

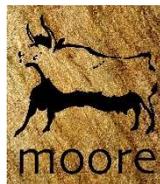
Report for the purposes of
Appropriate Assessment Screening

as required under Article 6(3) of the Habitats Directive
(Council Directive 92/43/EEC)

N24 Knockagh Pavement Overlay

Prepared by: Moore Group – Environmental Services

27 January 2021



On behalf of
Tipperary County Council

Project Proponent	Tipperary County Council
Project	N24 Knockagh Pavement Overlay
Title	Report for the purposes of Appropriate Assessment Screening N24 Knockagh Pavement Overlay

Project Number	21018	Document Ref	21018 N24 Knockagh Pavement Overlay AAS1 Rev0
Revision	Description	Author	Date
Rev0	Issued for client review	G. O'Donohoe 	27 January 2021
Moore Archaeological and Environmental Services Limited			

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Appendix A – Finding of No Significant Effects Report

Abbreviations

AA	Appropriate Assessment
EEC	European Economic Community
EPA	Environmental Protection Agency
EU	European Union
GIS	Geographical Information System
NHA	Natural Heritage Area
NIS	Natura Impact Statement
NPWS	National Parks and Wildlife Service
OSI	Ordnance Survey Ireland
pNHA	proposed Natural Heritage Area
SAC	Special Area of Conservation
SPA	Special Protection Area

1. Introduction

1.1. General Introduction

This Appropriate Assessment screening report contains information required for the competent authority, Tipperary County Council, to undertake screening for Appropriate Assessment (AA) for a Proposed Development consisting of a Pavement Overlay Scheme on the N24 at Knockagh, Co. Tipperary, (hereafter referred to as the Proposed Development) to significantly affect European sites. In accordance with Regulation 42(1) of the European Communities (Birds and Natural Habitats) Regulations, 2011 and Article 6 of the Habitats Directive, an Appropriate Assessment Stage 1 screening is required to be completed for this scheme.

Screening is the process that addresses and records the reasoning and conclusions in relation to the first two tests of Article 6(3) of Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (as amended) (referred to as the Habitats Directive):

- i) whether a plan or project is directly connected to or necessary for the management of the site, and
- ii) whether a plan or project, alone or in combination with other plans and projects, is likely to have significant effects on a Natura 2000 site (also referred to as a “European site”) in view of its conservation objectives.

Having regard to the provisions of the Planning and Development Act 2000 (section 177U and 177V), the purpose of a screening exercise under section 177U of the PDA 2000 is to determine whether it is necessary to carry out an “appropriate assessment” of the implications for a European site of the Proposed Development. The trigger for the requirement for an “appropriate assessment” is that the project, either individually or in combination with other plans or projects, is “likely to have a significant effect” on the European site.

In order to screen out a project, it must be *excluded*, on the basis of objective information, that the Proposed Development, individually or in combination with other plans or projects, will have a significant effect on a European site.

If the effects are deemed to be significant, potentially significant, or uncertain, or the screening process becomes overly complicated, or if it cannot be excluded, then the process must proceed to Stage 2 (AA). Screening should be undertaken without the inclusion of mitigation. If potential impacts clearly can be avoided through the modification or redesign of the plan or project, then the screening process is repeated on the altered plan or project.

When screening the project, there are two possible outcomes:

- the project poses no risk of a significant effect and as such requires no further assessment; and

- the project has potential to have a significant effect (or this is uncertain) and AA of the project is necessary.

This report has been prepared by Moore Group - Environmental Services to allow Tipperary County Council to carry out AA screening in relation to the Proposed Development. The report was compiled by Ger O'Donohoe (B.Sc. Applied Aquatic Sciences (GMIT, 1993) & M.Sc. Environmental Sciences (TCD, 1999)) who has over 25 years' experience in environmental impact assessment and has completed numerous Appropriate Assessment Screening Reports and Natura Impact Statements on terrestrial and aquatic habitats. He has completed several Reports for AA Screening and Appropriate Assessments regarding Data Storage Facilities and Strategic Infrastructure Developments.

1.2. Legislative Background - The Habitats and Birds Directives

It is necessary that the Proposed Development has regard to Article 6 of the Habitats Directive. This is transposed into Irish Law by the European Communities (Birds and Natural Habitats) Regulations, 2011 – 2015 (referred to as the Habitats Regulations).

The Habitats Directive (Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora) is the main legislative instrument for the protection and conservation of biodiversity in the European Union (EU). Under the Habitats Directive, Member States are obliged to designate Special Areas of Conservation (SACs) which contain habitats or species considered important for protection and conservation in an EU context. The Planning and Development Act 2000 (section 177U and 177V) govern the requirement to carry out appropriate assessment.

The Birds Directive (Directive 2009/147/EC on the Conservation of Wild Birds) is concerned with the long-term protection and management of all wild bird species and their habitats in the EU. Among other things, the Birds Directive requires that Special Protection Areas (SPAs) be established to protect migratory species and species which are rare, vulnerable, in danger of extinction, or otherwise require special attention.

Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs), designated under the Birds Directive, form a pan-European network of protected sites known as Natura 2000. The Habitats Directive sets out a unified system for the protection and management of SACs and SPAs. These sites are also referred to as European sites.

Articles 6(3) and 6(4) of the Habitats Directive set out the requirement for an assessment of proposed plans and projects likely to affect Natura 2000 sites.

Article 6(3) establishes the requirement to screen all plans and projects and to carry out a further assessment if required (Appropriate Assessment (AA)). Article 6(4) establishes requirements in cases of imperative reasons of overriding public interest:

Article 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 subjected to an appropriate assessment of its implications for the site in view of the site’s conservation objectives. In light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.”*

Article 6(4): *“If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, Member States shall take all compensatory measures necessary to ensure that the overall coherence of the Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted. Where the site concerned hosts a priority natural habitat type and/or a priority species the only considerations which may be raised are those relating to human health or public safety, to the beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.”*

2. Methodology

The Commission’s methodological guidance (EC, 2002) promotes a four-stage process to complete the AA and outlines the issues and tests at 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.

Stages 1-2 deal with the main requirements for assessment under Article 6(3). Stage 3 may be part of Article 6(3) or may be a necessary precursor to Stage 4. Stage 4 is the main derogation step of Article 6(4).

Stage 1 Screening: This stage examines the likely effects of a project either alone or in combination with other projects upon a Natura 2000 site and considers whether it can be objectively concluded that these effects will not be significant. In order to screen out a project, it must be excluded, on the basis of objective information, that the Proposed Development, individually or in combination with other plans or projects, will have a significant effect on a European site.

