



Castletroy Greenway  
Castletroy, Co. Limerick

Screening Report for Appropriate  
Assessment

Doherty Environmental Consultants Ltd.

April 2019

## Castletroy Greenway

### Castletroy, Limerick

#### Screening Report for Appropriate Assessment

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## 1.0 INTRODUCTION

Limerick City & County Council have commissioned Doherty Environmental Consultants (DEC) Ltd. to complete a Stage 1 Screening Report for Appropriate Assessment for the development of proposed greenway walking and cycle route at Castletroy, Limerick (see Figure 1.1 for project location).

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 identify the potential for the project to result in likely significant effects to European Sites and to provide information so that the competent authority can determine whether a Stage 2 Appropriate Assessment is required for the project.

### 1.1 LEGISLATIVE CONTEXT

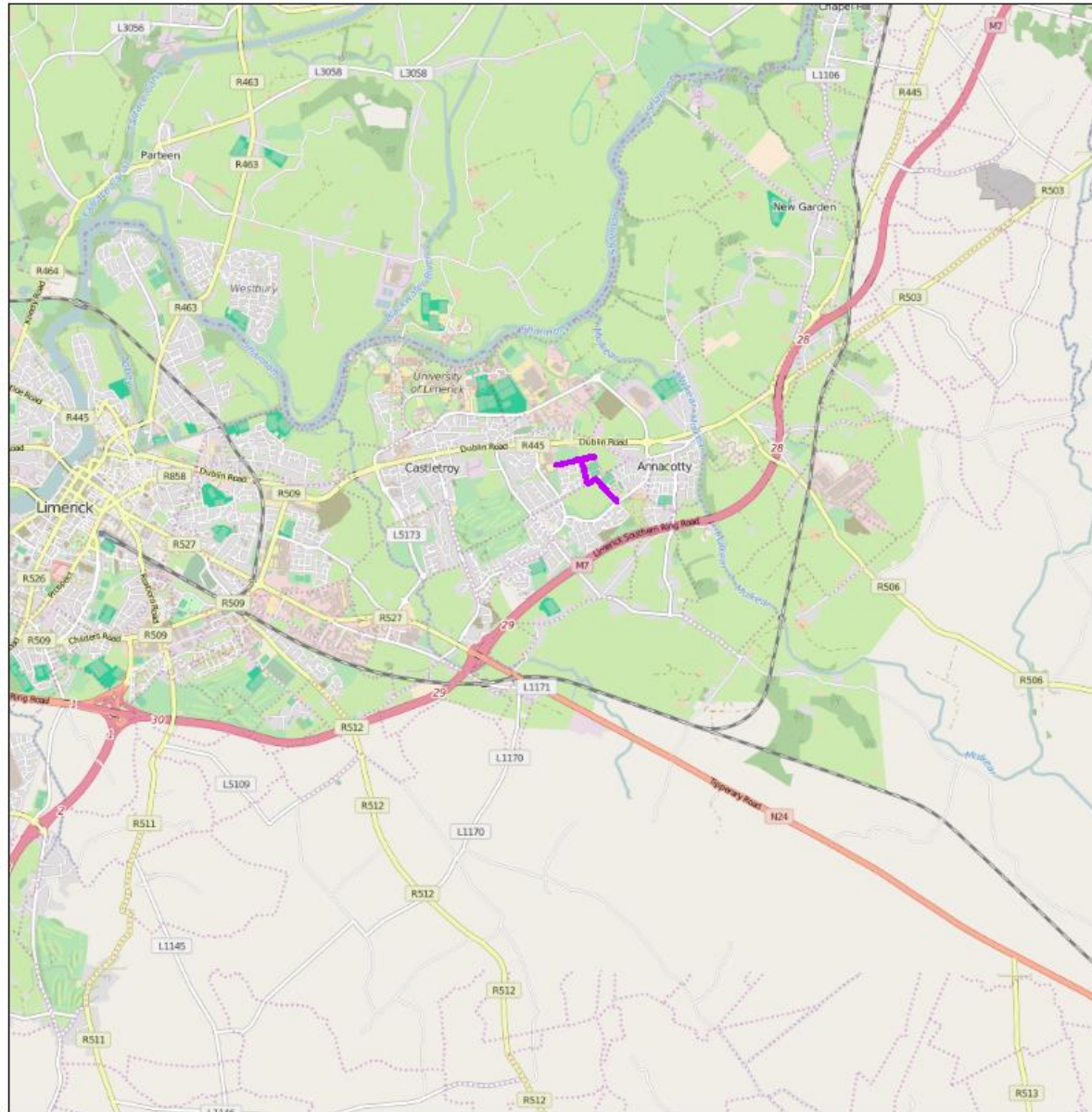
This Screening Report for Appropriate Assessment is being prepared in order to enable the competent authority to comply with Article 6(3) of Council Directive 92/43/EEC (The Habitats Directive). It is prepared to assess whether or not the project alone or in combination with other plans and projects 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. <sup>[1]</sup><sub>[SEP]</sub>

#### 1.1.1 Requirement for an Assessment under Article 6 of the Habitats Directive <sup>[1]</sup><sub>[SEP]</sub>

According to Regulation 42(1) of the European Communities (Birds and Natural Habitats) Regulations 2011 – 2015, 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, <sup>[1]</sup><sub>[SEP]</sub>
- 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. [L]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).



### Castletroy Greenway

Figure 1.1

#### Site Location

 Proposed Greenway

0 0.5 1 2 Km



Drawn By	PD
Date	22/04/2019
Data Source	OSM

## 2.0 SCREENING METHOD

The function of the Screening exercise is to identify whether or not the proposal will have a likely significant effect on European Sites. In this context “likely” refers to the presence of doubt with regard to the absence of significant effects (ECJ case C-127/02) and “significant” means not trivial or inconsequential but an effect that has the potential to undermine the site’s conservation objectives (English Nature, 1999; ECJ case C-127/02 &). In other words any effect that compromises the conservation objectives for the site would constitute a significant effect.

The nature of the likely interactions between the project and the conservation objectives of European Sites will depend upon the sensitivity of the sites qualifying features of interest to potential impacts arising from the project; the current conservation status of the European Sites and its qualifying features of interest; and any likely changes to key environmental indicators (e.g. habitat structure; vegetation community) that underpin the conservation status of the site and its associated qualifying features of interest, in combination with other plans and projects.

This Screening exercise has been undertaken with reference to respective National and European guidance documents: *Appropriate Assessment of Plans and Projects in Ireland (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 and relevant European and National case law. The following guidance documents were also of relevance during this Screening Assessment:

- *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 exercise of a project that has the potential to have likely significant effects on European Sites. The methodology adopted for this Screening exercise 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 likely to be influenced by the project;
3. Screen the project against established assessment criteria to determine if it has the potential to affect European Sites; and
4. Identify other plans or projects that, in combination with the project, have the potential to affect European Sites.

### **3.0 PROJECT DESCRIPTION**

The proposed works will consist of a new 3.5m wide cycleway alongside a new 2.5m wide footpath, enclosed by 1m grass verges, with the main spine extending for approx. 820m linking Castletroy College Road with the Access road to the Gaelscoil. Secondary spines will link to proposed future residential development to the east (approx. 170m in length) and Castletroy Shopping Centre (Town Centre) to the west (approx. 260m). Appropriate access points to the Greenway will be provided along its length. The proposed works also include for the installation of LED public lighting, security fencing where appropriate, tree and shrub planting areas as well as surface water drainage. Accommodation works will be undertaken as required including improvement works and car park alterations as necessitated for Castletroy Gaelscoil.

#### **3.1 SURFACE WATER DRAINAGE**

An existing drainage ditch occurs to the west of the main spine of the proposed greenway. This drainage ditch will be culverted for approximately 170m from the entrance to Castletroy College. A bottomless box culvert will be used to culvert this drainage ditch. The remaining section of the drainage ditch that run parallel to the proposed greenway between approximate chainage 170m to 450m will be retained as existing.

#### **3.2 PLANT & CONSTRUCTION MATERIALS REQUIRED**

The type of plant and machinery required will be typical road construction plant for earthworks and paving, and is likely to include:

- 360 degree 20 tonne Excavators (track machines)
- Rubber tyred Excavators 6t JCB



- 3t Mini Digger
- 30t Dump Trucks
- 6t Dumpers
- 7.5 tonne multi-purpose truck
- 20 tonne and 30 tonne delivery trucks (importation of rock and bitumenous paving materials)
- Teleporter for erection of lighting columns
- Site Vehicles
- Compactor plates
- 6t vibrating Rollers
- 10t rollers
- Paving Machine
- Bitumen Boiler/Hot Box
- Road Planing Machine
- Extruded Kerb Laying Machine
- Road Saws/Con Saws/chain saws
- Compressors,
- Jack Hammers
- Stihl Saws
- Small tools/hand tools
- Traffic Management Signs, Cones & Barriers
- Traffic Lights
- Road Sweeper &
- PPE

All machinery will be inspected and certified to be free of leaks and weeps prior to mobilisation on site.

### **3.3 DURATION OF THE WORKS**

It is estimated that the works will be completed within a 6 month time frame.

### **3.4 CONSTRUCTION COMPOUND**

The construction compound will be located in an area adjacent to the Gaelscoil towards the north of the main spine of the proposed greenway. The indicative location of the construction compound is shown on Figure 3.1. No surface watercourses such as drains or streams are located in the vicinity of the construction compound.

### **3.5 BASELINE ECOLOGY AT THE PROJECT SITE**

#### **3.5.1 Habitats**

The following habitats, as categorised in Fossit (2000) occur at and adjacent to the project site:

Drainage Ditch (FW4). A drainage ditch flows parallel to the proposed greenway along its section parallel to the Castletroy College access road and along the east to west orientated section at the northwest corner of the college. This drainage ditch drains surface water from agricultural fields to the west of the proposed greenway. The drainage ditch is ephemeral and was noted to be dry during a site visit in March 2019. The section of the drainage ditch nearer the Castletroy College Road (i.e. adjacent to Chainage 0m – approximate 200m of the proposed greenway) is mapped by the EPA as the Garraunykkee Stream. However the channel at this location is more representative of an artificial drainage ditch rather than a stream. The drainage ditch feeds the Garraunykkee Stream, which forms part of the Mulkear River catchment. The Garraunykkee Stream is culverted under the Castletroy College Road and is also culverted for large sections of its course downstream to its confluence with the Mulkear River (see Figure 3.2 for culverted sections). The confluence of this stream with the main channel of the Mulkear is located approximately 1.1km downstream from the Castletroy College Road and the southern end of the proposed greenway. The Mulkear River forms part of the Lower River Shannon SAC and is a designated salmonid river. It is also known to support otters and lamprey species and

alluvial woodland, an Annex I habitat listed as qualifying habitat of the Lower River Shannon SAC, also occurs along the Mulkear downstream of the Garraunykee and Mulkear confluence.



**Castletroy Greenway  
Figure 3.1**

**Aerial View of the  
Project Site**

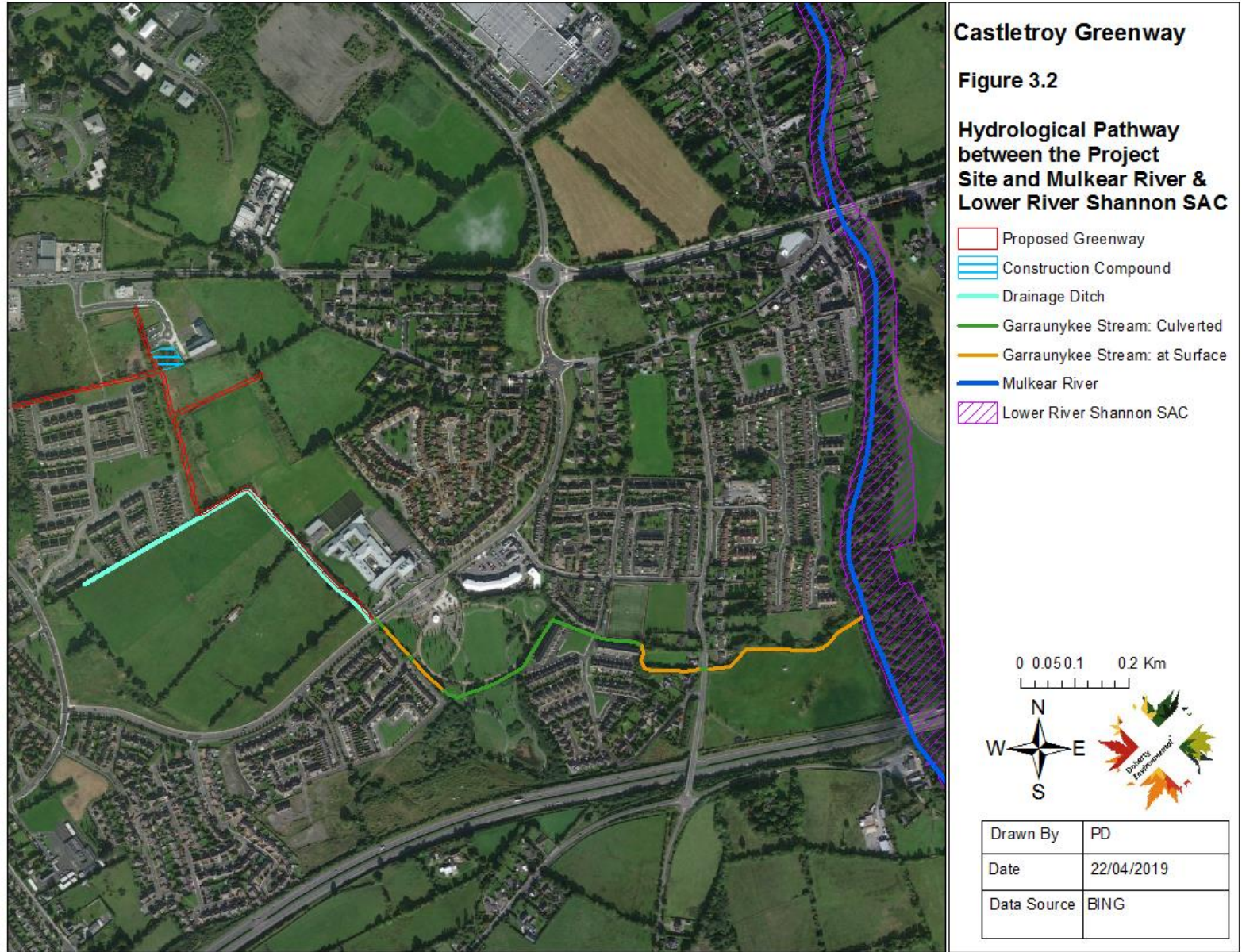
- Proposed Greenway
- Construction Compound

0 0.04 0.08 0.16 Km



Drawn By	PD
Date	22/04/2019
Data Source	BING





The section of the Mulkear River at and downstream of its confluence with the Garraunykée Stream has been assessed at “Good” Water Framework Directive (WFD) status. The lower section of the river downstream of the R445 and the main channel of the River Shannon immediately downstream of its confluence with the Mulkear have not been assigned a water quality status under the WFD. The pathway between the drainage ditch along and adjacent to the project site, the Garraunykée Stream and the Mulkear River and the Lower River Shannon SAC is shown on Figure 3.2.

Building and Artificial Surfaces (BL3): this habitat dominates the land cover to the east of the project site as it passes adjacent to Castletroy College.

Grassy Verge (GS2): grassy verge habitat occurs along the footprint and to the west of the project site as it runs north to south parallel to the existing Castletroy College access road.

Treeline (WL2): An existing treeline, which will be retained, occurs to the west of the proposed greenway. This treeline supports mature ash, oak and sycamore trees along with small hawthorn, blackthorn and willows. A mature beech treeline occurs along the east to west alignment of the proposed greenway between the Alder Homes entrance and the Castletroy Shopping centre entrance.

Scrub (WS2): Scrub habitat occurs along the section of the proposed greenway to the east of Woodhaven. The scrub habitat consists of spreading and maturing willow scrub and gorse scrub.

Dry Neutral Grassland (GS1). Examples of dry neutral grassland occur along the section of the proposed greenway to the east of Woodhaven.

### **3.5.2 Fauna**

During a field visit to the proposed greenway site in March 2019 no signs of breeding or resting places for protected ground dwelling mammals such as badgers or otters were noted. Bat species were observed and recorded foraging along the existing treeline at the northwest corner of the Castletroy College playing pitches. At least four Soprano pipistrelle were observed foraging at this location in late March. Common pipistrelle and Soprano pipistrelle

were also recorded foraging at lower activity levels within the grassland and scrub habitat to the east of Woodhaven.

### **3.6 IS THE PROJECT DIRECTLY CONNECTED WITH OR NECESSARY FOR THE CONSERVATION MANAGEMENT OF EUROPEAN SITES**

Given the description of the proposed project in Section 3.1 above it is clear that the project is not directly connected with or necessary for the management of any European Sites.

