MOTT MACDONALD

Park Bridge and Associated Works

Screening for Appropriate Assessment

13 December 2019

Limerick City and County Council

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Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description
B	13/12/2019	E. Johnston/ A. Sands	R. Mansfield	B Williams	Part 8 issue.

Document reference: 229100314 | 010 | B

Information class: Standard

Contents

1 Introduction

1.1 Context

Limerick County Council have appointed Mott MacDonald to undertake repairs to the existing Park Bridge in Limerick, and the construction of a new bridge over the canal adjacent to the existing rail bridge, which will accommodate the pedestrianisation of the existing Park Bridge. The aim of the works is to improve the pedestrian, cyclist, and vehicle crossing facilities of the canal.

Further information on the proposed works is provided in section 2.

1.2 Requirement for Appropriate Assessment

Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive) requires that where a plan or project is likely to have a significant effect on a European Site, while not directly connected with or necessary to the nature conservation management of the site, it will be subject to 'Appropriate Assessment' to identify any implications for the European site in view of the site's Conservation Objectives. Specifically, Article 6(3) of the Habitats Directive states:

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.

The Project is not associated with the 'management' of a European Site having regard to Article 6 of the Habitats Directive. Therefore, the Project is not directly connected with or necessary to the management of any European Site and must undergo screening for Appropriate Assessment in accordance with Regulation 42(1) of the European Communities (Birds and Natural Habitats) Regulations 2011.

This report has been prepared is to assist Limerick County Council in their statutory requirement to carry out a Screening for Appropriate Assessment.

This report has been prepared in accordance with the following European Commission and national guidance:

- European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), as amended;
- DEHLG (December 2009, revised February 2010) Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities;
- EC (2001) Assessment of plans and projects significantly affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC;
- DEHLG (2009) Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities (Revised 2010).

- EC (2018) ‘Managing Natura 2000 sites. The provisions of Article 6 of the ‘Habitats’ Directive 92/43/EEC’ Commission Notice C (2018) 7621.

