



Screening Statement for Appropriate Assessment

Temporary Access/Haul Road

Coonagh to Knocklisheen Distributor
Road Scheme

Doherty Environmental

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Temporary Access/Haul Road

Coonagh to Knocklisheen Distributor Road

Screening Report for Appropriate Assessment

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1.0 INTRODUCTION

Doherty Environmental Consultants (DEC) Ltd. has been commissioned by Limerick City & County Council to undertake a Screening Statement in support of an Appropriate Assessment (AA), under Article 6 of the EU Habitats Directive, for a proposed temporary haul road at Moyross that will form part of the overall Coonagh to Knocklisheen Distributor Road project. Figure 1.1 shows the location of project site, while Figure 1.2 shows an aerial image of the project site.

This Screening Report for Appropriate Assessment forms Stage 1 of the Habitats Directive Assessment process and is being undertaken in order to comply with the requirements of the Habitats Directive Article 6(3). The function of this Screening Report is to determine if it can or cannot be excluded, on the basis of objective information, that the project, individually or in combination with other plans or projects, will have a significant effect on a European Site. This Screening Report has been prepared to provide information to the competent authority to assist them in their determination as to whether a Stage 2 Appropriate Assessment is required for the project.

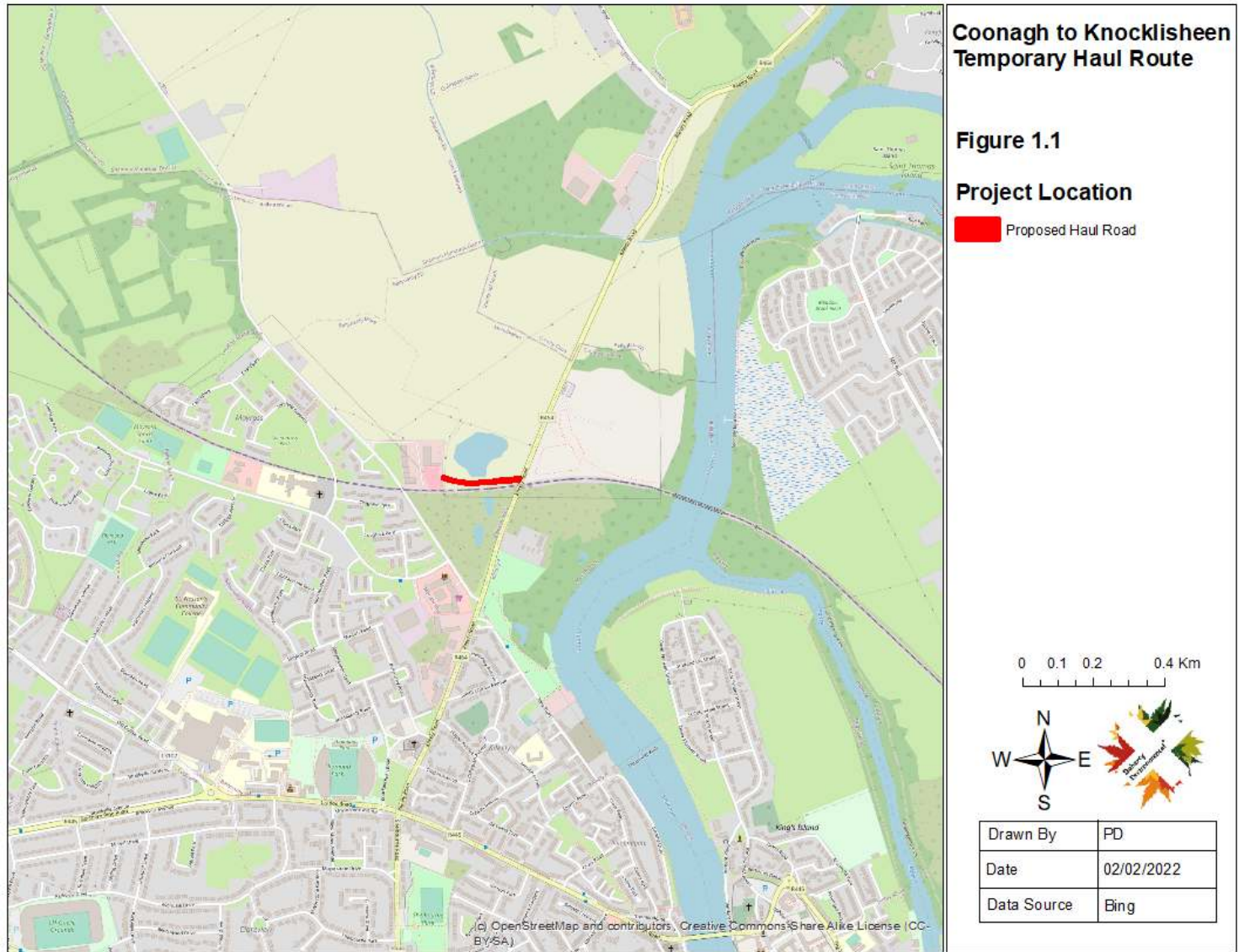
1.1 LEGISLATIVE CONTEXT

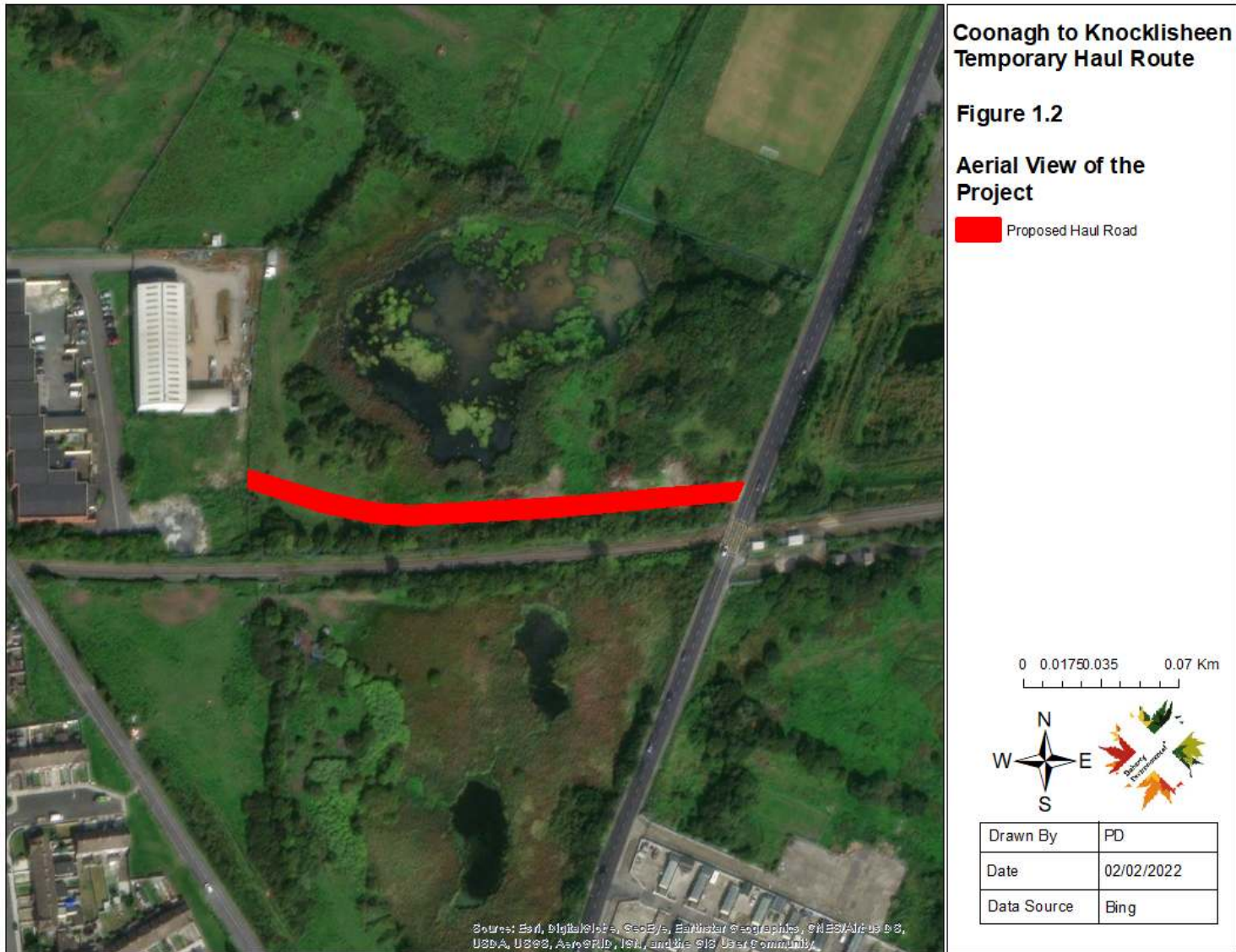
This Screening Report for Appropriate Assessment is being prepared in order to enable the competent authority to comply with Article 6(3) of Council Directive 92/43/EEC (The Habitats Directive). It is prepared to assess whether or not the project alone or in combination with other plans and projects is likely to have a significant effect on any European Site in view of best scientific knowledge and in view of the conservation objectives of the European Sites and specifically on the habitats and species for which the sites have been designated.

1.1.1 Requirement for an Assessment under Article 6 of the Habitats Directive

According to Regulation 42(1) of the European Communities (Birds and Natural Habitats) Regulations 2011 – 2017, the competent authority has a duty to:

- Determine whether the proposed Project is directly connected to or necessary for the management of one of more European Sites; and, if not,





