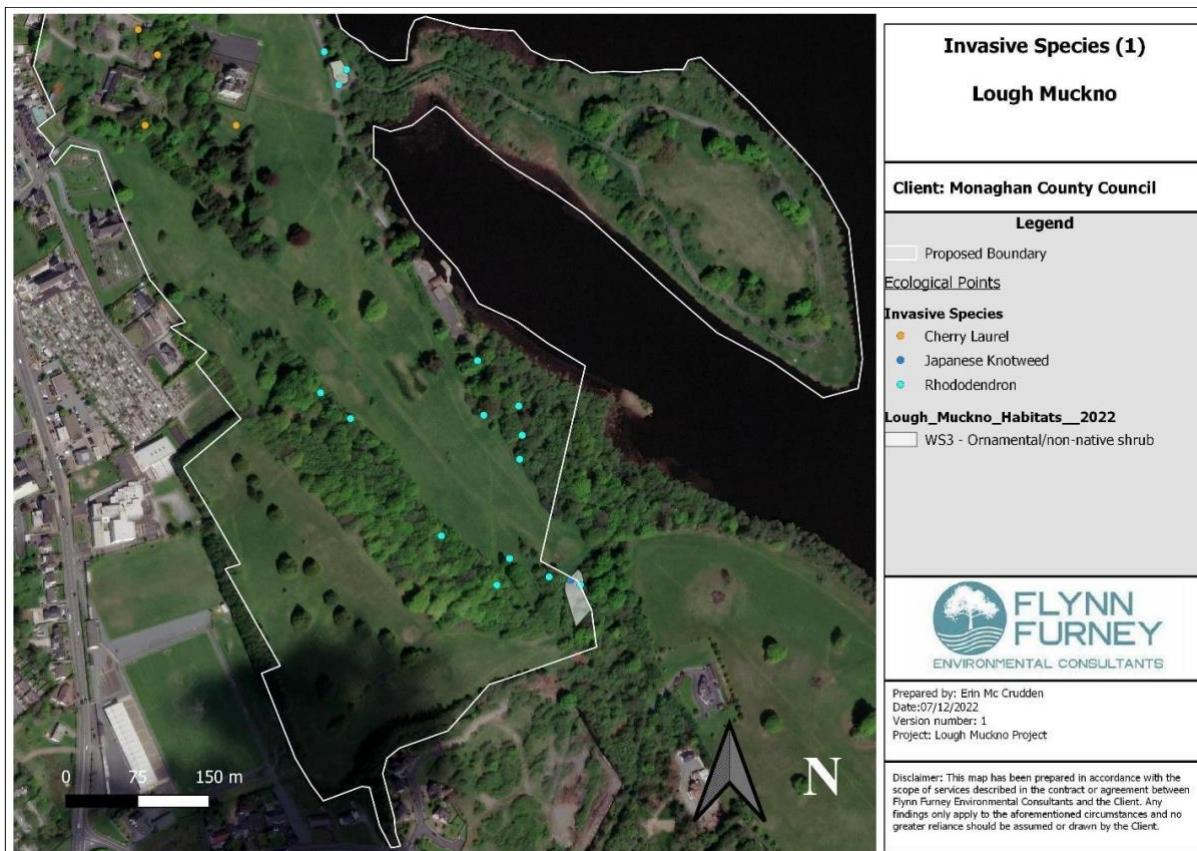


Figure 6.1: Invasive species map (1)

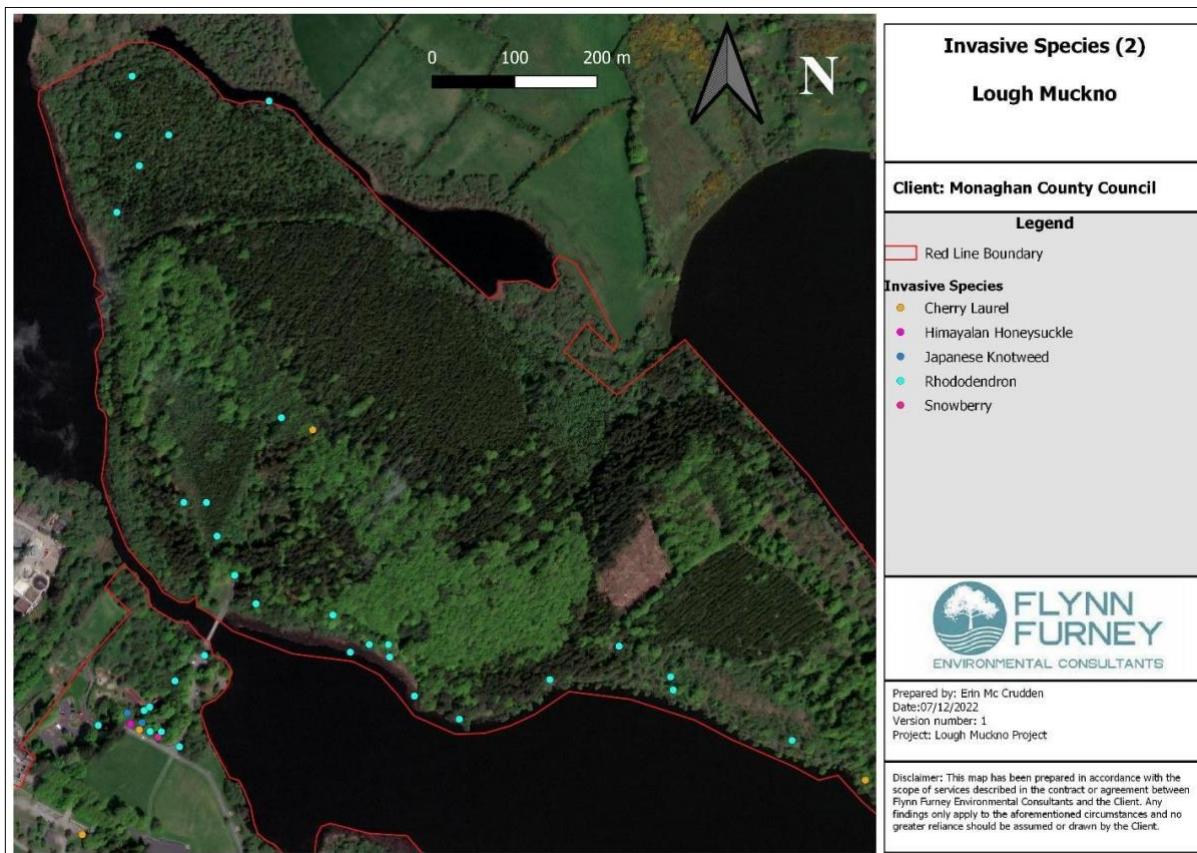


Figure 6.1: Invasive species map (2).

Legislative Context

Japanese Knotweed and Rhododendron are legally controlled species within Ireland due to the harm that they can cause to the natural environment, and to built structures in the case of knotweed. They are controlled under the following legislation:

- Invasive Alien Species Regulation, 2014;
- Wildlife Acts, 1976 to 2012;
- European Communities (Birds and Natural Habitats) Regulations, 2011 to 2015; and,
- Planning and Development Acts, 2000 to 2016, and 2017 amendment.

Under this legislation, it is an offence to;

- Plant, disperse, allow dispersal or cause the spread of the plant;
- Keep the plant in possession for purpose of sale, breeding, reproduction, propagation, distribution, introduction or release;
- Keep anything from which the plant can be reproduced or propagated from without a granted licence, or
- Keep any vector material, in this case soil or spoil taken from the plant, for the purposes of breeding, distribution, introduction or release.

The other species listed above are classified as invasive and may be subject to management depending on the local planning authority.

3.3.4 Nesting Birds

Bird Atlas 2007-2011 (Balmer et al.,2013)' were consulted for information on distribution of birds in Ireland. They provide generic data to monitor long term population trends at national and international level. A shortlist was compiled of species recorded in a 2km distance of the proposed site that are protected in Annex I of the EU Birds Directive, or subject to serious population declines in the Birds of Conservation Concern in Ireland (BoCCI) red list. It narrows the search for species of high conservation importance that may occur near the site. Figure 7.1 below shows the evidence of birds found during the survey of Lough Muckno.

Four Annex I wintering species include Whooper Swan (*Cygnus cygnus*), Kingfisher (*Alcedo atthis*), Peregrine Falcon (*Falco peregrinus*) and Golden Plover (*Pluvialis apricaria*). Kingfisher expands its winter wetland habitats area over breeding habitats and may be found in the area. Some of the banks along the rivers within the study area may be suitable for Kingfisher, which require muddy banks close to water for nesting.

A further three bird species, listed on the BoCCI Red list, winter in the area and include Lapwing (*Vanellus vanellus*), Yellowhammer (*Emberiza citronella*) and Black Headed Gull (*Larus ridibundus*). Lapwing winter on farmland, wetlands and flat coastal areas. Yellowhammer nests are usually placed low on the ground, among hedgerows or woodland fringes. Black Headed Gull winter on a variety of habitats. All the above species may potentially occur within the study area.

- The lake and vegetated reed fringe within the study area provide suitable habitats for nesting birds. If

possible, vegetation clearance associated with the works should be conducted outside of the breeding bird season (March to September inclusive) to protect any nests that may be present.

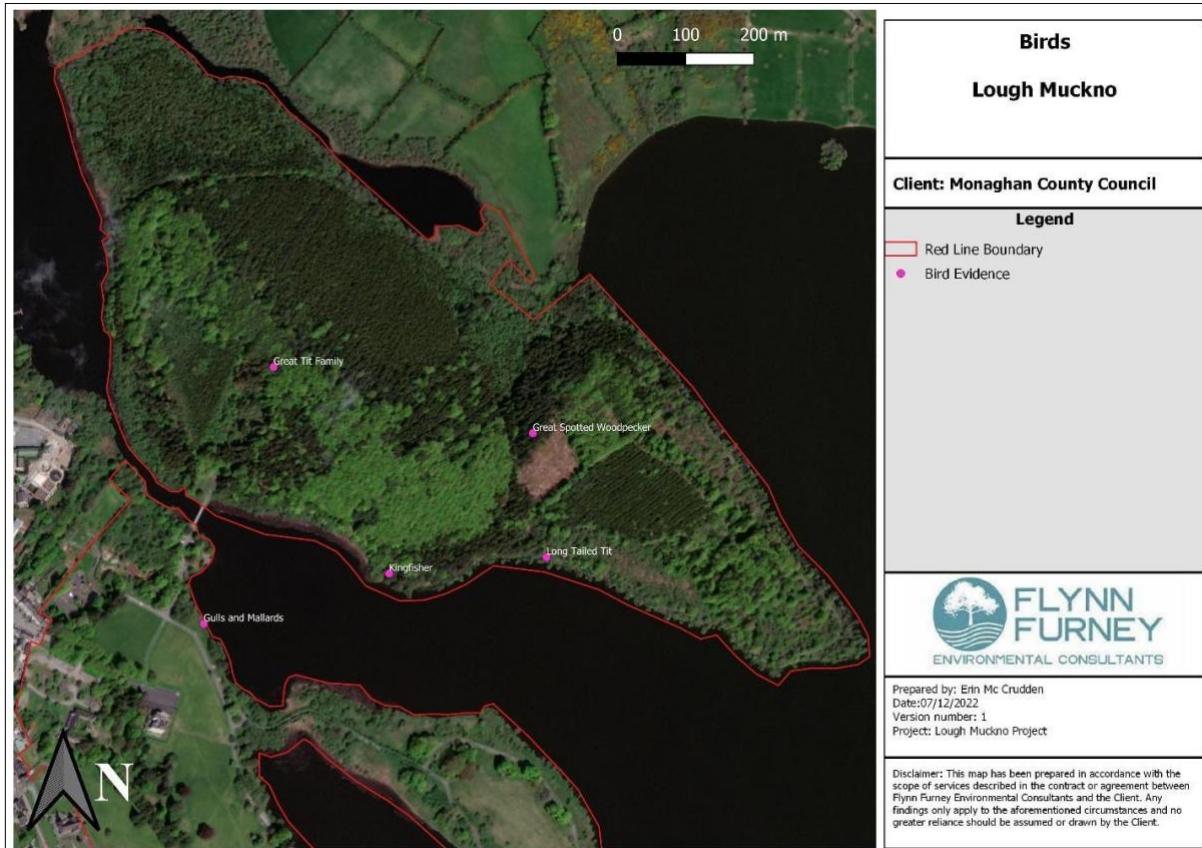


Figure 7.1: Evidence of Birds

Legislative Context

The Irish bird nesting season is defined in Section 40 of the Wildlife Act 1976 and Section 46 of the Wildlife Act 2000 (as amended) as the period between 1st March and 31st August. This legislation states that:

- "It shall be an offence for a person to cut, grub, burn or otherwise destroy, during the period beginning on the 1st day of March and ending on the 31st day of August in any year, any vegetation growing on any land not then cultivated, and;
- It shall be an offence for a person to cut, grub, burn or otherwise destroy any vegetation growing in any hedge or ditch during the period mentioned in paragraph a) of this subsection."

4 Recommendations

4.1 Bats

It is recommended that a follow up bat roost survey be conducted on trees in the immediate vicinity of the proposed works prior to development. All trees identified as having the potential to support roosting bats should be subject to dusk emergence surveys. The dusk emergence surveys must be conducted in line with best practice survey guidance issued by the Bat Conservation Trust (Bat Conservation Trust, 2016).

Lighting Restrictions

The site had several features of bat potential and several bat species have been recorded in the area. Most Irish bats are averse to light, and will avoid areas with high intensity lighting. Therefore in order to minimise any potential impacts from light spillage from the project, consideration should be given to the lighting strategy of pathways and buildings during the detailed design stage.

Furthermore, some design recommendations from the BCT (2010) for wildlife-friendly lighting⁶ include the following:

- Do not "over" light. Avoidance of excessive lighting as it is a major cause of obtrusive light, particularly around linear habitats, hedge and tree lines which may be used by commuting and foraging bats. Minimum amount of light needed for safety should be used;
- Where lighting is essential, i.e. for security reasons or pedestrian lighting, Light Emitting Diodes (LED's) must be used and the brightness must be set as low as possible. Lighting must be aimed only where it is needed (with no upward lighting). LED's lights must be directed below the horizontal plane, preferably at an angle less than 70 degrees;
- In order to predict where light spill occurs, lighting design computer programs and professional lighting designers should be used;
- Use narrow spectrum bulbs to lower the range of species affected by lighting; light should not overspill into the river below or onto adjoining vegetation thereby ensuring that a dark corridor for foraging and commuting bats is maintained. In addition light sources that emit minimal ultraviolet light should be used as insects are attracted to light sources that emit ultraviolet radiation;
- The height of lighting columns should be reduced as lighting at a low level further reduces ecological impact; and,
- Dark periods for wildlife should be provided by limiting when the lights are switched on.

4.2 Terrestrial Mammals

A dedicated mammal survey should be carried out by a qualified ecologist in/around any areas that are to be developed to ensure that there is no disturbance to any protected mammals that might be in residence.

4.3 Protection of Mature Trees, Woodlands and Hedgerows

The current proposal will require the removal of small sections of woodland. In order to compensate for the loss/removal of these sections additional tree planting should be included in the designs to compensate for this loss and ensure landscape connectivity with the wider surroundings is maintained.

The sections of regenerating ash plantation were noted to have signs of ash dieback (*Hymenoscyphus fraxineus*) and a number of trees appeared to be infected. It is recommended that a tree survey be carried out by a qualified arborist to determine whether these trees should be removed. If so, it could present an opportunity to plant new native broadleaf/deciduous trees to create a more natural woodland, improving the local habitat. This is also discussed in the Ecological Opportunities Report.

4.4 Invasive Species

It is recommended that a detailed invasive species survey be carried out, ideally within the active growing season from April to August, as several stands of invasive plant species were identified around the site during the field survey. The identified stands are noted in Figures 6.1 and 6.2, however not every instance of these species may have been recorded.

The Japanese knotweed will likely need to be controlled/treated on site and prior to development it is recommended that an Invasive Species Management Plan be produced by a qualified ecologist/invasive species specialist to reduce their spread.

4.4 Nesting Birds

The removal of any vegetation should be scheduled outside of the nesting bird season. The bird nesting season runs from the 1st March to the 31st September in Ireland. The cutting of trees, bushes and hedgerows is restricted during this period and due care should be taken to ensure that any such activities do not result in an offence being committed under the Wildlife Act (1976) or the Wildlife Amendment Act (2000).

In the event that works need to be undertaken within the main breeding season, clearance must be preceded by an inspection of the vegetation by an experienced ecologist to identify evidence of bird breeding activity (taken as the commencement of nest building through to fledging) along with consultation with NPWS. If such is found, work must be delayed until young birds have fledged.

5 Conclusions

Suitable habitat for and activity of protected terrestrial mammals, birds and bats were identified during the Site survey. Therefore, based on the findings of this preliminary ecological appraisal, additional species-specific surveys are required for terrestrial mammals, birds and bats to ensure no adverse impacts will occur to these protected species as a result of the proposed development.

As several stands of invasive species were identified within the site boundary, it is recommended that an Invasive Species Management Plan be created to deal with those identified and a further follow-on survey be carried out to identify any other species closer to development.

6 References

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7 Appendix I

ID	Photo	Description
1		Lough Muckno
2		Fly Agaric

3		Mixed Broadleaved Woodland
4		Old buildings by Orchard

5



Mature Oak Tree

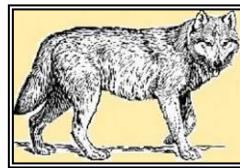


**FEHILY
TIMONEY**

**CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING**

APPENDIX 4

Cultural Heritage Constraints
Assessment for Concept
Proposal Options at Lough
Muckno Estate,
Castleblayney, Co. Monaghan,
Colm Flynn Archaeology
(March 2023)



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**CULTURAL HERITAGE CONSTRAINTS ASSESSMENT FOR
CONCEPT PROPOSAL OPTIONS AT LOUGH MUCKNO
ESTATE,
CASTLEBLAYNEY. CO. MONAGHAN**

Author: Colm Flynn, Archaeological Consultant

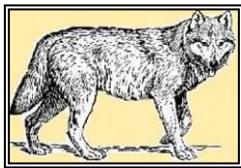
Client: Monaghan County Council / Fehily Timoney CE

Archaeological Licence: N/A

Date: March 2023

ABSTRACT

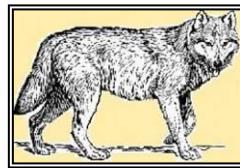
This report details the results of a Cultural Heritage Constraints Assessment for a proposed multi-phase development at Lough Muckno, Conra Wood and Castleblayney, County Monaghan.



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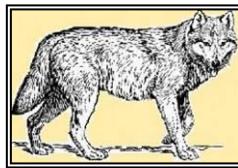
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- Plate 1 Showing southeast facing elevation of Hope Castle BH01.
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- Plate 3 Showing new bridge joining Black Island to mainland, facing north.
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- Plate 8 Showing hillock in Concra Wood Golf Course, where folly AH06 is covered by vegetation, facing north.



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1.0 Introduction

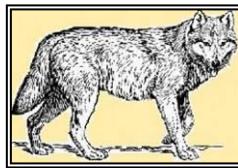
This Cultural Heritage Constraints and Desktop Report has been completed by Colm Flynn of Colm Flynn Archaeology in relation to proposed concept proposal options at Lough Muckno, Castleblayney, County Monaghan. The proposed area comprises Lough Muckno, and much of its western shores including Black Island, White Island, and the former gardens and grounds of an extant eighteenth-century country house known as Hope Castle (previously known as Blayney Castle), and the grounds of Conra Wood Golf Club. The location for the concept options proposal is situated to the south and southeast of the town of Castleblayney, County Monaghan. The area includes several buildings that are contained in the Record of Protected Structures for County Monaghan (RPS) and are also included in the National Inventory of Architectural Heritage (NIAH). By inclusion in the RPS a building is protected by law under the Planning and Development Act (2000). The area also includes several archaeological sites that are contained in the Record of Monuments and Places (RMP). By inclusion in the RMP an archaeological site is protected by law under the National Monuments Acts (1930-2014).

This report examines the known archaeological, architectural and cultural heritage assets within the proposed concept options proposal area, based on desktop research (non-invasive methods). The report assesses the existing archaeological and historical background of the receiving environment, and identifies the associated cultural heritage constraints that should be considered during the redevelopment of the Lough Muckno as a major amenity and tourism destination.

The archaeological work outlined in this report has been completed as part of the pre-planning phase for Lough Muckno, on behalf of Fehily Timoney and Company (FT) and Monaghan County Council (MCC).

This report has been prepared according to the following legislative framework, guidelines and documents:

- Framework and Principles for the Protection of Archaeological Heritage (Department of Arts, Heritage and the Gaeltacht, 1999).
- Guidelines on the Information to be contained in Environmental Impact Statements (Environmental Protection Agency 2002, 2003, 2017, 2022).
- Architectural Heritage Protection: Guidelines for Planning Authorities (Department of Arts, Heritage and the Gaeltacht, 2011).



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- National Monuments Acts 1930-2014.
- Heritage Act (1995).
- National Cultural Institutions Act (1997).
- The Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous) Provisions Act (1999).
- Local Government (Planning and Development Act (2000).
- European Communities (Environmental Impact Assessment) (Amendment) Regulations, 1999, (S.I. No. 93 of 1999).
- ICOMOS (International Council on Monuments and Sites) and the Venice, Burra and Valetta Charters.
- Monaghan County Development Plan 2019-2025.

Definitions

Archaeology is the study of past human societies through their material remains and artefactual assemblages. Archaeological heritage can be seen as that part of heritage relating to archaeological sites and objects.

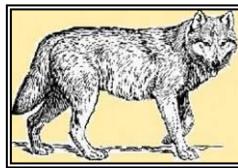
The International Council of Monuments and Sites (ICOMOS), explains architectural heritage as that part of heritage that includes buildings or ruins, ‘whose original value in terms of emotional, cultural physical, intangible, technical or historical has been increased over the years’.

The term cultural heritage can be explained as the expressions of the ways of living that have developed by a community and passed on over time. This can include folklore, traditions, traits and customs, practices, objects, values, and can be intangible attributes and physical artefacts of a society or cultural grouping.

Abbreviations used in this report

AH: Archaeological Heritage. Each known archaeological site is given an AH number for the purposes of this report, eg AH01.

AP: Archaeological Potential. Each possible archaeological site is given an AP number for the purposes of this report, eg AP01.



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BH: Built Heritage. Each known architectural heritage site is given a BH number for the purposes of this report, eg BH01.

BHP: Built Heritage Potential. Each possible architectural heritage site is given an BHP number for the purposes of this report, eg BHP01.

CH: Cultural Heritage. Each known cultural heritage site is given an CH number for the purposes of this report, eg CH01.

FT: Fehily Timoney and Company.

NMI: National Museum of Ireland.

NMS: National Monuments Service of the Department of Housing, Local Government and Heritage.

MCC: Monaghan County Council.

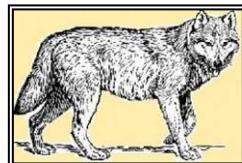
Summary Findings

This report concludes that the known archaeological, architectural heritage and cultural heritage assets within the proposed concept area are significant. The Concept Proposal Area includes Lough Muckno, Castleblayney town, and Concra Wood. The citizens of Castleblayney proudly identify with Lough Muckno and Hope Castle BH01, and have a unique relationship with the site. This relationship constitutes a significant intangible Cultural Heritage Asset CH01. The extant buildings of Hope Castle and its attendant outbuildings, gardens, walls, and landscape features are protected by law under the Planning and Development Act 2000. The archaeological heritage of the development area includes several known archaeological sites that are protected by law under the National Monuments Acts 1930-2014.

Recommendations are made to ensure the avoidance of negative impacts on any aspect of cultural, architectural, or archaeological heritage. Mitigation measures are proposed to ameliorate any potential impact that the concept proposal options may have on cultural, architectural, or archaeological heritage assets.

2.0 Background

MCC have developed concept proposal options to carry out redevelopment of Lough Muckno as a major amenity and tourism destination. In 2021 Failte Ireland and Monaghan County Council commissioned a report entitled 'A VISION FOR THE LOUGH MUCKNO ESTATE,



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CASTLEBLAYNEY, COUNTY MONAGHAN' (Stevens and Associates, 2021). This report examined the options to develop Lough Muckno and its environs, with the aim of building 'a credible, achievable and realistic vision for the Estate that has a compelling narrative that matches the strategic goals of Ireland in a post-COVID19 environment and can become an exemplar of a new type of tourism development that will be required by communities and tourists in the near future. At the same time, it must ensure the retention of access for the local community.' (ibid, 3). MCC have appointed FT to complete a strategic planning and environmental appraisal of the concept proposals.

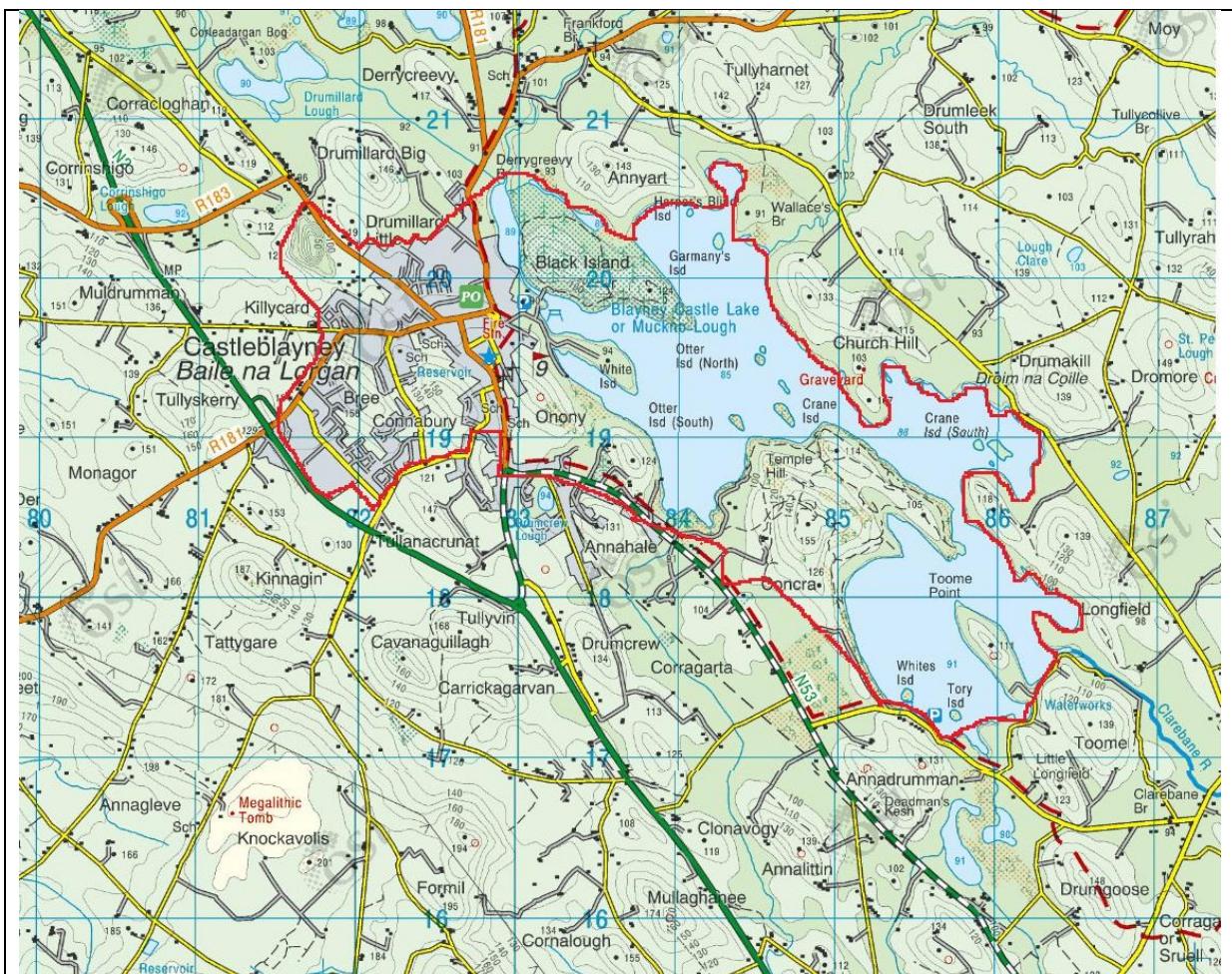
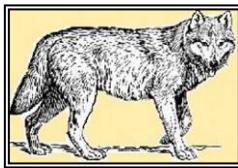


Figure 1 Showing proposed Lough Muckno concept development area on Discovery Series Ordnance Survey mapping.



