

N24 Carrick Road Improvement Scheme

EIA Screening Report

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SECTION 1: Introduction

Barry Transportation have been appointed by Kilkenny County Council as Consulting Engineers to prepare Environmental Impact Assessment (EIA) Screening Report for the N24 Carrick Road Improvement Scheme, Co. Kilkenny.

The principal requirement of this report is to assist the relevant authorities in forming an opinion as to whether the proposed N24 Carrick Road Improvement Scheme should be subject to an Environmental Impact Assessment and, if so, whether an Environmental Impact Assessment Report (EIAR) should be prepared in respect of the development.

This report presents the findings of an assessment to determine the requirement for an Environmental Impact Assessment for the scheme. It has been prepared by Barry Transportation generally in accordance with the following guidelines:

- Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Subthreshold Development (Department of Environment, Heritage and Local Government (DoEHLG), 2003 now the Department of Housing, Local Government and Heritage (DoHLGH));
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (DoHLGH, 2018);
- Draft Guidelines on the information to be contained in Environmental Impact Assessment Report (Environmental Protection Agency (EPA), 2017);
- Environmental Impact Assessment of Projects, Guidance on Screening (European Commission (EC), 2017);
- Environmental Impact Assessment of National Road Schemes A Practical Guide (Transport Infrastructure Ireland (NRA/TII), 2008);
- Environmental Impact Assessment Screening OPR Practice Note PN02 (Office of the Planning Regulator (OPR), 2021);
- Planning and Development Regulations 2001 (as amended); and
- Roads Act 1993 (as amended).



SECTION 2: Description of Proposed Development

2.1 Site Location

The N24 is a National Primary Route located in County Waterford, County Kilkenny, County Tipperary and County Limerick, with an overall total length of approximately 116km. The proposed N24 Carrick Road Improvement Scheme is located near Mooncoin, Co. Kilkenny, as shown in Figure 2-1. The section under consideration is a single carriageway of varying cross-section and is approximately 2.2km in length. The scheme is surrounded predominantly by agricultural land. The scheme aims to improve the safety, capacity and efficiency of the N24, to improve the journey times and to provide for road alignment to meet current and future needs.

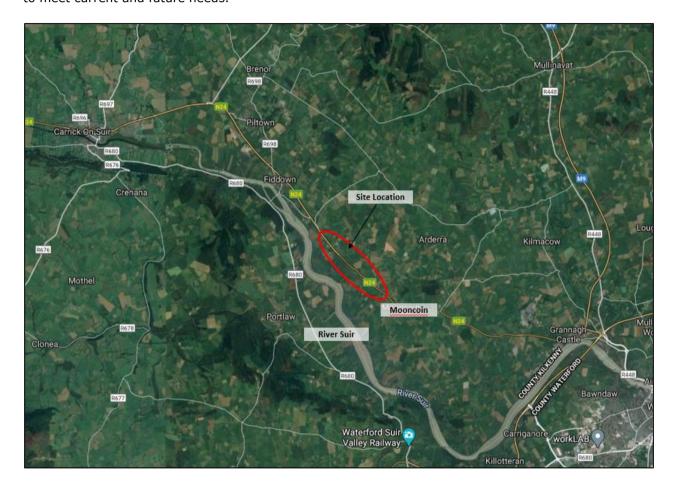


Figure 2-1: Site location (www.Google.com/maps)

2.2 Description of the Proposed Works

The proposed N24 Carrick Road Improvement Scheme located near Mooncoin, Co. Kilkenny is approximately 2.2km (northwest- southeast) in length. The scheme involves both offline and online works, approximately 950m of the road scheme will run along the existing N24 and the remaining 1.25km of the scheme requires realignment.

The proposed scheme involves:

- Surface water drainage.
- Provision of 2no. attenuation ponds, with 2m high palisade fencing, one on the western side of the scheme and other on the eastern side of the scheme.
- Provision of a construction compound at the location of the proposed eastern attenuation pond.



- Proposed realignment of the Skelpstown 16 stream which flows through the site (and associated Box Culvert).
- Provision of new combined road underbridge and cattle underpass at the location of the local road
 L7416, with track for cattle to gain access to underpass.
- Provision of 1.5m footpath as part of the underbridge at the location of the local road L7416.
- Provision of a timber post and tension mesh fences along much of the scheme length, as well as 2.5m wide shared surface/ footpath either side of the carriageway.
- Provision of agricultural access tracks and adjacent field access tracks.

2.3 Need for the Scheme

The purpose of the proposed scheme is to improve journey times and mainline speeds on the N24 Carrick Road. The provision of improved mainline speeds will maintain the existing collision rankings at below or twice below the national average rate. The scheme aims to improve safety, capacity and efficiency of the N24 by providing a suitable road alignment to meet current and future needs.

The scheme will provide for improved road based public transport journey time and complement wider government policy related to improved accessibility. It will also improve facilities for vulnerable road users and separation distances from vehicular traffic on the national road network. The scheme will also contribute to improved access and alleviate congestion and delays caused by the layout of the existing carriageway. The provision of cattle underpass will prevent significant queuing of the national road traffic. This will also maintain or reduce existing carbon dioxide and particulate emissions through a reduction in fuel consumption.



SECTION 3: Legislative Context, Screening Assessment Criteria

3.1 Introduction

One of the earliest phases in planning a project such as this N24 Carrick Road Improvement Scheme is to determine whether the project should be subject to Environmental Impact Assessment. This phase is called 'Screening'. The overriding consideration in determining whether a project should be subject to EIA is the likelihood of significant environmental effects. Significant effects may arise by virtue of the type of project, the scale or extent of the project and the location of the project in relation to sensitive environments.

In screening a project or development for EIA, the process will take place within a legislative framework, as set out by the EIA Directive and National Legislation.

