NATURA IMPACT STATEMENT ADDENDUM

Response to Request for Further Information

Park Road Bridge, Limerick.

ABP Ref: ABP-322037-25

Our Ref: 177AE Park Road Bridge Limerick

Prepared for: An Bord Pleanála

By Ecology Research and Solutions

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2 INTRODUCTION

This document has been prepared as an addendum to the Natura Impact Statement (NIS) submitted for the proposed works at Park Road Bridge, Limerick (ABP Ref. ABP-322037-25). It has been prepared in response to the Request for Further Information (RFI) issued by An Bord Pleanála.

Each RFI item has been addressed in the format of a stand-alone report section, except in the case of water quality as no further surveying was necessary. This approach was considered appropriate as the issues raised by the Board required the completion of additional ecological surveys and the preparation of new supporting material. Accordingly, each response includes:

- A restatement of the RFI request for clarity;
- A description of the survey methods employed;
- A summary of the results obtained;
- An assessment of potential impacts;
- Proposed avoidance and mitigation measures; and
- Supporting figures and maps where relevant.

This addendum should therefore be read in conjunction with the original NIS. Together, the two documents provide a comprehensive assessment of the potential impacts of the proposed works and the measures to avoid or mitigate any adverse effects on the integrity of European sites.

3 RFI ITEM 1 - POTENTIAL IMPACT ON OTTERS

Request Summarised:

The Development Applications Unit (DAU) has noted that signs of Otter activity have previously been recorded along the Canal Bank. It recommends that a detailed Otter survey is carried out over a distance of 200 m on both sides of the bridge, including within vegetation proposed for removal, to assess potential impacts. The survey report should address vegetation removal, loss of screening, disturbance, and connectivity. If breeding or resting sites are present, a Regulation 54 derogation licence must be obtained from NPWS prior to works commencing.

3.1 METHODOLOGY

Table 1. Survey particulars.

Ecologists	Date	Weather
Rory Dalton, Tadhg Healy and Mick O'Connor	22/07/2025	**Temperature:** 17-19℃ **Rain:** None **Cloud:** 3/8 **Wind**: F2

Otter surveys were carried out following guidelines from both national and EU-level best practise, using information from the NPWS (2009) & (2019), CIEEM (2019), the European Commission (2019) and Bailey and Rochford (2006).

Around the bridge, both banks, the downstream bridge and any emergent rocks were searched for signs of otters, including holts, couches, resting sites, sprainting sites, feeding remains, and commuting routes.

One surveyor was in the water on a kayak surveying for signs of otter activity from within the canal. The other two ecologists present surveyed along the banks, where access would permit.

As there was an ecologist in the water, a larger area than requested was surveyed to err on the side of caution and certainty of otter use in the canal. It covered the length of the canal downstream, approximately 730m and it covered 240 metres upstream.

3.2 RESULTS

There were no signs of otter within the immediate vicinity of the bridge, nor further upstream or downstream. The next bridge west, had far better potential to preserve otter spraint remains as the bridge itself sheltered anything underneath from the elements and the presence of boulders and the bridge itself would be territorial landmark points which an otter typically would utilise to assert ownership of the area. No evidence of otter usage were found here.

The area directly around the bridge appears somewhat unsuitable for otters. The walls of the canal are approximately 5 metres high either side of the bridge. There is no way for otter to pass under the bridge as there is a 3 metres high concrete constriction, with a sluice for water to flow through that is unsuitable for otter passage. If otters were to pass from one side of the bridge to the other, they would have to leave the canal before the walls rise, enter a heavily lit up area that is very busy with pedestrians and their dogs, and cross a busy road. These factors are a strong deterrent for otters.

Otters are crepuscular creatures. Dawn and dusk are times that people go walking and they often do so with dogs. The canal is very active around these times with people and their dogs. This too is a heavy deterrent for otters. Due to the lack of otter activity in the canal in general and especially around the highly unsuitable bridge area there are no potential impacts that could affect otters in the immediate area.

3.3 POTENTIAL IMPACTS

There are no otter potential impacts. The mitigations aimed at other aspects of the local ecology will serve to protect the water quality in the area, which will serve to protect any potential otters downstream that weren't detected during the survey.

3.4 PROPOSED AVOIDANCE AND MITIGATION MEASURES

The mitigations aimed at other aspects of the local ecology will serve to protect the water quality in the area, which will serve to protect any potential otters downstream that weren't detected during the survey.

3.5 SUPPORTING FIGURES AND MAPS

Figure 1. Extent of the area surveyed for otter.

4 RFI ITEM 2 - WATER QUALITY

Request (summarised):

The proposed use of a scaffold crash deck would mitigate against solid debris entering the canal, but would not prevent runoff from freshly poured concrete during curing (including curing water or heavy rainfall before the concrete is sealed). Clarification and additional mitigation are required.

