APPROPRIATE ASSESSMENT SCREENING REPORT

FOR

PROPOSED

TOWN RENEWAL MASTERPLAN

AT

CASTLEDERMOT

Co. KILDARE

ON BEHALF OF

Kildare County Council

Prepared by
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1 INTRODUCTION

1.1 Background

Enviroguide Consulting was commissioned by Kildare County Council (KCC) to prepare an Appropriate Assessment Screening Report in respect of a Proposed Town Renewal Masterplan, hereafter referred to as the 'Proposed Masterplan' or 'Site' (where referring to the area of the Proposed Masterplan) for Castledermot, Co. Kildare. This report contains information to enable the competent authority to undertake Stage 1 Appropriate Assessment (AA) screening in respect of the Proposed Masterplan.

1.2 Legislative Background

The Habitats Directive (92/43/EEC) seeks to conserve natural habitats and wild fauna and flora by the designation of Special Areas of Conservation (SACs). The Birds Directive (2009/147/EC) seeks to protect birds of special importance by the designation of Special Protection Areas (SPAs). It is the responsibility of each Member State to designate SPAs and SACs, both of which will form part of the Natura 2000 Network, a network of protected sites throughout the European Community. These designated sites are referred to as 'Natura 2000 sites' or 'European sites'. SACs are selected for the conservation of Annex I habitats (including priority types which are in danger of disappearance) and Annex II species (other than birds). SPAs are selected for the conservation of Annex I birds and other regularly occurring migratory birds and their habitats. The annexed habitats and species for which each site is selected correspond to the Qualifying Interests (QIs) and Special Conservation Interests (SCIs) of the sites; from these the conservation objectives of the site are derived.

An AA is a required assessment to determine the likelihood of significant effects, based on best scientific knowledge, of any plans or projects on European sites. Screening for AA determines whether a plan or project, either alone or in combination with other plans and projects, is likely to have significant effects on a European site, in view of its conservation objectives.

This AA Screening has been undertaken to determine the potential for significant effects on relevant European sites. The purpose of this assessment is to determine the appropriateness, or otherwise, of the Proposed Masterplan in the context of the conservation objectives of such sites.

1.2.1 Legislative Context

The obligations in relation to AA have been implemented in Ireland under Part XAB of the Planning and Development Act 2000, as amended ("the 2000 Act"), and in particular Section 177U and Section 177V thereof. The relevant provisions of Section 177U in relation to AA screening have been set out below:

"***177U.—*** *(1) A screening for appropriate assessment of a draft Land use plan or application for consent for proposed development shall be carried out by the competent authority to assess, in view of best scientific knowledge, if that Land use plan or proposed development, individually or in combination with another plan or project is likely to have a significant effect on the European site.*

(2)…

(3)…

(4) The competent authority shall determine that an appropriate assessment of a draft Land use plan or a proposed development, as the case may be, is required if it cannot be excluded, on the basis of objective information, that the draft Land use plan or proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site.

(5) The competent authority shall determine that an appropriate assessment of a draft Land use plan or a proposed development, as the case may be, is not required if it can be excluded, on the basis of objective information, that the draft Land use plan or proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site."

An Appropriate Assessment is required under Article 6 of the Habitats Directive where a project or plan may give rise to significant effects upon a European site. Paragraph 3 states that:

"*6(3) Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site, in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public."*

1.2.2 Stages of Appropriate Assessment

This AA Screening Report (the 'Screening Report') has been prepared by Enviroguide Consulting. It considers whether the Proposed Masterplan is likely to have a significant effect on any European sites and whether a Stage 2 AA is required.

The AA process is a four-stage process. Each stage requires different considerations, assessments, and tests to ultimately arrive at the relevant conclusion for each stage. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required.

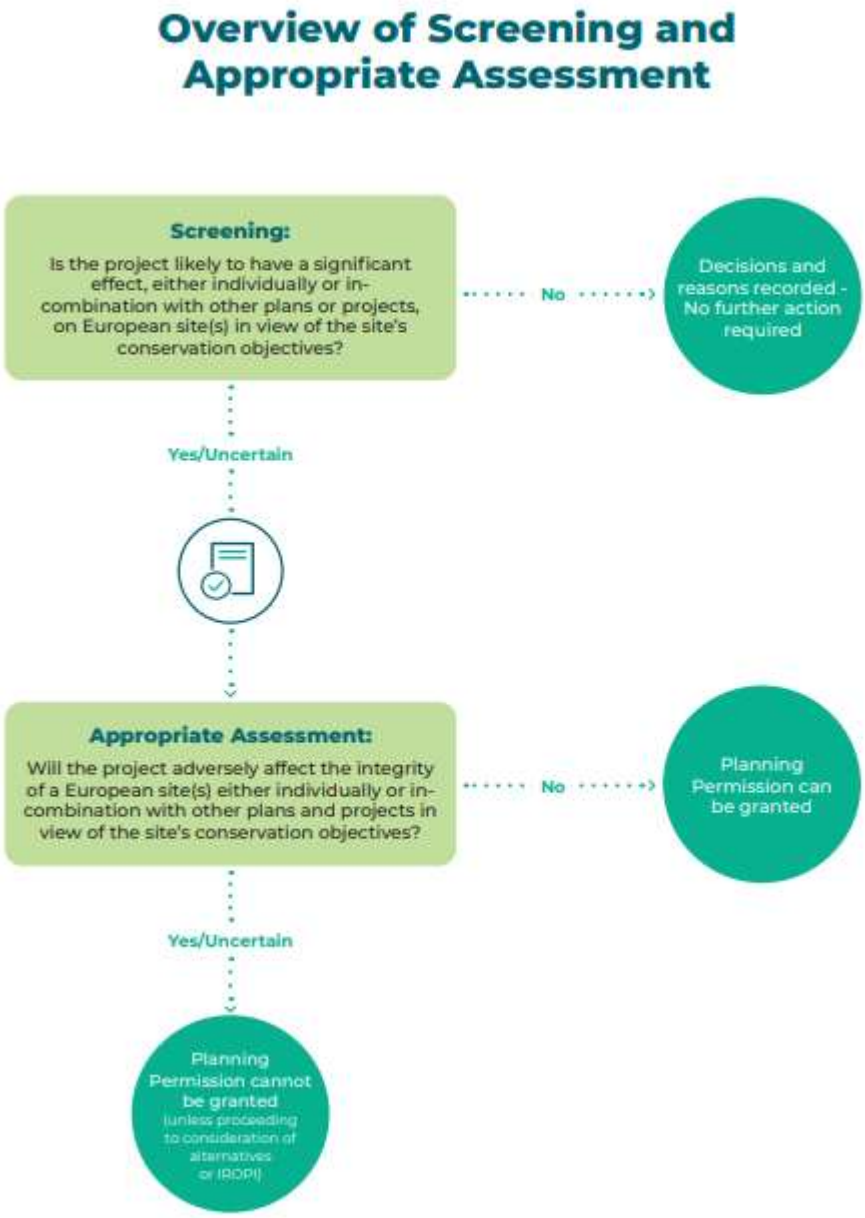

FIGURE 1. OVERVIEW OF SCREENING AND APPROPRIATE ASSESSMENT (OPR, 2021).

The four stages of an AA, can be summarised as follows:

- Stage 1: *Screening.* The first stage of the AA process is to determine the likelihood of significant effects of the proposal, this addresses:
    - whether a plan or project is directly connected to or necessary for the management of the European site, or
    - whether a plan or project, alone or in combination with other plans and projects, is likely to have significant effects on a European site in view of its conservation objectives.
- Stage 2: *Appropriate Assessment.* The second stage of the AA requires the competent authority to determine whether the project or plan (either alone or in combination with other projects or plans) will have an adverse effect on the integrity of the European

site, having regard to the conservation objectives of the site and its ecological structure and function. The developer must provide a Natura Impact Statement (NIS) to the competent authority to inform the AA, which is a statement, for the purposes of Article 6 of the Habitats Directive of the potential impacts of a proposed development, on its own or in combination with other plans or projects, for one or more than one European site, in view of the conservation objectives of the site or sites. It must include a report of a scientific examination of evidence and data, carried out by competent persons to identify and classify any potential impacts for one or more than one European site in view of the conservation objectives of the site or sites. The competent authority must consult with the public in relation to any plan or project that requires AA. If the competent authority determines that the plan or project would have an adverse effect on the integrity of any European site, it can only grant consent after proceeding through stages 3 and 4.