### **4.0 IDENTIFY EUROPEAN SITES LIKELY TO BE INFLUENCED BY THE PROJECT**

Current guidance on undertaking EU Habitats Directive Article 6 Assessments advises that all European Sites occurring within a 15km radius of a project site should be included within a Screening Assessment (Scott Wilson et al., 2006; DOEHLG, 2010). The guidelines go on to state that for certain projects this distance could be much less than 15km, and in some cases less than 100m, but this must be evaluated on a case-by-case basis 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.

Given that the footprint of the proposed greenway will be small in scale and will be restricted to a small area within the Mulkear River catchment, it is considered that only those European Sites occurring downstream of the project site are likely to occur in its zone of influence.

Two European Site occur downstream of the project site. These are the Lower River Shannon SAC and the River Shannon and River Fergus Estuaries SPA. All other European Sites are located at a remote distance from the project site (see Figure 4.1 and figure 4.2, the closest being over 10km from the project site) and are not connected to the project site via any impact pathways. The distance between the project site and the absence of impact pathways connecting the project site to these other European Sites ensures that they are located outside the zone of influence of the project.

Therefore the remainder of this Screening focuses on assessment the potential for the project to result in likely significant effects to the Lower River Shannon SAC and the River Shannon and River Fergus Estuaries SPA.

## 4.1 SHANNON EUROPEAN SITES FEATURES OF INTEREST

### 4.1.1 Lower River Shannon SAC

The qualifying features of interest of the Lower River Shannon SAC are listed in Table 4.1 below. In Table 4.1 these features of interest are grouped into broad habitat classifications and a comment on their occurrence within the Shannon Estuary is also provided. An assessment is also provided to identify those features of interest that occur within the zone of influence of the project.

**Table 4.1: Qualifying Features Of Interest of the Lower River Shannon SAC**

Qualifying feature of interest	Broad Habitat Classification and Location	Within the zone of influence of the project
Sandbanks which are slightly covered by sea water all the time [1110]	Marine habitat located in the out Shannon Estuary.	No.
Estuaries [1130]	Marine and coastal habitat located in the outer to inner estuary.	No.
Mudflats and sandflats not covered by seawater at low tide [1140]	Coastal habitat located in the outer to inner estuary.	No.
Coastal lagoons [1150]	Coastal habitat located in the outer and middle estuary.	No.
Large shallow inlets and bays [1160]	Marine habitat located in the outer estuary.	No.
Reefs [1170]	Marine habitat located in the outer	No.



Qualifying feature of interest	Broad Habitat Classification and Location	Within the zone of influence of the project
	estuary.	
Perennial vegetation of stony banks [1220]	Coastal habitat located in the outer estuary.	No.
Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]	Coastal habitat located in the outer estuary.	No.
Salicornia and other annuals colonising mud and sand [1310]	Coastal habitat located in the outer to inner estuary as east as the Maigue estuary.	No.
Atlantic salt meadows ( <i>Glaucopuccinellietalia maritima</i> ) [1330]	Coastal habitat located in the outer to inner estuary as east as the Maigue estuary.	No.
Mediterranean salt meadows ( <i>Juncetalia maritimi</i> ) [1410]	Coastal habitat located in the outer to inner estuary as east as the Maigue estuary.	No.
Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation [3260]	Freshwater and tidal watercourse habitat located along the Park Canal and the inner Shannon Estuary downstream of Limerick City.	No.
<i>Molinia</i> 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	No.

Qualifying feature of interest	Broad Habitat Classification and Location	Within the zone of influence of the project
	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.	Yes. Examples of this habitat occur along the Mulkear River downstream of the project site.
<i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029]	Freshwater species, restricted to the Cloon and Feale River sub-catchments on the northern side of the estuary	No.
<i>Petromyzon marinus</i> (Sea Lamprey) [1095]	Freshwater and tidal sections of the River Shannon.	Yes. This species is known to occur along the Mulkear River.
<i>Lampetra planeri</i> (Brook Lamprey) [1096]	Freshwater and tidal sections of the River Shannon.	Yes. This species is known to occur along the Mulkear River
<i>Lampetra fluviatilis</i> (River Lamprey) [1099]	Freshwater and tidal sections of the River Shannon.	Yes. This species is known to occur along the Mulkear River
<i>Salmo salar</i> (Salmon) [1106]	Freshwater and tidal sections of the River Shannon.	Yes. This species is known to occur along the Mulkear River
<i>Tursiops truncatus</i> (Common Bottlenose Dolphin) [1349]	Restricted to the outer and middle Shannon Estuary.	No.
<i>Lutra lutra</i> (Otter) [1355]	Freshwater and tidal sections of the	Yes. This species is known to occur

Qualifying feature of interest	Broad Habitat Classification and Location	Within the zone of influence of the project
	River Shannon.	along the Mulkear River

#### 4.1.2 River Shannon and River Fergus Estuaries SPA

The special conservation interests of the River Shannon and River Fergus Estuaries SPA are listed in Table 4.2 below.

**Table 4.2: 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)	Greenshank (Tringa)

	[A142]	nebularia) [A164]
Pintail (Anas acuta) [A054]	Knot (Calidris canutus) [A143]	Dunlin (Calidris alpina) [A149]
Black-headed Gull (Chroicocephalus ridibundus) [A179]	Wetland and Waterbirds [A999]	

No suitable habitat for bird species of the SPA occur within or in the wider vicinity of the project. Given the small scale of the project and the distance between the project site and the SPA it is considered that there will be no functional impact pathway linking the project site to this SPA and that the special conservation interests of this SPA lie outside the zone of influence of the project.