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Sources consulted in the preparation of this report.

Record of Monuments & Places (RMP)

The RMP is a list of archaeological monuments, generally predating AD1700, known to the National Monuments Service (NMS). This list was in many cases based initially on cartographic, documentary and aerial photographic sources. By inclusion on the RMP an archaeological site is protected by law under the National Monuments Acts (1930-2014). Any works that may impact on an RMP have to be approved by the appropriate authority prior to the work commencing. Each entry in the RMP receives an individual identification number with a two-letter prefix which denotes the county the archaeological site is in. There are several RMP sites within the Lough Muckno estate. Some of these archaeological sites are not visible at ground level but could remain under the existing soil. The relevant sites are discussed in Section 4 (see below). Appendix 1 lists the known archaeological sites within proximity of the proposed development.

Topographical Files

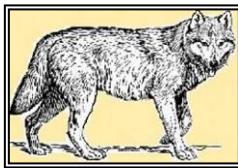
The topographical files of the National Museum of Ireland were consulted for this report. The topographical files identify recorded stray archaeological artefacts that have been donated to or purchased by the State in accordance with National Monuments legislation. The files are given individual numbers, and are identified by townland, and county, and in urban locations, by street number, street, and townland.

Archaeological Excavations Database (www.excavations.ie)

The Archaeological Excavations Database was consulted for this report. This database lists all archaeological excavations carried out in Ireland that were licensed under the National Monuments Acts. The Database is organised on a county by county basis, and allows for searches of individual addresses and street names in an urban context. One excavation that resulted in the identification of archaeology has been previously conducted at White Island and Black Island

National Inventory of Architectural Heritage

The National Inventory of Architectural Heritage (NIAH) is an ongoing survey commissioned by Department of Housing, Local Government and Heritage. The NIAH aims to promote the appreciation of, and contribute to, the protection of the architectural heritage by systematically recording the built heritage on a nation-wide basis. Several NIAH sites are situated within the



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Lough Muckno estate. The relevant sites are discussed in Section 4 (see below). Appendix 2 lists the NIAH sites within proximity of the proposed development.

Monaghan County Development Plan 2019-2025

Monaghan County Council have previously published the Monaghan County Development Plan 2019-2025. This plan was consulted for this project. The Monaghan County Development Plan 2019-2025 contains a list of buildings called the Record of Protected Structures (RPS) which are protected by law under Part IV of the Planning and Development Act 2000. The RPS identifies buildings of special architectural, historical, artistic, cultural, scientific, social or technical interest. Development which affects buildings contained in the RPS must be approved by the appropriate planning authority.

The stated policy of Monaghan County Council in relation to RPS sites as outlined in the Monaghan County Development Plan 2019-2025 is:

'BHP 1: To protect and conserve all structures included in the Record of Protected Structures and to encourage the sympathetic re-use and long-term viability of such structures without detracting from their special interest and character' (Monaghan County Council 2019, 130).

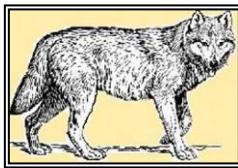
'BHP 6 To ensure that any new development proposed to or in the vicinity of a Protected Structure will complement and be sympathetic to the structure and its setting in Monaghan County Development Plan 2019-2025 terms of its design, scale, height massing and use of materials and to resist any development which is likely to impact on the building's special interest and/ or any views of such buildings and their setting.' (ibid).

The Monaghan County Development Plan 2019-2025 also outlines the policy of Monaghan County Council regarding archaeological sites contained in the RMP in County Monaghan:

'PMP 1 To protect the Record of Monuments and Places listed in Appendix 5 (and any subsequent additions by the National Monuments Service) to ensure that the setting of the recorded monument or site is not materially injured and to co-operate with all recommendations of Statutory bodies in the achievement of this objective.' (ibid 135).

'PMP 2 To ensure that any development adjacent to an archaeological monument or site shall not be detrimental to the character of the archaeological sites or its setting and shall be sited in a manner which minimises the impact on the monument and its setting. Development which is likely to detract from the setting of such a monument or site shall be resisted.' (ibid).

The Urban Archaeological Survey:



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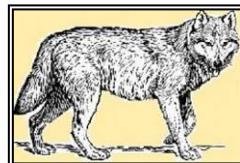
The Urban Archaeology Survey was established in 1982 to record known information relating to Irish towns and to present it to the public. One of the main objectives was to produce a zone of archaeological potential, based on the available evidence, which could be used for planning purposes. Historical sources of information were compiled and known archaeology of the towns was evaluated. The Urban Archaeological Survey of County Monaghan (J. Bradley and N. Dunne) was completed in 1989, and was consulted for this report.

Literary Sources

The document Architectural Heritage Protection: Guidelines for Local Authorities (Department of Arts, Heritage and the Gaeltacht, 2011) states the following: '*the planning authority should ensure that information on the impact of the proposed development on the structure is included in the information available to the public and the prescribed bodies. It should be noted that planning authorities cannot carry out works that would contravene their development plans, including objectives to protect the architectural heritage.*' (ibid, p96). The document outlines the following conservation principals regarding works to built heritage assets: '*Conservation is the process of caring for buildings and places and of managing change to them in such a way as to retain their character and special interest. Historic structures are a unique resource. Once lost, they cannot be replaced. If their special qualities are degraded, these can rarely be recaptured. Damage can be caused to the character of a historic structure as much by over-attention as by neglect. Over-restoration can harm the special qualities of a building with the loss of details, materials and craftsmanship which, while sometimes seeming of little significance in themselves, can contribute to the character of the building and make it special. For this reason, it is vitally important that proposals for works to protected structures, and within ACAs, be examined at a detailed level.*' (ibid, p105).

Various literary and online sources were consulted, a full list of which is provided in the bibliography. Particularly, the book 'Archaeological Inventory of County Monaghan' (Brindley 1986), provided useful information regarding the known archaeology of Castleblayney, County Monaghan. The book 'Monaghan: History & Society' (P Duffy; E Ó Ciardha, and W Nolan, (eds.), 2017), provided excellent background information regarding the history and development of human occupation and settlement in Monaghan. The pamphlet 'History of Hope Castle, Castleblayney, Co. Monaghan and Lake Muckno' by Louis O'Flaherty, also provided useful information about the history and development of the site.

Cartographic Sources



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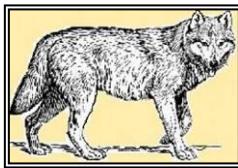
A wide range of maps were consulted, including private surveyors estate maps from the 18th century, and Ordnance Survey maps dating from the mid-19th century onwards. A full list of consulted cartographic sources is provided in the bibliography.

3.0 Location

The proposed concept options area will take in the former estate and lands of Hope Castle including Lough Muckno, its shoreline, Black Island, White Island, Contra Wood Golf Club, and lands in the townlands of Onomy, Annahale, Corragarta, and Concra, in the parish of Mucknoe, and in the barony of Cremorne, Castleblayney, County Monaghan (NGR 683050E, 819586N). The existing site is a mix of mature woodland, pasture and parklands, lakeshore, lake, paths and roads, landscaped golf course, and several buildings dating from the eighteenth to twentieth century.



Figure 2 Showing aerial image of Concept Proposal Area, Castleblayney, County Monaghan.



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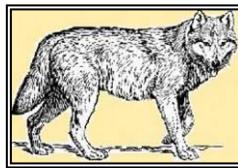
4.0 Archaeological & Historical Background

The area of Lough Muckno comprises a natural glacial valley and lake, and its islands and shoreline. Inland lakes and lakeshores are well documented focal points of human activity and settlement, from the time of the first human inhabitants of Ireland in the Mesolithic period (c. 7,000-4,000 BC), through to modern times. The known archaeological and historical information relating to Lough Muckno, as discussed below, certainly indicates that this part of Monaghan has featured human activity for millennia.

Prehistory

During the Mesolithic period people existed as hunters/gatherers, living on the coastline, along rivers and lakesides. The native landscape consisted of woodland with hazel, oak, ash and Scot's pine as the primary species and Mesolithic hunting groups made no significant impact on the landscape. Areas such as Lough Muckno, Castleblayney would have been very attractive to Mesolithic groups; with its fresh water and fish, and surrounding woodlands, and wild animals to hunt, and forest plants to forage. They used flint and other stones to manufacture sharp tools, and locating scatters of discarded stone tools and debris from their manufacture can sometimes identify settlements. An example of a Mesolithic flint blade is on display at the Monaghan County Museum. The artefact was recovered from Annaghmakerrig Bog, near Newbliss, Co. Monaghan.

The population became more settled during the Neolithic period (c. 4,000-2,400 BC) with a subsistence economy based on crop growing and stock-raising. This period also saw changes in burial practices, and a tradition of burying the dead collectively and carrying out of cremations emerged. Over 40 burial sites that likely date to the Neolithic period are known in County Monaghan. The closest of these sites to the development at Lough Muckno are two court tombs, one at Corlealackagh (RMP MO019-030), 5kms northwest of Castleblayney, and another court tomb (RMP MO025-005) at Annaglevy, 5km southwest of Castleblayney. The court tomb at Corlealackagh is marked as 'Giant's Grave' on the mid nineteenth century first edition 6" to a mile scale Ordnance Survey map of the area. A portal tomb (or portal dolmen) is known at Corleanamaddy, 5km northeast of Castleblayney. An unclassified megalithic burial site is situated at Maghernakill, 5km south of Castleblayney. Apart from Neolithic funerary sites, Monaghan also has evidence of Neolithic settlement sites. Archaeological excavations carried out at Monanny townland as part of the N2 Carrickmacross Bypass, County Monaghan, resulted in the identification of three Neolithic buildings that were radiocarbon dated to 3900-3700 BC (NRA and Monaghan Co Co, 5).



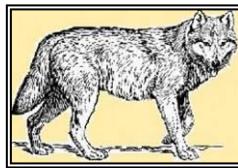
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The Bronze Age (c. 2,400-600 BC) is characterised by the introduction of metalworking technology to Ireland and coincides with many changes in the archaeological record, both in terms of material culture as well as the nature of the sites and monuments themselves. Though this activity has markedly different characteristics to that of the preceding Neolithic period, including new structural forms and new artefacts, it also reflects a degree of continuity. During this period knowledge of metalworking was acquired resulting in changes in material culture such as the introduction of metal tools and artefacts, as well as the introduction of a highly decorated pottery called Beaker pottery. In addition to changes in material culture, there were changes in burial rite from communal megalithic tombs to single burial in cists and barrows. An undated cist grave (RMP No MO024-013) was identified at Cabragh townland in 1948, 4kms southwest of Castleblaney. This site was situated on a fairly low and broad drumlin and comprised of a short rectangular cist (Waddell 1970, 128) containing a bowl food vessel (Lucas 1960, 18). A standing stone (RMP MO020-029) is situated at Tavanskeagh townland, on the south facing slopes of Mullyash Mountain, 6kms northwest of Lough Muckno.

An examination of the online archaeological excavations database (www.excavations.ie) outlines that archaeological monitoring of the construction of new access roads on Black Island and White Island, Onomy townland, Castleblayney, resulted in the identification and partial excavation of a number of features associated with fulachta fiadh (Archaeological Licence 12E0104). Some of these features were preserved in situ, and others were excavated. Their presence on the shores of Lough Muckno indicates that the Bronze Age inhabitants of the area frequented the area of modern-day Hope Castle estate.

A number of fulachta fiadh (RMP MO019-049, MO019-049001, MO019-050, and MO019-050001) were identified and archaeologically excavated as part of the N2 Clontibret to Castleblayney Road Realignment, in the townland of Grig, 3kms northwest of Castleblaney. These archaeological sites were radiocarbon dated to the Bronze Age, and comprised of spreads of burnt stone and charcoal stained soils which overlay troughs that were used for heating water. These sites provide evidence of pyrolithic (hot stone) technology in County Monaghan between 5000 and 3000 years ago (Halpin B. 2008, 312; 2010, 6, 11, V).

By the 4th millennium BC, a farming economy was developing that involved forest clearance. Archaeological and pollen records show an increasingly settled landscape with some fixed field boundaries for livestock and cereal production. While farming did spread throughout the country, the preference was for light soils and upland margins with free draining soils and light



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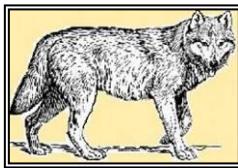
woodland cover. Extensive use of the productive though heavy soils of the poorly drained central lowlands was restricted by virtue of the limitations of available tools and technology.

As is generally the case in Ireland, the Iron Age (600 BC – 400 AD) has left few traces in the environs of Lough Muckno, and the surrounding landscape around Castleblayney, although it is likely that at least some of the enclosures and barrows in the landscape around this part of Monaghan, were in use during this period.

Early medieval

The Gaelic society that existed in Ireland during the Early Medieval Period (c. 400-1169 AD) is characterised as a rural agrarian culture. The island of Ireland was divided into approximately 150 kingdoms (*túath*) of varying size, each ruled by a king of varying power, and influence. The people who lived in Monaghan and Armagh at this time are known as the Airgíalla (anglicised to Oriel). Pseudo-historical accounts from the medieval period relate that the territory of Airgíalla was occupied by the Ulaid dynasty until the fifth century when the combined armies of three brothers known as the Three Collas (who were Cairell Colla Uais, Muiredach Colla Fo Chrí, and Áed Colla Menn) defeated the tribes of Ulaid, and settled in Monaghan and Armagh. In annals dating to the twelfth century, the placename Farney is used interchangeably with the placename Airgíalla. The placename Crioch Mugdornud (later Cremorne, and Anglicized as the barony of Cremorne in the late sixteenth century) appears in annalistic references dating to the tenth century (<https://www.logainm.ie/en/199>).

The ringfort (rath or cashel) (Dún or Lios) is the most common surviving domestic settlement mode from the early medieval period. These sites are believed to represent the farmsteads of an extended family. They consisted of an earth-cut ditch, often circular or sub-circular in plan approximately 25m to 50m in diameter, surrounding and enclosing a living space. The ditches were often several metres wide and up to 3m deep. In the instance of cashels, stone walls were used to build high enclosing walls around the site. In the case of raths the soil from the ditch was often cast up to the inner side of the enclosed living space to create a high protective bank. Some ringforts (raths or cashels) have evidence of wooden palisade fences also enclosing the living space. Wooden, and less often, stone buildings housed the inhabitants in the enclosed space. The smaller sized and single banked type (univallate) was more than likely home to the lower ranks of society, while larger examples with more than one bank (bivallate/trivallate) housed the more powerful kings and lords. They are regarded as defended family homesteads, and the extant dating evidence suggests they were primarily built between the 7th and 9th centuries AD (Stout 1997, 22-31). There are approximately 45000 known

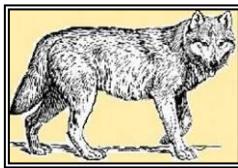


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ringforts (raths or cashels) in Ireland and are 669 known ringforts in County Monaghan. There are 286 further ‘enclosures or earthworks’ in County Monaghan. The remains of many more likely survive under the ground throughout the country. Enclosure sites belong to a classification of monument whose precise nature is unclear. Often, they may represent ringforts, which have either been damaged to a point where they cannot be positively recognised, or are smaller or more irregular in plan than the accepted range for a ringfort.

Several known archaeological sites that may date to the early medieval period are situated within the former estate lands of Hope Castle. An enclosure (RMP MO020-019, AH05) is situated in Onomy townland 300m south of Hope Castle, within the concept proposal area. This enclosure AH05 is situated in woodland on the summit of a north x south drumlin that overlooks Lough Muckno. This site was examined by the author during the site inspection and is formed by a low sub-circular bank with some mature trees. A modern tarmac path is situated to the west of the enclosure. A ringfort (RMP MO025-004, AH10) is situated in Toome townland on a narrow peninsula on the southern end of Lough Muckno. This ringfort is within the concept proposal area. Two more ringforts (RMP MO025-011 and RMP MO025-012) are situated in Annadrumman townland, southwest of Lough Muckno. These ringforts and enclosure sites are evidence of the settlements of the inhabitants of this part of Monaghan in the centuries after the arrival of Christianity to Ireland in the fifth century. The possible early medieval monastic site (RMP MO020-020001, AH08) at Church Hill townland, on the eastern shore of Lough Muckno is reputedly the site of the monastery of St. Maeldóid. St Maeldóid appears in annalistic references dating to the seventh century, and is recorded as being of the Uí Mhéith Gaelic tribe from whom the barony of Omeath in Louth is named (Ó Riain 2011, 439). The annals record that the monastery at Church Hill was attacked by Vikings in 830 (Gwynn and Hadcock 1970, 42). However, the monastery recovered, and is included in the ecclesiastical taxation (1302-06) of Pope Nicholas IV (Shirley 1879, 289). This papal taxation was levelled on all religious houses in Ireland and Britain to help pay for crusades in the Holy Lands. Although the monastery eventually failed, the church continued to be used as a parish church for the inhabitants of medieval Lough Muckno and its environs. It eventually was replaced by the church (RMP MO020-027, AH03) constructed at Onomy by the sixth Lord Blayney, southwest of his castle, in the late seventeenth century (Leslie 1929, 233-6). This church eventually became the parish church of the town of Castleblayney.

Until the arrival of the Anglo-Normans in the twelfth century, family names were not commonly used in Gaelic Ireland. Kinship travelled along paternal lines and the population of the area



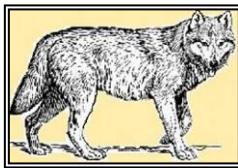
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around Lough Muckno would have likely been loosely related. From the medieval period onwards the area of modern-day Castleblayney was associated with the MacMahon (also McMahon) dynasty, whilst the O'Carroll dynasty was associated with other parts of modern-day County Monaghan.

Medieval

The arrival of the Anglo-Normans in 1169 AD accelerated the transfer of power and people from rural areas to urban centres. The Anglo-Normans established their society around shires, manors, villages, castles and churches. The arrival of Anglo-Normans in Ireland towards the end of the 12th century caused great changes during the following century. Large numbers of colonists arrived from England and Wales and established towns and villages. They brought with them new methods of agriculture which facilitated an intensification of production. Surplus foods were exported to markets all along Atlantic Europe which created great wealth and economic growth. The area around modern-day Castleblayney was conquered by the privateer Anglo-Norman adventurer John De Courcy in the late twelfth century. However, De Courcy, who conquered much of east Ulster, did so without the approval of King Henry II. King John did not favour De Courcy, and was suspicious of his intentions. Hugh de Lacy, the son of the Lord of Meath, was favoured by King John. De Lacy entered into conflict with De Courcy and following his capture in 1205, King John made de Lacy Earl of Ulster, and issued a grant of lands including Monaghan to him. From the late thirteenth century the Annals of the Four Masters record that the MacMahons were lords of Airgíalla, however it should be noted that this would only refer to that part of Airgíalla not under English control. The MacMahons were less powerful than their northern neighbours the O Neills of Ulster. The MacMahons control of strategically placed Monaghan, on the route between the English controlled Dublin, Meath and Louth, and the Gaelic controlled Ulster, resulted in both the English and Gaelic lords coveting the lands of Castleblayney and its environs. Consequently, during the fourteenth to sixteenth centuries, the various MacMahons factions regularly fought amongst themselves for supremacy, and switched allegiances to the English and O Neill, as their interests aligned.

The 14th century throughout northwest Europe is generally regarded as having been a time of crisis, and Ireland was no exception. Although the Irish economy had been growing in the late 13th century, it was not growing quickly enough to support the rapidly expanding population, especially when Edward I was using the trade of Irish goods to finance his campaigns in Scotland and Wales. When the Great European Famine of 1315-1317 arrived in Ireland, brought about by lengthy periods of severe weather and climate change, its effects



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were exacerbated by the Bruce Invasion of 1315-1318. Manorial records which date to the early 14th century show that there was a noticeable decline in agricultural production. This economic instability and decline was further worsened with the onset of the Bubonic Plague in 1348.

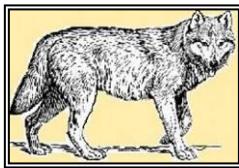
Before the Tudors came to the throne the kings of England were also the kings of western France, and so during the 14th and 15th centuries the various lords who ruled in Ireland were largely left to themselves. The Annals of the Four Masters record that in the year 1424 a great force of English soldiers under the Earl of Ormond attacked the Gaelic settlements and castles in Ulster including at Machaire Mucnamha (the Plain of Muckno).

Post medieval

The Tudor conquest of Ireland brought a greater interest in the affairs of Ireland. They wanted to put a stop to the raids of the Gaelic Irish on and within the areas under English rule. To do this, they ruthlessly put down any rebellions and even quashed inter-tribal feuds. English, and later British, settlers were enticed to establish settlements within the conquered regions. The first of these plantations occurred in the mid-16th century in what is now Laois and Offaly. After the Desmond rising in Munster in 1585 was suppressed, next came the Munster plantation, implemented by the Lord Deputy of Ireland Sir John Perrot. Various parts of Waterford, Limerick, Kerry, Cork and Tipperary were populated by English and Welsh planters, settlers and adventurers.

Following the Dissolution of the Monasteries under Henry VIII in 1536, religious influence and land holdings in Ireland reduced dramatically. The Augustinian lands at Church Hill, on the eastern shore of Lough Muckno were forfeited to the crown.

In the late sixteenth century the Lord Deputy Sir John Perrot, continued the process of Tudor conquest and formed seven counties of Ulster: Armagh, Monaghan, Tyrone, Coleraine (now county Derry), Donegal, Fermanagh, and Cavan. He achieved this with some acceptance of the policy of 'surrender and regrant' by Gaelic lords of Ulster. However, following the recall and subsequent imprisonment of Perrot in the Tower of London, his replacement as Lord Deputy of Ireland William Fitzwilliam, implemented a more robust campaign in Ulster, which saw the removal of some of the titles and support previously issued to Gaelic lords and chieftains. He then oversaw the issuing of new titles to lords considered more loyal to the crown, usually on the basis of religion. The subsequent backlash of Gaelic revolt in Ulster became the Nine-Years-War (1594-1603). Following the military defeat of O'Neill, O'Donnell

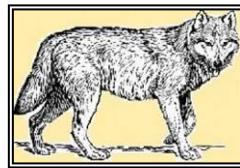


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and the other Gaelic lords of Ulster, and their escape to Europe, the Plantation of Ulster was implemented under King James I. The lands of modern-day Castleblayney were granted to Sir Edward Blayney of Montgomeryshire in Wales. Blayney was an experienced soldier who had fought in the British Army in Spain and Belgium. He was dispatched to Ireland in 1598 during the Nine-Years-War, and was appointed captain of the garrison in Monaghan town by Lord Mountjoy. Blayney was rewarded by the king for his efforts in Monaghan with grants of land. In the early seventeenth century King James I granted Sir Edward seized Augustinian church land at Muckno on the north-eastern side of the lake in Church Hill townland. Sir Edward Blayney constructed a type of castle dwelling called a fortified house (RMP MO020-018, AH01), at Onomy townland overlooking the western shoreline of Lough Muckno, and established the new town in circa 1612 (Lavery 1907, 31-2). The fortified house AH01 constructed by Blayney at Onomy is not the extant Hope Castle building BH01. Evidence of the fortified house may remain under the extant building and other landscape features. As such the original fortified house AH01 is included in the RMP. Fortified houses first appear in Ireland in the late sixteenth and early seventeenth centuries. They replaced the tower-house castle as the preferred settlement mode of the landowning class in Ireland. As defensive dwellings fortified houses were more commodious than the tower-house castles, with larger rooms, large windows, high gables, and several fireplaces. The fortified houses were often rectangular in plan with projecting angle towers that afforded the inhabitants of the houses some protection from attack. Whilst the fortified house may not have appeared overtly as defensive as the tower-house castles, many fortified houses featured enclosing high stone bawn walls, which provided additional protection to inhabitants. Details of the fortified house constructed by Blayney at 'Ballinelungan' (Ballylurgan) as Onomy was then known as is described by a contemporary writer is as follows:

'Sr. Edward Blanye hath buylte a very large bawn w'th lyme and stone 18 foote high, well flanked w'th bulworkes upon his land of Ballinelungan... Upon the bawne is buylte a fayre gate house and two other houses of lyme and stone upon two of the corners of the bawn w'ch flankes the whole work. They containe two or three roomes or lodgings a pice w'th chimneys; In w'ch Bawne he is buyldinge a fayre and spacious house of stone worke already two yards high above the grounde, the walles of a great thickness w'th vaults all buylte upon his own charge' (Shirley 1879, 241; Hunter 1975 81-2).

The historical reference to the bawn wall (RMP MO020-018001, AH02) around the fortified house is archaeologically significant. The bawn wall does not survive above the ground. It may



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have been removed at the same time as the fortified house (see below); possibly the stone was used to construct the walled gardens. However, the bawn wall AH02 is considered to be an important archaeological site, and is included in the RMP. A contemporary schematic drawing of the fortified house 'castle' built by Lord Blayney at 'Ballelurgan' (Onomy) survives in the library of Trinity College (see Figure 3 below). This map depicts the fortified house AH01 as a rectangular building with projecting angles at each of its four corners. The house is depicted as measuring circa 80 ft x 50 ft (24m x 18m). The bawn wall AH02 is depicted as measuring circa 240 ft x 240 ft (73m) and encloses the main building and is depicted as having projecting angle towers. Two of the angle towers are depicted as being sub square and two are depicted as circular. Of course it should be considered that this schematic drawing records the intended project, and not the completed project by Lord Blayney, and as such, could differ from the final project.