3.2 EIA Directive

EIA requirements derive from EU Directive 2014/52/EU. Known as the EIA Directive, it amends the previous directive (2011/92/EU) on the assessment of the effects of certain public and private projects on the environment (hereafter referred to as the 'EIA Directive'). It is defined under Article 1(2)(g) as follows:

"Environmental impact assessment means a process consisting of:

- i) the preparation of an environmental impact assessment report by the developer, as referred to in Article 5(1) and (2);
- ii) the carrying out of consultations as referred to in Article 6 and, where relevant, Article7;
- iii) the examination by the competent authority of the information presented in the environmental impact assessment report and any supplementary information provided, where necessary, by the developer in accordance with Article 5(3), and any relevant information received through the consultations under Articles 6 and 7;
- iv) the reasoned conclusion by the competent authority on the significant effects of the project on the environment, taking into account the results of the examination referred to in point (iii) and, where appropriate, its own supplementary examination; and
- v) the integration of the competent authority's reasoned conclusion into any of the decisions referred to in Article 8a."

Article 4(1) and Annex I of the EIA Directive lists projects for which an EIA is mandatory, whereas Article 4(2) and Annex II lists project types for which EIA may be required. For Annex II projects, Member States may set national thresholds and/or examine such projects on a case-by-case basis. Criteria to determine whether projects listed in Annex II should be subject to an EIA are set out in Article 4(3) and Annex III of the directive and include the characteristics of projects, the location of projects, and the type and characteristics of the potential impact.

The EIA Directive in Article 4(4) strengthened screening procedures to determine whether EIA is required in respect of development consent proposals. In this regard, there are new requirements on the information to be provided by the developer to the competent authority for the purposes of a screening determination (Annex IIA of the Directive), and expanded selection criteria to be used by the competent authority in making a screening determination (Annex III). Where a structured screening determination on the foregoing basis is not required, it will be necessary, in the case of each planning application or



appeal, for the competent authority to conclude, based on a preliminary examination, that there is no real likelihood of significant effects on the environment arising from the proposed works.

3.3 National Legislative Framework for EIA

The EIA Directive has been transposed into Irish legislation by the Planning and Development Act 2000 (as amended) (hereafter referred to as 'the Act') and Planning and Development Regulations 2001 (as amended) (hereafter referred to as 'the Regulations'). Section 172(1) of the Act sets out the statutory basis for the requirements for Environmental Impact Assessment. It provides as follows:

"An environmental impact assessment shall be carried out by the planning authority or the Board, as the case may be, in respect of an application for consent for proposed development where either—

- (a) the proposed development would be of a class specified in-
- (i) Part 1 of Schedule 5 of the Planning and Development Regulations 2001, and either—
 - (I) such development would equal or exceed, as the case may be, any relevant quantity, area or other limit specified in that Part, or
 - (II) no quantity, area or other limit is specified in that Part in respect of the development concerned,

or

- (ii) Part 2 of Schedule 5 of the Planning and Development Regulations 2001 and either—
 - (I) such development would equal or exceed, as the case may be, any relevant quantity, area or other limit specified in that Part, or
 - (II) no quantity, area or other limit is specified in that Part in respect of the development concerned,

or

(b)(i) the proposed development would be of a class specified in Part 2 of Schedule 5 of the Planning and Development Regulations 2001 but does not equal or exceed, as the case may be, the relevant quantity, area or other limit specified in that Part, and

- (ii) it is concluded, determined or decided, as the case may be, -
 - (I) by a planning authority, in exercise of the powers conferred on it by this Act or the Planning and Development Regulations 2001 (S.I. No. 600 of 2001),
 - (II) by the Board, in exercise of the powers conferred on it by this Act or those regulations,
 - (III) by a local authority in exercise of the powers conferred on it by regulation 120 of those regulations,
 - (IV) by a State authority, in exercise of the powers conferred on it by regulation 123A of those regulations,
 - (V) in accordance with section 13A of the Foreshore Act, by the appropriate Minister (within the meaning of that Act), or
 - (VI) by the Minister for Communications, Climate Action and Environment, in exercise of the powers conferred on him or her by section 8A of the Minerals Development Act 1940,

that the proposed development is likely to have a significant effect on the environment."

The EIA Directive is transposed into Irish Legislation, in context of road schemes, through the European Union (Planning and Development) (Roads Act 1993) (Environmental Impact Assessment) (Amendment) Regulations (S.I. 279 of 2019). Projects for which an EIA is mandatory under Annex I of the Directive have been listed under Part 1 of Schedule 5 to the Planning and Development Regulations. Similarly,



Part 2 of Schedule 5 outlines thresholds for other projects which also require EIA, as per Annex II of the Directive.

Projects requiring Environmental Impact Assessment are transposed from the EIA Directive into Irish Legislation through Section 172 of the Act. An initial determination is to be undertaken to examine whether the proposal is a project as understood by this transposition of the directive. If a proposed project is not of a type covered, there is no statutory requirement for it to be subject to Environmental Impact Assessment. In determining if the proposed project is of a 'type' it is also necessary to go beyond the general description of the project and to consider the component parts of the project and/or any processes arising from it.

Furthermore, the current requirements for EIA are set out in Part IV of the Roads Act, 1993 (as amended), and Part V of the Roads Regulations, 1994 - 2019 (S.I. No. 119 of 1994). In particular, sections 50 and 51 of the Act (as amended) deal with EIA. These sections have been amended through the European Communities (EIA) Regulations, the Planning and Development Acts, and the Roads Act. Consequently, the project should be screened to determine whether the project falls within the scope of or exceeds the thresholds set out in the legislation.



SECTION 4: EIA Screening

Environmental Impact Assessment (EIA) is the process for anticipating the effects (both positive and negative) from a proposed development or project on various environmental receptors. If the anticipated effects are unacceptable, design measures or other relevant mitigation measures can be taken to reduce or avoid those effects. The Environmental Impact Assessment Report (EIAR) is the output which records the details of this assessment.

The first step in the EIA process is to determine if an EIA needs to be undertaken or not. An initial determination establishes whether the proposal is a 'project' as understood by the Directive, i.e. does it comprise development, works or activity, as defined in the relevant Irish legislation. The relevant classes of developments that require an EIA are set out in Schedule 5 of the Planning and Development Regulations 2001 (as amended).

