Addendum to the Environmental Impact Assessment Report

NISA

North Irish Sea Array

Volume 4 - Onshore Chapters

Chapter 23
Biodiversity

Statkraft

CIP
Copenhagen Infrastructure Partners

GoBe
APEM Group

ARUP

Contents

Tables

23. Biodiversity

North Irish Sea Array Windfarm Ltd (NISA, hereafter referred to as 'the Developer') has been considering the Request for Further Information (RFI) issued by An Bord Pleanála (now An Coimisiún Pleanála) as well as the third-party submissions received following public consultation. At An Coimisiún Pleanála's behest, the Developer has also continued to consult with stakeholders in respect of the 2024 planning application throughout 2024-2026. The Developer has refined elements of the design to respond to the third-party submissions, the continued public and stakeholder consultation and the RFI. Amendments are therefore required to Chapter 23: Biodiversity of the 2024 Environmental Impact Assessment Report (EIAR). Full details of consultation undertaken can be found in Appendix A1.2 in the Addendum to the EIAR.

For the purposes of clarity, this document shall be read in conjunction with the Chapter 23 submitted as part of the 2024 EIAR.

Any cross reference to a chapter, section, table, image, figure or appendix within this document is to another location within the Addendum to the EIAR unless explicitly stated otherwise. Any cross reference to anything included in the 2024 EIAR will be clearly labelled as such.

Text in bold is only used throughout this document to indicate where changes are required, and why they are required. Text in italics is text from a section of the 2024 EIAR which is deleted, or quotations from other documents (as explicitly stated). Replacement text is in normal font.

Tables, figures and images which have been updated from the 2024 EIAR, or entirely new, have been included in the Addendum to the EIAR. These will be identified by the "A" prefix in the caption. Any changes within an updated table, in comparison to tables within the 2024 EIAR, are indicated by grey shading in the relevant cell, column or row, as necessary. The exception here is where a table has been replaced in its entirety.

The figures prepared for Chapter 23 of the 2024 EIAR are still relevant to provide a comprehensive overview of the ecological baseline for the onshore development area. However, in accordance with RFI Section 1 (b), the results from survey campaigns undertaken in 2023-2025 are included in Figure A23.1 to Figure A23.32.

The sections relevant to Chapter 23 in the RFI are included below.

RFI Section	RFI	Relevance to Chapter
1 (b)	The scientific information provided as part of the planning application documentation should be based on up-to-date survey reports and data. Accordingly, the applicant is requested to confirm/provide justification/verification that the information submitted in support of the planning application remains relevant and appropriate at the point of submitting further information or to update same as required.	The timeframes associated with the RFI have necessitated a review of the datasets previously used in the 2024 EIAR to ensure any necessary updates to the baseline environment are captured. Therefore, a review of the baseline environment has been undertaken to comply with RFI 1 (b). References have been updated to account for the review of baseline information in Chapter 23. However, unless any changes are required to the baseline information following the review of up-to-date data, the in-text citations included in Chapter 23 of the 2024 EIAR shall remain unchanged unless explicitly stated otherwise. Any relevant changes are included in this report in Sections 23.2 and 23.3.
1 (c)	The applicant is requested to confirm whether any on-going or additional surveying has been carried out since the application was lodged and, if so, the applicant is invited to submit any further survey data results and analysis and update the planning application documentation, as appropriate.	Additional ecology surveys have been undertaken since the 2024 EIAR to provide an updated baseline for assessment. The results of these surveys are included in Section 23.2 of this Chapter.

RFI Section	RFI	Relevance to Chapter
5	The Marine Institute in their observation raises concerns in relation to the methodology applied in the submitted cumulative effects assessment and the manner in which the information is presented, noting the lack of a standard Irish methodology in relation to CEA. The applicant is advised that guidance exists in the UK, namely Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment - GOV.UK, September 2024 (NSIP, 2024). The applicant is requested to revise the submitted cumulative assessment in line with NSIP (2024) and submit a standalone document to clearly demonstrate the CEA conclusions. In the interests of consistency and transparency, the applicant is requested to complete the assessment in accordance with the templates provided in the NSIP (2024), namely "Appendix 1: Matrix 1 – Identification of 'other development' for CEA" and "Appendix 2: Matrix 1 – Assessment matrix" (see attached Appendix B)…	A revised CEA, which considers the methodology and template provided in the Nationally Significant Infrastructure Projects: Advice on Cumulative Effects Assessment – GOV.UK, September 2024 (NSIP, 2024), has been prepared. The revised CEA is provided in Chapter 38 Cumulative and Inter-Related Effects, Appendix 38.1 – Onshore Long List and Appendix A38.2 Offshore Long List. The update to this chapter in relation to this, is provided in Section 23.9.
13 (e)	The applicant is requested to review the draft [Flemington] LAP (or adopted LAP, where updated at time of this observation) and update the submitted application documentation accordingly, having regard in particular to potential for visual impacts from the substation on the draft LAP lands, potential traffic implications given the proposed access to the LAP lands directly adjoins the proposed access to the substation, and potential noise implications from the substation on the adjoining residential zoned lands.	Minor changes to the landscape plan at the grid facility have been included in response to RFI Section 13 (e). Any relevant changes are included in this report in Section 23.6.
20 (b)	Fingal County Council raise a number of issues in relation to tree protection/removal, landscaping plans and the submitted Habitat and Species Management Plan. The applicant is requested to address the issues raised.	In response to RFI 20 (b), an updated Tree Report has been included to ensure retained trees are protected during construction. Details on a tree felling and replacement plan and replanting have also been included, and an updated Habitat and Species Management Plan has also been provided. Any relevant changes are included in Sections 23.3, 23.5, 23.6.

23.1 Introduction

There are no changes to the section. Refer to Section 23.1 of Chapter 23 of the 2024 EIAR.

23.2 Methodology

23.2.1 Introduction

There are no changes to the section. Refer to Section 23.2.1 of Chapter 23 of the 2024 EIAR.

23.2.2 Legislation and Guidance

23.2.2.1 Legislation

There are no changes to the section. Refer to Section 23.2.2.1 of Chapter 23 of the 2024 EIAR.

23.2.2.2 Plans and policies

There are no changes to the section. Refer to Section 23.2.2.2 of Chapter 23 of the 2024 EIAR.

23.2.2.3 Guidelines

The only change to this section is in relation to RFI Section 1 (b) and is an update to the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines. Therefore, the following text shall be deleted:

"CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. September 2018."

And replaced with the following text:

CIEEM (2024) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. September 2024.

There are no other changes to the section. Refer to Section 23.2.2.3 of Chapter 23 of the 2024 EIAR.

23.2.2.4 Information sources

There are no changes to the section. Refer to Section 23.2.2.4 of Chapter 23 of the 2024 EIAR.

23.2.3 Study Area

There are no changes to the section. Refer to Section 23.2.3 of Chapter 23 of the 2024 EIAR.

23.2.4 Data collection and Collation

There are no changes to the section. Refer to Section 23.2.4 of Chapter 23 of the 2024 EIAR.

23.2.4.1 Desktop Study

While the methodology and sources of information have not changed, all data searches have been updated to comply with RFI Section 1 (b) to capture the most recent available records. Updated data searches include National Biodiversity Data Centre (NBDC) records[1], Irish Wetland Bird Survey (IWeBS) data[2,3,4] and Bat Conservation Ireland (BCI) roost records as accessed in January 2026. The results of the updated desktop study are included in Appendix A23.3: Desktop Results.

No other changes apply to the section. Refer to Section 23.2.4.1 of Chapter 23 of the 2024 EIAR.

23.2.4.2 Field Surveys

In response to RFI Section 1 (c), updated surveys have been undertaken to provide an up-to-date baseline. Therefore, this section has been updated to provide the survey dates as undertaken in 2023, 2024 and 2025. All survey dates are provided in Table A23.1 (replacing Table 23.1 of Chapter 23 of the 2024 EIAR) with update survey dates which are highlighted in grey in Table A23.1. Where relevant, details of survey effort, survey times and conditions are provided in the following sections. With the exception of bat survey guidance, survey methodology for all other update surveys is as undertaken for the 2024 EIAR and have not changed.

Therefore, Table 23.1 and the following text shall be deleted from Section 23.2.4.2 of Chapter 23 of the 2024 EIAR:

"Ecology surveys in relation to the onshore infrastructure of the proposed development were undertaken by suitably qualified and experienced ecologists and followed best practice guidelines for specified habitats and species as outlined in the following sections. Ecological surveys were carried out between June 2021 and August 2023. A summary of the survey types and survey effort completed is provided in Table 23.1."

And replaced with the following text:

Ecology surveys in relation to the onshore infrastructure of the proposed development were undertaken by suitably qualified and experienced ecologists and followed best practice guidelines for specified habitats and species as outlined in the following sections. Ecological surveys were carried out between June 2021 and September 2025. A summary of the survey types and survey effort completed is provided in Table A23.1.

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1 NBDC Maps. Available at: https://maps.biodiversityireland.ie/Map [Accessed January 2026]

2 Irish Wetland Bird Survey – Map of sites. Available at: https://bwi.maps.arcgis.com/apps/View/index.html?appid=1043ba01fcb74c78bc75e306eda48d3a [Accessed January 2026]

3 Irish Wetland Bird Survey – Site summary tables. Available at: https://c0cre470.caspio.com/dp/4BAE30005dbe20614b404564be88 [Accessed January 2026]

4 Irish Wetland Bird Survey – Species trends by site. Available at: https://birdwatchireland.ie/app/uploads/2023/08/iwebs_trends_report.html#Site_Trends [Accessed January 2026]

Table A23.1 Overview of Ecological Surveys undertaken at the Proposed Development (Replacing Table 23.1 of Chapter 23 of the 2024 EIAR)

Survey type	2021 survey dates	2022 survey dates	2023 survey dates	2024 survey dates	2025 survey dates	Surveyors[5]
Extended Phase 1 Surveys	03/08/2021 04/08/2021 05/08/2021 11/08/2021 12/08/2021 09/09/2021 10/09/2021	29/06/2022 30/06/2022 01/07/2022 12/09/2022 13/09/2022 28/09/2022 29/09/2022	07/06/2023 08/06/2023		14/07/2025 15/07/2025 16/07/2025	AC, AH, EC, EH, FM, JK, MM, DC, FMC
Annex I Habitat Surveys	-	29/06/2022 30/06/2022	-		14/07/2025	JK, EC, FMC
Rare Plant Surveys	-	30/06/2022 13/09/2022	-		14/07/2025 03/09/2025	JK,EC, FMC, DC
Aquatic & Fisheries Assessment and Otter surveys	-	24/10/2022 25/10/2022	12/07/2023		03/09/2025 04/09/2025	PQ, FM, DC, KO
Breeding Bird Surveys	08/06/2021 10/06/2021 11/06/2021 14/06/2021	11/04/2022 25/04/2022 28/04/2022 15/05/2022 23/05/2022 26/05/2022	07/06/2023 08/06/2023	03/07/2024 04/07/2024 31/07/2024 01/08/2024		CS, SC, BF
Wintering Waterbird Surveys	20/10/2021 23/10/2021 29/10/2021 30/10/2021 11/11/2021 17/11/2021 19/11/2021 13/12/2021 14/12/2021 17/12/2021 23/12/2021 28/12/2021	11/01/2022 17/01/2022 18/01/2022 25/01/2022 14/02/2022 28/02/2022 10/03/2022 15/03/2022	30/10/2023 21/11/2023 12/12/2023	05/01/2024 06/01/2024 22/02/2024 18/03/2024 19/03/2024		CS
Potential Roost Feature (PRF) Bat Surveys	Belcamp substation: 11/08/2021 12/08/2021	Belcamp substation: 14/06/2022			23/07/2025 24/07/2025 02/09/2025	AC, OOS, FM, FH, ROC, DM, LM, PP
Bat Activity Transects	-	Landfall site & grid facility: 03/08/2022			Landfall site & grid facility: 24/07/2025	
Static Bat Detector Deployment	Landfall site:	Landfall site, Blakes Cross North and South, M1 crossing and Belcamp:		Landfall site, Blakes Cross South, and Belcamp:		