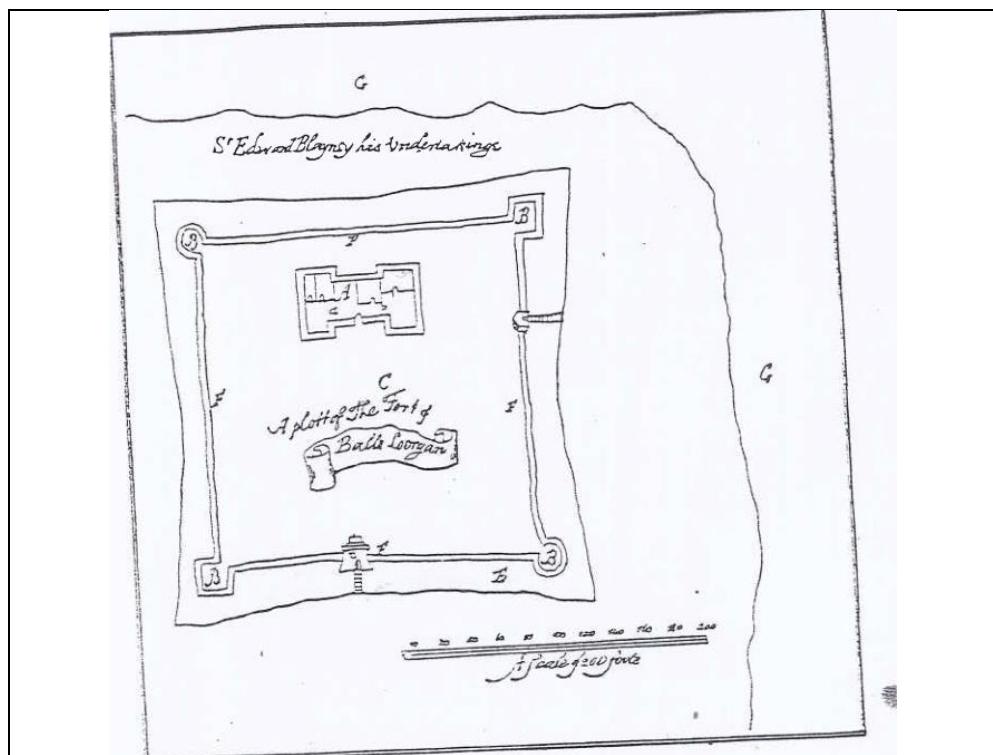
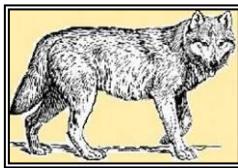


Figure 3 Extract from early seventeenth century drawing of castle at Castleblayney (Courtesy Trinity College Map Library).

The location for the new town of Castleblayney (AP01) was chosen as it was roughly halfway between the already established English garrison towns of Monaghan and Newry. In 1621 Sir Edward Blayney was elevated to the peerage and assigned the title of Lord Blayney. Sir

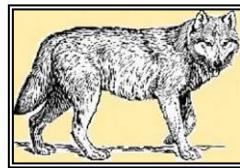


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Edward Blayney's new town is recorded as being called Castleblayney at least as early as 1663.

The Confederate Wars (1640s) and the Cromwellian Campaign (1649-51) saw huge upheaval in Ulster with great loss of life and property in Monaghan. The Confederation of Kilkenny (Confederate Parliament) was the title given to the alliance between the native Irish nobility and the Catholic Anglo-Irish lords of the Pale in support of Charles I against the Parliamentarians. The Confederacy ended with the participants unable to come to an agreement, with one faction supporting the Papal Nuncio's position of war and the other faction suing for peace. During the Confederate Wars the MacMahons succeeded in seizing the house AH01 from Lord Blayney. Historical accounts from the period suggest that the MacMahons under Hugh Mac Patrick Dubh MacMahon caused significant damage to the house. The damage caused to the house and lands was outlined by Lord Blayney in the 1641 Depositions as including the loss household items worth at least 1000 marks (sic), goods and riding horses worth £237, plate £500, linen £500, and animals including cattle and sheep valued at £925, ready money (cash) of £296, debts of £400, and a library of books worth £500 (Ohlmeyer 2009, 56). In total Blayney calculated his losses as £13873 8 shillings and 4 pence (*ibid*). The fighting that took place at Castle Blayney between the MacMahons and those loyal to the Lord Blayney constituted a low-level battle, and it is not known if cannon were used by the Gaelic MacMahons when attacking the town and castle at Castleblayney. However, the site of the battle (AP02) is an archaeological site, and should be viewed as such. Battlefield archaeology is the study of the material remains and topography of a battlefield to understand a conflict, and place it in its wider context. The National Monuments Service is currently in the process of appraising battlefield sites in Ireland, and adding them to the RMP, thus affording them legal protection under the National Monuments Acts 1930-2014. Following the defeat of the Catholic Confederacy, the house and lands at Castleblayney were returned to the Blayney family, but it is unclear if the house was ever repaired. It is also unclear if a second battle took place to return the town and castle under the control of the Blayneys. However, the position of the Blayney family in Castleblayney was confirmed as a result of the Cromwellian Invasion of the 1650s, and also reinforced as a result of the Williamite – Jacobite Wars in Ireland at the end of the seventeenth century.

The Down Survey maps of Monaghan depict the house AH01 and town AP01 at Castleblayney (see Figure 4). In this map the house and several other buildings are shown. Unfortunately,



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the Terrier (written information) that accompanied the Down Survey, about the parish of Muckno does not survive.

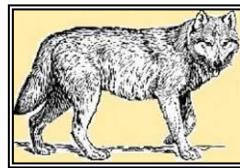
The Census of Ireland of 1659 records the total population of Monaghan as 4083 families comprising 3649 Irish and 434 English (Pender 1939). The most common family names in Monaghan are recorded as McMahon, McKenna, O Duffy, O Connolly, McCabe, McWard and McArdle.

Towards the end of the seventeenth century the Blayney's constructed a new parish church AH03 on a drumlin, south of the town of Castleblayney, and west of the castle. This church replaced the dilapidated church AH08 on the east shore of Lough Muckno that had been used since the medieval period. The seventeenth century church was subsequently replaced by another church, constructed in the centre of the graveyard (RMP MO020-027001, AH04) in 1810 (Lewis 1837 vol. 2, 408).



Figure 4 Extract of Down Survey map (dating to 1650) of the County of Monaghan showing the barony of 'Cremourne' and 'Castleblany'.

By the end of the eighteenth century the fortified house AH01 at Castleblayney was a ruin, and a drawing by Francis Grose made in 1770 shows that it was a T-shaped building, comprising two storeys and attic, with corner machicolations (see Figure 5, Grose 1791, vol.



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2, 72, Pl A, B). The precise location of the original fortified house and bawn is not known, however contemporary sources indicate that the new house which was built in 1799 was contiguous to the old one (Coote 1801, 91). It is also not clear if the rubble and masonry from the original house were reused in the Woodgate house (BH01).

The original ruined fortified house at Muckno was eventually removed and replaced in 1799 with a country house (NIAH 41308045, and included in the RPS for Monaghan, BH01) to a design by William Woodgate. This country house, though much altered, survives as Hope Castle. Woodgate had studied as an architect under John Soane of London, having previously described himself as a carpenter (<https://www.dia.ie/architects/view/5715/WOODGATE-ROBERT>). Woodgate's first project in Ireland was in 1791 when he oversaw the reconstruction of a county house for the Marquess of Abercorn at Baronscourt, County Tyrone, that had been damaged by fire.

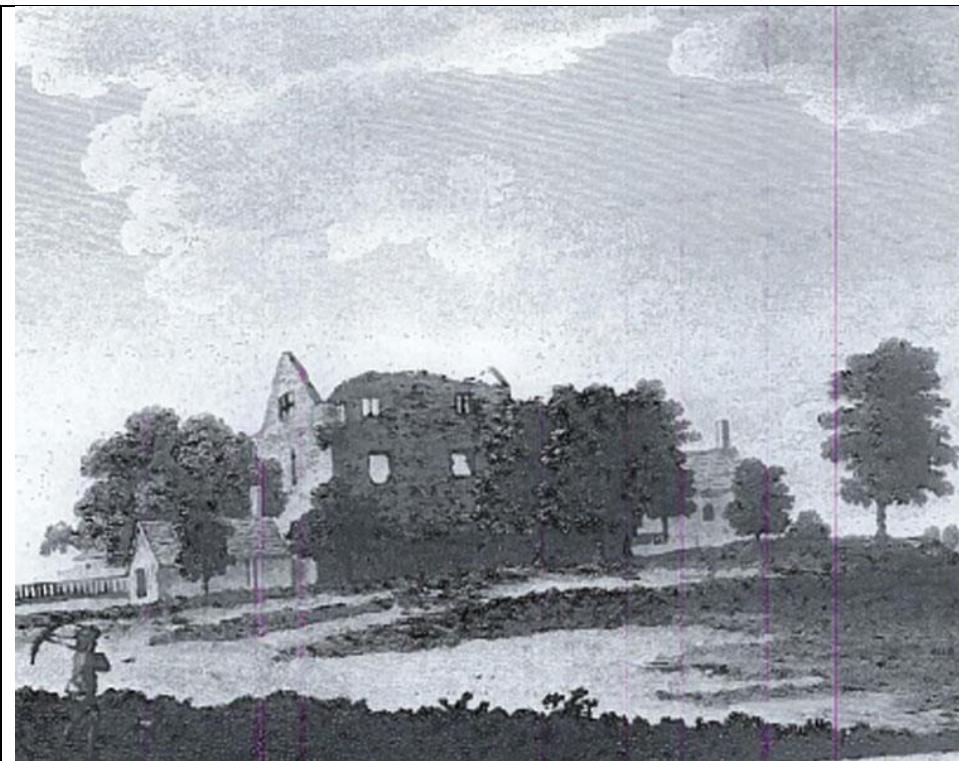
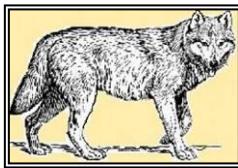


Figure 5 Extract from a painting of Castle Blayney AH01, County Monaghan by Francis Grose (Grose, 1791).

The new country house BH01 overseen by Woodgate at Muckno was part of the redevelopment of the Blayney estate to suit the fashions of the time including the construction of a walled garden (NIAH 41308042, and included in the RPS for Monaghan, BH03), enclosing walls (BH11) and entrance gates and piers (NIAH 41300237, and included in the RPS for



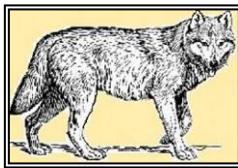
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Monaghan, BH04) were constructed. The NIAH entry 41308045 for the country house BH01 is as follows:

'Five-bay three-storey country house with basement, built 1799, to designs by architect Robert Woodgate, having central bays to front elevation with single-storey entrance porch. Five-bay side elevations have slightly recessed central bays, with single-storey bow to east, lake, elevation, and slightly projecting middle bays to south, garden, elevation. Roof concealed by crested rendered parapets with urns and finials having scrolled plaster decorated pediment to lake elevation and segmental pediment to garden, added in Victorian era. Cast-iron downpipes drain parapet gutter, located between ends bays of elevations. Moulded cornice between parapet and top floor, heavier moulded cornice between top and first floors, and simple string course between first and ground floors. Flat-roofed bow to lake elevation has render parapet and dentillated cornice. Walls painted smooth rendered with rusticated render quoins. Square headed window openings throughout, except for end bays of ground floor of garden elevation which are round-headed with keystones, all with moulded architraves and having cornices to lower floors. Replacement uPVC frames to many openings, and boarded up elsewhere, with moulded stone sills to first floor, held on scrolled corbels. Middle opening to first floor of garden elevation has round-headed niche with plaster statue, and top floor has blank rectangular panel. Porch has flat roof with decorative cast-iron brattishing to parapet. Round-headed door and window openings have imposts and moulded archivolts, doorway has large spoked fanlight and replaced double-leaf timber door, flanked by pilasters. Low balustrade to basement area with turned balusters and moulded coping to each side of porch. Single-storey late twentieth-century pitched roof extension to recessed central three bays of rear elevation obscured by timber hoarding. Three-centred arch vehicular access opening with ashlar sandstone block-and-start dressings to west of house and accessed via roadway connected with former stable block to south-west. House stands facing lawns stretching as far as Lough Muckno shores to north and east, with golf course on former parkland to south-east of house.'

(<https://www.buildingofireland.ie/buildings-search/building/41308045/hope-castle-onomy-castleblayney-monaghan>). The NIAH survey identifies Hope Castle as being of architectural and historical special interest, and constituting a building of regional importance in terms of architectural heritage (*ibid*).

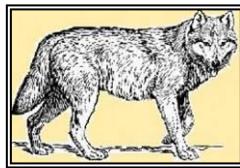
The redevelopment of the estate was commissioned by the 11th Baron Blayney, Andrew Thomas Blayney. Andrew Blayney was a soldier in the British Army during the Napoleonic Wars, and commanded the 89th Regiment of Foot, eventually rising to the rank of Lieutenant



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General. He was captured by Polish and French troops after the battle of Fuengirola in Spain in October 1810, and subsequently held as a prisoner of war for four years. Between the 1820s and 1830s Andrew Blayney instigated the laying out of the town of Castleblayney AP01, in its current form. This included the construction of the triangular Market Square and many of the buildings along the square. His son Cadwallader Blayney was the 12th Baron Blayney, and it was he who eventually sold the Blayney estate to Thomas Hope. The 11th Baron Blayney commissioned the celebrated landscape designer William Sawrey Gilpin to improve the Blayney estate. This included the construction of landscape terraces, planting of specimen trees, and laying out of paths. As part of the redevelopment the entrance gateway BH04 to the estate comprising a pair of ashlar limestone gate piers with cast-iron spear-headed gates and railings atop moulded stone plinths, was adapted, at the east end of Market Square. Gate lodges (NIAH 41308041 and NIAH 41308035, and included in the RPS for Monaghan, BH13) were constructed either side of the entrance off Market Square. A u-shaped stable block (NIAH 41308044, and included in the RPS for Monaghan, BH02) was also built to the west of the house. This stable block was altered in 1865, when an east facing entrance pavilion with flanking railings, were added. Contemporary with the works to the stable block in 1865, a rectangular three-bay three-storey barn (NIAH 41308043, and included in the RPS for Monaghan, BH05), was constructed to the south of the stable block.

In 1837 Samuel Lewis described the town of Castleblayney as containing 1828 inhabitants (Lewis 1837, 290). He outlined that the settlement at Castleblayney only took on the appearance of a town in the late eighteenth century, with the rebuilding of houses with stone, and the establishment of a linen market, by Lord Blayney (*ibid*). The town is described as comprising '341 houses....and has a respectable appearance. It consists of three streets meeting in the market-place, which is of a triangular form; and in the centre, on an elevated spot commanding every avenue, is the market-house, a very neat and ornamental building, with a spacious room on the second story, and a neat bell turret above the roof. Near the market-house are convenient shambles. The manufacture of linen, though not so extensive as formerly, furnishes employment to many persons in the surrounding districts; and there are three tanyards in the town.' (*ibid*). Lewis also describes the country home and estate of Lord Blayney: 'The mansion of Castle Blayney, the seat of Lord Blayney, is closely adjoining, and is encompassed by a demesne of great extent and beauty, which includes the Lake of Mucknoe and some fine woodland scenery: it is a handsome modern edifice, built near the site of the old castle. The ruins of an ancient fortress in Cornero (Concra) wood, on the shore of the lake, are also within the demesne. The parish church of Mucknoe is in the town; it is very neat, with



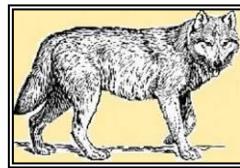
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a handsome spire, and the interior has been comfortably fitted up by Lord Blayney, who has also planted the churchyard with trees and evergreens.' (*ibid*).

Lewis' description of the parish church at Castleblayney 'comfortably fitted up by Lord Blayney' is not the extant church. The church referred to by Lewis was constructed circa 1810, financed by a loan of £1000 from the Board of First Fruits, as well as 'gifts of £200 from the late Lord Blayney, £100 from Lord Templeton, and £50 from Lady Eliz. Alexander' (Lewis 1837 vol. 2, 408).

The mid-19th century 1st edition 6" to a mile scale Ordnance Survey (OS) map of the area depicts the estate and town of Castleblayney in some detail (see Figure 6). The town AP01 is laid out roughly in its extant form which matches that described by Lewis in 1837. The Blayney country house BH01 is depicted as comprising a roughly rectangular block with two parallel wings on its western elevation. The coach house and stable block BH02 and walled garden BH03 are depicted on this map, roughly in the locations that they remain in. Black Island, White Island, and much of the area of Concra Wood Golf Course is depicted on this nineteenth century map as being forested. The early nineteenth century church referred to previously, is shown on this map.

An early nineteenth century farm complex (NIAH 41402503, BH12) is depicted on this map in Concra. The farm complex is depicted on the map as a series of buildings that surround a courtyard. At the northern end of the Concra headland this map annotates a structure as 'Ruins of Castle'. The archaeological file maintained by the NMS for this structure have identified it as a folly (RMP No MO025-047, AH06), likely constructed in the eighteenth century by the Blayney family as a landscape feature, which would have been visible from their fortified house.



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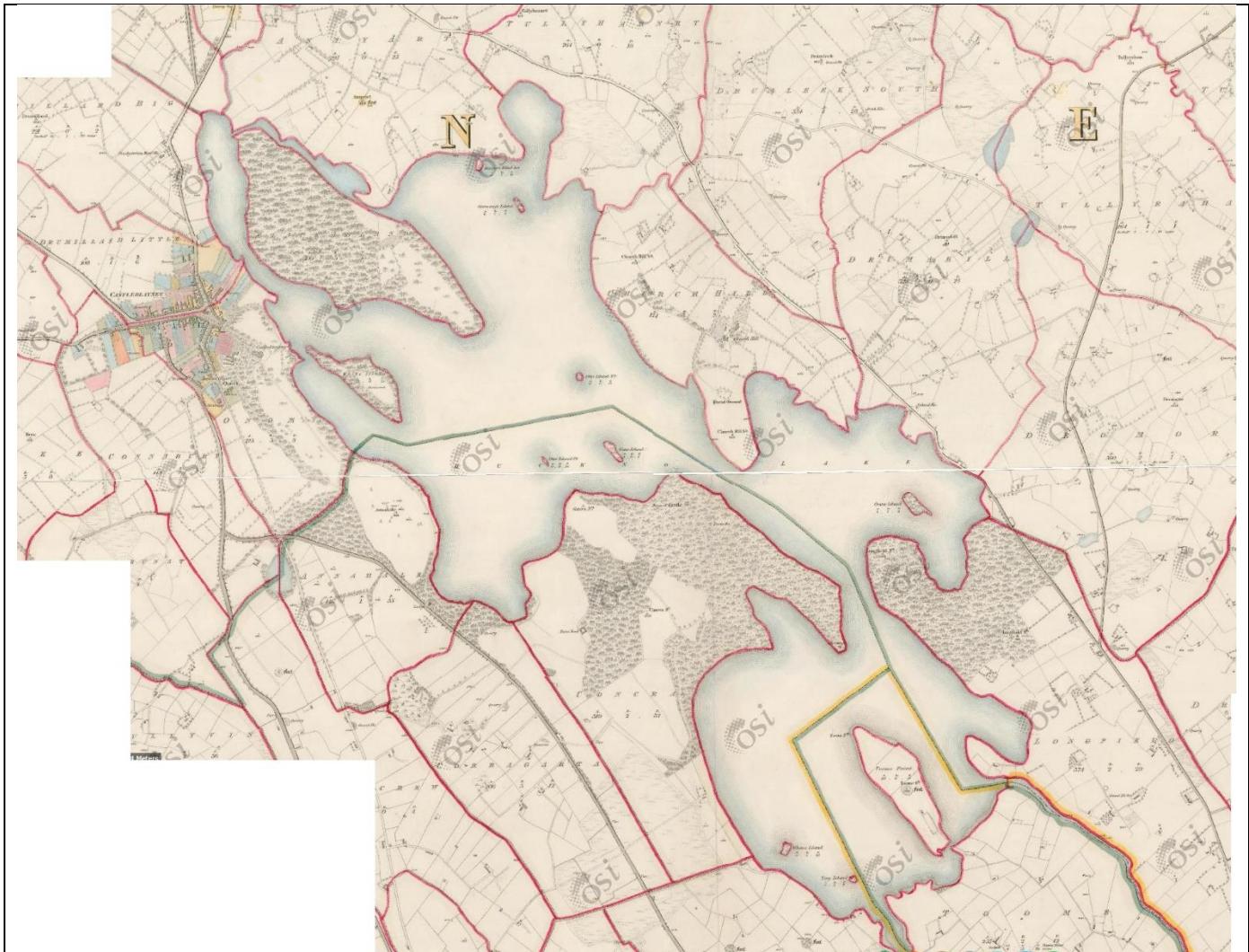
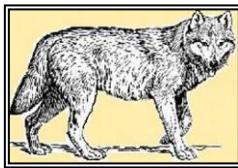


Figure 6 Extract from 1st ed OS map (dating to 1835) showing location of Lough Muckno, Castleblayney, County Monaghan.

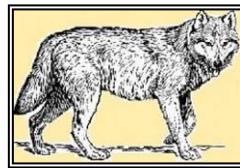
In 1853 the 12th Lord Blayney, Cadwallader Blayney, sold off the estate and house to Henry Thomas Hope of Deepdene, Surrey. The country house was then renamed Hope Castle which remains its name today. The Hope family were wealthy Dutch emigrants to England. Henry Thomas Hope inherited his father Thomas Hope and his uncle Henry Hope's fortunes, upon their deaths. Both his father and uncle had amassed wealth and property, due to their business and trade in arts, design, interior decoration, gems, and banking. Following the purchase of the Blayney estate and county house BH01, Henry Thomas Hope carried out extensive works to the estate, including planting and landscaping, and commissioned works to the house, stable block, and estate. In 1856-8 Hope financed the construction of a new parish church of St Maeldóid (NIAH 41308067, and RPS for Monaghan, BH06), to replace the one constructed in the early nineteenth century. This church of St. Maeldóid BH06 is the extant Church of Ireland



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parish church in Castleblayney. As mentioned previously, Hope added the east facing entrance pavilion with flanking railings to the stable block BH02. He also constructed a rectangular three-bay three-storey barn BH05 that functioned as an outbuilding for the stable BH02. A garden folly designed to look like a ruined temple (NIAH 41402502, and included in the RPS for Monaghan, BH07) was constructed at Concra. Anecdotal evidence suggests that this structure was used as a summer house or resting house by the Hope family. This landscape feature was constructed to be visible from Hope Castle. The Hope family continued to develop the estate throughout the second half of the nineteenth century. They altered the entrance to the estate off the east end Market Square BH33 and constructed gate lodges BH13, either side of the entrance gate BH04, as well as constructing the courthouse block as an extension to the Market House (NIAH 41308026, and RPS for Monaghan). In the wider estate the Hopes constructed an artisan style cottage (NIAH 41402501, and RPS for Monaghan, BH08) circa 1860 at Concra, overlooking Lough Muckno, and a gate lodge (NIAH 41402507, and RPS for Monaghan, BH09) was constructed circa 1875 at Annadrumman.

Following the death of Anne Adele Hope, the widow of Thomas Hope, in 1884, the estate and country home at Castleblayney was inherited by their grandson Lord Francis Hope. Lord Francis Hope was the son of the 6th Duke of Newcastle Henry Pelham-Clinton, and Henrietta Adela Hope. He inherited the Hope estate at Castleblayney on condition that he assume the name and arms of the Hope family, which he did in 1887. He and his actress wife lived an extravagant lifestyle, and he was declared bankrupt in 1896. Lord Francis Hope did not live in Hope Castle following his bankruptcy. The estate was leased out by the Hopes and between 1900 and 1904, was rented to Prince Arthur, Duke of Connaught and Strathearn, a son of Queen Victoria. At the time Prince Arthur served as the commander of British military forces in Ireland and had an official residence at the Master's House at the Royal Hospital, Kilmainham. The estate and Hope Castle were used as his private country residence during these years. The first edition 25 inch to a mile scale Ordnance Survey map of the area dates to 1908. This map provides greater detail about Hope Castle BH01 and estate and the area around Lough Muckno, in the early twentieth century. Hope Castle is depicted as having been subject to alterations since the mid nineteenth century and is annotated as 'Blayney Castle'. Both west wings of the house had been widened, and extensions had been added to their western extents. The estate around the house is depicted as having been significantly landscaped since the early nineteenth century, by William Sawrey Gilpin. A fountain BHP01 is depicted to the north of the house. Paths and tree lined avenues are depicted in the grounds and a formal garden with ornamental circular planting is depicted to the south of the house BHP02. The



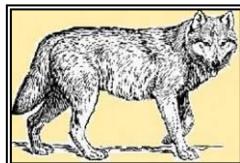
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stable block BH02, walled garden BH03, entrance lodges BH04 and BH08, ice houses BHP03, and boat houses BHP04, are all shown on this map. There is no bridge shown as joining Onomy to the Black Island, although a ferry crossing point is depicted. White Island is also not joined to the mainland. The archaeological site AH05 identified as enclosure that is location in the grounds of Hope Castle, is depicted on this map as being an ovoid shaped site formed by a bank and external ditch. In Conra, the farmyard is depicted, as are gate lodges BH10, 'pheasantrys' BHP05 and BHP06. Several pedestrian crossing points are depicted in Annahale townland and are described as 'foot bridges' BHP07 and BHP08.

From 1919 to 1921 Hope Castle BH01 was used as a military barracks. Later, between 1932 and 1937, the building was used as Monaghan County Hospital. It functioned as a convent for the Franciscan Order from 1942-1970s. Each of these occupiers altered the building either externally, internally, or both. The house has been in the ownership of Monaghan County Council since 1980, and had been leased out and used as a restaurant and venue until 2010, when fire severely damaged the building.



Figure 6 Extract from first edition 25" to a mile scale Ordnance Survey map of the area.

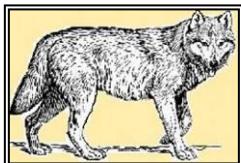


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Known Cultural Heritage, Archaeological Heritage and Architectural Heritage Sites.

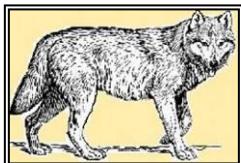
The former grounds and estate of Hope Castle are an important Cultural Heritage Asset CH01. The concept options proposal includes several known archaeological sites. Several structures and buildings that are included in the RPS for Monaghan are also within the concept area, as are several sites that are included in the NIAH, but not in the RPS for Monaghan. An examination of the historic mapping of the area resulted in the identification of several AP and BHA sites. These sites, buildings and structures are listed in Table 1.