4.1 Mandatory EIA

For road schemes, the legislative process of ascertaining whether a project or development requires an EIA is determined by reference to mandatory and discretionary provisions set out in the Roads Act 1993; Roads Regulations 1994; EIA (Amendment) Regulations 1999; Planning and Development Act 2000 (as amended); Planning and Development Regulations 2001 (as amended); Planning and Development (Strategic Infrastructure) Act 2006; Roads Act 1993 (as amended); and European Communities (Birds and Natural Habitats) Regulations 2011 (as amended).

The following table summarises the legislative context where an Environmental Impact Assessment is mandatory for a road scheme.

Table 4-1: Summary of Legislative Requirements for EIA Screening

Road Projects v	Regulatory Reference	
(1) Constr	S. 50(1)(a)(i) of the Roads Act, 1993 (as amended)	
(2) Const	S. 50(1)(a)(ii) of the Roads Act, 1993 (as amended)	
(3) Constru	S. 50(1)(a)(iii) of the Roads Act, 1993 (as amended)	
(4) Any prescribed type of proposed road development consisting of the construction of a proposed public road or the improvement of an existing public road, namely:	The construction of a new road of four or more lanes, or the realignment or widening of an existing road so as to provide four or more lanes, where such new, realigned or widened road would be eight kilometres or more in length in a rural area, or 500 metres or more in length in an urban area;	Article 8 of the Roads Regulations, 1994 (Part V Environmental Impact Assessment)
	The construction of a new bridge or tunnel which would be 100 metres or more in length.	Article 8 of the Roads Regulations, 1994 (Part V Environmental Impact Assessment)



(5) If An Bord Pleanála considers the (other than development to which proceedings of the construction of improvement of an existing public significant effects on the environment be subject to an environment.	S. 50(1)(b) of the Roads Act, 1993 (as amended)		
(6) Where a road authority or, a considers that a road developm development to which paragraph (of the construction of a proposed prexisting public road would be likely environment, it shall inform An making any application to the Bosection 51(1) in respec	S. 50(1)(c) of the Roads Act, 1993 (as amended)		
	(i) a European Site within the meaning of Regulation 2 of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011)		
7) Where a proposed development (other than development to which paragraph (a) applies, 1 to 4 above) consisting of the construction of a proposed public road or the improvement of an existing public road would be located on —	(ii) land established or recognised as a nature reserve within the meaning of section 15 or 16 of the Wildlife Act, 1976 (No. 39 of 1976)	S. 50(1)(d) of the Roads Act, 199 (as amended) as amended by the European Unio (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), reg. 56(7)(a) and reg. 56(7)(b)	
	vi) land designated as a refuge for fauna or flora under section 17 of the Wildlife Act, 1976 (No. 39 of 1976)		
	(iv) land designated a natural heritage area under section 18 of the Wildlife (Amendment) Act 2000.		
If the road authority considers that are likely, it shall inform ABP in a			

The proposed development is not considered to have a mandatory requirement for an EIA as it does not satisfy the criteria described in Table 4-1 above, and it does not meet any of the criteria listed under Part 1 or 2 of Schedule 5 of the Regulations. These regulations have been amended to set out the updated criteria in accordance with the requirements of the EIA Directive.

It should be noted that the overriding consideration in determining whether a project should be subject to EIA is the likelihood of significant environmental effects. As a result of this, under the precautionary principle the proposed project is subject to screening herein.



SECTION 5: Likely significant effects

5.1 Introduction

This chapter details the screening assessment used in determining whether the development would or would not be likely to have significant effects on the Environment.

Where a decision is being made on whether a proposed development would be likely to have significant effects on the environment, regard must be given to the following broad categories as outlined in Annex III of the EIA Directive;

- (i) Characteristics of the project
- (ii) Location of proposed development
- (iii) Type and characteristics of the potential impacts.

Each category is broken down into a number of subsections, in accordance with DoHLGH guidelines (2018). Where potentially significant impacts have been identified, design measures have been developed and included in the design or construction method to avoid or minimise impacts.

Following reports were referenced for this assessment:

- Ecological Impact Assessment, N24 Carrick Road Improvement Scheme, Co. Kilkenny (Ecofact, January 2022).
- AA Screening, N24 Carrick Road Improvement Scheme, Co. Kilkenny (Ecofact, January 2022).
- Natura Impact Statement, N24 Carrick Road Improvement Scheme, Co. Kilkenny (Ecofact, January 2022).
- Bat Assessment Report, N24 Carrick Road Improvement Scheme, Co. Kilkenny (Ecofact, January 2022).
- Air Quality & Climate Impact Assessment, N24 Carrick Road Improvement Scheme (AWN, 2022).
- Noise and Vibration Impact Assessment, N24 Carrick Road Improvement Scheme (AWN, 2021).
- Archaeological, Architectural and Cultural Heritage Impact Assessment, N24 Carrick Road Improvement Scheme, County Kilkenny (JCA, 2022).

5.2 Characteristic of the proposed development

5.2.1 Size and design of the whole project

The aim of the proposed development on the N24 Carrick Road is to enhance the capacity and efficiency of the N24 by improving journey times, average mainline speeds, road safety and road access. The proposed scheme is approximately 2.2 km long and includes the proposed realignment of the Skelpstown 16 stream which will flow through the site along with the construction of a new box culvert. The scheme also includes provision for a road underbridge structure which will also incorporate a separate (adjacent) cattle underpass. The new underbridge also includes a 1.5m wide footpath underneath the road. The scheme also includes for a timber post and tension mesh fences along most of the scheme length, 2.5m wide footpaths and agricultural and adjacent field access tracks.

5.2.2 Cumulation with other existing and/or approved projects

A number of sources have been reviewed to determine the potential for cumulative effects with other plans and projects. These sources include:

- An Board Pleanála database (www.pleanala.ie accessed November 2020).
- EIA Portal (www.housinggovie.maps.arcgis.com, accessed November 2020).
- Kilkenny County Development Plan 2014-2020 (Kilkenny County Council, 2014).
- Kilkenny City and County Development Plan 2021-2027 (Kilkenny County Council, 2021).