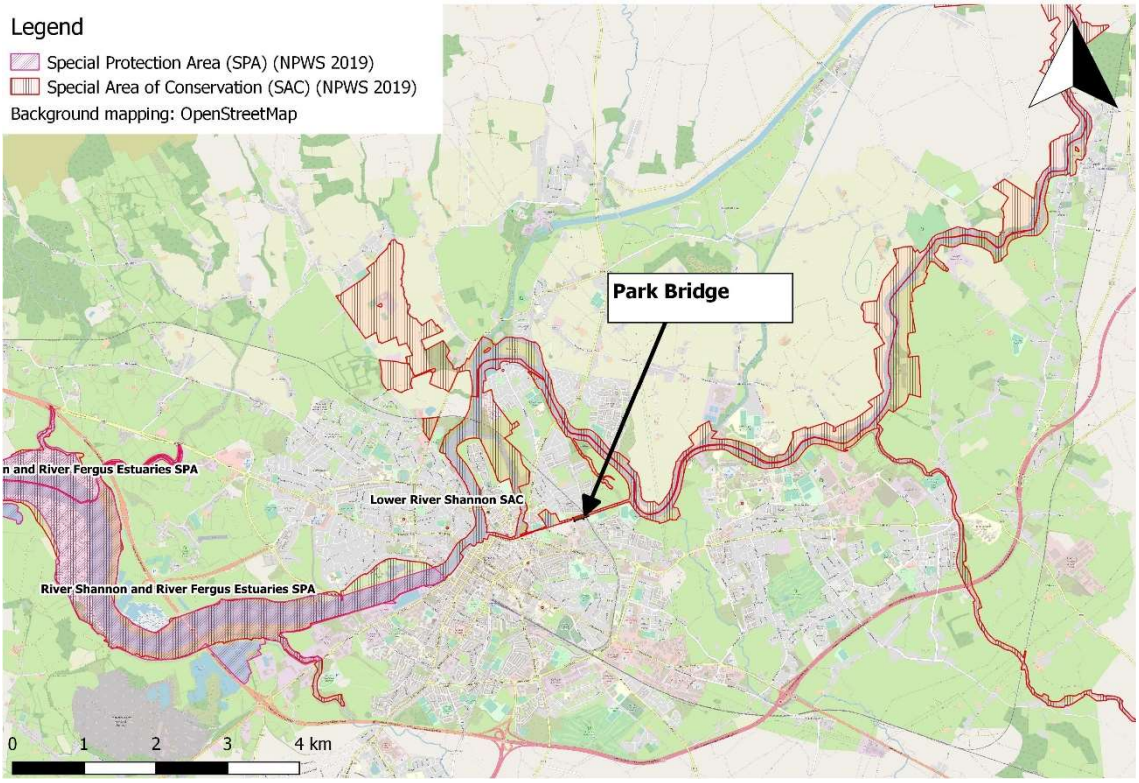
2 Project Description

2.1 Project Location

Park Bridge is a single span masonry arch bridge which carries a local road over Park Canal in Limerick City. A new bridge is proposed to be constructed approximately 140m upstream of the existing bridge and will be situated parallel to the existing railway bridge crossing of the canal.

The proposed works are located within the Lower River Shannon SAC (002165). The location is detailed in Figure 1.

Figure 1: Location of Park Bridge



2.1.1 Source-Pathway-Receptor Connectivity to European Sites

The source-pathway-receptor connectivity between European Sites and the proposed new canal crossing and repair works to the existing Park Bridge was investigated using GIS software, and through examination of aerial photography to determine likely pathways of connection including ecological corridors and stepping stones.

Any European Sites identified to have a viable source-pathway-receptor connection to the proposed works were then examined further to determine the potential for significant effects.

- Park bridge is within the Lower River Shannon SAC (002165). As the works will take place within the boundary of the SAC a source-pathway-receptor link to the SAC is identified.

- The River Shannon and River Fergus Estuaries SPA is located approximately 2km to the west of the proposed works. There will be no direct effects on the SPA from the proposed canal crossing and associated road works. The canal connects to the River Shannon, which flows in to the SPA. Hydrological connectivity is present between the canal and the SPA via the River Shannon. However, given the distance between the SPA combined with the scale of the proposed works, it is assessed that there is little scope for the works to affect the wetland birds and wetland habitats of the SPA indirectly through water pollution.
  The potential for ecological connectivity between the canal and the SPA was assessed. Whooper swan, a qualifying interest of the SPA occasionally use the canal. However, given that the canal is several kilometres outside of the SPA, is not within the boundary of the site, and is not an essential habitat for the maintenance of the population associated with the SPA, it is assessed that there is no viable ecological connectivity to the SPA.
- No viable source pathway receptor links were identified to any other European sites.

2.1.1.1 Characteristics of the Lower River Shannon SAC

The Source-Pathway-Receptor assessment has determined that the Lower River Shannon SAC is within the zone of impact of the proposed works. The potential for the proposed works to impact the qualifying interests of the SAC is discussed further in Section 3 of this report. The characteristics of the SAC are described hereunder.

The site synopsis[1] describes the Lower River Shannon SAC (002165) as follows:

"*This very large site stretches along the Shannon valley from Killaloe in Co. Clare to Loop Head/ Kerry Head, a distance of some 120 km. The site thus encompasses the Shannon, Feale, Mulkear and Fergus estuaries, the freshwater lower reaches of the River Shannon (between Killaloe and Limerick), the freshwater stretches of much of the Feale and Mulkear catchments and the marine area between Loop Head and Kerry Head. Rivers within the sub-catchment of the Feale include the Galey, Smearlagh, Oolagh, Allaughaun, Owveg, Clydagh, Caher, Breanagh and Glenacarney. Rivers within the sub-catchment of the Mulkear include the Killeenagarriff, Annagh, Newport, the Dead River, the Bilboa, Glashacloonaraveela, Gortnageragh and Cahernahallia.*"

The qualifying interests for which the Lower River Shannon SAC is designated for are presented below in Table 1.