- Stage 3: *Assessment of alternative solutions*. If the outcome of Stage 2 is negative i.e., adverse impacts to the sites cannot be scientifically ruled out, despite mitigation, the plan or project should proceed to Stage 3 or be abandoned. This stage examines alternative solutions to the proposal.
- Stage 4: *Assessment where no alternative solutions exist and where adverse impacts remain.* The final stage is the main derogation process examining whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project to adversely affect a European site, where no less damaging solution exists.

2 METHODOLOGY

2.1 Guidance

This Screening Report has been undertaken in accordance with the following guidance:

- *Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities.* (Department of Environment, Heritage and Local Government, 2010 revision);
- *Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities.* Circular NPW 1/10 & PSSP 2/10;
- *Communication from the Commission on the precautionary principle* (European Commission, 2000);
- *Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC* (European Commission, 2019):
- *Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC (*European Commission, 2021*);* and
- *Appropriate Assessment Screening for Development Management, OPR Practice Note PN01, Office of the Planning Regulator* (OPR) *March 2021.*

2.2 Screening Steps

This Screening Report has been undertaken in accordance with the European Communities Methodological Guidance on the provision of Article 6(3) and 6(4) of the 'Habitats' Directive 92/43/EEC (EC, 2002) and the European Commission Guidance 'Managing Natura 2000 sites' (EC, 2000). Screening for AA involves the following steps:

- Establish whether the plan is directly connected with or necessary for the management of a European site;
- Description of the plan or project and the description and characterisation of other projects or plans that in combination have the potential for having significant effects on the European site;
- Identification of European sites potentially affected;
- Identification and description of potential effects on the European site(s);
- Assessment of the likely significance of the effects identified on the European site(s); and
- Exclusion of sites where it can be objectively concluded that there will be no significant effects.

2.3 Desk Study

A desktop study was carried out to collate and review available information, datasets, and documentation sources relevant for the completion of this Screening Report. The desktop study relied on the following sources:

- Information on the network of European sites, boundaries, qualifying interests and conservation objectives, obtained from the National Parks and Wildlife Service (NPWS) at *www.npws.ie*;
- Text summaries of the relevant European sites taken from the respective Standard Data Forms and Site Synopses available at *www.npws.ie*;
- Information on waterbodies, catchment areas and hydrological connections obtained from the Environmental Protection Agency (EPA) at *www.gis.epa.ie*;
- Information on bedrock, groundwater, aquifers and their statuses, obtained from Geological Survey Ireland (GSI) at *www.gsi.ie*;
- Satellite imagery and mapping obtained from various sources and dates including Google, Digital Globe, Bing, and Ordnance Survey Ireland; and
- Information on the existence of permitted developments, or developments awaiting decision, in the vicinity of the Proposed Masterplan from KCC.

For a complete list of the specific documents consulted as part of this assessment, see *Section 5 References*.

2.4 Field Surveys

A field survey to determine the potential presence of Otter (*Lutra lutra)* within the village was carried out on the 21st of December 2022 by Christopher Doyle of Flynn Furney Environmental Consultants. The survey area consisted of and approx. 2km length of the River Lerr that flows within the village boundaries. Signs of otter that were searched for included spraint, footprints, confirmed holts, signs of feeding, or live animal sightings.

2.5 Identification of Relevant European Sites

In order to identify the European sites that potentially lie within the Zone of Influence (ZOI) of the Proposed Masterplan, a Source-Path-Receptor (S-P-R) method was adopted, as described in 'OPR Practice Note PN01 - Appropriate Assessment Screening for Development Management' (OPR, 2021), a practice note produced by the Office of the Planning Regulator, Dublin. This note was published to provide guidance on screening for AA during the planning process, and although it focuses on the approach a planning authority should take in screening for AA, the methodology is also readily applied in the preparation of Screening Reports such as this.

The methodology used to identify relevant European sites comprised the following:

- Identification of potential sources of effects based on the Proposed Masterplan description and details;

- Use of up-to-date GIS spatial datasets for European designated sites and water catchments – downloaded from the NPWS website (www.npws.ie) and the EPA website (www.epa.ie) to identify European sites which could potentially be affected by the Proposed Masterplan; and
- Identification of potential pathways between the Proposed Masterplan and any European sites within the ZOI of any of the identified sources of effects.
    - The catchment data were used to establish or discount potential hydrological connectivity between the Proposed Masterplan and any European sites.
    - Groundwater and bedrock information used to establish or discount potential hydrogeological connectivity between the Proposed Masterplan and any European sites.
    - Air and land connectivity assessed based on Proposed Masterplan details and proximity to European sites.

There is absolutely no reliance placed in this Screening Report on mitigation measures intended to avoid/reduce harmful effects on the European sites.

2.6 Assessment of Significant Effects

The potential for significant effects that may arise from the Proposed Masterplan was considered using key indicators, namely:

- Habitat loss or alteration
- Habitat/species fragmentation
- Disturbance and/or displacement of species
- Changes in population density
- Changes in water quality and resource

In addition, information pertaining to the conservation objectives of the European sites, the ecology of designated habitats and species, and known or perceived sensitivities of the habitats and species were considered.

3 STAGE 1 SCREENING

3.1 Management of European Sites

The Proposed Masterplan at Castledermot is not directly connected with or necessary to the management of any European sites.

3.2 Castledermot Town Renewal Masterplan (TRMP)

3.2.1 Castledermot Town Location and Description

Castledermot (*Díseart Diarmada*) is a town located in the south of County Kildare and is mainly accessed from M9 which by-passes the town to the west (Figure 2). The town lies 10 km northeast of Carlow Town and 11 km southeast of Athy. Castledermot is a service centre for the surrounding rural hinterland. The town is picturesque, with elements of geographical, archaeological, architectural, historical, and cultural significance.

The River Lerr (a tributary of the larger River Barrow, the second longest river in Ireland) flows through the town.

Castledermot town has a population of 1475 people (Census 2016). The prime land use within Castledermot is residential, retail, commercial with some community, sport, and agricultural land uses.

The key destinations to and within the town include two schools, a health centre, a community centre, and the retail/ commercial core focused around Market Square.

The R448 is the main road link through Castledermot, connecting the town to Kilcullen in the north and the M9 to the west. The R418 and other local roads connect Castledermot to the wider regional and local road network and rural hinterlands. The M9 provides a connection to Dublin in the north-east and Waterford City in the south.

Castledermot is served by bus route 736 (operated by JJ Kavanagh), providing services to Carlow and Waterford in the south and to Dublin Airport and City Centre. The town is also served by Kildare Local Link route 880 providing services between Carlow and Naas town centre.