The National Planning Application database (www.myplan.ie – accessed September 2020).

There are no projects or proposed projects in the nearby vicinity of the works that might give rise to cumulative effects.

5.2.3 The use of natural resources, in particular land, soil, water and biodiversity

The use of natural resources in the construction of the scheme includes the importation of construction material to site. The amounts are expected to be minor. All construction activities are to take place within the proposed route extents, as given in Appendix A.

There will be some removal of treeline and hedgerows only where necessary to amount to approximately 305m.

Habitat loss is unavoidable however it is not considered to have the potential to have a significant effect on the study area due to their low ecological importance. Hedgerows and treelines in the study area are well maintained in general and not of significant ecological importance. Landscaping will also be included for the proposed development that is considered to mitigate for this loss. Nonetheless, the impact of habitat loss in the absence of mitigation is evaluated as being slight negative, long-term to permanent and in the local context.

5.2.4 The production of waste

Minor quantities of waste will be generated from construction activities including removal of trees and hedgerows, and from resurfacing works, construction of new stream realignment (and associated box culvert), road underbridge (and cattle underpass) and the provision of the attenuation ponds. Excavation quantities for unacceptable material are listed below.

MaterialQuantities (m3)U1 Hard Material5,819U20Total Unacceptable Material5,819 m³

Table 5-1: Unacceptable Material Quantities

On site materials that cannot be used in construction and reinstatement will be disposed of in accordance with all relevant legislation and guidance including the Waste Management Acts (1996, as amended), Waste Management Permit Regulations, and the *Guidelines for the management of Waste from National Road Construction Projects* (TII, 2017). Waste generated by the works will not result in a significant impact on the surrounding environment.

5.2.5 Pollution and nuisances

During construction, negative environmental impacts may arise during instream works on the Skelpstown 16 stream and run-off from excavated areas and soil deposition areas resulting in increased suspended solids, as well as accidental spillages of hydrocarbons (oils and fuels) from machinery and waste materials such as concrete. Impacts due to noise and dust may be experienced by property owners adjacent the network, however these will be minor in nature, short-term and insignificant.

Eircom and water services are located within existing verges of the N24. Overhead ESB cables are ubiquitous along the scheme. Services require being maintained, protected and occasionally diverted. There may be temporary service interruptions experienced by residents in the local area during the construction works.

The site is also in close proximity to Lower River Suir SAC, approximately 510m northeast of the SAC. The Skelpstown 16 stream crosses the site and discharges downstream to Lower River Suir SAC. Though the works are relatively minor and consist of normal construction activities, there is potential for direct



disturbance impact to arise particularly from construction of box culvert on the water quality. The works can also affect Otters in Skelpstown stream. However, appropriate mitigation and precautionary measures will be taken during construction phase. The mitigation measures are detailed in *Natura Impact Statement* (Ecofact, 2022). There will be no piling or blasting works required, and the noise impacts due to construction are anticipated to be temporary and insignificant.

The full closure and partial closure of roads during construction has the potential to cause temporary nuisance on local residents.

It is expected that this scheme will provide for better road access and more reliable and reduced journey times on the N24 Carrick Road and the approaching roads. The proposed scheme will address deficiencies in terms of alignment, cross-section width, curvature and visibility thereby improving the consistency, accessibility and safety of the carriageway along the N24 Carrick Road Improvement Scheme.

No significant negative effects are expected during the operational phase of the proposed scheme.

5.2.6 The risk of major accidents and/or disasters which are relevant to the project concerned, including those caused by flooding or climate change, in accordance with scientific knowledge

No risks of major accidents and/or disasters that are relevant to the project have been identified.

5.2.7 The risks to human health (for example due to water contamination or air pollution)

The project will not give rise to adverse risks to human health. It is expected that the infrastructure associated with the proposed scheme will reduce journey times and improve access on the N24 to allow safer traffic movements. Therefore, it is expected that the implementation of the proposed scheme will result in a reduction of risk to human health. There are no other anticipated risks to human health from construction activities etc.

5.2.8 The risks to the dispersal and introduction of invasive alien species

A site survey for the purposes of an *Ecological Impact Assessment Report* (Ecofact, 2022) was undertaken during September to October 2020. This was completed to record locations of invasive species and the ecological presence along the route of the proposed scheme. September is within the optimal survey period where plants are readily identifiable, and winter and migratory bird surveys and bat roost assessments are applicable. No invasive species listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations (S.I. 477 of 2011) were recorded within or adjacent to the proposed works area. A dead Greater White-toothed Shrew *Crocidura russula* was also found in the agricultural lands adjacent the N24 during the October 2020 visit. It is a non-native, medium impact, invasive species.

However, due to hydrological connection via the Skelpstown 16 stream and the fact that works on this watercourse are proposed as part of the development it is possible that invasive species could be carried downstream and become established in the SAC and adversely affect the designated habitats. Biosecurity measures implemented during the proposed works will prevent the introduction of invasive species.

To avoid the introduction of invasive species any material imported to the site shall be screened for invasive species and all machinery shall be thoroughly cleaned down prior to arriving on site.

5.3 Location of the Proposed Development

5.3.1 The existing and approved land use

The proposed N24 Carrick Road Improvement Scheme is located near Mooncoin, Co. Kilkenny.

Treelines are relatively sparse and scattered on the proposed development site and occur mostly to the north of the scheme. The most common species present here include Common Ash *Fraxinus excelsior*



and Sycamore *Acer pseudoplatanus*. Hedgerows are common in the study area however those located close to the N24 road were considered to be sparse, highly maintained and of poor quality. Species such as Hawthorn and Gorse are common throughout the study area. Many of the hedgerows are low in height and are only present to delineate field boundaries.

A total of 11 habitats were recorded on the proposed development site and include Arable Crops (BC1), Wet Grassland (GS4), Amenity Grassland (improved) (GA2), Improved Agricultural Grassland (GA1), Buildings and Artificial Surfaces (BL3), Hedgerows (WL1), Mixed Broadleaved / Conifer Woodland (WD2), Horticultural Land (BC2), Treelines (WL2), Scrub (WS1), Eroding / upland Rivers (FW1). No records of Fossitt Wetlands are located within the study area. No Annex I Habitats occur within the proposed development site. No rare plants, protected species or protected habitats occur on the proposed development site.