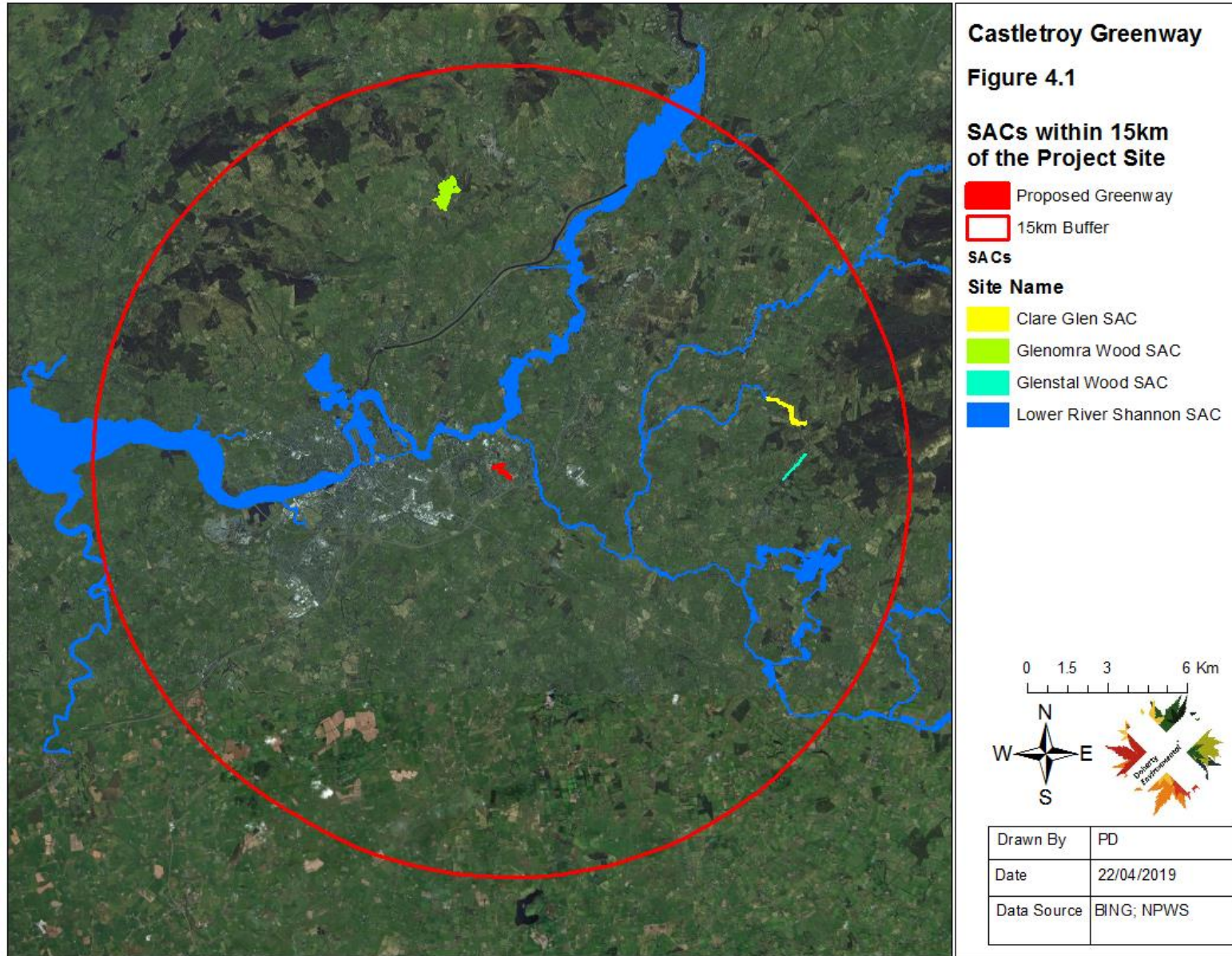
#### 4.1.3 Conservation Objectives

The conservation objectives for the five Annex II qualifying species of this Lower River Shannon SAC that have been identified as occurring within the zone of influence of the project are summarised in Table 4.3 below.

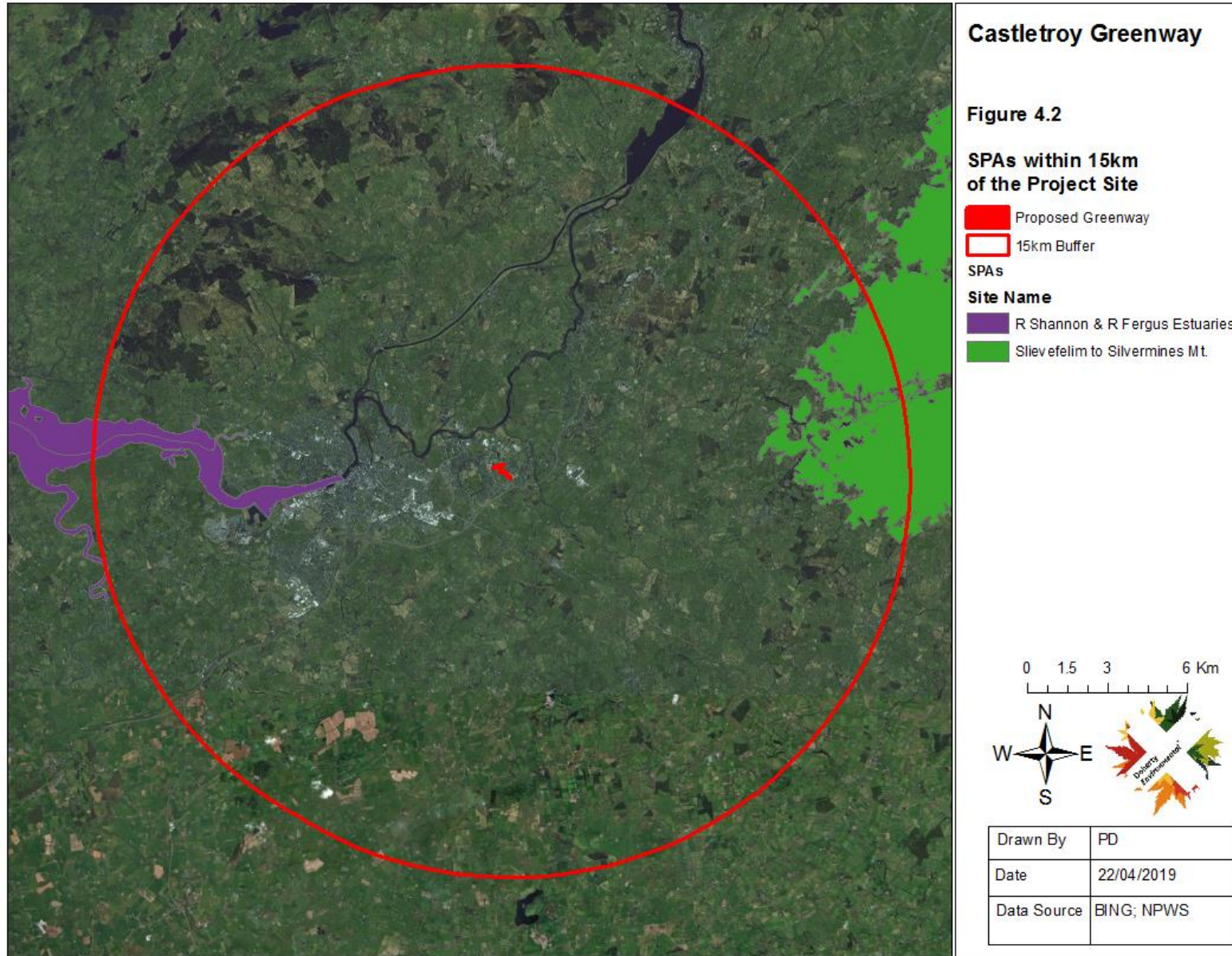
Qualifying features of interest	Summary of Conservation Objectives
Atlantic Salmon	Maintain river accessibility (no artificial barriers);  The size of the stock measured as the “Conservation Limit” is consistently exceeded  Maintain abundance of salmon fry

	<p>No significant decline in out-migrating smolt abundance</p> <p>No decline in the number of spawning beds (redds)</p> <p>Water quality is at least Q4 at all sites</p>
Lamprey Species	<p>Maintain river accessibility (no artificial barriers);</p> <p>Maintain healthy population structure;</p> <p>Maintain healthy density of juveniles;</p> <p>No decline in extent or distribution of spawning beds;</p> <p>Greater than 50% of sampling sites positive for occurrence of lamprey.</p>
Otter	<p>No decline in distribution</p> <p>No significant decline in habitat</p> <p>No significant decline in couch or holt sites</p> <p>No decline in available fish biomass</p>
Alluvial Woodland	<p>Habitat is stable or increasing</p> <p>No decline in habitat distribution</p> <p>Woodland maintained in terms of structure and height</p>

	<p>Vegetation diversity maintained</p> <p>Level of natural regeneration maintained.</p> <p>Number of veteran trees and dead wood maintained</p> <p>Maintenance of the hydrological regime</p> <p>No decline in tree cover</p> <p>Absence of negative indicator species.</p>
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## 5.0 ASSESSMENT OF POTENTIAL FOR LIKELY SIGNIFICANT EFFECTS

Given that the project is not located within or adjoining the Lower River Shannon SAC it will not have the potential to result in direct impacts in the form of physical habitat loss, degradation or disturbance to these European Sites. Thus the assessment for the project's potential to result in likely significant effects to the Lower River Shannon SAC focuses on investigating whether the project will have the potential to result in impacts to this European Site via impact pathways.

A source-pathway-receptor model has been used to establish the potential for the project to result in impacts to the Lower River Shannon SAC via impact pathways. Under such a model the project, as described in Section 3 of this Screening Report, represents the source.

Potential impact pathways relate to potential emissions from the project; the potential for pathways to convey such emissions; and the potential for such emissions to result in negative effects downstream of the project site at the SAC. Given that the project site is located at a remote distance from the nearest point of the Lower River Shannon SAC, the only possible impact pathway that could convey emissions from the project site to this SAC is the hydrological pathway, represented by the drainage ditch and the Garraunykkee Stream.

The receptors represent European Sites and their associated features of interest (i.e. qualifying features of interest of the SAC).

European Sites and their associated features of interest are only likely to be at risk from the project where the project has the potential to result in emissions that have the potential, alone or in-combination with other projects, to undermine the Conservation Objectives of features of interest of the Lower River Shannon SAC.

An assessment of the drainage ditch and Garraunykkee Stream's potential to function as a functional impact pathway is discussed in the following section.

## **5.1 ASSESSMENT OF THE HYDROLOGICAL PATHWAY TO FUNCTION AS AN IMPACT PATHWAY**

During the construction of the proposed greenway the primary contaminants of concern are hydrocarbons, cementitious materials and suspended solids. There is very limited potential for accidental hydrocarbon and cementitious contamination of the drainage ditch and Garraunykée Stream during the works as any required bulk storage of fuels and cement materials will be within the construction compound that will be located over 25m from the drainage ditch occurring along and to the west of the project site. As such the only potential leakage of hydrocarbons along the corridor or works is a single construction vehicle leak i.e. maximum 200 litres. The likelihood of such a leak occurring is not likely given that all machinery will be required to be inspected for leaks and weeps prior to mobilisation on site and will be routinely inspected throughout the construction phase to identify and prevent fuel leakage. As such the project will not present a risk of hydrocarbon contamination of the drainage ditch and Garraunykée Stream.

There will be no potential for cementitious materials to result in pollution of the drainage ditch, Garraunykée Stream or the Mulkear River downstream. All structures required for the culverting of the lower section of the drainage ditch along approximate Chainage 0m to 170m will be pre-cast box culverts. The box culverts will be installed during dry conditions and no cast insitu or wet cement mix will be used during the installation of the culvert. Given the proposed timing of culverting works during dry conditions and the ephemeral nature of the ditch and its drying out during dry conditions, culverting works will be completed in largely dry conditions minimising the potential for the transport of any suspended solids downstream along the Garraunykée River.

Along the remaining section of the proposed greenway that runs parallel to the drainage ditch (i.e. between Chainage 170m and 450m approx.) a buffer strip of 2m will be retained between the drainage ditch and the surface excavations so that any surface water runoff from the excavation footprint flows through the vegetated buffer. This will allow for the entrainment of sediment from the excavation footprint in the event of a rainfall while denuded surfaces are exposed. The surface of the proposed greenway will be removed and the tarmacadam surface will be laid in sections. The excavation and surfacing of the proposed greenway will be undertaken in dry conditions and so that the potential for the discharge of sediment or

proposed surface material in runoff to the drainage ditch or the Garraunykkee Stream is minimised. In addition the duration for which surface sediments are exposed following excavations will be minimised to as short a timeframe as possible to minimise the potential for sediment runoff from the excavation footprint.

Given the small scale of the excavation footprint adjacent to the drainage ditch, the ephemeral nature of the drainage ditch and the short timeframe for which denuded surfaces will be exposed only minor quantities of sediment are likely to be washed from the excavation footprint to the drainage ditch. The levels of sediment discharged to the drainage ditch are likely to settle along the Garraunykkee Stream downstream of the project site and will not result in any perceptible change in the levels of suspended solids occurring along the main channel of the Mulkear downstream of the project site.

As such the potential for a change in water quality downstream within the Lower River Shannon SAC as a result of the construction works will be imperceptible and will not result in significant impacts to the water quality status of the Mulkear River and the Lower River Shannon SAC downstream from the project site.

Given that the operation phase of the project will be used to facilitate pedestrian and cycling there will be no potential for polluted surface water runoff to arise during this phase of the project.

In light of the assessment provided above it is considered that the hydrological pathway between the project site and the Lower River Shannon SAC, will not have the potential to function as an impact pathway that could convey emissions downstream to the Lower River Shannon SAC and result in likely significant effects to the Conservation Objectives of the qualifying features of interest that occur within the zone of influence the project. These Conservation Objectives have been summarised in Table 4.3 above and it is noted that the maintenance of water quality within the Mulkear is a requirement for a number of the Conservation Objectives for lamprey, Atlantic Salmon and otters. Given the assessment of the hydrological pathway and imperceptible effect the project will have on water quality in the Mulkear River there will be no potential for the project to undermine the maintenance of water quality in the Mulkear and the achievement of these Conservation Objectives.

## 5.2 POTENTIAL IN-COMBINATION EFFECTS

Land use management and development in the Castletroy area is provided for by the Local Area Plan (LAP) 2009 – 2015, as extended to 2019. The LAP was screened for Appropriate Assessment and it was found during that screening that the implementation of the plan and the land use development facilitated by it will not result in likely significant effects to European Sites.

A search of the Limerick City and Council Planning Enquiries Portal has been completed to identify any other projects, granted or applied for within the last 5 years, that could combine with the proposed project to result in in-combination effects to the Lower River Shannon SAC and the River Shannon and River Fergus Estuaries SPA. The projects that have been identified during this planning search are listed below and an assessment of the potential for cumulative effects is provided.

Planning Reference No. 181214: This granted planning application consists of a proposal to alter land levels within the proposed project site. The project site for this planning application overlaps with the proposed greenway footprint between approximate Chainage 500m and 700m. A screening for Appropriate Assessment was completed for this application by the Planning Authority and it was found that the proposed alteration to lands at this location will not have the potential, alone or in combination with other projects to result in a likely significant effect to European Sites. It is noted that lands that are subject to this granted planning application and the overlapping section of the proposed greenway are well buffered from the nearest surface water features (i.e. the drainage ditch over 50m to the south) and there is no connection between these lands and the Lower River Shannon SAC or the River Shannon and River Fergus Estuaries SPA.

18526: This project, which has been granted planning permission, consists of a minor alteration to a previously permitted development under planning reference 13/7094. This project involves minor alterations to fencing and will not have the potential to combine with the proposed greenway to result in cumulative negative effects to the Lower River Shannon SAC or the River Shannon and River Fergus Estuaries SPA.

181104: This planning application consists of a proposed residential development comprising 99 no. residential units accessed via an existing entrance onto the Castletroy College road and all ancillary site development works. A Screening for Appropriate Assessment has been completed for the proposed development and has found that this residential development will not have the potential to combine with other plans or projects to result in likely significant effects to European Sites.

### 5.3 SCREENING MATRIX

A Screening Matrix, in line with European Commission (2001) guidelines is provided below in Table 4.2.

