OIFIG na nOIBREACHA POIBLÍ
OFFICE OF PUBLIC WORKS

River Bride (Blackpool) Certified Drainage Scheme

Natura Impact Statement
Addendum Report

October 2020

RYAN HANLEY
CONSULTING ENGINEERS
1 Galway Business Park, Dangan, Galway, H91 A3EF
170/173 Ivy Exchange, Granby Place, Parnell Square West, Dublin 1, D01 N938
Office 1D/1E North Point House, North Point Business Park, New Mallow Road, Cork, T23 AT2P
Innovation House, Moneen Road, Castlebar, Co. Mayo, F23 E400

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1 INTRODUCTION & BACKGROUND TO PROJECT

1.1 BACKGROUND

The Office of Public Works (OPW) applied for consent for the construction of the River Bride (Blackpool) Certified Drainage Scheme from the Department of Public Expenditure and Reform (DPER). As part of the application a Natura Impact Statement was submitted. The report was prepared by Ryan Hanley in partnership with McCarthy Keville O'Sullivan (MKO) on behalf of the OPW and contained information required for the competent authority to undertake an Appropriate Assessment (AA) in relation to the scheme. Since the application was submitted a Request for Further Information (RFI) was made by the Department of Public Expenditure and Reform.

This report aims to respond to the RFI made by the DPER in the context of the Appropriate Assessment and provides further information on the potential impacts on European Sites as a result of the Project. This report should be read in conjunction with the NIS (January, 2019) for the River Bride (Blackpool) Certified Drainage Scheme.

2 DEPARTMENT OF PUBLIC EXPENDITURE AND REFORM REQUEST FOR FURTHER INFORMATION

The following supplementary information pertaining to the NIS was requested by the DPER on the 07th May 2020:

- With reference to the scope of the proposed works the channel maintenance programme that is proposed does not clearly characterise the extent or methods of maintenance. The NIS should provide sufficient detail in relation to the programme, locations, timelines and methods for all construction and maintenance works.
- Provide details of extent of instream works including maximum extents of silt and gravel excavation in river bed and of any channel widening.
- With reference to the identification of potential impacts of invasive species the NIS does not provide detail in relation to the extent of invasive species in the works area and does not describe the potential impacts from this source. Further information is required in relation to the mapping and quantifying of invasive species known to occur within the scheme area.
- The Appropriate Assessment Screening conclusion statement requires rewording for clarity and to ensure the robustness of the NIS.
- With reference to the cumulative impacts with other plans and projects provide reference in relation to projects in the area to demonstrate adequate assessment.
- Provide mitigation measures that identify clear thresholds and standards

Unless otherwise specified, any text provided below supersedes the text provided in the relevant section of the NIS. In some instances, it has been necessary to reproduce text from the original NIS. This text is shown in grey for ease of reference.

3 THE APPROPRIATE ASSESSMENT PROCESS

3.1 CLARIFICATION ON SECTION 2.1- GUIDANCE

Section 2.1 of the NIS sets out the appropriate guidance documents that have been used in order to inform the requirements for the NIS. The following documents were included in the NIS and have since been removed from this guidance list in response to the submission made as part of the RFI stating that the documents are non-statutory and are not standard practice reference material:

- Ryan Hanley (2014a) Stage 1: Appropriate Assessment Screening Methodology for the Maintenance of Arterial Drainage Schemes. Prepared by Ryan Hanley on behalf of the Office of Public Works.
- Ryan Hanley (2014b) OPW Drainage Maintenance Categories Source » Pathway » Receptor Chains for Appropriate Assessment. Prepared by Ryan Hanley on behalf of the Office of Public Works

3.2 CLARIFICATION ON SECTION 2.2- STAGES OF ARTICLE 6 ASSESSMENT

In **Section 2.2** of the NIS, reference is made to the published guidance document '*Appropriate Assessment of Plans and Projects in Ireland*' (DoEHLG, 2010) in particular the NIS references the statement:

'*Screening is undertaken without the inclusion of mitigation, unless potential impacts clearly can be avoided though the modification or redesign of the plan or project, in which case the screening process is repeated on the altered plan or project*'.