5.3.2 The relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground

The proposed scheme is for the most part located on roads and rural agricultural land with realignment works and the attenuation pond located upon rural agricultural fields and field boundaries composed of treelines and hedgerows. The nearest areas that are considered to be of significant value for habitats and species are Lower River Suir SAC, Hugginstown Fen SAC, Tibberaghny Marshes pNHA, Fiddown Island pNHA, Lower River Suir (Coolfinn, Portlaw) pNHA, River Suir Below Carrick-On-Suir pNHA, Portlaw Woods pNHA, Hugginstown Fen pNHA, Kilkeasy Bog pNHA, Lough Cullin pNHA, Grannyferry pNHA and Kilbarry pNHA.

Treelines are relatively sparse and scattered on the proposed development site and occur mostly to the north of the scheme. The most common species present here include Common Ash *Fraxinus excelsior* and Sycamore *Acer pseudoplatanus*. Hedgerows are common in the study area however those located close to the N24 road were considered to be sparse, highly maintained and of poor quality. Species such as Hawthorn and Gorse are common throughout the study area. Many of the hedgerows are low in height and are only present to delineate field boundaries.

The proposed scheme will have a moderate impact on the quality and regenerative capacity of natural resources in the area, in terms of removal of vegetation. Most of the proposed route is along the existing N24 and green field with works comprising of realignment and provision of stream box culvert, road underbridge including a cattle track, access tracks and attenuation ponds. A sensitive landscape design will be incorporated into the overall project design to replant trees where they are removed and to replace any vegetation loss. Further details of this are provided in the *Ecological Impact Assessment Report* (Ecofact, 2022). This will avoid or reduce potential impacts along the proposed scheme and will maintain a sense of privacy and green coverage where impacted.

5.3.3 The absorption capacity of the natural environment, paying particular attention to the following areas

(a) Wetlands, riparian areas, and river mouths

The proposed scheme is located approximately 700m northeast of River Suir and also crosses Skelpstown 16 stream which is an open watercourse and discharges directly into the River Suir. The proposed scheme is within Suir Catchment (17) and the Water Framework Directive river sub-basins, Skelpstown (IE_SE_16S040450). The groundwater classification in this area is classified as good.

There is the potential for pollution incidents during the construction phase of the project from sediment runoff and hydrocarbon spills from machinery movements. Measures will be put in place to ensure that the water quality of associated waterbodies is maintained or improved during the construction and operational phases of the development. The scheme also involves provision of attenuation pond and drainage to the proposed outfall location (Appendix A). This will involve best construction practices and the provision of green space as the intermediary body between the greenway and the watercourses to allow for percolation and runoff of rainwater prior to discharge. The majority of the works for the proposed project are to take place on existing hardstanding areas.



(b) Coastal zones and the marine environment

The proposed scheme is located in close proximity to Lower River Suir SAC (510m northeast of the SAC). Lower River Suir adjacent to the proposed development site is classified as a Transitional Waterbody and is a nutritive sensitive area.

(c) Mountain and forest areas

None affected by the proposed scheme.

(d) Nature and reserve parks

None affected by the proposed scheme.

(e) Areas classified or protected under national legislation, including areas classified or protected under national legislation; Natura 2000 areas designated by Member States pursuant to Directive 92/43/EEC and Directive 2009/147/EC; special protection areas designated pursuant to Directives 2009/147/EC and 92/43/EEC.

None directly affected by the proposed scheme. The majority of the habitats encountered along the route are highly modified or manmade in nature, including residential properties and agricultural land to the east and west, and hedgerows and treelines along road boundaries. Two European sites are located within 15km of the proposed development. These sites include the Special Areas of Conservation, Lower River Suir SAC (Site Code 002137) and Hugginstown Fen SAC (Site Code 000404).

In accordance with Article 6(3) of the EU Habitats Directive (92/43/EEC), a screening for Appropriate Assessment was prepared for the project (Ecofact, 2022) with a conclusive finding that the project – when assessed alone or in-combination with any other plans or projects might result in adverse effects on the structure, function, integrity or the Conservation Objectives or Qualifying Interests of Natura 2000 site. Therefore, a *Natura Impact Statement* (NIS) is prepared for the proposed N24 Carrick Road Improvement Scheme (Ecofact, 2022) which details the mitigation measures to be adopted for the development.

(f) Areas in which there has already been a failure to meet the environmental quality standards laid down in legislation of the EU have already been exceeded. Union Legislation and relevant to the project, or in which it is considered there is such a failure

None affected by the proposed scheme.

(g) Densely populated areas

None affected by the proposed scheme.

(h) Landscapes and sites of historical, cultural or archaeological significance

An assessment of heritage impacts was conducted (John Cronin and Associates, 2022) to identify potential impacts of proposed scheme on archaeological, architectural and cultural heritage. The Record of Monuments and Places (RMP) and Sites and Monuments Record (SMR) do not list any recorded archaeological sites within the reviewed study area. There are no Protected Structures or National Inventory of Architectural Heritage (NIAH) listed structures located within the study area.

The assessment identified certain undesignated Cultural Heritage Sites (CHS) within the Study Area. The CHS ID allotted to these sites with a description is listed below.

CHS-12 (Building): Demolished, occupied by a modern dwelling and outbuildings. Elements of the easternmost building depicted on the historic mapping may be incorporated in one of the outbuildings. Located 15m outside of scheme boundary.