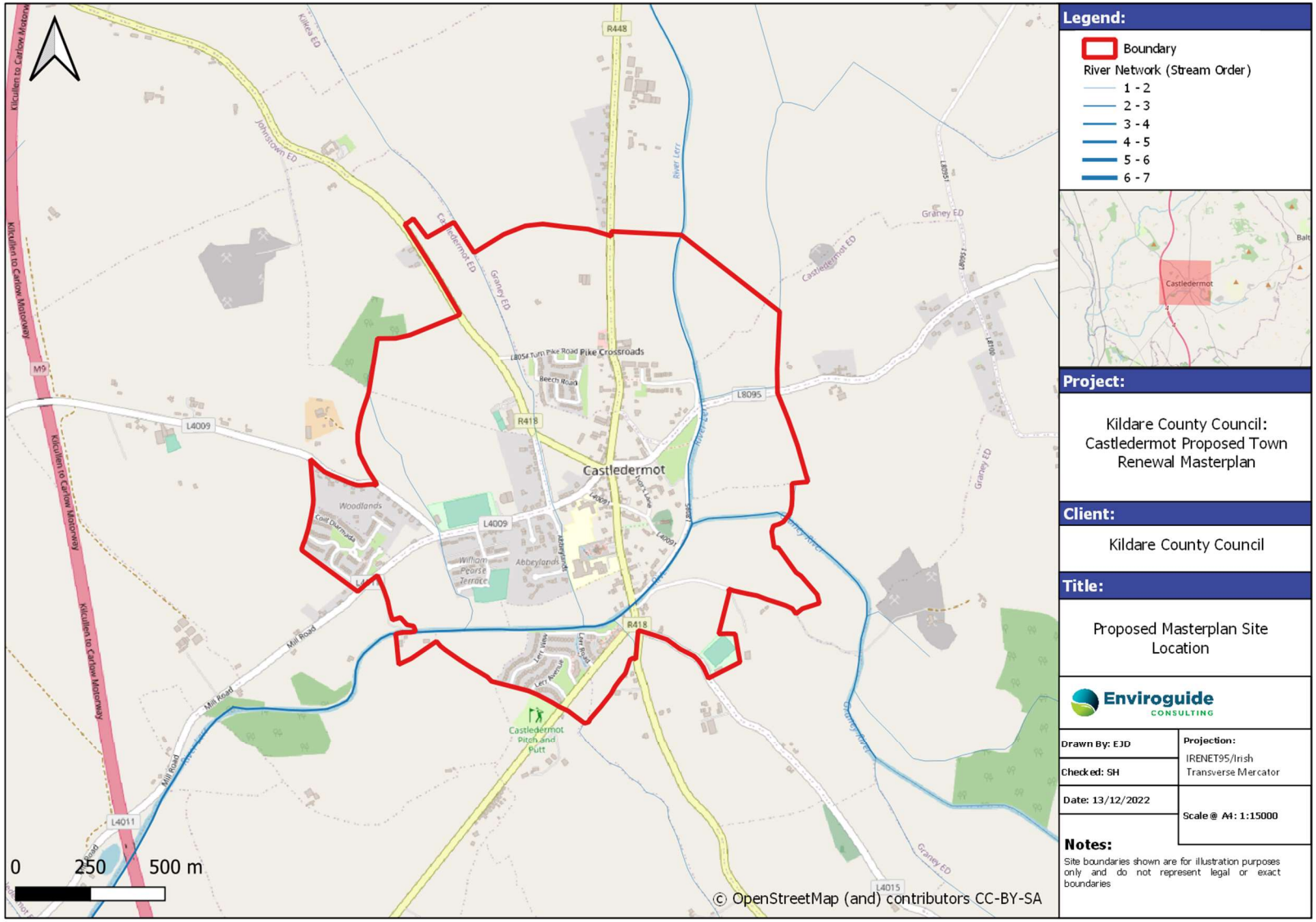

FIGURE 2. SITE LOCATION

3.2.2 Castledermot Town Renewal Masterplan- Main Objectives

Volume 2 of the Kildare Development Plan provides a planning framework for the development of small towns and villages. Section 1.3 describes Castledermot's form, context, and objectives for future development.

The central aim of this study is to support the renewal of Castledermot in order to improve the living and working environment of its communities and increase its potential to support economic activity into the future (Figure 3 & Figure 4). The overall intention is to:

- Increase the attractiveness of the town as a local commercial and social centre, and as a result increase its sustainability as a place in which to live and work.
- Enhance the town environment and amenities in the interests of residents, businesses, and visitors.
- Promote the town potential for tourism and as a centre for culture and local heritage, thus enhancing the sense of identity -physically and socially.

The renewal plan seeks to build on the very strong asset base of Castledermot, to ensure it retains its strong identity, to contribute to its enhancement, and to create opportunities which are unique to Castledermot for its citizens to identify with. As a town with growth potential, it needs to ensure that its current and future growth areas stitch into the town centre and its community base and draw on its character and sense of place. The objectives of Renewal Plan are to:

1. Create the opportunities for enabling strategies that the local community, stakeholders, and Kildare County Council can support and sustain for the future development of the town.
2. Enhance the vitality and vibrancy of Castledermot through ensuring vacant/derelict buildings and future growth areas are woven into the town and consolidated.
3. Create an enhanced environment for people living, working, and visiting the town through public realm interventions, encouraging and sustaining economic growth.
4. Re-balance the movement network ensuring accessibility for all, to further enhance the walking and cycling environment, prioritising public over private transport, and creating safe connections and places for people.
5. Enhance landscape quality and positive 'sense of place' in town which in turn will not only help combat the effects of climate change but also support higher property values.
6. Create a Compact Low-Carbon Climate Resilient Town including strategic regeneration proposals incorporating best practice in low-carbon placemaking and design, the promotion of sustainable transport modes and the enhancement of biodiversity in the town through blue and green infrastructure developments.

These objectives are driven by the specific characteristics of Castledermot and also by what are considered to be the essence of a successful town.

The Proposed Masterplan identifies nine key priority projects for the regeneration of Castledermot, and areas of opportunity (Figure 5):

1. **Castledermot Heritage:** Celebrating the rich heritage of Castledermot can be achieved through the development of a signage strategy. Such a strategy would cater to the specific needs of Castledermot by: elevating the status of several historic sites throughout the town; development of a dedicated heritage trail; development of an

interactive tourist map; improved wayfinding signage; and establishment of a small museum/information centre in one of the vacant buildings to highlight the heritage and history of the Town.

2. **Vacancy & Dereliction:** Establishing a centralised database on all vacant and derelict properties throughout the town, including brownfield sites, partially completed development sites, and vacant buildings. This will then enable a cohesive and 'joined up' approach to tackling the issue, based on dialogue with property owners. Priority would be placed on achieving 'quick wins' in the most problematic cases such as the painting of facades, while exploring the potential of 'meanwhile' uses and longer-term solutions. This key project also involves Re-Purposing vacant buildings i.e., the introduction of residential accommodation to the Town Centre, co-working hubs etc., utilising backland areas or attracting outside investment from large companies by making Castledermot more attractive.
3. **Public Realm Design Guidelines:** Particular attention to be paid to the design of new and replacement footpaths, pedestrian crossings, use of storefront displays and merchandising to promote pedestrian traffic, and provision of outdoor dining areas.
4. **Market Square:** Projects include an upgrade to main square area with new paving, mature trees, new planting, streetlamps and high-quality seating and street furniture to mark an importance of this area as a heart of town centre. Encourage restoration and re-use of vacant, derelict, and underutilised buildings around the square. Provide additional landscaping at junction corners which would soften the area, collect rainwater, and improve village look and feel.
5. **Main Street:** Regeneration including improved paving, lighting, footpath widening and greening.
6. **St James' Church / Church Lane**: Footpath widening, establishment of traffic management, improved lighting plans.
7. **Walking/cycling potential at the Green and River Lerr:** Explore options for walking/cycling green route along The Green and River Lerr, the option of 1-way traffic management or low traffic/limited vehicular access shared street environment.
8. **Fairgreen Town Park:** Provision of safe access to the park from the town by providing appropriate footpaths and street lighting along Keenans Lane, linking to The Green. Potential for traffic calming and dedicated pedestrian crossings. Enhance/expand town park as a multi-use passive recreation, sports, activity, and event hub with programme of events (i.e., weekly farmer & craft market with contributors from the surrounding area).
9. **Scoil Diarmada School Zone**: Introduction of school zone treatment with pencil bollard protection, change in road surface, enhanced main school crossing. Proposed school zone gateway with improved signage and traffic calming. Upgraded existing footpath along school boundary. Reduced carriageway width.