- Determine if the Project, either individually or in combination with other plans or projects, would be likely to have a significant effect on the European Site(s) in view of best scientific knowledge and the Conservation Objectives of the site(s).

This Report contains a Screening for Appropriate Assessment and is intended to assess and address all issues regarding the construction and operation of the Project and to inform and allow the competent authority to comply with the Habitats Directive. Article 6(3) of the Habitats Directive defines the requirements for assessment of projects and plans for which likely significant effects on European Sites may arise. The European Communities (Birds and Natural Habitats) Regulations, 2011 – 2015 (the Habitats Regulations) transpose into Irish law Directive 2009/147/EC (the Birds Directive) and Council Directive 92/43/EEC (the Habitats Directive) lists habitats and species that are of international importance for conservation and require protection. The Habitats legislation requires competent authorities, to carry out a Screening for Appropriate Assessment of plans and projects that, alone or in combination with other plans or projects, would be likely to have significant effects on European Sites in view of best scientific knowledge and the Site’s conservation objectives. This requirement is transposed into Irish Law by Part 5 of the Habitats Regulations and Part XAB of the Planning and Development Act, 2000 (as amended).

1.2 SCREENING METHODOLOGY

This Screening Report has been prepared in order to comply with the legislative requirements outlined in Section 1.1 above and aims to establish whether or not the proposed project, alone or in combination with other plans or projects, would be likely to have significant effects on European Sites in view of best scientific knowledge and the Site’s conservation objectives. In this context “likely” means a risk or possibility of effects occurring that **cannot** be ruled out based on objective information and “significant” means an effect that would undermine the conservation objectives of the European sites, either alone or in-combination with other plans and projects (Office of the Planning Regulator (OPR), 2021) .

The nature of the likely interactions between the Plan and the Conservation Objectives of European Sites will depend upon the:

- the ecological characteristics of the species or habitat, including their structure, function, conservation status and sensitivity to change; *and/or*

- the character, magnitude, duration, consequences and probability of the impacts arising from land use activities associated with the plan, in combination with other plans and projects.