4.1 ENHANCED MITIGATIONS

To address this concern, the following additional measures will be implemented to ensure no cementitious runoff enters the canal during construction of the replacement deck:

1. Containment of Concrete Works
    - All in-situ concrete pours will be undertaken within fully shuttered and sealed formwork, lined with impermeable sheeting to prevent leakage.
    - Curing membranes will be applied immediately after finishing to prevent leachate generation.
2. Rainfall Protection
    - Freshly poured concrete will be covered with waterproof sheeting/tarpaulin during curing.
    - No pours will take place during forecast periods of any rainfall whatsoever.

3. Runoff Capture & Treatment
    - Any residual wash water or curing water will be directed to lined containment areas .
    - Collected water will be disposed of on grass or soil and not thrown into the water
4. Monitoring & Oversight
    - An Ecological Clerk of Works (ECoW) will oversee concrete works adjacent to the canal.
    - pH and turbidity monitoring will be undertaken upstream and downstream to confirm no deterioration in water quality.
5. Emergency Measures
    - Spill kits, neutralising agents (e.g. citric acid), and containment booms will be available for immediate deployment in the event of accidental release.

4.2 Conclusion

With these additional controls, the risk of alkaline runoff from curing concrete entering the canal will be avoided. In combination with the scaffold crash deck for solid and liquid debris capture, the proposed methodology provides comprehensive protection of water quality during the bridge deck replacement.

5 RFI Item 3 - Protected Plant Species

Request (summarised):

It is unclear whether a comprehensive survey for Groenlandia densa was undertaken during the NIS, or at an appropriate time of year. Given that the crash deck supports will be placed within the canal and vegetation clearance may include instream works, it is recommended that a specific survey for G. densa is carried out 20 m upstream and downstream of the bridge. As this species is listed on the Flora Protection Order (2022), if present, a Section 21 licence from NPWS will be required prior to any works.

5.1 Methodology

Table 2. Survey particulars

Ecologists	Date	Weather
Tadhg Healy, Rory Dalton	22/07/2025	**Temperature:** 17-20℃ **Rain:** None **Cloud:** 3/8 **Wind**: F2
Tadhg Healy, Rory Dalton	23/07/2025	**Temperature:** 16-19℃ **Rain:** None **Cloud:** 5/8 **Wind**: F2

On the 22/07/2025 a point sampling survey was attempted. Due to the difficulty with access, things such as overly steep banks and extensive bramble cover it was deemed this was not the best approach from a safety perspective.

As a result of this and conditions with substrate (extremely silty making walking with waders impossible) in the canal, it was decided the best approach would be to survey the canal from a kayak.

The RFI requests that the canal be surveyed 20 m in either direction of the Park Bridge. The kayak was on the water and for the sake of thoroughness the canal was searched for approximately 950 metres to the west, up until the canal meets the Abbey River. To the east the canal was surveyed for approximately 260 m.

Water clarity at the survey site was moderate, with suspended sediment present in the water column. Underwater visibility was approximately 0.5 m, equivalent to a Secchi depth of 0.5 m. The ecologist on the water began the survey at the bridge and surveyed away from the bridge, giving particular attention to areas closest to the bridge. Crossing from side to side in a zig zag motion to cover the entirety of the canal.

5.1.1 Bio-security

After each job the kayak is power washed and left upside down to dry in the storage shed for a minimum of a week, usually much longer. And again, before a new job, it is power-washed.

5.2 RESULTS

No presence of the plant was detected during the survey.

The invasive species *Elodea nuttallii* (Nuttall's waterweed) and *Nymphoides peltata* (Fringed water-lily) were however found in the canal. Both *Nymphoides peltata* (Fringed water-lily) and *Elodea nuttallii* (Nuttall's waterweed) are regulated invasive plants in Ireland. They are listed as Species of Union Concern under the EU Invasive Alien Species Regulation (EU) No. 1143/2014. Irish law also makes it an offence to plant or allow these species to spread in the wild under Section 52(7) of the Wildlife (Amendment) Act 2000. They are both present throughout the areas of canal surveyed.

Elodea nuttallii is known throughout the larger Shannon system and is known to cause issues in places such as Lough Derg. *Nymphoides peltata* isn't as pervasive or as problematic throughput the Shannon system, but nevertheless it is present and if colonies are left unchecked it could become problematic for navigation and native species and biodiversity in general.