FIGURE 3. CASTLEDERMOT TOWN EXISTING LAYOUT (SOURCE: CASTLEDERMOT TRMP (KCC 2022)). NOTABLE LOCATIONS INCLUDED IN INSET [1 – 9]

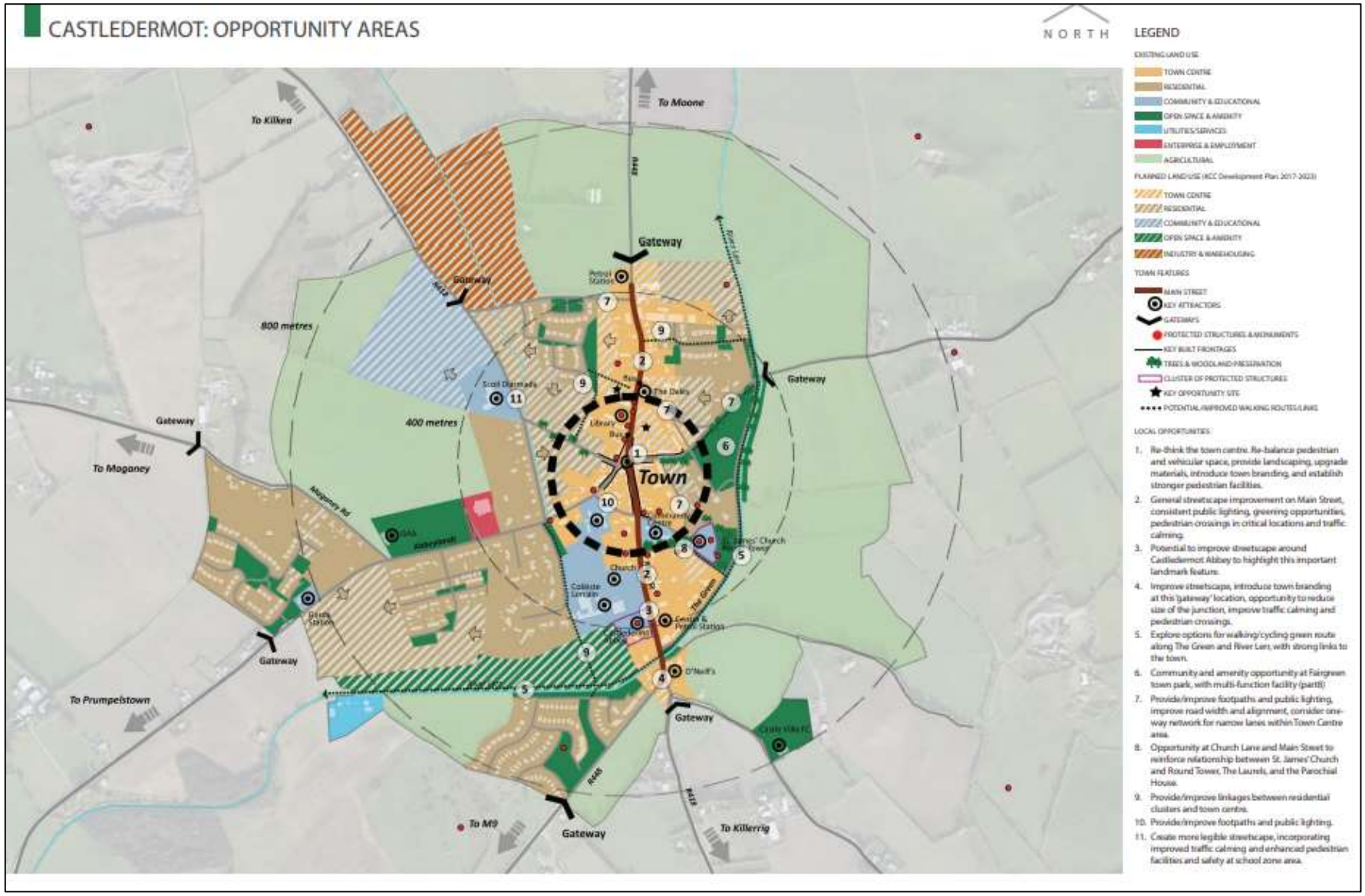

FIGURE 4. PROPOSED OPPORTUNITY AREAS (SOURCE: CASTLEDERMOT TRMP (KCC, 2022))

FIGURE 5. PROPOSED KEY PRIORITY PROJECTS (SOURCE: CASTLEDERMOT TRMP (KCC, 2022))

3.3 Existing Environment

3.3.1 Hydrology

The Proposed Masterplan site has been mapped by the EPA (EPA, 2022) to be within:

- The Barrow Water Framework Directive (WFD) Catchment (ID: 14);
- The Lerr_SC_010 Sub-Catchment, (Sub-catchment ID: 14); and
- TheLerr_020 WFD River Sub Basin (European Code: IE_SE_14L010155).

The closest surface water feature to the town is the River Lerr (LERR_020, European Code: IE_SE_14L010155). The River Lerr (a tributary of the larger River Barrow, the second longest river in Ireland) flows through the town of Castledermot, encircling the town to the south and east. The River Lerr has been assigned a *Poor* ecological status based on monitoring, and it is *At Risk* of not achieving its WFD objectives (EPA, 2022)[1].

3.3.2 Geology and Hydrogeology

The Entirety of the town of Castledermot is situated on the New Ross groundwater body (IE_SE_G_152). The overall WFD status of this GWB is *Good* and its risk projection is currently under review (EPA, 2022)[2]. The majority of the town is located on the bedrock aquifer: '*Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones'*. The south-western portion of the town, adjacent to the GAA grounds, is located on the bedrock aquifer that is defined as '*Poor Aquifer - Bedrock which is Generally Unproductive except for Local Zones'*. The groundwater rock units underlying the aquifer across the town are classified as 'Granites & other Igneous Intrusive rocks' (GSI, 2022).

The entirety of the town sits on ground with *High* vulnerability to groundwater contamination from human activities, however a small portion of the south-eastern part of the site (adjacent to Castle Villa AFC grounds) lies on ground with *Extreme* vulnerability to groundwater contamination (GSI, 2022) (Figure 6).

[1] https://www.catchments.ie/data/#/waterbody/IE_EA_09L011700?_k=f134cz [Accessed: December 2022]
[2] https://www.catchments.ie/data/#/waterbody/IE_EA_G_008?_k=k3z50m [Accessed: December 2022]