Reference No:	RMP/ RPS/ NIAH No:	Townland	Type	Location
CH01	N/A	Onomy	The relationship between the inhabitants of Castleblaney and Hope Castle estate is an important intangible aspect of Cultural Heritage.	N/A.
AH01	MO020-018	Onomy	Fortified House, constructed in the early 17 th by Sir Edward Blayney. Removed in the late 18 th century and replaced with BH01.	Within concept area. Unknown exact location, circa 682998E, 819598N.
AH02	MO020-018001	Onomy	Bawn wall constructed by Sir Edward Blayney around the fortified house. A contemporary drawing indicates that the bawn wall featured projecting angle towers.	300m SW of site. Unknown exact location, circa 682981E, 819573N.
AH03	MO020-027	Onomy	Church; 17 th century church constructed by Sir Edward Blayney to the north of the extant St. Maeldoid's Church BH06.	Situated to the west of concept area. Unknown exact location, likely at 682838E, 819518N.
AH04	MO020-027001	Onomy	Graveyard; 17 th century graveyard associated with the contemporary church AH03 constructed by Sir Edward Blayney.	300m SW of concept area. At 682833E, 819502N.
AH05	MO020-019	Onomy	Enclosure, shown on historic Ordnance Survey maps and visible during site inspection.	Within concept area. At 683055E, 819249N.



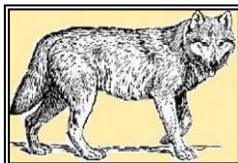
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Reference No:	RMP/ RPS/ NIAH No:	Townland	Type	Location
AH06	MO025-047	Concra	Folly, depicted on historic mapping of the area and annotated as 'castle'. However, examination by the NMS identified it as a landscape feature likely constructed by the Blayney family as a folly.	Within concept area. At 684927E, 818926N.
AH07	MO025-048	Concra	Fortification; possible 17 th century military site constructed near the summit of a rise. Now just east of the carpark of Concra Wood Golf Club.	Within concept extent. At 684809E, 818565N.
AH08	MO020-020001	Church Hill	Church; medieval abbey church site. Following the Dissolution of the Monasteries in the 16 th century, it became the parish church of Gaelic settlement of Machaire Mucnamha (the Plain of Muckno).	Situated on the eastern shore of Lough Muckno. At 685075E, 819424N.
AH09	N/A	Onomy	Archaeological sites identified on White Island and Black Island and preserved in situ during development of roads and improved accessibility, under archaeological licence 12E0104.	Black Island and White Island. No specific location.
AH10	MO025-004	Toome	Ringfort depicted on historic mapping of the area.	Situated on a peninsula at the south end of Lough Muckno, at 685925E, 917653N.
AP01	N/A	Onomy	Early 17 th century town of Castleblayney as established by Lord Blayney. Likely located at the location of the extant town.	West of Hope Castle estate. Unknown exact location, likely at 682798E, 819753N.
AP02	N/A	Onomy	Site of battle at Castle Blayney in 1641 when the Catholic forces defeated those loyal to Lord Blayney, resulting in him fleeing the area.	Within concept options site. No known exact location.



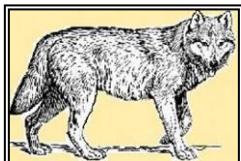
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Reference No:	RMP/ RPS/ NIAH No:	Townland	Type	Location
AP03	N/A	Onomy	Shoreline in Lough Muckno. Inland shorelines are well documented locations of archaeological activity. Previous archaeological works have resulted in the identification of sites at Black Island and White Island.	Within concept options site. Unknown exact location. Likely in environs of AH01 and AH02.
BH01	41308045	Onomy	18-19 th century Country House; previously known as Castle Blayney, and since the mid-19 th century known as Hope Castle.	Within concept options site. At 683011E, 819592N.
BH02	41308044	Onomy	18-19 th century stables, coach house, and courtyard.	Within concept options site. At 682888E, 819593N.
BH03	41308042	Onomy	18-19 th century walled garden.	Within concept options site. At 682874E, 819677N.
BH04	41308036	Onomy	18-19 th century entrance gates, piers and railings to the grounds of Hope Castle, from Market Square.	Within concept options site. At 682841E, 819724N.
BH05	41308043	Onomy	Mid-19 th century 3 bay barn building constructed to the south of the coach house and stable block.	Within concept options site. At 682866E, 819579N.
BH06	41308067	Onomy	Mid-19 th extant Parish Church of St Maeldoid shown on historic maps of the area. This church replaced an early 19 th century church roughly at the same location.	Within concept options site. At 682882E, 819444N.
BH07	41402502	Concra	18-19 th century stone folly designed to look like temple.	Within concept options site. At 684509E, 818848N.
BH08	41402501	Concra	19 th century artisan style cottage constructed in the estate of Hope Castle.	Within concept options site. At 684250E, 818600N.



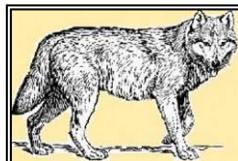
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Reference No:	RMP/ RPS/ NIAH No:	Townland	Type	Location
BH09	41402507	Annadrumman	19 th century gate lodge constructed in the estate of Hope Castle.	Situated to west of concept area. At 685210E, 817325N.
BH10	41308041	Concra	19 th century lodge constructed as part of the estate of Hope Castle and depicted on historic OS maps.	Within concept options site.
BH11	N/A	Onomy	18-19 th century demense walls of Hope Castle estate.	Within concept options site. No specific location.
BH12	41402503	Concra	An early nineteenth century farm complex shown on historic Ordnance Survey maps.	Situated to west of concept area. At 684469E, 818375N.
BH13	41308035	Onomy	19 th century gate lodge constructed either side of the entrance to Hope Castle off Market Square.	Within concept options site off Market Square. At 682847E, 819738N.
BH13	N/A	Market Square	The Rounded Corner at Market Square and West St.	Within concept options area.
BH14	41308068	Onomy Upper York Street	Saint Mary's Church, Freestanding cruciform-plan Early English Gothic-style church.	Within concept options area.
BH15	41308026	Market Square	The Market House. Market Square, at junction of Main Street and Muckno Street.	Within concept options area. At 682775E, 819778N.
BH16	41308002	Muckno Street, Onomy	First Presbyterian Church, Lakeview. Freestanding gable-fronted Presbyterian church with Gothic detailing, dated 1787.	Within concept options area.
BH17	41308023	West Street,	The Hope Arms Hotel. Detached five-bay three-storey house with raised basement, built c.1780.	Within concept options area.
BH18	41308008	New Street	Convent of Mercy. Build circa 1830.	Within concept options area.
BH19	41308069-41308075	Upper York Street, Onomy.	The Almshouses. Former almhouses built circa 1875-1885.	Within concept options area.



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Reference No:	RMP/ RPS/ NIAH No:	Townland	Type	Location
BH20	N/A	Market Square	The Rounded Corner at Market Square and West St.	Within concept options area. At 682738E, 819885N.
BH21	41308037	Market Square	The Corner House at the junction of Market Square and Henry Street.	Within concept options area.
BH22	41308020	West Street	Building adjoining Bank of Ireland, West Street. Terraced two-bay three-storey house, built c.1830.	Within concept options area.
BH23	41308055- 41308061	Church Street	Terrace of cottages built c. 1880-1890, as workers houses for the Hope Estate.	Within concept options area.
BH24	41308062	Church Street	Gate Lodge and Pillars to Hope Castle.	Within concept options area.
BH25	41308063	Church St.	The Caretakers Residence at Saint Maeldoids Church. Built c.1870.	Within concept options area.
BH26	41308006	Muckno St, Drumillard	The Seven Houses. Terraced seven-bay single-storey rubble stone house with dormer attic, built c.1830.	Within concept options area.
BH27	41308024	Muckno St.	McGuigan's Boutique, Muckno Street	Within concept options area.
BH28	41308019	West Street	Bank of Ireland, West Street	Within concept options area.
BH29	41308036- 41308040	Market Square	Row of Five Houses in Market Square at Muckno Gates	Within concept options area.
BH30	41308022	West Street.	Former Castleblayney Town Council Offices and Property on Opposite Side of Archway.	Within concept options area.
BH31	41308017	West Street	Post Office, West Street	Within concept options area.
BH32	41308013	West Street	Mallon Solicitor's office	Within concept options area.
BH33	N/A		Market Square Architectural Conservation Area	Within concept options area.
BHP01	N/A	Onomy	Garden fountain to north of Hope Castle BH01 depicted on historic mapping.	Within concept options area. Not

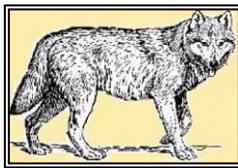


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Reference No:	RMP/ RPS/ NIAH No:	Townland	Type	Location
				identifiable at ground level.
BHP02	N/A	Onomy	Planted formal gardens to south of Hope Castle BH01 depicted on historic maps.	Within concept options site. Not identifiable at ground level.
BHP03	N/A	Onomy	Ice houses in estate of Hope Castle shown on early 20 th century OS map, annotated as disused.	Within concept options site. Not identifiable at ground level.
BHP04	N/A	Onomy	Planted formal gardens to south of Hope Castle BH01 shown on historic mapping.	Within concept options site. Not identifiable at ground level.
BHP05	N/A	Concra	Pheasantry in estate of Hope Castle shown on early 20 th century OS map.	Within Concra Wood Golf Club. Not identifiable at ground level.
BHP06	N/A	Concra	Pheasantry in estate of Hope Castle shown on early 20 th century OS map.	Within Concra Wood Golf Club. Not identifiable at ground level.
BHP07	N/A	Annahale	Footbridges shown on early 20 th century OS map, annotated as disused.	Within concept options site. Not identifiable at ground level.
BHP08	N/A	Annahale	Footbridges shown on early 20 th century OS map, annotated as disused.	Within concept options site. Not identifiable at ground level.

Table 1: Record of known Archaeological Heritage, Architectural Heritage, and Cultural Heritage sites in within the development and its environs.

Previous Archaeological Investigations



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One archaeological investigation that are included in the online excavations database www.excavations.ie is listed for the townland of Onomy, Lough Muckno, Castleblayney, County Monaghan. This archaeological work was carried out by Martin McGonigle under licence 12E0104 on the western shores of Lough Muckno at White Island and Black Island, for the construction of new access roads and paths. This work resulted in the identification of archaeological features related to fulacht fia. Following approval of the NMS, excavation of these features identified that several archaeological pits that were likely Bronze Age in date, were present. Some were excavated in full, whilst others were preserved in situ.

Archaeological monitoring was carried out by David Sweetman at Concra Wood Golf Course, Concra, Castleblayney under archaeological licence 05E0339. No archaeology was identified during this work.

Topographical Files of the National Museum of Ireland

The Topographical Files does not contain any entries for the townlands of Onomy, Concra, or Annahale.

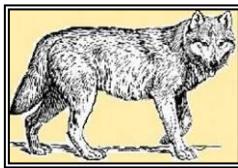
5.0 Site Inspection Results

The site inspection is useful for inspecting the receiving environment prior to the commencement of any development works. The site inspection can result in the identification of landscape features, topographical anomalies, and also for identifying aspects of non-tangible cultural heritage, that written sources may not convey. The site inspection was carried out in February 2023 in showery conditions. The inspection commenced in Castleblayney town, Lough Muckno and its environs, and later continued to Concra Wood Golf Club.

Castleblayney town, Lough Muckno and environs

The Lough Muckno comprises much of the former estate of Hope Castle on the western shoreline of Lough Muckno, including White Island, Black Island, some of the townland of Onomy, and Lough Muckno itself. It is clear that the park is a source of great pride locally, and the inhabitants of Castleblayney are very aware of the unique history and heritage of Hope Castle and its estate. As such, this constitutes a significant intangible Cultural Heritage asset CH01.

Lough Muckno is part of a glacial valley that runs roughly north x south. The town of Castleblayney is situated to the north of Lough Muckno. Historical records indicate that the seventeenth century town of Castleblayney AP01 was situated roughly at the location of the



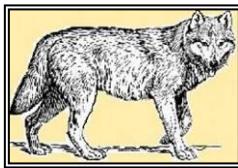
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extant Market Square and its environs. The area of the Market Square is a proposed Architectural Conservation Area (BH33) as identified in Appendix 2 of the Monaghan County Development Plan 2019-2025 (p262). The Market House building (BH15) is situated in the centre of the Market Square. This building was constructed circa 1790, and extended and adapted in the mid nineteenth century. It is included in the Record of Protected Structures for County Monaghan and the National Inventory of Architectural Heritage and is consequently afforded legal protection under the Planning and Development Act 2000. At its eastern extent the Market Square abuts the historic estate wall and piers (BH04) and gate lodges (BH13) of Hope Castle (BH01). Many of the buildings situated on either side of the Market Square are also included in the Record of Protected Structures for County Monaghan and the National Inventory of Architectural Heritage.

Much of Lough Muckno comprises the sloping pasture lands that gradually slopes downwards from a ridge or drumlin of high ground at the west, to the shoreline of Lough Muckno. The shoreline of Lough Muckno is an area of archaeological potential AP03, due to the archaeological sites identified during previous development works at Black Island and White Island. The existing landscape of Lough Muckno consists of parkland, forest, scrubland, tarmac and concrete paths, landscaped terraces, lime tree avenue, and various buildings dating from the eighteenth to twentieth centuries.

Several known and legally protected archaeological sites (AH sites) and legally protected architectural heritage sites (BH sites) are within the Lough Muckno and its immediate environs. The archaeological sites AH01 to AH05, are included in the RMP and are consequently protected by law under the National Monuments Acts 1930-2014. The BH sites are included in the RPS for Monaghan, and are afforded legal protection under the Planning and Development Act 2000. Also, previous archaeological works resulted in the identification of Bronze Age fulachta fia AH09 on both White Island and Black Island. Although these archaeological sites AH09 on White Island and Black Island are not included in the RMP, they indicate the likelihood that there are other archaeological sites subterranean within Lough Muckno.

The seventeenth century fortified house AH01 known as Castle Blayney does not survive above ground. However, the fortified house AH01 and its associated stone bawn wall AH02 may remain under the existing ground situated around the extant Hope Castle BH01. It is possible that some of the masonry (including architectural features) of the fortified house AH1 were incorporated into the extant Hope Castle BH01, and remain hidden behind plasterwork.



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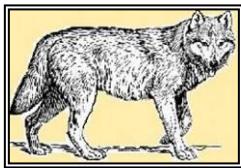
Any groundworks that take place in the location of the fortified house AH01 and its bawn AH02 risk impacting on any underlying archaeology. The mid seventeenth century battlefield site AP01 is part of the archaeological heritage of the 1641 Rebellion. The extent of this battle in Lough Muckno estate is unknown. Archaeological surveys of battlefield sites in other parts of Ireland have resulted in the identification and recovery of artefacts, and previously unknown information relating to the battle.

The extant Hope Castle BH01, and its attendant coach house and stable block BH02, barn BH05, walled garden BH03, entrance gates and piers BH04, and estate boundary wall BH11, and demesne wall BH11, all survive in various states of preservation. Hope Castle BH01 has been subject to significant alterations during the nineteenth and twentieth centuries. In recent times the building has been subject to vandalism. The lands surrounding the house comprises sloping grassy lawns with some paths and tarmac roads. The area immediately to the south of the house has been terraced. White Island is joined to the mainland by a modern road. A modern boat house and jetty is situated to the south of White Island. A modern concrete bridge connects Black Island and the mainland. A compacted stone open area and new paths have been constructed where the bridge from Black Island meets the mainland.

Black Island is a mostly forested and overgrown marginal land that gently rises to its centre, and slopes downwards towards Lough Muckno. Several compacted stone and tarmac paths facilitate visitor access. An un-provenanced millstone has been placed at the entrance to Black Island. As mentioned previously, archaeological excavations have identified in situ archaeology AH09 at Black Island.

White Island is the smaller of the two islands. This island is now connected to the mainland. A compacted stone road provides access around the entirety of this island. White Island comprises some marginal land with reeds and rushes, and a central drier grassy area with some mature trees. As mentioned previously, archaeological excavations have identified in situ archaeology AH09 at White Island.

The enclosure AH05 is identifiable as an overgrown earthen and stone bank, near the apex of a north x south ridge of high ground that marks the modern-day western extent of Lough Muckno. This enclosure is likely to represent the remains of a small ringfort. The interior of this site likely originally had dwellings made of timber and thatch. There may have been associated features in the sloping pasture and surrounding forest, although the mature trees and hedges, and landscaped terraces situated around the enclosure AH05 has likely impacted



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on any external archaeology. A modern tarmac path travels close to the western extent of this monument.

The seventeenth century original parish church AH03 of Castleblayney does not survive. It was reputedly situated to the north of the extant nineteenth century St. Maeldoids Church BH06. The seventeenth century graveyard AH04 associated with the original church AH03 is likely still in use as the parish graveyard. The extent of the original graveyard AH04 around the seventeenth century church AH03 is unknown, and it may have continued beyond the eighteenth-century demesne wall BH11.



Plate 1 Showing southeast facing elevation of Hope Castle BH01.



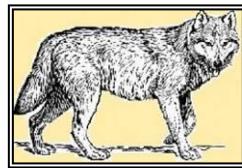
Plate 2 Showing landscape terracing and view towards Lough Muckno, facing east.



Plate 3 Showing new bridge joining Black Island to mainland, facing north.



Plate 4 Showing shoreline on White Island, facing west towards Hope Castle.



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Plate 5 Showing enclosure AH05 in Lough Muckno estate.	Plate 6 Showing stable block and carriage houses BH02, facing west.

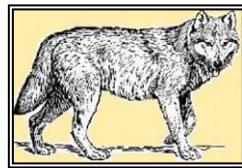
Concra Wood Golf Club and its environs

The townland of Concra and some of the townland of Annahale were originally part of the estate of Hope Castle. Following the purchase of the estate by Monaghan County Council in 1980, Concra Wood Golf Club was developed at Concra, Castleblayney. Several known and legally protected archaeological sites (AH sites) and legally protected architectural heritage sites (BH sites) are within the Concra Wood Golf Club.

The unclassified fortification AH07 is situated at the summit of a hillock just west of the clubhouse and carpark at Concra Wood Golf Course. The archaeological site is not visible at ground level, as the existing area is overgrown with vegetation. The function and date of this archaeological site is not known. The archaeological file maintained by the NMS for this site indicates that it may have been a seventeenth century fortification or lookout.

The landscape feature of folly AH06 is situated on the north facing slope of a hillock that overlooks Lough Muckno. The archaeological file maintained by the NMS for this site indicates that this stone structure was constructed by the Blayney family as part of landscape improvement works. This structure would have been visible from Hope Castle, and from anyone sailing on Lough Muckno. Currently this site AH06 is not visible as the vegetation has completely hidden this structure.

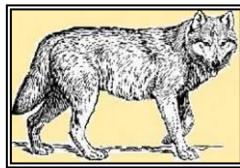
During the redevelopment of the estate by the Blayney family in the early nineteenth century, and later by the Hope family, several estate buildings were constructed at Concra and



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Annahale townlands. These structures are depicted on historic maps of the area, and the surviving buildings are included in the NIAH and RPS for Monaghan. The nineteenth century garden temple BH07, cottage BH08, estate lodge BH10, and estate farm BH12, survive in various iterations. The location of the garden temple BH07 is overgrown, and is not identifiable.

A photograph showing a wide view of a golf course. In the foreground, there's a mix of green grass and some dark, scrubby vegetation. Beyond the course, a large, calm body of water (Lough Erne) stretches across the middle ground. The background features rolling green hills and a clear blue sky with a few wispy clouds.	A photograph of a grassy hillside. The slope is covered in patches of green grass and areas of brown, dry vegetation. At the top of the hill, there's a dense cluster of trees and shrubs. The sky above is a bright, clear blue.
Plate 7 Showing Concra Wood Golf Course towards location of temple BH07, facing north.	Plate 8 Showing hillock in Concra Wood Golf Course, where folly AH06 is covered by vegetation, facing north.



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6.0 Discussion

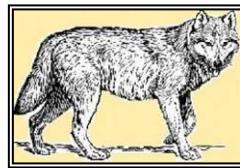
The concept proposal area including Lough Muckno, Concra Wood Golf Club, and Castleblayney town, are amenities that include cultural, architectural and archaeological heritage assets. The known archaeological and architectural heritage of the concept proposal area spans a period of over 4000 years and displays significant evidence of human occupation and activity. The known archaeology within the area includes sites that date to the prehistoric period, medieval period, and post medieval period. There is a high likelihood that other archaeological sites and features remain subterranean within the area. No invasive measures were utilised during the compilation of this report to establish whether any subterranean archaeology is within concept proposal area. The extent of some of the known and legally protected archaeological sites within the Concept Options Area has not been established. Preservation *in situ* of known archaeology, through avoidance of direct impacts, is advised by the National Monuments Service. To avoid direct impacts on archaeology, the National Monuments Service recommend that a buffer zone of 15m is created around known archaeological sites.

The architectural heritage assets within concept proposal area largely relate to the establishment of the extant Hope Castle (then Blayney Castle) and its attendant buildings, gardens, landscaping, and demesne wall, in the late eighteenth and nineteenth centuries, and the laying out of the town of Castleblayney in the eighteenth and nineteenth centuries.

Historic mapping indicates that most of the Lough Muckno estate and Concra Wood Golf area was part of the estate of Blayney Castle, and later Hope Castle, which is of regional architectural heritage significance.

The Monaghan County Development Plan 2019-2025 outlines that it is the stated policy of MCC to protect the archaeological heritage of county Monaghan by ensuring appropriate and proportionate development. It is also the stated policy of MCC that any developments that take place in the vicinity of architectural heritage assets contained in the RPS will be sympathetic to the architectural heritage in terms of its design, scale, height and use of materials.

The site inspection identified that the concept area has been significantly landscaped since at least the eighteenth century. These previous landscape works have resulted in the construction of buildings and structures of archaeological and architectural heritage merit. These works have also likely impacted on some archaeological heritage assets.



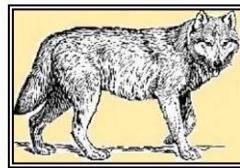
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The concept proposal options should reflect the unique cultural heritage of the area. This project affords the opportunity to positively impact on the extant cultural heritage assets of the receiving environment, through conservation, promotion, and research. Appropriate conservation, refurbishment, and reuse of dilapidated built heritage assets will ensure the survival of these buildings, resulting in a positive impact. Consideration should be given for the reuse of some of the buildings for purposes related to cultural heritage, such as a museum, research or heritage amenity. Promotion of the known archaeological and built heritage of the area using storyboards, information panels, with additional information on the already established downloadable walking tours, will result in a positive impact.

The Concept Proposal Options includes two phases, and each phase contains a number of elements as detailed below. The likely impact and outcome of each concept proposal element is listed in italics below.

Concept Proposal Option 1 elements:

- Regeneration and repurposing of Hope Castle BH01 situated in Lough Muckno Estate.
The sensitive and appropriate refurbishment and repurposing of Hope Castle BH01 will result in a positive impact on the architectural heritage by ensuring the long-term survival of this asset.
- Use of Hope Castle BH01 and its curtilage as an Exhibition Venue, Sculpture Garden and Park, and Walled Garden BH03. *This proposal will result in a positive impact on the architectural heritage by ensuring the long-term survival of these assets.*
- Development of a coach house café, retail area, and children's play area, at Hope Castle's coach house building BH02. *This proposal is appropriate and will result in a positive impact on the architectural heritage by ensuring the long-term survival of this asset.*
- General landscaping and development of greenways, parkland walks and cycle paths within Lough Muckno Estate. *This proposal should consider the reinstatement of historic garden and landscape features depicted on historic maps of the area. This proposal is sensitive to the receiving archaeological and built heritage environment, and will positively contribute to the setting of the extant built heritage assets.*
- Development of a water sports centre in Lough Muckno Estate. *The scale of this proposal risks adversely impacting on both archaeological and architectural heritage. The location of any such development should be chosen to ensure that it does not*



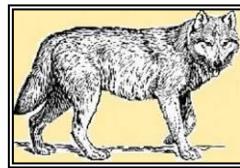
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impact on the visual setting of Hope Castle BH01. This proposal may result in impacts on archaeological heritage. Archaeological mitigation measures (as listed in Section 5.0 below) may mitigate any adverse impacts on archaeology.

- Development of a cruise tour centre, and provision of water taxies, cruise boats and electric buggies within Lough Muckno Estate. *This concept proposal element will result in minimal risk of impacts on archaeological or architectural heritage assets.*
- Development of a fishing lodge and conservation centre within Lough Muckno Estate. *This proposal is in-line with one of the original functions of the estate. As such it is appropriate and sensitive to the history of the site.*

Concept Proposal Option 2 elements:

- Development of a hotel, golf complex, lodges, a spa and a cookery school at Concra Wood Golf Club. *The existing buildings at Concra Wood Golf Club are modern. Some known archaeological and architectural heritage sites are situated within the course and grounds. The siting of any large-scale development at this location should be finalised to ensure that the views from Hope Castle BH01 are not adversely affected. Any large-scale developments at this location risk impacting on subterranean archaeology. Archaeological mitigation measures (as listed in Section 5.0 below) may mitigate any adverse impacts on archaeology.*
- The development of dispersed lodges and recreational activities at islands in Lough Muckno. *This concept proposal element is unlikely to result in adverse impacts on the built and archaeological heritage of the area.*
- Development of a centre for cultural and recreational activities at Market House BH15 situated in Market Square, Castleblayney. *This concept proposal element is appropriate and unlikely to result in adverse impacts on the built and archaeological heritage of the area.*
- Integration of Castleblayney Town with the Historic Estate via the Gatehouses to the estate BH13. *This concept proposal element is unlikely to result in adverse impacts on the built and archaeological heritage of the area.*
- Development of the Gatehouse BH13 as an information centre and retail area. *This concept proposal element is appropriate and unlikely to result in adverse impacts on the built and archaeological heritage of the area.*
- Development of dispersed parking through Castleblayney Town to accommodate visitors to Castleblayney, relative to the scale of the development that takes place. *This*



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concept proposal element is unlikely to result in adverse impacts on the built and archaeological heritage of the area.

- Development of Black Island Trails. Previous works carried out at Black Island and White Island identified subterranean archaeology along the shorelines. *This concept proposal option element should be subject to advanced archaeological mitigation measures as outlined in Section 5 below.*
- The development of a modest sized, open sided dome structure in the vicinity of Hope Castle BH01 housing several recreational and cultural activities, a café and potentially, a moderately scaled ice climbing wall. *The scale of this concept proposal option element is likely to result in significant impacts (direct and indirect {visual}) on the archaeological and architectural heritage of the area. Appropriate mitigation measures as outlined in Section 5 below, may partially ameliorate the extent of any adverse impacts.*

Mitigation measures are recommended below to ensure that the proposed concept options elements do not result in significant adverse impacts on cultural, architectural or archaeological heritage assets.

5.0 Conclusions and Recommendations

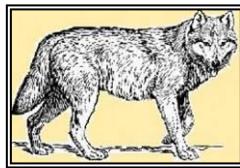
Conclusions

The concept options proposal for Lough Muckno, Concra Wood and Castleblayney town, will involve construction activities in an area with known and extant cultural, archaeological and architectural heritage assets.