Stage 2 Appropriate Assessment: In this stage, there is a consideration of the impact of the project with a view to ascertain whether there will be any adverse effect on the integrity of the Natura 2000 site either alone or in combination with other projects or plans, with respect to the site’s structure and function and its conservation objectives. Additionally, where there are predicted impacts, an assessment of the potential mitigation of those impacts.

Stage 3 Assessment of Alternative Solutions: This stage examines alternative ways of implementing the project that, where possible, avoid any adverse impacts on the integrity of the Natura 2000 site.

Stage 4 Assessment where no alternative solutions exist and where adverse impacts remain: Where imperative reasons of overriding public interest (IROPI) exist, an assessment to consider whether compensatory measures will or will not effectively offset the damage to the sites will be necessary.

To ensure that the Proposed Development complies fully with the requirements of Article 6 of the Habitats Directive and all relevant Irish transposing legislation, Moore Group compiled this report to allow Tipperary County Council to carry out AA screening to determine whether the Proposed Development, individually or in combination with another plan or project will have a significant effect on a European site.

2.1. Guidance

This report has been compiled in accordance with guidance contained in the following documents:

- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities. (Department of Environment, Heritage and Local Government, 2010 rev.).
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPWS 1/10 & PSSP 2/10.
- Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (European Commission Environment Directorate-General, 2001); hereafter referred to as the EC Article Guidance Document.
- Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC (EC Environment Directorate-General, 2000); hereafter referred to as MN2000.
- Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC (EC, 2018).

2.2. Data Sources

Sources of information that were used to collect data on the Natura 2000 network of sites, and the environment within which they are located, are listed below:

- The following mapping and GIS data sources, as required:
 - National Parks & Wildlife (NPWS) protected site boundary data;
 - Ordnance Survey of Ireland (OSI) mapping and aerial photography;
 - OSI/ Environmental Protection Agency (EPA) rivers and streams, and catchments;
 - Open Street Maps;
 - Digital Elevation Model over Europe (EU-DEM);
 - Google Earth and Bing aerial photography 1995-2021;

- Online data available on Natura 2000 sites as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie including:
 - Natura 2000 - Standard Data Form;
 - Conservation Objectives;
 - Site Synopses;
- National Biodiversity Data Centre records;
 - Online database of rare, threatened and protected species;
 - Publicly accessible biodiversity datasets.
- Status of EU Protected Habitats in Ireland. (National Parks & Wildlife Service, 2019); and
- Relevant Development Plans:
 - Tipperary County Development Plans.

3. Description of the Proposed Development

The proposed scheme is approximately 1.2km in length and is located just outside the town of Cahir. It commences at the Knockagh Roundabout situated at the junction of the N24 with the R640, extending 1.2km east in the direction of Clonmel, ending in the townland of Rathmore.

The existing carriageway from Knockagh Roundabout to Local Road L-3159 consists of a Type 1 Single Carriageway with hard shoulders and wide verges. Shortly after the L-3159 the N24 carriageway reduces abruptly to a Type 2 Single Carriageway with narrow hard shoulders and narrow verges. The horizontal alignment is made up of substandard radii leading to reduced sight distances and there is insufficient superelevation on the bends.

The scheme involves overlay/inlay of this section of the existing legacy N24 mainline as well as reprofiling of the carriageway cross section to improve areas of sub-standard superelevation with minor realignment where possible.

The main surface water collection will be provided by the existing systems of predominantly over the edge with short sections of filter drains and kerb and gully which will discharge at suitable outfall locations.

It is proposed to outfall road drainage to the existing N24 drainage network. There is an existing attenuation pond to the south west of the scheme which was constructed as part of the M8 Motorway works. There are no streams or rivers within the area.

All works will be undertaken within the curtilage of the road and are of such a small scale that no significant effects are likely.

Figure 1 shows the Proposed Development location and Figure 2 shows a detailed view of the Proposed Development boundary on recent aerial photography. Figure 3 is a plan of the Proposed Development.

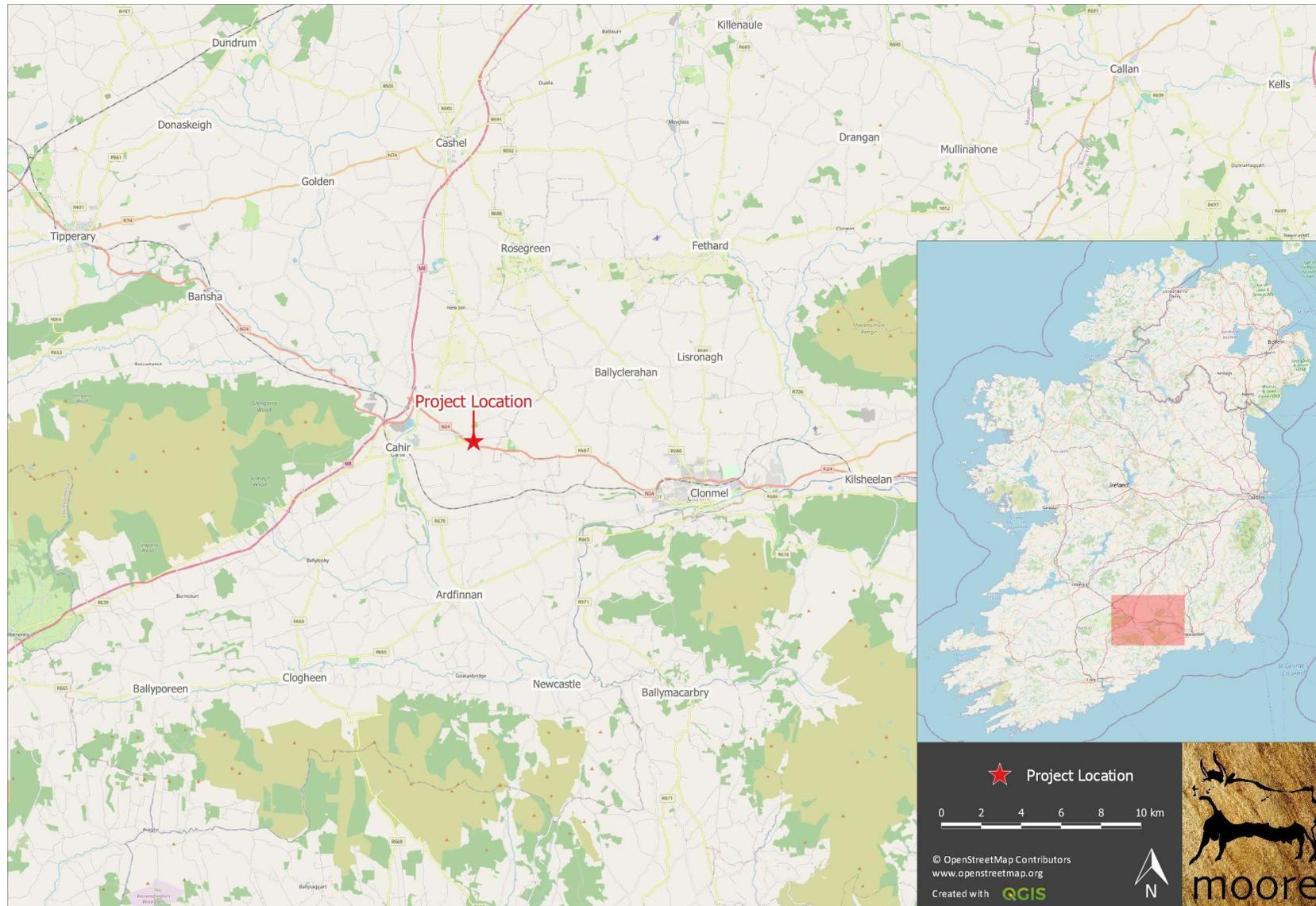


Figure 1. Showing the Proposed Development at Knockagh, Co. Tipperary.



Figure 2. Showing the Proposed Development on recent aerial photography.

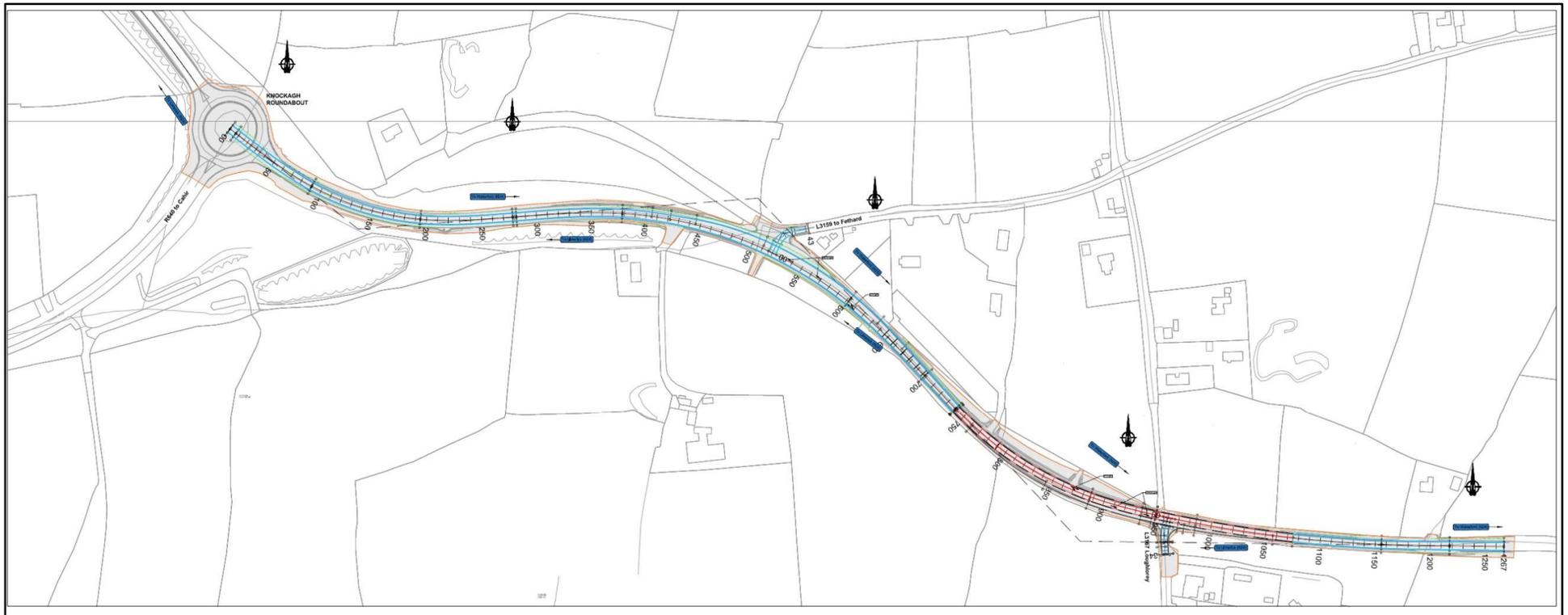


Figure 3. Plan of the Proposed Development.

4. Identification of Natura 2000 Sites

4.1. Description of Natura Sites Potentially Affected

Department of Environment, Heritage and Local Government (2009) Guidance on Appropriate Assessment recommends an assessment of European sites within a zone of impact of 15 km. This distance is a guidance only and the zone of impact has been identified taking consideration of the nature and location of the Proposed Development to ensure all European sites with connectivity to it are considered in terms of a catchment-based assessment.

The zone of impact may be determined by connectivity to the Proposed Development in terms of:

- Nature, scale, timing and duration of works and possible impacts, nature and size of excavations, storage of materials, flat/sloping sites;
- Distance and nature of pathways (dilution and dispersion; intervening 'buffer' lands, roads etc.); and
- Sensitivity and location of ecological features.

The guidance provides that, at the screening stage, it is necessary to identify the relevant Natura 2000 sites and compile information on their qualifying interests and conservation objectives. In preparation for this, the potential for source – pathway – receptor connectivity is firstly identified and detailed information is then provided on sites with connectivity. European sites that are located within 15 km of the Proposed Development are listed in Table 1 and presented in Figures 4 and 5, below. Spatial boundary data on the Natura 2000 network was extracted from the NPWS website (www.npws.ie) on 11 January 2021.

Table 1 European Sites located within the potential zone of impact¹ of the Proposed Development.

Site Code	Site name	Distance (km) ²
000646	Galtee Mountains SAC	11.49
002137	Lower River Suir SAC	2.40

There is no connectivity with the Galtee Mountains and the Galtee Mountains SAC is excluded from the assessment at this stage. The Proposed Development is located just outside the town of Cahir. There are no water courses which drain the scheme and there is no connectivity with the River Suir which is located c 2.4 km to the west.

¹ All European sites potentially connected irrespective of the nature or scale of the Proposed Development.

² Distances indicated are the closest geographical distance between the Proposed Development and the European site boundary, as made available by the NPWS. Connectivity along hydrological pathways may be significantly greater.