A submission made as part of the RFI identified that this statement is in conflict with the current CJEU ruling and further clarification is required. As such this Addendum report expands on the information that has been provided in the NIS with regard to the CJEU ruling and has taken into consideration the CJEU ruling followed in lieu of the DoEHLG guidance as this statement is in reference to screening for Appropriate Assessment. As such the DoEHLG statement is removed from the NIS.

The NIS makes reference to the recent case C-323/17 '*People Over Wind and Peter Sweetman v Coillte*' (April, 2018) in which the Court of Justice of the European Union (CJEU) ruled that mitigation measures, in particular any measures '*intended to avoid or reduce the harmful effect of a project on a European Site*', could not be taken into account at the screening stage of an appropriate assessment. Before the CJEU ruling, it had been established practice for mitigation measures to be taken into account at the screening stage.

An AA screening report was undertaken in December 2015 as part of the Public Exhibition for the River Bride (Blackpool) Certified Drainage Scheme. This Screening Report identified potential impacts on downstream European Sites including runoff and water quality impacts, spread of invasive species and changes in sediment load into downstream intertidal zones and concluded that with best practice pollution control, avoidance and mitigation measures in place, there was no potential for significant effect on European Sites as a result of the project.

In light of the above court decision and using the precautionary principle with regard to potential for impacts on European Sites, the OPW took the opportunity to revise the AA screening and determined that a Natura Impact Statement should be completed. The NIS was undertaken in order to include relevant mitigation to address any potential for significant negative effects from the impacts identified in the screening process on the qualifying interests of downstream European Sites.

4 DESCRIPTION OF THE PROPOSED PROJECT

4.1 CLARIFICATION ON SECTION 3.2.11- MAINTENANCE REGIME

Section 3.2.11 of the NIS sets out the proposed maintenance regime for the River Bride (Blackpool) drainage Scheme. The information provided below supersedes the proposed maintenance activities provided in that section and provides further information on the method employed for maintenance:

Under Section 37 of the Arterial Drainage Act 1945 as amended, the OPW is statutorily obliged to maintain all rivers, embankments and urban flood defences on which it has executed works since the 1945 Act, in "*proper repair and effective condition*".

In the years following the construction of a drainage scheme there is a tendency for channel capacity to be progressively reduced due mainly to the transportation and deposition of bed materials, the accumulation of silt and the growth of in-channel vegetation. Channel maintenance is required to restore the Scheme to design levels in order to maintain the designed capacity to convey water. As such, future channel maintenance will apply to the River Bride (Blackpool) Certified Drainage Scheme.

The following stretches of river/stream channel require future channel maintenance as they have been identified as locations where sit, gravel and debris are likely to accumulate due to structures, sharp bends, culvert inlets etc.:

- The Glenamought River from the new roughing screen upstream of the Viaduct to its confluence with the River Bride (517m),
- The River Bride from the new roughing screen upstream of Rose Cottage to Blackpool Church (2,623m),
- The River Bride (Kiln culvert branch) from Blackpool Church to the confluence of the Kiln Branch and the Kiln Brewery Branch (946m, running under Watercourse Road and the N20 Blackpool Bypass),
- The River Bride (Kiln culvert branch) between its bifurcation with the Kiln culvert branch at its upstream end to its confluence with the Kiln culvert branch at its downstream end (740m, running under Watercourse Road and the Heineken Brewery),
- The Glen River (Spring Lane culvert branch) from its confluence with the new culvert on the River Bride to the proposed sluice structure at the head of this channel section (333m),
- The Glen River (mainly open channel) from the proposed sluice structure referred to above to the existing culvert under the North Ring Road (230m),
- The Glen River (Back Watercourse culvert branch) from the proposed sluice structure referred to above to its confluence with the (Kiln Watercourse culvert branch) outside Madden's Buildings (542m, running mainly under the N20 Blackpool Bypass),
- The Rathpeacon Stream from its confluence with the River Bride for a distance of 193m upstream, and
- The Fairhill Stream from its confluence with the River Bride for a distance of 108m upstream.

In addition, the new trash screen and roughing screens will require regular maintenance, as will the proposed surface water pumping stations. The surface water pumping stations will require regular maintenance and it will be necessary to jet the surface water sewers to maintain hydraulic capacity to drain flood waters.

Typically, the need for channel maintenance will be assessed on an annual basis by means of a site walkover survey. Specific maintenance activities are described in the Preliminary Maintenance Plan (See Appendix A). In general, channel maintenance typically consists of activities including silt and vegetation management, aquatic vegetation cutting, bank protection, bush cutting/branch trimming, tree cutting, mulching, mowing and

structural maintenance. The following provide further details on the types and nature of maintenance activities that may be required as part of this Scheme:

- The channels will be monitored by means of a walkover survey from the banks on a regular basis (annually, and also following a significant flood event). The walkover surveys will identify issues with implications for flood risk (e.g. fallen trees, excessive vegetation build-up, overgrown trees, illegal dumping, accumulation of granular deposits, etc). In-channel debris will typically be removed by a long reach excavator working from the banks. Excessive overhanging vegetation will typically be pruned back or removed by hand using a cherry picker, depending on access.
- Removal of build-up of foreign or natural material that impedes the flow of water within the watercourse or river channel in order to maintain the hydraulic conveyance to pass the design flood. This includes periodic removal of material within the channel by means of suitably rigged excavators or similar equipment. Where access is required to the watercourse, this will be carried out as close as practical to the area of channel subject to maintenance to minimise the length of tracking along the channel. Maintenance works are to be carried out from the bank/dry side where possible depending on flow conditions and other constraints. For example, maintenance activities to remove bed material build up will be ideally carried out during low flow periods to minimise the risk of siltation and material transport downstream. This will be carried out by a long reach excavator but due to space constraints within the scheme, this may not be possible within certain areas and in stream access will be required. Typically, this material will be deposited on the riverbanks subject to space constraints or may be disposed offsite to an appropriately licenced waste facility.
- The volume of future material to be removed from the scheme extents is impossible to predict and is dependent on future flow regime within the river, climate change and land use management upstream. As a worst-case scenario, it is envisaged that 180 m^3 material will be removed on an annual basis at the sediment trap. The sediment trap does not have to be fully emptied each time, and some material in the low flow channel will be retained. Once the river has adjusted to the works upstream an annual removal of sediment is considered sufficient. A set of marker posts will be installed along the sediment trap to trigger removal. This shall be based on a trigger of 0.4m fill depth in the first bay, and 0.3m in the second and third.
- Cutting back and removal of overgrowth and fallen trees will prevent snagging of debris upstream or at hydraulic structures such as bridges and culverts which reduces the risk of blockages. Furthermore, removal of vegetation reduces the risk of material build up at these locations. This is typically carried out by less invasive mechanical means such as using weed cutting boats or similar less intrusive equipment. During low flow events, manual intervention into the river may be possible subject to health and safety assessment and methods of working. Emergency removal of fallen trees may be required at intermittent periods or as required following regular inspection of the channel extent such as pre and post flood events. This is to be carried out during the appropriate environmental period (i.e. outside the breeding bird season) or if required as emergency works shall be carried out in consultation with a suitably qualified ecologist.
- Inspection of watercourses for evidence of scour or riverbank erosion will be ongoing including inspection of placed rock armour, erosion protection membranes, stone slabs in culverts, existing riverbanks and other in-stream features.
- Maintenance will have regard for the requirements of invasive species on site and will follow the requirements within the Environmental Guidance: Drainage Maintenance & Construction (OPW, 2019) particularly those found within EP18D, disturbance and spread of invasive species will be avoided during maintenance.

- Culverts will be inspected on an annual basis and following a significant flood event. Any debris present in the culvert will be cleared by hand. A full CCTV survey and clearing of silt/sediment from the culvert is expected to take place approximately every ten years. Removal of debris will be carried out as required.

Maintenance works that include the removal of scrub/transitional woodland that has developed along the bankside via bush cutting/branch trimming, tree cutting or mulching will be undertaken outside of the bird nesting season (from the 1st March to 31st August as per the Wildlife Act (1976). If required as emergency works, this should be carried out in consultation with a suitably qualified ecologist. In-stream maintenance works for silt and vegetation management will be carried out outside of the salmonid spawning season (November to March) on channels with salmonid spawning habitat. Any works required during this period are carried out in consultation with IFI. As a result, there may be a two-stage approach to the works, with silt and in-stream vegetation management carried out during the open season (i.e. summer months), while woody vegetation removal is carried out in the winter months.

Further information on the maintenance measures proposed as part of this scheme can be found in Appendix A below.

4.2 Clarification on Section 3.3.8- Other Instream Works

Section 3.3.8 of the NIS outlines the anticipated construction methods for instream works for the River Bride (Blackpool) drainage Scheme. The information provided below is provided as additional information to that found in this section and provides further information on the estimated volumes of excavated material during construction:

Table 3.2 Estimated volume of excavation from instream works area during construction

Scheme Element	Interference Number	Estimated Volume of Excavation
Flood Defence Walls	C08.L01, C08.L02, C08.L03, C08.L04, C07.L01, C06.L16, C04.L01	794 m^3
Bridge	C08.B01, C08.B02, C06.B01, C06.B02	698 m^3
Embankment	C06.E02/T02	4,472 m^3
Culvert	C06.B04	2,052 m^3
Wall/ Sediment Trap	C06.L17/L18/L19	1,800 m^3
	Total	**9,816 m^3**

5 DESIGNATED SITES IN PROXIMITY TO THE PROPOSED PROJECT

5.1 CLARIFICATION ON SECTION 4.2- IDENTIFICATION OF POTENTIAL IMPACTS

Activities associated with construction works can inadvertently result in the spread of invasive species where watercourses can act as a potential impact-receptor pathway regarding indirect habitat loss/damage to downstream locations in the wider area including any designated sites that are present. Taking the precautionary approach in the NIS, **Section 4.2** identified invasive species as having potential impacts on the Cork Harbour SPA and Great Island Channel SAC. Information is provided below on the extent of the invasive species known to occur within the scheme area and their potential impacts.

As part of the River Bride (Blackpool) Drainage Scheme a targeted invasive plant species survey was undertaken to establish the presence and distribution of invasive plants within the footprint of the proposed works. Two species listed on the Third Schedule, Japanese knotweed (*Fallopia japonica*) and Giant rhubarb (*Gunnera tinctoria*), were identified within the works area of the proposed Scheme. Several stands of Japanese knotweed were recorded along the Glenamought River and Bride River (North), while a single Giant rhubarb plant was recorded in an amenity park adjacent to the Blackpool Retail Park (See Figure 5.1 below).

There is potential for these invasive species to be spread to designated sites during the construction and operational maintenance works associated with the proposed Scheme. Fragments of Japanese knotweed could be disturbed within the works area and enter the River Bride and could become established downstream within habitats associated with the Great Island Channel SAC (in particular Atlantic salt meadows) and within the Cork Harbour SPA on which important bird populations feed. A treatment programme is currently being undertaken to control Japanese knotweed and Giant rhubarb within the works area to manage the spread of invasive species and an Invasive Species Management Plan has been undertaken. A copy of the ISMP is presented in Appendix B The first round of invasive species treatment was completed in August and September 2016. The follow up survey undertaken in 2017 reported treatment to be very effective with a reduction of the extent and density of Japanese knotweed by almost 50%. Three further rounds of treatment were undertaken from July to September in 2018, August 2019 and September 2020. It was noted that there were areas with limited or no regrowth, while results of the 2020 treatment are pending.

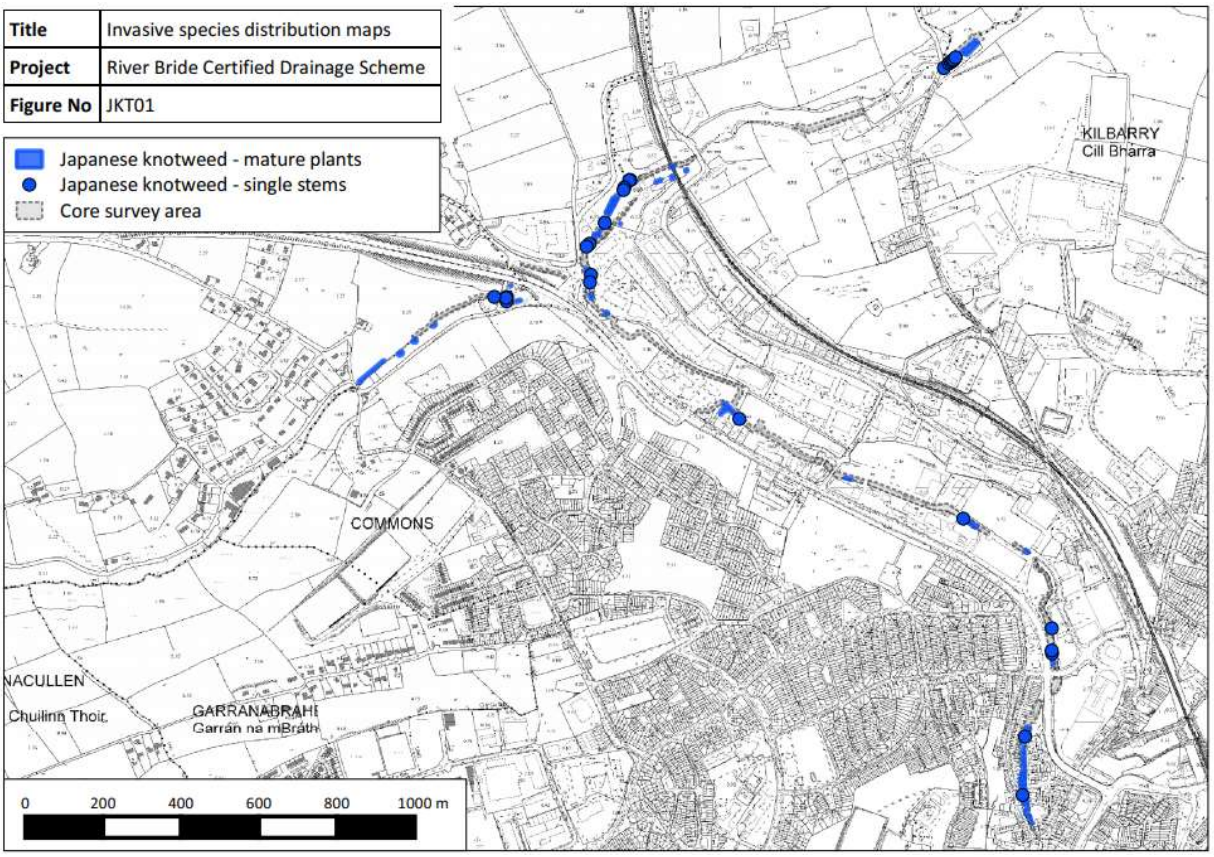

Figure 5.1- Invasive Species Distribution along the River Bride Certified Drainage Scheme

5.2 CLARIFICATION OF SECTION 4.3- APPROPRIATE ASSESSMENT SCREENING CONCLUSION

Section 4.3 provides the conclusions of the appropriate assessment screening. This conclusion has been updated to include the provision of precautionary principle as followed:

The risk of potential pathways for impacts is slight, however, using the precautionary approach potential pathways for impacts to the conservation objectives of both European sites (Cork Harbour SPA and Great Island Channel SAC) have been identified in the absence of any best practice pollution control, avoidance and mitigation measures. Potential impacts identified include the release of suspended solids/hydrocarbons or by the spread of invasive species that may enter the River Lee via the Bride (North) and have negative impacts on qualifying habitats and species. Therefore, in accordance with Article 6(3) of the Habitats Directive, the proposed River Bride (Blackpool) Certified Drainage Scheme has the potential to impact on the Qualifying Interests of European sites and therefore be subject to a Stage 2 Appropriate Assessment (NIS).

6 IMPACT ASSESSMENT

6.1 CLARIFICATION ON SECTION 5- IMPACT ASSESSMENT

In addition to the potential impacts identified in **Section 5** of the NIS, the following additional information is also considered:

During the operational phase of the Scheme there will be no direct habitat loss or disturbance to the wintering and breeding bird populations which make up the qualifying intertest within Cork Harbour SPA as no maintenance works (silt and vegetation management) will be undertaken within this European Site. Any disturbance to foraging grounds within the Drainage Scheme maintenance area will be temporary and small in scale given the overall availability of the habitat in the River Bride catchment.

Cork Harbour SPA could potentially be impacted by maintenance works via surface water pathways. Silt and vegetation management could potentially result in a temporary release of sediment or disturbance of invasive species material which may enter scheme watercourses that are hydrologically connected to the site. Given the distance between the Drainage Scheme and the SPA (>5 km downstream of maintenance works), that any sediment released as part of the works will be temporary in nature and is likely to be small in scale and that an Invasive Species Management Plan will be put in place for three years post construction which will prevent the spread of invasive plant species as a consequence of the scheme it is considered that maintenance activities will have no significant impact on the Cork Harbour SPA.

Similarly, the Great Island Channel SAC will not be directly impacted by maintenance works (silt and vegetation management) as the site is located a significant distance (>9 km) downstream of the drainage scheme and the scheme area does not support any Qualifying Interests associated with the site. Potential impacts as a result of maintenance activities are via surface water pathways and could result in temporary release of sediment or disturbance of invasive species material which may enter scheme watercourses that are hydrologically connected to the site. Given the distance between the Drainage Scheme and the SAC, that any sediment released as part of the works will be temporary in nature and is likely to be small in scale and that an Invasive Species Management Plan will be put in place for three years post construction which will prevent the spread of invasive plant species as a consequence of the scheme it is considered that maintenance activities will have no significant impact on the Great Island Channel SAC.

Maintenance activities in the absence of appropriate mitigation measures, are not considered to have negative impacts downstream on qualifying interests of the Cork Harbour SPA and Great Island Channel SAC. Therefore, the potential impacts considered in the NIS in consideration of the additional information presented in this Addendum infer that the conclusions of the NIS remain the same.

7 CUMULATIVE IMPACTS WITH OTHER PLANS/PROJECTS

7.1 CLARIFICATION ON SECTION 6- IN-COMBINATION EFFECTS

The NIS assesses the potential impacts of the proposed Scheme in-combination with existing activities and proposed plans for the region. The following plans are also considered for their in-combination effects in addition to those identified in **Section 6** of the NIS:

The area surrounding the proposed development is heavily populated with a mixture of residential estates, shops and industrial parks. A review of the Cork County Council Planning viewer identified several planning applications located in proximity to the proposed Scheme. These applications are predominantly change of use applications or small-scale extension works of existing industrial facilities. These developments are small in scale, considering the nature of the proposed works and the distance between the Scheme and the Great

Island Channel SAC and Cork Harbour SPA these projects there is no in combination impacts as a result of the proposed Scheme.

8 MITIGATION MEASURES

8.1 CLARIFICATION ON SECTION 7- MITIGATION MEASURES

A preliminary construction programme is provided in Appendix C. The construction works themselves will last approximately 2.5 years. The following mitigation measures are proposed in addition to the measures presented in **Section 7**:

The following measures will be implemented during construction to mitigate impacts from silt/sediment laden runoff:

- The importance of protecting downstream habitats from silt laden runoff as outlined in Section 5 of the NIS will be included in the Construction Environmental Management Plan (CEMP).
- A suitably qualified Ecologist will be employed on site for the duration of the works and ensure that all mitigation measures are implemented in full.
- Measures to minimise the suspension and transfer of sediment downstream will include the use of silt barriers downstream of the works areas and removal of any accumulated silt, construction of silt sumps downstream of the works areas, coffer damming and dewatering of works areas where concrete and other building works are proposed.
- Any stockpiling of material will be stored a minimum of 10 meters from the river bank.
- All works undertaken on the banks will be fully consolidated to prevent scour and run off of silt. Consolidation may include use of protective biodegradable matting on the banks and also the sowing of grass seed on bare soil.
- Works will only be undertaken during normal working hours (8:00 – 18:00) thus allowing the river to run clean for 14 hours per day.
- During any working with cofferdams the following will be adhered to:
  - The working area will not be de-watered directly into the river; the removed water must receive treatment before discharge.
  - Before removal of the cofferdam at completion of the works all materials, debris, tools, plant and equipment will be removed from the work area and any potential sources of pollution/contamination within the cofferdam will be cleaned up.
- In channel working will be minimised, where possible, method statements will identify access routes and works areas prior to commencement in consultation with the Project Ecologist.
- Runoff from works, stockpile and compound areas will be monitored and observed daily to ensure that it is not impacting on any local watercourses. Silt release results in discolouration to water and so is easy to visually monitor for its presence.

8.2 ADDITIONAL MEASURES FOR THE PROTECTION OF HABITATS AND SPECIES OUTSIDE OF EUROPEAN SITES

In addition, as part of operational maintenance activities that are associated with the upkeep of the of the proposed Drainage Scheme, all OPW maintenance works are undertaken in accordance with the Environmental Guidance: Drainage Maintenance & Construction (OPW, 2019) (Appendix D). These measures will be carried out to ensure protection of the River Bride and Glenamought and associated habitats. The following best practice measures will be implemented during channel maintenance of the Scheme:

- When removing aquatic vegetation instream, the use of a weed cutting bucket will be maximised where possible to minimise the amount of silt being disturbed/suspended into the water column from the river substrate or bank.
- All aquatic vegetation or branch cuttings shall be removed from the channel and the channel bank and placed in an area where they cannot re-enter the water.
- In situations where there may be a more significant build-up of silt, debris or nutrients e.g. during sluice maintenance, there will be a 20m section of channel unmaintained at the channel outfall and if this is not naturally present, additional silt mitigation measures will be implemented including the use of geotextiles, clean washed stone and coarse sand (where suitable), removal of material and/or other silt filtration techniques. The method used will be on a case-by-case basis and methods used will be documented and discussed with environment team.
- If channels need to be accessed by vehicles over soft/wet ground and there is a risk that significant areas of soil may be exposed, bog mats or sleepers shall be laid.
- Works on all channels will be undertaken in accordance with the Scheme's design standard, in order to prevent any new widening or deepening of a channel.

8.3 CLARIFICATION ON SECTION 7.2- MITIGATION TO AVOID THE SPREAD OF INVASIVE PLANT SPECIES

Section 7.2 outlines the mitigation measures required to avoid the spread of invasive species to European Sites during both the construction and operational phases of the proposed Scheme. The following section supersedes the information provided in the NIS.

An Invasive Species Management Plan (Appendix B) has been put in place by the OPW for the Rivers Bride and Glenamought in Blackpool which outlines the strategy that has been used to date and will be adopted during the construction and operation of the Scheme and taking into consideration the ongoing treatment of the site in order to prevent the spread of invasive species. The schedule of treatment for invasive species within the proposed Scheme will be implemented for up to three years post construction.

The following measures will be implemented to avoid the spread of invasive species:

- A pre-construction/pre-operational maintenance survey for invasive species will be conducted at the earliest stage possible to update and inform on the status of invasive plant species in or near the scheme/maintenance works area. These surveys should be undertaken during the appropriate botanical season (April to September).
- Wash down all machinery and equipment using power washers to ensure the removal of all organic plant and soil mater before leaving the site. This material will be washed into a dedicated and contained area away from watercourses and will require appropriate treatment with other contaminated materials on site.
- Ensure all organic material removed from personal equipment and clothing including footwear
- Use of machinery with tracks should, where possible, be avoided within infested areas.
- Vehicles used in the transport of contaminated material will be visually checked and washed down into a contained area before being used for any other work, either on the same site or at a different site.
- Areas infested with invasive species shall be fenced off prior to and during construction works where possible in order to avoid spreading plant fragments to areas free from infestation. For areas infested with Japanese knotweed identified during the pre-construction/operational surveys a buffer distance of 7m minimum is required.
- Areas identified to be fenced off shall clearly be identified and marked out with signs to inform contractors of the risk.

- Treatment and control of invasive alien species will follow Guidelines for the Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads (NRA 2010) and Environmental Guidance: Drainage Maintenance & Construction (OPW 2019), and any other best practice guidance which may become available in the interim.
- Treatment will be carried out by a suitably qualified person who has received appropriate training and will involve the use of herbicides approved for working in proximity to an aquatic environment.
- All construction staff will receive training in the identification and management of invasive species, including identification of knotweed rhizomes, through "toolbox talks" and be made aware of the invasive species management plan before works begin on site.
- Areas where contaminated soil is to be stockpiled on site shall be clearly identified and cannot be within 50m of any watercourse or within a flood zone.
- For any material entering the site, including all fill material, the supplier must provide an assurance that it is free of non-native invasive species.

Advanced treatment of the site has been undertaken using chemical treatment methods and given the physical site boundaries and flooding risk in the area the ISMP identified further chemical treatment as the most suitable method for future treatment at the site. The Invasive Species Management Plan is available in Appendix C.

CONCLUSION

The current Addendum to the NIS addressing further information requests by the Department of Public Expenditure and Reform has been prepared following the recommendations and mitigation of the NIS and provides further detail to the mitigation in order to allow the competent authority to make an Appropriate Assessment.

The submitted report evaluates the potential for impacts on the qualifying interests of the Cork Harbour SPA and Great Island Channel SAC arising from the construction and operational maintenance phase of the proposed River Bride (Blackpool) Drainage Scheme, in combination with other plans/projects affecting the environment. The assessment considerers whether the proposed works, alone or in combination with other plans or projects, will have adverse effects on the integrity of these European Sites. The Addendum report identifies specific impacts in relation to the operational maintenance of the scheme and provides further mitigations measures in relation to the potential impacts identified within the NIS and the Addendum.

It is therefore concluded that the River Bride (Blackpool) Drainage Scheme, based on the original findings of the NIS and this NIS Addendum , alone and/or in-combination with other plans and/or projects, will not give rise to significant negative effects on the integrity of the Cork Harbour SPA and Great Island Channel SAC as long as the avoidance and mitigation measure as listed in the NIS and the Addendum are implemented in full.

COMPETENCY

Sinead Gavin was responsible for compilation of the NIS submitted to DPER in 2018. Sinead has 13 years' experience as an environmental scientist and ecologist. She has undertaken environmental assessments for a wide range of large and small-scale infrastructural projects. Sinead has been responsible for the management and writing of a number of EISs/ EIARs, Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA) (Screenings and Natura Impact Statements) for development of schemes close to and within Natura 2000 sites (SAC/SPA). Sinead has been involved in Oral hearings for road schemes, been responsible for the management of expert witnesses and acted as expert witness for EIS/EIA Reports.

Grace Kilbane was responsible for the compilation of the Natura Impact Statement (NIS) Addendum. Grace has 4 years' experience in the preparation of technical environmental reports such as Appropriate Assessment Screenings, Natura Impact Statements, Environmental Impact Assessment documents and EIAR Chapters.