This activity may potentially impact on known and legally protected archaeological and architectural heritage sites. Any large scale works risk impacting on any unknown subterranean archaeology. As any development works have not been determined, the extent of any impact is uncertain, at this stage. Recommendations are made to minimise the risk of impacting negatively on archaeological and architectural heritage assets.

Recommendations

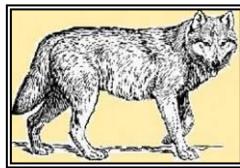
- Any development proposals for Concept Area should be designed with regard to the stated objectives of the Monaghan County Development Plan 2019-2025 (listed on



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page 9 of this report) regarding the protection of archaeological and architectural heritage assets, and appropriate development in the vicinity of such assets. The Development Plan outlines that developments in the vicinity of archaeological assets will not negatively impact on the asset. The Development Plan outlines that developments in the vicinity of built heritage assets will be sensitive to the receiving environment in terms of design and scale. The Development Plan outlines that the proposed reuse of built heritage assets should be sympathetic to their unique character.

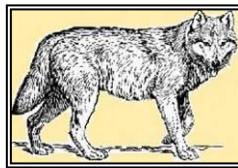
- Prior to the lodging of any planning applications associated with large-scale elements outlined for Concept Proposal Area, the proposal should be submitted to the Development Applications Unit of the Department of Housing, Local Government and Heritage, for review and comment. This will allow for the identification of any significant issues regarding cultural heritage in advance of the planning process, whether under Part VIII of the Planning and Development Act 2000, or another planning process.
- Prior to the commencement of any works that affect any of the built heritage assets (BH01-BH33) discussed in this report, a Declaration under Section 57 of the Planning and Development Act 2000 may be required to be published by Mon Co Co.
- A design team including a Conservation Architect Grade 1 and Conservation Engineer, should be appointed to assist with any elements of the Concept Proposal Area that include the built heritage assets.
- An architectural heritage impact assessment should be completed in advance of any developments within the Concept Proposal Area that impact on architectural heritage assets. This assessment should be completed by a conservation engineer / architect / archaeologist, experienced in built heritage assessment.
- Any conservation, repair, and alteration works to Hope Castle, or any of the architectural heritage assets within the development area and discussed in this report, should be carried out in accordance with the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous) Provisions Act (1999), the document 'Architectural Heritage Protection: Guidelines for Planning Authorities' (Department of Arts, Heritage and the Gaeltacht, 2011), and the Advice Series on Historic Buildings published by the National Monuments Service of the Department of Housing, Local Government, and Heritage. In general, any conservation and repair works to architectural heritage assets within the development area should be carried



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out in line with the principals of the Burra Charter: ‘as much as necessary, and as little as possible’. Professionals experienced and qualified in working on historic properties should be employed to carry out conservation, repair or refurbishment works to any built heritage assets.

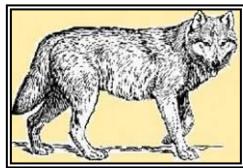
- The National Monuments Service of the Department of Housing, Local Government, and Heritage state that avoidance of direct impacts on known archaeology allowing for *preservation in situ*, is the preferable approach, regarding development projects. Consequently, any proposed development works in the vicinity of the known archaeological sites AH01-AH10, should minimise the extent of the ground disturbance works, associated with the development.
- A GPR / geophysical archaeological survey should be undertaken in the vicinity of the extant Hope Castle. This survey should examine the environs of Hope Castle with the intention of identifying the original location of the seventeenth century Blayney Castle and its associated bawn wall. This will allow for appropriate planning and routing of underground services, and avoidance of any direct impacts, allowing for preservation *in situ* of the archaeology.
- Any ground disturbance works for new buildings, structures, and underground utilities within the concept area should be subject to advanced archaeological impact assessment. This assessment should be compiled by an archaeologist that is eligible to hold an archaeological licence issued under the National Monuments Acts (1930-2014). This will allow for the advanced identification and any direct negative impacts on the archaeology, and the implementation of appropriate mitigation measures. Archaeological mitigation measures may include pre-construction geophysical surveying, and archaeological test trenching. In instances where adverse impacts on subterranean archaeology cannot be avoided, archaeological excavation under licence issued by the National Monuments Service, may be required.
- Any Archaeological Impact Assessments or Architectural Heritage Impact Assessments carried out as part of this project should take account of the cumulative impacts of the concept proposal option elements on the existing cultural, archaeological and architectural heritage.



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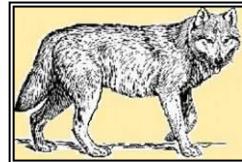
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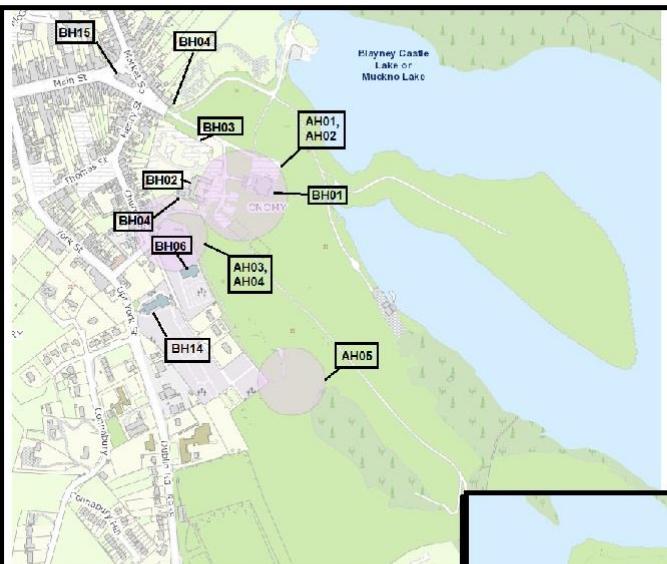
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Title
Lough Muckno Concept Proposal Options Area
Showing known Archaeological, Architectural, &
Cultural Heritage Assets

Notes
AH-Archaeological Heritage asset
BH-Architectural Heritage asset
CH-Cultural Heritage asset
AP-Archaeological Potential asset

A3

Job/Exc No.
Date
Mar 2023

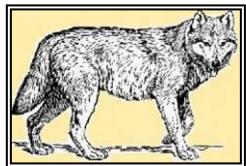
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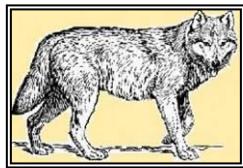
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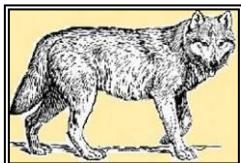
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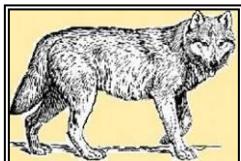
Appendix 1 Index of RMP Archaeological Sites Within Development Area

AH No	RMP No	Location	Description
AH01	MO020-018	Onomy, Muckno	Lough Fortified House. Located on a shelf towards the bottom of a NE-facing slope which overlooks White Island and the N end of Muckno Lough. Sir Edward Blayne was a captain in the English garrison at Monaghan town (MO009-060----) from 1602. He was instrumental in establishing its defences and in the building of a fortified house (MO009-060003-) there, for which he received a grant of former church land in Monaghan barony. In 1607 he received a grant of land at Ballylurgan, also known as Ballifort, which consisted of two ballybetaghs (or villages, each of sixteen tates or townlands) in Cremorne barony on condition that he built a fort there within four years (Lavery 1907, 31-2). The location was half-way between Monaghan town and Newry, and the castle would provide a secure halting-place in re-supplying the former from the latter (Livingstone 1966, 141-2). In 1612 Sir Edward received a further grant of the Muckno church lands, which included the ballybetaghs of Ballinknockluske (Coyle 1980), with the result that he could have held seven of the twenty two ballybetaghs in Cremorne barony. In 1621 Sir Edward was elevated to the peerage as the first Lord Blayne. A contemporary description describes the house as: 'Sr. Edward Blanye hath buylte a very large bawn w'th lyme and stone 18 foote high, well flanked w'th bulworkes upon his land of Ballinelungan... Upon the bawne is buylte a fayre gate house and two other houses of lyme and stone upon two of the corners of the bawn w'ch flankes the whole work. They containe two or three roomes or lodginges a pice w'th chimneys; In w'ch Bawne he is buyldinge a fayre and spacious house of stone worke already two yards high above the grounde, the walles of a great thickness w'th vaults all buylte upon his own charge' (Shirley 1879, 241; Hunter 1975 81-2).



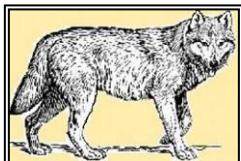
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AH No	RMP No	Location	Description	
			<p>In 1642 the castle was occupied by rebels led by several of the local MacMahons who despoiled the estate and may have destroyed the castle irreparably as there is very little record of it thereafter. Between 1648 and 1653 Edward, the third Lord Blayney, sold all the property to Thomas Vincent, a London merchant. Shortly afterwards Vincent's daughter Elizabeth married Richard, the brother and heir of Edward, and brought the Cremorne land back in her dowry to the Blayney family, but her father disposed of the land in Monaghan barony separately (Shirley 1879, 247). This may have restored the family fortunes for a while but the estate was always in difficulty and it seems that the castle might never have been restored.</p> <p>By the end of the eighteenth century the castle was certainly a ruin, and a drawing by Francis Grose made in 1770 shows that it was T-shaped, of two storeys and attic with corner machicolations supported on continuous corbels in the Scottish fashion (Grose 1791, vol. 2, 72, Pl A, B). The castle was replaced with the present house, known as Castleblayney Castle, which was built in 1799 to a design of Robert Woodgate. The estate was sold by the twelfth and last Lord Balyney in 1853 to Henry Thomas Hope of Deepdene, Surrey, and the house is known as Hope Castle ever since. The location of the old castle is not known with absolute certainty, but Coote (1801, 91) says the new house was built contiguous to the old castle.</p> <p>The above description is derived from the published 'Archaeological Inventory of County Monaghan' (Dublin: Stationery Office, 1986). In certain instances the entries have been revised and updated in the light of recent research.</p>	
AH02	MO020-018001	Onomy, Muckno	Lough	Bawn. Located on a shelf towards the bottom of a NE-facing slope which overlooks White Island and the N end of Muckno Lough. Sir Edward Blayney built a fortified



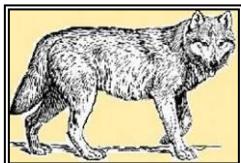
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AH No	RMP No	Location	Description
			<p>house (MO020-018----) after 1612 on land he had been granted in Cremonne barony at Ballylurgan, also known as Ballifort. A contemporary description describes how he 'hath buylte a very large bawn w'th lyme and stone 18 foote high, well flanked w'th bulworkes upon his land of Ballinelungan... Upon the bawne is buylte a fayre gate house and two other houses of lyme and stone upon two of the corners of the bawn w'ch flankes the whole work. They containe two or three roomes or lodginges a pice w'th chimneys;' Inside the bawn he buit a 'fayre and spacious house' (Shirley 1879, 241; Hunter 1975 81-2). The precise location of the house and bawn is not known, but Coote (1801, 91) says the new house which was built in 1799 was contiguous to the old one.</p>
AH03	MO020-027	Onomy	<p>Church. Located on a shelf that slopes down gently to the N with slightly lower ground to the W before a hill rises over the town of Castleblayney, but the ground falls away steeply to the N and E. The parochial centre of Muckno parish moved from what was the site of St Maodóid's monastery and the medieval parish church at Church Hill (MO020-020001-), on the E shore of Lough Muckno, to Castleblayney during the seventeenth century.</p> <p>The last will of Edward, the first Lord Blayney who died in 1629, directed that his body was 'to be buried in the church of Castle-Blayney' (Lodge and Archdall 1789, 308). It is not clear if there was a church at this location then as he was buried in Monaghan Church (MO009-060012-) (<i>ibid</i>, 309). The first church of Castleblayney appears to have been built in the last quarter of the 17th century by William, the sixth Lord Blayney who was born in 1671 at Castle Blaney (MO020-018----). He died in 1706 and was buried in the graveyard of the chapel of Castle-Blayney (<i>ibid.</i>, 317).</p> <p>This is a rectangular structure (int. dims 20.2m E-W; 7.3m N-S) with a contemporary porch (int. Wth 2.35m; L 3.4m) located towards the W end of the S wall. The walls (Wth</p>



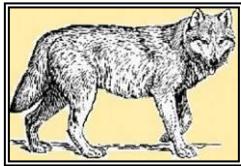
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AH No	RMP No	Location	Description
			<p>0.8m; H 0.9-1.2m) of the church survive with soil built up externally but the interior of the church is open to the original level and has graves dating from 1859. The NE and SE angles have external buttresses supporting them, and the mausoleum of Thomas Andrew, the eleventh Lord Blayney, is inserted into the E end of the church, which is at the N end of a sub rectangular graveyard (dims c. 170m NNW-SSE; c. 60m ENE-WSW) defined by masonry walls. A new church was built at the centre of the graveyard in 1810 (Lewis 1837 vol. 2, 408), and this was replaced on the same site by the present church of St Maeldoid in 1858-60 to a design of Joseph Welland, and this church still prospers.</p>
AH04	MO020-027001	Onomy	<p>Graveyard. Located on a shelf that slopes down gently to the N with slightly lower ground to the W before a hill rises over the town of Castleblayney, but the ground falls away steeply to the N and E. The parochial centre of Muckno parish moved from the site of St Maodóid's monastery and the medieval parish church at Church Hill (MO020-020001-), on the E shore of Lough Muckno, to Castleblayney during the seventeenth century. William, the sixth Lord Blayney probably built the church (MO020-027----) at the N end of a subrectangular graveyard (dims c. 170m NNW-SSE; c. 60m ENE-WSW) defined by masonry walls. The oldest memorials dating from c. 1770 are around this structure on a slightly rising area (diam. c. 45m), forming the original graveyard. The present Church of Ireland church of St Maeldoid which was built in 1858-60 is a replacement for a church on the same site at the centre of the graveyard that was built in 1810 (Lewis 1837 vol. 2, 408).</p>
AH05	MO020-019	Onomy, Muckno	<p>Lough</p> <p>Located towards the SE end of a NW-SE drumlin ridge overlooking the N end of Muckno Lough and on the old demesne land of Blayney Castle. It is represented as a hachured feature only on the 1907 edition of the OS 6-inch map. This is a subcircular grass-covered area (dims</p>



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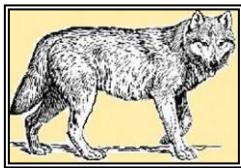
AH No	RMP No	Location	Description
			26m ENE-WSW; 21m NNW-SSE) with some mature deciduous trees on the bank. It is defined by a fosse (at SW: Wth of top 2.9m; Wth of base 1.3m; int. D 0.3m; ext. D 0.55m) and an outer earthen bank (at SW: Wth of base 5m; Wth of top 2.1m; ext. H 1.9m) that is removed N-NE. There are entrance gaps in the bank at SSE (Wth of base 2m) and NNW (Wth of base 1.9m).
AH06	MO025-047	Concra	Folly, depicted on historic mapping of the area and annotated as 'castle'. However, examination by the NMS identified it as a landscape feature likely constructed by the Blayney family as a folly.
AH07	MO025-048	Concra	Fortification; possible 17 th century military site constructed near the summit of a rise. Now just east of the carpark of Concra Wood Golf Club.
AH08	MO020-020001	Church Hill	Church; medieval abbey church site. Following the Dissolution of the Monasteries in the 16 th century, it became the parish church of Gaelic settlement of Machaire Mucnamha (the Plain of Muckno).
AH09	N/A	Onomy	Archaeological sites identified on White Island and Black Island and preserved in situ during development of roads and improved accessibility, under archaeological licence 12E0104.
AH10	MO025-004	Toome	Situated on a peninsula (max. dims c. 725m NW-SE; c. 200m NE-SW) jutting into the S part of Muckno Lough from the SE. It is depicted as a subcircular embanked enclosure (ext. diam. c. 50m NW-SE; c. 40m NE-SW) on the 1834 edition of the OS 6-inch map where it is described in gothic lettering as a 'fort', and as an oval enclosure in woodland on the 1907 edition. Faint traces of an oval enclosure are visible in pasture on OSI aerial photographic images (1995, 2000).



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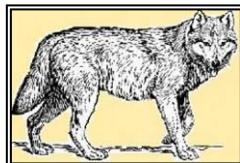
Appendix 2 Index of Architectural Heritage Structures and NIAH Sites Within Development Area

AH No	NIAH No	Location	Description
BH01	41308045	Onomy, Lough Muckno	Hope Castle (formerly Blayney Castle). Five-bay three-storey country house with basement, built 1799, to designs by architect Robert Woodgate, having central bays to front elevation with single-storey entrance porch. Five-bay side elevations have slightly recessed central bays, with single-storey bow to east, lake, elevation, and slightly projecting middle bays to south, garden, elevation. Roof concealed by crested rendered parapets with urns and finials having scrolled plaster decorated pediment to lake elevation and segmental pediment to garden, added in Victorian era. Cast-iron downpipes drain parapet gutter, located between ends bays of elevations. Moulded cornice between parapet and top floor, heavier moulded cornice between top and first floors, and simple string course between first and ground floors. Flat-roofed bow to lake elevation has render parapet and dentillated cornice. Walls painted smooth rendered with rusticated render quoins. Square headed window openings throughout, except for end bays of ground floor of garden elevation which are round-headed with keystones, all with moulded architraves and having cornices to lower floors. Replacement uPVC frames to many openings, and boarded up elsewhere, with moulded stone sills to first floor, held on scrolled corbels. Middle opening to first floor of garden elevation has round-headed niche with plaster statue, and top floor has blank rectangular panel. Porch has flat roof with decorative cast-iron brattishing to parapet. Round-headed door and window openings have imposts and moulded archivolts, doorway has large spoked fanlight and replaced double-leaf timber door, flanked by pilasters. Low balustrade to basement area with turned balusters and moulded coping to each side of porch. Single-storey late twentieth-century pitched roof extension to recessed central three bays of rear elevation obscured by timber hoarding. Three-centred arch vehicular access opening with ashlar sandstone block-and-start dressings to west of house



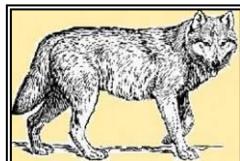
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AH No	NIAH No	Location	Description
			<p>and accessed via roadway connected with former stable block to south-west. House stands facing lawns stretching as far as Lough Muckno shores to north and east, with golf course on former parkland to south-east of house.</p> <p>Known also as Blayney Castle after the plantation castle nearby (from which the town gets its name), Hope Castle was built by Andrew Thomas, eleventh Lord Blayney who ran the associated estate from 1784 to his death in 1832. Originally a five-bay three-storey Georgian block, the house received many embellishments during the Victorian era, including scrolled cresting on the roof parapets and at one stage an ornamental cast-iron and glass porch canopy. The present country house is notable for the different treatments of the principal elevations, enhanced by the various recesses and projections, and embellished by the wide variety of render details. Its associated walled garden, stable block, entrance gates, gate lodges and other features make this one of the most intact of Monaghan's demesnes. The subsequent history of the house and demesne is particularly varied, having been sold in 1853 to the Hope family after whom the famous Hope Diamond is named, later occupied by Queen Victoria's son, the Duke of Connaught. The British Army had a barracks there later, it functioned as Monaghan County Hospital from 1932-7, then as a Franciscan convent from 1943-74. A period of dereliction followed until it was taken over the local council in the 1980s. Nineteenth-century additions to the garden and main fronts were demolished during works at this time. One interesting internal feature – a Soanesque top-lit upper stair landing was destroyed during the phase of dereliction. Recent use as a hotel and leisure complex were short-lived and the site has remained derelict since an arson attack in 2010.</p>
BH02	41308044	Onomy, Lough Muckno	Stables. Two-storey U-plan stable complex, built c.1799, associated with Hope Castle, having pedimented seven-bay central block flanked by six-bay forward returning blocks, latter with pedimented front gables, and fourth side formed by entrance pavilion dated 1865 and flanking railings. Partially



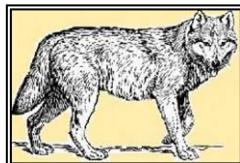
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AH No	NIAH No	Location	Description
			<p>collapsed pitched roof with fire-damaged fibre-cement slate covering to sawn common rafter structure, with rolled clay ridge and sandstone verge skews. Roughly squared rubble limestone walls to internal elevations. Square-headed window openings with brick dressings to first floor and ashlar sandstone to ground floor, with centrally pivoted timber windows. Main block facade has arcade of three-centred arch carriage openings with ashlar sandstone surrounds. All openings have protective metal coverings. Pediments have square limestone string course and raking skews, oculi with brick surrounds. Squared rubble limestone walling to front elevations, and uncoursed rubble to rear elevations, much weather-struck pointed in cement, with punched sandstone quoins and brick dressings to square-headed window openings which have stone sills except on smooth cement rendered part of west elevation beside late twentieth-century lean-to extensions where windows have cast concrete sills. Entrance pavilion is pedimented single-storey two-bay structure with pitched slate roof having stone skews and cornice holding cast-iron rainwater goods, squared rubble limestone walls with sandstone plinth and block-and-start quoins and dressings, blind round-arch brick-filled openings to side elevations, and three-centred arch cast-iron gated entrances to front and rear elevations. Pediment has limestone string course and raking gable skews with carved stone plaque having Hope family emblem and 1865 date carved in relief. Rubble limestone plinth wall with cut-stone copings to each side of pavilion supports cast-iron railings.</p> <p>This impressive stable courtyard retains much of its architectural impact, the enclosed courtyard elevations still appearing largely intact since the classical entrance pavilion and railings were added in 1865, although a pre-first edition Ordnance Survey block to the south is gone. Fine stone detailing marks the high standard of craftsmanship involved in the original construction. The whole classical composition is representative of the typically high-quality agricultural complexes associated with eighteenth and nineteenth-century country houses.</p>



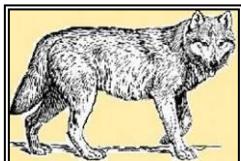
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AH No	NIAH No	Location	Description
BH03	41308042	Onomy	<p>Walled garden, part of demesne, erected c.1799 when associated Blayney Castle built. Flemish-bond brick wall approximately 3.6m tall to most of east and south sides, with some remains of flat sandstone coping flags but mostly uncapped wall tops or view obscured by vegetation. Derelict former stable block forms south-east corner of garden. Lower rubble stone section of wall to north end of east side with curved corner leading to north wall which is brick-faced to interior, and coursed rubble stone walling to exterior. Large gap to north wall to accommodate later twentieth-century galvanised gates to County Council depot now located in part of former orchard. Section to west end of north wall has additional corner to bring fully rubble stone wall out to abut gable end of south gate lodge to demesne. Some overgrown apple trees survive to north-east sloped orchard which is mostly covered in grass with wide gravel paths.</p>
BH04	41308036	Onomy	<p>Formal entrance gateway to Hope (Blayney) Castle estate, built c.1799, at east end of Market Square. Comprises pair of ashlar limestone gate piers to vehicular gateway, with cast-iron spear-headed gates and railings atop moulded stone plinths, and flanked by ashlar-walled flat-roofed pedestrian ways. Each pier features moulded stone base with full moulded stone entablature to summit and carrying simple square block on which ornate iron lamp rests. Decorative vertical-railed double-leaf cast-iron gates with curved panel containing cast foliage ornament on northern leaf, corresponding element now missing from southern leaf. Pedestrian lobbies built of rusticated ashlar limestone with round-arched doorways to east and west elevations, with round-topped keystones and similar window openings on gate-side elevations, with cut-stone sill. Southern pedestrian way has ornate double-leaf cast-iron gates to entrances, and grilles over window opening, while northern lobby openings are boarded up. East elevation of southern lobby reveals cast-iron downpipe draining parapet gutter of concealed lobby roof. Ivy growth obscures views of northern lobby's east elevation. Cast-iron spur-stops protect piers and ends of main</p>



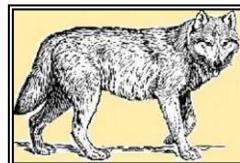
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AH No	NIAH No	Location	Description
			<p>gates. Wrought-iron arch between main gate piers carries lettering 'HOPE CASTLE'. Avenue to Hope Castle lined with lime trees.</p> <p>This entrance gateway is a monument to the grandeur of the original civic structures planned for this part of Castleblayney town. It remains as the only functional part of a group which included the currently derelict market house, the gate lodges, stable block and Hope Castle itself. Despite being cluttered with signage and suffering some loss of cast-iron decorative elements, this entrance gateway has lost none of its architectural impact and still commands the attention of viewers from any part of the Market Square in front of it.</p>
BH05	41308043	Onomy, Lough Muckno	<p>Three-bay three-storey barn, built c.1865, and associated with former stable block of Hope Castle demesne. Pitched fibre-cement slate roof with plain brick cornice holding replacement uPVC rainwater goods. Coursed rubble limestone walls with punch-finished sandstone quoins and brick dressings around square-headed openings which have sandstone sills and replacement timber window frames. One three-centred arch opening to south elevation on ground floor. Interior appears to be gutted. Ground rises steeply to west and south, enclosing building between embankment and former stable block.</p> <p>The high standard of masonry places this apparently agricultural building in the same date range as the adjacent former stable block. It is sited where a range of office buildings south of the former stable block were located during at the time of the first Ordnance Survey and may incorporate some of this earlier building in its fabric. The building formed part of the development of one of Monaghan's most significant demesnes.</p>
BH06	41308067	Onomy	<p>Saint Maeldoid's Church. Freestanding Early English Gothic-style stone Church of Ireland church, built 1858-60, possibly by Thomas Henry Carroll to designs by Joseph Welland. Cruciform plan with five-bay nave, final crossing bay to east flanked by lower transepts, polygonal chancel, vestry to south-east transept, three-stage tower to south-west, three-bay side-aisle with porch to south of nave between tower and transept. Pitched</p>



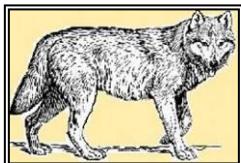
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AH No	NIAH No	Location	Description
			<p>slate roof having cast-iron rainwater goods, with tooled limestone copings to gables. Uncoursed random rubble limestone walls, bell tower, spire and buttresses, having tooled limestone plinths, quoins and corbelling below eaves course. Double and single-light pointed arch window openings to nave having iron-framed lattice glazing with stained-glass quatrefoil windows over, set in tooled stone surrounds with stone sills. Single-light windows have geometric stone tracery, with stained glass to transepts, with trefoil stained-glass windows to upper gables of transepts. Double-light pointed arch window openings with timber louvres to bell tower and having quatrefoil lights over, set in tooled stone surrounds with stone sills. Main entrance to north comprising recessed pointed arch opening with tooled stone surround, with stone steps and tongued-and-grooved timber double-leaf door with decorative metal ironmongery. Square-headed door opening to vestry having tooled stone surround, stone steps and tongued-and-grooved timber door with decorative metal ironmongery. Interior comprising nave, side aisles to east and west having pointed limestone arches to round-plan limestone piers, painted smooth rendered walls, decorative stained-glass windows, timber pews, ceiling and gallery. Stone arcade detail to apse with ornate cornice and supported on marble colonettes. Stone colonettes flank interior of apse windows. Carved stone and marble pulpit. Arch-braced timber truss roof supported on stone corbels. Sandstone gateway to north. Church set within graveyard, containing vertical and horizontal gravestones. Stone Blayney family vault of 1880 to north.</p> <p>Saint Maeldoid's Church is a well composed Gothic Revival church characteristic of the mid-nineteenth century. The random rubble limestone, with tooled limestone dressings and finely crafted spire, adds to the character of the building which is a well known landmark in the town. The variety of fine stained-glass windows adds to the significance of the building. Its interior displays good detailing in carved stone and marble.</p>
BH07	41402502	Concra	18-19th century stone folly designed to look like temple.



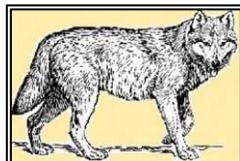
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AH No	NIAH No	Location	Description
BH08	41402501	Concra	19th century artisan style cottage constructed in the estate of Hope Castle.
BH09	41402507	Annadrumman	19th century gate lodge constructed in the estate of Hope Castle.
BH10	41308041	Concra	19th century lodge constructed as part of the estate of Hope Castle and depicted on historic OS maps.
BH11	N/A	Onomy	18-19th century demense walls of Hope Castle estate.
BH12	41402503	Concra	An early nineteenth century farm complex shown on historic Ordnance Survey maps.
BH13	41308035	Onomy	19th century gate lodge constructed either side of the entrance to Hope Castle off Market Square.
BH14	41308068	Onomy Upper York Street	Saint Mary's Church, Freestanding cruciform-plan Early English Gothic-style Roman Catholic church, partly building of 1805-14, rebuilt 1851-6, having six-bay nave (three bays are extension of 1929), gable-fronted transepts, gable-fronted apse to east, gable-fronted chapels to north and south elevations of nave, and single-storey flat-roofed addition to south-east. Pitched slate roof having cast-iron ridge cresting, cast-iron rainwater goods, and with painted stone copings and pinnacles to all gables. Painted ruled-and-lined rendered walls with painted stone plinth and buttresses, copings and pinnacles. Finely carved stone crosses to gable apexes. Pointed arch window openings to nave and double-light to transepts and chapels, with painted render hood-mouldings, painted render reveals, stone sills and stained-glass windows. Stained-glass quatrefoil windows to all gables. Pointed arch triple-light window openings to entrance front, having painted render hood-mouldings, reveals and stone sills with stained-glass windows. Apse has triple-light traceried stained-glass window. Pointed arch window opening to addition having recent timber window. Doorways to entrance front and to transepts comprise pointed arch openings with tooled stone doorcases having painted render hood-mouldings and timber panelled double-leaf doors. Flight of stone steps to entrance front has painted rendered walls to each side. Interior has painted smooth rendered walls with timber panelling to lower parts. Marble altar, altar rails, pulpit, and apse having marble up



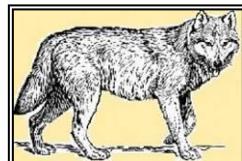
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AH No	NIAH No	Location	Description
			<p>to dado level. Clustered colonettes over corbels to chancel arch with similar archivolt. Open scissors timber truss roof to nave with hanging posts on decorative corbels, with tongued-and-grooved boarding above. Balcony to entrance end of nave, with timber panelling. Carved timber seats, confessionals and Stations of the cross. Square-plan painted rendered piers to street, with metal gates, and metal railings atop painted plinth wall.</p>
BH15	41308026	Onomy, Market Square	<p>The Market House. Freestanding eight-bay two-storey over basement market house, built c.1790, facing south-west, having four central bays of front elevation recessed and fronted by single-storey arcaded loggia reached by two steps, and with three-bay courthouse block added c.1856 to straight-sided rear, north-east, seven-bay elevation having chamfered corners and continuous arcaded loggia. Three-bay end elevations to main block. Now disused. Hipped fibre-cement slate roof partially concealed behind lead-sheeted stone parapets, having smooth rendered chimneystacks with over-sailing courses. Copper-roofed octagonal-plan belvedere to south-east elevation, with clock below placed in small round-topped pediment that interrupts cornice. Loggia to front has plain parapet supported on plain pilasters with render plinths. Painted smooth rendered ruled-and-lined walls with smooth rendered platband beneath heavy moulded cornice at wall tops, plaster guilloche ornament between ground and first floors, rusticated smooth render quoins, and with projecting cut-stone base to ground floor. Basement level to rear addition has quarry-faced ashlar walls beneath chamfered string course and has empty niches to chamfered corners. Street level to front and end elevations has semi-circular areas bounded by cast-iron railings. Square-headed window openings having stone sills to top floor of original block and to short sides of addition, and round-headed to ground floor and to basement of addition, latter having rusticated voussoirs. Ground floor windows, including those to interior of front loggia, are set within shallow recesses. Building</p>



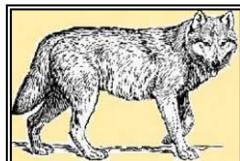
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AH No	NIAH No	Location	Description
			forms island within Market Square, at junction of Main Street and Muckno Street.
BH16	41308002	Muckno Street, Onomy	First Presbyterian Church, Lakeview. Freestanding gable-fronted Presbyterian church with Gothic detailing, dated 1787, remodelled 1930 by John Francis McGahon of Dundalk, having three-bay nave with single-storey flat-roofed minister's room (1930) to rear (west). Pitched natural slate roof, half-hipped to rear, blue-black angled clay ridge and hip tiles, half-round metal gutters, stone finial gable, oval slate date plaque inscribed '1787/Revd. John Davys'. Roughcast rendered walling, smooth rendered plinth, quoins, and minister's room. Pointed-arch cast-iron Y-tracery diagonally glazed windows with stained margins and quatrefoil to spandrels. Geometric tracery to east window over entrance door with moulded string course continued as hood-moulding, with concrete sills throughout. Pointed-arch timber double-leaf doors. Interior having partially timber-panelled lobby with timber dog-leg stairs leading to first floor gallery and meeting room. Church hall having two aisles, painted plastered walls and ceiling, wall-mounted carved stone memorials, carved timber pulpit and balcony on pair of cast-iron columns. Set back from road by roughcast plinth walls and cast-iron gates hinged to square pillars. Situated in elevated graveyard site, addressed by central flights of granite steps. Nearby lecture hall, built 1892 by John Harvey of Castleblayney.
BH17	41308023	West Street,	The Hope Arms Hotel. Detached five-bay three-storey house with raised basement, built c.1780, in use as hotel since 1824, and having two-bay full-height addition to middle of rear, and single-bay single-storey addition to rear re-entrant corner. Pitched slate roof with render copings and yellow-brick gable-end chimneystacks. Smooth rendered walls with render plinth and render block-and-start quoins. Square-headed one-over-one pane timber sliding sash windows to front elevation and square-headed mainly boarded up windows to rear. Square-headed doorway to front elevation having moulded render surround, detached moulded cornice, and replacement glazed timber door, approached by flight of limestone steps and having



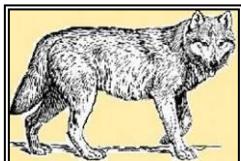
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AH No	NIAH No	Location	Description
			decorative rose device above doorway now lacking original lamp fitting. Basement area to front protected by painted stone plinth supporting decorative cast-iron railing with banded newel posts. Gateway to east gives access to yard to rear.
BH18	41308008	New Street	Convent of Mercy. This is an example of the scale and influence of religious orders in early twentieth-century Ireland. Clearly welcomed as providers of high quality education in Castleblayney as they had been involved with throughout the country since the 1830s, the Sisters of Mercy built a convent that is an imposing and very highly detailed architectural work and which retains the bulk of its historic fabric in excellent condition.
BH19	41308069- 41308075	Upper York Street, Onomy.	The Almshouses. Former almhouses built circa 1875-1885. Strong attention to detail is evident throughout, with high-quality brickwork, brick details, decorative terracotta work. The design included double-light windows to the front which have been carefully framed within decorative brick pilasters. The placement of the chimneystacks, halfway down the front roof slope, is unusual.
BH20	N/A	Market Square	The Rounded Corner at Market Square and West St. The unusual rounded configuration of this road and its ascent from Muckno Street into West Street has resulted in an unusual curved frontage which characterises this part of the town.
BH21	41308037	Market Square	The Corner House at the junction of Market Square and Henry Street. This building forms a distinctive bookend to the junction of Market Square and Henry Street and its conical roof and rounded corner softens the corner. The timber eaves brackets and detailing to the dormer add interest and detail to the elevations. The retention of some timber windows and of the cast-iron railings enhances the building and its setting.
BH22	41308020	West Street	Building adjoining Bank of Ireland, West Street. Terraced two-bay three-storey house, built c.1830, having integral carriage arch to east end. In use as offices and dental surgery. Gabled four-bay two-storey residential range linked to catslide extension at rear. This traditionally proportioned example of terraced housing retains much of its original materials and features, notably the fine cast-iron railings, and the vehicular access to



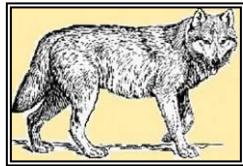
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AH No	NIAH No	Location	Description
			<p>the rear yard which now provides pedestrian connectivity between the Main Street and car parking in the distinctively long former back plots of the street-front buildings. The fine render details, especially to the doorway, provide visual interest, and the retention of a timber panelled door and sash windows enhances the structure.</p>
BH23	41308055-41308061	Church Street	<p>Terrace of cottages built c. 1880-1890, as workers houses for the Hope Estate. Aesthetically pleasing terrace of former workers' houses, built by the Hope family. They display a host of good late nineteenth-century detailing, such as the decorative timbering to the dormer window and the entrance canopy. The visual contrast between the red brick, rubble limestone, red brick chimney stack and the carved timber, considerably enhances the streetscape.</p>
BH24	41308062	Church Street	<p>Gate Lodge and Pillars to Hope Castle. This former gate lodge associated with the Hope Castle estate slightly predates the fine row of former almshouses to which it is attached. It is embellished with many good architectural details that link it visually to the almshouses. The attention to detail is evident, especially in the ornately crafted bargeboards and the chimney stacks. The oriel feature is repeated in the almshouses, and the textural contrast between the rubble walls, cut and carved sandstone details, and the carved timber work, makes for an especially pleasing composition.</p>
BH25	41308063	Church St.	<p>The Caretakers Residence at Saint Maeldoids Church. Terraced three-bay two-storey L-plan gate lodge, built c.1870. Pitched fibre-cement slate roof with rolled terracotta ridge, brick chimney stack to rear with over-sailing courses. Brick flue raking to north gable. Carved pierced fascia boards to front and rear eaves of front block, and plain timber to gables, and to eaves of rear wing, with replacement uPVC rainwater goods. Roughly squared rubble limestone walls with partially dressed ashlar sandstone block-and-start dressings to quoins. Chamfered sandstone sill course to first floor of front elevation. Stone dressings to front elevation and south gable, brick elsewhere. Segmental-headed door and window openings to front</p>



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AH No	NIAH No	Location	Description
			elevation, to south gable and to first floor of return, square-headed elsewhere, all with replacement uPVC frames.
BH26	41308006	Muckno St, Drumillard	The Seven Houses. Terraced seven-bay single-storey rubble stone house with dormer attic, built c.1830, possibly originally three houses, having detached single-storey pitched roofed outhouse to south-west corner of rear yard and detached single-storey outhouse south of gable end creating entrance gateway for densely overgrown rear yard. Pitched slate roof with black clay ridge tiles, three evenly spaced brick chimneystacks having simple over-sailing courses, and replacement metal gutters on timber fascia board fixed to exposed overhanging rafter ends and having cast-iron downpipes. Gabled wall dormers with fibre-cement tiles, decorative terracotta ridge, black clay finials and pierced decorative timber bargeboards. Painted, ruled-and-lined smooth rendered walls with small triangular render moulding above dormer windows and camber-arch window openings with side-hung timber casements, two-pane to dormer level and six-pane to ground floor level, all with painted stone sills. One-over-one pane timber sliding sash window visible to south gable end. Square-headed entrance doorway with replacement sheeted timber door in simple moulded timber frame. Painted, smooth rendered ruled-and-lined brick boundary wall to front garden, with wrought-iron railings held by square piers with chamfered and stopped arrises and cut-stone capping. Square-plan gate piers with cut-stone capping incorporated into south-east corner of house and north-east corner of single-storey outbuilding with steel-sheeted gates to rear yard. Pitched outbuilding with slate roof and stone walls with wide double-leaf timber-sheeted door to gable end at road.
BH27	41308024	Muckno St.	McGuigan's Boutique, Muckno Street
BH28	41308019	West Street	Bank of Ireland, West Street
BH29	41308036- 41308040	Market Square	Row of Five Houses in Market Square at Muckno Gates
BH30	41308022	West Street.	Former Castleblayney Town Council Offices and Property on Opposite Side of Archway.
BH31	41308017	West Street	Post Office, West Street



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AH No	NIAH No	Location	Description
BH32	41308013	West Street	Mallon Solicitor's office
BH33	N/A		Market Square Architectural Conservation Area

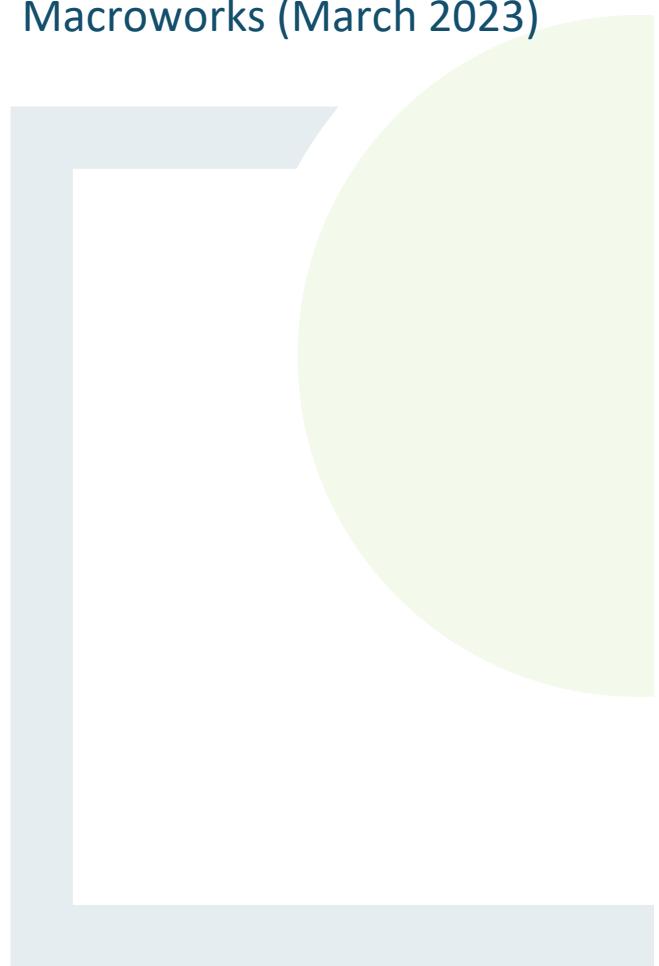


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APPENDIX 5

Landscape and Visual
Constraints and
Considerations Report, Lough
Muckno Tourism Vision,
Macroworks (March 2023)



LANDSCAPE AND VISUAL CONSTRAINTS / CONSIDERATIONS REPORT



Lough Muckno Tourism Vision

County Monaghan



Registered
Landscape
Architect

February 2023

1.1 INTRODUCTION

This Landscape and Visual Constraints/Considerations Report has been prepared in relation to a vision to development Lough Muckno and the associated town of Castleblayney as an integrated tourism destination. This Vision involves concept proposals for four connected zones of activity, within which it will be possible to undertake a vast range of outdoor adventure activities as well as experiences associated with nature, conservation, art, craft, music, food and drink, and health and well-being. There are two options to be assessed with the first of these relating to relatively light touch measure to enhance the visitor offering of Lough Muckno and its environs. The second option includes all elements of option 1, but relates to substantial development of Lough Muckno Estate as an international tourist destination. Both options will be considered in sequence within this report. It should be noted that these proposals are only at the conceptual stage and have not bee proposed as 'development' under the meaning of the Planning and Development Act, as amended.

This landscape and visual constraints/considerations study considers landscape & visual related designations and policies within the Monaghan County Development Plan. The study also identifies key sensitive receptors within the surrounding area that may have the potential to be significantly impacted upon from a landscape and visual perspective and thereby may have the potential to represent a planning risk for the proposed tourism development.

Although closely linked, landscape and visual impacts are assessed separately in a Landscape and Visual Assessment (LVIA). In the interests of context and clarity, descriptions of landscape impact assessment and visual impact assessment are provided separately below:

Landscape Impact Assessment (LIA) relates to assessing effects of a development on the landscape as a resource in its own right and is concerned with how the proposal will affect the elements that make up the landscape, the aesthetic and perceptual aspects of the landscape and its distinctive character.

Visual Impact Assessment (VIA) relates to assessing effects of a development on specific views and on the general visual amenity experienced by people. This deals with how the surroundings of individuals or groups of people may be specifically affected by changes in the content and character of views as a result of the change or loss of existing elements of the landscape and/or introduction of new elements. Visual impacts may occur from; Visual Obstruction (blocking of a view, be it full, partial or intermittent) or; Visual Intrusion (interruption of a view without blocking).

1.2 METHODOLOGY

For the purpose of this constraints/considerations study, a study area of c.2km radius from the potential development zones has been used, being that area that is contained in the immediate Lough Muckno catchment area and with potential visibility of potential

development features. However, there will be a particular focus on landscape and visual constraints within and immediately around the concept proposals zones.



Figure 1 – Approximate 2km radius LVIA study area from the concept proposal zones

The LVIA Constraints and Considerations study will include the following sections;

- Overview Concept Description
- Baseline Landscape and Visual Context
- Landscape and Visual Policy Context
- Option 1 - Potential Landscape and Visual Effects
- Option 2 – Potential Landscape and Visual Effects
- Summary

Appendix A contains the criteria tables used by Macro Works in the normal course of LVIA for proposed developments, which are aligned with the IEMA Guidelines for Landscape and

Visual Impact Assessment (2013) and the Environmental Protection Agency Guidance on Information to be contained in Environmental Impact Assessment Report (2022). Whilst the brief in this instance is not to provide a full LVIA of development elements that are not yet fully defined and designed, the assessment criteria provide a frame of reference for planning risks that are identified herein. The diagram below (Figure 1) provides an overview of the LVIA process.

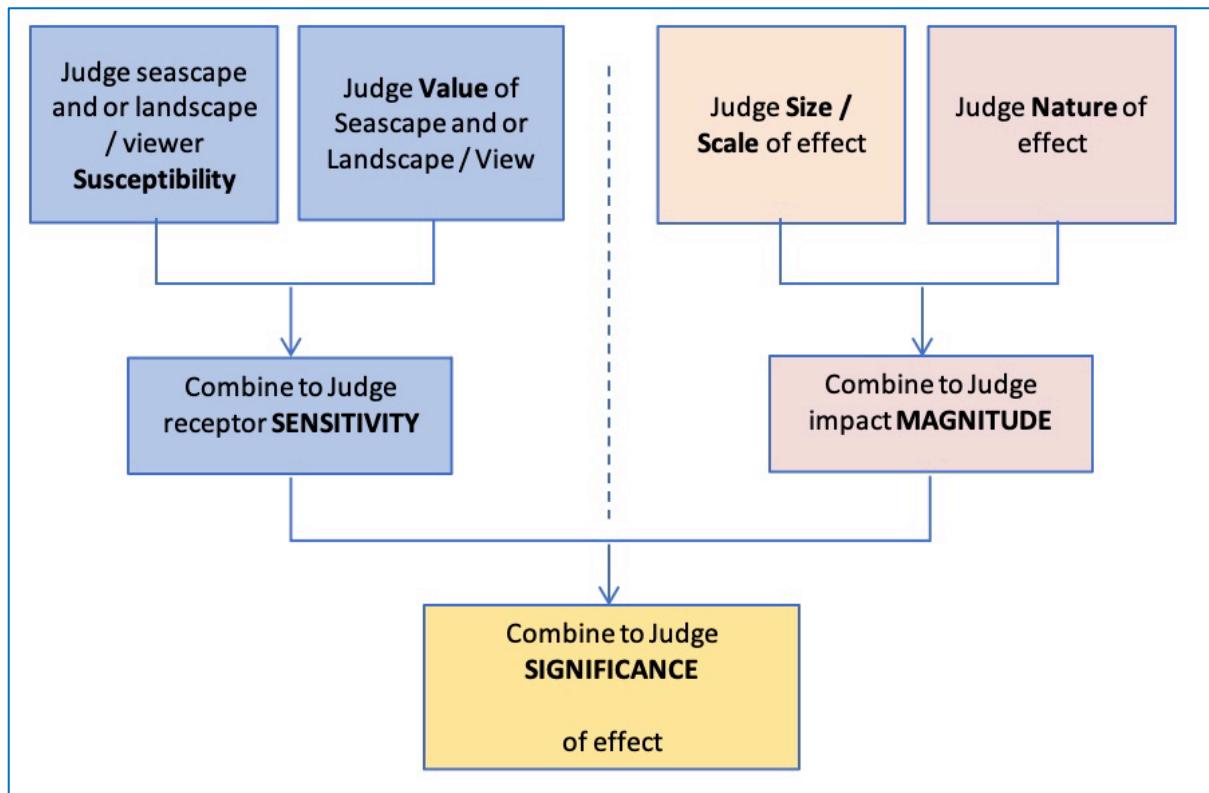


Figure 2 – Overview of Landscape and Visual Impact Assessment Process

1.3 OVERVIEW CONCEPT DESCRIPTION

Concept Proposed Option 1

Concept Proposal Option 1 entitled '*Muckno Adventure Estate*' involves concept proposals for four connected zones of activity, within which it will be possible to undertake over 150 different outdoor adventure activities as well as experiences associated with nature, conservation, art, craft, music, food and drink, and health and well-being.

The four main zones for this concept are as follows:

- Zone 1: The Historic Estate
- Zone 2: Lough Muckno
- Zone 3: Concra Woods
- Zone 4 The Town – Castleblayney

Key components of this option are as follows:

- Regeneration and repurposing of Hope Castle situated in Lough Muckno Estate.

- Use of Hope Castle and its curtilage as an Exhibition Venue, Sculpture Garden and Park, and Walled Garden.
- Development of a Coachouse café, retail area, and children's play area, at Hope Castle's coachouse building.
- General landscaping and development of greenways, parkland walks and cycle paths within Lough Muckno Estate.
- Development of a water sports centre in Lough Muckno Estate.
- Development of a cruise tour centre, and provision of water taxies, cruise boats and electric buggies within Lough Muckno Estate.
- Development of a fishing lodge and conservation centre within Lough Muckno Estate.
- Development of a hotel, golf complex, lodges, a spa and a cookery school at Concra Wood Golf Club.
- The development of dispersed lodges and recreational activities at islands in Lough Muckno.
- Integration of Castleblayney Town with The Historic Estate via the Gatehouses to the estate.
- Development of the Gatehouse as an information centre and retail area.
- Development of a centre housing cultural and recreational activities at Market House situated in Market Square, Castleblayney.
- Development of dispersed parking through Castleblayney Town to accommodate visitors to Castleblayney, relative to the scale of the development that takes place.
- Development of Black Island Trails.
- The development of a modest sized, open sided dome structure in the vicinity of Hope Castle housing several recreational and cultural activities, a café and potentially, a moderately scaled ice climbing wall.

Concept Proposal Option 2

Concept Proposal Option 2 entitled '*The Great Drumlin of Adventure*' builds on Concept Proposal Option 1. This concept proposal option involves the carrying out of additional substantial development at Lough Muckno Estate. The Estate will be developed as an internationally significant tourist attraction. This project will be ambitious, innovative and transformative in nature. The Estate will host a myriad of high value tourism and recreational amenities and attractions. It will involve the development of an iconic and architecturally significant dome structure replicating the shape and profile of a drumlin.

Key components of this concept option are as follows:

- All of the Concept Proposal Option 1 components listed in the bullet points above.
- The development of a large-scale dome structure (potentially over Hope Castle) in Lough Muckno Estate, to be known as the Great Drumlin of Adventure.
- Development of a spa and well-being centre, several café and retail facilities, exhibition areas, substantially scaled indoor ice climbing walls, a high ropes course, play areas, and auditorium, all within the domed area.
- The development the deep adventure attraction within the domed area in Lough Muckno Estate.
- Development of a canyoning and water sports arena within the domed area in Lough Muckno Estate.

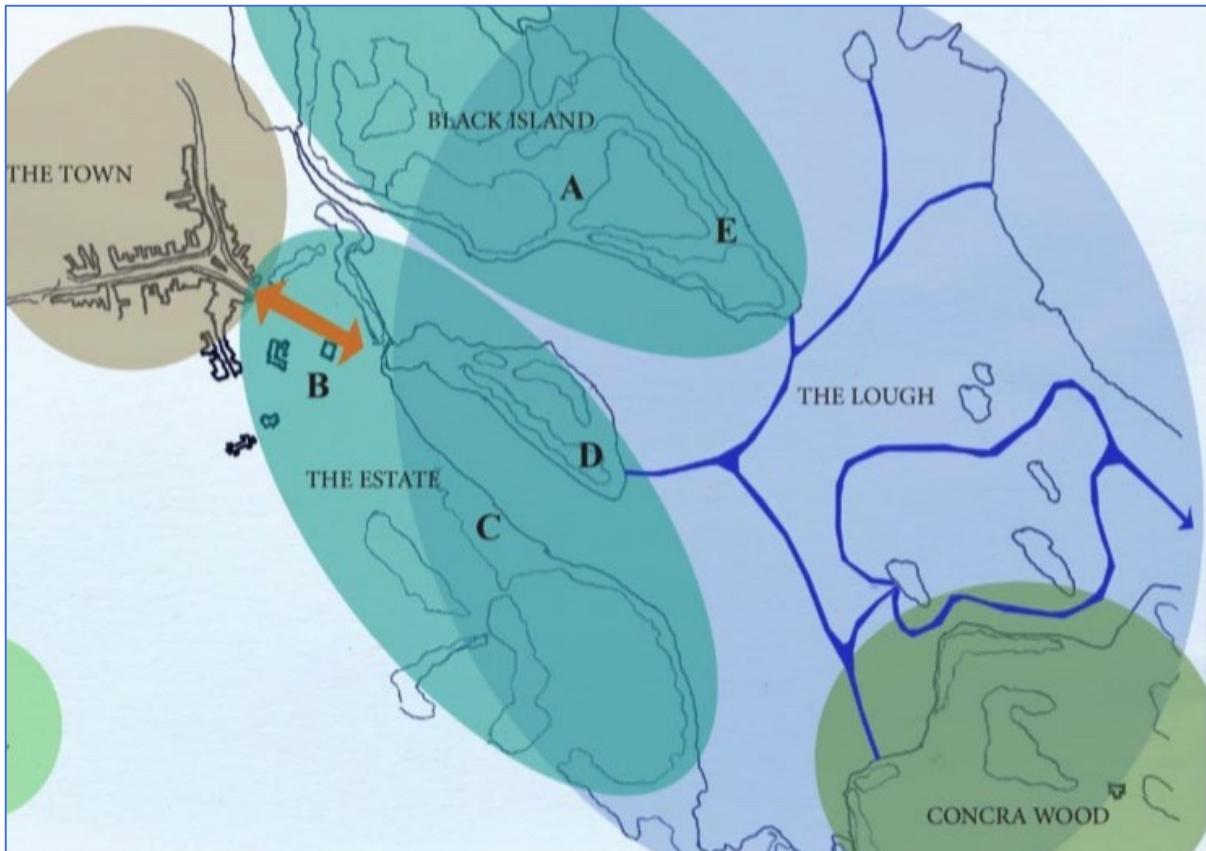


Figure 3 – Potential Zones of Activity

1.4 BASELINE LANDSCAPE AND VISUAL CONTEXT

1.4.1 Study Area Context

In the context of the 2km radius study area the most dominating landscape feature is Lough Muckno and its associated islands, peninsulas and riparian vegetation, which ranges from natural and semi-natural woodland, marshland and improved agricultural grassland. Another key feature is the substantial settlement of Castleblayney, which has its focus around a market square and Hope Castle at the north-western end of the lake. Black Island is the largest island within the Lough and its domed, wooded form is located adjacent to the east of Castleblayney where it serves as a key recreational amenity. The rural hinterland of Castleblayney and Lough Muckno predominately consists of rolling drumlin farmland that rises away from the waterbody and provides a pleasant pastoral enclosure to the overall setting. There is a reasonable spread of rural / residential dwellings beyond the settlement that generally try to take advantage of elevated views across the Lough, especially on its eastern side. There are a series of small loughs and marshy areas to the north of Castleblayney that drain towards Lough Muckno.