Table 1: Lower River Shannon SAC (002165)

Qualifying Interests (* Indicates priority habitats)

Annex I Habitats	Conservation Objectives
Sandbanks which are slightly covered by sea water all the time [1110]	To maintain the favourable conservation condition of Sandbanks which are slightly covered by sea water all the time in the Lower River Shannon SAC
Estuaries [1130]	To maintain the favourable conservation condition of Estuaries in the Lower River Shannon SAC
Mudflats and sandflats not covered by seawater at low tide [1140]	To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in the Lower River Shannon SAC
Coastal lagoons [1150]	To restore the favourable conservation condition of Coastal lagoons in the Lower River Shannon SAC

[1] Site Synopsis Lower River Shannon SAC Rev 13 Doc (Version Date: 16.12.2013)

Qualifying Interests (* Indicates priority habitats)	
Large shallow inlets and bays [1160]	To maintain the favourable conservation condition of Large shallow inlets and bays in the Lower River Shannon SAC
Reefs [1170]	To maintain the favourable conservation condition of Reefs in the Lower River Shannon SAC
Perennial vegetation of stony banks [1220]	To maintain the favourable conservation condition of Perennial vegetation of stony banks in the Lower River Shannon SAC
Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]	To maintain the favourable conservation condition of Vegetated sea cliffs in the Lower River Shannon SAC
Salicornia and other annuals colonising mud and sand [1310]	To maintain the favourable conservation condition of Salicornia and other annuals colonizing mud and sand in the Lower River Shannon SAC
Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) [1330]	To restore the favourable conservation condition of Atlantic salt meadows (*Glauco - Puccinellietalia maritimae*) in the Lower River Shannon SAC
Mediterranean salt meadows (*Juncetalia maritimi*) [1410]	To restore the favourable conservation condition of Mediterranean salt meadows (Juncetalia maritimi) in the Lower River Shannon SAC
Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation [3260]	To maintain the favourable conservation condition of Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho - Batrachion vegetation in the Lower River Shannon SAC
Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) [6410]	To maintain the favourable conservation condition of Molinia meadows on calcareous, peaty or clayey - silt laden soils (*Molinion caeruleae*) in the Lower River Shannon SAC
Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*) [91E0]	To restore the favourable conservation condition of Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno - Padion, Alnion incanae, Salicion albae*) in the Lower River Shannon SAC
Annex II Species	
Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]	To restore the favourable conservation condition of Freshwater Pearl Mussel in the Lower River Shannon SAC
Petromyzon marinus (Sea Lamprey) [1095]	To restore the favourable conservation condition of Sea Lamprey in the Lower River Shannon SAC
Lampetra planeri (Brook Lamprey) [1096]	To maintain the favourable conservation condition of Brook Lamprey in the Lower River Shannon SAC
Lampetra fluviatilis (River Lamprey) [1099]	To maintain the favourable conservation condition of River Lamprey in the Lower River Shannon SAC,
Salmo salar (Salmon) [1106]	To restore the favourable conservation condition of Salmon in the Lower River Shannon SAC
Tursiops truncatus (Common Bottlenose Dolphin) [1349]	To maintain the favourable conservation condition of Bottlenose Dolphin in the Lower River Shannon SAC
Lutra lutra (Otter) [1355]	To restore the favourable conservation condition of Otter in the Lower River Shannon SAC