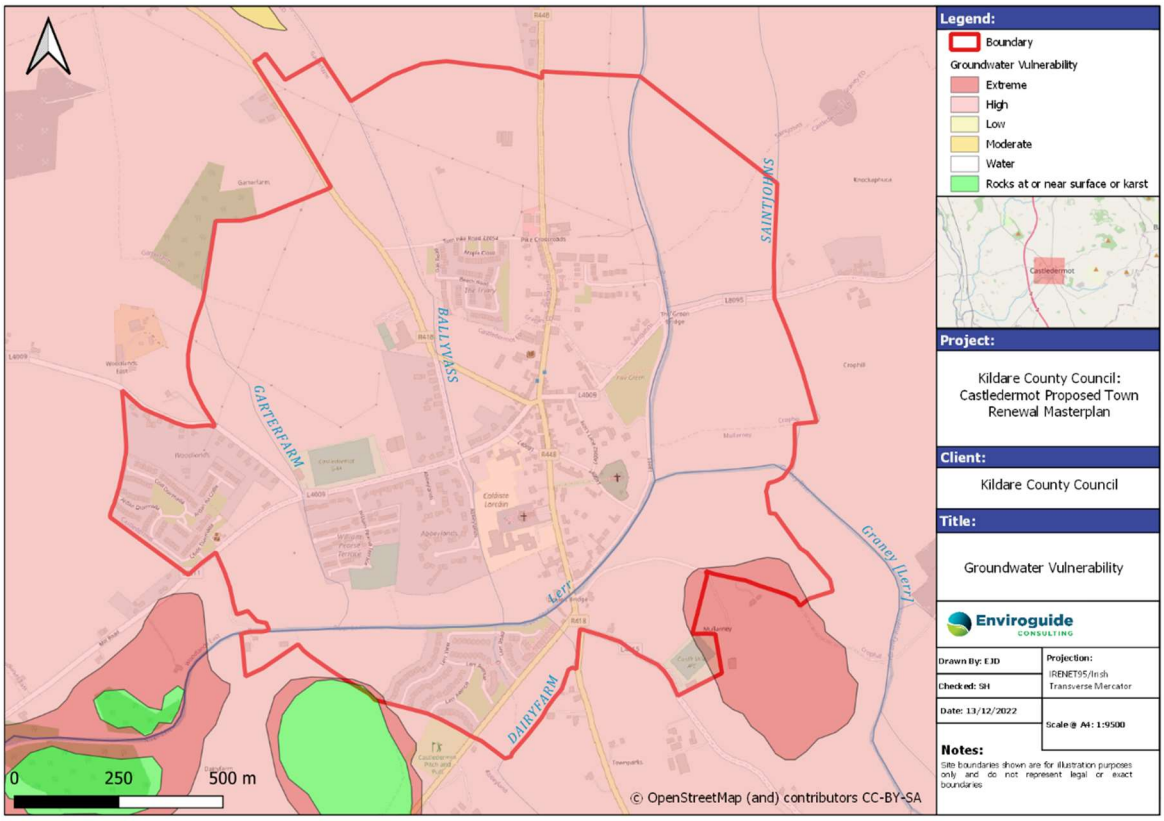

FIGURE 6. GROUNDWATER VULNERABILITY

3.3.3 Otter Survey

No records from the NBDC of Otter within the survey area, though there are some recordings of sightings logged within 2 km up and down river, within the last ten years.

No direct evidence of Otter was found (i.e. spraint, footprints, confirmed holts, signs of feeding or live animal sightings). Several mammal trails were seen running the length of the survey area, stopping and starting, some ending at the river that could potentially be Otter slides. Many salmonids were observed in the river, the longest at approximately 40 cm. Anecdotal evidence form locals was that:

- Otter are currently present in the River Greese (approx. 4 km west of the River Lerr), which is consistent with recent NBDC records.
- There was a sighting of an Otter in the Lerr at the south end of town in 2021;
- Mink (*Neogale vison*) have been seen downstream by a local hobby fisherman, who also confirmed that the Lerr is a good river for salmonids.

3.4 Identification of Relevant European Sites

The following sections detail the results of the S-P-R method applied as outlined in section 2.5.

3.4.1 Potential Sources of Effects

The Proposed Masterplan will act as a non-statutory framework for the enhancement of Castledermot Town, including recommendations related to enhance the public realm via

creation of a public realm design guide that would establish rules for building frontages and advertisements, a rebalancing of the town centre pedestrian and vehicular space, provision of a safe multi-use network connecting River Lerr, Fairgreen, The Abbey, Town Centre, Schools, GAA, St. James Church, and all residential areas, reduction of speed limits in the town and increased traffic calming, utilizing and renovating derelict buildings and sites, and enhanced landscaping/greening in the town. The Proposed Masterplan itself does not propose any direct works but is envisioned to guide the further planning and design of the identified key projects in ensuring a unified approach in their preparation.

Therefore, potential sources of effects do not directly relate to specific development proposals but are identified to represent potential development projects undertaken under advice from the Proposed Masterplan.

The main focus of the key projects is on enhancing the public spaces for pedestrians and cyclists, including both locals and visitors alike. Thus, the following elements of the Proposed Masterplan were considered for their potential to cause likely significant effects on European sites:

- Increased human presence due to promoting visitors;
- Increased traffic due to improved permeability for both cars and cyclists;
- Increased lighting / noise due to improved public realm safety; and
- Changes to land-use within the Proposed Masterplan Site.

Note that there are no works proposed as part of the Proposed Masterplan which would lead to impacts either on groundwater or surface water quality through emissions or the loss of fine sediments or silts.

Although assessed here as part of the Proposed Masterplan, any future development projects undertaken with cognisance to the Proposed Masterplan are subject to the appropriate environmental assessments as per the policies set out in the Kildare County Development Plan (KCDP) 2017-2022.

3.4.1 Potential Pathways to European Sites

For the above listed potential sources of effects to have the potential to cause likely significant effects on any European site, a pathway between the source of potential effects (i.e., the Site of the Proposed Masterplan) and the receptor is required. The potential for pathways between European sites and the Proposed Masterplan Site was assessed on a case-by-case basis using the S-P-R framework as per the OPR Practice Note PN01 (OPR, 2021). Pathways considered included:

a. Direct pathways e.g., proximity/location within a European site, water bodies, air (for both air emissions and noise impacts).
b. Indirect pathways e.g., disruption to migratory paths, ‘Sightlines’ where noisy or intrusive activities may result in disturbance to shy species.

Potential impact pathways are discussed in the following sections in the context of the potential impact sources as identified in section 3.4.1.

3.4.1.1 Direct Pathways

Hydrological pathways

The River Lerr flows through the Proposed Masterplan area. This section of River Lerr, within the catchment of the River Barrow, is part of the *River Barrow and River Nore SAC (002162).* Hence this SAC is located within the Proposed Masterplan boundary, and a direct hydrological pathway to the SAC exists.

No other European sites are linked to the Site via hydrological means.

Hydrogeological pathways

During groundworks and other construction activities that may result from developments made under the Proposed Masterplan, the ground will be exposed and any potential accidental discharges to ground could potentially migrate vertically downward to the underlying bedrock aquifer and laterally within the aquifer to downgradient receiving surface waterbodies, i.e., River Lerr.

Considering an SAC (characterised by riverine features) is located within the Site, a hydrogeological pathway exists between the Proposed Masterplan and the *River Barrow and River Nore SAC*.

Air and land pathways

Potential for air and land pathways from the Proposed Masterplan Site to the European site of *River Barrow and River Nore SAC* were identified due to a section of the SAC being located within the village boundaries. Hence, there is the potential for impacts from increases in noise, lighting and/or dust or other airborne pollutants.

The next nearest European site is Holdenstown Bog SAC, located 10 km east of the Proposed Masterplan. The air and land pathway is deemed insignificant on account of the intervening distance.

3.4.1.2 Indirect Pathways

No indirect pathways (e.g., disruptions to migratory paths) were identified..

3.4.2 Relevant European Sites

A European site will only be at risk from likely significant effects where an S-P-R link of note exists between the Proposed Masterplan Site and the European site. The preceding steps identified one European site that is linked to the Proposed Masterplan:

- River Barrow and River Nore SAC (002162)

This site is linked to the Proposed Masterplan via potential hydrological, hydrogeological and air/land pathways.

No other European sites are connected to the Proposed Masterplan via any direct or indirect pathways. The European sites considered under the various potential pathways are listed in Table 1, and European sites within a 10 km radius of the Proposed Masterplan are shown in Figure 7 for information purposes.

TABLE 1. EUROPEAN SITES CONSIDERED WITH THE SOURCE-PATHWAY-RECEPTOR (S-P-R) METHOD TO ESTABLISH NOTABLE LINKS BETWEEN THE SOURCES OF EFFECTS ARISING FROM THE PROPOSED MASTERPLAN, AND ANY RELEVANT EUROPEAN SITES. THOSE SITES WITH NOTABLE S-P-R LINKS ARE HIGHLIGHTED IN GREEN (IF ANY).