In terms of transport routes, the principal road within the study area is the N2 national road, which converges with the N53 national secondary road on the southern outskirts of Castleblayney to the southwest of Lough Muckno. The two roads run in parallel within the southwestern quadrant of the study area with the N53 being closest to the Lough. Nonetheless, it has little visual connection to Lough Muckno due to enclosure by terrain and vegetation. The R182 and R183 regional roads diverge from the northern outskirts of

Castleblayney in north-easterly and north-westerly directions respectively. There are only local roads to the east of the Lough within the study area.



Figure 4 – View south along Lough Muckno from Hope Castle



Figure 5 – View of Lough Muckno from western farmland fringe (Designated Scenic View)

1.4.2 Zone 1 Context – The Historic Estate

The Zone 1 Historic estate includes Hope Castle and its associated demesne, which reads as an extensive waterside parkland area on the slopes between Castleblayney's southern approach and the northern end of Lough Muckno. The dilapidated Hope Castle, rises prominently above an sloping apron of parkland lawns at the head of the lough where it is connected to the town square to the northwest by a short, treelined, avenue. Beyond a modest stone wall to the south of the avenue are a collection of associated halls and stables that have also fallen into dilapidation or have been subject of fire damage. This part of the demesne, directly adjacent to the south and west of Hope Castle, is enclosed by large mature trees ,whereas the slopes beyond are more open parkland dotted by specimen trees.

Saint Maeldoid's Church and cemetery is just outside, but enveloped by the western side of the estate where it lies adjacent to the larger St Mary's Church. These churches contribute to the sense of heritage within the immediate context of the demesne.

The estate includes the low-lying White Island, which reads more as a peninsula with open ground and scattered mature trees at its centre, but surrounded by a broad transition of marshland and reeds to the waters edge. White Island penetrates into the bay at the northern end of Lough Muckno that is framed by the demesne to the west and larger Black Island to the north. As described above in relation to the general character of the area, Black Island is a steep and heavily wooded Island, which forms part of the historic estate. Between Black Island and the parkland demesne surrounding Hope Castle is a small amenity beach area with seating and a playground. There is a wooden bridge that connects recreational walkers to Black Island where there is a range of sign-posted tracks. The Castleblayney Outdoor Adventure Centre is a water based activity area centred around a modest wooden dock, downslope to the southeast of Hope Castle.



Figure 6 – View of dilapidated Hope Castle



Figure 7 – View towards adventure centre from White Island



Figure 8 – View of amenity picnic area and playground at northern end of Lough Muckno



Figure 9 – View from walking trail on Black Island

1.4.3 Zone 2 Context – Lough Muckno

The landscape and visual setting of Lough Muckno has been described in a general sense in section 1.4.1 because it is the distinctive centrepiece of the low-lying study area. It is a large and diverse waterbody for a drumlin setting and has a mixture of naturalistic, productive and heritage values surrounding it in the form of riparian woodlands, reed beds, farmland and the demesne landscape of Hope Castle. The lough consists of large and small islands and inlets and has a pleasant sense of enclosure at both the micro and macro scale.

There are jetties and small beaches that are used for recreational purposes and to launch watercraft into the lake and the lough appears well used by fisherfolk and recreationalists. Many of the dwellings that surround the lough are designed to take advantage of elevated views across it.



Figure 10 – View east towards Black Island from White Island

1.4.4 Zone 3 Context – Conra Wood Golf Course

The Conra Woods Golf Course is a high quality and internationally renowned golf course that exudes the character of an inland links course because it is open in nature and waterside in location. It occupies a promontory headland that juts out into Lough Muckno from the southwest and divides the lough into a northern and southern end with a relatively narrow channel between. The parkland character of the golf course blends seamlessly with the parkland character of the Hope Castle Demesne to the northwest and there is generally riparian woodland surrounding the golf course at the interface with the Lough.



Figure 11 – View of Lough Muckno from Conra Wood Golf Course



Figure 12 – View of Conra Wood Golf Course Club House

1.4.5 Zone 4 Context – Castleblayney

Castleblayney is the a main settlement contained within the study area and a key component of the Lough Muckno Vision as the service centre to support the tourism initiatives. The settlement emerged after ‘the nine years war’ when Sir Edward Blayney was granted forfeited lands in 1611 to build a castle at the present location of Hope Castle. The settlement established around the castle as a market square that served the local area.

The settlement already has connections to the historic estate of Zone 1 through adjacency and connectivity along a treeline avenue from the market square to Hope Castle albeit the visual connection is not strong. The historic core of the settlement is gently undulating and winding in nature with a strongly contained streetscape of 2-3 storey dwellings and/or residential over commercial uses. The settlement has a strong sense of heritage, but although Lough Muckno and the historic estate lies adjacent to the east there is not currently a strong sense of either from within the settlement.



Figure 13 – Market Square looking northwest



Figure 14 – View towards entrance to historic estate from Market Square

1.5 LANDSCAPE AND VISUAL POLICY CONTEXT

1.5.1 Monaghan County Development Plan (2019 – 2025)

In section 2.3 of the Monaghan County Development Plan (2019 – 2025) – ‘Settlement Hierarchy’, Castleblayney is identified as a Tier 2 settlement for which it is stated;

Castleblayney serves a wide hinterland and provides important local level residential, retailing, social and leisure functions for the town and surrounding rural community. The town is now by-passed by the N2 national route but remains a strategic town for the County that has significant potential for expansion and growth. The N53 route between Castleblayney and Dundalk provides an essential link to a larger economic centre and gives direct access to the M1 Dublin Belfast corridor. Emphasis will be placed on maintaining and supporting urban development by way of consolidation of the town centre and expansion of services to meet the needs of the locality commensurate with its position in the hierarchy. It is important that this growth occurs in a manner that protects and enhances the towns natural heritage assets including the promotion of Lough Muckno for appropriate and sustainable tourism development.

In section 6.11 - Natural & Recreational Amenities it is stated that;

“Amenity areas are specifically designated due to their important landscape quality and recreational potential. They provide an asset for the local community and visitors in terms of recreation, contemplation and tourism. All scenic views, primary and secondary amenity areas can be viewed on Map 6.1 County Monaghan Development Constraints.”

... and in section 6.11.1 - Areas of Primary Amenity;

“County Monaghan has two principle areas of outstanding landscape quality which require protection from insensitive and inappropriate development. They are as set out in the Table 6.5 Areas of Primary Amenity below. Development in these areas will only be permitted where the integrity and natural beauty of the landscape is not threatened. Any developments which are normally exempt under Article 6 of the Planning and Developments Regulations will require planning permission.

Development proposals in these areas will only be permitted where it can be clearly demonstrated that the existing landscape, landform, flora and fauna, scenic or environmental characteristics will not be compromised.”

Table 6.5 of the County Development Plan identifies that ‘Lough Muckno and Environs is one of the two Primary Amenity Areas in the county. There is one policy relating to Primary Amenity Areas and that is;

“PAP1 - To restrict development in Areas of Primary Amenity to sites where it can be demonstrated to the satisfaction of the Planning Authority that the proposed development would not threaten the scenic or environmental quality of the area.”

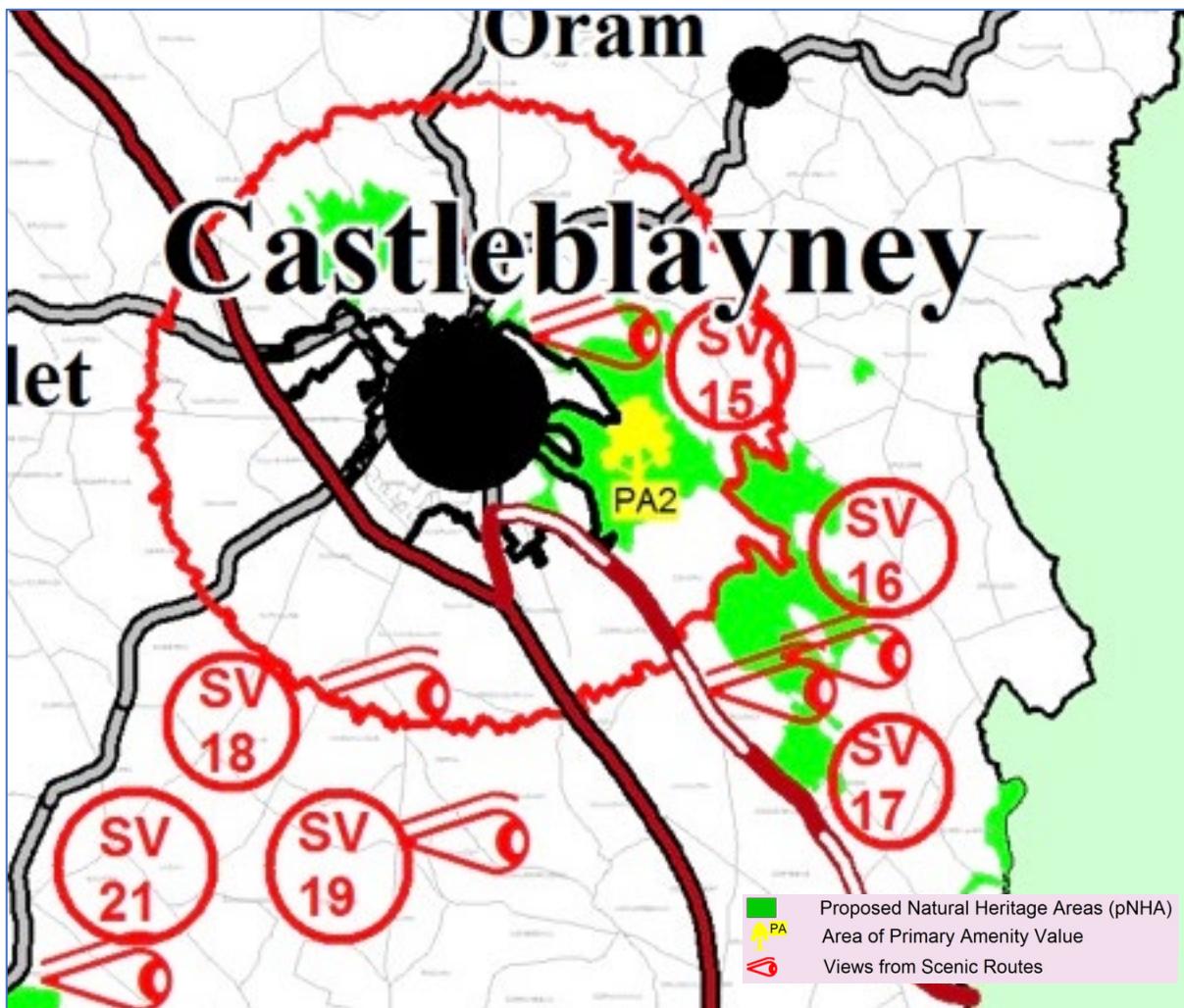


Figure 15 – Excerpt from Map 6.1 of the Monaghan County Development Plan

Designated Scenic Views

As can be seen from the Map 6.1 excerpt in Figure 15 above, there are potentially six scenic views that relate to views of Lough Muckno. Views SV15, SV16 and SV17 relate to views from the ‘scenic drive along Muckno’ to the east of the lough, whilst views SV18 and SV19 relate to ‘Distant Views of Lough Muckno and Slieve Gullion’ from several km to the west of the Lough. All of these are potentially relevant to proposed developments within the environs of Lough Muckno, but not in context where they could be blocked or dominated by such proposals.

SV 15	Scenic drive along Lough Muckno	LP03700
SV 16		LS08400
SV 17		LP03720
SV 18	Distant views of Lough Muckno and Slieve Gullion	LS07830
SV 19		LS08141

Figure 16 – Schedule of relevant scenic routes from Appendix 5 of the Monaghan County Development Plan

1.6 EXTENT OF VISUAL INFLUENCE

In order to understand the likely extent of visual influence of the Option 1 proposals, a ‘Zone of Theoretical Visibility’ (ZTV) map has been prepared from the top of the existing Hope Castle. This indicates from where in the surrounding landscape it is likely to be visible and because it uses Digital Surface Model (DSM) data it accounts for the screening effects of vegetation and buildings. The top of the existing castle has been used for this exercise as it represents one of the highest points in the landscape that is also subject to proposed works and is a focal point of the overall concept. It is also representative of a worst case-scenario in terms of visual exposure for Option 1 developments associated with the estate, the lough and the town.

For the purposes of understanding the potential visibility of the Option 2 dome relative to the existing Castle over which it is likely to span the dome element has also been introduced into the ZTV map at a height equivalent to twice that of the castle but with the same coordinates (See Figure 17 below)

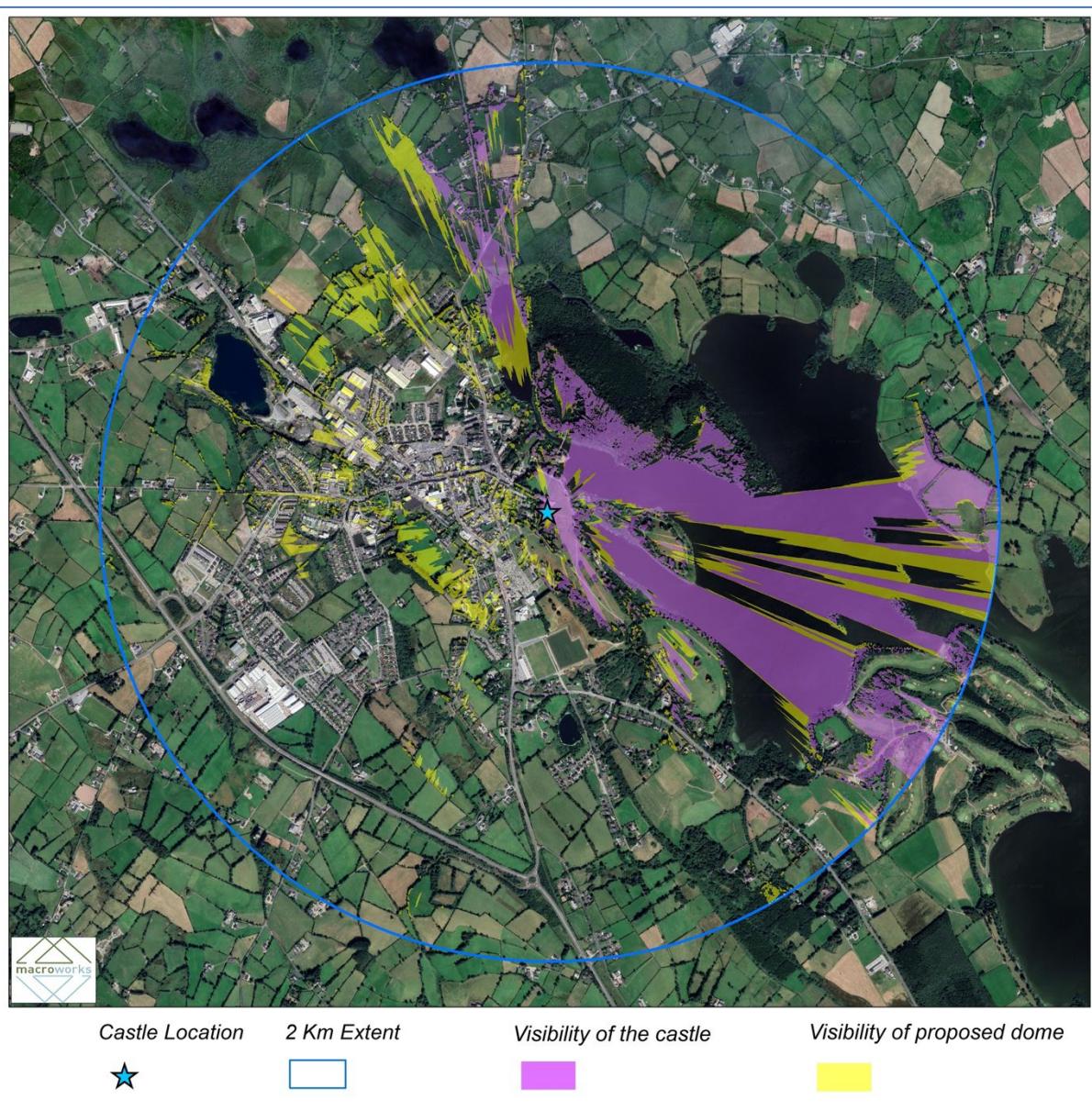


Figure 17 – ZTV map showing potential visibility of Hope Castle and also the dome spanning over it (option 2)

Figure 17 should be read such that the yellow pattern represents locations that only have a view of the dome, but the purple pattern represents areas that have a view of both the existing castle and the future dome.

Views of Hope castle (purple pattern) are largely confined to shards that extend down the lake to the south east but only as far as Concra Wood Golf Course and do not extend into the north-eastern bay beyond Black Island. There is also some sporadic visibility to the north along the river valley. There is almost no visibility from within the town of Castleblayney.

Potential views of the Option 2 dome (yellow pattern) extend to a marginally greater proportion of the lough than the castle in its own right. It will also become visible within the elevated farmed hinterland of the settlement to the north and west once intervening buildings and vegetation within the settlement have less of a screening influence.

There will be very little potential for visibility from designated scenic routes surrounding the lough to the east (SV15, SV17 and SV17) and there also appears to be little visibility from the west and south. Views of the dome will be afforded from Zone 3 – Concra Wood Golf Course and there is potential cumulative effects with Options 1 proposals at the golf course.

1.7 OPTION 1 - POTENTIAL LANDSCAPE AND VISUAL EFFECTS

In order to determine the potential effects of each of the proposed Option 1 interventions at each of the zones, it is first necessary to cross reference relevance between the interventions and the zones. This analysis is provided in the matrix at Table 1. Thereafter, each relevant intervention will be assessed in terms of its potential effects on the physical landscape, landscape character and visual amenity with the key aim of identifying potentially significant impacts of a negative quality – key planning risks. The assessment will also determine if the interventions are likely to have a positive quality of effect.

Table 1.1 Relevance Matrix

Concept Proposal/ Zone	Zone 1 Historic Estate	Zone 2 Lough Muckno	Zone 3 Contra Woods	Zone 4 The Town
<i>Regeneration and repurposing of Hope Castle situated in Lough Muckno Estate</i>				
<i>Use of Hope Castle and its curtilage as an Exhibition Venue, Sculpture Garden and Park, and Walled Garden</i>				
<i>Development of a Coachouse café, retail area, and children's play area, at Hope Castle's coachouse building</i>				
<i>General landscaping and development of greenways, parkland walks and cycle paths within Lough Muckno Estate</i>				
<i>Development of a water sports centre in Lough Muckno Estate</i>				
<i>Development of a cruise tour centre, and provision of water taxies, cruise boats and electric buggies within Lough Muckno Estate</i>				
<i>Development of a fishing lodge and conservation centre within Lough Muckno Estate</i>				
<i>Development of a hotel, golf complex, lodges, a spa and a cookery school at Contra Wood Golf Club</i>				
<i>The development of dispersed lodges and recreational activities at islands in Lough Muckno</i>				
<i>Integration of Castleblayney Town with The Historic Estate via the Gatehouses to the estate</i>				
<i>Development of the Gatehouse as an information centre and retail area</i>				
<i>Development of a centre housing cultural and recreational activities at Market House situated in Market Square, Castleblayney</i>				
<i>Development of dispersed parking through Castleblayney Town to accommodate visitors to Castleblayney, relative to the scale of the development that takes place</i>				
<i>Development of Black Island Trails</i>				
<i>The development of a modest sized, open sided dome structure in the vicinity of Hope Castle housing several recreational and cultural activities, a café and potentially, a moderately scaled ice climbing wall</i>				

Table 1.2 Potential Landscape and Visual Effects Option 1 / Zone 1

Zone 1 - Historic Estate	Physical Landscape Impact Potential	Landscape Character Impact Potential	Visual Impact Potential	Potential for significant effects (Y/N)
<i>Regeneration and repurposing of Hope Castle situated in Lough Muckno Estate</i>	There will be localised negative physical effects to the castle and immediate surrounds during construction, but the fabric of the Castle and its immediate landscape setting will be enhanced thereafter.	There will be localised negative impacts on landscape character during construction, but the character of the castle and its setting will be enhanced thereafter	There will be localised negative impacts on visual amenity for estate users during construction, but the visual amenity of the castle and its setting will be enhanced thereafter	N
<i>Use of Hope Castle and its curtilage as an Exhibition Venue, Sculpture Garden and Park, and Walled Garden</i>	Very minor impacts	The landscape setting of the Castle and its surrounds is likely to be enhanced by this light touch use	The visual amenity of the Castle and its surrounds is likely to be enhanced by this light touch use	N
<i>Development of a Coachouse café, retail area, and children's play area, at Hope Castle's coachouse building</i>	There will be localised negative physical effects to the Coachouse and immediate surrounds during construction, but the fabric of the Coachouse and its immediate landscape setting will be enhanced thereafter.	There will be localised negative impacts on landscape character during construction, but the character of the Coachouse and its setting will be enhanced thereafter	There will be localised negative impacts on visual amenity for estate users during construction, but the visual amenity of the Coachouse and its setting will be enhanced thereafter	N
<i>General landscaping and development of greenways, parkland walks and cycle paths within Lough Muckno Estate</i>	There will be temporary, minor and dispersed impacts	There will be a minor increase in the intensity of pathway	Whilst there will be a minor increase in the intensity of pathway	N

	during construction of paths and cycleways	development within the estate, but this is consistent with the nature and scale of development within demesne landscapes generally	development within the estate, this will facilitate users (visual receptors) resulting in greater opportunity to experience high amenity views within the estate	
<i>Development of a water sports centre in Lough Muckno Estate</i>	There will be localised negative physical effects during construction of built elements associated with the water sports centre as well as permanent landcover change	There will be an increase in intensity and diversity of built development within the estate that could draw from its heritage character if not designed sympathetically	There will be localised negative impacts on visual amenity for estate users during construction. Thereafter, there will be an increase in intensity and diversity of built development within estate views that could draw from visual amenity	Unlikely
<i>Development of a cruise tour centre, and provision of water taxies, cruise boats and electric buggies within Lough Muckno Estate</i>	There will be localised negative physical effects during construction of built elements associated with the cruise tour centre as well as permanent landcover change	There will be an increase in intensity and diversity of built development within the estate that could draw from its heritage character if not designed sympathetically	There will be localised negative impacts on visual amenity for estate users during construction. Thereafter, there will be an increase in intensity and diversity of built development within estate views that could draw from visual amenity.	Unlikely
<i>Development of a fishing lodge and conservation centre within Lough Muckno Estate</i>	There will be localised negative physical	There will be an increase in intensity	There will be localised negative impacts on	Unlikely

	<p>effects during construction of built elements associated with the fishing lodge and conservation area as well as permanent landcover change</p>	<p>and diversity of built development within the estate that could draw from its heritage character if not designed sympathetically</p>	<p>visual amenity for estate users during construction. Thereafter, there will be an increase in intensity and diversity of built development within estate views that could draw from visual amenity.</p>	
<p><i>The development of dispersed lodges and recreational activities at islands in Lough Muckno</i></p>	<p>There will be dispersed localised negative physical effects during construction of built elements associated with the fishing lodge and conservation area as well as permanent landcover change</p>	<p>There will be an increase in intensity and diversity of built development within the estate that could draw from its heritage character if not designed sympathetically</p>	<p>There will be localised negative impacts on visual amenity for estate users during construction. Thereafter, there will be an increase in intensity and diversity of built development within estate views that could draw from visual amenity.</p>	<p>Unlikely</p>
<p><i>Integration of Castleblayney Town with The Historic Estate via the Gatehouses to the estate</i></p>	<p>There may be localised negative physical effects during construction / demolition of built elements associated with the integration of the historic estate and town</p>	<p>There will be localised negative impacts on landscape character during construction, but the character of both the town centre and estate setting should be enhanced by the improved integration</p>	<p>There will be localised negative impacts on visual amenity during construction. Thereafter, visual amenity should be enhanced by the integration measures</p>	<p>Unlikely</p>

<i>Development of the Gatehouse as an information centre and retail area</i>	There will be localised negative physical effects to the Gatehouse and immediate surrounds during construction, but the fabric of the Gatehouse and its immediate landscape setting will be enhanced thereafter.	There will be localised negative impacts on landscape character during construction, but the character of the Gatehouse and its setting will be enhanced thereafter	There will be localised negative impacts on visual amenity for estate users during construction, but the visual amenity of the Gatehouse and its setting will be enhanced thereafter	Unlikely
<i>Development of a centre housing cultural and recreational activities at Market House situated in Market Square, Castleblayney</i>	There will be localised negative physical effects to Market House and its immediate surrounds during construction, but the fabric of the Market House and its immediate landscape setting will be enhanced thereafter.	There will be localised negative impacts on landscape character during construction, but the character of the Market House and Market Square will be enhanced thereafter	There will be localised negative impacts on visual amenity residents and visitors during construction, but the visual amenity of the Market House and Market Square will be enhanced thereafter	N
<i>Development of Black Island Trails</i>	There will be temporary, minor and dispersed impacts during construction of any additional paths and cycleways	There will be a minor increase in the intensity of pathway development on the island, but this is consistent with the nature and scale of its current use	Whilst there may be a minor increase in the intensity of pathway development on black Island, this will facilitate users (visual receptors) resulting in greater opportunity to experience high amenity views within and from the island	N
<i>The development of a modest sized, open sided dome structure in the vicinity of Hope Castle housing several recreational and</i>	There will likely be negative physical	There will be a noticeable increase in	There will be a noticeable increase in	Y

<i>cultural activities, a café and potentially, a moderately scaled ice climbing wall</i>	effects to the dome site during construction, and permanent landcover change thereafter.	the scale intensity and diversity of built development within the estate that could draw from its heritage character if not sited / designed sympathetically	the scale intensity and diversity of built development within the estate that could draw from residential amenity for estate users if not sited / designed sympathetically	
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Table 1.3 Potential Landscape and Visual Effects Option 1 / Zone 2

Zone 2 – Lough Muckno	Physical Landscape Impact Potential	Landscape Character Impact Potential	Visual Impact Potential	Potential for significant effects (Y/N)
<i>Regeneration and repurposing of Hope Castle situated in Lough Muckno Estate</i>	None	There will be localised negative impacts on background landscape character during construction, but the character of the castle and its wider setting will be enhanced thereafter	There will be localised negative impacts on visual amenity for Lough users during construction, but the visual amenity of the castle and its wider setting will be enhanced thereafter	N
<i>Use of Hope Castle and its curtilage as an Exhibition Venue, Sculpture Garden and Park, and Walled Garden</i>	None	No material effect on the character of the Lough	No material effect on the visual amenity of Lough users	N
<i>Development of a Coachouse café, retail area, and children's play area, at Hope Castle's coachouse building</i>	None	No material effect on the character of the Lough	No material effect on the visual amenity of Lough users	N
<i>General landscaping and development of greenways, parkland walks and cycle paths within Lough Muckno Estate</i>	There will be temporary, minor and dispersed impacts during construction of paths and cycleways,	There will be a minor increase in the intensity of pathway development around the Lough but this is	Whilst there will be a minor increase in the intensity of pathway development within around the Lough, this	N

	spume of which may be close to the shore	not out of character with the environs	will facilitate users (visual receptors) resulting in greater opportunity to experience high amenity views across the lough	
<i>Development of a water sports centre in Lough Muckno Estate</i>	There will be localised negative physical effects during construction of built elements associated with the water sports centre as well as permanent shoreline change at the edge of the lough	There will be an increase in intensity and diversity of built development around the shores of the lough that could draw from its naturalistic character if not designed sympathetically	There will be negative impacts on visual amenity for lough users during construction. Thereafter, there will be an increase in intensity and diversity of built development along the shoreline that could draw from visual amenity	Y
<i>Development of a cruise tour centre, and provision of water taxies, cruise boats and electric buggies within Lough Muckno Estate</i>	There will be localised negative physical effects during construction of built elements associated with the cruise tour centre as well as permanent shoreline change at the edge of the lough	There will be an increase in intensity and diversity of built development around the shores of the lough that could draw from its naturalistic character if not designed sympathetically	There will be negative impacts on visual amenity for lough users during construction. Thereafter, there will be an increase in intensity and diversity of built development along the shoreline that could draw from visual amenity	Y
<i>Development of a fishing lodge and conservation centre within Lough Muckno Estate</i>	There will be localised negative physical effects during construction of built	There will be an increase in intensity and diversity of built development around	There will be negative impacts on visual amenity for lough users during	Y

	elements associated with the fishing lodge and conservation centre as well as permanent shoreline change at the edge of the lough	the shores of the lough that could draw from its naturalistic character if not designed sympathetically	construction. Thereafter, there will be an increase in intensity and diversity of built development along the shoreline that could draw from visual amenity	
<i>The development of dispersed lodges and recreational activities at islands in Lough Muckno</i>	There will be dispersed localised negative physical effects during construction of built elements associated with the fishing lodge and conservation area as well as permanent landcover change	There will be an increase in intensity and diversity of built development within the estate that could draw from its heritage character if not designed sympathetically	There will be negative impacts on visual amenity for lough users during construction. Thereafter, there will be an increase in intensity and diversity of built development along the shoreline that could draw from visual amenity.	Y
<i>Development of Black Island Trails</i>	None	No material effect on the character of the Lough	No material effect on the visual amenity of Lough users	N
<i>The development of a modest sized, open sided dome structure in the vicinity of Hope Castle housing several recreational and cultural activities, a café and potentially, a moderately scaled ice climbing wall</i>	None	There will be an increase in intensity and diversity of built development in the wider visual setting of the lough that could draw from its naturalistic character if not designed sympathetically	There will be localised negative impacts on visual amenity for Lough users during construction. Thereafter, there will be an increase in intensity and diversity of built development within the wider visual setting of the lough	Y

			that could draw from visual amenity	
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Table 1.4 Potential Landscape and Visual Effects Option 1 / Zone 3

Zone 3 – Conra Woods Golf Course	Physical Landscape Impact Potential	Landscape Character Impact Potential	Visual Impact Potential	Potential for significant effects (Y/N)
<i>Development of a hotel, golf complex, lodges, a spa and a cookery school at Conra Wood Golf Club</i>	There will be substantial physical effects to the golf course its shoreline during construction as well as permanent landcover change / vegetation loss thereafter.	There will be localised negative impacts on landscape character during construction. There will be a noticeable increase in the scale, intensity and diversity of built development within the golf course and its wider setting that could draw from its heritage character if not sited / designed sympathetically	There will be negative impacts on visual amenity for golfers and lough users during construction. Thereafter, there will be an increase in the scale, intensity and diversity of built development along the golf course shoreline that could draw from visual amenity.	Y

Table 1.5 Potential Landscape and Visual Effects Option 1 / Zone 4

Zone 4 – The Town, Castleblayney	Physical Landscape Impact Potential	Landscape Character Impact Potential	Visual Impact Potential	Potential for significant effects (Y/N)
<i>Integration of Castleblayney Town with The Historic Estate via the Gatehouses to the estate</i>	There may be localised negative physical effects during construction / demolition of built elements associated	There will be localised negative impacts on landscape character during construction, but the character of both the town centre	There will be localised negative impacts on visual amenity during construction. Thereafter, visual amenity should be	Unlikely

	with the integration of the historic estate and town	and estate setting should be enhanced by the improved integration	enhanced by the integration measures	
<i>Development of the Gatehouse as an information centre and retail area</i>	There will be localised negative physical effects to the Gatehouse and immediate surrounds during construction, but the fabric of the Gatehouse and its immediate landscape setting will be enhanced thereafter.	There will be localised negative impacts on townscape character during construction, but the character of the Gatehouse and its setting will be enhanced thereafter	There will be localised negative impacts on visual amenity for residents and visitors during construction, but the visual amenity of the Gatehouse and its setting will be enhanced thereafter	Unlikely
<i>Development of a centre housing cultural and recreational activities at Market House situated in Market Square, Castleblayney</i>	There will be localised negative physical effects to Market House and its immediate surrounds during construction, but the fabric of the Market House and its immediate landscape setting will be enhanced thereafter.	There will be localised negative impacts on landscape character during construction, but the character of the Market House and Market Square will be enhanced thereafter	There will be localised negative impacts on visual amenity for residents and visitors during construction, but the visual amenity of the Market House and Market Square will be enhanced thereafter	N
<i>Development of dispersed parking through Castleblayney Town to accommodate visitors to Castleblayney, relative to the scale of the development that takes place</i>	There will be short term and dispersed impacts during construction of additional parking within the town. There will be permanent change to the landcover of selected	There will be an increase in the intensity of vehicle-based infrastructure within the town, which may detract from its character unless sympathetically sited and designed.	There will be an increase in the intensity of vehicle-based infrastructure within the town, which may detract from visual amenity unless sympathetically sited and designed.	Unlikely

	<p>parking areas and the impact of that will depend on what is lost / improved</p>			
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1.8 OPTION 2 – POTENTIAL LANDSCAPE AND VISUAL EFFECTS

Although substantial in scale and diverse in nature, the various uses described for Option 2 are to be contained within a proposed dome structure that will envelope Hope Castle and much of its curtilage down the shores of Lough Muckno. Therefore, in landscape and visual terms it is the dome itself which represents the key intervention and will be considered hereafter instead of the various structures and activities that may be contained within it. The potential effects of the Option 2 dome will be considered separately for each zone.

Table 1.6 Potential Landscape and Visual Effects Option 2 / All Zones

Zone 1 - Historic Estate	Physical Landscape Impact Potential	Landscape Character Impact Potential	Visual Impact Potential	Potential for significant effects (Y/N)
<i>The development of a large-scale dome structure (potentially over Hope Castle) in Lough Muckno Estate, to be known as the Great Drumlin of Adventure.</i>	There will be substantial physical effects to the estate during construction of the dome and associated features as well as permanent landcover change / vegetation loss.	There will be substantial negative impacts on landscape character during construction. Thereafter, there will be a substantial increase in the scale, intensity and diversity of built development within the estate and its wider setting. The Option 2 development represents landscape transformation with the potential to impact negatively on sensitive landscape elements and naturalistic / heritage character.	There will be large scale negative impacts on visual amenity for residents, visitors and recreationalists during construction. The permanent presence of the dome and associated development represents dramatic visual change that has the potential to adversely impact on aspects of visual amenity within the estate. However, it is also a visually striking, high quality feature that may be perceived as improving visual amenity for some viewers – even providing an alternative improved frame of reference for the Castle to be appreciated.	Y
Zone 2 – Lough Muckno				
<i>The development of a large-scale dome structure (potentially over Hope Castle) in Lough Muckno</i>	There will be substantial physical effects to the	There will be substantial negative impacts on	There will be large scale negative impacts on visual	Y

<i>Estate, to be known as the Great Drumlin of Adventure.</i>	shoreline and slopes above the lough during construction of the dome and associated features as well as permanent landcover change / riparian vegetation loss.	landscape character during construction. Thereafter, there will be a substantial increase in the scale, intensity and diversity of built development within setting of Lough Muckno. The Option 2 development represents landscape transformation with the potential to impact negatively on sensitive landscape elements and naturalistic / heritage character.	amenity for lough users during construction. The permanent presence of the dome and associated development represents dramatic visual change to the northern backdrop of the Lough that has the potential to adversely impact on aspects of visual amenity. However, it is also a visually striking, high quality feature that may be perceived as improving visual amenity for some viewers.	
Zone 3 – Contra Woods Golf Course				
<i>The development of a large-scale dome structure (potentially over Hope Castle) in Lough Muckno Estate, to be known as the Great Drumlin of Adventure.</i>	None	The Option 2 dome will add to the scale, intensity and diversity of development within the wider context of the Contra Woods Golf Course, but as a distinct background feature that will not have a major influence on the character of the immediate golf course setting.	The dome will add to the scale, intensity and diversity of development within the wider visual setting of the Contra Woods Golf Course, but as a distinct background feature that will not have a major influence on visual amenity the immediate golf course setting.	Y

Zone 4 – The Town, Castleblayney				
<i>The development of a large-scale dome structure (potentially over Hope Castle) in Lough Muckno Estate, to be known as the Great Drumlin of Adventure.</i>	None	The Option 2 dome will add to the scale, intensity and diversity of development within the immediate context of Castleblayney. It may transform the perception and nucleus of the town connecting it more overtly with the estate and the lough. However, it will not have a strong or necessarily detrimental impacts on the townscape character as intervisibility is likely to be limited.	Where visibility from within the town, the dome will add to the scale, intensity and diversity of the streetscape and may even appear ambiguous in this context i.e. looming above intervening buildings and vegetation, however, potential intervisibility appears to be limited.	Y

1.9 DISCUSSION

As can be determined from the tabulated assessment of potential landscape and visual effects from each element of Option 1 and Option 2 within each of the specified activity Zones, the Option 1 elements are generally more acceptable having regard to landscape and visual amenity related constraints. Option 1 is much less likely to result in significant effects as most are light-touch, obvious measures to rejuvenate and enhance the current visitor offering for the Lough Muckno environs. The two exceptions being the hotel development at Conra Wood Golf Course and the modest scale dome development in the vicinity of Hope Castle. The former is likely to be large scale and set on (or just back from) the sensitive shores overlooking Lough Muckno and the latter may not be of a large scale, but will be an overt modern feature in the context of the historic estate. However, just because they are likely to impart significant landscape and visual change, these two elements are also likely to involve striking architectural and recreational amenity appeal and the perception may be that they impart a positive or balanced quality of effect.

It should also be noted that whilst the provision of the likes of a water sports centre, cruise tour centre, a fishing lodge, dispersed accommodation lodges and a conservation centre might each be relatively minor in their own right, collectively they represent a much greater transformation of the landscape and visual setting. Thus, the cumulative effects of these built facilities will almost certainly be significant from a landscape and visual perspective in this designated High Amenity area. Whether the quality of the effect is adverse, positive or balanced will relate to the siting and design of the elements and how well integrated they are.

It will be important that a cohesive design language is used and this would ideally form part of a masterplan for the development of the four zones. The various measures are likely to be realised over a number of years and there is, otherwise, a risk of a piecemeal, independent approach being taken by the different designers of each element. Commonality of design language in a masterplan should cover micro siting of structures in relation to sensitive habitats and landscape features. It should also cover the form and material of built features and how they integrate with the surrounding landscape. It is considered that the most appropriate design approach in order to promote positive effects on landscape character and visual amenity will be one that use natural and flowing forms (including biophilic design principles) that integrate seamlessly with designed and then natural landscape elements. Materials best suited to that type of approach will be natural and robust giving a strong sense of permanence and integration. Green roofs and Sustainable Urban Dranaige System (SUDs) principals should also be incorporated. Repetition of the design language throughout the zones as well as in the finer features of signage, lighting and path materials will all help with the perceived cohesion of the development and reduce the potential for adverse cumulative impacts arising from an agglomeration of discordant development features.

The Option 2 dome represents a marked change to the context of Lough Muckno and the historic estate in terms of both landscape character and visual setting. The dome and its associated elements will substantially increase the scale, intensity and diversity of development within this setting in a complete departure from traditional forms of development. Whilst Option 2 in combination with Option 1 can only be considered to

generate significant landscape and visual effects, not all change is detrimental. A well-considered, high quality of design and materials may be perceived as positive or balanced landscape and visual change that benefits the wider community in a number of ways. At present the ‘protective’ designation of ‘Lough Muckno and Environs’ as a ‘Primary Amenity Area’ could be perceived as precluding such a broad ranging and ambitious scale of development as represented by the concept proposals. Especially as the relevant objective also reads as cautiously protective of the scenic and environmental resource;

“PAP1 - To restrict development in Areas of Primary Amenity to sites where it can be demonstrated to the satisfaction of the Planning Authority that the proposed development would not threaten the scenic or environmental quality of the area.”

It is considered that a revised / additional policy that is more positively framed around ‘promoting’ considered development within Primary Amenity Areas to achieve a balance of recreational, scenic and ecological imperatives would be more appropriate in light of the ambitions for development at Lough Muckno.

In addition to generating a cohesive design approach for realising the vision for Lough Muckno environs, a masterplan for the concept proposals area could also be incorporated into the Monaghan County development Plan. If successfully incorporated through the public consultation process, this would allow a reliable framework for all stakeholder groups to reference throughout the likely to mid to long term timeframe for vision realisation.

1.10 CONCLUSION AND RECOMMENDATIONS

Based on the discussion contained in section 1.9 above, there are several measures that could be implemented to firstly safeguard and then potentially enhance the landscape character and visual amenity of Lough Muckno Environs. These include;

1. Preparation of an overarching masterplan for Lough Muckno Environs that stems from the Vision document to place more specific parameters on the siting and cohesive design of the various concept proposals. This should be prepared by Architects and Landscape Architects in conjunction with specialists from the full range of relevant environmental factors.
2. Integration of the masterplan into the Monaghan County Development Plan through the required public consultation process.
3. Modification of Objectives relating to Areas of Primary Amenity so that they achieve appropriate environmental safeguards, whilst promoting / allowing for appropriate development that will potentially facilitate the enhancement of Primary Amenity Areas.

Appendix A

Landscape and Visual Impact Assessment (LVIA) Criteria

LANDSCAPE IMPACT ASSESSMENT CRITERIA

When assessing the potential impacts on the landscape resulting from a proposed development, the following criteria are considered:

- Landscape character, value and sensitivity;
- Magnitude of likely impacts; and
- Significance of landscape effects

The sensitivity of the landscape to change is the degree to which a particular landscape receptor (Landscape Character Area (LCA) or feature) can accommodate changes or new elements without unacceptable detrimental effects to its essential characteristics. Landscape Value and Sensitivity is classified using the following criteria set out in **Table 1.1**.

Table 1.1 Landscape Value and Sensitivity

Sensitivity	Description
Very High	Areas where the landscape character exhibits a very low capacity for change in the form of development. Examples of which are high value landscapes, protected at an international or national level (World Heritage Site/National Park), where the principal management objectives are likely to be protection of the existing character.
High	Areas where the landscape character exhibits a low capacity for change in the form of development. Examples of which are high value landscapes, protected at a national or regional level (Area of Outstanding Natural Beauty), where the principal management objectives are likely to be considered conservation of the existing character.
Medium	Areas where the landscape character exhibits some capacity and scope for development. Examples of which are landscapes, which have a designation of protection at a county level or at non-designated local level where there is evidence of local value and use.
Low	Areas where the landscape character exhibits a higher capacity for change from development. Typically, this would include lower value, non-designated landscapes that may also have some elements or features of recognisable quality, where landscape management objectives include, enhancement, repair and restoration.
Negligible	Areas of landscape character that include derelict, mining, industrial land or are part of the urban fringe where there would be a reasonable capacity to embrace change or the capacity to include the development proposals. Management objectives in such areas could be focused on change, creation of landscape improvements and/or restoration to realise a higher landscape value.

The magnitude of a predicted landscape impact is a product of the scale, extent or degree of change that is likely to be experienced as a result of the concept proposals. The magnitude takes into account whether there is a direct physical impact resulting from the loss of

landscape components and/or a change that extends beyond the Site boundary that may have an effect on the landscape character of the area. **Table 1.2** refers.

Table 1.2 Magnitude of Landscape Impacts

Magnitude of Impact	Description
Very High	Change that would be large in extent and scale with the loss of critically important landscape elements and features, that may also involve the introduction of new uncharacteristic elements or features that contribute to an extensive change of the landscape in terms of character, value and quality.
High	Change that would be more limited in extent and scale with the loss of important landscape elements and features, that may also involve the introduction of new uncharacteristic elements or features that contribute to a considerable change of the landscape in terms of character, value and quality.
Medium	Changes that are modest in extent and scale involving the loss of landscape characteristics or elements that may also involve the introduction of new uncharacteristic elements or features that would lead to noticeable changes in landscape character, and quality.
Low	Changes affecting small areas of landscape character and quality, together with the loss of some less characteristic landscape elements or the addition of new features or elements that would lead to discernible changes in landscape character, and quality.
Negligible	Changes affecting small or very restricted areas of landscape character. This may include the limited loss of some elements or the addition of some new features or elements that are characteristic of the existing landscape or are hardly perceptible leading to no material change to landscape character, and quality.

The significance of a landscape impact is based on a balance between the sensitivity of the landscape receptor and the magnitude of the impact. The significance of landscape impacts is arrived at using the following matrix set out in **Table 1.3**.

Table 1.3 Impact Significance Matrix

		Sensitivity of Receptor				
Scale/Magnitude	Very High	High	Medium	Low	Negligible	
Very High	Profound	Profound-substantial	Substantial	Moderate	Slight	
High	Profound-substantial	Substantial	Substantial-moderate	Moderate-slight	Slight-imperceptible	
Medium	Substantial	Substantial-moderate	Moderate	Slight	Imperceptible	
Low	Moderate	Moderate-slight	Slight	Slight-imperceptible	Imperceptible	
Negligible	Slight	Slight-imperceptible	Imperceptible	Imperceptible	Imperceptible	

Note: The significance matrix provides an indicative framework from which the significance of impact is derived. The significance judgement is ultimately determined by the assessor using professional judgement. Due to nuances within the constituent sensitivity and magnitude judgements, this may be up to one category higher or lower than indicated by the matrix. Judgements indicated in orange are considered to be ‘significant impacts’ in EIA terms.

VISUAL IMPACT ASSESSMENT CRITERIA

As with the landscape impact, the visual impact of the concept proposals will be assessed as a function of sensitivity versus magnitude. In this instance, the sensitivity of the visual receptor, weighed against the magnitude of the visual effect.

Sensitivity of Visual Receptors

Unlike landscape sensitivity, the sensitivity of visual receptors has an anthropocentric basis. It considers factors such as the perceived quality and values associated with the view, the landscape context of the viewer, the likely activity they are engaged in and whether this heightens their awareness of the surrounding landscape. A list of the factors considered by the assessor in estimating the level of sensitivity for a particular visual receptor is outlined below and used in Table 1.6 below to establish visual receptor sensitivity at each VRP:

Susceptibility of Receptors

In accordance with the Institute of Environmental Management and Assessment (“IEMA”) Guidelines for Landscape and Visual Assessment (3rd edition 2013) visual receptors most susceptible to changes in views and visual amenity are:

- “Residents at home;
- *People, whether residents or visitors, who are engaged in outdoor recreation, including use of public rights of way, whose attention or interest is likely to be focussed on the landscape and on particular views;*

- *Visitors to heritage assets, or to other attractions, where views of the surroundings are an important contributor to the experience;*
- *Communities where views contribute to the landscape setting enjoyed by residents in the area; and*
- *Travellers on road, rail or other transport routes where such travel involves recognised scenic routes and awareness of views is likely to be heightened".*

Visual receptors that are less susceptible to changes in views and visual amenity include;

- *"People engaged in outdoor sport or recreation, which does not involve or depend upon appreciation of views of the landscape; and*
- *People at their place of work whose attention may be focussed on their work or activity, not their surroundings and where the setting is not important to the quality of working life".*

Values Associated with Views

1. **Recognised scenic value of the view** (County Development Plan designations, guidebooks, touring maps, postcards etc). These represent a consensus in terms of which scenic views and routes within an area are strongly valued by the population because in the case of County Developments Plans, for example, a public consultation process is required;
2. **Views from within highly sensitive landscape areas.** Again, highly sensitive landscape designations are usually part of a county's Landscape Character Assessment, which is then incorporated within the County Development Plan and is therefore subject to the public consultation process. Viewers within such areas are likely to be highly attuned to the landscape around them;
3. **Primary views from dwellings.** A proposed development might be seen from anywhere within a particular residential property with varying degrees of sensitivity. Therefore, this category is reserved for those instances in which the design of dwellings or housing estates, has been influenced by the desire to take in a particular view. This might involve the use of a slope or the specific orientation of a house and/or its internal social rooms and exterior spaces;

4. **Intensity of use, popularity.** This relates to the number of viewers likely to experience a view on a regular basis and whether this is significant at county or regional scale;
5. **Connection with the landscape.** This considers whether or not receptors are likely to be highly attuned to views of the landscape i.e. commuters hurriedly driving on busy national route versus hill walkers directly engaged with the landscape enjoying changing sequential views over it;
6. **Provision of elevated panoramic views.** This relates to the extent of the view on offer and the tendency for receptors to become more attuned to the surrounding landscape at locations that afford broad vistas;
7. **Sense of remoteness and/or tranquillity.** Receptors taking in a remote and tranquil scene, which is likely to be fairly static, are likely to be more receptive to changes in the view than those taking in the view of a busy street scene, for example;
8. **Degree of perceived naturalness.** Where a view is valued for the sense of naturalness of the surrounding landscape it is likely to be highly sensitive to visual intrusion by distinctly manmade features;
9. **Presence of striking or noteworthy features.** A view might be strongly valued because it contains a distinctive and memorable landscape feature such as a promontory headland, lough or castle;
10. **Historical, cultural and / or spiritual significance.** Such attributes may be evident or sensed by receptors at certain viewing locations, which may attract visitors for the purposes of contemplation or reflection heightening the sense of their surroundings;
11. **Rarity or uniqueness of the view.** This might include the noteworthy representativeness of a certain landscape type and considers whether the receptor could take in similar views anywhere in the broader region or the country;
12. **Integrity of the landscape character.** This looks at the condition and intactness of the landscape in view and whether the landscape pattern is a regular one of few strongly related components or an irregular one containing a variety of disparate components;
13. **Sense of place.** This considers whether there is special sense of wholeness and harmony at the viewing location; and

14. Sense of awe. This considers whether the view inspires an overwhelming sense of scale or the power of nature.

Those locations which are deemed to satisfy many of the above criteria are likely to be of higher sensitivity. No relative importance is inferred by the order of listing in the **Table 1.5**. Overall sensitivity may be a result of a number of these factors or, alternatively, a strong association with one or two in particular.

Visual Impact Magnitude

The magnitude of visual effects is determined on the basis of two factors; the visual presence (relative visual dominance) of the proposal and its effect on visual amenity.

Visual presence is a somewhat quantitative measure relating to how noticeable or visually dominant the proposal is within a particular view. This is based on a number of aspects, aside from scale in relation to distance. Some of these aspects include the extent and complexity of the view, as well as the degree of existing contextual movement experienced. The backdrop against which the development is presented and its relationship with other focal points or prominent features within the view is also considered. Visual presence is essentially a measure of the relative visual dominance of the proposal within the available vista and is often, though not always, expressed as one of the following terms:

- Minimal;
- Sub-dominant;
- Co-dominant;
- Dominant;
- Highly dominant.

The magnitude of visual impacts is classified in **Table 1.4**.

Table 1.4 Magnitude of Visual Impact

Criteria	Description
Very High	The proposal obstructs or intrudes into a large proportion or critical part of the available vista and is without question the most noticeable element. An extensive degree of visual change will occur within the scene completely altering its character, composition and associated visual amenity
High	The proposal obstructs or intrudes into a significant proportion or important part of the available vista and is one of the most noticeable elements. A considerable degree of visual change will occur within the scene substantially altering its character, composition and associated visual amenity
Medium	The proposal represents a moderate intrusion into the available vista and is a readily noticeable element. A noticeable degree of visual change will occur within the scene perceptibly altering its character, composition and associated visual amenity
Low	The proposal intrudes to a minor extent into the available vista and may not be noticed by a casual observer and/or the proposal would not have a marked effect on the visual amenity of the scene
Negligible	The proposal would be barely discernible within the available vista and/or it would not influence the visual amenity of the scene

Visual Impact Significance

As stated above, the significance of visual impacts is a function of visual receptor sensitivity and visual impact magnitude. This relationship is expressed in the same significance matrix and applies the same EPA definitions of significance as used earlier in respect of landscape impacts (**Table 1.3** refers).

QUALITY AND TIMESCALE OF EFFECTS

In addition to assessing the significance of landscape effects and visual effects, EPA Guidance for EIAs requires that the quality of the effects is also determined. This could be negative/adverse, neutral, or positive/beneficial.

Landscape and Visual effects are also categorised according to their duration:

- Temporary – Lasting for one year or less;
- Short Term – Lasting one to seven years;
- Medium Term – Lasting seven to fifteen years;
- Long Term – Lasting fifteen years to sixty years; and
- Permanent – Lasting over sixty years.



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