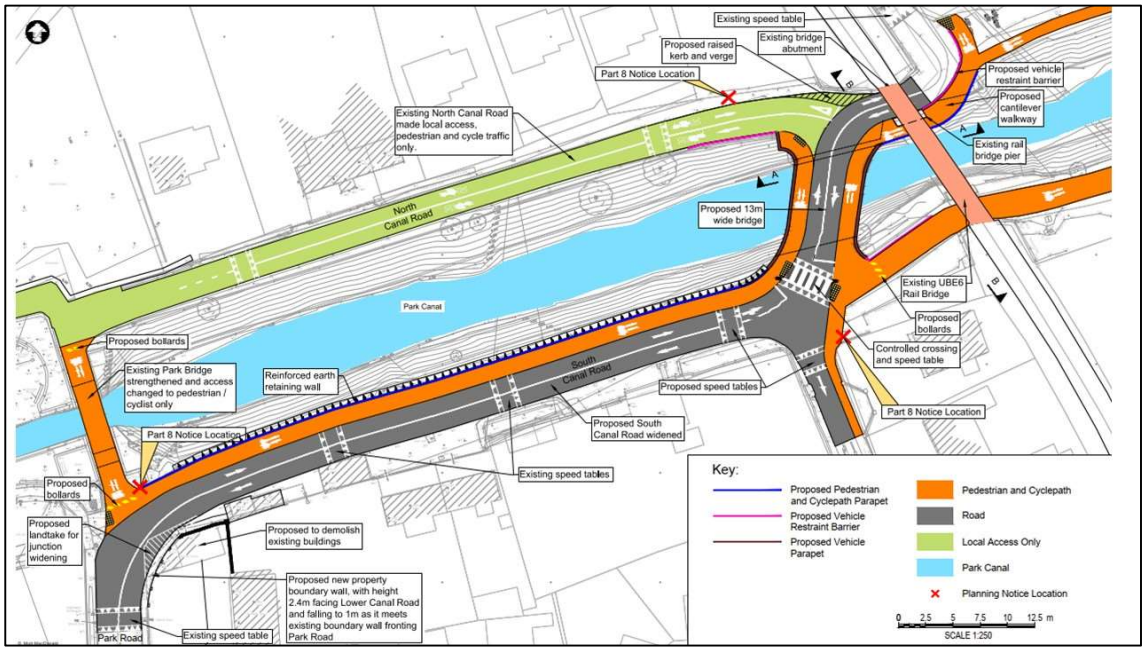
2.2 Project Overview

It is proposed to construct a new bridge approximately 140m to the east of Park Bridge, adjacent to the existing railway bridge. The south end of the Lower Park Road on the north canal bank, where it passes under the rail bridge will be connected by the new bridge to the junction at the east end of the south canal road. The north canal road will be maintained as a pedestrian and cycleway with local access for residents. The south junction will be widened to accommodate traffic travelling from the south canal road towards Rhebogue Road.

The existing Park Bridge will be closed to vehicular traffic and retained as a pedestrian and cycle crossing for the park.

The new bridge will consist of reinforced concrete abutments supported on piles on each canal bank. The bridge will have a skew span of 17.6m which will maintain the existing navigable canal width and provide a 2m cycle/pedestrian towpath on the south bank of the canal. The deck width will be 13m which is enough to accommodate two lanes of highway traffic, a pedestrian footway to the west side and a combined pedestrian/cycleway raised verge to the east side of the deck. The approaches will be a combination of unreinforced and reinforced earth embankments. An additional towpath will be built on the north abutment.

Figure 2: Proposed Layout



Source: Snapshot of Drawing MMD-229100314-S-DR-00-XX-1045

2.2.1 Construction Methodology

Site access and compound

The bridge itself will be accessed using the existing road. All works will be carried out from road level.

The works will require lane closures and traffic management to facilitate the works. The works will be carried out over a 4-5-month period. The road will be closed to traffic to facilitate the piling works, and traffic management put in place throughout. The exact location of the site compound will be agreed with Limerick City and County Council and will be in accordance with planning conditions. The compound however will be located a minimum of 50m from all watercourses / drains. The truck wash-down facility will be located within a dedicated area within the site compound.

Diversion of services (Eir, ESB and Irish Water) will be required to accommodate the works. This will be carried out by or under the supervision of the individual service providers. A small shed will require removal to accommodate road widening. A new boundary wall and garden landscaping will be completed in association with the shed removal.

Construction of new bridge

All works will be carried out during daylight hours.

A works area will firstly be established by sheet piling along the canal bank for approximately 5m upstream and 5m downstream from the footprint of the proposed bridge. The sheet piles will isolate the works area and prevent the release of emissions into the canal. A hardstanding area for the piling rig will be set up at road level behind the existing northern and southern banks of the canal. Trees within the footprint of the works will be cut back to stump level. Sheet piles will then be installed flush within the canal bank. The piling works will be carried out from the banks. The line of the piles will not extend beyond the edge of the canal banks. There is no requirement for instream works.

