Screening for Appropriate Assessment

N63 FRRANYOOGAN ACTIVE TRAVEL SCHEME, LONGFORD

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1 INTRODUCTION

Deborah D'Arcy was commissioned by Longford County Council to carry out an Appropriate Assessment Screening under Article 6(3) of the EU Habitats Directive in relation to the proposed pavement improvement works for the active travel scheme extending along N63 National Secondary Road in Co. Longford, hereinafter referred to as the 'Proposed Scheme'.

This report contains information to inform the competent authority, Longford County Council, to undertake Stage 1 Appropriate Assessment screening in respect of the project. The report makes reference to the design plans and reports pertaining to the project and should be read in conjunction with those plans and reports. The evaluation and assessment conclusion are determined based on the project description and detail provided by Longford County Council.

1.1 NEED FOR THE PROPOSED SCHEME

The existing environment along the N63 National Secondary Route highlights several critical needs:

- Regularising the width of the N63 carriageway and improvement works to the carriageway;
- Construction of pedestrian and cycle facilities;
- Regularising the geometry of the numerous accesses along this section of the N63;
- Improvement of the one-way shuttle system at the Railway Bridge to allow for safer movements by non-motorised road users.
- Infrastructure Consistency: Infrastructure elements along the route vary significantly, necessitating standardization to provide a consistent and safe road environment.

Addressing these needs is crucial for ensuring the safety, accessibility, and functionality of the N63 National Secondary Route while accommodating the transition from rural to urban contexts along its length.

1.2 ABOUT THE AUTHORS

Deborah D'Arcy is an Ecologist with an MSc in Ecological Assessment and 10 years ecological consultancy experience and is an Associate Member of the Chartered Institute of Ecology and Environmental Management, the chief professional body for Ecologists in Ireland and as such is bound by their professional code of conduct.

Caoife D'Arcy is an environmental scientist with a BSc in Planning and Environmental Management and 6 years relevant industry and Appropriate Assessment experience and is a member of the Chartered Institute of Ecology and Environmental Management, the chief professional body for Ecology and Environmental Management in Ireland and as such bound by the professional code of conduct.

1.3 LEGISLATIVE CONTEXT

The purpose of Screening for Appropriate Assessment is to determine, on the basis of a preliminary assessment and objective criteria, whether a plan or project, alone and in combination with other plans or projects, could have significant effects on a Natura 2000 site in view of the site's conservation objectives. The need to apply the precautionary principle in making any key decisions in relation to the tests of AA has been confirmed by European Court of Justice case law. Therefore, where significant effects are likely, uncertain or unknown at screening stage, AA will be required. Stage 1 Screening for AA is undertaken without the consideration of any mitigation measures, unless potential impacts can be clearly avoided through

modification or re-design of the project (DoEHLG, 2010). If significant effects on Natura sites cannot be ruled out, then a Stage 2 Appropriate Assessment and Natura Impact Statement is required.

The Natura 2000 network provides an ecological infrastructure for the protection of sites that are of particular importance for rare, endangered or vulnerable habitats and species within the EU. The Natura 2000 network in Ireland is made up of European Sites which include:

- Special Areas of Conservation (**SAC**)
- Special Protection Areas (**SPA**)

This report has been compiled in accordance with Article 6(3) of the Habitats Directive 92/43/EEC which establishes the requirement for Appropriate Assessment. The Habitats Directive is transposed into Irish Law by the European Communities Natural Habitats Regulations S.I. No. 477 of 2011.

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

These requirements are implemented in the Republic of Ireland by the European Communities (Birds and Natural Habitats) Regulations 2011 as amended and by Part XAB of the Planning and Development Act 2000, as amended. The legislative provisions for AA screening for planning applications are set out in Section 177U of the Planning and Development Act 2000.

1.4 METHODOLOGY

Appropriate Assessment is an assessment of the potential for adverse or negative effects of a plan or project, in combination with other plans or projects, on the conservation objectives of a European Site. Screening is the process that addresses and records the reasoning and conclusions in relation to the first two tests of Article 6(3):

(1) whether a plan or project is directly connected to or necessary for the management of the site, and

(2) 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 in view of its conservation objectives.

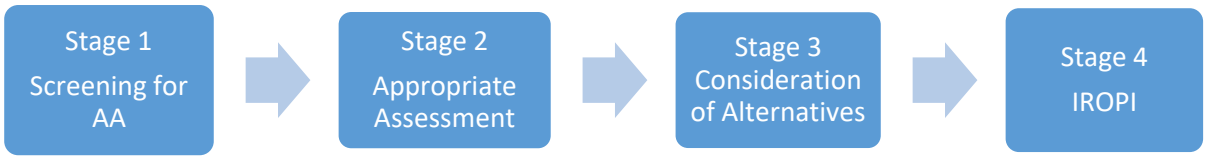


Figure 1.1 Stages of Appropriate Assessment

Screening results in a determination for each European site regarding the significance of effects, categorised as not significant, significant, potentially significant, or uncertain. If the latter three determinations are made, the site will proceed to Stage 2 Appropriate Assessment. **Figure 1.2** outlines the process of this report to inform screening for Appropriate Assessment.

A standard source-receptor-pathway conceptual model is used to identify a preliminary list of 'relevant' European sites (i.e. those which could be potentially affected due to connectivity via impact pathways). This conceptual model is a commonly used tool in environmental assessment. For an effect to occur, all three elements of this mechanism must be present. If any element is absent or removed, the likelihood of the effect occurring diminishes. In the context of the proposed scheme, the model includes the following components:

Source: Characteristics of the proposed scheme such as the nature, size and location and the type of impacts that have the potential to impact on a European site.

Pathway: Existence and characteristics of pathways that could link European sites and their Qualifying Interests to the proposed scheme. These pathways may be terrestrial, hydrological, hydrogeological or via air.

Receptor: the location, nature and sensitivities of the qualifying species and habitats, the ecological conditions underpinning their survival and the conservation objectives specified to maintain or restore favourable conservation status.

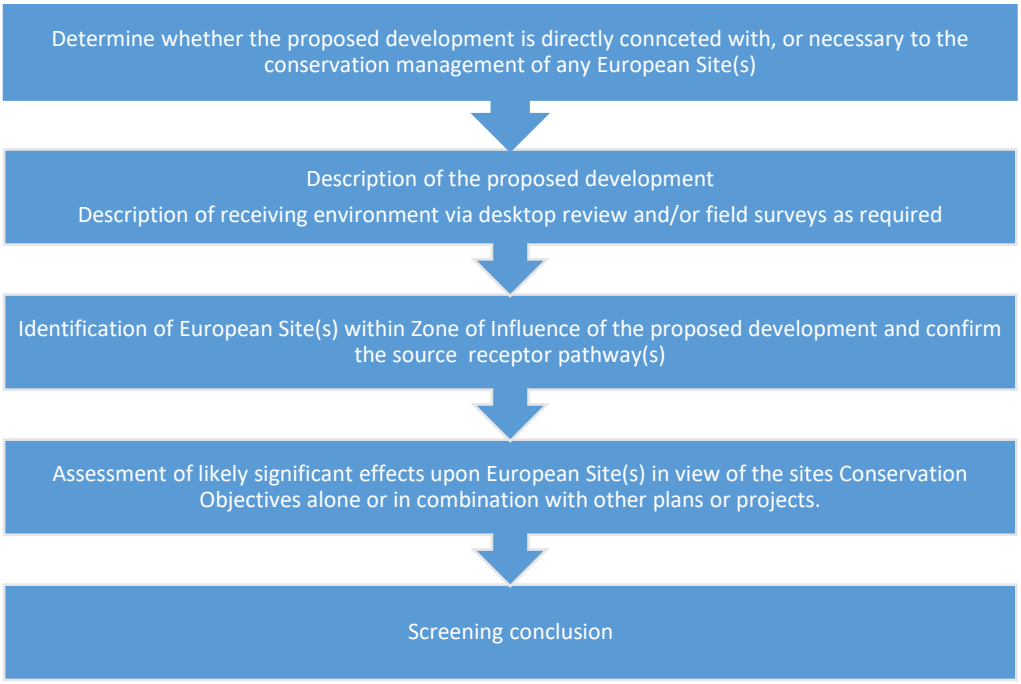


Figure 1.2 Process to Inform Screening for AA

1.4.1 Determining the Zone of Influence

The OPR Guidance specify the application of a Source-Pathway-Receptor (S-P-R) model to all stages of the proposed scheme with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors, and the potential for in combination effects. Taking account of the most recent guidance published by the OPR (2021), the zone of influence of the proposed scheme is evaluated with regard to the nature and scale of impacts of the proposal and identification of connectivity pathways to any European Sites.

The AA of Plans and Projects in Ireland - Guidance for Planning Authorities (Department of Environment, Heritage and Local Government, 2010 revision applies a 15km zone of influence. However, the distance could

be less or more than 15km. Given the scale and nature of the proposed scheme, a distance of 10km has been initially applied.

1.4.2 Defining Likely Significant Effects

The key test in AA screening is to determine any likelihood of significant effects on European sites. Once the relevant European sites have been identified, this test must be applied. In this context, 'likely' refers to a risk or possibility of effects occurring that cannot be ruled out based on objective information. Significant effects refer to those that would undermine the conservation objectives of the European sites, either alone or in-combination with other plans and projects. Ultimately, the determination of 'significance' relies on the assessment of scientific information. However, if the consideration of significance becomes overly complex (i.e. with multiple factors involved), it serves as an indication of existing uncertainty and the need for Stage 2 Appropriate Assessment. Any conclusion starting the absence of likely significant effects must be reached without taking account of mitigation measures.

1.5 GUIDELINES

The following guidelines have been used in the compilation of this report:

- Appropriate Assessment of Plans and Projects in Ireland. Guidelines for Planning Authorities. DoEHLG, 2010.
- Appropriate Assessment Screening for Development Management: OPR Practice Note PN01. Office of the Planning Regulator, 2021.
- Circular NPWS 1/10 & PSSP 2/10 Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities
- Managing Natura 2000 sites – The Provisions of Article 6 of The Habitats Directive 92/43/EEC. European Commission, 2000.
- Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (C437/01). European Commission, 2021.
- 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, 2002.
- Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg (EC 2018).
- Article 6 of the Habitats Directive. Rulings of the European Court of Justice. Final draft September 2014.
- CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management, Winchester.

1.6 DESKTOP REVIEW

A desktop review was undertaken to gather baseline ecological information for the study area and assess the potential for any Qualifying Interests (QI) /Special Conservation Interests (SCIs) of European sites to occur. Particular attention was paid to evaluating any potential ecological or hydrological linkage with European sites. The following sources were consulted to conduct the desktop review.

- Environmental Protection Agency (EPA) online mapping tools (https://gis.epa.ie/EPAmaps) and https://gis.epa.ie/EPAMaps/Water;
- EPA data resources for latest information regarding soils, geology, air quality, land use, water quality and licenced facilities (https://gis.epa.ie/GetData/Download);
- Bird Watch Ireland for bird habitat requirements and food preferences (https://birdwatchireland.ie/);
- National Parks and Wildlife Service (NPWS) for Conservation Objective, Site Synopsis and any other relevant reporting for European Sites (https://www.npws.ie/protected-sites);
- National Parks and Wildlife Service (NPWS) and data resources for the latest European site boundaries and relevant species and habitat mapping (https://www.npws.ie/maps-and-data);
- *The Status of EU Protected Habitats and Species in Ireland,* (Department of Culture, Heritage and the Gaeltacht, 2019);
- National Biodiversity Data Centre (NBDC) online mapping tool for QIs, SCIs, protected species and invasive species (https://maps.biodiversityireland.ie/);
- Geological Survey Ireland mapping tools (https://www.gsi.ie/en-ie/data-and-maps/);
- Geohive online sensitivity mapping (https://airomaps.geohive.ie/ESM/).

1.7 FIELD SURVEY

This report was informed by a site walkover survey carried out on the 23rd May 2023. The survey focused on the classification of habitats within and adjacent to the scheme area, the potential for Annex habitats or Annex II or SCI species to occur, the presence of other species protected under the Wildlife Act 1976, as amended, as well as the presence of invasive plant species. Invasive plant species were noted. The extent and condition of infestation was recorded. The presence or potential presence of terrestrial mammals was determined by noting suitable habitat, signs of activity or resting places.

Due to the minimal vegetation removal and disturbance impacts including noise and/or increased lighting associated with the proposed scheme dedicated bat surveys or bird surveys were not scoped into the ecological assessment. Bird species observed during the walkover survey were noted. Habitats suitability for birds, bats and other mammal species was assessed during the general ecological walkover survey. Survey limitations were not encountered.

1.7.1 Difficulties encountered compiling the report

Difficulties were not encountered in the compilation of this report. General assumptions have been made during preparation of the report are set out below:

- Relevant information has been obtained from publicly available sources and mapping databases such as the EPA, NPWS, GSI, OPW, etc. It has been assumed that the information is correct and while reasonable care and skill has been applied in review of this data no responsibility can be accepted for inaccuracies in the data supplied.

2 DESCRIPTION OF THE PROPOSED SCHEME

2.1 SITE LOCATION

The proposed scheme is located within the confines of the existing N63 road corridor along an approximate 1.8 km section of the N63 in Farranyoogan, from the Royal Canal crossing southwest of Longford Town to the Railway Bridge, north towards the town centre in County Longford (Coordinate reference: 53°42'35.2''N; -7°49'14.7''W/ 611833.9282; 773358.4863). No intrusive site investigations (SI) works were undertaken and there are no further SI works planned. The site location is shown on **Figure 2.1.**

Figure 2.1 Site Location

2.2 PROJECT DESCRIPTION

The proposed scheme will comprise of pavement improvement works for an active travel scheme on an approximate 1.8 km section of the N63 National Secondary Route, with the primary objective of enhancing safety and accessibility for all road users. This proposed development will comprise four distinct sections, each with characteristics and infrastructure requirements. The overall carriageway width will be reduced where possible (existing hardstanding of 35,505m^2 to finished hardstanding of 33,636 m^2) to allocate dedicated lanes for pedestrians and cyclists. The four sections of the proposed scheme are shown in **Figure 2.2.** Further drawings on general arrangement layouts can be found in **Appendix A**.

The principles, approaches and standards set out in the Design Manual for Urban Roads and Streets [DMURS], and also the National Cycle Manual [NCM] will apply to that part of the N63 within a 60km/h speed limit zone (which is the case for most of the proposed scheme). Transport Infrastructure Ireland (TII) DN-GEO-03031 Road Link Design will apply to the short section of the N63 located in a 100 km/h zone.

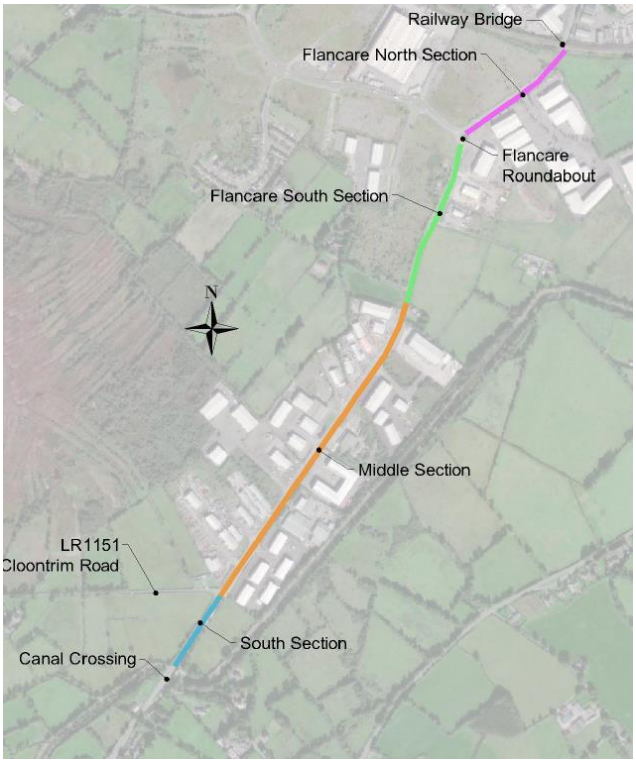


Figure 2.2 Proposed Scheme

2.2.1 South Section: Rural to Urban Transition

The South Section spans c. 190m between the Canal Crossing and the LR1151 Cloonatrim Road, where the road transitions from rural to urban context. The lands on both sides of the N63 are agricultural and the speed limit is 100kph for most part, suggesting a rural context. However, route lighting is present throughout and there is a footpath on the east side of the N63, suggesting an urban context. The northbound carriageway is 3.25m wide and has no hard strip. The southbound carriageway is the same width but has a hard shoulder approximately 1.75m wide. Key infrastructural elements proposed include:

- Shared Surface Facility: Implementing shared surface facilities on both sides of the carriageway to accommodate pedestrians and cyclists safely while ensuring the road's functionality.
- Footway Extension: Extending the footway and lighting beyond the town limits.
- Crossing Facilities: Introducing defined crossing facilities for users of the canal towpath and enhancing connectivity to the town.
- Cycle Facilities: Considering the addition of cycle facilities to bridge the gap between the Canal Crossing and the town.

2.2.2 Middle Section: Segregated Pedestrian and Cycle Facilities

The Middle Section is c. 0.8km, characterised by a 6.5m wide carriageway within a 50kph zone and numerous accesses to commercial developments. The geometry of the commercial accesses varies but typically have

wide mouths that are unsuited to pedestrian or cyclist crossing movements. The overall carriageway width will be reduced where possible to allocate dedicated lanes for pedestrians and cyclists. Infrastructure elements include:

- Segregated Facilities: Providing dedicated lanes for pedestrians and cyclists while reducing the carriageway width where possible.
- Footways: Ensuring the presence of footways with varying widths on the east side and occasional sections on the west side.
- Access Improvements: Addressing the challenges posed by wide-mouthed commercial accesses, making them more pedestrian and cyclist-friendly.
- Crossing Points: Establishing safe crossing points for non-motorized road users.

2.2.3 Flancare South Section

This section is c. 0.5km and exhibits changes in geometry compared to the Middle Section, including curved horizontal alignment, no hard shoulders and minimal hard shoulders. Flancare Roundabout is a notable feature, and the section lacks crossing facilities. This section includes Flancare Roundabout and specific infrastructure considerations include:

- Belisha Crossings: Introducing Belisha crossings on all approach arms to enhance pedestrian safety.
- Continuation of Facilities: Continuing segregated pedestrian and cycle facilities on the west side, ensuring a secure pathway.
- Shared Surface: Implementing a shared surface on the east side to accommodate various road users effectively.

2.2.4 Flancare North Section

Similar to the Flancare South Section, this section maintains curved geometry except that a wide hard shoulder adjoins the southbound carriageway and lacks cyclist facilities. The verge adjoining the northbound carriageway is considerably narrower. The one-way shuttle system at the Railway Bridge does not accommodate cyclists. This section is c. 0.3km. Infrastructural elements include:

- Segregated Facilities: Extending segregated pedestrian and cycle facilities to both sides of the carriageway.
- Hard Shoulder: Maintaining a wide hard shoulder on the southbound carriageway.
- Shared Surface: Providing shared surface facilities on the east side, tying into the footway immediately south of the railway bridge
- Railway Bridge Enhancement: Improving the one-way shuttle system at the Railway Bridge to ensure the safety of non-motorised road users.

2.2.5 General Infrastructural Elements

Other infrastructural elements to be included in the proposed scheme comprise the following:

- Tying into the existing drainage, as necessary utilising existing outfalls.
- Diversion of existing services and utilities as necessary to facilitate the works including but not limited to EIR, ESB, gas and water.
- Site and vegetation clearance including grassed verges, and trees;
- Roadside hazards removed;

- The existing road markings and signage would be removed, and new signage and markings installed, as required;
- Lighting proposals from the town core; and
- Other consequential construction works necessary in order to complete the proposed scheme.

2.3 SURFACE WATER MANAGEMENT

The proposed scheme will not require modifications to the current road drainage system. Additionally, the proposed design will reduce the existing hardstanding from 35,505m^2 to 33,636 m^2 or 5.27%. The proposed scheme will not involve a significant increase the amount of hard surface, which could lead to increased surface water run-off and a higher risk of flooding in other areas.

2.4 PUBLIC UTILITIES

Part of the works will require diversions to the existing utilities. Eir poles and associated overhead lines will be removed and replaced with underground Eir ducts and cables where sightlines are to be improved and roadside hazards removed.

Underground gas, watermains and ESB poles and lines are to be retained where possible but may need to be diverted if impacted by the proposed scheme.

2.5 LANDSCAPING

The proposed design's reduction in hardstand has potential for 1,869m^2 additional vegetation areas along the N63 road corridor. These measures are proposed to offset any vegetation loss along the proposed scheme. These measures would be dependent on sightlines for vehicles.

2.6 ROAD GEOMETRY

The approximate length of the proposed scheme is 1.8 km, and the average cross section width is 14.75 m. Cross section varies at accesses. The proposed cross sections and its elements at various zones across the proposed scheme are outlined in **Table 2.1** to **Table 2.4**. Cross section layout drawings are presented in **Figure 2.3** to **Figure 2.5**. Further general arrangement drawings are presented in **Appendix A**.

Table 2.1 Typical Section at 100kph/ Ch. 0m to Ch. 810

Cross Section Elements	Southbound	Northbound	Total
Carriageway	3.50	3.50	7.00
Grassed verge	4.50	1.50	6.00
Shared surface	0.00	3.00	3.00
Total Cross section	8.00	8.00	16.00

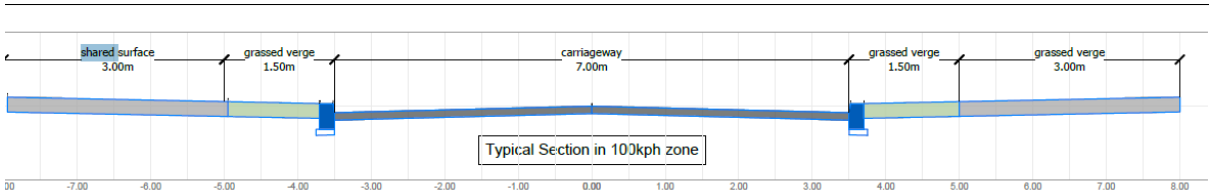


Figure 2.3 Typical Section at 100kph zone / Ch. 0m to Ch. 810m

Table 2.2 Typical Section at Ch. 800m to Ch. 1145m

Cross Section Elements	Southbound	Northbound	Total
Carriageway	3.50	3.50	7.00
Cycle Track	0.00	1.75	1.75
Footway	0.00	2.00	2.00
Shared surface	3.00	0.00	3.00
Total Cross section	6.50	7.25	13.75

Table 2.3 Typical Section Flancare East

Cross Section Elements	Southbound	Northbound	Total
Carriageway	3.50	3.50	7.00
Cycle Track	1.75	1.75	3.50
Footway	2.00	2.00	4.00
Total Cross section	7.25	7.25	14.50

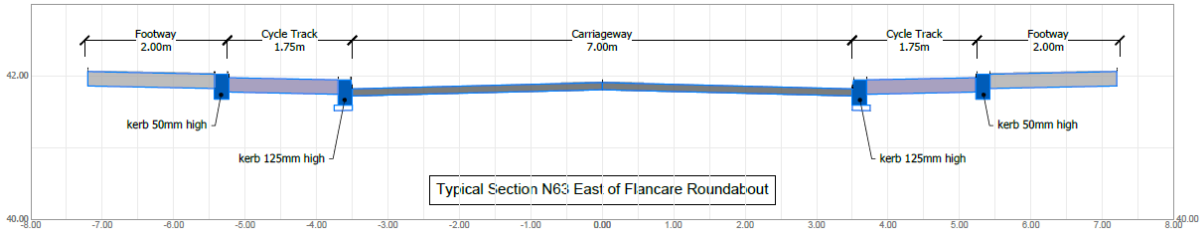
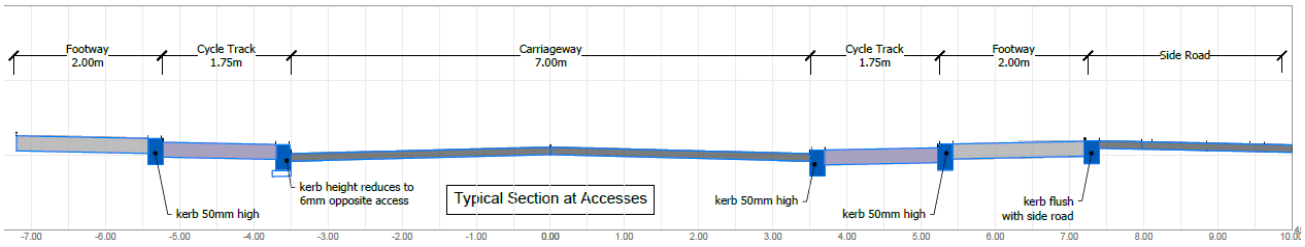


Figure 2.4 Typical Section East of Flancare Roundabout

There are numerous commercial accesses on to the N63. These will continue as priority junctions but with their widths reduced to reduce entry and exist speeds. Cycleways and footways will continue across these accesses at a raised level relative to the carriageway and thus non-motorised road users will have priority when crossing the accesses.

Table 2.4 Typical section at Accesses

Cross Section Elements	Southbound	Northbound	Total
Carriageway	3.50	3.50	7.00
Cycle Track	1.75	1.75	3.50
Footway	2.00	2.00	4.00
Side Road	3.00	3.00	
Total Cross section	10.25	10.25	



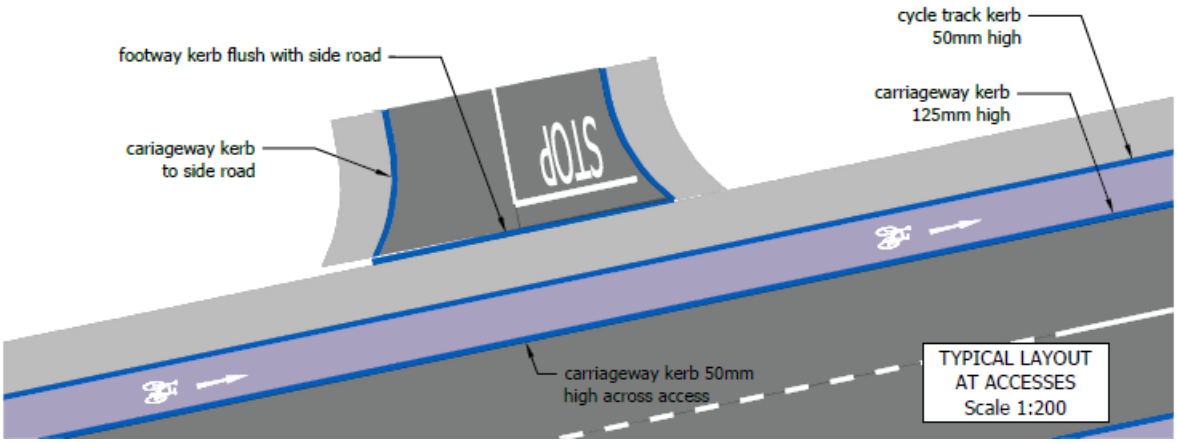


Figure 2.5 Typical Layout at Accesses

2.7 CONSTRUCTION METHODOLOGY AND PROGRAMME

It is expected that the main construction works to the proposed scheme will be carried out in a single phase in 2023. The total construction time accounting for site clearance, excavations, pavement inlay, concreting and finishing in and tying in will take in the order of 12 months.

Prior to commencement of works, the site compound will be set up and traffic management measures will be put in place.

The main phases applicable to the main construction phase of this proposed scheme will include:

- Establishment of the site office and compound;
- Establishment of appropriate traffic control measures to provide adequate separation and protection of work areas from live traffic on the N63;
- Mobilisation of construction plant;
- Site clearance and preparations;
- Excavation of footpath tie ins.

Temporary Construction Compound

Due to the confined nature of the proposed construction works. One temporary construction compound will is required. The location has yet to be determined. (Co-ordinate reference). This is subject to landowner agreement. Materials and plant required for works are anticipated to be stored in the compound with a minimum setback distance of 10m from any watercourse or riverbank. All storage areas will be appropriately bunded where required. Fuelling of plant is anticipated to be in a designated fuel storage area within the compound.

Working Hours

The proposed operating hours for the proposed scheme are as follows:

- 07:00 hrs – 18:00 hrs Monday to Friday;
- 07:00 hrs – 14:00 hrs Saturdays; and
- Site closed on Sundays / Public Holidays.

2.8 OPERATION PHASE

The operational phase will coincide with the end of construction and the commissioning of the proposed scheme. Maintenance will be undertaken as required by Longford County Council Roads Department and would likely include path clearing, gully clear out and landscaping etc.

3 DESCRIPTION OF THE RECEIVING ENVIRONMENT

The following section details the results from the desktop review and site survey which are used to inform the assessment of the potential for likely significant effects upon European sites. The current Longford County Development Plan 2021-2027 zones the area of the proposed scheme as *Town Core.* The area surrounding the proposed scheme is *Industrial/Commercial/Warehousing.* The following county policy objectives are relevant to the proposed scheme.

> *RPO 4.59: To enhance accessibility and sustainable mobility within the town centre by improving links between the core and surrounding areas through the further integration of public transport, walking and cycling facilities.*
>
> *County Policy Objective 5.70: Seeks the development of effective cycling infrastructure along the key urban arterial routes to and from Longford Town, including N63 – Ballinalee Road.*
>
> *CPO 12.59 Improve the biodiversity and ecological value of the County through the promotion of the planting of native and heritage / traditional varieties and grass-cutting schemes amended to encourage local wildflower growth.*
>
> *CPO 12.80 Protect and preserve existing hedgerows in new developments, particularly species rich roadside and townland boundary hedgerows, and where their removal is necessary during the course of road works, or other works, seek their replacement with new hedgerows of native species indigenous to the area.*

3.1 HABITATS

The proposed scheme is largely within the footprint of the existing N63 road and footpaths (BL3). The edges of the road are characterised by buildings and artificial surfaces (BL3), dry meadows and grassy verges (GS2), treelines (WL2), scrub (WS1), and ornamental shrub (BL3). The height and density of the vegetation varies across the proposed scheme based on factors such as sunlight exposure, soil conditions, history of disturbance and management in the area. The habitat types identified along and adjacent to the proposed scheme are identified in **Table 3.1.**

The proposed scheme starts at the south section, within the vicinity of the Royal Canal – Longford branch (FW3). The proposed scheme introduces defined crossing facilities for users of the canal towpath. However, there will be no interference with the canal which diverts under the N63.

At the southern section, there are grassy verges (GS2) along the carriageway and adjacent to footpaths. Species identified include Bush vetch (*Vicia sepium),* knapweed (*Centaurea nigra)* and dandelion (*Taraxacum vulgaria*). Areas adjacent to the proposed scheme on both sides are improved agricultural land (GA1), dry meadow grassland (GS2), scrub (WS1) and an area of transitional wet woodland (WN6) composed of willow and birch located along the west side of the carriageway on an undeveloped site at the northern end of the southern section.

The middle section is dominated by commercial premises (BL3) with discontinuous treelines (WL2) comprising of horse chestnut, beech, and sycamore within commercial premises on the east side and a short treeline of sycamore along the verge on the west side of the carriageway. An area in transition

from recolonising bare ground (ED3) to wet grassland (GS4) is present adjacent to the east side of the road in an undeveloped site.

On approach to the Flancare Roundabout, the western roadside verge is managed and composed of amenity grassland (GA2) with a hawthorn hedge for part of the length followed by willow scrub. The land adjacent to the west side has an expanse of willow scrub which extends as far as and beyond the roundabout. There is an existing footpath along the east side of the road with improved agricultural land extending west. Near the roundabout further areas of commercial buildings occur.

At the Flancare North Section, there is hedgerow (WL1) which extends approximately 200m at the boundary of an unused site with recolonising bare ground (ED3) and scrub (WS1). The hedgerow bordering the road is composed of young hawthorn (*Crataegus monogyna),* bramble (*Rubus fruticosus agg.)* and willow (*Salix spp.*). The hedgerow ends at a vacant dwelling which features to the west. The vacant dwelling will remain unaffected by the proposed scheme.

A tributary of the Camlin is diverted under the road at the Flancare Roundabout North Section. The channel is approximately 1-2m wide, slow moving and flows in an east-west direction. The channel has abundant aquatic vegetation such as reed canary grass (*Phalaris arundinacea)* and fool's watercress (*Apium nodiflorum*) on the downstream (west side) of the road. On the eastside of the road the stream is bordered by a hedgerow along the north side and built land on the south side. The instream and bankside vegetation serve as a natural silt trap. There will be no modifications to the stream required to progress the works. The stream is culverted under the road.

Table 3.1 Habitat Types identified within and adjacent to the proposed scheme

Habitat	Fossitt Code	Description
Canals	FW3	The start of the proposed scheme is located at the Royal Canal (Longford branch). A defined access point to the Royal Canal greenway is included as part of the proposed scheme. A spur branch of the canal crosses under the N63 and extends northwards on the east side (southbound carriageway) of the N63. The canal, on both sides of the carriageway, is filled with vegetation such as Horsetail (*Equisetum spp.*) and Reed canary grass (*Phalaris arundinacea L.)*. The bankside vegetation comprises of grey willow (*Salix cinerea).*
Buildings and other artificial surfaces	BL3	The majority of the proposed scheme lies within the existing N63 road corridor, footpath and cycle lanes. Housing is present on the southbound carriageway in the southern section. Commercial premises are located on both sides of the carriageway, they are predominantly located at the Middle Section and the Flancare South Section.

Habitat	Fossitt Code	Description
Improved agricultural grassland	GA1	In the southern section, areas adjacent to the proposed scheme on both the northbound and southbound carriageway are improved agricultural land.
Treelines and hedgerows	WL2	Treelines are present along both carriageways, predominantly at the South Section. At the start of the scheme there is a predominantly native hedgerow with occasional tall ash along the eastern footpath. There are short length of planted treelines at the roadside boundary of two commercial premises. These were composed of mature horse chestnut, beech and sycamore trees.
Dry meadows and grassy verges	GS2	Grassy verges occur on both sides of the road along the proposed scheme including accesses and junctions. Species observed along the uncut margins include Herb-robert (*Geranium robertianum*), ribwort plantain (*Plantago lanceolata*), common hogweed (*Heracleum sphondylium*), Nettle (*Urtica diocia*), Creeping buttercup (*Rananculus repens*), False oat grass, (*Arrhenatherum elatius*) and Cock's-foot (*Dactylis glomerata*). These species are abundant on roadsides. At the Flancare south section, the species observed in the recently mown amenity grassland (GA2) outside a commercial premises include: Dandelion (*Taraxacum*), Common knapweed (*Centaurea nigra*), Common hogweed (*Heracleum sphondylium*), Lesser trefoil (*Trifolium dubium*), Common sorrel (*Rumex acetosa)*, White clover (*Trifolium repens)*. Some areas of grassy verges and amenity grassland will be removed to accommodate the proposed layout.
Wet willow-alder-ash woodland	WN6	In the Middle Section, there is an area transitional to wet woodland composed of young willow and birch adjacent to the proposed scheme on the northbound carriageway. This area will remain unaffected by the proposed scheme.
Hedgerows	WL1	At the Flancare North Section, there is hedgerow which extends approximately 200m. Species present include: young Hawthorn (*Crataegus mongyna),* bramble (*Rubus fruticosus agg.)* and willow (S*alix spp*). The hedgerow ends at a vacant dwelling which features to the west.

Habitat	Fossitt Code	Description
		There is a young hawthorn and hornbeam hedgerow (WL1) in the Flancare North Section on the west side of the road near the roundabout. This hedgerow may require removal to achieve the required sightlines.
Scrub	WS1	At the Flancare south section there is a large area of willow scrub occurs on adjacent land to the west of the road. Narrow strips of gorse (*Ulex europaeus*) scrub occur along the north and south bound carriageway. A dense and tall bramble scrub area is present on the northbound carriageway.
Depositing/lowland rivers	FW1	A tributary of the Camlin is culverted under the road at the Flancare Roundabout North Section. The channel is approximately 1-2m wide, slow moving and flows in an east-west direction. The channel has abundant aquatic vegetation such as Reed canary grass and Fool's' watercress (*Apium nodiflorum*). The instream and bankside vegetation provides a natural silt trap .
Stone walls and other stonework	BL1	Discontinuous stone walls and other stonework such as the railway bridge feature occur along the proposed scheme. These stone features will remain unaffected by the proposed scheme.
Recolonising bare ground	ED3	Areas of recolonising bare ground exist along the northbound and southbound carriageways adjacent to the proposed scheme. Also, at the Flancare North section there are areas of demolished commercial premises. These sites are colonised with willow, birch , gorse , bramble and a range of pioneer herb species.
Wet Grassland	GS4	A transition from recolonising bare ground (ED3) to wet grassland (GS4) is present on the southbound carriageway in an area adjacent to the proposed scheme. This transition occurs when the area becomes increasingly waterlogged supporting the establishment of wetland plant species. Wet grassland habitats are characterised by the presence of grasses and sedges that are adapted to grow in saturated or periodically flooded conditions. A range of grass species such as reed canary grass (*Phalaris arundinacea*), meadow foxtail (*Alopecurus pratensis*) and tufted hairgrass *(Deschampsia*

Habitat	Fossitt Code	Description
		caespitosa) occurred. Sedges include common sedge (*Carex nigra*) or yellow sedge (*Carex demissa*) are present.

3.1.1 Annex I Habitats

Annex I habitats of Molinia meadows [6410} and Hydrophilous tall herb fringe communities [6430] feature on the Camlin River c. 5.6km downstream from the proposed scheme. Molinia meadow is a distinctive wet grassland community characterised by a relatively species-rich sward which is generally between 20 and 60 cm tall. The grass *Molinia caerulea* is usually prominent, however the species should not dominate. The vegetation typically develops on nutrient-poor, damp soils such as peats or gleys, which occur along the margins of lakes and rivers which experience periodic flooding during the winter months.[1]

3.2 SURFACE WATER

The proposed scheme lies within the Upper Shannon River catchment (WFD 26C) and the Shannon Upper sub-catchment (Shannon (Upper)_SC_060 (26C_7).

At the start of the proposed scheme, the Royal Canal (Longford branch) transects the N63. The Royal Canal (002103) is a proposed Natural Heritage Area (pNHA). The Royal Canal will remain entirely unaffected by the proposed scheme.

A single spur of the Camilin_060, intersects the proposed scheme in the north section, south of the railway bridge. This stream is culverted under the road and flows in a southeast- northwest direction. This spur of the camlin_060 continues c. 1.8km where it joins with other tributaries that meet the camlin_070. The camlin_070 flows in a north-west direction c. 3.0km where it meets the Shannon (Upper)_090. The river diverges into the Shannon (Upper)_080 which flows in north-westerly direction. While the Shannon (upper)_090 continues and flows in a southerly direction. Both the Shannon (Upper)_080 and the Shannon (Upper)_090 form part of the Ballykenny-Fishertown Bog SPA (004101) and the Lough Forbes Complex SAC (001818). A summary of the Water Framework Directive ecological status and risk status is included in **Table 3.2.**

The catchment area of the Camlin is identified as a Priority Area for Action (PAAs) under Cycle 2 of the Water Framework Directive (WFD). There will be no modification of the Camlin stream required for the works as it is diverted under the road.

[1] Molinia meadows (EU Habitats Directive code 6410), BSBI Ireland Annex I Grassland Resources

Table 3.2 Summary of WFD Status and Risk 2016-2021

Waterbody	WFD Code	WFD Status 2016-2021	WFD Risk
Camlin_060	IE_SH_26C010900	Moderate	At risk
Camlin_070	IE_SH_26C011000	Poor	At risk
Shannon (Upper)_090	IE_SH_26S021530	Poor	At risk
Shannon (Upper)_080	IE_SH_26S021510	Good	Review

3.2.1 Aquatic Dependent Annex II Species

The Camlin Stream is not connected within the potential zone of influence to a European site with aquatic dependent Annex II species as Qualifying Interests.

The Camlin is not designated as a Salmonid River under the Salmonid Regulations (S.I. 293 EC (Quality of Salmonid Waters) regulations, 1998). White clawed crayfish (*Austropotamobius pallipes*) was recorded in the Camlin River in 2011.

The proposed scheme does not lie within a freshwater pearl mussel *Margaritifera* sensitive catchment (NPWS mapping dataset Margaritifera sensitive areas ITM 2020v 10).

Inland Fisheries Ireland surveyed the Camlin River catchment by electrofishing in 2021. A total of ten fish species were recorded during the survey including one Annex II fish species, lamprey. Three spined sticklebacks were the most common, followed by brown trout. Stone loach was recorded at four of the eighteen sites, pike at three, nine spined sticklebacks at two and perch, lamprey and minnow at one site each.

There are records for eel, a critically endangered species, for the Camlin River within 2km of the proposed scheme (NBDC record extract N17H).

3.3 GEOLOGY AND HYDROGEOLOGY

According to GSI online mapping, the underlying bedrock is Basal Clastics (Rinn Point Limestone Formation) consisting of conglomerate and sandstones. Quaternary sediments across the proposed scheme comprises primarily of cut over raised peat. An area at the start of the scheme comprises of till derived from lower Palaeozoic and Carboniferous sandstones and shales. The soil group is classified as cutover/cutaway peat.

The Longford Ballinalee (IE_SH_G_149) groundwater body underlies the proposed scheme. It is poorly productive bedrock. The 3rd cycle groundwater monitoring programme, status is 'Good' and 'Not at risk' of failing to achieve WFD status. The groundwater vulnerability across the proposed scheme length ranges from Low (L) to Moderate (M). The bedrock aquifer is a Locally Important Aquifer – Bedrock which is moderately productive only in Local Zones.

3.4 BIOLOGICAL RECORDS

National Biodiversity Data Centre (NBDC) for the 2km grid square for the 2km square N17H, N17G and N17B were extracted and reviewed on 27th April 2023. Records for notable species in the context of this AA screening report are provided in Table 3.3 below. (Notable species include EU Habitats Directive Annex II, Annex IV; Birds Directive Annex I or rare or protected species or invasive species).

3.4.1 Terrestrial Mammals

Terrestrial mammals were not recorded at the proposed scheme. A review of NBDC online mapping revealed records of protected terrestrial mammals. Records for the 2km square (N17B, N17G, N17H) within which the project site lies were extracted from the National Biodiversity Data Centre (NBDC) database in October 2023 and reviewed. There are no records for otter for the stetch of canal or the stream crossed by the proposed scheme. There are no records for otter along the Camlin River at Longford with the nearest records for otter being located near the canal at Kilashee. However, the canal spur at Longford and the Camlin River are suitable habitats for otter.

Records of other species protected under the Wildlife Act 1976, as amended, include: Pine marten (*Martes martes*), Eurasian Badger (*Meles meles*), West European Hedgehog (*Erinaceus europaeus*) are shown in **Table 3.3.**

Table 3.3 Species records within 2km of the proposed scheme

Species	Record count	Date of last record	Datasource	Status
Pine Marten *(Martes martes)*	1	31/12/2012	Irish Squirrel Survey 2012	EU Habitats Directive >> Annex V || Protected Species: Wildlife Acts
Eurasian Badger *(Meles meles)*	3	31/12/2011	Badger Setts of Ireland Database	Protected Species: Wildlife Acts
West European Hedgehog *(Erinaceus europaeus)*	1	26/06/2020	Hedgehogs of Ireland	Protected Species: Wildlife Acts

3.4.2 Invertebrates

A review of NBDC online mapping shows records of Annex II species within proximity of the proposed scheme. There are 8 no. records of Freshwater White-clawed Crayfish (*Austropotamobius pallipes*), an Annex II invertebrate species identified in proximity to the proposed scheme. These records are in the Camlin_050 at Longford. These are shown in **Table 3.4.**

Table 3.4 Annex II Invertebrate in proximity to the proposed scheme

Species	Record count	Date of last record	Datasource	Status
Freshwater White-clawed Crayfish (Austropotamobius pallipes)	8	15/06/2011	National Bat Database of Ireland	EU Habitats Directive: Annex II

3.4.3 Bats

A review of NBDC online mapping shows records of bats within 2km of the proposed scheme. Records of bat species returned included Soprano Pipistrelle (*Pipistrellus pygmaeus*), Pipistrelle (*Pipistrellus pipistrellus sensu lato*) and Daubenton's Bat (*Myotis daubentonii*). There are no records for the Lesser Horseshoe Bat (*Rhinolophus hipposideros*), the single bat species on the Annex II species list. In Ireland, the lesser horseshoe bat is confined to six western counties, Mayo, Galway, Clare, Limerick, Cork and Kerry. Bat species in proximity to the proposed scheme are included in **Table 3.5.**

The potential for negative effects on bat species has been considered. There is no requirement for removal of trees or significant areas of vegetation as part of the scheme. Lighting proposals will be designed sensitive to bat population. No significant negative effects on bats are anticipated.

Table 3.5 Bat species in proximity to the proposed scheme

Species	Record count	Date of last record	Datasource	Status
Daubenton's Bat (*Myotis daubentonii)*	8	27/08/2013	National Bat Database of Ireland	EU Habitats Directive >> Annex IV || Protected Species: Wildlife Acts
Pipistrelle *(Pipistrellus pipistrellus sensu lato)*	1	11/08/2006	National Bat Database of Ireland	EU Habitats Directive >> Annex IV || Protected Species: Wildlife Acts
Soprano Pipistrelle (*Pipistrellus pygmaeus)*	1	11/08/2006	National Bat Database of Ireland	EU Habitats Directive >> Annex IV || Protected Species: Wildlife Acts

3.4.4 Birds

The nearest European for the protection of birds is Ballykenny-Fishertown Bog SPA (004101) which is c. 4.5km west of the proposed scheme. This SPA is characterised by intact raised bog, callow grassland and lake with a narrow band of deciduous woodland. The lake and callow grassland are suitable for a range of wintering waterfowl species. The SPA is designated for Greenland white-fronted geese. The proposed scheme is primarily artificial surfaces and buildings with adjacent land composed primarily of improved agricultural grassland and willow scrub. Some wintering water bird species such as geese or waders e.g. curlew and lawing may use agricultural lands for feeding. There are no records for Greenland white fronted goose within the vicinity of Longford town. There are records for curlew, lapwing, snipe and whooper swan within 2km of the scheme. Records for bird species in proximity to the proposed scheme are included in **Table 3.6.**

Table 3.6 Records for bird species in proximity to the proposed scheme

Species	Record count	Date of last record	Data source	Status
Common Kestrel (*Falco tinnunculus*)	2	31/12/2011	Bird Atlas 2007 - 2011	Birds of Conservation Concern – Red List
Whooper Swan (*Cygnus cygnus*)	1	31/12/2011	Bird Atlas 2007 - 2011	EU Birds Directive >> Annex I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Common Starling (*Sturnus vulgaris*)	2	31/12/2011	Bird Atlas 2007 - 2011	Birds of Conservation Concern - Amber List
House Sparrow (*Passer domesticus*)	1	31/12/2011	Bird Atlas 2007 - 2011	Birds of Conservation Concern - Amber List
Mallard (*Anas platyrhynchos*)	3	31/12/2011	Bird Atlas 2007 - 2011	Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section I Bird Species
Eurasian Curlew (*Numenius arquata*)	1	17/07/2011	Birds of Ireland	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section II Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Common Pheasant (*Phasianus colchicus*)	1		Bird Atlas 2007 - 2011	U Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section I Bird Species
Common Snipe	2	10/12/2022	Birds of Ireland	EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section III Bird

Species	Record count	Date of last record	Data source	Status
(*Gallinago gallinago)*				Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern – Red List
Common Swift (*Apus apus*)	2	26/07/2022	Swifts of Ireland	Birds of Conservation Concern – Red List
Common Wood Pigeon (*Columba palumbus*)	3	31/12/2011	Bird Atlas 2007 - 2011	EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section I Bird Species
Mute Swan (Cygnus olor)	1	31/12/2011	Bird Atlas 2007 - 2011	Birds of Conservation Concern - Amber List
Northern Lapwing (*Vanellus vanellus*)	2	31/12/2011	Bird Atlas 2007 - 2011	Annex II, Section II Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List

3.4.5 Invasive Plant Species

For the surrounding area, a review of the NBDC online mapping returned records of four invasive plant species listed as Third Schedule under the Bird and Habitats Regulations (S.I. 477). These are identified in **Table 3.7.**

The tetrad within which the site is located (N17H) has a record of four invasive species, which are listed on the Third Schedule of the Bird and Habitats Regulations, 2011 and subject to restriction under Section 49 of those Regulations.

There is a record for Himalayan balsam within the Camlin River at The Mall Bridge on the northern edge of Longford own. There were no records Himalayan balsam for the stream crossed by the scheme and balsam was not observed during the site walkover survey.

There were records for Spanish bluebell within the monad N1375 covering the town north of the railway. This species was not observed during the site walkover survey.

Third Schedule plant species were not identified within the zone of influence along the proposed scheme during the site visit. In the Flancare Roundabout North Section, adjacent to the proposed scheme on the southbound carriageway, Japanese knotweed (5m x5m) was identified. It forms a dense stand (5m x 5m) next to the railway. This area is located outside the proposed scheme approximately 15- 20 m form the road and will remain entirely unaffected by the proposed scheme.

Table 3.7 Third Schedule plant records within 1km of the proposed scheme

Third Schedule Species	Grid reference	Record date	Distance from the proposed scheme
Japanese Knotweed (*Fallopia japonica*)	N131764 N132739 N120758	26/05/2016 N12075 18/07/2019	c. 2.5km north, and west east approximately
Indian Balsam (*Impatiens glandulifera*)	N138758	24/07/2008	c. 1.5km north east
Spanish Bluebell (*Hyacinthoides hispanica*)	N1375	21/05/2017	c. 500m

4 SCREENING ASSESSMENT

Screening is the process that addresses and records the reasoning and conclusions in relation to the first two tests of Article 6(3):

(1) whether a plan or project is directly connected to or necessary for the management of the site; and

(2) 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 in view of its conservation objectives.

4.1 WHETHER THE PROJECT IS DIRECTLY CONNECTED TO OR NECESSARY FOR THE MANAGEMENT OF THE SITE

The plan or project is not directly connected to or necessary for the management of the site. It is therefore necessary to undertake the screening to determine whether the project is likely to have significant effects on a Natura 2000 site in view of its conservation objectives.

4.2 IDENTIFICATION OF RELEVANT EUROPEAN SITES

A distance of 10km was used as a starting point for identifying potential impacts. There are 4 SACs and 1 SPA within 10km of the proposed scheme. The Source-Pathway-Receptor (S-P-R) model has been used to identify the relevant European sites relevant to the proposed scheme. The most up-to-date Conservation Objectives for the European sites under consideration and details in relation to the Qualifying Interests (QI)and Special Conservation Interests (SCI) of these European sites are provided in **Error! Reference source not found.**. SACs and SPAs described in Table 4.1 are illustrated in Error! Reference source not found.. The information contained in these tables is based on publicly available data on these European Sites and their Conservation Objectives, sourced from NPWS in May 2023.

The proposed scheme is not located within or adjacent to any European site. The closest site is Brown Bog SAC (002346) approximately 2.6km northwest. There is no hydrological or hydrogeological connection to this European site from the proposed scheme. The Brown Bog is located in the Lough Forbes ground waterbody and the proposed scheme is underlain by the Longford-Ballinalee ground waterbody.

There is remote hydrogeological connectivity between Mount Jessop SAC and the proposed scheme via the Longford Ballinalee ground waterbody (IE_SH_G_149|. A source-pathway-receptor was identified.

A small tributary of the Camlin River intersects the N63 in the Flancare North Section, south of the railway bridge. This tributary flows into a channel of the Camlin River and joins the Shannon (Upper) which forms part of the Lough Forbes Complex SAC and Ballykenny-Fishertown SPA. Therefore, a source (of potential pollutants/disturbance of invasive species) - pathway (Camlin_060) receptor was identified. Lough Forbes Complex SAC (001818) consists of a number of different habitats, and is centred around Lough Forbes, a lake formed by a broadening of the River Shannon. The confluence of the River Camlin is located downstream of Lough Forbes (lake).

Therefore, these three Natura sites, Mount Jessop SAC, Lough Forbes Complex SAC and Ballykenny-Fishertown SPA were considered to be within the zone of influence of the proposed scheme.

A source-pathway-receptor was not identified for any other European site within the potential Zone of Influence (ZoI). Clooneen Bog SAC (site code 002348) is located 9.6km northwest of the proposed scheme. There is no surface water hydrological connection or hydrogeological connection to this SAC. It is located in the Mohill groundwater body delineation.

The Royal Canal is a man-made waterway linking the River Liffey at Dublin to the River Shannon near Tarmonbarry. There is a branch line from Kilashee to Longford Town. The Royal Canal connects to the River Shannon at Cloondara downstream of the Lough Forbes Complex SAC. Given the hydrological distance of approximately 12km along the canal between Longford and the River Shannon and the nature of canal waterbodies and the nature and scale of the proposed scheme, the Royal Canal is not considered to be a viable hydrological pathway for transmission of water borne impacts to any Natura site from this proposed scheme.

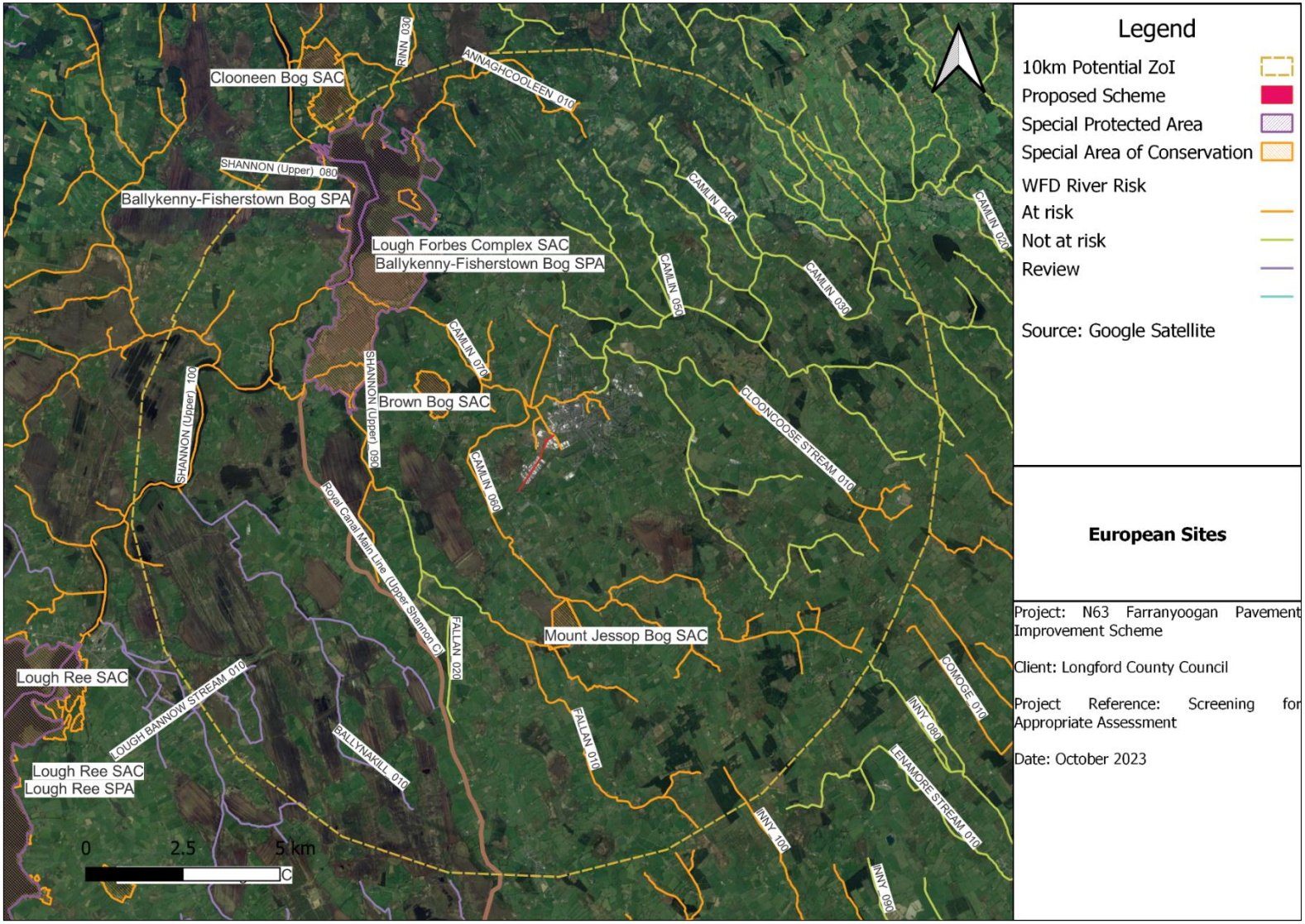


Figure 4.1 European Sites

Table 4.1 Identification of European Sites within the Zone of Influence

Site Code	Site Name	Qualifying Interests	Conservation Objectives	Source-Pathway-Receptor / within zone of influence
002346	Brown Bog SAC Latitude: 53.7321 Longitude: -7.8542 *Distance from proposed scheme: c. 2.6km northwest*	Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150]	NPWS (2016c) Conservation Objectives: Brown Bog SAC 002346. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.	*No. The proposed scheme is not located within or adjacent to this SAC. Therefore, there will be no direct disturbance of the QI habitats. The habitats within and adjacent to the proposed scheme do not correspond with the QI habitats of this SAC which is a bog.* *There is no hydrological or hydrogeological connection. No source-pathway-receptor was identified. The underlying waterbody of the Brown Bog is Newtown Forbes (IE_SH_G_192) and the proposed scheme is underlain by the Longford Ballinalee (IE_SH_G_149) ground waterbody.*
002202	Mount Jessop Bog SAC Latitude: 53.6778 Longitude: -7.80341 *Distance from proposed scheme: c. 2.6km southeast*	Degraded raised bogs still capable of natural regeneration [7120] Bog woodland [91D0]	NPWS (2022) Conservation objectives for Mount Jessop Bog SAC [002202]. First Order Site Specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.	*Yes. The proposed scheme is not located within or adjacent to this SAC. Therefore, there will be no direct disturbance of the QI habitats. The habitats within and adjacent to the proposed scheme do not correspond with the QI habitats of this SAC which is a bog.* *There is no surface hydrological connectivity. There is remote hydrogeological connectivity via the Longford Ballinalee ground waterbody (IE_SH_G_149|,* a source-pathway-receptor was identified.
004101	*Ballykenny Fishertown Bog SPA*	Greenland White-fronted Goose (*Anser albifrons flavirostris*) [A395]	NPWS (2022) Conservation objectives for Ballykenny-Fishertown Bog SPA	*Yes.*

Site Code	Site Name	Qualifying Interests	Conservation Objectives	Source-Pathway-Receptor / within zone of influence
	Latitude: 53.765 *Longitude: -7.87816* *Distance from proposed scheme: c. 4.6km northwest or 5.6km downstream*		[004101] First Order Site Specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.	*The proposed scheme is not located within or adjacent to this SPA. Therefore, there will be no direct disturbance of the SCI bird species. The habitats within and adjacent to the proposed scheme include improved agricultural grassland. There are no records for the SI species within the vicinity of the scheme and it is considered very unlikely the greenland white-fronted geese to use these lands as ex situ habitat given the distance to the SPA.* *The raised bogs, known as the Ballykenny-Fishertown bog, are separated by the Camlin River, which has further areas of callow grassland. The proposed scheme intersects and/or discharges to a tributary of the Camlin connected to the Shannon (Upper)_090. The Shannon (Upper)_090 and Shannon (Upper)_080 form part of the Ballykenny Fishertown SPA. A source-pathway-receptor was identified.*
001818	*Lough Forbes Complex SAC* *Latitude: 53.7649* *Longitude: -7.87833* *Distance from proposed scheme: c. 4.6km northwest or c. 5.6km downstream*	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150] Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	NPWS (2016) Conservation objectives for Lough Forbes Complex SAC [001818], Version 1. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	Yes. *The proposed scheme is not located within or adjacent to this SAC. Therefore, there will be no direct disturbance of the QI habitats. The habitats within and adjacent to the proposed scheme do not correspond with the QI habitats of this SAC.* *The raised bogs, known as the Ballykenny-Fishertown complex, are separated by the Camlin River, which has further areas of callow grassland. The proposed scheme intersects and/or discharges to a tributary of the Camlin connected to the Shannon (Upper)_090. The Shannon (Upper)_090 and Shannon (Upper)_080 form part of the*

Site Code	Site Name	Qualifying Interests	Conservation Objectives	Source-Pathway-Receptor / within zone of influence
				Lough Forbes Complex SAC. A source-pathway-receptor was identified.
002348	*Clooneen Bog SAC* Latitude: 53.8033 Longitude: -7.89553 *Distance from proposed scheme: c. 9.5km*	Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150] Bog woodland [91D0]	NPWS (2016) Conservation Objectives: Clooneen Bog SAC 002348. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.	*No. The proposed scheme is not located within or adjacent to this SAC. Therefore, there will be no direct disturbance of the QI habitats. The habitats within and adjacent to the proposed scheme do not correspond with the QI habitats of this SAC which is a bog.* *The Clooneen Bog SAC adjoins the Lough Forbes Complex SAC. However, there is no hydrogeological or hydrological connectivity to this European site.*

4.3 OTHER DESIGNATED SITES AND SITES PROPOSED FOR DESIGNATION

Other designated sites located within the zone of influence of the proposed scheme are shown in Figure 4.2. These include the following Natural Heritage Areas (NHA) and proposed Natural Heritage Areas (pNHA).

- Royal Canal pNHA
- Carrickglass Demense pNHA (001822)
- Derrymore Bog pNHA(000447)
- Mount Jessop Bog NHA (001450) partly overlaps Mount Jessop SAC
- Brown Bog pNHA (000442) overlaps the SAC
- Lough Forbes Complex pNHA (0018180) overlaps the SAC
- Clooneen Bog pNHA (000445) overlaps the SAC
- Rinn River NHA (000691)
- Lough Bannow pNHA (000449)
- Lough Bawn pNHA(001819)
- Cloonageeher Bog NHA (001423)

The NHA and pNHAs designated for peatland habitats and providing suitable habitat for wintering birds may be considered stepping stone habitats for the Lough Forbes SAC. There is no hydrological or viable groundwater connectivity between the NHAs located to the north of Lough Forbes SAC. These sites are located in a different groundwater body to that of the proposed scheme.

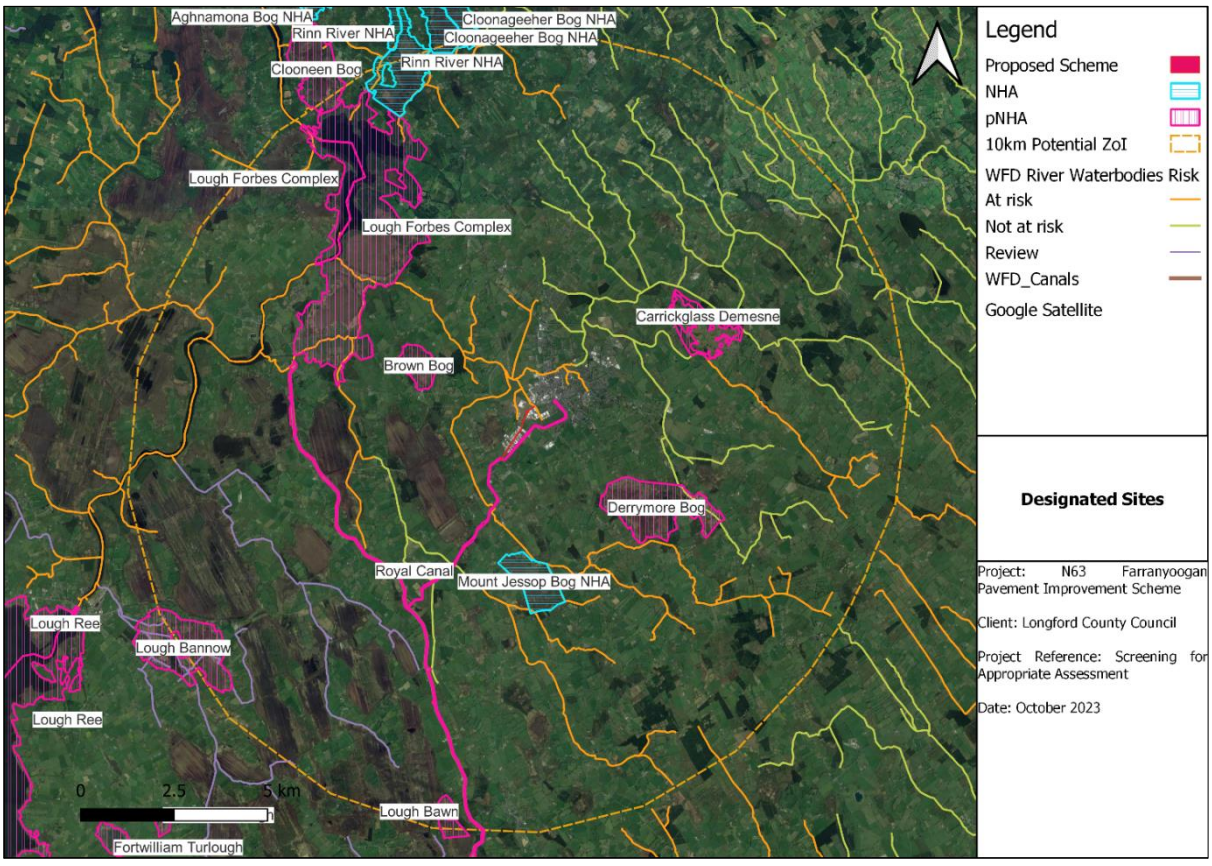


Figure 4.2 NHAs and pNHAs

5 ASSESSMENT OF POTENTIAL SIGNIFICANT EFFECTS

This section sets out the assessment of the potential for significant direct and indirect effects on the conservation objectives of the site(s) within the zone of influence in relation to the project alone; and in-combination with other plans and projects. This impact assessment has been undertaken without consideration of mitigation measures.

Three European sites have been determined to be within the potential zone of influence, namely:

- Mount Jessop Bog SAC (002202)
- Ballykenny Fishertown Bog SPA (004101)
- Lough Forbes Complex SAC (001818)

Potential impacts and effects as a result of the construction and operation of the proposed scheme are considered through the use of key indicators:

- Habitat loss or fragmentation
- Changes in surface water quality
- Changes in groundwater or alteration in groundwater flow/yield
- Changes in air, noise, lighting, vibration or human presence
- Spread of invasive species

5.1 DIRECT IMPACTS

Habitat loss or fragmentation

The proposed scheme does not lie within nor is it adjoining the boundaries of any European site; therefore there is no risk of habitat loss, or any other direct impacts. The area of the proposed scheme is not under any wildlife or conservation designation. Furthermore, no rare, threatened or legally protected plant species are known to occur within the site. The habitats present are not of significance for such species.

The proposed scheme site is not suitable ex situ habitat for any of the SCI bird species, the Forbes Greenland White-fronted goose population associated with the Ballykenny-Fishertown Bog SPA. At the time this site was designated as a Special Protection Area (SPA) it was being used by part of the Loughs Kilglass and Forbes Greenland White-fronted Goose population. The geese appear to have since abandoned the peatland sites in favour of grassland sites elsewhere.[2]

Areas of callow grassland, which feature c. 5km upstream along the Camlin River, have not been identified in proximity to the proposed scheme. Callow grasslands are seasonally flooded grassland ecosystems provide good habitat for a range of wintering waterfowl species. It is considered very unlikely that the agricultural grassland bordering the scheme are used by Greenland white-fronted geese or that it is important ex situ habitat for the species given the distance to the SPA. There are no records for the geese within 2km of the proposed scheme. In any case, given the nature, scale and short duration of the construction phase no significant disturbance effects to geese using potential ex situ habitat on these lands is likely to result.

[2] NPWS (2012) Site Synopsis Ballykenny-Fishertown Bog SPA site code 004101

Merlin has been recorded within the European site and may nest. Whooper Swan and Merlin are listed on Annex I of the E.U. Birds Directive. Red Grouse are known from the bogs. Red Grouse is a Red Listed species in Ireland as it has declined in numbers in recent decades. No significant effects on these Annex I species as a result of the proposed scheme are anticipated.

5.2 INDIRECT IMPACTS

The most common pathway for impacts is surface water, for example pollutants washed into a river and carried downstream into a designated site. Other potential pathways are groundwater, air (e.g. airborne dust), or land (e.g. flow of liquids, vibration). Hydrological impacts can be several kilometres, but for air and land it is rarely more than a few hundred metres. The magnitude of impacts usually decreases as the distance between source and receptor increases.

Changes in the hydrological regime and surface water quality

Construction works typically generate fine sediments and may occasionally cause accidental spills of pollutants (hydrocarbons, pollutants), which can be harmful to aquatic / marine habitats and species. Despite their distance, a potential surface water pathway exists between the proposed scheme and the European sites.

The proposed scheme is located 4.6km or 5.6km upstream of the Ballykenny-Fishertown Bog SPA and Lough Forbes Complex SAC. There is a hydrological connection to this SPA and this SAC via the Camlin River where it meets the Shannon (Upper)_090 and diverges to the Shannon (Upper)_080. The Shannon (Upper)_080 and the Shannon (Upper)_090 form part of the Ballykenny-Fishertown Bog SPA (004101) and the Lough Forbes Complex SAC (001818).

No instream works or bankside works are required. The Camlin_060 is culverted under the road with areas of scrub and grassed verges. It is considered that these features would separate any potential pathway from the development works to the Camlin_060. The scrub habitat would provide an area of filtration for any pollutants in the unlikely event of surface water runoff. Furthermore, the proposed scheme will reduce the hard surface are from 35,505m2 to finished hardstanding of 33,636 m2. Reduction in the hard surface can allow for more permeable surfaces which enable rainwater to infiltrate to ground, reducing stormwater runoff and replenish groundwater.

The existing road drainage exact discharge location is unknown but presumed to discharge to the Camlin_060. The works footprint is narrow and is largely confined to the existing road corridor. The qualifying interests of the Lough Forbes Complex SAC include:

3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation

7110 Active raised bogs

7120 Degraded raised bogs still capable of natural regeneration

7150 Depressions on peat substrates of the Rhynchosporion

91E0 Alluvial forests

The conservation targets[3] in relation to water quality and levels for the Natural eutrophic lake habitat rely on maintenance of appropriate hydrological regimes and appropriate water quality with regard to a range of chemical and physical attributes. The confluence of the Camlin River with the Shannon is located downstream of the Natural eutrophic lake habitat and the habitat is therefore not within the zone of influence of any pollution from the proposed scheme via the Camlin River. Therefore the proposed scheme is not anticipated to negatively affect the natural hydrological regime and water quality necessary to support this habitat.

Water chemistry within raised bogs is influenced by rainwater. However, the conservation objectives for active raised bogs note that within soak systems, water chemistry is influenced by other inputs such as focused flow or interaction with underlying substrates. Water chemistry in marginal areas surrounding the high bog varies due to influences of different water types (bog water, regional groundwater, and run-off from surrounding mineral lands). Given the nature and limited scale of the proposed scheme any potential decline in water quality of the Camlin River is not expected to negatively affect water quality or influence water chemistry within the SAC. Owing to the nature of the works that involves minimal excavations and the distance and the dilution effects of the river to the European site, it is considered that any escape of pollutants or sediments would not be likely to result in significant adverse effects.

Alluvial forests are mapped in the conservation objectives mapping to occur around the margins of Lake Forbes and as the Camlin River is located downstream of this, mapped alluvial forests within the SAC are not considered to be within the zone of influence of the proposed scheme. However, it is possible that other unmapped areas of alluvial forest occur e.g. along the Camlin River. The proposed scheme involves a marginal decrease in hardstanding area with a slight increase in area for natural percolation of water though vegetated areas. No significant change in hydrological regime supporting alluvial woodlands in anticipated as a result of these small changes in hardstanding area.

It is considered that even in the unlikely event of an accidental spill of pollutants or release of sediments; the small scale, nature, and location of the proposed construction in relation to the European sites, as well as the consideration of Quality Interests (QI) and Special Conservation Interest (SCI) birds and wetland habitats, lead to the conclusion that the construction will not result in surface water runoff or deterioration of water quality likely to cause significant effects on European sites.

The first order conservation objectives for Balllykenny-Fisherstown Bog SPA (0004101)[4] is to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA: A395 Greenland white-fronted goose. As there are no negative effects on the bog habitats of the Lough Forbes Complex SAC overlapping this SPA no negative effect on Greenland white fronted goose as a result of changes in hydrological regime or water quality are expected to arise.

[3] NPWS (2016c) Conservation Objectives: Lough Forbes Complex SAC 001818. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
[4] NPWS (2022) Conservation objectives for Ballykenny-Fisherstown Bog SPA [004101]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.

Changes in groundwater quality or alteration in yield/flow

Construction can potentially release contaminants, such as chemicals or waste materials, into the surrounding soil and groundwater. These contaminants can then spread through the groundwater system, potentially affecting the quality (and safety) of groundwater which is linked to surface water watercourses.

The proposed development is located 2.6km from the boundary of the Mount Jessop Bog SAC (002202). The proposed scheme lies within the same groundwater body as this SAC. Bogs are primarily rainfall fed habitats and there are no groundwater dependent terrestrial ecosystems (GWDTE) associated with this SAC. However, the conservation objectives for the SAC[5] note in relation to the water quality target that the water chemistry within the raised bog is influenced by rainwater but within soak systems water chemistry is influenced by other inputs such as focused flow, or interaction with underlying substrates. Water chemistry is areas surrounding the high bog varies due to influences of different water types (bog water, regional groundwater and run-off from surrounding areas.

No abstraction is required as part of the scheme. The proposed scheme will be located within the existing roadway. Alteration to groundwater quality or yield is not predicted as a result of the proposed scheme.

Hydrogeological pathways are remote. The proposed scheme involves little or no excavations or impacts to soils or subsoils. The existing hardstanding will remain in situ for the construction and operation of the proposed scheme. Abstraction of groundwater is not required. Alterations to groundwater quality and alteration of groundwater flow/yield is considered negligible. The risk of contamination of groundwater from hydrocarbons from the works is considered very low given the nature and scale of the scheme and the groundwater vulnerability across the scheme of low to moderate.

No significant effect on groundwater quality or yield is likely to result from the proposed scheme and therefore no significant adverse effect on the conservation targets of Mount Jessop SAC (002202) pertaining to hydrological regime or water quality will result from this scheme.

Changes in air, noise, lighting, vibration and human disturbance

The proposed scheme will involve minimal excavations of a short-term duration. This will generate some noise, dust, vibration and human disturbance although this will be controlled in order to avoid disturbance to residences and commercial premises in the area. There are no SPAs within 1km of the proposed scheme. The nearest SPA is c. 4.6km distant. At this distance the construction of the proposed scheme will not cause significant disturbance to birds and will not occur at levels that adversely affect the SCIs of any European site. The adjacent land is not anticipated to be important ex situ habitat for Greenland white-fronted geese, the SCI species of the Ballykenny-Fisherstown Bog SPA. Furthermore, any use of the adjacent agricultural lands by wintering waterbirds is not anticipated to result in any significant disturbance impact on wintering waterbirds due to the nature and small scale of the works and the limited short-term construction period.

[5] NPWS (2023) Conservation Objectives: Mount Jessop Bog SAC 002202. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

Spread of invasive species

The conservation objectives for peatland habitats and alluvial forests within the Lough Forbes SAC include targets for achieve non-significant levels of non-native invasive species.

There is no significant increased risk of the spread of invasive species as a result of the proposed scheme. There is minimal vegetation removal required to progress the works. Any vegetation cleared will be removed from the site. No increased risk of spread of non-native species via seeds or stem fragments was identified.

There are no Third Schedule invasive species identified on site. Japanese knotweed (*Fallopia japonica*) was identified during the site survey in a plot to the adjacent to the railway. The knotweed was located approximately 15-20 m east of the road as it runs under the railway bridge. This plot is not located in the proposed works area. Japanese knotweed rhizomes typically extend 7-10 m from the source plant and at 15-20m from the works it is considered that there is no potential for the works to interact with Japanese knotweed rhizomes and there is no risk of spread of this invasive plant species as a result of the proposed works.

5.3 IN-COMBINATION EFFECTS

A review of planning applications within the vicinity of the proposed scheme was undertaken using the Department of Housing, Local Government and Heritage EIA portal and Longford County Council Web portal map. A number of other permitted and proposed projects were identified (**Table 5.1**). Given the relatively small scale, extent and duration of the proposed works, the search area for in-combination plans/projects covered the area along the proposed works area and within a 5-year period.

The proposed scheme will form part and interact with the wider transport network of Co. Longford. It is subject to ongoing management, monitoring and review by Longford County Council

The screening assessment has concluded that there is no real viable pathway for transmission of impacts to European sites due to the small scale of the development, the minor impact sources and the remote hydrological distance to the sites. It is considered highly unlikely that the proposed scheme would contribute to significant in combination effects with any granted or proposed projects.

Table 5.1 Summary of Plans/Policies/Projects near the proposed scheme with potential in-combination effects

Plans/Policies	Development
Longford County Council **Planning Reference:** 22173 Proposed construction of 3 no. light industrial units, car parking, proposed foul sewer connection into an existing wastewater treatment system with polishing filter which was installed/upgraded under planning permission reference number PL 04/933, extension of duration of planning permission reference numbers PL10/66 & PL 13/177, which services Johnston Business Park and all ancillary site works. Permission granted: 25/01/2023	This is located within an industrial estate adjacent to the proposed scheme.
Longford County Council **Planning Reference**: 2360142 Proposed single storey extension to the front and side of existing light industrial unit to included amendments to relevant elevations and all ancillary site works. Decision Due date:15/11/2023	This is located in an industrial unit adjacent to the proposed scheme.
Longford County Council **Planning Reference:** 238 Proposed new Tool and Plant hire building with relevant storage, office, access road, parking and hard surface area with equipment service and wash area, boundary treatments, ancillary drainage connections and all ancillary site works. Decision due date: 15/11/2023	This is located in an industrial estate adjacent to the proposed scheme.

6 SCREENING CONCLUSION

This Appropriate Assessment Screening Report was prepared to assess whether the proposed scheme individually or in combination with other plans or projects, and in view of best scientific knowledge, is likely to have significant effect on a European site(s).

The Source-Pathway-Receptor model was used for detailed assessment. The potential impact has been considered in the context of the Conservation objectives of the Qualifying Interests and Special Conservation Interests of the following European sites within the potential zone of influence of the project.

- Ballykenny Fishertown Bog SPA
- Lough Forbes Complex SAC
- Mount Jessop Bog SAC

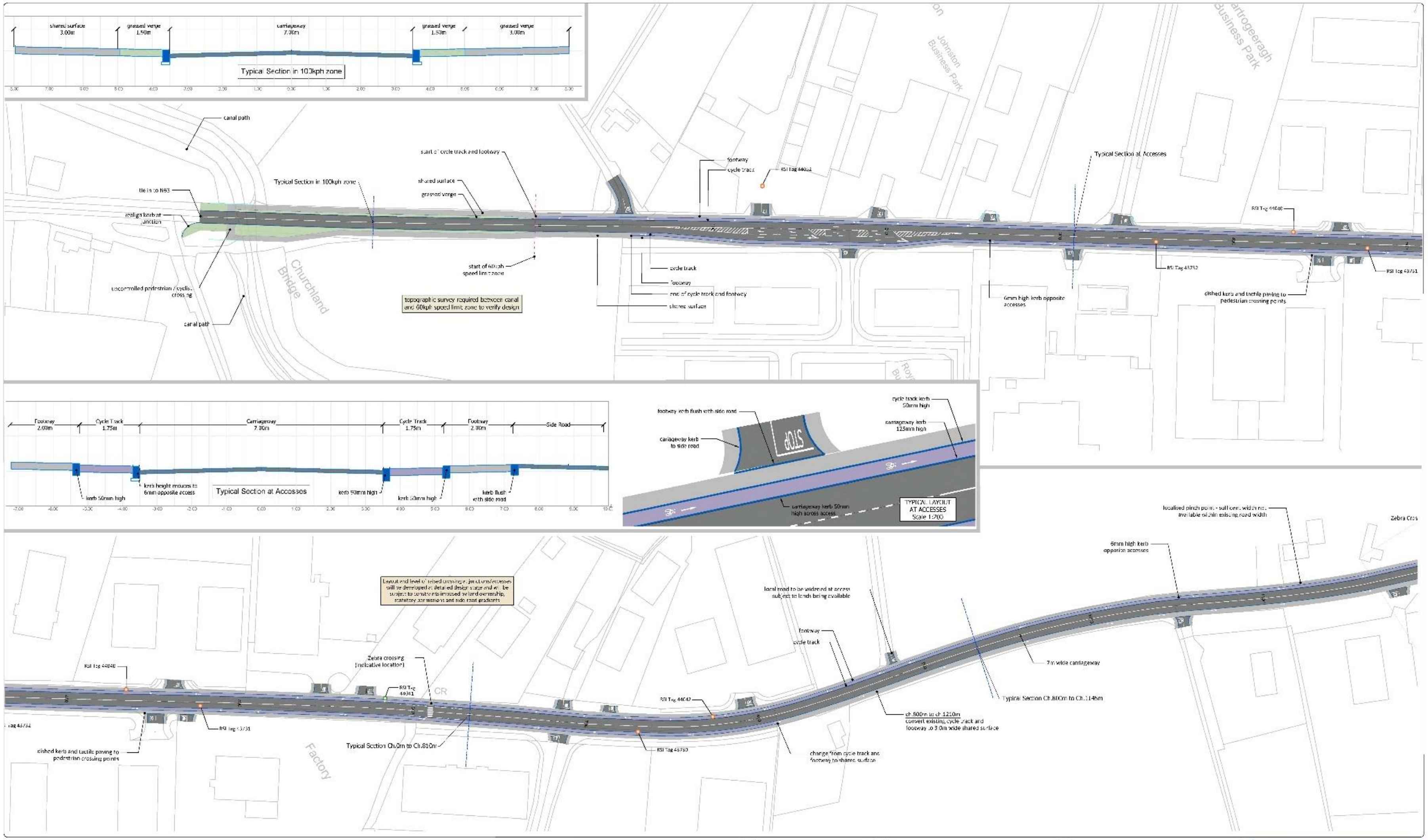
Due to the small scale and short-term nature of the proposed scheme and the potential low risk of minor pollution or sediment release, and the remote hydrological distance it is considered very unlikely that the project would result in significant effects on any European site alone or in combination with other plans and projects.

In undertaking the construction phase, best practice construction methods will be used but these are not required to avoid or reduce any effects on a European site. These control measures have not been used to formulate a conclusion.

It is concluded that the proposed scheme, individually or in-combination with other plans or projects is not predicted to result in likely significant effects on the European sites identified to be within the potential zone of influence, or any other European sites, in view of their respective conservation objectives.

APPENDIX A

General Arrangement Drawings



LEGEND	
Carriageway	
Footway	
Cycle Track	
Cycle Lane	
Grassed Verge	
Kerb	

REV	DATE	BY	DETAILS
PR5	12/05/21	PB	Speed limit adjusted; Note on accesses added
PR4	21/04/21	PB	Scheme extended to Canal
PR3	11/03/21	SC	Pedestrian Crossings added
PR2	14/12/20	SC	Comments amended. Markings added. Crossings added.
PR1	25/08/20	SC	Preliminary issue

STATUS: PRELIMINARY. FOR DISCUSSION - NOT TO BE USED FOR ANY OTHER PURPOSE.

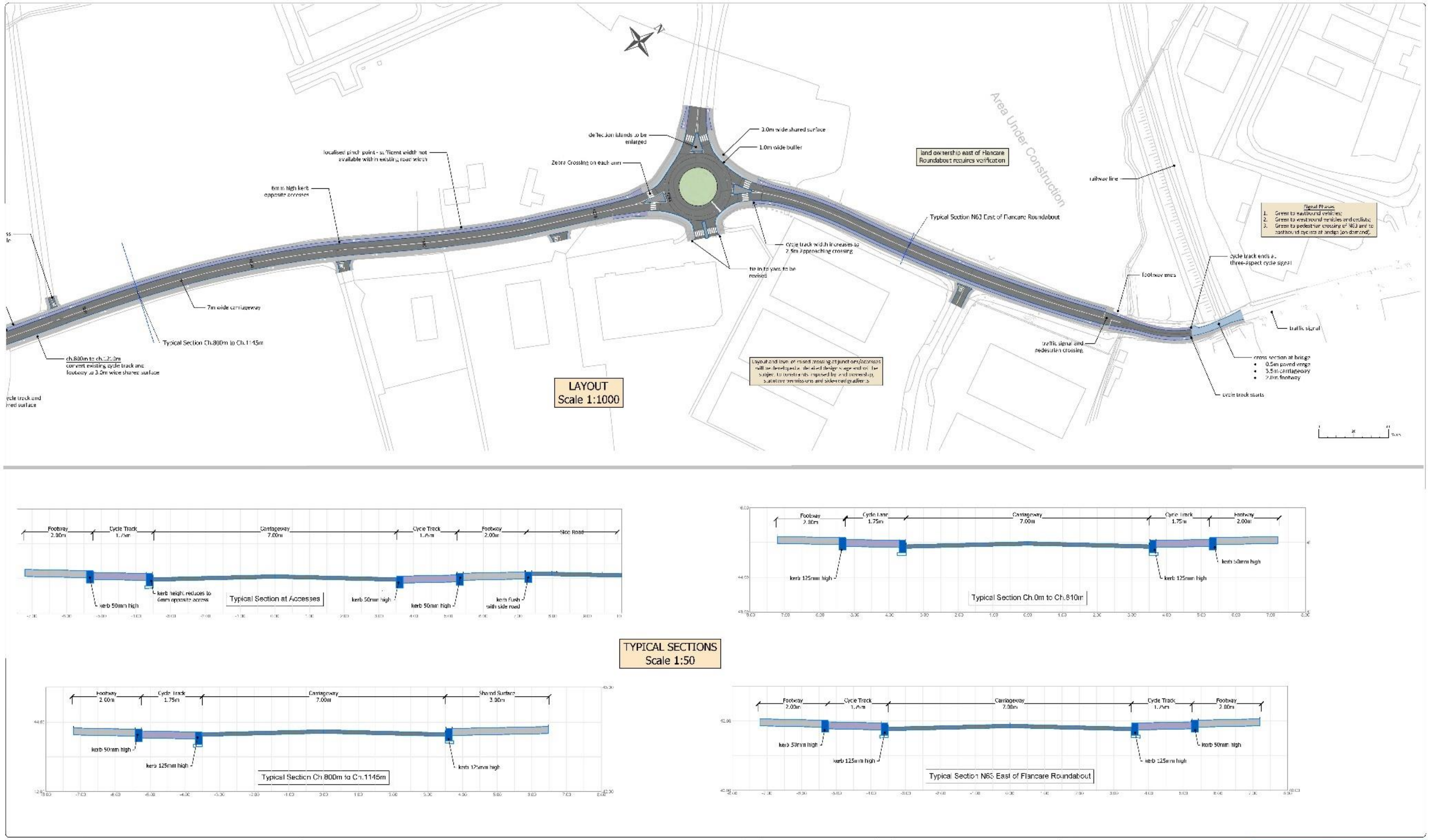
CLIENT: LONGFORD COUNTY COUNCIL

PROJECT: N63 FARRANYOOGAN PAVEMENT IMPROVEMENT SCHEME

TITLE: GENERAL LAYOUT (Sheet 1 of 2) TYPICAL SECTIONS

KILGALLEN & PARTNERS
KYLEKIPROE, WELL ROAD, PORTLAOISE, CO. LAOIS

DRN:	DRAWING NO.:		REV:
SC	18048 C DR 101		PR5
CHKD:	SCALE:	SIZE:	DATE:
PB	1:1000 @ A1	A1	25/08/20



LEGEND

Carriageway	
Footway	
Cycle Track	
Cycle Lane	
Grassed Verge	
Kerb	

Bonneagar Iompair Éireann
Transport Infrastructure Ireland

OS mapping reproduced under licence 0009620.

REV	DATE	BY	DETAILS
PR5	12/05/21	PB	Note on accesses added. Arrangement at bridge amended.
PR4	21/04/21	PB	Scheme extended to railway line
PR3	11/03/21	SC	Pedestrian Crossings added
PR2	14/12/20	SC	Corner radii amended. Markings added. Crossings added.
PR1	25/08/20	SC	Preliminary Issue

STATUS: PRELIMINARY. FOR DISCUSSION - NOT TO BE USED FOR ANY OTHER PURPOSE.

CLIENT: LONGFORD COUNTY COUNCIL

PROJECT: N63 FARRANYOOGAN PAVEMENT IMPROVEMENT SCHEME

TITLE: GENERAL LAYOUT (Sheet 2 of 2) TYPICAL SECTIONS

KILGALLEN & PARTNERS
KYLEKIPROE, WELL ROAD, PORTLAOISE, CO. LAOIS

DRN:	DRAWING NO:		REV:
SC	18048-C-DR-102		PR5
CHKD:	SCALE:	SIZE:	DATE:
PB	as shown @ A1	A1	25/08/20