**Table 5.1: Screening Matrix for proposed project.**

Brief description of the project or plan	The project and associated activities are described in Section 3 above.
Brief description of the European Sites	The European Sites occurring in the wider surrounding area are identified and briefly described in Section 4 above.
Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the European Sites.	The elements of the project that have been examined for their potential effects to the Lower River Shannon SAC relate to the emission of potentially polluting substances to the adjacent drainage ditch arising from the project activities and their conveyance downstream to the Lower River Shannon SAC. An assessment of the potential for the project to result in pollution to the adjacent drainage ditch and Garraunykee Stream is outlined in Section 5.1 of this report. This assessment has found that the project will not have the potential to result in the emission of hydrocarbons and cementitious materials to the hydrological pathway connecting the project site to the Mulkear River that could result in perturbations to water quality in this watercourse or the Lower River Shannon SAC.

	<p>In addition it has been found that the potential for the project to result in changes to suspended solids in the Mulkear River will be imperceptible and will not have the potential to result in any changes to this water quality parameter within the main channel of the Mulkear River and the Lower River Shannon SAC.</p>
<p>Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the European Sites site by virtue of:</p> <ul style="list-style-type: none"> <li>• size and scale;</li> <li>• land-take;</li> <li>• distance from the Natura 2000 site or key features of the site;</li> <li>• resource requirements (water abstraction etc.);</li> <li>• emissions (disposal to land, water or air);</li> <li>• excavation requirements;</li> <li>• transportation requirements;</li> <li>• duration of construction, operation, decommissioning, etc.;</li> </ul>	<p>The project is representative of a small scale project that involves the provision of a pedestrian and cycle greenway.</p> <p>A small area of land take dominated by grassland habitat will be required to facilitate the project. The land take associated with the project will be remote from any European Sites. There will be no land take within any European Sites.</p> <p>The project is located at a remote distance from the nearest European Site, which is the Lower River Shannon SAC. This is located approximately 1.1km downstream from the project site.</p> <p>The project will not require any resources that are associated with or relied upon by a European Site and its associated features of interest.</p> <p>The potential for the project to result in emissions to the Lower River Shannon have been assessed in Section 5 of this report and it has been found that the project will not have the potential to result in likely significant effects to the Conservation Objectives of the Lower River Shannon SAC.</p> <p>The project will not result in any appreciable changes to existing traffic volumes during the upgrade works.</p> <p>The construction works for the project will be</p>

	completed over a short term period of approximately 6 months.
<p>Describe any likely changes to the site arising as a result of:</p> <ul style="list-style-type: none"> <li>• reduction of habitat area;</li> <li>• disturbance to key species;</li> <li>• habitat or species fragmentation;</li> <li>• reduction in species density;</li> <li>• changes in key indicators of conservation value</li> <li>• (water quality etc.);</li> <li>• climate change.</li> </ul>	<p>The project will not have the potential to result in the reduction in any habitat area within the Lower River Shannon SAC and will not have the potential to result in any habitat area upon which mobile species of these European Sites rely.</p> <p>The project will not have the potential to result in disturbance to qualifying species of the SAC that could undermine the Conservation Objectives for these species.</p> <p>The project will not result in any species or habitat fragmentation within the Lower River Shannon SAC.</p> <p>The project will not have the potential to result in any changes in water quality within the Lower River Shannon SAC.</p> <p>The project will have the potential for positive implications for climate change by providing infrastructure for alternative modes of transport such as walking and cycling that do not rely on vehicular transportation.</p>
<p>Describe any likely impacts on the European Sites site as a whole in terms of:</p> <p>interference with the key relationships that define the structure of the site;</p> <p>interference with key relationships that define the function of the site</p>	<p>For reasons set out above the project will not have the potential to interfere with key relationships that define the structure and function of European Sites.</p>
<p>Provide indicators of significance as a result of the identification of effects set out above in terms of:</p> <ul style="list-style-type: none"> <li>• loss;</li> <li>• fragmentation;</li> <li>• disruption;</li> <li>• disturbance;</li> <li>• change to key elements of the site (e.g. water quality etc.).</li> </ul>	<p>For reasons set out above the project will not have the potential to result in such effects to European Sites.</p>

<p>Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is not known.</p>	<p>The project will not have the potential to result in likely significant effects to European Sites.</p>
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## 6.0 SCREENING STATEMENT CONCLUSION: FINDING OF NO SIGNIFICANT EFFECTS

During the Screening of the proposed project it was found that two European Sites occur downstream of the project. These European Sites are the Lower River Shannon SAC and the River Shannon and River Fergus Estuaries SPA. The River Shannon and River Fergus Estuaries SPA was screened out at an early stage of this screening due to the significant distance between the project site and this SPA downstream, the estuarine setting of the SPA and the nature of the wetland habitats upon which special conservation interest bird species of the SPA rely.

During the preparation of this Screening Report the hydrological pathway comprised of the drainage ditch along and adjacent to the project site, the Garraunykee Stream was identified as the only pathway connecting the project site to these two European Sites. A key part of this Screening has been the assessment of the potential for the hydrological pathway to function as an impact pathway and convey potential emissions, that may arise as a result of the greenway construction works, downstream to the Lower River Shannon SAC and River Shannon and River Fergus Estuaries SPA. This assessment has found that the potential for the emission for polluting substances to the hydrological pathway will be restricted to small quantities of suspended solids. It is considered that the input of such emissions to the hydrological pathway and the Mulkear River will be degraded, diluted and/or assimilated within the hydrological pathway and the Mulkear such that it will not result in any perceptible change in the concentration of suspended solids within the Mulkear River and the Lower River Shannon SAC.



This Screening Report has found that due to the the absence of a functional impact pathway between the project site and the Lower River Shannon SAC and the River Shannon and River Fergus Estuaries SPA there will be no potential for the proposed upgrade works to result in likely significant effects to the Conservation Objectives of these 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 and 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 practice and there is no reasonable scientific doubt as to that conclusion.

## 7.0 REFERENCES

Department of the Environment Heritage and Local Government (DEHLG) (2008) Circular letter SEA 1/08 & NPWS 1/08.

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

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