- **CHS-13 (Buildings):** Demolished, occupied by the realigned N24 Clonmore Cross junction. Located 10m outside of scheme boundary.
- **CHS-15 (Bridge/ Culvert):** The N24 crosses the stream at the same location shown on 25-inch OS map. The culvert has a concrete parapet on its upstream side, this appears to be built over a masonry headwall. The downstream side was overgrown and could not be inspected. Located within scheme boundary.
- **CHS-16 (Buildings):** A derelict single-storey stone-built building located on the north side of the existing N24. Map regression analysis suggests that this is likely to be the building depicted on the historic mapping. Located 10m to south of scheme boundary.
- **CHS-17 (Buildings):** A derelict single storey stone-built building which map regression analysis suggested was the fourth building depicted on the historic mapping stood in field to the west of a modern dwelling. It has recently been demolished. A tubular metal gate indicates the former access on the roadside. Located 50m to south of scheme boundary.
- **CHS-19 (Building and buildings (site of)):** Demolished, occupied by a dwelling house and a ruined stone-built building to the east. Map regression analysis suggests that this may be the easternmost building depicted on the historic mapping. Located in private property immediately outside scheme boundary.
- **CHS-27 (Roadside memorial):** Roadside memorial on the north side of the N24, comprising a polished stone headstone on a cut limestone plinth erected in front of a rendered and painted concrete wall with painted concrete coping. It commemorates Linda Holden of Clonmore, Mooncoin, who died as a result of a road traffic accident on 04/03/1991.
- **CHS-28 (Historic Boundary):** Hedgerow along local road. It comprises a low earthen bank topped with trees and hedgerow and is flanked on both sides by shallow earth-cut drains. Located within scheme boundary.
- **CHS-29 (Historic Boundary):** N24 road centreline and field boundary (earthen bank and hedgerow). The field boundary section is formed by a straight earth/stone bank (c.0.8m to 1m high) topped with a well-maintained hedgerow. No surface traces of flanking ditch on either side. Extends for c. 12m into scheme boundary.
- **CHS-30 (Historic Boundary):** Stream (Skelpstown Stream). Averages 1m wide and the slow flowing water within the channel was 0.3m deep at the time of inspection. Earth-eroded sides and bed was covered in silts. Extends into scheme boundary.

The geophysical survey carried out in 2021 revealed a variety of anomalies of potential archaeological or agricultural origin as well as likely evidence for agricultural processes detected through soil disturbance, relict field boundaries, cultivation furrows and potential boundary ditches. Likely archaeological remains within the scheme boundary were also detected and include five potential ring-ditch sites.





Figure 5-1: Environmental Constraints – Cultural Heritage (Refer to Section 13 of Planning Report)

5.4 Type and characteristics of the potential impacts

This section describes the potential impacts of the proposed development in relation to criteria as set out under sections 5.2 and 5.3 of this report.

5.4.1 The magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected)

Residents in the immediate vicinity of the proposed development may be affected by noise and disruptions due to construction works. Commuters in the wider area may experience delays during the construction phase. During the operational phase, commuters from the wider area and residents in the local area will be positively impacted.

Approximately 305m of hedgerow and treeline will be removed during the construction phase of the proposed development. This will impact upon the biodiversity in the localised area only.

During construction material runoff from the works area may have the potential to impact nearby waterbodies including the Skelpstown stream. During the operational phase surface, treatment and attenuation pond will be provided for road run-off. The drainage design for the proposed road scheme includes the direction of all surface water run-off through a controlled drainage system which includes attenuation ponds to allow for the settlement of run-off and capture of suspended solids and pollutants, unlike the existing N24. All storm water run-off will be attenuated, and pollution control measures will be put in place prior to discharge including bypass petrol interceptors at outfalls. A manual shut off valve will also be fitted to the outfall pipe to assist in the event of any accidental spillages.



Considering the improved drainage design, the low lying landscape in this area, the small scale of the scheme and the robust nature of the receiving water body, potential cumulative water quality impacts will not be significant.

Otters would not be affected by the scheme as they do not use the Skelpstown 16 stream. No Badger setts or other protected mammal dwellings were identified in the study area. No bat roosts were identified and the habitats in the study area are already fragmented and not of significant importance to bats. The bird population is the study is dominated by common passerine species typical of the Co Kilkenny countryside. The Skelpstown 16 stream is not a salmonid watercourse and lampreys are not present.

During the operational phase of the proposed development there will be positive impact upon commuters in the wider area and residents in the local area by improving journey times and providing safer access from adjoining roads.

The proposed scheme is proposed to have direct and indirect impacts on undesignated Cultural Heritage Sites and possible sites of archaeological significance identified in geophysical surveys.

5.4.2 The nature of the impact

There is the potential for minor negative temporary impacts during the construction phase from noise from machinery and road traffic diversions which may affect residents in the immediate area and commuters in the wider area. A Construction Traffic Management Plan (CTMP) will be prepared at the detailed design stage which will detail traffic management measures. During the operational phase of the proposed development, commuters from the wider area and residents in the local area will experience a significant long term positive impact from reduced travel times and a safer travel environment.

The proposed development is expected to have a temporary moderate negative impact upon biodiversity from the removal of approximately 305m of treelines and hedgerows.

Material runoff from construction may have the potential to cause minor temporary negative impacts upon the Skelpstown Stream.

During the operational phase of the proposed development impacts are expected to be permanent and positive in the wider area in reducing the travel time on the N24 and in providing safer access from adjoining roads. This will result in a permanent positive impact on human health.

It is expected to have a minor, localised, and temporary negative impact on the receiving environment primarily during the construction phase. This is associated with disruption to local residents and commuters from noise and traffic diversions, surface water runoff, and modification, removal and disruption of habitats. Thereafter, there is expected a permanent positive impact on human health during the operational phase of the development.

The proposed scheme will not result in any predicted negative impacts on any recorded archaeological sites listed in the SMR/RMP for Co. Kilkenny or on the designated architectural heritage resource, i.e., Protected Structures, Architectural Conservation Areas or structures listed in the National Inventory of Architectural Heritage.

Out of the ten undesignated Cultural Heritage Sites within the study area, three sites are predicted to have no impacts. One site is expected to have direct, moderate, negative, permanent impact and three sites are expected to have direct, slight, negative, permanent impacts. The remaining three sites are expected to have indirect, slight, negative, permanent impacts.