European site	QIs / SCIs	Potential Pathways
Special Areas of Conservation		
River Barrow and River Nore SAC (002162)) Linear Distance to Proposed Masterplan: Within Proposed Masterplan Site Boundary	**Habitats** – 1130] Estuaries – [1140] Tidal Mudflats and Sandflats – [1170] Reefs – [1310] Salicornia Mud – [1330] Atlantic Salt Meadows – [1410] Mediterranean Salt Meadows – [3260] Floating River Vegetation – [4030] Dry Heath – [6430] Hydrophilous Tall Herb Communities – [7220] Petrifying Springs* – [91A0] Old Oak Woodlands – [91E0] Alluvial Forests* **Species** – [1016] Desmoulin's Whorl Snail (*Vertigo moulinsiana*) – [1029] Freshwater Pearl Mussel (*Margaritifera margaritifera*) – [1092] White-clawed Crayfish (*Austropotamobius pallipes*) – [1095] Sea Lamprey (*Petromyzon marinus*) – [1096] Brook Lamprey (*Lampetra planeri*) – [1099] River Lamprey (*Lampetra fluviatilis*) – [1103] Twaite Shad (*Alosa fallax*) – [1106] Atlantic Salmon (*Salmo salar*) – [1355] Otter (*Lutra lutra*) – [1421] Killarney Fern (*Trichomanes speciosum)* – [1990] Nore Freshwater Pearl Mussel (*Margaritifera durrovensis*)	Direct hydrological link via the River Lerr, and direct land pathway as within the Site boundary.
Holdenstown Bog SAC (001757) Linear Distance to Proposed Masterplan: approx. 10km	– Transition mires and quaking bogs [7140]	No potential pathways were identified.

3.4.2.1 Relevant European Sites – Site Descriptions

River Barrow and River Nore SAC (002162)

The following description is extracted from the Standard Data Form Quality and Importance section for the River Boyne and River Blackwater SAC:

This site consists of the freshwater stretches of the Barrow and Nore River catchments as far upstream as the Slieve Bloom Mountains, and it also includes the tidal elements and estuary as far downstream as Creadun Head in Waterford. The site passes through eight counties –

Offaly, Kildare, Laois, Carlow, Kilkenny, Tipperary, Wexford and Waterford. Major towns along the edge of the site include Mountmellick, Portarlington, Monasterevin, Stradbally, Athy, Carlow, Leighlinbridge, Graiguenamanagh, New Ross, Inistioge, Thomastown, Callan, Bennettsbridge, Kilkenny and Durrow. The larger of the many tributaries include the Lerr, Fushoge, Mountain, Aughavaud, Owenass, Boherbaun and Stradbally Rivers of the Barrow, and the Delour, Dinin, Erkina, Owveg, Munster, Arrigle and King's Rivers on the Nore.

The main threats to the site and current damaging activities include high inputs of nutrients into the river system from agricultural run-off and several sewage plants, over-grazing within the woodland areas, and invasion by non-native species, for example Cherry Laurel (*Prunus laurocerasus)* and Rhododendron (*Rhododendron ponticum*). The water quality of the site remains vulnerable. Good quality water is necessary to maintain the populations of the Annex II animal species listed above in Table 2. Good quality is dependent on controlling fertilisation of the grasslands, particularly along the Nore. It also requires that sewage be properly treated before discharge. Drainage activities in the catchment can lead to flash floods which can damage the many Annex II species present. Capital and maintenance dredging within the lower reaches of the system pose a threat to migrating fish species such as lamprey and shad. Land reclamation also poses a threat to the salt meadows and the populations of legally protected species therein. Overall, the site is of considerable conservation significance for the occurrence of good examples of habitats and of populations of plant and animal species that are listed on Annexes I and II of the E.U. Habitats Directive. Furthermore, it is of high conservation value for the populations of bird species that use it. The occurrence of several Red Data Book plant species including three rare plants in the salt meadows and the population of the hard water form of the Freshwater Pearl Mussel, which is limited to a 10 km stretch of the Nore, add further interest to this site.

3.4.2.2 Relevant European sites – Conservation Objectives

Each European site is designated based on a unique set of Qualifying Interests (QIs) or Special Conservation Interests (SCIs), which can be species and/or habitats of conservation and/or community interest, and typically each of these will have a set of Site-Specific Conservation Objectives (SSCO). Where SSCOs have not been compiled, generic objectives are used. The SSCOs for the relevant European sites are detailed in Table 2.

TABLE 2 QUALIFYING INTERESTS (QIS) / SPECIAL CONSERVATION INTERESTS (SCIS) AND THEIR CONSERVATION OBJECTIVES FOR THE RELEVANT EUROPEAN SITES. THE CONSERVATION STATUS OF EACH QI / SCI WAS SOURCED FROM THE RELEVANT STANDARD DATA FORMS, AVAILABLE FROM THE NATURA 2000 NETWORK VIEWER[3].

QI / SCI	Conservation Objective
Estuaries [1130]	To maintain the favourable conservation condition of Estuaries in the River Barrow and River Nore SAC
Mudflats and sandflats not covered by seawater at low tide [1140]	To maintain the favourable conservation condition of the Mudflats and sandflats not covered by seawater at low tide in the River Barrow and River Nore SAC
Reefs [1170]	To maintain the favourable conservation condition of Reefs in the River Barrow and River Nore SAC

[3] Available at: https://natura2000.eea.europa.eu/

Salicornia and other annuals colonising mud and sand [1310]	To maintain the favourable conservation condition of Salicornia and other annuals colonizing mud and sand in the River Barrow and River Nore SAC
Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]	To restore the favourable conservation condition of Atlantic salt meadows in the River Barrow and River Nore SAC
Mediterranean salt meadows (Juncetalia maritimi) [1410]	To restore the favourable conservation condition of Mediterranean salt meadows in the River Barrow and River Nore SAC
Water courses of plain to montane levels with the *Ranunculion fluitantis* and Callitricho-Batrachion vegetation [3260]	To maintain the favourable conservation condition of Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation in the River Barrow and River Nore SAC
European dry heaths [4030]	To maintain the favourable conservation condition of European dry heaths in the River Barrow and River Nore SAC
Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430]	To maintain the favourable conservation condition of Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels in the River Barrow and River Nore SAC
Petrifying springs with tufa formation (Cratoneurion) [7220]	To maintain the favourable conservation condition of Petrifying springs with tufa formation (Cratoneurion) in the River Barrow and River Nore SAC
Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	To restore the favourable conservation condition of Old oak woodland with Ilex and Blechnum in the River Barrow and River Nore SAC
Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	To restore the favourable conservation condition of Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) in the River Barrow and River Nore SAC
Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]	To maintain the favourable conservation condition of Desmoulin's whorl snail in the River Barrow and River Nore SAC
Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]	The status of the freshwater pearl mussel (Margaritifera margaritifera) as a qualifying Annex II species for the River Barrow and River Nore SAC is currently under review. The outcome of this review will determine whether a site-specific conservation objective is set for this species. Please note that the Nore freshwater pearl mussel (Margaritifera durrovensis) remains a qualifying species for this SAC.
Austropotamobius pallipes (White-clawed Crayfish) [1092]	To maintain the favourable conservation condition of White-clawed crayfish in the River Barrow and River Nore SAC
Petromyzon marinus (Sea Lamprey) [1095]	To restore the favourable conservation condition of Sea lamprey in the River Barrow and River Nore SAC
Lampetra planeri (Brook Lamprey) [1096]	To restore the favourable conservation condition of Brook lamprey in the River Barrow and River Nore SAC
Lampetra fluviatilis (River Lamprey) [1099]	To restore the favourable conservation condition of River lamprey in the River Barrow and River Nore SAC
Alosa fallax fallax (Twaite Shad) [1103]	To restore the favourable conservation condition of Twaite shad in the River Barrow and River Nore SAC
Salmo salar (Salmon) [1106]	To restore the favourable conservation condition of Salmon in the River Barrow and River Nore SAC

Lutra lutra (Otter) [1355]	To restore the favourable conservation condition of Otter in the River Barrow and River Nore SAC
Trichomanes speciosum (Killarney Fern) [1421]	To maintain the favourable conservation condition of Killarney Fern in the River Barrow and River Nore SAC
Margaritifera durrovensis (Nore Pearl Mussel) [1990]	To restore the favourable conservation condition of the Nore freshwater pearl mussel in the River Barrow and River Nore SAC

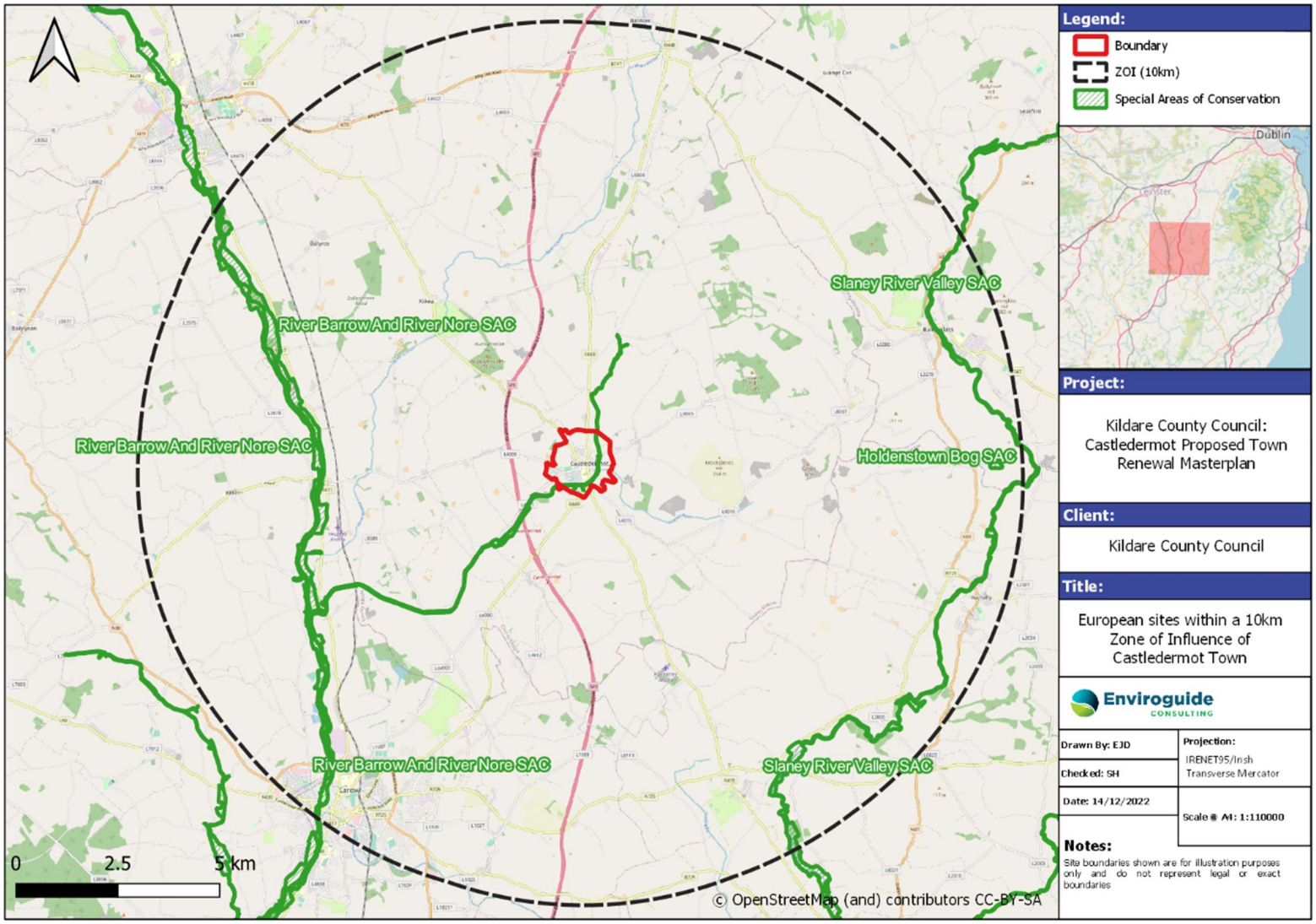

FIGURE 7. EUROPEAN SITES CONSIDERED IN S-P-R ASSESSMENT TO IDENTIFY RELEVANT EUROPEAN SITES WITH NOTABLE LINKAGES TO PROPOSED MASTERPLAN. A 10KM BUFFER FROM THE PROPOSED MASTERPLAN IS SHOWN.

3.5 Assessment of Likely Significant Effects

The following sections discuss the potential for likely significant effects on the relevant European sites, taking into consideration their QIs, SCIs and SSCOs, and assesses whether the Proposed Masterplan has the capacity to adversely affect the integrity of any of the relevant European sites.

3.5.1 Habitat Loss or Alteration

The River Lerr, which runs through the Proposed Masterplan Site, is part of the River Barrow and River Nore SAC, and this SAC is located within the boundaries of the Site. Future proposed developments within the boundary of the Proposed Masterplan, could propose designs that include partial loss and/or alteration of the SAC habitats and hence will require careful consideration under the AA process as appropriate during their planning. The Proposed Masterplan itself has not identified any key projects that propose altering the habitats within the SAC boundary, nor does it put forward proposals of any direct works at this stage.

Habitat loss or alteration can also occur as a result of invasive species introductions, for example from any new planting that may be proposed as part of the Proposed Masterplan. The proposed projects and key recommendations put forward by the Proposed Masterplan are subject to detailed design and individual planning, which must accord to the KCDP 2023-2029 objectives and policies on Development Management Standards, including the standards set for Soft Landscaping. These standards state that "*New planting should consist of local native plant types indigenous to the area*" and provide a table of acceptable tree and shrub species (Table 15.1 (a) in the KCDP 2023-2029). Additionally, the KCDP 2023-2029 provides for protection of designated sites via policies on the overall protection of the European sites network (e.g., BI P2, BI O9, BI O10), as well as specific policies regarding potential spread of Invasive Species:

- BI P9: "*Implement and support measures for the prevention and/or eradication of invasive species within the county and the control of noxious weeds*".
- BI O58: "*Require all development proposals to address the presence or absence of invasive alien species on proposed development sites and (if necessary) require applicants to prepare and submit an Invasive Species Management Plan where such species exist, in order to comply with the provisions of the European Communities (Birds and Natural Habitats) Regulations 2011*".

The Proposed Masterplan, as already stated, does not constitute a statutory framework of development, and it does not put forward individual planning applications. Therefore, it can be concluded that any potential projects arising as advised by the Proposed Masterplan must adhere to the policies of the KCDP 2017-2022 to protect European sites and to prevent the spread of invasive species. Thus, the potential for significant habitat loss/alteration as a result of invasive species spread arising from the preparation of the Proposed Masterplan **can be excluded**.

All projects and key recommendations implemented as a result of the Proposed Masterplan are subject to the appropriate environmental assessments, including the AA process.

3.5.2 Habitat / Species Fragmentation

Habitat fragmentation has been defined as the 'reduction and isolation of patches of natural environment' (Hall *et al*., 1997 cited in Franklin *et al*., 2002) usually due to an external disturbance such that an alteration of the spatial composition of a habitat occurs that alters the habitat and 'create[s] isolated or tenuously connected patches of the original habitat' (Wiens, 1989 cited in Franklin *et al*., 2002). This results in spatial separation of habitat units which had previously been in a state of greater continuity.

As there will be no habitat loss within any European sites (see section 3.5.1), no habitat fragmentation will arise as a result of the Proposed Masterplan.

3.5.3 Changes in Water Quality and Resource

The River Lerr which flows through Castledermot is part of the River Barrow and River Nore SAC. With regards to WFD water quality, the River Lerr is noted by the NPWS as follows: *"Nitrates are high due to intensive tillage in South Kildare - recent data indicates that nitrate levels are levelling off. Biological data indicates borderline conditions. Overall quality is mediocre."* The River Lerr has been assigned a *Poor* ecological status based on monitoring, and it is *At Risk* of not achieving its WFD objectives (EPA, 2022)[4].

The *River Barrow and River Nore SAC* lists several aquatic species which may be susceptible to water quality deterioration. Fish and mammal QI species listed for these sites which may be susceptible to water quality deterioration include Freshwater Pearl Mussel (*Margaritifera margaritifera*), White-clawed Crayfish (*Austropotamobius pallipes*), Sea Lamprey (*Petromyzon marinus*), Brook Lamprey (*Lampetra planeri*), River Lamprey (*Lampetra fluviatilis*), Twaite Shad (*Alosa fallax*), Atlantic Salmon (*Salmo salar*), Otter (*Lutra lutra*), and Nore Freshwater Pearl Mussel (*Margaritifera durrovensis*).

The Proposed Masterplan does not recommend increases in local population and/or residential dwellings, and as such will not result in added pressures on water resources or the treatment volumes of foul water. Additionally, the Proposed Masterplan does not propose any direct works that could result in emissions (e.g., silt/sediments/hydrocarbons) to groundwater, surface water systems or the river directly.

Considering the above, the potential for likely significant effects on water quality and/or resource arising from the Proposed Masterplan **can be ruled out**. However, it is important to note that all future developments within the Site will be subject to the appropriate environmental assessments at detailed design stage as set out in the KCDP 2023-2029.

3.5.4 Changes in Population Density

In the case of *River Barrow and River Nore SAC,* qualifying interests for this SAC include a number of freshwater fauna, as well as Killarney Fern (*Trichomanes speciosum)* and Floating River Vegetation.

Adverse effects on the attributes pertaining to vegetation and plant community structure of the above habitats and species could occur as a result of future developments within the Proposed Masterplan area, or invasive species introductions, which can alter the density of the characteristic species. However, as noted above in section 3.5.1, the Proposed Masterplan does not propose any direct works as part of the key recommendations, and all projects and

[4] https://www.catchments.ie/data/#/waterbody/IE_EA_09L011700?_k=f134cz [Accessed: December 2022]

developments at the Site are subject to the policies and development standards as set out in the KCDP 2023-2029.

Therefore, potential for likely significant changes to population densities of QI/SCI species within the relevant European sites arising as a result of the Proposed Masterplan **can be ruled out**.

3.5.5 Disturbance and/or Displacement of Species

'Disturbance' in an ecosystem is defined as any event "that disrupts the structure of an ecosystem, community, or population, and changes resource availability or the physical environment" (White and Pickett, 1985).

Future development activities within or in close proximity to a European site may result in brief disturbance and/or displacement of QI/SCI species at the European site(s). Examples of disturbance to QI/SCI species that could occur as a result of project activities include: displacement due to noise generation during the installation phase, or the deterioration in water quality as a result of sediment/pollutant discharge into a water body during the installation phase. As already noted, the Proposed Masterplan itself is not considered to have the capacity to impact on water quality (section 3.5.3). Additionally, as the Proposed Masterplan does not include any direct works at this stage, and any future development proposals put forward with cognisance to the Proposed Masterplan will have to adhere to the development standards of the KCDP 2023-2029 (incl. e.g., the requirement for AA), there exists no potential for works related disturbance from the preparation of the Proposed Masterplan.

However, listed QI species for the *River Barrow and River Nore SAC* such as Otter may be susceptible to disturbance from increases in human activity along the River Lerr as a result of the key projects identified in the Proposed Masterplan, particularly Key Project 7**,** which would see the improvement of 'Walking/cycling potential at the Green and River Lerr'. To assess the potential level of impact on Otter, an Otter survey was carried out to determine whether Otter is present along the key project area. This survey found no direct evidence of Otter within the approx. 2 km length of River Lerr that runs through Castledermot (see section 3.3.3). Additionally, only one anecdotal account of a relatively recent (2021) Otter sighting was obtained, indicating that if otter is present, the population is not significant or permanently resident at present. As such, the potential for significant disturbance on Otter as a result in increases in human activity along the River Lerr can be ruled out.

It should be noted however that any future developments arising as a result of the Proposed Development should be carefully considered under the AA process for potential impacts on the QIs of the River Barrow and River Nore SAC.

3.5.6 Potential for In-combination Effects

Although the Proposed Masterplan is not considered to have the capacity to cause significant effects on any European sites alone, it is important to consider the potential for cumulative effects with other plans and/or projects. The following sections outline existing granted or pending planning permissions in the vicinity of the Proposed Masterplan and assess the potential for adverse in-combination effects on any European sites.

3.5.6.1 Existing Granted or Pending Planning Permissions

A search of planning applications located within the Proposed Masterplan area and within a 1 km radius of the Site was undertaken using online planning resources such as the National Planning Application Database (NPAD) (MyPlan.ie) and Kildare County Council's Planning Applications Map Viewer (http://webgeo.kildarecoco.ie/planningenquiry). Any planning applications listed as granted or decision pending from within the last five years were assessed for their potential to act in-combination with the Proposed Masterplan and cause likely significant effects on the relevant European sites. Long-term developments granted outside of this time period were also considered where applicable.

It is noted that the majority of developments within the Site of the Proposed Masterplan are applications granted for new build dwellings, renovations or extensions to existing dwellings, and/or changes to designs of dwellings that were permitted as part of larger planning applications.

The larger existing projects within the Proposed Masterplan area and within a 1 km radius are detailed below.

Reg. Ref. 171218, *Within Proposed Masterplan Site area, Conditional as of 08/06/2018***:**
Re-establishment of use and making good of public house and restaurant use of existing two-storey Shamrock Bar (previously burnt out) a protected structure Ref. No. B40-20; now a partially roofed shell and construction of new and refurbished buildings around an internal patio courtyard; (b) Installation of a mezzanine floor into the existing two storey shell and reinstatement of elevational treatment to Main Street; (c) Demolition of the existing single storey bathroom extension to northern rear end; (d) Construction of new two-storey range linked to adjoining gable to north containing bathrooms and administration offices with gated enclosed public entrance courtyard accessed off Main Street; (e) Demolition of the remains of existing two storey rear return adjoining National Wholesalers; (f) Construction of replacement double height return to include adjoining new conservatory, kitchen and service areas and glazed link to rear; (g) Demolition of existing Dutch barn corrugated shed; (h) Construction of two-storey staff accommodation over bottle store and service entrance accessed off new rear car-parking area; (i) Change of use and elevational modification and extension of the existing detached rear stone outbuilding for use as staff accommodation 2 No. bedrooms; (j) Provision of a surface carpark shared with National Electrical Wholesalers to the rear of the development with associated site works and boundary fence.

Reg. Ref. 181259, *Within Proposed Masterplan Site area, Conditional as of 02/07/2019***:**
To construct an all-weather training pitch with associated flood lighting and fencing to pitch area, to construct additional car-parking, all ancillary site works and services

With due consideration of the distance to the nearest European site, it is considered that any future proposed developments that arise as a result of the Proposed Masterplan will need to be assessed with regards to significant in-combination effects on any European sites.

3.5.6.2 Relevant Policies and Plans

The following policies and plans were reviewed and considered for possible in-combination effects with the Proposed Masterplan.

- Kildare County Development Plan (CDP) 2017-2023
- Kildare County Development Plan (CDP) 2023-2029

Both County Development Plans have directly addressed the protection of European sites through specific policies and objectives. Additionally, the Natura Impact Report for the Kildare CDP 2023-2029 concludes that "*the Plan itself, subject to it securing the mitigation detailed in this report, will not adversely affect the integrity of any European Site either alone or in combination with other plans or projects.*" Therefore, future proposed developments that arise as part of the Proposed Masterplan will need to be assessed with regards to significant in-combination effects on any European sites.

4 APPROPRIATE ASSESSMENT SCREENING CONCLUSION

The Proposed Town Renewal Masterplan for Castledermot, Co. Kildare, has been assessed taking into account:

- the nature, size and location of the proposed works and possible impacts arising from the construction works.
- the qualifying interests and conservation objectives of the European sites.
- the potential for in-combination effects arising from other plans and projects.

In conclusion, upon the examination, analysis and evaluation of the relevant information and applying the precautionary principle, it is concluded by the authors of this report that, on the basis of objective information; the possibility **may be excluded** that the Proposed Masterplan will have a significant effect on any European sites.

As such, no further assessment is required. In carrying out this AA screening, mitigation measures have not been taken into account. Standard best practice construction measures which could have the effect of mitigating any effects on any European Sites have similarly not been taken into account.

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