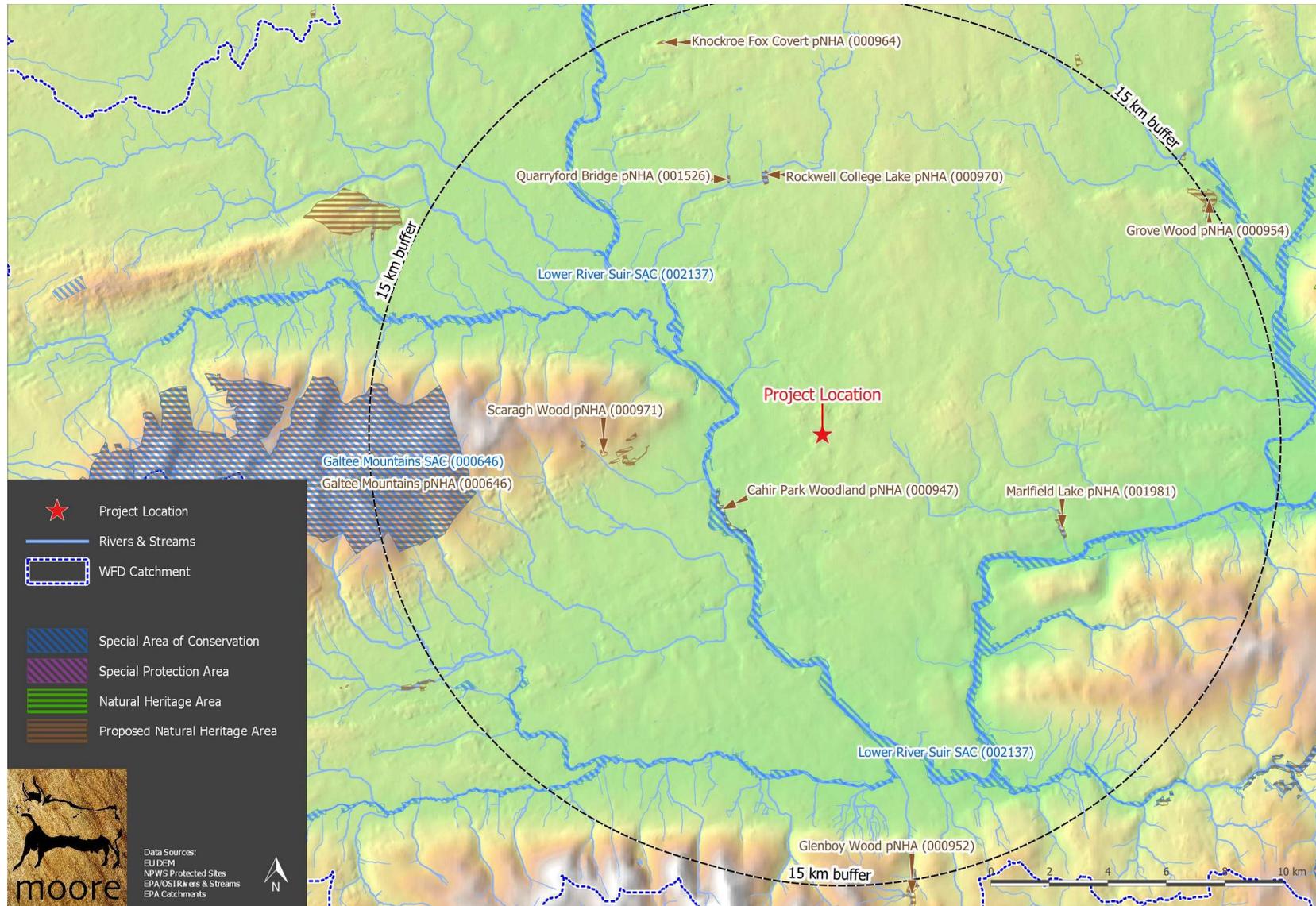


Figure 4. Showing European sites and NHAs/pNHAs in the vicinity of the Proposed Development.

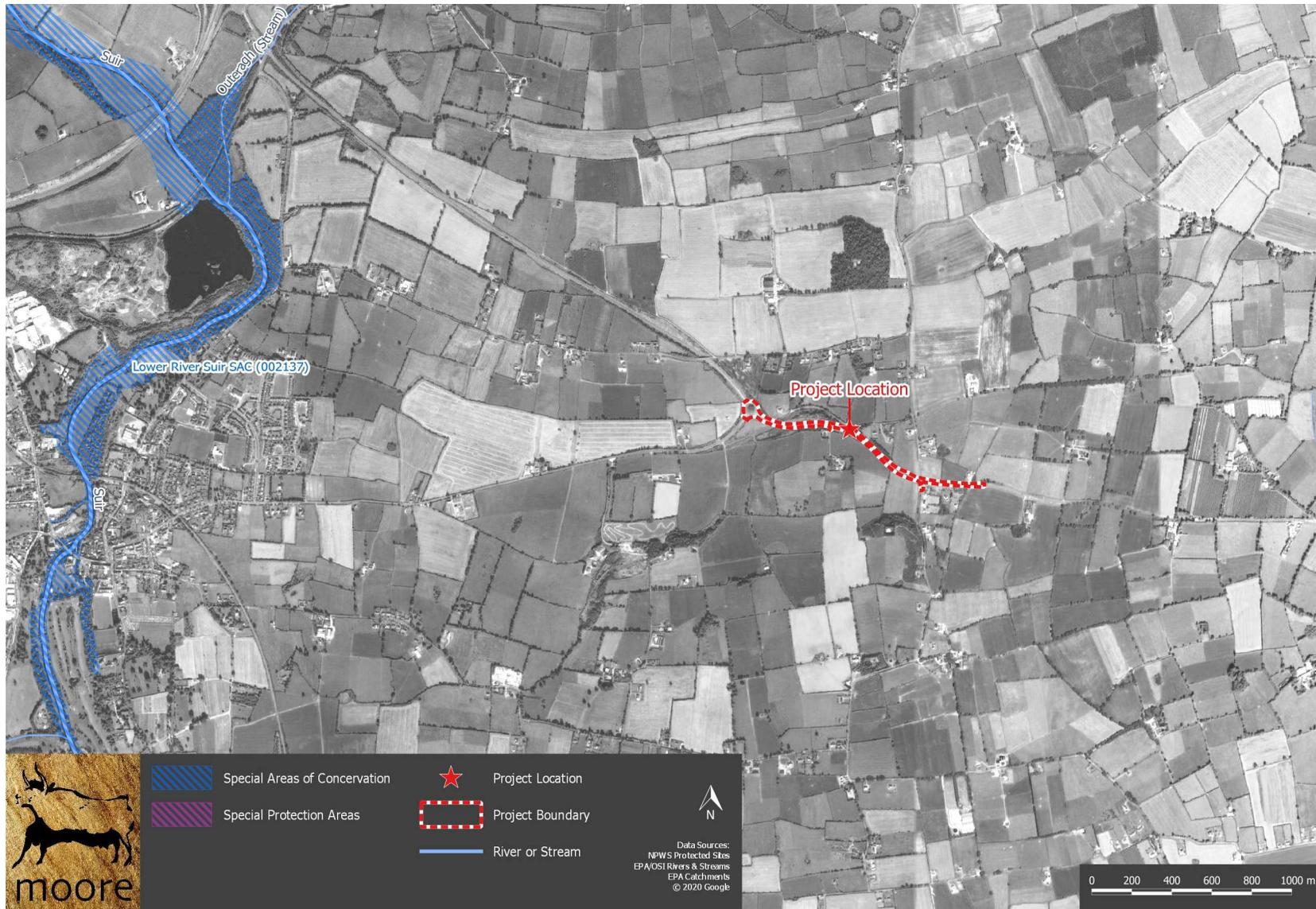


Figure 5. Detailed view of European sites in the vicinity of the Proposed Development.

Table 2 European sites located within the potential Zone of Impact of the Proposed Development (*indicates priority habitat).

Site Code	Site name	Distance (km)	Sensitive Receptors (Qualifying Interests & Special Conservation Interests)	Potential Effects	Pathway for Significant Effects	Pathway for In-combination effects
002137	Lower River Suir SAC	0.00	<p>1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>)</p> <p>1410 Mediterranean salt meadows (<i>Juncetalia maritimi</i>)</p> <p>3260 Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation</p> <p>6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels</p> <p>91A0 Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles</p> <p>91E0 Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>)</p> <p>91J0 <i>Taxus baccata</i> woods of the British Isles*</p> <p>1029 Freshwater Pearl Mussel <i>Margaritifera margaritifera</i></p> <p>1092 White-clawed Crayfish <i>Austropotamobius pallipes</i></p> <p>1095 Sea Lamprey <i>Petromyzon marinus</i></p> <p>1096 Brook Lamprey <i>Lampetra planeri</i></p> <p>1099 River Lamprey <i>Lampetra fluviatilis</i></p> <p>1103 Twaite Shad <i>Alosa fallax fallax</i></p> <p>1106 Salmon <i>Salmo salar</i></p> <p>1355 Otter <i>Lutra lutra</i></p>	<p>The Scheme is located over 2 km from the SAC area and there are no Qualifying Interests located under the footprint of the proposed development. There will be no direct effects on the Lower River Suir SAC.</p> <p>It is proposed to outfall road drainage to the existing N24 drainage network. There is an existing attenuation pond to the south west of the scheme which was constructed as part of the M8 Motorway works. There are no streams or rivers within the area.</p> <p>All works will be undertaken within the curtilage of the road and are of such a small scale that no significant effects are likely.</p>	No	No

4.2. Conservation Objectives of the Natura 2000 Sites

4.2.1. Lower River Suir SAC (002137) - Version 1; 28th March 2017

The following Conservation Objectives are set out for the Lower River Suir SAC. Specific attributes, measures and targets are presented in the relevant Conservation Objectives documents and will be addressed in more detail if required after potential impacts have been determined.

1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

To restore the favourable conservation condition of Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) in Lower River Suir SAC.

1410 Mediterranean salt meadows (*Juncetalia maritimi*)

To restore the favourable conservation condition of Mediterranean salt meadows (*Juncetalia maritimi*) in Lower River Suir SAC.

3260 Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation

To maintain the favourable conservation condition of Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation in Lower River Suir SAC.

6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels

To maintain the favourable conservation condition of Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels in Lower River Suir SAC.

91A0 Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles

To restore the favourable conservation condition of Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles in Lower River Suir SAC.

91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)

To restore the favourable conservation condition of Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)* in Lower River Suir SAC.

91J0 *Taxus baccata* woods of the British Isles

To restore the favourable conservation condition of *Taxus baccata* woods of the British Isles* in Lower River Suir SAC.

1029 Freshwater Pearl Mussel *Margaritifera margaritifera*

To restore the favourable conservation condition of Freshwater Pearl Mussel in Lower River Suir SAC.

1092 White-clawed Crayfish *Austropotamobius pallipes*

To maintain the favourable conservation condition of White-clawed Crayfish in Lower River Suir SAC.

1095 Sea Lamprey *Petromyzon marinus*

To restore the favourable conservation condition of Sea Lamprey in Lower River Suir SAC.

1096 Brook Lamprey *Lampetra planeri*

To restore the favourable conservation condition of Brook Lamprey in Lower River Suir SAC.

1099 River Lamprey *Lampetra fluviatilis*

To restore the favourable conservation condition of River Lamprey in Lower River Suir SAC.

1103 Twaite Shad *Alosa fallax fallax*

To restore the favourable conservation condition of Twaite Shad in Lower River Suir SAC.

1106 Salmon *Salmo salar*

To restore the favourable conservation condition of Atlantic Salmon in Lower River Suir SAC.

1355 Otter *Lutra lutra*

To maintain the favourable conservation condition of Otter in Lower River Suir SAC.

4.3. Assessment Criteria

4.3.1. Examples of Direct, Indirect or Secondary Impacts

In order to identify those sites that could be potentially affected, it is necessary to describe the Natura 2000 site in the context of why it has been designated i.e. in terms of its Qualifying Interests and the environmental and ecological conditions that maintain the condition of these features. The underpinning conditions that are required to maintain the 'health' of these features are listed in Table 3 below.

Table 3 Qualifying Interests and Key environmental conditions supporting site integrity.

Qualifying Interests	Key environmental conditions supporting site integrity	Current Threats to Qualifying Interests	Potential Impacts
* Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, <i>Salicion albae</i>)	Riparian/lacustrine habitat prone to flooding.	Grazing, Invasive Species, Drainage, Planting of nonnative conifers, felling of native tree species.	This habitat does not occur in the zone of impact of the Proposed Development and will not be affected.

Qualifying Interests	Key environmental conditions supporting site integrity	Current Threats to Qualifying Interests	Potential Impacts
Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>)	Marine and groundwater dependent. Medium sensitivity to hydrological change. Changes in salinity and tidal regime. Overgrazing, erosion and accretion.	Overgrazing; erosion; invasive species, particularly common cordgrass (<i>Spartina anglica</i>); infilling and reclamation.	This habitat does not occur in the zone of impact of the Proposed Development and will not be affected.
Brook Lamprey (<i>Lampetra planeri</i>)	Surface water dependent Highly sensitive to hydrological change.	Channel maintenance, barriers, passage obstruction, gross pollution and specific pollutants.	There will be no discharges to water courses from the Proposed Development and this species will not be affected.
Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>)	Surface water dependent Highly sensitive to hydrological change Very highly sensitive to pollution.	Poor substrate quality due to increased growth of algal and macrophyte vegetation as a result of severe nutrient enrichment, as well as physical siltation.	This species does not occur in the zone of impact of the Proposed Development and will not be affected.
Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	Habitats are formed on gleyed soils, rich in nutrients, sand, silty and sand-silty ones with a high ground water level. Usually these nitrophylious communities are located in the form of the narrow strips near riverbeds and channels and occupy a small area.	Change of hydrological regime, adjustment of river channels, expansion of neophyte species, farming.	This habitat does not occur in the zone of impact of the Proposed Development and will not be affected.
Mediterranean salt meadows (<i>Juncetalia maritimi</i>)	Marine and groundwater dependent. Sensitivity to hydrological change. Changes in salinity and tidal regime. Overgrazing, erosion and accretion	Overgrazing; erosion; invasive species, particularly common cordgrass (<i>Spartina anglica</i>); infilling and reclamation.	This habitat does not occur in the zone of impact of the Proposed Development and will not be affected.
Old sessile oak woods with Ilex and Blechnum in the British Isles	Changes in management. Changes in nutrient or base status. Introduction of alien species.	The introduction of alien species; sub-optimal grazing patterns; general forestry management; increases in urbanisation and human habitation adjacent to oak woodlands; and the construction of communication networks through the woodland.	This habitat does not occur in the zone of impact of the Proposed Development and will not be affected.
Otter (<i>Lutra lutra</i>)	Prey availability. Water Quality. Riparian vegetation for breeding sites. Unhindered	Decrease in water quality: Use of pesticides; fertilization; vegetation removal; professional fishing (including lobster pots and fyke nets);	There will be no discharges to water courses from the Proposed Development and this species will not be affected.

Qualifying Interests	Key environmental conditions supporting site integrity	Current Threats to Qualifying Interests	Potential Impacts
	passage along waterways.	hunting; poisoning; sand and gravel extraction; mechanical removal of peat; urbanised areas; human habitation; continuous urbanization; drainage; management of aquatic and bank vegetation for drainage purposes; ; and canalization or modifying structures of inland water course.	
River Lamprey (<i>Lampetra fluviatilis</i>)	Surface water dependent Highly sensitive to hydrological change.	Channel maintenance, barriers, passage obstruction, gross pollution and specific pollutants.	There will be no discharges to water courses from the Proposed Development and this species will not be affected.
Salmon (<i>Salmo salar</i>) (only in fresh water)	Surface water dependent Highly sensitive to hydrological change	Numerous threats impact upon this species. Some of these include: cultivation, pesticides; fertilization; pollution; water pollution; biocenotic evolution; accumulation of organic material; eutrophication; over-fishing; forest-related pressures; parasites.	This species does not occur in the zone of impact of the Proposed Development and will not be affected.
Sea Lamprey (<i>Petromyzon marinus</i>)	Surface water dependent Highly sensitive to hydrological change.	Obstructions to movement; gross pollution; and specific pollutants.	There will be no discharges to water courses from the Proposed Development and this species will not be affected.
<i>Taxus baccata</i> woods	Changes in management. Changes in nutrient or base status. Introduction of alien species.	The introduction of alien species; sub-optimal grazing patterns; general forestry management; increases in urbanisation and human habitation adjacent to woodlands; and the construction of communication networks through the woodland.	This habitat does not occur in the zone of impact of the Proposed Development and will not be affected.
Twaite shad (<i>Alosa fallax</i>)	Surface water dependent	Twaite shad <i>Alosa fallax</i>	There will be no discharges to water courses from the Proposed Development and this species will not be affected.
Water courses of plain to montane levels with the <i>Ranunculus fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation	Surface and groundwater dependent. Highly sensitive to hydrological changes. Highly sensitive to pollution.	Eutrophication; overgrazing, excessive fertilisation; afforestation; and the introduction of invasive alien species.	This habitat does not occur in the zone of impact of the Proposed Development and will not be affected.

Qualifying Interests	Key environmental conditions supporting site integrity	Current Threats to Qualifying Interests	Potential Impacts
White-clawed Crawfish (<i>Austropotamobius pallipes</i>)	Surface water dependent. Highly sensitive to hydrological change, Very highly sensitive to pollution.	Introduction of diseases transmitted by introduced American crayfish.	This species does not occur in the zone of impact of the Proposed Development and will not be affected.

4.2. Ecological Network Supporting Natura 2000 Sites

An analysis of the proposed Natural Heritage Areas and designated Natural Heritage Areas in terms of their role in supporting the species using Natura 2000 sites was undertaken. It was assumed that these supporting roles mainly related to mobile fauna such as mammals and birds which may use pNHAs and NHAs as “stepping stones” between Natura 2000 sites.

Article 10 of the Habitats Directive and the Habitats Regulations 2011 place a high degree of importance on such non-Natura 2000 areas as features that connect the Natura 2000 network. Features such as ponds, woodlands and important hedgerows were taken into account during the rest of the AA process.

There are no Natural Heritage Area or proposed Natural Heritage Areas that will be effected by the Proposed Development.

5. Identification of Potential Impacts & Assessment of Significance

The Proposed Development is not directly connected with or necessary for the management of the sites considered in the assessment and therefore potential impacts must be identified and considered.

5.1. Potential Impacts

This section uses the information collected on the sensitivity of each European site considered and describes any likely significant effects of implementation of the Proposed Development. This assumes the absence of any controls, conditions or assumption mitigation measures.

The likely significant effects of the Proposed Development are presented in Table 5 (Section 5.3), both in isolation and potentially in combination with other plans and Proposed Developments.

There will be no direct impacts on Lower River Suir SAC and there will be no habitat loss or fragmentation as a result of the Proposed Development.

Having considered direct impacts and ruling them out, indirect impacts are then considered.

A worst-case scenario may be considered whereby the Proposed Development would be the source of a significant detrimental change in water quality in the Lower River Suir SAC either alone or in combination with other projects or plans as a result of indirect pollution. The effect would have to be considered in terms of changes in groundwater or surface water quality which would affect the species and/or habitats or food sources for which the Lower River Suir SAC's species are designated. However, this is unlikely.

Potential adverse effects on Lower River Suir SAC are unlikely given the nature and scale of the Proposed Development to be contained within the curtilage of the existing road with no discharges to surface water.

Having considered the above, it is evident that potential adverse effects on Lower River Suir SAC are unlikely and significant effects on any European sites as a result of the Proposed Development are ruled out.

5.2. Assessment of Potential In-Combination Effects

Cumulative impacts or effects are changes in the environment that result from numerous human-induced, small-scale alterations. Cumulative impacts can be thought of as occurring through two main pathways: first, through persistent additions or losses of the same materials or resource, and second, through the compounding effects as a result of the coming together of two or more effects.

As part of the Screening for an Appropriate Assessment, in addition to the Proposed Development, other relevant plans and projects in the area must also be considered at this stage. This step aims to identify at this early stage any possible significant in-combination effects of the Proposed Development with other such plans and projects on European sites.

A review of the National Planning Application Database was undertaken. The first stage of this review confirmed that there were no data outages in the area where the Proposed Development is located. The database was then queried for developments granted planning permission within 1 km of the Proposed Development within the last three years, these are presented in Table 4.

Table 4 Planning applications granted permission in the vicinity of the Proposed Development.

Planning Ref.	Description of development	Comments
18600194	development of cattle house with slatted tank and lie back area, also Retention Permission for two cattle houses incorporating lie back area and feeding area and all associated works on my land	AA Screening was completed by TCC and determined a finding of no significant effects.
18601344	the construction of a new agricultural shed (circa 846sqm and 13.6m high) for the storage of straw bales, containerised heat exchanger unit (circa 17sqm) and all associated site works	AA Screening was completed by TCC and determined a finding of no significant effects.

Planning Ref.	Description of development	Comments
20162	the material change of use for existing and new agricultural sheds to include the storage and drying of grain, timber, bark and other wood based materials	AA Screening was completed by TCC and determined a finding of no significant effects.

There are no predicted in-combination effects given the reasons discussed in the comments column of Table 4 and given that it has been concluded that the Proposed Development is unlikely to have any effects on any European sites.

The Tipperary County Development Plan in complying with the requirements of the Habitats Directive requires that all Projects and Plans that could affect the Natura 2000 sites in the same zone of impact of the Project site would be initially screened for Appropriate Assessment and if requiring Stage 2 AA, that appropriate employable mitigation measures would be put in place to avoid, reduce or ameliorate negative impacts. In this way, in-combination impacts with Plans or Projects for the development area and surrounding townlands in which the development site is located, would be avoided.

The listed developments have been granted permission in most cases with conditions relating to sustainable development by the consenting authority in compliance with the relevant Local Authority Development Plan and in compliance with the Local Authority requirement for regard to the Habitats Directive. The development cannot have received planning permission without having met the consenting authority requirement in this regard. There are no predicted in-combination effects given that it is predicted that the Proposed Development will have no effect on any European site.

Any new applications for the Project area will be assessed on a case by case basis *initially* by Tipperary County Council which will determine the requirement for AA Screening as per the requirements of Article 6(3) of the Habitats Directive.

5.3. Summary of Potential Impacts

Table 5 Outlining the potential impacts in the absence of mitigation of the Proposed Development.

Site	Potential Direct Impacts e.g. Habitat Loss	Potential Indirect Impacts e.g. alteration to hydrological regime	Surface or Groundwater Contamination	Disturbance to Protected Species (Habitats Directive Annex II & IV)	Stage 2 AA Required
002137 Lower River Suir SAC	No	No	No	No	No

6. Conclusion

There will be no direct impacts on Lower River Suir SAC and there will be no habitat loss or fragmentation as a result of the Proposed Development.

Having considered direct impacts and ruling them out, indirect impacts are then considered.

A worst-case scenario may be considered whereby the Proposed Development would be the source of a significant detrimental change in water quality in the Lower River Suir SAC either alone or in combination with other projects or plans as a result of indirect pollution. The effect would have to be considered in terms of changes in groundwater or surface water quality which would affect the species and/or habitats or food sources for which the Lower River Suir SAC's species are designated. However, this is unlikely.

Potential adverse effects on Lower River Suir SAC are unlikely given the nature and scale of the Proposed Development to be contained within the curtilage of the existing road with no discharges to surface water.

Having considered the above, it is evident that potential adverse effects on Lower River Suir SAC are unlikely and significant effects on any European sites as a result of the Proposed Development are ruled out.

It has been objectively concluded by Moore Group Environmental Services that:

1. The Proposed Development is not directly connected with, or necessary to the conservation management of the European sites considered in this assessment.
2. The Proposed Development, alone or in combination with other projects, is not likely to have significant effects on the European sites considered in this assessment.
3. It is possible to rule out likely significant impacts on any European sites considered in the assessment.
4. It is possible to conclude that there would be no significant effects, no potentially significant effects and no uncertain effects if the Proposed Development were to proceed.

It can be *excluded*, on the basis of objective information, that the Proposed Development, individually or in combination with other plans or projects, will have a significant effect on a European site.

It is the view of Moore Group Environmental Services that it is not necessary to undertake any further stage of the Appropriate Assessment process.

A finding of no significant effects report is presented in Appendix A in accordance with the EU Commission's methodological guidance (European Commission, 2001).

7. References

Department of the Environment, Heritage and Local Government (2010) Guidance on Appropriate Assessment of Plans and Projects in Ireland (as amended February 2010).

European Commission (2000) Managing Natura 2000 sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC.

European Commission (2001) Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. European Commission, Brussels.

European Commission (2007) Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC: Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interests, compensatory measures, overall coherence and opinion of the Commission. European Commission, Brussels.

European Commission (2018) Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC.

NPWS (2013) Lower River Suir SAC 002137 Site Synopsis Version date 13.12.2013. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

NPWS (2017) Conservation Objectives: Lower River Suir SAC 002137. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

NPWS (2019) The Status of EU Protected Habitats and Species in Ireland. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.

NPWS (2021) National Parks and Wildlife Service Metadata available online at <https://www.npws.ie/maps-and-data>

Appendix A

FINDING OF NO SIGNIFICANT EFFECTS REPORT

Finding no significant effects report matrix

Name of project or plan

N24 Knockagh Pavement Overlay

Name and location of the Natura 2000 site(s)

There is no connectivity with the Galtee Mountains and the Galtee Mountains SAC is excluded from the assessment at this stage. The Proposed Development is located just outside the town of Cahir. There are no water courses which drain the scheme and there is no connectivity with the River Suir which is located c 2.4 km to the west.

Description of the project or plan

The proposed scheme is approximately 1.2km in length and is located just outside the town of Cahir. It commences at the Knockagh Roundabout situated at the junction of the N24 with the R640, extending 1.2km east in the direction of Clonmel, ending in the townland of Rathmore.

The existing carriageway from Knockagh Roundabout to Local Road L-3159 consists of a Type 1 Single Carriageway with hard shoulders and wide verges. Shortly after the L-3159 the N24 carriageway reduces abruptly to a Type 2 Single Carriageway with narrow hard shoulders and narrow verges. The horizontal alignment is made up of substandard radii leading to reduced sight distances and there is insufficient superelevation on the bends.

The scheme involves overlay/inlay of this section of the existing legacy N24 mainline as well as reprofiling of the carriageway cross section to improve areas of sub-standard superelevation with minor realignment where possible.

The main surface water collection will be provided by the existing systems of predominantly over the edge with short sections of filter drains and kerb and gully which will discharge at suitable outfall locations.

It is proposed to outfall road drainage to the existing N24 drainage network. There is an existing attenuation pond to the south west of the scheme which was constructed as part of the M8 Motorway works. There are no streams or rivers within the area.

All works will be undertaken within the curtilage of the road and are of such a small scale that no significant effects are likely.

Is the project or plan directly connected with or necessary to the management of the site(s)

No

Are there other projects or plans that together with the projects or plan being assessed could affect the site

A review of the National Planning Application Database was undertaken. The first stage of this review confirmed that there were no data outages in the area where the Proposed Development is located. The database was then queried for developments granted planning permission within 1 km of the Proposed Development within the last three years, these are presented in the Table below.

Planning Ref.	Description of development	Comments
18600194	development of cattle house with slatted tank and lie back area, also Retention Permission for two cattle houses incorporating lie back area and feeding area and all associated works on my land	AA Screening was completed by TCC and determined a finding of no significant effects.
18601344	the construction of a new agricultural shed (circa 846sqm and 13.6m high) for the storage of straw	AA Screening was completed by TCC and determined a finding of no significant effects.

Planning Ref.	Description of development	Comments
	bales, containerised heat exchanger unit (circa 17sqm) and all associated site works	
20162	the material change of use for existing and new agricultural sheds to include the storage and drying of grain, timber, bark and other wood based materials	AA Screening was completed by TCC and determined a finding of no significant effects.

These are no predicted in-combination effects given the reasons discussed in the comments column of the Table above and given that it has been concluded that the Proposed Development is unlikely to have any effects on any European sites.

The Tipperary County Development Plan in complying with the requirements of the Habitats Directive requires that all Projects and Plans that could affect the Natura 2000 sites in the same zone of impact of the Project site would be initially screened for Appropriate Assessment and if requiring Stage 2 AA, that appropriate employable mitigation measures would be put in place to avoid, reduce or ameliorate negative impacts. In this way, in-combination impacts with Plans or Projects for the development area and surrounding townlands in which the development site is located, would be avoided.

The listed developments have been granted permission in most cases with conditions relating to sustainable development by the consenting authority in compliance with the relevant Local Authority Development Plan and in compliance with the Local Authority requirement for regard to the Habitats Directive. The development cannot have received planning permission without having met the consenting authority requirement in this regard. There are no predicted in-combination effects given that it is predicted that the Proposed Development will have no effect on any European site.

Any new applications for the Project area will be initially assessed on a case by case basis by Tipperary County Council which will determine the requirement for AA Screening as per the requirements of Article 6(3) of the Habitats Directive.

THE ASSESSMENT OF SIGNIFICANCE OF EFFECTS

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

There will be no direct impacts on Lower River Suir SAC and there will be no habitat loss or fragmentation as a result of the Proposed Development.

Having considered direct impacts and ruling them out, indirect impacts are then considered.

A worst-case scenario may be considered whereby the Proposed Development would be the source of a significant detrimental change in water quality in the Lower River Suir SAC either alone or in combination with other projects or plans as a result of indirect pollution. The effect would have to be considered in terms of changes in groundwater or surface water quality which would affect the species and/or habitats or food sources for which the Lower River Suir SAC's species are designated. However, this is unlikely.

Explain why these effects are not considered significant.

Potential adverse effects on Lower River Suir SAC are unlikely given the nature and scale of the Proposed Development to be contained within the curtilage of the existing road with no discharges to surface water.

Having considered the above, it is evident that potential adverse effects on Lower River Suir SAC are unlikely and significant effects on any European sites as a result of the Proposed Development are ruled out.

List of agencies consulted: provide contact name and telephone or e-mail address

The requirement for Appropriate Assessment Screening was determined by Tipperary County Council.

Response to consultation

N/A.

DATA COLLECTED TO CARRY OUT THE ASSESSMENT

Who carried out the assessment

Moore Group Environmental Services.

Sources of data

NPWS database of designated sites at www.npws.ie

National Biodiversity Data Centre database <http://maps.biodiversityireland.ie>

Level of assessment completed

Desktop Assessment.

Where can the full results of the assessment be accessed and viewed

Tipperary County Council Planning Section.

OVERALL CONCLUSIONS

There will be no direct impacts on Lower River Suir SAC and there will be no habitat loss or fragmentation as a result of the Proposed Development.

Having considered direct impacts and ruling them out, indirect impacts are then considered.

A worst-case scenario may be considered whereby the Proposed Development would be the source of a significant detrimental change in water quality in the Lower River Suir SAC either alone or in combination with other projects or plans as a result of indirect pollution. The effect would have to be considered in terms of changes in groundwater or surface water quality which would affect the species and/or habitats or food sources for which the Lower River Suir SAC's species are designated. However, this is unlikely.

Potential adverse effects on Lower River Suir SAC are unlikely given the nature and scale of the Proposed Development to be contained within the curtilage of the existing road with no discharges to surface water.

Having considered the above, it is evident that potential adverse effects on Lower River Suir SAC are unlikely and significant effects on any European sites as a result of the Proposed Development are ruled out.

It has been objectively concluded by Moore Group Environmental Services that:

1. The Proposed Development is not directly connected with, or necessary to the conservation management of the European sites considered in this assessment.
2. The Proposed Development, alone or in combination with other projects, is not likely to have significant effects on the European sites considered in this assessment.
3. It is possible to rule out likely significant impacts on any European sites considered in the assessment.
4. It is possible to conclude that there would be no significant effects, no potentially significant effects and no uncertain effects if the Proposed Development were to proceed.

It can be *excluded*, on the basis of objective information, that the Proposed Development, individually or in combination with other plans or projects, will have a significant effect on a European site.

It is the view of Moore Group Environmental Services that it is not necessary to undertake any further stage of the Appropriate Assessment process