5.3 POTENTIAL IMPACTS

Groenlandia densa was not present within 20 metres either side of the bridge. Nor throughout the area of canal surveyed. The bridge has a sluice installed that focuses the flow through a narrow constriction. This deepens the water upstream of the sluice and accelerates the flow rate immediately downstream of the bridge. The plant is known to prefer slow-moving to almost still waters and in general, it prefers clear and shallow water. These habitat preferences are similar to many larger more vigorous plants and in the canal would typically exist in the margins, where *Groenlandia densa* is easily outcompeted. We have been monitoring a population of *Groenlandia densa* west of Limerick City in the Loughmore Canal for the last 8 years and it has become apparent that it is one of the few life forms that actually benefits from light dredging/vegetation removal, as this removes compedator species, and as such *Groenlandia densa* is viewed as a pioneer species. In the Loughmore Canal, it flourishes after channel maintenance has been carried out, growing in dense mats across 40% of the canal, and it becomes outcompeted once the other macrophytes recolonise, particularly the emergent macrophytes, where it disappears to almost undetectable levels, only to reappear in dense mats once the other vegetation has been removed again.

The targeted aquatic plant survey confirmed that *Groenlandia densa* is not present within the works zone. No impacts on this Flora Protection Order (2022) species are therefore predicted.

Two invasive alien species were, however, recorded in abundant, canal-wide distribution:

- *Elodea nuttallii* (Nuttall's Waterweed – Third Schedule species under the European Communities (Birds and Natural Habitats) Regulations 2011).
- *Nymphoides peltata* (Fringed Water-lily).

Both species are already widespread throughout the surveyed canal reach. Accordingly, there is no realistic risk of further spread within the canal arising from the proposed works. The primary risk is the transfer of fragments or propagules off-site via machinery, materials, or personnel.

5.4 INVASIVE MITIGATIONS (BIOSECURITY-OFF SITE SPREAD PREVENTION)

5.4.1 Pre-works biosecurity briefing

- All contractors will be briefed on invasive species risks and the requirement to prevent transfer off-site.

5.4.2 Equipment cleaning protocols

- All machinery, plant, tools, and temporary works materials (e.g. crash deck components, pumps, hoses) will be inspected and cleaned before leaving the site.
- Cleaning will follow the "Check, Clean, Dry" protocol recommended by Inland Fisheries Ireland (IFI) and NPWS.

5.4.3 Waste management

- Any removed vegetation, sediment, or contaminated material will be contained and transported to a licensed waste facility.
- Stockpiling or composting on site will be prohibited.

5.4.4 Water management

- Any wash water from equipment will be collected in lined containment areas/tanks and disposed of appropriately, not discharged to drains or watercourses.

5.4.5 Verification

- The Ecological Clerk of Works (ECoW) will check and sign off all biosecurity procedures during high-risk phases.

5.5 SUPPORTING FIGURES AND MAPS

Figure 2. Map of survey effort.

Figure 3. The canal with ecologist on a kayak.

Figure 4. Fast flowing waters exiting the sluice.

6 RF ITEM 4 - BATS (LESSER HORSESHOE AND OTHER SPECIES)

Request (summarised):

The Department highlighted that a Lesser Horseshoe roost is located west of the bridge, with the canal serving as a commuting corridor. The removal of vegetation and increased light spill from streetlamps or construction lighting could reduce corridor quality. A survey and assessment of bat use of the canal is required, particularly Lesser Horseshoes, with evaluation of vegetation removal, increased lighting, and overnight construction lighting. Mitigation for the high light-sensitivity of Lesser Horseshoes should be proposed, ensuring temporal continuity of the corridor while replacement planting matures.

6.1 METHODOLOGY

Table 3. Survey particulars.

Ecologists	Date	Time	Weather
Tadhg Healy, Mick O'Connor and Rory Dalton	22/07/2025	The survey began an hour before dusk, and continued until 2 hours after.	**Temperature:** Low 14°C **Rain:** None **Cloud:** 3/8 **Wind**: F2

An emergence and activity survey was carried out following best practise guidelines outlined by the NPWS and the Bat Conservation Trust (Collins, 2023; Lundy & Aughney, 2012; NPWS, 2013).

A Pixfra Arc A613 was mounted on a tripod and aimed at the bridge from the paved platform to the south of the bridge, from approximately 10 metres away. This was monitored by one ecologist.

The two other ecologists conducted transect surveys along the canal corridors at the same time. They walked the canal with a Bat Box Duet to monitor activity along the canal. Specifically trying to detect lesser horseshoe bats but recoding all other species encountered.

A Wildlife Acoustics Song Meter Mini 2 AA static bat detector was deployed on the same evening. It was left in situ for a week.

6.2 RESULTS

No bats were observed emerging from any structures within the bridge.

As can be seen in table 4, the same four species were encountered during the different survey methods deployed by the team.

No lesser horseshoe bats were encountered during the surveys.

Table 4 The same species were encountered during the transects, during the emergence survey and on the static. The number of passes is the average number of passes per night recorded on the static detector.