Following the installation of the piles the tree stumps and roots will be excavated. The canal banks behind the sheet piled area will then be excavated to accommodate the construction of the new towpaths and bridge abutments. Given the height and slope of the canal banks it is unlikely that there will be any groundwater pumping required. Should the need arise, the discharge of groundwater to the canal will be in accordance with IFI *Guidelines on protection of Fisheries During Construction Works in and Adjacent to Waters (2016)* such that it is treated prior to entering any watercourses. Any surplus material which is excavated and not suitable for reuse on-site will be disposed of in accordance with waste legislation.

Piles for the abutment will then be constructed behind the sheet piles. A temporary weekend road closure to the Lower Park Road will be put in place to accommodate the works.

Reinforcement and formwork for the abutments and wingwalls will then be erected. The abutments and wingwalls will be cast in situ. Concrete will be delivered to site by truck. Any washing out of the truck will take place within a designated impermeable bund within the site compound. The concrete will be allowed to fully cure, and shutters removed. The abutments and wingwalls will then be backfilled with granular material.

Temporary decking will be erected spanning the abutments. Formwork and reinforcement for the decking will be constructed. The deck of the bridge will then be cast in situ, and steel parapets installed. Following the construction of the parapets the deck will be waterproofed. This will be spray applied and, as it binds to the deck on contact, there will be no run-off. The waterproofing

will be within the confines of the parapet edge beams and no spraying is required outside of the deck over the canal. Following the waterproofing the temporary decking will be removed. An earth embankment will be installed to tie in the new bridge and existing road.

Construction of the towpaths, walkways, and cycle paths

The sheet piles will be cut down to the towpath level, and the towpaths installed. Trenches will be excavated on the south canal bank and the precast concrete crib wall footings will be installed. Modular crib walls will be erected along the cycle paths and where the road will then be widened. The cribwall structures will then be backfilled along with the retained area. Along the southern canal bank the existing road will be widened.

The south lane of the existing carriageway adjacent to the rail bridge will be excavated. Cantilever walkway foundations will be cast within the existing roadway and backfilled to the reinstated road level. Steel beams will be connected to the buried foundations and cantilever cycle path decking will be constructed adjacent to the north railway bridge. The embankment adjacent to the road to the northeast of the proposed bridge will be excavated. Precast concrete foundations will then be installed along with a modular crib retaining wall. The wall will be backfilled with 6N granular material. Flexible surfacing will be installed to all walkway paths and to the cycle paths. Cycleway barriers will also be installed along all cycle paths.

Excavation works will be undertaken along the south lane of the existing carriageway adjacent to underbridge UBE6. Cast concrete foundations will be installed within the excavated carriageway and will be infilled to the resisted road level. Steel beams will be installed connecting the buried walkway foundations and the erect cantilever cycle path decking adjacent to underbridge UBE6 north pier.

Reinstatement and finishing

The carriageway along the north bank, and the bridge deck will be surfaced, and new road markings painted. Additional speed restriction bumps will be added to existing roads, along with vehicle restraint barriers and road signage. The traffic lights at Park Bridge will be removed, and traffic bollards positioned in place. The exposed fasciae of the crib walls will be seeded. Pre-seeded erosion matting will be installed in areas where vegetation was removed during the works.

Temporary decking and sheeting will be placed over the canal between the lock walls under Park Bridge. Steel replacement beams will be erected to Park Bridge. The existing beams will be shot-blasted and repainted. The temporary decking will then be removed.

2.3 Operational Phase

The proposed works consist of alterations to the existing Park Bridge, and the addition of a new bridge spanning Park Canal adjacent to the existing railway bridge. The existing Park Bridge will be pedestrian and cyclist only, while the new bridge will carry cars, cyclists and pedestrian over the canal. The design life of the works is 120 years and any further alterations to the bridges will be subject to environmental assessment.

3 Impact Prediction

3.1 Overview

The likely effects of the new bridge over the Park canal on the Lower River Shannon SAC (002165), are assessed hereunder.

The proposed works are anticipated to take place over a 4-5 month period.

The works are small scale in nature. The works will not require any instream works within the canal itself and will be undertaken from the banks. There will be no land take within the SAC.

There are no resource requirements for the proposed works.

Traffic management will be put in place to allow for lane closures, and full road closures, to facilitate the works.

The potential for effects to qualifying interests for which the Lower River Shannon SAC (002165) is designated in relation to physical changes, and to emissions are discussed below in Table 2.

Table 2: Potential for Effects

Feature of Interest	Potential for Effects	Likely Impacts
Sandbanks which are slightly covered by sea water all the time [1110]	Sandbanks have been recorded and mapped as part of the conservation objectives. The habitat occurs only in the western extent of SAC in the mouth of the estuary. The nearest extent of this habitat to the proposed works is located approximately 76km (straight line) from Park Bridge. Given the distance between the proposed works area and the protected habitat, there is no potential for impact.	No likely impact identified
Estuaries [1130]	Estuaries have been mapped as part of the conservation objectives. The closest extent of this habitat to Park Bridge is located approximately 700m from the works. The proposed works will not result in any direct impact to Estuarine habitat. As the works will be isolated by the outer pile wall, emissions as a result of the works will be contained. There will therefore be no impact to Estuaries as a result of the proposed works.	No likely impact identified
Mudflats and sandflats not covered by seawater at low tide [1140]	Mudflats and sandflats have been mapped within the SAC as part of the conservation objectives. The closest extent of the habitat to the proposed works is located approximately 2km to the west of Park bridge.	No likely impact identified

Feature of Interest	Potential for Effects	Likely Impacts
	The proposed works will not result in any direct impact to mud flat and sand flat habitat. Given the distance between Park bridge and the habitat, and as the works will be isolated by the outer pile wall, emissions as a result of the works will be contained. There will therefore be no impact on Mudflats and Sandflats as a result of the proposed works.	
Coastal lagoons [1150]	Coastal lagoons have been mapped as part of the conservation objectives for the site. The closest extent of this habitat to park bridge is located 21km to the west of the works. Given the distance and the isolation of the works area there is no potential for impact on the habitat.	No likely impact identified
Large shallow inlets and bays [1160]	Large shallow inlets and bays have been mapped as part of the conservation objectives. The habitat occurs in the western extent of the SAC. The closest area of shallow inlets and bays to Park bridge is located approximately 60km west of the works. Given the distance and the isolation of the works area there is no potential for impact on the habitat.	No likely impact identified
Reefs [1170]	Reef habitat has been mapped as part of the conservation objectives for the site. The habitat occurs throughout the coastal part of the SAC fringing the coastline. The closest area of reef is located approximately 11.5km to the west of Park bridge. Given the distance and the isolation of the works area there is no potential for impact on the habitat.	No likely impact identified
Perennial vegetation of stony banks [1220]	Perennial vegetation of stony banks is a coastal habitat associated with stony beaches. The habitat has been mapped as part of the conservation objectives. The closest record for this habitat is located approximately 57km to the west of Park Bridge. Given the distance and the isolation of the works area there is no potential for impact on the habitat.	No likely impact identified
Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]	Vegetated sea cliffs have been mapped within the SAC as part of	No likely impact identified

Feature of Interest	Potential for Effects	Likely Impacts
	the conservation objectives. The habitat is associated with the western end of the SAC. The closest extent of this habitat to Park bridge is located approximately 52km from the works. Given the distance and the isolation of the works area there is no potential for impact on the habitat.	
Salicornia and other annuals colonising mud and sand [1310]	Salicornia and other annuals colonising mud and sand were mapped as part of the Saltmarsh Monitoring Project (McCorry and Ryle, 2009). The closest extent of this habitat to Park bridge is located approximately 50km to the west of the works. Given the distance and the isolation of the works area there is no potential for impact on the habitat.	No likely impact identified
Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) [1330]	Atlantic Salt Meadows were mapped as part of the Saltmarsh Monitoring Project (McCorry and Ryle, 2009). The closest extent of this habitat to Park bridge is located approximately 9km to the west of the works. Given the distance and the isolation of the works area there is no potential for impact on the habitat.	No likely impact identified
Mediterranean salt meadows (*Juncetalia maritimi*) [1410]	Mediterranean salt meadows were mapped as part of the Saltmarsh Monitoring Project (McCorry and Ryle, 2009). The closest extent of this habitat to Park bridge is located approximately 9km to the west of the works. Given the distance and the isolation of the works area there is no potential for impact on the habitat.	No likely impact identified
Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation [3260]	Watercourses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation has been mapped within the SAC as part of the conservation objectives supporting document. The mapping is based on a report by Reynolds *et al.* (2006) which recorded opposite leaved pondweed in eight locations along the entire length of the canal including at Park Bridge itself. There were no records at the	No likely impact identified

Feature of Interest	Potential for Effects	Likely Impacts
	location of the proposed new bridge. A follow up survey of the same location by Reynolds (2009) did not record opposite leaved pondweed within the canal. Given the absence of the vegetation from the canal, no impacts are determined. The works will require sheet piling along the banks of the canal. The piles will not extend beyond the edge of the bank. There will be no loss of instream habitat as a result of the construction phase of the proposed works. The piles will cause the works area to be isolated from the canal. As such, emissions will be contained within the works area. There will be no impact to water quality as a result of the works.	
Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*) [6410]	Molina meadows were mapped as part of the Semi Natural Grassland Survey (O'Neill *et al.* 2013). The closest extent of this habitat to Park bridge is located approximately 9km to the north-east of the works. On the basis of distance there is no potential for impact as a result of the works.	No likely impact identified
Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*) [91E0]	Alluvial woodland was mapped as part of the National Survey of Native Woodlands (Perrin *et al.* 2008). The closest extent of this habitat to Park Bridge is located approximately 6km to the north east of the works (hydrological route ca. 9km). Given the distance and the isolation of the works area there is no potential for impact on the habitat.	No likely impact identified
Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]	Freshwater pearl mussel catchments have been mapped as part of the conservation objectives for the SAC. Park Bridge is not located within any freshwater pearl mussel catchments. The nearest freshwater pearl mussel catchment to the park bridge is approximately 34km to the west. There is no downstream hydrological connectivity between the proposed development and the population of pearl mussel. Given the distance and lack of hydrological connectivity, there is no potential for impact.	No likely impact identified

Feature of Interest	Potential for Effects	Likely Impacts
Petromyzon marinus (Sea Lamprey) [1095]	The canal contains a series of lock gates which isolate the canal from the main body of the River Shannon. These lock gates are a barrier to the migration of lamprey and salmon into the canal. In addition, there are no records for any of these species within the canal. There will therefore be no direct impact to lamprey or salmon as a result of the proposed works. The outer layer of piles will serve to isolate the works area and prevent surface water emissions from entering the watercourse. There will therefore be no impact to water quality as a result of the proposed works. There will be no impact to lamprey or salmon or their breeding habitat as a result of the proposed works.	No likely impact identified
Lampetra planeri (Brook Lamprey) [1096]		No likely impact identified
Lampetra fluviatilis (River Lamprey) [1099]		No likely impact identified
Salmo salar (Salmon) [1106]		No likely impact identified
Tursiops truncatus (Common Bottlenose Dolphin) [1349]	Habitat suitable for Bottlenose dolphin has been mapped as part of the conservation objectives for the SAC. Suitable habitat extends upstream as far as Coonagh nature park, Limerick. The closest extent of this habitat is located approximately 6.5km to the west of Park bridge. Given the distance and the isolation of the works area there is no potential for impact on bottle nose dolphin as a result of the proposed works.	No likely impact identified
Lutra lutra (Otter) [1355]	The National Biodiversity Data Centre (NBDC) holds records of otter in the vicinity of Park Bridge. The ecological walkovers found no evidence of otters within the works areas. It is likely however that otters may commute through the canal. The proposed works will be carried out during daylight hours. As such there will be no disturbance to otters in the vicinity. The outer layer of piles will serve to isolate the works area and prevent surface water emissions from entering the watercourse. There is no potential for indirect impacts on otter due to a degradation of their feeding resources. There will be no impact to otter as a result of the proposed works.	No likely impact identified

3.2 Summary of Likely Effects

No potential for significant effects on the qualifying interests of the Lower River Shannon SAC (002165).

3.3 Plans or projects which might act in combination

Article 6(3) of the Habitats Directive requires that:

'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.'

It is therefore required that the potential impacts of the proposed works are considered in combination with any other relevant plans or projects.

Planning Applications

A search of the Limerick City Council planning enquiry system (https:// http://eplan.limerick.ie/searchtypes) was carried out on the 17/04/2019. Finalised applications lodged within the vicinity of Park Bridge within the last 5 years were examined.

Small Scale Developments

A review of the planning website indicated that there are 16 small scale applications for the demolition of, construction of, alterations to and retention of domestic dwellings. These are small scale and temporary in nature and will not result in-combination impacts with the proposed Park Bridge works on the Lower River Shannon SAC (002165).

Large Developments

Revington Land Limited are seeking permission for the development of a large residential development comprising 303 apartments at Park Road, located immediately adjacent to the proposed Park Bridge works. The planning application was lodged to An Bord Pleanála in May 2019, however there was a request from the Bord for further consideration in August 2019. At the time of writing this report, the application had not yet been resubmitted to the Bord. Despite this, due to the close proximity of the residential development to Park Bridge, an assessment for potential in-combination effects was undertaken. The proposed Park Bridge works will be small-scale and temporary in nature and will be entirely isolated from Park Canal. There is no potential for the proposed bridge works to result in any impacts on the Lower River Shannon SAC. There is therefore no potential for the Park Bridge development to result in-combination impacts with the proposed adjacent residential development.

Novelty ICAV are seeking planning permission for a development of an existing partially constructed 7.96 hectares at a site at Singland which is located approximately 1.6km south-east of Park Bridge. The proposed development will include the construction of a mixed use residential, commercial and community development comprising of 245 residential units, 112 duplex units, 123 apartments and 1.12 hectares of public park and associated parking. An Environmental Impact Assessment (EIA) and a Natura Impact Statement (NIS) have been undertaken for the proposed development and accompany the planning application. The proposed residential development will be subject to stringent mitigation measures which will ensure there is no impact to the receiving environment. Considering the distance of the proposed residential development from Park Bridge and the proposed mitigation measures which will be implemented there is no potential for in-combination effects with the development under appraisal in this report.

4 Assessment of Significance

4.1 Summary

No impacts to the Lower River Shannon SAC from the proposed repair works have been determined. There is therefore no potential for significant effects on the conservation objectives of the European Site.

5 Screening Statement

5.1 Summary

The current assessment investigates the potential for significant effects on the qualifying interests of the Lower River Shannon SAC (002165) arising from the proposed works at Park Canal. The assessment considers whether the proposed works, either alone or in combination with other projects or plans, will have a significant effect on the European site.

It is concluded that there is no potential for significant effects on the Lower River Shannon SAC (002165) from the proposed works either alone or in-combination with other plans and/or projects. The findings of this report for screening for Appropriate Assessment are summarised in the Findings of No Significant Effects Matrix in Table 3 and are presented to aid the Competent Authority in their screening assessment.

Table 3: Findings of No Significant Effects Matrix

Name of project or plan	Park Bridge repair works
Name and location of European sites	Park Bridge is located within the Lower River Shannon SAC (002165)
Description of the project or plan	The proposed works comprise the construction of a new bridge spanning Park Canal, located adjacent to the existing rail bridge and alterations to the existing Park Bridge.
Is the project or plan directly connected with or necessary to the management of the site?	No
Are there other projects or plans that together with the project or plan being assessed could affect the site?	No
The assessment of significance of effects	
Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 site.	No likely effects were determined from the proposed repair works.
Explain why these effects are not considered significant	No likely effects were determined therefore there can be no alteration of the conservation condition or objectives of the European Site due to the proposed works.
List of agencies consulted: provide contact name and telephone or e-mail address	None
Response to consultation.	N/A
Data collected to carry out the assessment	
Who carried out the assessment?	Erin Johnston, Ecologist with Mott MacDonald
Sources of data?	Refer to References Section.
Level of assessment?	Desktop study and site survey

6 References

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