Furthermore, six geophysical anomalies of likely archaeological origin are expected to have direct, significant, negative, permanent impacts. One geophysical anomaly is expected to have direct, moderate, negative, permanent impact. And one geophysical anomaly is expected to have indirect, slight, negative, permanent impact. It is noted that the discovery of previously unrecorded archaeological features is a commonly occurrence on linear infrastructure schemes. While the proposed scheme will result in localised direct negative impacts on potential archaeological sites identified during the



geophysical survey these are typically ameliorated following approval of road schemes through preservation by record (by archaeological excavation following the approval of the National Monuments Service) and are unlikely to result in any significant negative impacts on the wider archaeological environment.

All cultural heritage assessment and mitigation services will be carried out in accordance with the provisions of the National Monuments Acts (1930 – 2014) and the *Code of Practice for Archaeology agreed between TII and the Minister for Arts, Heritage, Regional, Rural and Gaeltacht Affairs* (2017) and these services will be overseen by a TII-assigned Project Archaeologist.

5.4.3 The transboundary nature of the impact

None associated with the proposed scheme.

5.4.4 The intensity and complexity of the impact

The proposed development works consist of a road realignment (online and offline), construction of attenuation ponds, stream realignment with new box culvert, combined underbridge and cattle underpass, and all associated diversions and provisions which are considered relatively non-intensive and standard for road construction.

The proposed realignment of the Skelpstown 16 stream with a new box culvert and a livestock underpass included in the proposed development would facilitate safe mammal commuting between habitats at either side of the proposed road which is currently facilitated with the existing N24 which fragments the landscape and prevents habitat connectivity and will have positive biodiversity benefits.

5.4.5 The expected onset, duration, frequency and reversibility of the impact

The proposed project will result in minor construction phase impacts that will be temporary in nature. All traffic diversions and disruptions will be temporary. Impacts upon biodiversity through the removal of trees and hedgerows, and the construction of the attenuation pond will be reversible through the planting of semi-mature native species along road boundaries. Tree / hedgerow removal will take place outside the bird nesting season. Mammal fencing would also be provided along the new road. Measures will be taken pre-construction and during construction phase to minimise heritage impacts.

It is expected that the implementation of the proposed project will result in permanent positive impacts by improving the safety, capacity and efficiency of the N24, to improve the journey times and to provide for road alignment to meet current and future needs.

5.4.6 The cumulation of impact with the impact of other existing and/or approved projects

The following projects have been identified in the vicinity of the proposed scheme. There have been no planning applications located at the proposed development site.

- Planning Reference 19841, located 170m west of the proposed scheme: For the construction of a milking parlour, dairy, plant room, drafting area, collecting yard, meal bin and underground slurry storage tank and all associated site works. The development has conditional permission valid until February 2025.
- Planning Reference 17223, located 170m west of the proposed scheme: For Machinery Shed, and all associated site works. The development has conditional permission valid until June 2022.
- Planning Reference 19848, located 270m west of the proposed scheme: For one number existing single storey detached garage to the rear of existing property. The development has conditional permission valid until February 2025.
- Planning Reference 20710, located 350m west of the proposed scheme: For extension to dwelling house, an planning permission for garage and all associated site works. The development has conditional permission valid until June 2026.
- Planning Reference 20223, located 350m west of the proposed scheme: To retain indefinitely existing single storey extensions to the front and rear of dwelling. Permission to retain existing



garage/store and greenhouse. Permission to construct a single storey extension to the rear of dwelling and all ancillary site works. The development has conditional permission valid until October 2025.

- Planning Reference 18655, located 150m to east of the proposed scheme: To retain indefinitely the following: Extension to the side and rear of dwelling; Conversion of the attic area and; Detached domestic garage and all associated works. The development has conditional permission valid until January 2024.
- Planning Reference 18109, located 150m to east of the proposed scheme: For indefinite retention of existing boundary wall and widened entrance and for planning permission for renovation and extension of existing dressing room building into a new club house, construction of three playing pitches with ball stop netting, perimeter security fence, outdoor gym, children's play area, walking path, parking area, septic tank and all associated works. The development has conditional permission valid until August 2023.
- Planning Reference 19868, located 150m to east of the proposed scheme: For change of design of the club house building and all associated site works. Planning permission was previously granted under planning application 18/109. The development has conditional permission valid until February 2025.
- Planning Reference 19219, located 150m southwest of the proposed scheme: The erection of a
 detached single storey temporary demountable building containing 1 No. classroom, 1 No. special
 needs unit, associated site works and ancillary related works. The development has conditional
 permission valid until November 2024.
- Planning Reference 17214, located 280m to the east of the proposed scheme: To construct new parking spaces, boundary wall and entrance, footpath and all associated works. The development has conditional permission valid until June 2022.
- Planning Reference 20761, located 1.5km west of the proposed scheme on the other side of the River Suir in Killowen: Development at existing Composting and Anaerobic Digestion Facility. This development will facilitate an increase in the intake of materials at the facility from 40,000 tonnes to 80,000 tonnes per annum. The proposed development includes all ancillary site development and boundary treatment works above and below ground. This application relates to development for the purposes of an activity requiring a licence under the Industrial Emissions Directive. An Environmental Impact Assessment Report and a Natura Impact Statement will be submitted to the Planning Authority with the application.
- Planning Reference 217, located 75m to the east of the proposed scheme: On 13 January 2021 an application was made to KCC for extension to existing dwelling house, to include kitchen / dining / living area, bathroom, 3 No. bedrooms and entrance porch, and all associated site works. The decision was declared in April 2021 with a conditional permission valid until May 2026. However, it is not expected that this planning application will have any additional impacts on the N24 scheme.

5.4.7 The possibility of effectively reducing the impact

The proposed development is expected to have a temporary moderate negative impact upon biodiversity from the removal of approximately 305m of treelines and hedgerows. This will be offset by the replanting of semi-mature native species along the boundary of the realigned road as per the recommendations set out in the EcIA (Ecofact 2022).

There might be hydrological impacts on the Lower River Suir SAC via the instream works in the Skelptown 16 stream. Strict water quality protection measures are provided to ensure adverse water quality impacts do not arise during the construction phase. Silt fences and bunding will be installed to reduce potential water quality impacts. The proposed development will provide for treatment and attenuation for road run-off which will positively affect the study area. With the improved kerb and gully treatment system along the roadside, 2no. attenuation ponds and an interceptor ditch the potential cumulative water quality impacts are not considered to have the potential to be significant.

Any oils or fuels that may be required for minor machinery used during the proposed works will be stored appropriately in bunded tanks in the site compound to ensure no spillages occur. Machinery will be well-maintained and checked for leaks prior to its use on site.



Storage areas for concrete / cement and grout required for the works will be included in the site compound. Waste from any site clearance works will be dealt with appropriately, at least 50m away from the Skelpstown 16 stream.

Strict biosecurity measures will be employed during the construction of the proposed scheme to avoid the introduction of any non-native invasive plant species on site. Any hired equipment and machinery used on site will be treated with an approved biocide / cleaning agent prior to its arrival on site.

The proposed mitigation measures for the undesignated Cultural Heritage Sites located within the scheme boundary include the compilation of pre-construction licensed underwater/wading survey of Skelpstown Stream (CHS-30), to include the bridge / culvert feature under the N24 (CHS-15), the compilation of records of historic boundaries (CHS-28 and CHS-29) and the relocation of a modern roadside memorial feature (CHS-27). A suitably qualified and experienced Archaeological Consultant will be appointed to undertake a program of archaeological test excavation within the boundary of the road-take. It is envisioned that following the successful implementation of these mitigation measures in combination with the absence of predicted impacts on the recorded and designated archaeological and architectural heritage resources, the proposed scheme will not result in any predicted adverse impacts on the archaeological, architectural and cultural heritage resource during the operation phase.

No other significant negative impacts have been identified for the proposed scheme. Any potential impacts during the construction or operational phase will be insignificant in nature and temporary, and will be effectively reduced by adherence to construction best practice guidelines. This may include, for example, stringent noise limits and timeframes in areas where pre-existing noise levels are low and the preparation of a Construction Environmental Management Plan (CEMP).



SECTION 6: Conclusion

The need for the proposed works at Carrick Road on the N24 has been identified. The scheme involves both offline and online works, approximately 950m of the road scheme will run along the existing N24 and the remaining 1.25km of the scheme requires realignment.

Works will also consist of surface water drainage with the provision of 2 No. attenuation ponds, road underbridge and cattle underpass, realignment of the Skelpstown 16 stream and associated box culvert, access from nearby fields and residential developments and provision of a timber post and tension mesh fences along much of the scheme length, as well as 2.5m wide footpaths either side of the carriageway and 1.5m footpath as part of the underbridge.

The aim of the proposed scheme is to address deficiencies in terms of alignment, cross-section width, curvature and visibility thereby improving the consistency, accessibility and safety of the carriageway along the N24 Carrick Road Improvement Scheme.

The project has been screened in the context of the Planning and Development Act 2000 (as amended) and the Planning and Development Regulations 2001 (as amended) and with regard to Annex IIA and III of the EIA Directive. The proposed development does not have a mandatory requirement for an EIA as it does not satisfy the criteria included in Section 50 of the Roads Act, and it does not meet any of the criteria listed under Part 1 or 2 of Schedule 5 of the Regulations. Under the precautionary principle the proposed project was subject to screening as the overriding consideration in determining whether a project should be subject to EIA is the likelihood of significant environmental effects.

The screening has indicated that this project is not likely to result in adverse effects on the environment and therefore it is not required to be subject to a full Environment Impact Assessment.

Based on the findings, Barry Transportation recommend for a determination that the proposed works at N24 Carrick Road Improvement Scheme are not considered likely to have significant effects on the environment and consequently does not require an Environmental Impact Assessment as prescribed under the EIA Directive.



SECTION 7: References

The following sources have been consulted in the preparation of this Environmental Impact Assessment Screening Report:

- Appropriate Assessment Screening Report (Ecofact), 2022.
- Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, Online Mapping, http://webgis.archaeology.ie/historicenvironment/, 2019.
- **Department of the Environment, Community & Local Government**, Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment, 2018.
- Ecological Impact Assessment Report (Ecofact), 2022.
- **Environmental Protection Agency (EPA)**, Guidelines on the Information to be contained in Environmental Impact Assessment Reports Draft, 2017.
- Environmental Protection Agency (EPA), Online Mapping, http://gis.epa.ie, 2019.
- European Commission (EC), Environmental Impact Assessment EIA, Overview, Legal context, 2015.
- **European Commission (EC)**, Environmental Impact Assessment of Projects, Guidance on Screening, 2017.
- **European Union (EU)**, Council Directive 2014/52/EU of 16 April 2014 amending Directive 2011/92/EU assessment of the effects of certain public and private projects on the environment, 2014.
- **Inland Fisheries Ireland (IFI)**, Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters 2016.
- National Roads Authority (NRA), Guidelines for the Crossing of Watercourses during the Construction of National Road Schemes, 2008
- National Roads Authority (NRA), Guidelines for the Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads, 2010.
- National Roads Authority (NRA), Guidelines for the Protection and Preservation of Trees, Hedgerows and Scrub Prior to, during and Post Construction of National Road Schemes, 2006.
- Natura Impact Statement (Ecofact), 2022.
- Planning and Development Regulations 2001 (as amended).
- Planning & Development Act 2000 (as amended).
- **Transposition of 2014 EIA Directive** (2014/52/EU) in the Land Use Planning and EPA Licencing Systems: Key Issues Consultation Paper, 2017.
- Transport Infrastructure Ireland (TII), Management of Waste from National Road Construction Projects, 2017.
- **Kilkenny County Council,** Kilkenny City and Environs Development Plans, 2014-2020 (Superseded).
- Kilkenny County Council, Kilkenny County Development Plan, 2014-2020 (Superseded).
- Kilkenny County Council, Kilkenny City and County Development Plan 2021-2027.



Appendix A: General Arrangement Drawings