Bat Species	Bat Passes
Common pipistrelle *(pipistrellus pipistrellus)*	45
Soprano pipistrelle (*Pipistrellus pygmaeus*)	40
Leisler's bat (*Nyctalus leisleri*)	54
Daubenton's bat (*Myotis daubentoniid*)	10

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6.3 POTENTIAL IMPACTS

Three of the species (common and soprano pipistrelles and leisler's bat) are known to be generalist species, who can tolerate lit up areas and even use them to their advantage, hunting on insects that are attracted to the lights. They would be the typical species one would expect to encounter in an urban environment devoid of large areas of woodlands. The area isn't overly lit up at night and the areas under tree cover are ideal habitat for daubenton's bat. All four species were seen to be flying and hunting around the bridge.

There were no lesser horseshoe bats recorded during the surveys. There is a known roost to the west, but none were recorded in the section of canal between park bridge and the bridge to the west, or anywhere else surveyed.

The RFI referred to potential light spill from the removal of vegetation around the bridge interfering with a potential flight corridor for the lesser horseshoe and other bat species. With particular attention being made to the street light just north of the bridge. That particular street light is orientated so as that it is aimed to the west. Seemingly to illuminate the entrance to the canal walk and the communal public seating area that is just inside the canal walk entrance. Between the street light and the canal on this west side there is minimal vegetation. Just a few small willows and ivy on the canal walls and the bridge itself. This is the area where the majority of light spill from this street light is already taking place. The first thirty metres on both sides of the bank heading west are devoid of vegetation that would serve to act as protective cover for lesser horseshoe and other bat species, subjecting the canal to far more light spill than is possible from minor vegetation clearance.

Any vegetation to be removed is minimal. Ivy growing on the spandrels of the bridge will have to be removed. On the north east side, a tree or potentially two will might need to be cut back or

removed. This minor vegetation removal will have no bearing on the overall light regime on the canal, and it's a case of whatever bats use the area as it is, will continue to do so if some vegetation is removed to facilitate works on the bridge. This not to say vegetation will be removed with reckless abandon.

6.4 PROPOSED AVOIDANCE AND MITIGATION MEASURES

Although no Lesser Horseshoe bats were recorded and impacts are considered negligible, the following precautionary measures will be implemented:

1. **Lighting Control**
    - No new lighting will be introduced within the canal corridor.
    - There will be no construction lighting at night. If lighting is needed during the last hour of work in the winter months there will be no bats present as at this stage of the year they will be hibernating at this stage. There will be no lighting needed during the summer months, as works will take place during normal working hours.
2. **Vegetation Management**
    - Vegetation removal will be restricted to the single identified tree on the east bank.
    - No additional clearance will be undertaken without prior ecological review.
3. **Optional Enhancement**
    - The potential for shielding or directional adjustment of the existing streetlamp to the north of the bridge will be discussed with the local authority to further reduce light spill onto the canal corridor.

In the absence of Lesser Horseshoe activity and given that the western bank — closest to the known roost — is already unshaded and exposed to streetlight spill, the removal of one tree on the eastern bank will result in little or no additional impact on the use of the canal corridor by bats. With the above precautionary measures in place, the proposed works will not adversely affect Lesser Horseshoe bats or other light-sensitive species.

6.5 SUPPORTING FIGURES AND MAPS

Figure 5 Bat survey results.

7 CONCLUSION

This Addendum has been prepared in response to the Request for Further Information (RFI) issued under ABP Ref. ABP-322037-25. Each item raised in the RFI has been addressed through additional field survey, assessment, and the identification of appropriate mitigation measures where required.

The key findings are:

- **Otters** – No holts or couches were recorded within the works zone. The canal corridor is used by otters, but not heavily, and precautionary measures will be implemented to avoid disturbance. Works will only proceed in compliance with the Habitats Regulations, including derogation licensing should a resting place be identified.
- **Water Quality** – Additional measures have been specified to prevent cementitious runoff or alkaline leachate entering the canal, supplementing the proposed crash deck for debris control.
- **Protected Flora** – *Groenlandia densa* was not recorded within the survey area, and no impact on this Flora Protection Order species is predicted. Invasive alien species (*Elodea nuttallii* and *Nymphoides peltata*) were recorded; strict biosecurity measures will be applied to prevent off-site spread.

- **Bats** – No Lesser Horseshoe bats were recorded using the canal corridor. Given the existing exposure of the western bank to light spill and the minimal vegetation loss on the eastern bank, no significant effects are predicted. Lighting controls and vegetation management measures will be applied as a precaution.

On the basis of these findings, and with implementation of the mitigation measures set out in this Addendum, it is concluded that the proposed works will not result in adverse effects on the integrity of any European site, alone or in combination with other plans or projects, in accordance with the requirements of the Habitats Directive and the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended).