Jacobs

Meath to Kildare Grid Upgrade Derogation Licence Application (Otter)

RE: Application for Derogation under Article 54 of the European Communities (Birds and Natural Habitats) Regulation 2011-2021, relating to disturbance to otter.

FOR: Electricity Supply Board Networks (ESBN)

LICENSEE NAME: APPOINTED by ESBN

SCIENTIFIC AGENT: APPOINTED by ESBN

DATE OF APPLICATION: 19.06.24

Document no: 321084AH-JAC-DOC-Z-0601

Version: 0.1

EirGrid

CP1021 Kildare-Meath Grid Upgrade

Kildare-Meath Grid Upgrade

19 June 2024



Meath to Kildare Grid Upgrade Derogation Licence Application (Otter)

Client name: EirGrid

Project name: Kildare-Meath Grid Upgrade

Client reference: CP1021 Kildare-Meath Grid Upgrade Project no: 321084AH

Document no: 321084AH-JAC-DOC-Z-0601 **Project manager:** Andy Scott

Version: 0.1 **Prepared by:** Irene Bottero

Date: 19 June 2024 **File name:** Otter Derogation Licence

Application_v 0.1_corrections

Document status: Final

Document history and status

Version	Date	Description	Author	Checked	Reviewed	Approved
0.0	30/04/2024	Draft	IB	SC	SC	AS
0.1	19/06/2024	Final following review	IB	SC	SC	AS

Jacobs Engineering Ireland Limited

Termini Building, 2nd Floor

3 Arkle Road Sandyford Dublin

Co. Dublin D18 C9C5 T +353 (0)1 269 5666 F +353 1 269 5497 www.jacobs.com

© Copyright 2024 Jacobs Engineering Ireland Limited. All rights reserved. The content and information contained in this document are the property of the Jacobs group of companies ("Jacobs Group"). Publication, distribution, or reproduction of this document in whole or in part without the written permission of Jacobs Group constitutes an infringement of copyright. Jacobs, the Jacobs logo, and all other Jacobs Group trademarks are the property of Jacobs Group.

NOTICE: This document has been prepared exclusively for the use and benefit of Jacobs Group client. Jacobs Group accepts no liability or responsibility for any use or reliance upon this document by any third party.

Contents

1.	Intro	oduction	1
	1.1	Licence Application	1
2.	Qual	ification as Scientific agent	2
	2.1	Licences held	2
	2.2	Qualification of Jacobs Ecologist	2
3.	Otte	r Survey Methodology	2
	3.1	Relevant Legislation & Guidelines	2
		3.1.1 Relevant Guidelines	2
		3.1.2 Relevant legislation	3
	3.2	Desk Based Research and Data Sources	3
	3.3	Field Survey Method	3
4.	Surv	ey Results	4
5.	Exar	nination of Impacts and Satisfactory Alternatives	6
	5.1	Potential Impacts	6
		5.1.1 Mortality	6
		5.1.2 Disturbance	6
		5.1.3 Pollution	6
	5.2	Mitigation	6
		5.2.1 Ecological Clerk of Works	7
		5.2.2 Mortality and Disturbance	7
		5.2.3 Pollution	7
		5.2.4 Specific Measures	10
	5.3	Consideration of Alternatives	10
6.	App	lication for Regulation 54 (Article 16) Derogation Licence	11
	6.1	Test of Condition One – Reasons for Seeking Derogation	11
	6.2	Test of Condition Two – There is no Satisfactory Alternative	11
	6.3	Test of Condition Three – Favourable Conservation Status	11
7.	Lice	nce Information	12
	7.1	Qualification as Scientific Agent	12
	7.2	Period for Licence	12
8.	Sum	mary and Conclusion	12
9.	Refe	rences	13
Ap	pend	ices	
Арр	endix /	A. Photographs	14

1. Introduction

1.1 Licence Application

Otter (*Lutra lutra*) is listed on Annex IV of the EU Habitats Directive. The directive has been transposed into Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477/2011) as amended. The Habitat Regulations, 2011- 2023, gives strict protection to individual otters and their breeding and resting places (holts and couches). Otter is also on Appendix II of the Berne Convention on the Conservation of European Wildlife and Natural Habitats which also gives strict protection to otter.

The Meath to Kildare Grid Upgrade (the Proposed Development) consists of a 52km underground cable (UGC) between Dunnstown 400 kV substation in Kildare and Woodland 400 kV substation in Meath, of which 9km is off-road and 43km is in-road. The location of the Proposed Development which specifically pertains to this licence application is shown in Figure 1, and is southeast of Millicent Bridge, North of Sallins, Co Kildare. Construction of the Proposed Development and pre-construction Ground Investigation (GI) works associated with the Proposed Development have the potential to cause disturbance to otter.



Figure 1. Otter (potential and confirmed) resting places and field signs and proposed works area (planning application boundary in red, cable route in blue and HDD compound locations in pink and proposed ground investigations (GI) locations).

The programme of GI works is planned prior to the start of construction; subject to the granting of statutory approvals, it is anticipated that the main construction phase will commence in Quarter 2, 2025. The GI works will comprise four boreholes, a windowless sample and a slit trench (Figure 1). The works are small scale with a two-person team undertaking the sampling using a light vehicle to bring a rig to site. Works will take between a half day to two days to complete. The construction phase works comprises setting up of horizonal directional drilling (HDD) launch and receptor pits, temporary construction compounds and HDD under the River Liffey. HDD launch and reception pits of approximately 3 m x 5 m will be constructed for the HDD holes and will be constructed within the Planning Application Boundary. The HDD temporary construction compound will comprise welfare facilities, car parking, security lighting, launch or receptor pit, areas for material laydown, material storage, waste storage and HDD ducting storage. The site will have gravel hardstanding and security

fencing. Works location in relation to field signs of otter, are shown on Figure 1. The nearest borehole to a confirmed otter resting place, a holt, is at 33.1m.

This application is for derogation under Article 54 of the Habitat Regulations, 2011-2023, in relation to disturbance to otters and their habitats.

2. Qualification as Scientific agent

As the Scientific Agent, Jacobs Engineering Ltd. proposes to use staff members that are experienced in ecology/otter surveys and mitigation. The works as detailed below for Ground Investigation/site set up and Horizontal Directional Drilling (HDD) activities will be supervised by May Higgins who is an experienced ecologist. Dr Susie Coyle will provide technical assistance.

2.1 Licences held

Photography licence number 230/2023 (and see Section 2.2).

2.2 Qualification of Jacobs Ecologist

May Higgins is an Ecologist with almost 3 years' experience in ecological consultancy. She holds a first class honours degree in Zoology from University College Dublin. May is a qualifying member of the Chartered Institute of Ecology and Environment (CIEEM) and has carried out multiple field surveys for protected species, including otter, and habitats on a variety of large and small infrastructure projects.

Dr Susie Coyle is a Senior Associate Director of Ecology and holds a BSc (Hons) in Aquatic Bioscience and a PhD in fish biodiversity from the University of Glasgow. She is a Chartered full Member of the Royal Society of Biology (MRSB), a full Member of CIEEM (MCIEEM) and a Member of the Institute of Fisheries Management (MIFI). She has seventeen years of consultancy experience in aquatic and terrestrial ecology with over twenty years' experience of field surveys and environmental sampling techniques. She holds or has held several protected species licenses and she is an accredited agent on pan Scotland otter licence (No:14385), AWPR otter licence (No: 42522) and A68 Lintalee otter licence (No: 27991). She has experience in otter survey techniques identifying otter resting places, holts, couches and hovers, and identification of field signs such prints, spraints (droppings) and slides on several large-scale UK road schemes and was involved in the design of a replacement holt on the A9 dualling project. She has undertaken multiple otter surveys for Irish projects, including the Meath to Kildare Grid Upgrade, N2 Ardee to Castleblayney Road Scheme, Cork Line Level Crossing, N59 Road Scheme - Maam Cross to Bunakill, N69 Listowel Bypass and Foynes to Limerick (including Adare Bypass). She is an experienced Ecological Clerk of Works (ECoW) and Safepass card holder.

3. Otter Survey Methodology

3.1 Relevant Legislation & Guidelines

3.1.1 Relevant Guidelines

- National Roads Authority (2008) Guidelines for the Treatment of Otters prior to the Construction of National Road Schemes. National Roads Authority.
- Chanin P. (2003a), Ecology of the European otter. Conserving Natura 2000 Rivers Ecology Series No. 10.
 English Nature, Peterborough,
- Chanin P. (2003b), Monitoring the otter *Lutra lutra*. Conserving Natura 2000 Rivers Monitoring Series No.
 10. English Nature, Peterborough.

 Guidance on the Strict Protection of Certain Animal and Plant Species under the Habitats Directive in Ireland (2021) National Parks and Wildlife Service (NPWS). Department of Housing, Local Government and Heritage.

3.1.2 Relevant legislation

Otters and their habitats are protected under the European and National legislation, including:

- EU Habitats Directive (92/43/EEC)
- European Communities (Birds and Natural Habitats) Regulations, 2011 (hereafter referred to as the Habitat Regulations, 2011)

Otters are listed in Annex II and Annex IV of the Habitats Directive. Strict Protection is afforded to all Annex IV species under the Habitats Regulations, 2011.

As set out in Regulation 51 of the Habitat Regulations, 2011, it is an offence to do any of the following without first obtaining a derogation licence from the Minister in accordance with Regulation 54:

- (a) Deliberately capture or kill any specimen of these species in the wild.
- (b) Deliberately disturb these species particularly during the period of breeding, rearing, hibernation and migration.
- (c) Deliberately take or destroy eggs of these species in the wild.
- (d) Damage or destroy a breeding or resting place of such an animal, or
- (e) Keep, transport, sell, exchange, offer for sale or offer for exchange any specimen of these species taken in the wild, other than those taken legally as referred to in Article 12(2) of the Habitats Directive.

Undertaking any work which has the potential to capture or kill any specimen of a Strictly Protected species, or to disturb Strictly Protected species, or to take or destroy eggs of such a species, and for which a derogation licence has not been granted, may constitute an offence under Regulation 51 of the Habitat Regulations 2011.

As it is an offence under Section 51 of Habitat Regulations, 2011 and under Section 23 of the Wildlife Act to to kill an otter or to damage or destroy the breeding or resting place of an otter, a derogation licence must be obtained to prevent an offence being committed. A derogation licence to disturb breeding and resting places of otter may be granted if "there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species concerned at a favourable conservation status in their natural range" (Art. 16, Directive - 92/43 - Habitats Directive).

3.2 Desk Based Research and Data Sources

A desk-based review was conducted to inform baseline surveys for the Environmental Impact Assessment Report for the Proposed Development area. A search of the National Biodiversity Data Centre (NBDC) (accessed August 2022) returned records of European otters, within 2km of the Proposed Development.

3.3 Field Survey Method

Walkover ecological surveys for otter were carried out as part of the fauna species walkover surveys, undertaken between October 2021 and April 2022, by experienced Jacobs surveyors, following guidance from Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes (NRA 2008b). A corridor of 100m from the Proposed Development (i.e. the Planning Application Boundary) was surveyed for fauna species that could be directly or indirectly affected during construction/operation of the Proposed Development. The study area also extended to at least 150 m from the Proposed Development along watercourses hydrologically

linked to the Planning Application Boundary. Otters were surveyed for through the detection of field signs including resting sites (holts and couches) as well as prints, markings, feeding signs, and droppings. This survey was then followed up in October 2023 to confirm survey results. Where potentially active resting sites were identified infra-red motion cameras were deployed in March for one week and again in April 2024 for one week to assess otter presence or any activity and identify the level of use and importance of a resting site (e.g. holt, couch, etc.) if in use. In March three cameras were deployed and in April five cameras were deployed.

4. Survey Results

During the mammal surveys completed in 2021/22 one potential otter holt was identified within the Planning Application Boundary (within a hedgerow) and an otter slide was recorded upstream from the potential holt (see Table 1, Figure 1):

- A potential otter holt was recorded near to the River Liffey at ITM 687929, 724445 (it is noted that the original grid reference as reported in the Environmental Impact Assessment Report (EIAR) has been slightly adjusted to be at the exact position of the potential otter holt as the original reference was taken within the tree canopy which interferes with GPS signal resulting in minor discrepancies in exact location. The grid adjusted reference in this licence application is N 87922 24452). This was a single hole within a hedgerow on an earth bank overgrown with ivy and vegetation (Photographs 1,2, Appendix A). The entrance to the potential holt was well worn; and
- A single otter slide (S1) close to the bank of the River Liffey at ITM 687940, 724511 (as reported in the EIAR for the Proposed Development and adjusted in this licence application at N 87937 24494) and the slide lies 16 m east of the cable route (Photograph 3, Appendix A).

Table 1 Potential otters resting places and signs of otter recorded during the ecological surveys in 2021 and 2022 and in 2024.

Reference number	Feature Description D		Distance from Proposed Development	Coordinates
Н1	Potential holt	Potential holt recorded during October 2023 surveys (Photographs 1, 2 Appendix A)	Approximately 54m from cable route and 50m from closest compound (located on opposite site of River Liffey) and 33m from the nearest GI (borehole) location	N 87922 24452
S1	Slide	Slide into the river (Photograph 3, Appendix A)	Approximately 33m from cable route and 34m from closest compound (located on opposite site of River Liffey)	N 87937 24494

Further surveys in this area, between October 2023 and April 2024, confirmed the presence of three further potential resting places in proximity and along the River Liffey along with signs of otter (see Figure 1). These included three potential otter holts (H2, H3, H4), two potential couches (C1 and C2), spraint at the couch C2 (Sp1) and several footprints (F1). Photographs and finding of the otter potential resting places and signs are presented in the Table 2 and in Photographs 4 -11, in Appendix A). In addition, in April 2024, surveyors observed a live otter (O1, Figure 1) while they were on the site during camera trapping.

Three potential holts were assessed as being highly suitable for otter (H1, H2 and H4) while a further one was assessed as much less likely (H3) given the entrance holes were very small. There was also a potential couch (C1) near H3 but again was assessed as unlikely to be used by otter. Consequently, cameras were deployed at H1, H2 and H4. For the second round of camera trapping, two cameras were deployed at H1, one at H2, one at H4 and one at H3/C1 but trained at C2. This camera, given its position would not only pick up signs of otter at C2 but also at H3/C1.

Table 2 Potential otters resting places and signs of otter recorded during the surveys in October 2023 and April 2024.

Reference number	Feature	Description	Distance from Proposed Development	Coordinates
H2	Potential holt	Potential holt, with at least four entrances that were approximately 20 cm wide. Holt was sheltered under a tree root (Photographs 4, 5, Appendix A)	Approximately 20m from the Cable route and 32m from closest compound (on the other side of the Liffey River)	N 87943 24512
НЗ	Potential holt	Potential holt, very small hole, located next to a potential couch (C1), both unlikely to be used by otter (Photograph 6, Appendix A).	Approximately 51m from the cable route and 45m from the closest compound (located on the opposite of the Liffey River)	N 87923 24476
H4	Potential holt	Potential holt (Photograph 7, Appendix A)	Approximately 52m from the cable route and 37m from the closest compound (located on the opposite of the Liffey River)	N 87932 24461
C1	Potential couch	Close by H3 under tree roots and unlikely to be used by otter (Photograph 8 Appendix A).	Approximately 51m from the cable route and 45m from the closest compound (located on the opposite of the Liffey River)	N 87923 24476
C2	Potential Couch	Potential couch with fresh spraint at the time of the visit (March 2024) and with old spraint also present (Photographs 9, 10, Appendix A). There were also multiple otter prints at this location.	Approximately 41m from cable route, and 36m from the closest compound (located on the opposite side of Liffey River)	N 87934 24467
F1	Otter footprints	Several fresh otter footprints found in the mud, in March 2024 (Photograph11, Appendix A).	Approximately 33m from cable route and 34m from closest compound (located on the opposite side of River Liffey)	N 87937 24494
01	Individual	A small otter was spotted during the survey in April 2024, in a dense scrub area and startled by surveyors.	Approximately 18m from cable route and 26m from closest compound (located on the same bank of the river).	N 87942 24524

One record of adult otter leaving H4 was recorded on 21st March 2024 (Table 3). There were no signs of young otter at H4, so it is unlikely that this is currently a natal holt. There were no other records of otter movement at any of the other potential resting places.

Table 3. Results of Camera Footage

Reference	Feature and	Description	Distance from Proposed	Coordinates
number	ID		Development	

H4	Live adult otter. Confirmed	Otter seen leaving the otter holt. Recorded once on 21/03/2024. (Photograph 12, Appendix A).	Approximately 53m from the Cable route and 37m from closest compound (on the	N 87932 24461
	otter holt.	C see 2 sh / Phrs s /	other side of the Liffey River)	

Couch C2 had spraint on every visit although no live otters were recorded. H4 and C2 confirmed as active otter resting places. As otter usage of breeding and resting sites is highly transient, all resting places is Table 2 are included within the scope of this licence on precautionary basis.

5. Examination of Impacts and Satisfactory Alternatives

5.1 Potential Impacts

Otters are known to be present within the area of the Proposed Development, with three potential holts, two potential couches and one slide identified within one area along the Proposed Development during field surveys. One holt (H4) and one couch (C2) were confirmed as active. However, otter usage of breeding and resting sites is highly transient, thus all the sites (H1, S1, H2, H3, H4, C1, C2, F1, O1) should be included within scope of licence on preventive basis.

In addition, there is optimal commuting, foraging and resting habitat for otter throughout the survey area and a live otter was observed during trail camera deployment. Disturbance or direct mortality to this species could arise from the enabling and construction works. Additionally, a pollution event from the works may impact on water quality and reduce otter prey availability. The potential spread of invasive non-native species could alter the habitat quality, and therefore the distribution of otter.

5.1.1 Mortality

Direct contact with GI/construction machinery or activities may result in mortality of otter on site. Additionally, impacts on the availability or quality of prey, for example as a result of pollution, may lead to mortality of otter in the area. Otters are territorial (Vincent Wildlife Trust, 2020) and therefore mortality of otter would affect the distribution of otter (albeit likely temporarily and at a local scale) within the area.

5.1.2 Disturbance

An otter was observed during field surveys on the bank of the Liffey River. In addition, otter prints and potential and confirmed resting places were found, confirming the presence of otter near the Proposed Development area of works. Due to the proximity of the works to the watercourse there may be impacts on otter due to disturbance. For example, works involving trenching to the HDD compound, setting up and operating the HDD under the river to the other side, vegetation clearance and soil levelling up, as well as compound set up with fencing and lighting and access road, along with an increase in general activity on site, could cause disturbance impacts. Disturbance could result in avoidance of the area by otter affecting the distribution of otter in this area.

5.1.3 Pollution

Construction will take place near the banks of the Liffey River and under the river to the other side, providing points of entry for pollutants associated with construction works. A pollution event resulting from material spillages, hydrocarbon leaks, or sediment laden surface water runoff may lead to direct impacts upon water quality and prey availability (fish biomass) for otter.

5.2 Mitigation

The following mitigation measures will be implemented to either avoid or reduce the aforementioned potential impacts to otter from the Proposed Development.

5.2.1 Ecological Clerk of Works

An Ecological Clerk of Works (EcoW) will be required on site for any works deemed to be of a sensitive nature due to the number of sensitive ecological receptors and the works taking place within watercourses connected to European sites. Where sensitive habitats or species could be impacted, the ECoW will be on site to oversee the implementation of all mitigation measures as described below. The ECoW will have the appropriate qualifications and relevant experience and will be a member of a professional body such as CIEEM or similar.

5.2.2 Mortality and Disturbance

Measures set out herein will be implemented at the crossing of the River Liffey to ensure that there will be no disturbance or mortality of otter during the Construction Phase of the Proposed Development:

- The National Roads Authority (NRA) (2008) Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes will be adhered to;
- Works will take place within a defined working area to reduce the footprint of the Proposed Development to minimise potential for impact to otter foraging or resting habitat;
- There will be no in-stream activities in this area;
- Any excavations will be covered at night to prevent otter from falling in or becoming trapped;
- Night-time working will be minimised as far as possible and cut-off cowls and ensuring lights are orientated in suitable directions will be implemented;
- Any lights will be turned off after working hours;
- A pre-construction survey will be carried out to ensure no change in the baseline information to ensure
 that mitigation measures remain relevant. This should be conducted no more than 10-12 months in
 advance of construction. Should there be a change in otter behaviour or new holts created a derogation
 licence from the NPWS may be required;
- No works should be undertaken within 150m of any holts at which breeding females or cubs are present. Otter breeding may take place during any season so breeding activity at holts needs to be determined on a case-by-case basis. No wheeled or tracked vehicles (of any kind) should be used within 20m of active, but non-breeding, otter holts. Light work, such as digging by hand or scrub clearance should also not take place within 15m of such holts, except under licence;
- A Noise and Vibration Management Plan will be developed by the appointed contractor;
- All site access roads will be kept even to reduce vibration;
- Noise levels will not exceed permissible levels for construction works (80dB(A)) based on Guidelines
 for the Treatment of Noise and Vibration in National Road Schemes (NRA, 2004), threshold of 67dB
 predicted at the HDD location. Additionally, given that works will be confined to daylight hours and
 otter are most active outside of working hours no significant impacts from noise will occur; and
- Post construction, the site will be revegetated where possible, except at permanent infrastructure locations (e.g. joint bays and permanent access tracks).

5.2.3 Pollution

Potential pollution impacts from construction are via the transport of pollutants and/or sediments into the River Liffey via overland flows or leakages/surface water run-off from the construction site and machinery during the construction.

In light of the potential for effects resulting from pollution and sediment laden run-off, control measures have been developed to ensure that the activities do not adversely impact upon the surface water environment. The introduction of construction-based pollutants or sediment-based run-off may impact otter reducing prey availability. Measures to mitigate pollutants and/or sediment entering the watercourse during construction of the Proposed Development, and therefore protecting otter, are outlined below.

Measures set out herein, and in the Construction and Environmental Management Plan (CEMP) for the proposed Development, will be implemented to ensure that there will be no pollution of surface water during the construction phase of the Proposed Development. The measures will be incorporated into the contractor's Construction Environmental Management Plan (CEMP) and the CEMP will be developed in accordance with the following guidance documents and legislation:

- Guidelines on Protection of Fisheries during Construction Works in and Adjacent to Waters (Inland Fisheries Ireland, 2016);
- CIRIA C532: Control of Water Pollution from Construction Sites, Guidance for Consultants and Contractors (Masters-Williams et al., 2001);
- CIRIA C648 Control of Water Pollution from Linear Construction Projects: Technical Guide (Murnane et al., 2006a);
- CIRIA C649 Control of Water Pollution from Linear Construction Projects: Site Guide (Murnane et al., 2006b);
- CIRIA C692: Environmental Good Practice on Site (Audus et al., 2010); and
- S.I. No. 40/2020 European Union (Good Agricultural Practice for Protection of Waters) (Amendment) Regulations 2020.

5.2.3.1 Mitigation for Working Near Watercourses

The following measures will be implemented on site, to prevent surface water run-off into rivers:

- Silt fences will be erected along the boundary of water bodies to prevent any silt laden runoff from impermeable surfaces, temporary or permanent, as well as spoil heaps within the construction working width:
- Silt fencing will also be applied to areas that are within 30 m of a watercourse and hydrologically linked to a European site, where concrete pouring is to be undertaken and where there is a risk to European designated sites. Where required this may be double silt fencing;
- Silt fences will be installed downgradient of the potential source of the silt / sediment;
- The silt curtain will contain the area where silted waters are being generated and will terminate on high ground;
- They will be constructed using permeable filter fabric (Hy-Tex Terrastop silt fence or similar) rather than a mesh material and its base will be embedded at least 15 cm into the ground and staked at 2 m intervals;
- Vegetation will be retained, however, where targeted vegetation removal is required, additional measures will be put in place including additional silt fencing in these areas.
- The vegetated turves will be peeled back and not detached from the ground, the materials inserted and the turves replaced to hold the base in place;
- The silt fence will be inspected regularly by the ECoW and appointed contractor, and in particular following heavy rainfall;
- Silt fences will remain in-situ until the vegetation on the disturbed ground is re-established, as determined by the ECoW;
- The fence will not be pulled from the ground, but cut at ground level and the stakes / posts removed;
- Should water build up behind the fences, the sediment will settle to the bottom. Water can be released, but sediments will remain;
- Two lines of silt fencing will be installed in sensitive areas, based on the ECoW's professional judgement;
- A record of its installation, inspection and removal will be maintained by the ECoW; and
- Reinstatement of any banks affected by silt-laden run off during construction will be reinstated back to pre-development conditions.

5.2.3.2 Mitigation Measures for Accidental Pollution

Mitigation measures with respect to accidental pollution are focused on prevention and safeguarding the approach to the storage and handling of materials and managing vehicles during the temporary construction phase.

The following measures will be implemented for storage of materials:

- All oil and diesel storage facilities will be at least 30 m from any watercourse, including surface water drains, and outside the 1:100 flood extent (1% Annual Exceedance Probability);
- Spill kits and drip trays will be provided for all equipment and at locations where any liquids are stored and dispensed:
- Storage areas for solid materials, including waste soils, will be designed and managed to prevent deterioration of the materials and their escape (via surface run-off or wind blow);
- Storage areas will be kept secure to prevent acts of vandalism that could result in leaks or spills; and
- All containers of any size will be correctly labelled, indicating their contents and any hazard warning signs.

The following measures will be implemented across the site to prevent spills:

- Fuel tanks, drums and mobile bowsers (and any other equipment that contains oil and other fuels) will have a secondary containment, for example double-skinned tanks;
- All tanks, drums and mobile bowsers will be located in a sealed impervious bund with sufficient capacity
 to contain at least 25% of the total volume of the containers or 110% of the largest container,
 whichever is the greatest;
- Storage areas will be covered, wherever possible, to prevent rainwater filling the bunded areas (long-term storage areas will be covered. Storage areas used for a short period of time e.g. a few hours and where no rain is predicted, will not be covered);
- Fuel fill pipes will not extend beyond the bund wall and will have a lockable cap secured with a chain;
- Where fuel is delivered through a pipe permanently attached to a tank or bowser:
- The pipe will be fitted with a manually operated pump or a valve at the delivery end which closes automatically when not in use;
- The pump or valve will be fitted with a lock;
- The pipe will be fitted with a lockable valve at the end where it leaves the tank or bowser;
- The pipework will pass over and not through bund walls;
- Tanks and bunds will be protected from vehicle impact damage;
- Tanks will be labelled with contents, capacity information and hazard warnings; and
- All valves, pumps and trigger guns will be turned off and locked when not in use. All caps on fill pipes will be locked when not in use.
- Suitable precautions will be taken to prevent spillages from equipment containing small quantities of hazardous substances (for example, chainsaws and jerry cans) including:
- Each container or piece of equipment will be stored in its own drip tray made of a material suitable for the substance being handled; and
- Containers and equipment will be stored on a firm, level surface.
- For deliveries and dispensing activities, the Contractor will ensure that:
- Site-specific procedures are in place for bulk deliveries; and
- Delivery points and vehicle routes are clearly marked.
- Emergency procedures will be displayed, and suitably sized spill kits will be available at all delivery points, and staff will be trained in these procedures and the use of spill kits.
- Fuel and oil leaks from vehicles and plant

The use of vehicles and plant poses similar risks to those posed by storage of liquids. Fuel and oil may leak from such equipment which may enter drains and/or watercourses, as well as contaminating the ground itself. The following measures will be implemented to reduce this risk:

- Vehicles and plant provided for use on the site will be in good working order to ensure optimum fuel
 efficiency, and will be regularly inspected to ensure they are free from leaks;
- Sufficient spill kits will be carried on all vehicles;
- Vehicles and plant will be regularly maintained to ensure that they are working at optimum efficiency and are promptly repaired when not in good working order;
- Vehicles and plant will not park near or over drains; and
- Refuelling of vehicles and plant will be carried out on hard standing, using drip trays to ensure no fuel can contaminate the ground outside of the bunded areas.

The following measures will be implemented to reduce risks associated with concrete pouring:

- When working in or near the surface water and the use of introduced materials (e.g. oil) cannot be avoided, alternative materials such as biodegradable oils will be used;
- Placing of concrete in or near watercourses will only be carried out under the supervision of the ECoW;
- there will be no hosing of concrete, cement, grout or similar material spills into surface water drains. Such spills shall be contained immediately, and run-off prevented from entering the watercourse;
- Concrete waste and wash-down water will be contained and managed on-site to prevent pollution of all surface watercourses; and
- Washout from concrete lorries will not be permitted on-site and will only take place at the batching plant (or other appropriate facility designated by the manufacturer).

5.2.4 Specific Measures

A precautionary approach is being taken regarding seeking a licence to monitor and carry out works in proximity of the above-mentioned confirmed and potential holts and couches. This includes monitoring using static camera traps that will be carried out before the start of works (including GI) to identify any changes in baseline and during the works period to monitor otter activity. Cameras will be deployed and checked for a minimum of fifteen weeks prior to works commencement by a licensed ecologist. A licensed ecologist will supervise the work to ensure that mitigation measures will be in place.

A 30 m buffer zone will need to be established, using temporary fencing, during the construction period. This buffer will need to be extended to 150 m, if any holt is confirmed as being used by breeding females or cubs, until the cubs have left the holt. Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes (National Roads Authority, 2008) will be consulted prior proceeding. All works will be undertaken in accordance with the methodology illustrated in the guidance.

5.3 Consideration of Alternatives

No reasonable alternative options will have a lower impact.

Different options appraisals have been previously conducted. A submitted EIAR and NIS examined the potential for changes in the baseline conditions from the Proposed Development against the conservation objectives of relevant European sites, were relevant. The nearest European site designated for otter was the River Boyne and River Blackwater Special Area of Conservation (SAC). The SAC is located 14km at its nearest point and the Natura Impact Statement (NIS) reported that there was no potential for Adverse Effects on Site Integrity, due to lack of a hydrological link to the QI of this SAC. The EIAR established that, with the adoption of specific mitigation measures, the current Proposed Development will have no residual effects on otter.

The licence will not cause long-term impacts on the species concerned.

The mitigation proposals detailed above have been designed to meet criteria for licence application.

6. Application for Regulation 54 (Article 16) Derogation Licence

In order for the Proposed Development to go ahead, a derogation licence must be sought. Article 16 of the Habitats Directive sets out three conditions, all of which must be met before a derogation from the requirements of Article 12 or Article 13 of the Directive can be granted. These conditions are also set out in Regulation 54 of the Regulations. The conditions are:

- 1. A reason(s) listed in Regulation 54 (a)-(e) applies;
- 2. No satisfactory alternatives exist; and
- 3. Derogation would not be detrimental to the maintenance of a population(s) at a favourable conservation status.

The Proposed Development has been assessed under these three conditions.

6.1 Test of Condition One – Reasons for Seeking Derogation

Regulation 54(2) (a)–(e) states that a derogation licence may be granted for any of the following reasons:

- (a) In the interests of protecting wild flora and fauna and conserving natural habitats;
- (b) To prevent serious damage, in particular to crops, livestock, forests, fisheries and water and other types of property;
- (c) In the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment;
- (d) For the purpose of research and education, of re-populating and re-introducing these species and for the breeding operations necessary for these purposes, including artificial propagation of plants; or
- (e) To allow, under strictly supervised conditions, on a selective basis and to a limited extent, the taking or keeping of certain specimens of the species to the extent specified therein, which are referred to in the First Schedule.

The Proposed Development falls under reason (a) "In the interests of protecting wild flora and fauna and conserving natural habitats".

6.2 Test of Condition Two – There is no Satisfactory Alternative

For a derogation licence to be granted, there must be no satisfactory alternatives.

As described in Section 5.3, alternative options were considered as part of the scheme. However no reasonable alternatives will have a lower impact.

Therefore, the proposed option, together with the adoption of mitigation measures, is the only viable option to ensure the success of the Proposed Development.

6.3 Test of Condition Three – Favourable Conservation Status

The final test for a derogation licence to be granted is considering if granting a derogation licence would be detrimental to the maintenance of the populations of the species in question at a favourable conservation status in their natural range.

The mitigation measures detailed in Section 5.2 have been designed to meet this test. With those mitigation measures implemented, the impacts on otter will be reduced, and the residual disturbance impacts that the derogation licence is required for will be minimal. Once construction is complete, no impacts on otter are envisaged, and it is expected that even if there is any disturbance of otter caused by the Proposed Development, the area will continue to be utilised and inhabited by otter post-construction given the high-value habitat the River Liffey provides to the species.

7. Licence Information

7.1 Qualification as Scientific Agent

The appointed contractor will be providing an Ecological Clerk of Works (ECoW) to act as the client's Environmental Assurance Officer (EAO) for the duration of the works. The ECoW will possess suitable experience of otter survey, monitoring and mitigation. The licence will be in the name of the contractor once appointed, but as this is not yet decided, the name on the licence will be that of the public authority until the contractor is appointed. The Contractor for the works is due to be appointed in 2025. Once appointed the NPWS will be contacted so that the licence can be updated with the Licensee (Contractor's) details.

7.2 Period for Licence

The Contractor for the main works is due to be appointed in 2025 with a GI contractor to be appointed prior to this date but likely to be Q3 2024. Once appointed the NPWS will be contacted so that the licence can be updated with the Licensee (Contractors) details. We are requesting the licence be granted to cover the period Q3 2024 to end Q3 2028. Construction phase is due to commence in 2025 and last approximately until 2028. If there is a delay to the programme which would require an update to the licence the NPWS will be contacted immediately.

8. Summary and Conclusion

The Proposed Development is required to respond to the increased electricity demand on the East Coast and to integrate new renewable generation from South and South-West Regions. Otter is confirmed present in the vicinity of the Proposed Development site, due to the data recorded during the desk study and field surveys. The works may impact on otter utilising the Liffey River through mortality, disturbance and pollution. With the appropriate mitigation implemented, these impacts are expected to be reduced and/or eliminated. However, the works may still cause disturbance to otter. Alternative route options have been considered, but the only feasible option is that being proposed, hence it is not possible to eradicate the possibility of disturbing otter. Therefore, a derogation licence is required for the Proposed Development to progress. On a precautionary basis due to the potential for changes in baseline conditions given the usage of breeding and resting sites is highly transient, all couches and holts, confirmed or potential, identified during the surveys are included in this licence application,.

The four stages of the decision-making process to decipher if a derogation licence should be sought as recommended by NPWS (2021) has been followed. Existing information and ecological surveys have been used to determine the likely presence of otter in the area (Stage 1 and Stage 2). The potential impacts, mitigation and alternative options have been assessed and considered (Stage 3). There is no satisfactory alternative to proceeding with the works, and therefore a derogation licence is being sought (Stage 4).

The three conditions which must be met before a derogation from the requirements of Article 12 or Article 13 of the Directive can be granted have been met:

- 1. The Proposed Development is required "In the interests of protecting wild flora and fauna and conserving natural habitats".
- 2. There are no satisfactory alternatives to that proposed.

3. The Proposed Development will not be detrimental to the maintenance of the populations of otter at a favourable conservation status in their natural range.

Therefore, a derogation licence is required for the Proposed Development, and that the Proposed Development is eligible for this licence.

9. References

Audus, I, Charles, P and Evans, S. (2010). Environmental good practice on site (third edition), CIRIA, London.

CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.

CIEEM (2021) Good Practice Guidance for Habitats and Species. Version 3. Chartered Institute of Ecology and Environmental Management, Winchester.

Inland Fisheries Ireland (2016). Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters. Inland Fisheries Ireland.

Masters-Williams, H., Heap, A., Kitts, H., Greenshaw, L., Davis, S., Fisher, P., Hendrie, M. and Owens, D. (2001). Control of Water Pollution from Construction Sites, Guidance for Consultants and Contractors. Construction Industry Research and Information Association.

Murnane, E., Heap, A., and Swain, A. (2006a). Control of water pollution from linear construction projects: Technical Guide. Construction Industry Research and Information Association.

Murnane, E., Heap, A., and Swain, A. (2006b). Control of water pollution from linear construction projects: Site quide. Construction Industry Research and Information Association.

National Biodiversity Data Centre (ND, accessed January 2024). Biodiversity Maps. Available online at: https://maps.biodiversityireland.ie/Map

National Parks and Wildlife Service (NPWS) (2021). Strict Protection of Animal Species - Guidance for Public authorities on the Application of Articles 12 and 16 of the EU Habitats Directive to development/works undertaken by or on behalf of a Public authority.

National Roads Authority (2010). Guidelines on the Management of Noxious Weeds and Non-Native Invasive Plant Species on National Roads. National Roads Authority.

National Roads Authority (NRA) (2008). Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes. National Roads Authority.

National Roads Authority (2004). Guidelines for the Treatment of Noise and Vibration in National Road Scheme. National Roads Authority.

Vincent Wildlife Trust (2020). Otter Species Project. Accessed February 2024. Available: https://www.vincentwildlife.ie/species/otter.

Appendix A. Photographs





Photograph 1: Location at grid N 87922 24452, where potential holt (H1) entrance was recorded during the ecology baseline surveys.

Photograph 2: Detail of potential holt (H1) entrance (N 87922 24452) taken in March 2024.





Photograph 3: Detail of the otter slide (S1) recorded at approximately N 87937 24494.

Photograph 4: Location at grid ref. N 87943 24512, where potential holt (H2) entrances were recorded during ecology surveys.



Photograph 5: Detail of the potential otter holt (H2) located at grid ref. N 87943 24512. The entrances where approx. 20cm wide and located below the tree root.



Photograph 6: Potential otter holt (H3) located at grid N 87923 24476, in proximity to potential otter couch



Photograph 7: Potential otter holt (H4) at grid N 87932 24461



Photograph 8: Potential otter couch (C1) recorded at grid N 87923 24476