This Screening Report for Appropriate Assessment has been undertaken with reference to respective National and European guidance documents: Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities (DEHLG 2010) and *Assessment of Plans and Projects Significantly Affecting Natura 2000 sites – Methodological Guidance of the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*; Office of the Planning Regulator – OPR Practice Note PN01: *Appropriate Assessment Screening for Development Management*, and recent European and National case law. The following guidance documents were also of relevance during the preparation of this Screening Report:

- A guide for competent authorities. Environment and Heritage Service, Sept 2002. Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities (2010). DEHLG.
- Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites – Methodological Guidance of the Provisions of Article 6(3) and (4) of the Habitats Directive 92/42/EEC. European Commission (2021).
- Managing Natura 2000 Sites – The provisions of Article 6 of the Habitats Directive 92/43/EEC. European commission (2018).

The EC (2001) guidelines outline the stages involved in undertaking a Screening Report for Appropriate Assessment for projects. The methodology adopted during the preparation of this Screening Report is informed by these guidelines and was undertaken in the following stages:

1. Describe the project and determine whether it is necessary for the conservation management of European Sites;
2. Identify European Sites that could be influenced by the project;
3. Where European Sites are identified as occurring within the zone of influence of the project identify potential effects arising from the project and screen the potential for such effects to negatively affect European Sites identified under Point 2 above; and

1. Identify other plans or projects that, in combination with the project, have the potential to affect European Sites.

2.0 PROJECT DESCRIPTION

The lands are located in Ballynanty More and Monabraher, north of the Limerick to Galway railway line and to the west of the Kileely Road (R464).

The temporary access/haul road will be constructed as works progress on the CKDR Scheme. The access/haul road will be required when the existing Ballynanty rail bridge is being demolished and the subsequent new bridge construction and adjoining sections of road construction are on-going. The Ballynanty rail bridge works are included in Section 2 (Phase 2) of the CKDR Scheme Main Contract and as such will be 12 months or so after the commencement of the CKDR Scheme Main Contract.

2.1 2.1.2 FEATURES OF THE PROPOSED DEVELOPMENT

The approach to the road development will be as per the approved CKDR Scheme of 2010, and is not repeated here unless necessary. The features of the proposed temporary haul road are detailed in the following subsections.

2.1.1 Duration of works.

The bridge demolition and re-construction will take approximately 6 to 9 months with adjoining road and services construction works along the re-constructed Knockalisheen Road to be carried out within a period of 12 to 18 months overlapping with the bridge works. The temporary access/haul road will then be removed following the re-opening of the improved Knockalisheen Road.

Works to construct the temporary access/haul road would take approximately 6 weeks. It may take 2 to 3 weeks to remove at the conclusion of the project.

2.1.2 Approach to Works:

Works to construct the temporary access/haul road would consist of removal of some filled ground and placing a geotextile on an approved road formation as a separation layer with imported material to form the road being placed on top. The imported stone material will be placed as capping to the roadway with a sub-base over comprising compacted class 804 stone and the road construction then completed in a tar and chip temporary surfacing.

Some local levelling will be required at the Long Pavement Road boundary where an earthen mound forms part of the boundary.

A construction compound would be located within the adjoining Enterprise Centre development or directly adjacent the road construction area.

2.1.3 Anticipated machinery during works and number of staff working on the project (estimates).

- Two Excavators and four/five tipper trucks to construct the access/haul road.
- One excavator and two dump trucks to remove.

2.1.4 Drainage

There is a 'pond' in the vicinity of the works. Following review of OS mapping this pond may have been formed through over-land flows from the Shannon during high tides becoming trapped. In this regard historic mapping shows that the lands were liable to floods. As the Kileely Road and Railway Line was developed open drains which previously drained eastwards towards the Shannon may have been cut off by the embankments constructed to support the road and rail infrastructure. The pond would therefore seem to largely be as a result of the accumulation of water from flood events being unable to drain out of the lands through the blocked drainage pathways and the low-lying nature of the lands.

The lands are shown on CFRAM mapping dated Jun 2016 not at risk of fluvial flood events. The lands are shown on CFRAM mapping to be at risk of a 1 in 200-year coastal flood event.. There is also a large watermain running parallel to the proposed road on the railway embankment side with various access covers visible on the ground. There is anecdotal evidence that the watermain has leaked in the past which added to the volume of standing water in the area. The footprint of the proposed road avoids the area of standing water or 'pond'.

2.1.5 Earthworks

The temporary access/haul road earthworks operations will involve the excavation and transportation of some excavated cut material along the route of the road with some of the excavated material then being used as fill to form a protective berm. Earthworks on the project site will then comprise :

- Construction of protective berm on south side of the road;
- Excavation and infilling carried out in small progressive stages;
- Surplus excavated topsoil will be disposed off site; Whilst no significant run-off of silt laden run-off is anticipated, given the proposed construction methodology, the site will be regularly monitored by construction staff for signs of run-off such as silt in surrounding vegetation and measures will be put in place to prevent this where necessary. This may include the provision of a solid containment berm (of soil) or alternatively the erection of a silt fence. A silt fence may be constructed by attaching a sheet of geotextile membrane to a stock fence and burying the bottom of it into the ground, thus allowing water to pass through but not the heavier fraction of the sediment;
- In all circumstances, excavation depths and volumes will be minimised and excavated material will be re-used where possible.

2.1.6 Fuel Use and Storage

The use of machinery at the site carries the potential for accidental hydrocarbon contamination of the area, by fuel spillages or oil leaks for example. The works will be carried out in accordance with the following measures to avoid such impacts:

- Mobile storage such as fuel bowsers will be banded to 110% capacity to prevent spills. Tanks for bowsers and generators shall be double skinned.
- When not in use, all valves and fuel trigger guns from fuel storage containers will be locked.
- All plant refuelling will take place on site using mobile fuel bowsers. Only dedicated trained and competent personnel will carry out refuelling operations.
- Plant refuelling will take place as far as practicable from watercourses located. A spill kit and drip tray shall be on site at all times and available for all refuelling operations. Equipment shall not be left unattended during refuelling.

- All pipework from containers to pump nozzles will have anti siphon valves fitted.
- Strict procedures for plant inspection, maintenance and repairs shall be detailed in the contractor's method statements and machinery shall be checked for leaks before arrival on site.
- All site plant will be inspected at the beginning of each day prior to use.
- Defective plant shall not be used until the defect is satisfactorily fixed.
- All major repair and maintenance operations will take place off site.
- Care will be taken at all times to avoid contamination of the environment with contaminants other than hydrocarbons, such as uncured concrete or other chemicals.
- The plant refuelling procedures described above shall be detailed in the contractor's method statements.

2.1.7 Non-Native Invasive Species

Giant Hogweed is recorded on the lands, therefore the following will apply:

- Any vegetation clearance or construction works to be undertaken in the vicinity of areas identified as supporting non-native species will be undertaken in accordance with the Transport Infrastructure Ireland (TII) (formerly the National Roads Authority (NRA)) guidance measures for the control and management of noxious weeds and non-native invasive species (see NRA, 2010). Sites of known infestation shall be clearly marked prior to works and avoided during construction. The importance of preventing the spread of these species will form part of a tool box talk to all personnel prior to construction commencing.
- Sites of known infestation shall be clearly marked prior to works and avoided during construction. The importance of preventing the spread of these species will form part of a tool box talk to all personnel prior to construction stage.
- All contractors should incorporate strict biosecurity protocols into their Construction Environmental Management Plans. These protocols to include the thorough cleaning and disinfection of all machinery prior to arrival and departure from the site, to prevent the spread of invasive species.

3.0 DESCRIPTION OF THE SITE LOCATION

The habitats present within the footprint of the project site are representative of dry neutral and grassy verge grassland habitat and scrub.

A summary of a habitats from the 2010 EIS is as follows and applies to the area immediately surrounding the development site:

Section 7.2.2 General Description of the Study Area

The majority of the route from Coonagh to Knockalisheen runs at the western fringe of suburban Limerick crossing low-lying land of neglected pasture (a mosaic of species-poor wet grassland and dry neutral grassland) with occasional scrubby hedgerows. North-east of the Limerick to Ennis rail line, the topography is more undulating as the route enters an area of smaller fields separated by tree-lines and dense hedgerows north of Castle Park Estate before joining the Knockalisheen Road.

The scheme also involves the upgrade of the Knockalisheen Road as far as Watchhouse Cross. This stretch of road is uniformly low-lying and is partially bordered to the east by Knockalisheen Marsh (a proposed Natural Heritage Area and part of the Lower River Shannon candidate Special Area of Conservation), while the wooded grounds of the derelict Castle Park Estate, a protected structure, fringe the western side of the road. A small block of wetland, also within the Lower River Shannon candidate Special Area of Conservation, occurs immediately north of Watchhouse Cross.

[page 7/4] Hedgerows and Treelines

In the section between Coonagh and the rail line (chainage 0 to 1, 880), field boundaries are primarily low scrubby hedgerows (WL1) comprised of willow, hawthorn, and blackthorn with abundant briar. Elder and ash are both occasional as small trees. The ground flora is typically poorly developed due to the dense nature of the hedgerow.

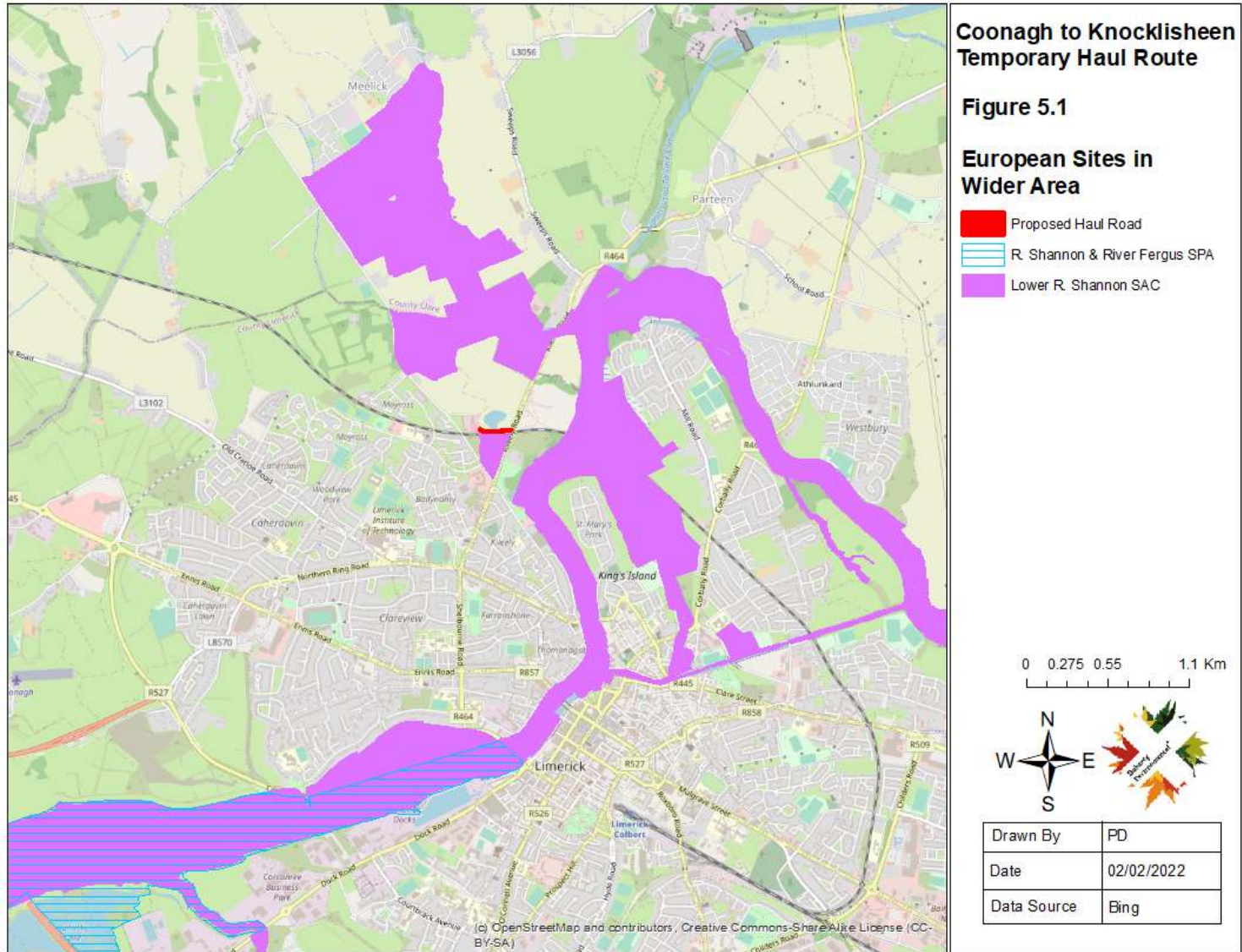
4.0 IS THE PROJECT NECESSARY FOR THE CONSERVATION MANAGEMENT OF EUROPEAN SITES

The project has been described in Section 2 of this Screening Report and it is clear from the description provided that the project is not directly connected with or necessary for the future conservation management of any European Sites.

5.0 IDENTIFICATION OF EUROPEAN SITES

Current guidance informing the approach to screening for Appropriate Assessment defines the zone of influence of a proposed development as the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European site. It is recommended that this is established on a case-by-case basis using the Source-Pathway-Receptor (SPR) framework.

As a first step in identifying the European Sites that could be connected to the project via SPR pathways all European Sites occurring in the wider surrounding area were identified. As can be seen in Figures 5.1 two European Sites, comprising the Lower River Shannon SAC and River Shannon and River Fergus Estuaries SPA, occur within the wider area surrounding the project site. All other European Sites are located at a remote distance from the project site and are not connected to it via any SPR pathways. As such the remainder of this screening exercise focuses on the Lower River Shannon SAC and the River Shannon and River Fergus Estuaries SPA (hereafter jointly referred to as the Lower River Shannon European Sites).



5.1 EUROPEAN SITES OVERVIEW

5.2 LOWER RIVER SHANNON SAC

The qualifying features of interest of the Lower River Shannon SAC are listed in Table 5.1 below. In Table 5.1 these features of interest are grouped into broad habitat classifications and a comment on their occurrence within the Shannon Estuary is also provided.

Table 6.5.1: Qualifying Features of Interest of the Lower River Shannon SAC

Qualifying feature of interest	Broad Habitat Classification and Location
Sandbanks which are slightly covered by sea water all the time [1110]	Marine habitat located in the out Shannon Estuary.
Estuaries [1130]	Marine and coastal habitat located in the outer to inner estuary.
Mudflats and sandflats not covered by seawater at low tide (referred to as tidal mudflats and sandflats) [1140]	Coastal habitat located in the outer to inner estuary.
Coastal lagoons [1150]	Coastal habitat located in the outer and middle estuary.
Large shallow inlets and bays [1160]	Marine habitat located in the outer estuary.
Reefs [1170]	Marine habitat located in the outer estuary.
Perennial vegetation of stony banks [1220]	Coastal habitat located in the outer estuary.
Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]	Coastal habitat located in the outer estuary.

Qualifying feature of interest	Broad Habitat Classification and Location
Salicornia and other annuals colonising mud and sand [1310]	Coastal habitat located in the outer to inner estuary as east as the Maigne estuary.
Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330]	Coastal habitat located in the outer to inner estuary as east as the Maigne estuary.
Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]	Coastal habitat located in the outer to inner estuary as east as the Maigne estuary.
Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation (referred to as vegetation of flowing waters) [3260]	Freshwater and tidal watercourse habitat located along the Park Canal and the inner Shannon Estuary downstream of Limerick City.
Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410]	Terrestrial habitat located adjacent to freshwater sections of the River Shannon upstream of Limerick City, with noteworthy examples occurring near Castleconnel.
Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) [91E0]	Freshwater habitat located upstream of the Mulkear confluence with the River Shannon and along the Mulkear catchment.
Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]	Freshwater species, restricted to the Cloon sub-River catchment on the northern side of the estuary
Petromyzon marinus (Sea Lamprey) [1095]	Freshwater and tidal sections of the River Shannon.
Lampetra planeri (Brook Lamprey) [1096]	Freshwater and tidal sections of the River Shannon.

Qualifying feature of interest	Broad Habitat Classification and Location
Lampetra fluviatilis (River Lamprey) [1099]	Freshwater and tidal sections of the River Shannon.
Salmo salar (Salmon) [1106]	Freshwater and tidal sections of the River Shannon.
Tursiops truncatus (Common Bottlenose Dolphin) [1349]	Restricted to the outer and middle Shannon Estuary.
Lutra lutra (Otter) [1355]	Freshwater and tidal sections of the River Shannon.

The location of some of the qualifying habitats and qualifying species of the SAC, as listed in Table 5.1 above have been mapped by the NPWS as part of the site-specific conservation objectives for the SAC (NPWS, 2012). No example of any qualifying habitat of the SAC are mapped as occurring in the section of the SAC occurring to the south of the proposed haul route or within the wetland habitat to the south of the railway.

Otter habitat occurs to along the River Shannon. Bottle-nosed dolphin habitat is located in the middle to outer Shannon estuary at a significant distance downstream of the project site. Atlantic salmon and lamprey species occur throughout the SAC during varying times of the year. Freshwater pearl mussel are restricted to the Cloon River sub-catchment of the SAC and are not hydrologically connected to the project site.

5.2.1 River Shannon and River Fergus Estuaries SPA

The special conservation interests of the River Shannon and River Fergus Estuaries SPA are as follows:

Table 5.2: Special Conservation Interests of the River Shannon and River Fergus Estuaries SPA

Cormorant (Phalacrocorax carbo) [A017]	Shoveler (Anas clypeata) [A056]	Dunlin (Calidris alpina) [A149]
Whooper Swan (Cygnus cygnus) [A038]	Scaup (Aythya marila) [A062]	Black-tailed Godwit (Limosa limosa) [A156]
Light-bellied Brent Goose (Branta bernicla hrota) [A046]	Ringed Plover (Charadrius hiaticula) [A137]	Bar-tailed Godwit (Limosa lapponica) [A157]
Shelduck (Tadorna tadorna) [A048]	Golden Plover (Pluvialis apricaria) [A140]	Curlew (Numenius arquata) [A160]
Wigeon (Anas penelope) [A050]	Grey Plover (Pluvialis squatarola) [A141]	Redshank (Tringa totanus) [A162]
Teal (Anas crecca) [A052]	Lapwing (Vanellus vanellus) [A142]	Greenshank (Tringa nebularia) [A164]
Pintail (Anas acuta) [A054]	Knot (Calidris canutus) [A143]	Dunlin (Calidris alpina) [A149]
Black-headed Gull (Chroicocephalus ridibundus) [A179]	Wetland and Waterbirds [A999]	

The SPA boundary is located over 2km downstream from the project site. The pond habitats occurring to the north of the proposed temporary haul route and to the south of the railway provide suitable habitat for waterbirds. However these ponds are of limited habitat extent and do not have the potential to support significant numbers of waterbirds supported by the SPA.

5.3 CONSERVATION OBJECTIVES

Detailed Site-Specific Conservation Objectives have been published for the the Lower River Shannon European Sites. These conservation objectives are available at:

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002165.pdf

https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO004077.pdf

5.4 EXAMINATION OF EUROPEAN SITES WITHIN THE ZONE OF INFLUENCE OF THE PROJECT

As the nearest point of a European Site to the project is the Lower River Shannon SAC, which is located approximately 3m to the south of the nearest point of the proposed haul route, the project will be located outside the boundary of the Lower River Shannon European Sites and will not have the potential to result in direct impacts to European Sites. It is also noted that the section of the Lower River Shannon SAC occurring to the south of the proposed haul route encompasses the existing railway embankment and railway line. The embankment and railway line are not representative of an qualifying habitat of this SAC and does not provide suitable habitat resource for any qualifying species of this SAC. Wetland habitat occurs to the south of the railway and the existing railway and its embankments form a barrier between the proposed haul route and this area of wetland habitat that is included within the SAC to the south.

Given that project is located outside the boundary of the Lower River Shannon SAC and the River Shannon and River Fergus Estuaries SPA and is buffered from any existing semi-natural habitats of the SAC by an existing barrier, this Screening exercise focuses on investigating whether it can or cannot be excluded, on the basis of objective information, that the project will have the potential to result in indirect effects to European Sites or effect mobile species associated with European Sites beyond the boundaries of their designated conservation areas.

Using the SPR framework the project, as described in Section 2 of this Screening Report, represents the source of potential impacts to European Sites.

During the construction and operation of new developments projects the potential existing for the following emissions to occur:

Emissions to surface water

Emissions to groundwater

Noise and vibration emissions

Emissions to air

Light emissions;

Visual emissions;

Spread of non-native invasive species

Development projects that are located outside of European Sites can also result in impacts to mobile qualifying species of European Sites in the event that such species rely on habitats occurring within the project site. For the purposes of this screening report this impact is referred to as a “mobile species impact”.

Given that the project site is located within the Lower River Shannon sub-catchment the potential for a hydrological pathway to connect the proposed haul route to the Lower River Shannon SAC and the River Shannon and River Fergus Estuaries SPA further downstream requires further examination as part of this screening exercise.

The proposed haul route is located in an area that has been identified by the Geological Survey of Ireland as being underlain by estuarine silts and clay and of low groundwater permeability. Given the underlying subsoils at the project site and the low permeability, which is evident on the ground by the presence of the pond to the north of the project site (as described in Section 2.1.4 above), it is concluded that there is no potential for a groundwater pathway to connect the project to the Lower River Shannon SAC and the River Shannon and River Fergus Estuaries SPA further downstream.

Noise generated at the project site during the installation, operation and removal of the temporary haul route is not considered to have the potential to function as an impact pathway that could lead to disturbance of qualifying species of the Lower River Shannon SAC . Aside

from otters the qualifying species of the SAC are freshwater and/or marine fish and mammal species (e.g. bottle-nosed dolphin). Otter is the only mammal that occurs can use terrestrial habitats. Given the location of the project site adjacent to an existing railway and on the edge of an urban area that is subject to high levels of existing human activity and associated noise, the potential for noise generated from the project site is not predicted to have the potential to disturbance any otters that may occur in the vicinity of the proposed route. In addition given the distance of over 2km between the project site and the River Shannon and River Fergus Estuaries SPA there will be no potential for the project to result in disturbance to waterbirds of the SPA within the boundary of the SPA. The pond to the north provides suitable wetland habitat for waterbirds. However the extent of this pond habitat is small in scale and does not support significant numbers of waterbirds associated with the populations protected within the SPA designation. As such any potential for temporary disturbance to waterbirds using the ponds in the vicinity of the project site will be short-lived and insignificant in the context of the conservation objectives of the SPA (i.e. in the context of the overall population trends and distribution of waterbirds supported by the SPA).

Air: The construction and removal of the haul route will have the potential to give rise to dust emissions. Such emissions are generally short-lived changes to baseline air quality which last over a few hours or days, occurring over a limited time period associated with the exposure of de-vegetated ground cover. Given the short-term period during which de-vegetated ground will be exposed during the construction and removal of the proposed haul route the potential risk for fugitive dust emission to be generated at quantities that could lead to discernible deposition within the Lower River Shannon SAC is considered to be negligible. As such the generation of dust and associated deposition within the Lower River Shannon SAC is not considered to represent a likely significant effect to the SAC and the medium of air emissions is not considered to represent a viable impact pathway between the project and the SAC or the River Shannon and River Fergus Estuaries SPA further downstream.

Light: No new lighting is proposed to be erected along the temporary haul route over the short lifetime of the route.

Visual Disturbance: The temporary haul route will be entirely screened from the SAC and the River Shannon and River Fergus Estuaries SPA further downstream and will not have the potential to result in any visual emissions to the SAC and SPA.

Mobile Species Pathway: The footprint of the project site does not offer suitable habitat for mobile species of the SAC (i.e. otters) or the SPA (waterbirds species). The pond to the north of the project site provides suitable habitat for waterbird species of the SPA. However this pond is small in scale and is not relied upon by significant numbers of waterbirds associated with the populations supported by the River Shannon and River Fergus Estuaries SPA.

Spread of non-native invasive species: The presence of giant hogweed within the footprint of the project site has been noted. However given the location of the project site bounded to the south by the railway corridor and to the east by the public (and the absence of hydrological pathways (see Table 5.3 below) there will be no potential for the project to result in the spread of this species within semi-natural habitats or qualifying habitat supported by the SAC.

The receptors represent European Sites and their associated qualifying features of interest.

European Sites and their associated qualifying features are likely to occur in the zone of influence of the project only where a hydrological pathway establishes a link between the project and the European Site.

Table 5.3 provides an evaluation as to whether the Lower River Shannon SAC and/or the River Shannon and River Fergus Estuaries SPA occur within the project's zone of influence. This evaluation has been undertaken in line with the following questions:

- Is there a hydrological pathway link between the Project site and European Sites?
- Do the hydrological pathway establish a connection between qualifying habitats of these European Sites and the project site?
- Do the hydrological pathway establish a connection between qualifying species of these European Sites and the project site?

Table 5.3: Identification of European Sites within the Zone of Influence of the Project

European Sites	Distance from Project Site	Hydrological Pathway	Do qualifying habitats occur within the zone of influence of the project.	Does the Project have the potential to interact with Qualifying Species	Do European Sites occur within the Projects Zone of Influence?
Lower River Shannon SAC	3m to the south	There is no hydrological pathway connecting the footprint of the proposed temporary haul route to the Lower River Shannon SAC. The footprint of the project is situated in an area where drainage to the River Shannon has been severed. As described in Section 2.1.4 above the presence of the railway to the south and the public road to the east of the site has resulted in the containment of surface water runoff within the footprint of the project site and the area to the north of the project site. This has	No. No examples of qualifying habitats of the SAC occur within the wider vicinity of the project site.	The project site does not support any habitats that have potential to function as habitat for qualifying species of the SAC. The pond to the north of the project site and to the south of the railway provide suitable habitat for otters. However given the absence of any semi-natural corridors connecting these ponds to the River Shannon and the presence of a busy public road between the project site and the river to the east the likelihood of otters relying on these ponds is considered to be low.	No. In light of the foregoing there are no impact pathways connecting the project to the Lower River Shannon SAC and this European Site will not be negatively influenced by the project.

		<p>lead to the establishment of wetland habitats to the north of the project site. It is noted that the project site is not located on wetland habitat. The habitat at the project site as described in Section 3 above is comprised of dry grassy verge and scrub habitat.</p> <p>All surface water runoff draining from the project site naturally drains to the pond to the north of the project site. surface water is held in this pond. As noted above drainage to groundwater is negligible given the presence of silts and clays of low permeability underlying the pond and the footprint of the project site.</p>		<p>The project will not have the potential to result in any significant disturbance to the population of otters supported by the SAC.</p>	
River Shannon and River Fergus Estuaries SPA	>2km to the south	For the reasons outlined above for the Lower River Shannon SAC there are no hydrological pathways connecting the project to this SPA.	For the reasons outlined above for the Lower River Shannon SAC there are no pathways connecting the project to the wetland habitats of this SPA.	The footprint of the project does not provide suitable habitat for waterbird species supported by the SPA. The ponds to the north and south of the project provide limited suitable habitat for waterbirds. Given the limited extent of this	No. In light of the foregoing there are no impact pathways connecting the project to the River Shannon and River Fergus Estuaries SPA and this European Site

				habitat it is not considered to have the potential to support significant numbers of waterbird species. In addition given the short term and temporary nature of the project, any potential for disturbance to low numbers of waterbirds supported by these ponds will be of a short-term nature and will not have the potential to decrease the population or change the distribution of waterbirds supported by the SPA.	will not be negatively influenced by the project.
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Table 5.1 above has examined the potential for the project to be connected to the Lower River Shannon SAC and the River Shannon and River Fergus Estuaries SPA and for the project to result in a negative influence to these European Sites. Given the absence of any impact pathways connecting the project to these European Sites there will be no potential for the project to result in negative influences to them.

Table 5.4 below provides a summary of the screening in line with EU Guidance (2001) Assessment Criteria used to examine the potential of the project to negatively impact upon European Sites. These assessment criteria are used to establish whether the project has the potential to result in likely significant effects to the Lower River Shannon SAC and the River Shannon and River Fergus Estuaries SPA. The examination described in the Screening Matrix below is underpinned by the evaluation provided in Section 5.4 above.

Table 5.4: Screening of Potential Effects to European Sites within the project potential Zone of Impact

Assessment Criteria	
<i>Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the European Site by virtue of:</i>	
Size and Scale	The project is of a small and temporary scale..
Land-take	The project will involve the land take of dry neutral grassland and grassy verge. There will be no land take from any European Sites as a result of the proposed project.
Distance from Conservation Sites	The nearest European Sites to the project is the Lower River Shannon SAC located approximately 3m to the south of the project site. the section of the SAC located immediately to the south of the project site is not representative of semi-natural habitat or qualifying habitat of the SAC. Nor is it representative of

or key features of the site	habitat relied upon by qualifying species of the Lower River Shannon SAC or the River Shannon and River Fergus Estuaries SPA. The nearest area of semi-natural habitat occurring within the SAC is to the south of the railway embankment located south of the project site. This area of semi-natural habitat is representative of wetland habitat but has not been identified as supporting any qualifying habitats of the SAC. No qualifying habitats of the SAC have been identified as occurring in the vicinity of the project.
Excavations and Resource requirements	. Excavations will be required within the footprint of the proposed project.
Emissions	Emissions associated with the project have been considered in Section 5.4 above.
Transportation requirements	The project will not result in any perceptible changes to traffic volumes in the area surrounding the project site. The haul route will accommodate .
Duration of construction, operation etc.	The project will be of short-term nature and existing ground cover will be reinstated following the removal of the temporary haul route.
In-Combination Effects	Given the absence of potential impact pathways connecting the project to the Lower River Shannon SAC or the River Shannon and River Fergus Estuaries SPA there will be no potential for the project to combine within other projects or land uses in the surrounding area to result in cumulative negative effects to the Lower River Shannon SAC or the River Shannon and River Fergus Estuaries SPA.
Describe any likely changes to the European Site arising as a result of:	

Reduction of habitat area	The project will not result in the reduction of qualifying habitats of the Lower River Shannon European Sites or any semi-natural habitats occurring within the footprint of these European Sites. The project will not result in a reduction in any habitat relied upon by qualifying species of the Lower River Shannon European Sites.
Disturbance of key species	For reasons outlined in Section 5.4 above the project will not result in disturbance to qualifying species of the Lower River Shannon European Sites.
Habitat or species fragmentation	The project will not result in habitat or species fragmentation.
Reduction in species density	For the reasons outlined in Section 5.4 above the project will not result in a reduction in the density of any qualifying species support by the Lower River Shannon European Sites.
Changes in key indicators of conservation status	In light of the absence of impact pathways connecting the project to the Lower River Shannon European Sites there will be no potential for the project to undermine the attributes and targets of the conservation objectives of the Lower River Shannon European Sites. These attributes and targets represent the key indicators of conservation status of these European Sites.
Describe any likely impacts on the European Site as a whole in terms of:	
Interference with key relationships that define the structure and function of the site	Given the absence of impact pathways between the project site and the Lower River Shannon European Sites there will be no potential for the project to interfere with the key relationships that define the structure and function of the Lower River Shannon European Sites.

<p>Provide indicators of significance as a result of the identification of effects set out above in terms of:</p> <p>Loss Fragmentation Disruption Disturbance Change to key elements of the Site (e.g. water quality etc.)</p>	<p>The project will not result in any:</p> <p>loss of semi-natural habitats, qualifying habitats or wetland habitat utilised by qualifying species of the Lower River Shannon European Sites;</p> <p>fragmentation of the Lower River Shannon European Sites;</p> <p>disruption to the qualifying habitat or species of the Lower River Shannon European Sites due to the absence of a potential impact pathways;</p> <p>disturbance to the qualifying species of the Lower River Shannon European Sites;</p> <p>changes to key elements of these European Sites due to the absence of impact pathways.</p>
<p>Describe from the above the elements of the project or plan or combination of elements, where the above impacts are likely to be significant or where the scale of magnitude of impacts is not known.</p>	
<p>Based upon the above assessment it has been concluded that the proposed project will not have the potential to result in likely significant effects to the conservation status of the Lower River Shannon European Sites.</p>	

6.0 SCREENING CONCLUSION

The proposed project has been screened for its potential to result in likely significant effects to the conservation status of surrounding European Sites. As this project site is located outside the footprint of European Sites, a Source-Pathway-Receiver model was used to identify potential

impact pathways linking the project site to European Sites. The potential impact pathways identified were restricted to hydrological pathways.

Two European Sites, the Lower River Shannon SAC and the River Shannon and River Fergus Estuaries SPA, were identified as occurring in the wider area surrounding the project site. the Lower River Shannon SAC is located immediately to the south of the project site, while the River Shannon and River Fergus Estuaries SPA is located over 2km to the south.

The potential emissions that could be generated by the project have been considered in the screening report and the potential for emission pathways to connect the project to the Lower River Shannon SAC and the River Shannon and River Fergus Estuaries SPA have been examined. This examination has found that these emission pathways will not have the potential to function as impact pathways connecting the project to the Lower River Shannon SAC and the River Shannon and River Fergus Estuaries SPA.

Given the absence of impact pathways between the project and these European Sites there will be no potential for the project to result in likely significant effects to these European Sites and their conservation objectives.

It is noted that a suite of best practice measures will be implemented as part of the project to minimise the impact of the project to the local environment. These measures are detailed in full in the EIA Screening Report that has been prepared for the project and is presented under separate cover. While the implementation of these measures will mitigate the potential for impacts to the local receiving environment, it is noted that such measures have not been relied upon to inform the findings of this screening report and the potential for the project to result in likely significant effects to European Sites.

In light of the findings of this report it is the considered view of the authors of this Screening Report for Appropriate Assessment that it can be concluded by Limerick City & County Council that the project is not likely, alone or in-combination with other plans or projects, to have a significant effect on any European Sites in view of their Conservation Objectives and on the basis of best scientific evidence and there is no reasonable scientific doubt as to that conclusion.

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