[5] Surveyors Alice Clarke (AC), Aoife Hughes (AH), Emmeline Cosnet (EC), Emma Horgan (EH), Fionn Murphy (FM), Julie Kohlstruck (JK), Maeve Maher-McWilliams (MM), Patrick Quinn (PQ), Ciaran Smyth (CS), Oisín O'Sullivan (OOS), Fred Hintz (FH), Róisín O'Connell (ROC),David McGarrell (DM), Darren Craig (DC), Patrick Power (PP), Shane Cully (SC), Brien Foley (BF), Ed Morris (EM), Fern, McCann (FMC), Leona McSharry (LM) and Kevin O'Reilly (KO)

Survey type	2021 survey dates	2022 survey dates	2023 survey dates	2024 survey dates	2025 survey dates	Surveyors[5]
	02/09/2021 to 10/09/2021	03/08/2022 to 16/08/2022		03/07/2024 to 24/07/2024		
Emergence/Re-entry Roost Surveys	-	-	05/07/2023 03/08/2023 24/08/2023			

Bats

The change required is an update to bat survey methodology guidance which supersedes guidance followed during surveys undertaken for the 2024 EIAR.

Therefore, the following text from Section 23.3.3.1 of Chapter 23 in the 2024 EIAR shall be deleted:

Potential Roost Features (PRFs)

"These surveys were undertaken during Extended Phase 1 surveys completed between August 2021 and June 2023, with specific PRF surveys undertaken at trees within the existing Belcamp substation area between August 2021 and June 2022. See Table 23.1 for a full list of survey dates. PRF assessment was undertaken according to Bat Conservation Trust (BCT) guidance (Collins, 2016) which is set out in Table 23.4 below, and with regards to Irish Wildlife Manual no. 25 (Kelleher & Marnell, 2006). Updated BCT guidance (Collins, 2023) was published in October 2023 following the completion of bat surveys, however PRF assessment as outlined below remains the same. Individual trees were assigned PRF suitability and mapped using a handheld Global Positioning System (GPS), or ArcGIS surveying application Survey123."

And replaced with the following text:

Potential Roost Features (PRFs)

These surveys were undertaken during Extended Phase 1 surveys completed between August 2021 and June 2023, and between July and September 2025 with specific PRF surveys undertaken at trees within the existing Belcamp substation area between August 2021 and June 2022 and again in July 2025. See Table A23.1 for a full list of survey dates. PRF assessment (pre-2024) was undertaken according to Bat Conservation Trust (BCT) guidance (Collins, 2016). Due to an update in published guidance, subsequent PRF assessment (post 2024) was undertaken according to BCT guidance (Collins, 2023) which is set out in Table A23.2 below, and with regards to Irish Wildlife Manual no. 25 (Kelleher & Marnell, 2006). Collins (2023) provides guidelines for assessing potential suitability of habitat features as bat roosts and for foraging bats. This allows surveyors to assign PRFs as None, Negligible, Low, Moderate, or High status in terms of their potential for bats in structures as shown on Table A23.2 Alternatively, for trees were assessed using the categorisation on Table A23.2. Features were mapped using a handheld Global Positioning System (GPS), or ArcGIS surveying application Survey123.

In addition, Table 23.4 of Chapter 23 in the 2024 EIAR shall be deleted and replaced in its entirety with Table A23.2 to reflect the updated guidance.

Table A23.2 Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of habitat features within the landscape, to be applied using professional judgement (Collins, 2023) (Replacing Table 23.4 of Chapter 23 of the 2024 EIAR)

Suitability	Description Roosting Habitats	Commuting and Foraging Habitats
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e., a complete absence of crevices/suitable shelter at all grounds /underground levels).	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e., no habitats that provide continuous lines of shade/protection for flight-lines or generate/shelter insect populations available to foraging bats).

Suitability	Description Roosting Habitats	Commuting and Foraging Habitats
Negligible[a]	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No obvious habitat features on site likely to be used as flightpaths or by foraging bats; however, a small element of uncertainty remains to account for non-standard bat behaviour.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions[b] and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e., unlikely to be suitable for maternity and not a classic cool/stable hibernation site but could be used by individual hibernating bats[c]).	Habitat that could be used by small numbers of commuting bats such as a hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by another habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions [b], and/or surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland, or water.
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions, and surrounding habitat. These structures have the potential to support high conservation status roosts e.g. maternity or classic cool/stable hibernation site.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, treelined watercourses and grazed parkland. Site is close to and connected to known roosts.

[a] Negligible is defined as so small or unimportant as to be not worth considering, insignificant. This category may be used where there are places that a bat could roost or forage (due to one attribute), but it is unlikely that they would (due to another attribute).

[b] For example, in terms of temperature, humidity, height above ground level, lights levels or levels of disturbance.

[c] Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of buildings types in urban environments (Korsten *et al.*, 2016 and Jansen *et al.*, 2022). Common pipistrelle swarming has been observed in the UK (Bell, 2022 and Tomlinson, 2020) and winter hibernation of numbers of this species has been detected at Seaton Delaval Hall in Northumberland (National Trust, 2018). This phenomenon requires some research in the UK, but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter prominent buildings in the landscape, urban or otherwise.

In addition, the following text and Table A23.3 shall be added to Section 23.2.4.2 of Chapter 23 of the 2024 EIAR to reflect the updated Collins (2023) guidance, which was published after the completion of the surveys provided for the 2024 EIAR:

As per Collins (2023), the above categorisation is not the most suitable for trees. A better categorisation is that shown in Table A23.3. This categorisation of trees uses two categories (PRF-I or PRF-M). Furthermore, if a woodland/treeline is made up of multiple PRF-I's this area is best categorised as a roost resource. Appropriate compensation for all PRF-I's in advance of impacts, and a Precautionary Working Method Statement (PWMS) for works, is required.

Table A23.3 Guidelines for categorising the PRFs on a proposed development site for bats (Collins, 2023)

Suitability	Description
PRF-I	PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats.
PRF-M	PRF-M is suitable for multiple bats and may therefore be used by a maternity colony.

To account for the updated bat activity, transect surveys in response to RFI Section 1 (b), the following text below from Section 23.3.3.1 and Table 23.5 of Chapter 23 in the 2024 EIAR shall be deleted:

Bat Activity Transects

"The transect survey was conducted using a handheld Batlogger bat detector on 03 August 2022, during suitable weather conditions, in accordance with BCT Guidelines.

Surveyors walked around the boundaries of each of the fields as shown in Table 23.5, where the highest amount of commuting bat activity would be expected. See Figure 23.9 for the transect route taken."

And replaced with the following text and Table A23.4:

Bat Activity Transects

The transect survey was conducted using a handheld Batlogger bat detector on 03 August 2022 and repeated on 24 July 2025, during suitable weather conditions, in accordance with BCT Guidelines.

Surveyors walked around the boundaries of each of the fields as shown in Table A23.4, where the highest amount of commuting bat activity would be expected. See Figure 23.9 and Figure A23.1 for the transect route taken.

Table A23.4 Bat activity transect survey effort (Replacing Table 23.5 of Chapter 23 of the 2024 EIAR)

Date	Start time	End time	Sunset	Weather conditions
03/08/2022	21:25	22:50	21:19	2.5m/s wind, 16ºC, light drizzle <0.1mm stopping at c. 21:35
24/07/2025	21:45	22:55	21:33	3m/s wind, 15ºC, light drizzle, dry

To reflect the updated bat surveys in response to RFI Section 1 (b), the following text below from Section 23.3.3.1 and Table 23.6 of Chapter 23 in the 2024 EIAR shall be deleted:

Static Bat Detector Deployments

"Their locations and the transect route are illustrated in Figure 23.9 and Figure 23.10. Survey effort is detailed in Table 23.6. Detector WSS040 stopped recording after 10 nights as a result of increased battery drainage while recording high levels of activity."

And replaced with the following text and Table A23.5:

Static Bat Detector Deployments

Detectors were deployed in the same locations on 03 July 2024 for a minimum of 10 consecutive nights. Their locations and the transect route are illustrated in Figure 23.9, Figure 23.10 and Figure A23.1. Survey effort is detailed in Table A23.5. In 2022, Detector WSS040 stopped recording after 10 nights as a result of increased battery drainage while recording high levels of activity. In 2024, Detector WSS078 stopped recording due to equipment failure.

Table A23.5 Bat static detector survey effort (Replacing Table 23.6 of Chapter 23 of the 2024 EIAR)

Deployment Date	Unit number	Map ID	Latitude	Longitude	Detector model	Total recording time in minutes (min) and nights
03/08/2022	WSS061	D.01	53.40909	-6.20723	SM4	8833min; 12 nights
03/08/2022	WSS053	D.02	53.41082	-6.20554	SM4	8833min; 12 nights
03/08/2022	WSS064	D.03	53.49476	-6.19699	SM4	8833min; 12 nights
03/08/2022	WSS046	D.04	53.500437	-6.19653	SM-Mini	8833min; 12 nights
03/08/2022	WSS067	D.05	53.620777	-6.20561	SM-Mini	8833min; 12 nights
03/08/2022	WSS040	D.06	53.62417	-6.19337	SM4	7300min; 10 nights
03/08/2022	WSS060	D.07	53.62448	-6.18932	SM4	8833min; 12 nights
03/07/2024	WSS032	D.01	53.409098	-6.20719	SM4	9498 min and 15 nights
03/07/2024	WSS030	D.02	53.410828	-6.205602	SM4	9498 min and 15 nights
03/07/2024	WSS070	D.03	53.494768	-6.197085	SM4	9498 min and 15 nights
03/07/2024	WSS078	D.04	53.500205	-6.196488	SM-Mini	n/a failed to record
03/07/2024	WSS025	D.05	53.620539	-6.206004	SM-Mini	9498 min and 15 nights
03/07/2024	WSS040	D.06	53.624196	-6.193399	SM4	9498 min and 15 nights
03/07/2024	WSS057	D.07	53.624478	-6.189242	SM4	9498 min and 15 nights

Birds

Breeding Birds

The change required for this section refers to survey effort, dates and times for updated surveys undertaken in 2024 and is contained in Appendix A23.1.

Therefore, the following text shall be deleted:

"Full detail of the survey effort, dates and times are provided in Volume 10, Appendix 23.1".

And replaced with the following text:

Full detail of the survey effort, dates and times are provided in Volume 10, Appendix A23.1.

No other changes apply to the section. Refer to Section 23.2.4.2 of Chapter 23 of the 2024 EIAR.

Wintering Waterbirds

The change required for this section refers to survey effort, dates and times for updated surveys undertaken in 2023 and 2024 and is contained in Appendix A23.2.

Therefore, the following text shall be deleted:

"Full detail of the survey effort, dates and times are provided in Volume 10, Appendix 23.2."

And replaced with the following text:

Full detail of the survey effort, dates and times are provided in Volume 10, Appendix A23.2.

The following text shall also be deleted:

"Separate to surveys undertaken and detailed in this EIAR chapter, additional ornithology surveys at the landfall site were completed between January to March, and September to December 2021, and January to February, and September to December 2022. Details of these survey are contained in Volume 3, Chapter 15: Offshore Ornithology for full details. Surveys undertaken to collect data on birds using the offshore development area is provided in Chapter 15: Offshore Ornithology."

And replaced with the following text:

Separate to surveys undertaken and detailed in this EIAR chapter, additional ornithology surveys at the landfall site were completed between January to March, and September to December 2021, and January to February, and September to December 2022. Details of these survey are contained in Volume 3, Chapter 15: Offshore Ornithology for full details. Surveys undertaken to collect data on birds using the offshore development area is provided in Chapter 15: Offshore Ornithology.

No other changes apply to the section. Refer to Section 23.2.4.2 of Chapter 23 of the 2024 EIAR.

23.2.5 Survey Limitations

Bat activity surveys were undertaken in 2022 using the Bat Conservation Trust (BCT) Guidelines available at the time (Collins, 2016). It is noted that this guidance was updated by BCT in 2023 (Collins, 2023) after these surveys were concluded. However, it should be noted that whilst this was flagged in the 2024 EIAR, the updated bat activity surveys were undertaken using the Collins 2023 guidance document. Therefore, there are no changes to the section. Refer to Section 23.2.5 of Chapter 23 of the 2024 EIAR.

23.2.6 Impact Assessment Methodology

There are no changes to the section. Refer to Section 23.2.6 of Chapter 23 of the 2024 EIAR.

23.3 Baseline Environment

There are no changes to the section. Refer to Section 23.3 of Chapter 23 of the 2024 EIAR.

23.3.1 Description of the Site

The change required for this section is an update to reference of latest Water Framework Directive (WFD) status from the 2016-2021 WFD status to the 2019-2024 WFD status. Therefore, one sentence has been updated in this section, and the following text from Section 23.3.1 of Chapter 23 in the 2024 EIAR shall be deleted:

"*The 2016-2021 WFD status of the water bodies within the onshore development area show that the watercourses along the onshore cable route and grid facility have 'poor' WFD status apart from one stream named Ballough Stream_010 which has 'moderate' status. All watercourses crossed by the proposed development flow into the Northwestern Irish Sea (HA 08).*"

And replaced with the following text:

The 2019-2024 WFD status of the water bodies within the onshore development area show that the watercourses along the onshore cable route and grid facility have 'poor' WFD status apart from one stream named Ballough Stream_010 which has 'moderate' status. All watercourses crossed by the proposed development flow into the Northwestern Irish Sea (HA 08).

There are no other changes to the section. Refer to Section 23.3.1 of Chapter 23 of the 2024 EIAR.

23.3.2 Desk Study Results

The change required for this section refers to the updated data records obtained in January 2026 and include NBDC records, existing terrestrial non-native invasive species records and BCI records. This information is contained in Appendix A23.3.

Therefore, the following text shall be deleted from Section 23.3.2 of Chapter 23 of the 2024 EIAR:

"Records of protected species noted in the vicinity of the onshore development area were obtained from the NBDC database. Details of all protected and endangered species recorded within 10km of the onshore development area are summarised in Appendix 23.3."

And replaced with the following text:

Records of protected species noted in the vicinity of the onshore development area were obtained from the NBDC database. Details of all protected and endangered species recorded within 10km of the onshore development area are summarised in Appendix A23.3.

There are no other changes required to this section. Refer to Section 23.3.2 of Chapter 23 of the 2024 EIAR.

23.3.3 Field Survey Results

23.3.3.1 Extended Phase 1

The changes required to this section is to update the description, area and length of habitats to reflect the results from the updated baseline survey, as outlined in Section 23.2.4.2 in compliance with RFI Section 1 (b). Habitats requiring updating include BC1 Arable crops, GA1 Improved agricultural grassland and GS2 Dry meadows and grassy verges. In addition, the length of WL1 hedgerow within the study area has reduced by 154.44m.

Therefore, the following text below from Section 23.3.3.1 of Chapter 23 in the 2024 EIAR shall be deleted:

"The distribution of habitats is presented in Figure 23.17 to Figure 23.25 and summarised in Table 23.12."

And replaced with the following text:

The distribution of habitats is presented in Figure 23.17 to Figure 23.25, and Figure A23.2 to Figure A23.3 and summarised in Table A23.6

BC1 Arable crops

The following text below from Section 23.3.3.1 of Chapter 23 in the 2024 EIAR shall be deleted:

"In total, 53.71ha of arable crops fall within the onshore development area."

And replaced with the following text:

In total, 56.19ha of arable crops fall within the onshore development area.

GA1 Improved agricultural grassland

The following text below from Section 23.3.3.1 of Chapter 23 in the 2024 EIAR shall be deleted:

"This is the dominant habitat type across the onshore development area and surrounding area. 11.30ha of the habitat is located within the onshore development area."

And replaced with the following text:

This is the dominant habitat type across the onshore development area and surrounding area. 10.85ha of the habitat is located within the onshore development area.

GS2 Dry meadows and grassy verges

Due to the GS2 habitat loss at Wx22, GS2 Dry Meadows and grassy verges are no longer present. This change in the baseline environment is reflected in Figure A23.3. Therefore, the following text below from Section 23.3.3.1 of Chapter 23 in the 2024 EIAR shall be deleted:

"This habitat type is abundant across the onshore development areas it is often present alongside road margins (5.11ha). It is also used to categorise some agricultural fields which receive little to no agricultural inputs and the field margins of arable crops found along the coast. Often the grassland sward has gone rank with tall growing or scrambling herb species also present. Species included Yorkshire fog H. lanatus, false oat-grass A. elatius, cock's-foot D. glomerata, Taraxacum spp., ragwort S. jacobaea, bramble Rubus fruticosus agg., white clover T. repens, Leontodon spp., dog rose Rosa canina, , hogweed H. sphondylium, , Rumex spp, creeping thistle C. arvensis, bush vetch V. sepium, Calystelgia spp., Erigeron spp, redshank Persicaria maculosa ash F. excelsior and saplings of sycamore A. pseudoplatanus.

It is of biodiversity value due to the unmanaged nature, variety of species present and extent of this habitat type in particular at the Wx22 (Sluice Stream), see Figure 23.23, therefore it has been valued as local importance (higher value)."

And replaced with the following text:

This habitat type is abundant across the onshore development areas it is often present alongside road margins (1.90ha). It is also used to categorise some grasslands which receive little to no agricultural inputs and the field margins of arable crops found along the coast. Often the grassland sward has gone rank with tall growing or scrambling herb species also present. Species included Yorkshire fog *H. lanatus*, false oat-grass *A. elatius*, cock's-foot *D. glomerata*, *Taraxacum spp*., ragwort *S. jacobaea*, bramble *Rubus fruticosus agg*., white clover *T. repens*, *Leontodon spp*., dog rose *Rosa canina*, , hogweed *H. sphondylium*, , *Rumex spp*, creeping thistle *C. arvensis*, bush vetch *V. sepium*, *Calystelgia spp*., *Erigeron spp*, redshank *Persicaria maculosa* ash *F. excelsior* and saplings of sycamore *A. pseudoplatanus*. The total area of this habitat has decreased in recent years, particularly due to changes of GS2 habitat to GA1 habitat at Blakes Cross South and to BL3 housing development at Wx22 (Sluice stream).

It is of biodiversity value due to the unmanaged nature, variety of species present and extent of this habitat type, therefore it has been valued as local importance (higher value).

WS2 Immature woodland

The change required for this section refers to the updated tree report which has been completed as part of the RFI Section 20 (b) and is included in Appendix A23.8. Therefore, the following text below from Section 23.3.3.1 of Chapter 23 in the 2024 EIAR shall be deleted:

"Also see the Baseline Tree Survey Report (John Morris Arboricultural Consultancy, 2023), which was prepared for the proposed development, in Appendix 23.11."

And replaced with the following text:

Also see the Baseline Tree Survey Report (John Morris Arboricultural Consultancy, 2025), which was prepared for the proposed development, in Appendix A23.8.

All habitats within the Study Area are summarised in Table A23.6 with updated habitats, as detailed above, highlighted in grey below. Therefore, Table 23.12 from Chapter 23 of the 2024 EIAR shall be deleted and replaced with Table A23.6:

Table A23.6 Overview of habitats within the Study Area (Replacing Table 23.12 of Chapter 23 of the 2024 EIAR)

Habitat (Fossitt 2000)	EU Annex I Affiliations	Area/length	Ecological Evaluation	Important Ecological Feature? Yes/No
BC1 Arable crops	No	56.19ha	Local importance (lower value)	No
BL3 Buildings and artificial surfaces	No	N/A	Local importance (lower value)	No
CB1 Shingle and gravel banks	Perennial vegetation of stony banks (1220)	0.12ha	National importance	Yes
CD1 Embryonic dunes	Embryonic shifting dunes (2210)	0.01ha	Regional/County importance	Yes
CS3 Sedimentary sea cliffs	Vegetated sea cliffs of the Atlantic and Baltic coasts (1230)	378m	National importance	Yes
ED3 Recolonising bare ground	No	0.02ha	Local importance (lower value)	No
FW2 Lowland depositing river	No	25 no. watercourse crossings	Local importance (higher value) to Regional/County importance	Yes
FW4 Drainage ditches	No	1309.30m	Local importance (higher value)	Yes
GA1 Improved agricultural grassland	No	10.85ha	Local importance (lower value)	No

Habitat (Fossitt 2000)	EU Annex I Affiliations	Area/length	Ecological Evaluation	Important Ecological Feature? Yes/No
GS4 Wet grassland/GM1 Marsh	No	0.67ha	Local importance (higher value)	Yes
GS1 Dry calcareous and neutral grassland	No	1.34ha	Local importance (higher value)	Yes
GS2 Dry meadows and grassy verges	No	1.90ha	Local importance (higher value)	Yes
WD1 (Mixed) broadleaved woodland	No	0.24ha	Local importance (higher value)	Yes
WL1 Hedgerows	No	5879.90m	Local importance (higher value)	Yes
WL2 Treelines	No	829.13m	Local importance (higher value)	Yes
WS1 Scrub	No	0.55ha	Local importance (lower value)	No
WS2 Immature woodland	No	0.99ha	Local importance (lower value)	No

Annex I Habitats

The change required for this section refers to references to Figures and Appendices produced from the update surveys in 2025. Refer to Figure A23.4 for Annex I habitat mapping, and Appendix A23.4 for Annex I Assessment sheets and Quadrat Sheets.

No other changes apply to the section. Refer to Section 23.2.4.2 of Chapter 23 of the 2024 EIAR.

Terrestrial Mammals

The change required to this section is an update to the survey results for terrestrial mammals. Update surveys undertaken in 2025 recorded additional badger activity and a total of six setts, details of which are provided herein. This is in comparison to two setts recorded during surveys for the 2024 EIAR. The overall ecological evaluation for badger remains the same as assessed in the 2024 EIAR.

The following text below from Section 23.3.3.1 of Chapter 23 in the 2024 EIAR shall be deleted:

"Overall, there was limited protected mammal activity recorded across the study area. Two badger Meles meles setts were recorded in total, see Figure 23.26. One was located at Blakes Cross South, over 50m from the onshore development area in suitable habitat. This sett is considered to be a main sett and has at least four entrances, and in September 2022 fresh spoil heaps were noted. The agricultural habitat and network of treelines and hedgerows in the area surrounding the sett provides good quality habitat for badger. In addition, the Deanestown Stream (Wx12) and Ballyboghill Stream (Wx13) are in close proximity to the sett and provide ecological corridors and semi-natural habitats suitable for badger foraging. ear the existing Belcamp substation, over 150m from the onshore development area, in suitable habitat. This sett has one entrance, and in September 2022 the sett appeared to be relatively inactive as leaf litter had collected in the entrance".

And replaced with the following text:

In total, six badger setts were identified during surveys within the study area, see Figure A23.5 to Figure A23.6. Footage from wildlife trail cameras was used to ascertain the sett activity. Two setts are located at the western boundary of the grid facility site, situated approximately 80m apart. Trail camera footage identified use of these setts by at least one badger. Both setts are considered active outlier setts with one to two entrances and used sporadically. An inactive sett was identified at the landfall site in an area of scrub near the coastline. There were five entrances identified at this sett with no activity recorded. An active sett was identified approximately 5 m from the onshore development area at Sluice Stream Wx22. There were multiple trail camera observation of badger entering and exiting this sett. The sett is considered to be a subsidiary sett with three entrances present.

One sett was located at Blakes Cross South, approximately 85m from the onshore development area in suitable habitat. This sett is considered to be a main sett as at least five entrances were identified and could potentially be used as a breeding sett. Trail camera footage identified a minimum of three badgers using this sett. The agricultural habitat and network of treelines and hedgerows in the area surrounding the sett provides good quality habitat for badger. In addition, the Deanestown Stream (Wx12) and Ballyboghill Stream (Wx13) are in close proximity to the sett and provide ecological corridors and semi-natural habitats suitable for badger foraging. A sett was identified 185 m from the onshore development area west of Belcamp substation, in suitable habitat. This sett has one entrance, and in July 2024 the sett appeared to be relatively inactive as leaf litter had collected in the entrance.

In addition, the following text has been added on Irish stoat:

A single Irish stoat *Mustela erminea Hibernica* was recorded on a trail camera at the grid facility site in October 2024.

Otter

There are no changes to the section. Refer to Section 23.2.2.2 of Chapter 23 of the 2024 EIAR.

Amphibians and Reptiles

There are no changes to the section. Refer to Section 23.2.2.2 of Chapter 23 of the 2024 EIAR.

Bats

The change required to this section is an update to the survey results for bats. Update surveys for PRFs, bat activity transects and static bay detector deployments undertaken in 2024 and 2025 recorded additional information which is provided below.

Potential Roost Features (PRFs)

The update survey results include an additional two PRFs bringing the total number of PRFs to 45 compared to 43 as presented in the 2024 EIAR. The ecological evaluation for roosting potential for bats remains the same as assessed in the 2024 EIAR.

The following text below from Section 23.3.3.1 of Chapter 23 in the 2024 EIAR shall be deleted:

"*A total of 43 PRFs were recorded within, or in close proximity to, the onshore aspects of the onshore development area. See Appendix 23.6 for details of the survey methodology and Figures 23.44 to Figure 23.51 for locations of PRFs across the study area.*

All PRFs identified were in trees. No buildings occurred within the study area that held suitable PRFs. Thirty-five PRFs were assessed as having low suitability which could be used by individual roosting bats opportunistically. A further seven PRFs were assessed as having moderate suitability which could be used by bats but are unlikely to support a roost of high conservation status. One tree with a high PRF was identified which could hold large numbers of bats and support a maternity roost or other roost of high conservation status."

And replaced with the following text:

A total of 45 PRFs were recorded within, or in close proximity to, the onshore aspects of the onshore development area. See Appendix 23.6 for details of the survey results and Figures 23.44 to Figure 23.51 for locations of PRFs across the study area. Appendix A23.5 and Figures A23.7 to Figure A23.15 provide locations of PRFs with 2025 updated status according to Collins (2023).

Forty-four PRFs identified were in trees, while one building occurred within the study area that held suitable PRFs. Thirty-eight trees were assessed as PRF-I which could be used by individual roosting bats opportunistically. A further six trees were assessed as PRF-M which could be suitable for multiple bats and therefore support a maternity roost or other roost of high conservation status. One derelict building, in the vicinity of Blakes Cross South, was identified as having moderate PRF potential with multiple entrances and surrounding foraging habitat.

Bat Activity Transects

The update survey results include updated activity for three bat species recorded during surveys undertaken for the 2024 EIAR. No additional bat species were recorded during the update surveys.

The following text below from Section 23.3.3.1 of Chapter 23 in the 2024 EIAR shall be deleted:

"One bat activity transect was undertaken at the landfall site and grid facility."

And replaced with the following text:

A bat activity transect was undertaken at the landfall site and grid facility in 2022 and repeated in 2025.

The following text has been added to present the 2025 survey results:

During the 2025 survey, two common pipistrelles *Pipistrellus pipistrellus* were recorded, one foraging along the roadside hedgerow and another along the treeline separating two arable crop fields on the eastern side of the transect, representing the central area of the landfall site. Following the route perpendicular to the coastline in the northern section of the transect, a Leisler's bat *Nyctalus leisleri* was recorded along a hedgerow running east-west. A foraging soprano pipistrelle *Pipistrellus pygmaeus* was also observed foraging approximately 3 m above ground level along this hedgerow. In addition, two common pipistrelles and a soprano pipistrelle were recorded continuously foraging back and forth through the train tunnel at this location. Along a tree-lined track separating the arable fields near the coast, an estimated one soprano pipistrelle and two common pipistrelles were recorded foraging continuously between heights of approximately 2 m and 15 m above ground level, generating 8 and 17 passes respectively. Two Leisler's bat passes were also recorded during this period.

To account for the updated data, the following text and Table 23.13 from Section 23.3.3.1 of Chapter 23 in the 2024 EIAR shall be deleted:

"These data are presented graphically in Figure 23.52 while a summary of total passes is presented in Table 23.13."

And replaced with Table A23.7 and the following text:

The 2022 transect data are presented graphically in Figure 23.52. The 2025 transect data are presented graphically in Figure A23.16 while a summary of total passes is for both transects are presented in Table A23.7 with update survey results highlighted in grey.

Table A23.7: Total bat passes recorded during the transect survey undertaken on 3 August 2022 and 24 July 2025 at the Landfall and Grid facility locations (Replacing Table 23.13 of Chapter 23 of the 2024 EIAR)

Species	2022 Bat Passes (n)	2022 Earliest pass (hh:mm)	2025 Bat Passes (n)	2025 Earliest pass (hh:mm)
Leislers bat (*Nyctalus leisleri*)	5	21:47	52	22:38
Common pipistrelle (*Pipistrellus pipistrellus*)	85	22:00	50	22:09
Soprano pipistrelle (*Pipistrellus pygmaeus*)	46	22:00	19	22:29

Static Bat Detector Deployments

The update survey results include updated bat activity for all 2024 deployments. While there is some variation in activity the ecological evaluation for foraging and commuting bats remains the same as assessed in the 2024 EIAR.

Therefore, Table 23.14 and the following text below from Section 23.3.3.1 of Chapter 23 in the 2024 EIAR shall be deleted:

"These locations were D.02 at the existing Belcamp substation, D.05 at the grid facility, and D.06 at the landfall site (Table 23.14). Notably, the landfall site, which included a hedgerow in arable fields, exhibited activity orders of magnitude higher than the other high activity locations, with a recording of 76.59 bp/h compared to an average of 19.77 bp/h (Table 23.14). Areas with medium species aggregate activity were D.03 at Blakes Cross, and D.07 at the landfall, while both D.01 and D.04 had low species aggregate activity (Table 23.14).

The common pipistrelle exhibited high activity at D.02 in the existing Belcamp substation, as well as at D.05 in the grid facility. Furthermore, D.06 at the landfall site showed high activity for both the common pipistrelle and the soprano pipistrelle. Specifically, the soprano pipistrelle displayed high activity exclusively at D.06. Notably, the presence of pipistrelles significantly contributed to the overall high species aggregate activity observed across all locations.

On the other hand, Leisler's bat demonstrated high activity at D.02 and medium activity at both D.03 and D.06. As for Myotis sp., low activity levels were observed at all locations."

And replaced with Error! Reference source not found. **and the following text:**

These locations were D.02 at the existing Belcamp substation, D.05 at grid facility, D.06 and D.07 at landfall site. In 2024, D.07 located at scrub along edge of coastline recorded highest activity for Leisler's bats, common and soprano pipistrelle. Areas with medium species aggregate activity were D.01 at the Belcamp substation and D.03 at Blakes Cross. In 2024, one detector (D.04 – Blakes Cross) encountered issues and failed to record, however this location had low species aggregate activity in 2022.

Detectors at the landfall site exhibited activity orders of magnitude higher than the other high activity locations, with a recording of 76.59 bat passes/hour (bp/h) (D.06 in 2022) and 100.6 bp/h (D.07 in 2024) compared to an average of 19.77 bp/h and 32.48bp/h respectively. An increase in activity at D.07 in 2024 may be due to a period of favourable weather conditions for foraging in suitable habitat at the landfall site.

The common pipistrelle exhibited high activity at D.02 in the existing Belcamp substation, as well as at D.05 in the grid facility. Furthermore, detectors at the landfall site showed high activity for both the common pipistrelle and the soprano pipistrelle. Specifically, the soprano pipistrelle displayed high activity at D.06 in 2022 and D.07 in 2024. Notably, the presence of pipistrelles significantly contributed to the overall high species aggregate activity observed across all locations.

On the other hand, Leisler's bat demonstrated high activity at D.02 and D.07 (2024 only) and medium activity at both D.03 and D.06. As for Myotis sp., low activity levels were observed at all locations.

A summary of total bp/h for all species recorded and all deployments are presented in **Error! Reference source not found.** with update survey results in grey.

Table A23.8 Bat activity recorded by static detectors during the 2022 and 2024 deployment (Replacing Table 23.14 of Chapter 23 of the 2024 EIAR)

Deploy Date	Map ID	Location	Leisler's bat bp/h	Common pipistrelle bp/h	Soprano pipistrelle bp/h	Myotis sp bp/h	Brown long-eared bat bp/h	Total pass bp/h
03/08/2022	D.01	Belcamp substation	1.49	1.31	0.22	0.01	0.00	3.04
03/08/2022	D.02	Belcamp substation	9.90	17.58	1.57	0.05	0.01	29.11
03/08/2022	D.03	Blakes Cross	4.36	1.78	1.99	0.05	0.01	8.19
03/08/2022	D.04	Blakes Cross	0.00	0.00	1.31	0.00	0.00	1.31
03/08/2022	D.05	Grid facility	1.37	13.31	2.98	0.03	0.00	17.68
03/08/2022	D.06	Landfall site	5.52	32.28	38.73	0.05	0.01	76.59
03/08/2022	D.07	Landfall site	2.26	2.57	0.48	0.00	0.00	5.30
03/07/2024	D.01	Belcamp substation	6.1	2.1	0.2	0.0	0.0	8.4

Deploy Date	Map ID	Location	Leisler's bat bp/h	Common pipistrelle bp/h	Soprano pipistrelle bp/h	Myotis sp bp/h	Brown long-eared bat bp/h	Total pass bp/h
03/07/2024	D.02	Belcamp substation	14.3	20.2	4.1	0.0	0.0	38.7
03/07/2024	D.03	Blakes Cross South	3.7	1.4	0.9	0.0	0.0	5.9
03/07/2024	D.04	Blakes Cross South	na	na	na	na	na	na
03/07/2024	D.05	Grid facility	5.2	16.8	4.2	0.0	0.0	26.2
03/07/2024	D.06	Landfall site	8.5	4.7	1.8	0.0	0.0	15.1
03/07/2024	D.07	Landfall site	43.3	42.0	15.4	0.0	0.0	100.6

Birds

The change required to this section is an update to the survey results for breeding and wintering birds. Update survey results recorded during surveys across 2023, 2024 and 2025 recorded additional information which is provided below.

Breeding Birds

The change required to this section is an update to the survey results for breeding birds. Update surveys undertaken in 2024 recorded additional information which is provided below. This includes observations of two additional red-listed species, stock dove and curlew. The ecological evaluation for breeding birds remains the same as assessed in the 2024 EIAR.

The following text below from Section 23.3.3.1 of Chapter 23 in the 2024 EIAR shall be deleted:

"Breeding bird surveys were undertaken for the onshore development area in 2021 and 2022, with update surveys in 2023. In total, nine red and 28 amber-listed species of Birds of Conservation Concern in Ireland (BoCCI) 2020-2026 were recorded across the onshore development area."

And replaced with the following text:

Breeding bird surveys were undertaken for the onshore development area in 2021, 2022, 2023 and 2024. In total, 11 red and 28 amber-listed species of Birds of Conservation Concern in Ireland (BoCCI) 2020-2026 were recorded across the onshore development area.

The following text below from Section 23.3.3.1 and Table 23.15 of Chapter 23 in the 2024 EIAR shall be deleted:

"Table 23.15 describes in detail each amber and red-listed species that occur within the onshore development area numbers they occur in, their distribution and their breeding status. Figures 23.27 to Figure 23.35 show a representation of red and amber-listed breeding birds recorded across the study area. For a full list of species recorded across the onshore development area including green-listed birds, which are not considered threatened or of conservation concern, see Appendix 23.7."

And replaced with the following text:

Table A23.9 describes in detail each amber and red-listed species that occur within the onshore development area numbers they occur in; their distribution and their breeding status as recorded across all survey years. Updates within Table A23.9 are presented in grey. Figures 23.27 to Figure 23.35 show a representation of red and amber-listed breeding birds recorded across the study area for 2021, 2022 and 2023. Figures A23.17 to Figures A23.24 show records for 2024. For a full list of species recorded across the onshore development area including green-listed birds, which are not considered threatened or of conservation concern, see Appendix 23.7 and Appendix A23.6 for updated 2024 survey results.

Table A23.9 Species recorded and their breeding status within the onshore development area during the breeding bird surveys across 2021, 2022, 2023 and 2024 (replacing Table 23.15 of Chapter 23 of the 2024 EIAR)

Species	BTO codes [6]	BoCCI 2020-2026[7]	Species recorded within the onshore development area	Breeding status within the onshore development area
Grey wagtail	GL	Red Br.	Two birds recorded perched along the onshore cable route during the breeding bird surveys.	No breeding behaviour or nests identified during the surveys. Likely breeding along fast-flowing streams in the wider area.
Meadow pipit	MP	Red Br.	Singing males recorded throughout the majority of the onshore development area with the greatest densities at the landfall and grid facility.	Yes. Ground-nesting species breeding throughout most of the onshore development area within grassland and arable habitats.
Yellowhammer	Y.	Red Br.	Singing males were recorded throughout the majority of the onshore development area with the greatest densities at the landfall site, grid facility and Blakes Cross North.	Yes. Breeding yellowhammers are present throughout the majority of the onshore development area, breeding within hedgerows and ditches of arable fields.
Kestrel	K.	Red Br.	One breeding season record of a male hunting at the landfall and grid facility site.	No breeding/territorial behaviour noted within the onshore development area. Likely breeding in the wider area.
Swift	SI	Red Br.	Recorded foraging/flying throughout much of the onshore development area.	No nest sites identified within the onshore development area. Closest reported nest sites: Balbriggan, Skerries and Malahide[8]
Stock Dove	SD	Red Br.	Recorded on two occasions at Belcamp substation.	Yes. Pair flushed from ground at Belcamp. Likely nesting in area in tree holes or buildings, however no nest confirmed.
Curlew	CU	Red Br. & Win.	Recorded at flying and calling at Blakes Cross South and the landfall and grid facility.	No. No nest sites identified within the onshore development area. Known to breed in upland habitat areas.
Lapwing	L.	Red Br. & Win.	Small numbers of adult birds present at Malahide Estuary during the breeding season.	No breeding/territorial birds recorded within the onshore development area. Likely breeding in open farmland in the wider area.
Oystercatcher	OC	* Red Br. & Win.	Small numbers of adult birds present at the landfall and grid facility, and Malahide Estuary during the breeding season.	No breeding/territorial birds recorded within the onshore development area. Breeding along coastline in the wider area.
Redshank	RK	* Red Br. & Win.	One bird recorded at the landfall site in April 2022.	No recent breeding records in Dublin (Balmer *et al*., 2013).
Black-tailed godwit	BW	* Red Win	Flock recorded on Malahide Estuary mudflats in May 2022.	No, black-tailed godwit are a rare and sporadic breeder in Ireland, mainly a winter visitor. Flock recorded likely non-breeding birds.
Common tern	CN	*Amber Br.	Recorded on two occasions at the landfall and grid facility site during the breeding bird surveys.	No nest sites recorded within the onshore development area. Closest known breeding colonies at Rockabill Island, Dublin Bay.
Black-headed gull	BH	Amber Br. & Win.	Small numbers recorded on the mud flats at Malahide Estuary during the breeding season.	No, mostly breed on islands on inland lakes.
Common gull	CM	Amber Br. & Win.	One observation of a small flock at the landfall and grid facility site during summer 2021.	No breeding colonies identified within the onshore development area. Closest known breeding colonies at located on Lambay Island.

[6] BTO codes as displayed on breeding bird Figures A23.17 – A23.24

[7] Br. denotes the species is listed for its breeding population; Win. Denotes the species is listed for its wintering population; * denotes the species is listed in Annex I of the EU Birds Directive

[8] Birdwatch Ireland Online Swift Story Map: Nest Site Records (2012 -2022). Available at: https://bwi.maps.arcgis.com/apps/MapJournal/index.html?appid=81ddc38cfcde40ffab699be638ee5b20

Species	BTO codes [6]	BoCCI 2020-2026[7]	Species recorded within the onshore development area	Breeding status within the onshore development area
Herring gull	HG	Amber Br. & Win.	Recorded throughout the entirety of the onshore development area with largest numbers at the landfall and grid facility site.	No nest sites identified within the onshore development area, though likely breeding on rooftops of buildings along the route. Largest breeding colony in Ireland is on Lambay Island.
Lesser black-backed gull	LB	Amber Br. & Win.	Recorded throughout the onshore development area.	No nest sites identified within the onshore development area. Known to breed along the coast and islands between Balbriggan and Dublin Bay. Small numbers breed on rooftops in towns and cities.
Kingfisher	KF	* Amber Br.	Recorded on a number of occasions along a stretch of the Broadmeadow River between the M1 and R132 in both the breeding and non-breeding seasons.	Yes. Kingfishers are a largely sedentary and territorial species. The cable route therefore crosses over a kingfisher territory in this location.
Goldcrest	GC	Amber Br.	Birds recorded singing throughout the onshore development area during summer 2021 and 2022.	Yes. Breeding in treelines, hedgerows and gardens throughout the onshore development area.
Greenfinch	GR	Amber Br.	Several birds heard singing, in particular at the landfall and grid facility site and Belcamp substation. A pair and a juvenile were recorded foraging at Malahide Estuary.	Yes. Breeding in treelines, hedgerows, parks and gardens along the proposed development.
House martin	HM	Amber Br.	Recorded throughout the onshore development area.	Yes. No nest sites pinned down during surveys, but likely nesting in eaves of buildings along the proposed development.
House sparrow	HS	Amber Br.	Recorded frequently throughout the onshore development area.	Yes. Nest site identified in a shed at Blake's Cross and female provisioning noted at Belcamp.
Linnet	LI	Amber Br.	Recorded frequently throughout the onshore development area	Yes. Singing males, breeding pairs and nest building behaviour recorded. Likely breeding within hedgerows and scrub throughout the onshore development area.
Sand martin	SM	Amber Br.	Recorded flying over Malahide Estuary and at landfall site.	No. Likely breeding in sandbanks in the wider area, some identified outside the study area at Loughshinny.
Skylark	S.	Amber Br.	Recorded singing in fields onshore development area.	Yes. Ground nesting species breeding within grassland habitats.
Starling	SG	Amber Br.	Recorded frequently throughout onshore development area.	Yes. Several family groups with juveniles and provisioning behaviour noted within onshore development area. Nesting in holes/crevices of buildings and trees.
Swallow	SL	Amber Br.	Recorded frequently throughout onshore development area	Yes. Recorded entering multiple sheds, stables and barns along the proposed development.
Tree sparrow	TS	Amber Br.	Recorded on three occasions within the fields at the landfall and grid facility site.	Yes. Noted to be nesting with house sparrows in house at the landfall and grid facility site.
Willow warbler	WW	Amber Br.	Recorded frequently throughout proposed development.	Yes. Breeding within treelines and hedgerows throughout onshore development area.
Gannet	GX	Amber Br.	One record of a bird flying offshore at the landfall and grid facility site.	No. Breeding on offshore islands in the wider area. Closest known breeding colonies are Lambay Island and Ireland's eye.
Shag	SA	Amber Br.	Three birds recorded perched on rocks at the landfall and grid facility site.	No suitable breeding habitat within the onshore development area.

Species	BTO codes [6]	BoCCI 2020-2026[7]	Species recorded within the onshore development area	Breeding status within the onshore development area
				Closest known breeding colonies are Skerries Islands, Lambay Island, Ireland's Eye and Howth Head.
Mute swan	MS	Amber Br. & Win.	Recorded at Malahide Estuary and a small waterbody at Balrothery.	No. Breeding adjacent to the onshore development area at Malahide Estuary and Wavin (Knock) Lake, Balrothery.
Cormorant	CA	Amber Br. & Win.	Recorded mainly flying over the proposed development and perched on rocks offshore.	No. Closest known colonies are located at Skerries Islands, Lambay Island, Ireland's Eye. Cormorant can breed inland in trees along rivers, however no juveniles or nesting behaviour was noted during the surveys. Unlikely to be breeding within the onshore development area.
Gadwall	GA	Amber Br. & Win.	Recorded on two occasions at Malahide Estuary.	No suitable breeding habitat within the onshore development area.
Great crested grebe	GG	Amber Br. & Win.	One bird recorded swimming at Malahide Estuary.	No suitable breeding habitat within the onshore development area.
Mallard	MA	Amber Br. & Win.	Recorded mainly at Malahide Estuary and at the landfall site, with small numbers recorded on rivers where the proposed development crosses.	Yes. Breeding adjacent to the onshore development area at the Broadmeadow River west of the M1 bridge at Malahide Estuary, and at the landfall site.
Shelduck	SU	Amber Br. & Win.	Small numbers of adults recorded at Malahide Estuary.	Yes. Breeding adjacent to the onshore development area at Malahide Estuary (NPWS, 2013).
Teal	T.	Amber Br. & Win.	A single male recorded on two occasions at Malahide Estuary.	No breeding pairs observed during surveys.

Wintering Waterbirds

The change required to this section is an update to the survey results for wintering waterbirds. Update surveys undertaken in 2023 and 2024 recorded additional information which is provided below. This includes observations of three additional amber-listed species, common sandpiper, wigeon and teal. In addition, peak counts of black-tailed godwit, dunlin, mute swan, whooper swan, red-breasted merganser and teal increased at the Malahide Estuary, and peak counts of black-tailed godwit and lapwing increased at the landfall & grid facility. The ecological evaluation for wintering waterbirds remains the same as assessed in the 2024 EIAR.

The following text below from Section 23.3.3.1 of Chapter 23 in the 2024 EIAR shall be deleted:

"Wintering waterbird surveys were undertaken for the onshore development area at the landfall site and at Malahide Estuary during the 2021-2022 winter season. In total, 18 red and 25 amber-listed species of Birds of Conservation Concern in Ireland (BoCCI) 2020-2026[41] were recorded at the landfall site and Malahide Estuary study area."

And replaced with the following text:

Wintering waterbird surveys were undertaken for the onshore development area at the landfall site and at Malahide Estuary during the 2021-2022 winter season and 2023-2024 winter season. In total, 18 red and 28 amber-listed species of Birds of Conservation Concern in Ireland (BoCCI) 2020-2026 were recorded at the landfall site and Malahide Estuary study area.

The following text below from Section 23.3.3.1 of Chapter 23 in the 2024 EIAR shall be deleted:

"Six species were recorded occurred in numbers greater than 1% of the national population. These are golden plover Pluvialis apricaria, common scoter Melanitta nigra, light-bellied brent goose Branta bernicla hrota, great crested grebe Podiceps cristatus, great northern diver Gavia immer and red-throated diver Gavia stellata."

And replaced with the following text:

Eight species were recorded occurred in numbers greater than 1% of the national population. These are black-tailed godwit *Limosa limosa*, golden plover *Pluvialis apricaria*, common scoter *Melanitta nigra*, light-bellied brent goose Branta *bernicla hrota*, great crested grebe *Podiceps cristatus*, great northern diver *Gavia immer*, red-breasted merganser *Mergus serrator* and red-throated diver *Gavia stellata*.

In addition, Table 23.16 and the following text below from Section 23.3.3.1 of Chapter 23 in the 2024 EIAR shall also be deleted:

"Table 23.16 describes in detail each amber and red-listed species recorded during surveys and that occur within or in close proximity to the onshore development area, peak numbers they occur in and their distribution at the landfall site and Malahide Estuary. Figures 23.36 to 23.43 show a representation of red and amber-listed wintering waterbirds recorded across the onshore wintering waterbird study area. For a full list of species recorded, including green-listed birds, and monthly peak counts at the landfall site and Malahide Estuary, see Appendix 23.8."

And replaced with Table A23.10 and the following text:

Table A23.10 describes in detail each amber and red-listed species recorded during surveys and that occur within or in close proximity to the onshore development area, peak numbers they occur in and their distribution at the landfall site and Malahide Estuary across all survey years. Updates within Table A23.10 are highlighted in grey. Figures 23.36 to 23.43 show a representation of red and amber-listed wintering waterbirds recorded across the onshore wintering waterbird study area for 2021-2022 winter season. Figures A23.25 to A23.32 show records for 2023-2024 winter season. For a full list of species recorded, including green-listed birds, and monthly peak counts at the landfall site and Malahide Estuary for updated 2024 survey results, see Appendix A23.7.

Table A23.10 Peak count and distribution of wintering waterbirds recorded during high and low-tide count surveys at the proposed landfall and grid facility, and Malahide Estuary during winters 2021-22 and 2023-24 (Replacing Table 23.16 of Chapter 23 of the 2024 EIAR)

Common name	BTO codes[9]	BoCCI 2020-2026	SCI of nearby European sites	Peak count at landfall & grid facility	Peak count at Malahide Estuary	1% of national population	1% of international population	Occurrence in relation to the onshore infrastructure of the proposed development
Kittiwake	KI	Red Br.	Yes	2	0	247 pairs	0	Small numbers recorded flying off Gormanston Beach north of the landfall site and north of the Delvin River.
Razorbill	RA	Red Br.	Yes	10	0	336 pairs	0	Small numbers recorded off the coast of Bremore Point at the landfall site.
Bar-tailed godwit	BA	* Red Win.	Yes	3	38	150	1200	Three birds recorded foraging at Bremore Point beach at the landfall site, and a flock of 38 birds recorded foraging at Malahide Estuary.
Black-tailed godwit	BW	Red Win.	Yes	23	213	190	610	Small numbers recorded flying off Gormanston Beach north of the landfall site, and north of the Delvin River. Flocks between 58 and 213 birds recorded foraging and roosting at Malahide Estuary. Observations at Malahide Estuary made each month between November 2023 and March 2024.
Curlew	CU	Red Br. & Win.	Yes	156	33	350	8400	Flocks recorded foraging in fields at the grid facility and landfall site, and at Malahide Estuary. A maximum of 91 curlew were recorded roosting/feeding in arable fields at the landfall site.
Dunlin	DN	* Red Br. & Win.	Yes	259	383	570	13300	Flocks observed on rocks at Bremore Bay Beach close to the landfall site and foraging/roosting at Malahide Estuary.
Golden plover	GP	* Red Br. & Win.	Yes	281	1000	920	9300	Foraging within fields at the landfall site, and foraging/roosting at Malahide Estuary and surrounding fields. Golden plover were recorded roosting/feeding in arable fields at the landfall site in numbers ranging between 17 and 58.
Grey plover	GV	Red Win.	Yes	27	2	30	2500	Flocks recorded foraging/roosting on rocks at Bremore Bay Beach close to the landfall site. Two birds seen roosting at Malahide Estuary.
Knot	KN	Red Win.	Yes	5	-	280	4500	Small numbers recorded roosting at Bremore Bay Beach south of the landfall site. No birds observed at Malahide Estuary.
Lapwing	L.	Red Br. & Win.	No	68	148	850	72300	Recorded foraging in fields at the landfall site and during high/low tide counts at Malahide Estuary. Lapwing were

[9] BTO codes as displayed on wintering waterbird Figures A23.25 – A23.32

Common name	BTO codes[9]	BoCCI 2020-2026	SCI of nearby European sites	Peak count at landfall & grid facility	Peak count at Malahide Estuary	1% of national population	1% of international population	Occurrence in relation to the onshore infrastructure of the proposed development
								recorded roosting/feeding in arable fields at the landfall site in numbers of up to 68 birds.
Oystercatcher	OC	Red Br. & Win.	Yes	151	106	690	8200	Widespread and numerous along the coastline at the landfall site and at Malahide Estuary.
Purple sandpiper	PS	Red Win.	Yes	11	-	20	710	Recorded at Bremore Bay Beach close to the landfall site.
Redshank	RK	Red Br. & Win.	Yes	60	99	300	3900	Widespread and numerous along coastline at landfall site and at Malahide Estuary. Three recorded in an arable field at the landfall site on one occasion.
Snipe	SN	Red Br. & Win.	No	1	10	-	5700	One observation at Knocknagin Beach, north of the landfall site but south of the Delvin River. Two recordings of roosting snipe at Malahide Estuary.
Common scoter	CX	Red Br. & Win.	Yes	1660	-	110	7500	Large flocks recorded loafing off the coast of the landfall site.
Eider	E.	Red Br. & Win.	No	2	-	55	9800	Two birds seen swimming offshore at Tankardstown Beach south of the onshore development area in March 2022.
Goldeneye	GN	Red Win.	Yes	-	26	40	11400	Recorded within the outer Malahide Estuary during high-tide surveys.
Scaup (Greater)	SP	Red Win.	No	-	1	25	3100	Two birds recorded within the outer Malahide Estuary.
Black-headed gull	BH	Amber Br. & Win.	Yes	275	1510	78 pairs	20000	Widespread and numerous along the coastline and in arable fields at the landfall site and at Malahide Estuary.
Common gull	CM	Amber Br. & Win.	Yes	197	224	19 pairs	16400	Widespread and numerous along coastline at the landfall site and at Malahide Estuary. Small numbers, up to 8, were recorded in arable fields at the landfall site.
Herring gull	HG	Amber Br. & Win.	Yes	644	317	103 pairs	10200	Widespread and numerous along coastline at the landfall site and at Malahide Estuary. Up to 80 herring gull were recorded in arable fields at the landfall site.
Lesser black-backed gull	LB	Amber Br. & Win.	Yes	11	11	71 pairs	-	Small flocks recorded at Gormanstown Beach, north of the landfall site and north of the Delvin River. Recorded within the inner Malahide Estuary.

Common name	BTO codes[9]	BoCCI 2020-2026	SCI of nearby European sites	Peak count at landfall & grid facility	Peak count at Malahide Estuary	1% of national population	1% of international population	Occurrence in relation to the onshore infrastructure of the proposed development
Mediterranean gull	MU	* Amber Br.	No	66	-	-	-	Flocks recorded within fields and along the coast at the landfall site.
Kingfisher	KF	* Amber Br.	No	-	2	-	37100	Recorded on a number of occasions along this stretch of the Broadmeadow River, inland of the Malahide Estuary, during the breeding and non-breeding seasons.
Guillemot (Common)	GU	Amber Br.	Yes	14	-	1773 pairs	-	Recorded swimming off the coast of the landfall site.
Gannet	GX	Amber Br.	No	1	-	479 pairs	-	One observation of a bird swimming off the coast at the landfall site.
Shag	SA	Amber Br.	Yes	45	-	-	-	Birds present on rocks adjacent to the landfall site.
Brent goose	BG	Amber Win.	Yes	131	1560	360	400	Widespread and numerous along coastline at the landfall site and at Malahide Estuary. Numbers of up to 79 were recorded in arable fields at the landfall site.
Mute swan	MU	Amber Br. & Win.	No	-	76	100	2500	Widespread and numerous within the inner Malahide Estuary.
Whooper swan	WS	* Amber Br. & Win.	No	-	13	150	340	A flock of 13 birds recorded swimming within the inner Malahide Estuary.
Ringed plover	RP	Amber Br.	Yes	80	-	120	-	Flocks observed on rocks at Bremore Bay Beach close to the landfall site. No flocks observed at Malahide Estuary.
Common sandpiper	CS	Amber Br.	No	0	1	-	12000	One individual recorded on two occasions at Malahide Estuary. No individuals observed at the landfall site.
Turnstone	TT	Amber Win.	Yes	56	16	95	-	Widespread and numerous along coastline at the landfall site and at Malahide Estuary.
Cormorant	CA	Amber Br. & Win.	Yes	105	44	110	1200	Widespread and numerous along coastline at the landfall site and at Malahide Estuary.
Gadwall	GA	Amber Br. & Win.	No	-	2	20	1200	Two birds observed swimming within the inner Malahide Estuary during the high-tide surveys.
Great crested grebe	GG	Amber Br. & Win.	No	40	39	30	6300	Recorded swimming off the coast of the landfall site and within the outer Malahide Estuary.

Common name	BTO codes[9]	BoCCI 2020-2026	SCI of nearby European sites	Peak count at landfall & grid facility	Peak count at Malahide Estuary	1% of national population	1% of international population	Occurrence in relation to the onshore infrastructure of the proposed development
Mallard	MA	Amber Br. & Win.	No	7	39	290	45000	Small numbers recorded at Gormanston Beach, north of the landfall site and north of the Delvin River. Widespread and numerous at Malahide Estuary.
Great northern diver	ND	* Wintering	Yes	6	38	20	50	Recorded swimming off the coast of the landfall site.
Red-throated diver	RH	* Amber Br. & Win.	Yes	35	-	20	3000	Recorded swimming off the coast of the landfall site.
Red-breasted merganser	RM	Amber Br. & Win.	Yes	1	39	25	860	One bird recorded swimming off the coast of the landfall site. Recorded regularly at Malahide Estuary in flock size of one to 39 birds. Recorded within the inner and outer Malahide Estuary.
Shelduck	SU	Amber Br. & Win.	Yes	1	9	120	3000	One bird recorded flying out to sea at the landfall site and small numbers recorded within the inner Malahide Estuary.
Teal	T.	Amber Br. & Win.	Yes	17	117	340	5000	Three birds recorded swimming at Gormanston Beach, north of the landfall site and north of the Delvin River. Widespread and numerous within the inner Malahide Estuary.
Tufted duck	TU	Amber Br. & Win.	No	-	1	270	8900	One female recorded within the inner Malahide Estuary.
Wigeon	WN	Amber Win.	No	-	8	560	140000	A single observation of eight individuals recorded in Malahide Estuary. No individuals observed at the landfall site.
Pintail	PT	Amber Win.	Yes	-	1	20	600	A single observation of eight individuals recorded in Malahide Estuary. No individuals observed at the landfall site.

Aquatic and Fisheries

The change required to this section is an update to the survey results for aquatic and fisheries. Update survey results recorded during 2025 surveys collected additional information which is provided below. It includes the update of salmonid suitability for Wx08 Courtlough Stream, Wx23A Cuckoo Stream and Wx24A Mayne River from no suitability to suitable habitat present. It also includes the update of Wx16 Broadmeadow River WFD Q-value status (2016-2024) from Moderate (upstream) to Poor (upstream).

Due to the above update, the ecological value of these three rivers for aquatic and fisheries receptors has been updated from local (higher) importance to County/regional. The ecological value of other aquatic and fisheries receptors remains the same as assessed in the 2024 EIAR.

Therefore, Table 23.17 and the following text below from Section 23.3.3.1 of Chapter 23 in the 2024 EIAR shall be deleted:

"Desktop data from the EPA and IFI for each river, along with the fisheries suitability assessment is presented in Table 23.17. For streams where the Q value has not been assessed and where they occur in urban environments, the status is likely to be poor. Similarly, the ecological status of fish is not monitored by IFI for several of the watercourses crossed by the proposed development. This is likely due to their size and lack of fisheries suitability.

From the Water Chapter, only a few water quality monitoring locations are found on the streams adjacent to the onshore cable route where ratings are established, i.e., Mayne (Q3), Sluice River (Q3-Q4), Gaybrook, Meadowbrook (Q3-Q4), Turvey (Q3), and Ballough Stream (Q3-Q4). The majority of these are moderately polluted to slightly polluted which indicates that the overall water quality is unsatisfactory.

Each watercourse, described in Table 23.17 has been assigned an ecological value at the crossing point based on the aquatic features present and fisheries suitability. For watercourses that have poor Q values, are at risk of not achieving the WFD status and have no fisheries suitability, an ecological value of local (lower) has been assigned. These include: Wx01 Bremore Stream, Wx03 Knock Stream, Wx04 Balrothery Stream, Wx05 Balrickard Stream, Wx06 Rowans Big Stream, Wx07 Rowans Little Stream, Wx08 Courtlough Stream, Wx10 Aldrumman Stream, Wx14 Turvey Stream, Wx15 Staffordstown Stream, Wx18 Seapoint Stream, Wx19 Greenfields Stream, Wx20 Gaybrook Stream and Wx21 Hazelbrook Stream."

And replaced with the following text and Table A23.11:

Update desktop data from the EPA and IFI for each river, along with the fisheries suitability assessment is presented in Table A23.11. Updates within Table A23.11 are highlighted in grey. For streams where the Q value has not been assessed and where they occur in urban environments, the status is likely to be poor. Similarly, the ecological status of fish is not monitored by IFI for several of the watercourses crossed by the proposed development. This is likely due to their size and lack of fisheries suitability.

From the Water Chapter, only a few water quality monitoring locations are found on the streams adjacent to the onshore cable route where ratings are established, i.e., Mayne (Q3), Sluice River (Q3-Q4), Turvey (Q3), and Ballough Stream (Q3-Q4). The majority of these are moderately polluted to slightly polluted which indicates that the overall water quality is unsatisfactory.

Table A23.11: Review of water quality within the Study Area (Source: Catchments.ie) (Replacing Table 23.17 of Chapter 23 of the 2024 EIAR)

Crossing	Stream Name / WFD Name	Lat, Long	IFI WFD Fish Monitoring[10] Status & Assemblage	Q-value Status (2019-2024)	WFD Risk Score	Salmonid Suitability
1	Bremore Stream / Matt_010	53.61514, -6.19107	Not monitored	Not assessed / Poor	At risk	No stream visible. Possibly culverted
2	Bracken (Matt) River / Matt_010	53.60364, -6.18646	Not monitored	Not assessed / Poor	At risk	Yes, substrate available and good flows
3	Knock Stream / Matt_010	53.58334, -6.19539	Not monitored	Not assessed / Poor	At risk	No, choked with vegetation. No passage
4	Balrothery Stream / Matt_010	53.57752, -6.20143	Not monitored	Not assessed / Poor	At risk	No, subterranean flow and no substrate
5	Balrickard Stream / Matt_010	53.56375, -6.20998	Not monitored	Not assessed / Poor	At risk	No passage
6	Rowans Big Stream	53.562488, -6.209828	Not monitored	Not assessed / Poor	At risk	Not viable
7	Rowans Little Stream	53.561208, -6.210099	Not monitored	Not assessed / Poor	At risk	Not viable
8	Courtlough Stream / Ballough Stream_010	53.54808, -6.20729	Not monitored	Moderate (downstream)	At risk	Yes, low water flow and available gravel substrate. Moderate fisheries potential
9	Obserstown Stream / Ballough Stream_010	53.53922, -6.20030	Not monitored	Moderate (downstream)	At risk	Yes, substrate available and suitable flow
10	Aldruman Stream / Ballough Stream_010	53.53695, -6.19849	Not monitored	Moderate (downstream)	At risk	No flow
11	Ballough Stream / Ballough Stream_020	53.50901, -6.19605	Not monitored	Moderate (downstream)	At risk	Yes, close proximity to estuary
12	Deanestown Stream / Ballyboghil_010	53.49933, -6.19425	Not monitored	Poor	At risk	Yes. No visual on substrate, but appears to have potential suitability
13	Ballyboghil Stream / Ballyboghil_010	53.49876, -6.19433	Not monitored	Poor (upstream)	At risk	Yes, due to proximity to estuary
14	Turvey Stream / Turvey_010	53.4944, -6.19517	Not monitored	Poor (upstream)	At risk	No available substrate, no flow and choked with vegetation

[10] Water Framework Directive: Fish Ecological Status Map Viewer. Available at: Water Framework Directive Fish Ecological Status 2008-2021 | Water Framework Directive Fish Ecological Status 2008-2021 | Inland Fisheries Ireland Data Hub (arcgis.com) (Accessed December 2022)

Crossing	Stream Name / WFD Name	Lat, Long	IFI WFD Fish Monitoring[10] Status & Assemblage	Q-value Status (2019-2024)	WFD Risk Score	Salmonid Suitability
15	Staffordstown Stream / Turvey_010	53.47575, -6.20782	Not monitored	Poor	At risk	No, very low flow
16	Broadmeadow River / Broadmeadow_040	53.47097, -6.21177	In monitoring year 2017, the status upstream was Poor. Fish recorded were: Minnow Stone loach, European eel, Brown trout (≥ 1+,0+)	Poor (upstream)	At risk	Yes, suitable substrate and flows - high potential
17	Ward River / Ward_040	53.47021, -6.21257	In monitoring year 2017, the status upstream was Good to Moderate. Fish recorded were: Minnow, Brown trout (≥1+,0+), Seatrout	Moderate (upstream)	At risk	Yes, suitable substrate and flows – high potential
18	Seapoint Stream / Gaybrook_010	53.463879, -6.202588	Not monitored	Poor	At risk	
19	Greenfields Stream / Gaybrook_010	53.46322, -6.19996	Not monitored	Poor	At risk	No, concrete pipe discharge point
20	Gaybrook Stream / Gaybrook_010	53.44824, -6.18000	Not monitored	Poor	Under review	No, subterranean flow
21	Hazelbrook Stream / Sluice_010	53.44008, -6.17665	Not monitored	Poor	Under review	No, subterranean flow
22	Sluice Stream / Sluice_010	53.42769, -6.17768	In monitoring year 2016, the status downstream was Poor. Fish recorded were: 3-spined stickleback, Brown trout (0+), European eel, Flounder	Poor	Under review	Yes, good substrate and flows
23A	Cuckoo Stream / Mayne_010	53.41197, -6.17983	In monitoring year 2016, the status upstream was Bad. Fish recorded were: European eel, 3-spined stickleback	Poor (downstream)	At risk	Yes, suitable flows and substrate.
23B	Cuckoo Stream / Mayne_010	53.41086, -6.16247	As above	As above	As above	No, urban environment
23C	Cuckoo Stream / Mayne_010	53.40968, -6.16112	As above	As above	As above	No, urban environment

Crossing	Stream Name / WFD Name	Lat, Long	IFI WFD Fish Monitoring[10] Status & Assemblage	Q-value Status (2019-2024)	WFD Risk Score	Salmonid Suitability
24A	Mayne Stream / Mayne_010	53.40701, -6.17787	In monitoring year 2016, the status downstream was Poor to Bad. Fish recorded were: European eel	Poor (downstream)	At risk	Yes, moderate flows and available substrate.
24B	Mayne Stream / Mayne_010	53.40918, -6.16359	As above	As above	As above	Yes, good substrate available however other areas have fine sediments
24C	Mayne Stream / Mayne_010	53.40887, -6.16146	As above	As above	As above	Yes, good substrate available however other areas have fine sediments
25	Mayne Stream / Mayne_010	53.4086, -6.20646	In monitoring year 2016, the status downstream was Poor to Bad. Fish recorded were: European eel	Poor	At risk	No, substrate loaded with sediment and heavily vegetated

Each watercourse, described in Table A23.11 has been assigned an ecological value at the crossing point based on the aquatic features present and fisheries suitability. For watercourses that have poor Q values, are at risk of not achieving the WFD status and have no fisheries suitability, an ecological value of local (lower) has been assigned. These include: Wx01 Bremore Stream, Wx03 Knock Stream, Wx04 Balrothery Stream, Wx05 Balrickard Stream, Wx06 Rowans Big Stream, Wx07 Rowans Little Stream, Wx10 Aldrumman Stream, Wx14 Turvey Stream, Wx15 Staffordstown Stream, Wx18 Seapoint Stream, Wx19 Greenfields Stream, Wx20 Gaybrook Stream and Wx21 Hazelbrook Stream.

The following text below from Section 23.3.3.1 of Chapter 23 in the 2024 EIAR shall be deleted:

"Where watercourses were assessed as having poor fisheries suitability but are known or were observed to support European eel, an ecological value of local (higher) was assigned. These watercourse crossings were Wx23A-C Cuckoo Stream and Wx24A Mayne River and Wx25 Mayne River. All three of these watercourses are connected to downstream European sites.

Watercourses that were assessed as being viable for fisheries were, and/or are known to support fish populations, were assessed as having an ecological value of County/regional. The ten watercourse crossings are Wx02 Bracken River, Wx09 Oberstown Stream, Wx11 Ballough Stream, Wx12 Deanestown Stream, Wx13 Ballyboghill Stream, Wx16 Broadmeadow River, Wx17 Ward River, Wx22 Sluice Stream, Wx24B Mayne River and Wx24C Mayne River. All of these are connected to downstream European sites."

And replaced with the following text:

Where watercourses were assessed as having poor fisheries suitability but are known or were observed to support European eel, an ecological value of local (higher) was assigned. These watercourse crossings were Wx23B-C Cuckoo Stream and Wx25 Mayne River. All three of these watercourses are connected to downstream European sites.

Watercourses that were assessed as being viable for fisheries were, and/or are known to support fish populations, were assessed as having an ecological value of County/regional. The ten watercourse crossings are Wx02 Bracken River, Wx08 Courtlough Stream, Wx09 Oberstown Stream, Wx11 Ballough Stream, Wx12 Deanestown Stream, Wx13 Ballyboghill Stream, Wx16 Broadmeadow River, Wx17 Ward River, Wx22 Sluice Stream, Wx23A Cuckoo Stream, Wx24A-B Mayne River and Wx24C Mayne River. All of these are connected to downstream European sites.

There are no other changes required to this section. Refer to Section 23.3.3.1 of Chapter 23 of the 2024 EIAR.

23.3.4 Summary of Important Ecological Features

There are no changes to the section. Refer to Section 23.3.4 of Chapter 23 of the 2024 EIAR.

23.4 Characteristics of the Proposed Development

There are no changes to the section. Refer to Section 23.4 of Chapter 23 of the 2024 EIAR.

23.4.1 Landfall Site

There are no changes to the section. Refer to Section 23.4.1 of Chapter 23 of the 2024 EIAR.

23.4.2 Grid Facility

There are no changes to the section. Refer to Section 23.4.2 of Chapter 23 of the 2024 EIAR.

23.4.3 Onshore Cable Route

There are no changes to the section. Refer to Section 23.4.3 of Chapter 23 of the 2024 EIAR.

23.4.4 Offshore Infrastructure

There are no changes to the section. Refer to Section 23.4.4 of Chapter 23 of the 2024 EIAR.

23.5 Potential Effects

There are no changes to the introductory text in this section. Refer to Section 23.5 of Chapter 23 of the 2024 EIAR.

23.5.1 Do-nothing Scenario

There are no changes to the section. Refer to Section 23.5.1 of Chapter 23 of the 2024 EIAR.

23.5.2 Construction Phase

There are no changes to the introductory text in this section. Refer to Section 23.5.2 of Chapter 23 of the 2024 EIAR.

23.5.2.1 Designated Sites

There are no changes to the section. Refer to Section 23.5.2.1 of Chapter 23 of the 2024 EIAR.

23.5.2.2 Habitats

The change in this section reflects the update survey results which recorded a reduced habitat area of GS2 dry meadows and grassy verges at Blakes Cross South, due to conversion to GA1 improved agricultural grassland, and as a result of the construction of a new housing development at Wx22 (Sluice Stream).

In addition, a change is required for this section to provide reference to the Habitat and Species Management Plan which has been updated in response to RFI Section 20 (b) and the NPWS submission that relates to the planting method of habitat enhancement for semi-natural grasslands. This is included in Appendix A23.9.

The following text from Section 23.5.2.2 of Chapter 23 in the 2024 EIAR shall be deleted:

*"**Dry calcareous and neutral grassland, dry meadows and grassy verges and wet grassland/marsh***

A total of 7.12ha of semi-natural grassland habitat comprising of dry calcareous and neutral grassland, dry meadows and grassy verges and/or wet grassland/marsh occurs within the ecology study area of the proposed development. Wet grassland/marsh is located at Blakes Cross South and encompasses the riparian corridor at Wx12 Deanestown Stream. A small area of dry calcareous and neutral grassland is located at the M1 crossing. While areas of dry meadows and grassy verges are located around field margins at the landfall site and M1 crossing, within an unmanaged agricultural field at Blakes Cross South and Wx22 (Sluice Stream), and periphery areas at the existing Belcamp substation."

And replaced with the following text:

Dry calcareous and neutral grassland, dry meadows and grassy verges and wet grassland/marsh

A total of 3.91ha of semi-natural grassland habitat comprising of dry calcareous and neutral grassland, dry meadows and grassy verges and/or wet grassland/marsh occurs within the ecology study area of the proposed development. Wet grassland/marsh is located at Blakes Cross South and encompasses the riparian corridor at Wx12 Deanestown Stream. A small area of dry calcareous and neutral grassland is located at the M1 crossing. While areas of dry meadows and grassy verges are located around field margins at the landfall site and M1 crossing, and periphery areas at the existing Belcamp substation.

The following text from Section 23.5.2.2 of Chapter 23 in the 2024 EIAR shall be deleted:

"Reinstatement methods for semi-natural grassland habitats are set out in the Habitat and Species Management Plan, see Appendix 23.10."

And replaced with the following text:

Reinstatement methods for semi-natural grassland habitats are set out in the Habitat and Species Management Plan, see Appendix A23.9.

Hedgerows and treelines

The change in this section reflects the change in length of hedgerow as noted in Section 23.3.3.1 within the study area recorded during update surveys in 2025.

The following text from Section 23.5.2.2 of Chapter 23 in the 2024 EIAR shall be deleted:

- *"A total length of 6.86km of hedgerows and treelines occurs within the ecology study area of the proposed development. Hedgerows are present at each of the offline sections of the proposed development. Hedgerows, for the most part, were mature and established throughout the study area. Treelines occurred at the Blakes Cross North, Blakes Cross South, M1 crossing, Wx22 (Sluice Stream) and Belcamp substation."*

And replaced with the following text:

- A total length of 6.71km of hedgerows and treelines occurs within the ecology study area of the proposed development. Hedgerows are present at each of the offline sections of the proposed development. Hedgerows, for the most part, were mature and established throughout the study area. Treelines occurred at the Blakes Cross North, Blakes Cross South, M1 crossing, Wx22 (Sluice Stream) and Belcamp substation.

Terrestrial Non-native Invasive Species

A change is required for this section to provide reference to the Habitat and Species Management Plan which has been updated in response to RFI Section 20 (b), and the NPWS submission is included in Appendix A23.9.

The following text from Section 23.5.2.2 of Chapter 23 in the 2024 EIAR shall be deleted:

"Treatment methods and appropriate measures to remove medium and high impact invasive species are set out in the Habitat and Species Management Plan, see Appendix 23.10."

And replaced with the following text:

Treatment methods and appropriate measures to remove medium and high impact invasive species are set out in the Habitat and Species Management Plan, see Appendix A23.9.
There are no other changes to the section. Refer to Section 23.5.2.2 of Chapter 23 of the 2024 EIAR.

23.5.2.3 Annex 1 Habitats

There are no changes to the section. Refer to Section 23.5.2.3 of Chapter 23 of the 2024 EIAR.

23.5.2.4 Terrestrial Mammals

Badger

The change in this section is an update to the potential effects of construction on badger based on the update survey results which recorded an additional four setts, along with the two setts recorded during surveys for the 2024 EIAR.

Therefore, the following text from Section 23.5.2.4 of Chapter 23 in the 2024 EIAR shall be deleted:

"Two badger setts were identified during surveys within the onshore ecological study area, however they both occur outside the onshore development area. The nearest identified badger sett is located at Blakes Cross South, over 50m from the onshore development area. This sett is believed to be a main sett as multiple entrances were identified and could potentially be used as a breeding sett. As set out by NRA (2006a) guidelines, to avoid disturbance during the breeding season (December to June) works should not occur within 50m of an active sett, and no blasting or pile driving should occur within 150m of an active sett. In relation to the proposed development, works will not occur within 50m of the sett and no piling or blasting is proposed within 150m of the sett. A second sett was located near the existing Belcamp substation, over 150m from the onshore development area. As such, impacts to badger arising from the proposed development will not extend to the sett location (NRA, 2006a). Given the distance of both setts from the onshore development area, and that no piling or blasting will occur within 150m of either sett (NRA, 2006a), badgers will not be subject to temporary disturbance at sett locations during the construction phase of the onshore infrastructure of the proposed development, and therefore no likely significant effects are predicted.

Suitable foraging habitat for badger will be temporarily lost resulting from the onshore cable route working corridor and temporary compounds during the construction phase. Given that grassland habitats will be reinstated following construction and considering the substantial foraging habitat available to badger across the onshore cable route, any minimal temporary loss of foraging resource is not considered to result in a likely significant effect on badger.

Temporary artificial lighting at construction compounds may also alter badger behaviour at these locations. Across the onshore cable route there is substantial foraging and commuting habitat available to badger, as such no likely significant effects are predicted arising from artificial lighting impacts on badger at any geographical scale.

Significance of effect: There will be no likely significant effect at any geographical scale on badger as a result of the proposed development."

And replaced with the following text:

Six badger setts were identified during surveys within the onshore ecological study area. Three of the setts were recorded within the onshore development area at the landfall site and grid facility site.

Two setts are located at the western boundary of the grid facility site, situated approximately 80 m apart. Both setts are considered active outlier setts with one to two entrances and used sporadically. As the setts are in close proximity to construction works, setts will be temporarily closed to exclude badgers from the setts during the construction phase. The sett closure will occur prior to construction of the grid facility and will remain closed for the period of construction at this location. Temporary closure of setts will be subject to permissions being granted by the competent authority. As set out by NRA (2006) guidelines, exclusion of badgers from any currently active sett should only be carried out during the period of July to November (inclusive) in order to avoid the badger breeding season. This will result in temporary loss (or potential permanent loss) of setts to badgers.

Construction will result in the permanent loss of foraging habitat at the grid facility, which will affect badger to some degree, at least temporarily. As construction works will typically be undertaken during normal daylight working hours and badger are nocturnal in habit, displacement of badgers from foraging areas is unlikely.

An inactive sett was identified at the landfall site in an area of scrub near the coastline. There were five entrances identified at this sett with no activity recorded. As set out by NRA (2006) guidelines, to avoid disturbance during the badger breeding season (December to June) works should not occur within 50 m of an active sett, and no pile driving (including HDD) should occur within 150 m of the sett. In relation to the proposed development, works will occur within 50 m of the sett and piling (HDD) is proposed within 150 m of the sett. There is a risk of disturbance and/or destruction of sett due to vibrations from HDD in close proximity. Although the setts are considered to be inactive, appropriate mitigation measures and consultation with NPWS would be required to minimise any impact in the scenario where the sett becomes active.

An active sett was identified approximately 5 m from the onshore development area at Wx22 (Sluice Stream). The sett is considered to be a subsidiary sett with three entrances present. The closest offline construction works will take place at 50m from the sett. Given the close proximity of this sett to the onshore development area badgers will be subject to disturbance at sett locations during the construction phase of the onshore infrastructure of the proposed development and therefore would require appropriate mitigation measures to minimise any impact.

An identified badger sett is located at Blakes Cross South, approximately 85m from the onshore development area. This sett is believed to be a main sett as at least five entrances were identified and could potentially be used as a breeding sett. Trail camera footage identified a minimum of three badgers using this sett. As set out by NRA (2006) guidelines, to avoid disturbance during the breeding season (December to June) works should not occur within 50m of an active sett, and no pile driving should occur within 150m of an active sett. In relation to the proposed development, works will not occur within 50 m of the sett and no piling is proposed within 150m of an active sett. Given the distance of this sett from the onshore development area, and that no piling will occur within 150 m of the sett (NRA, 2006), badgers will not be subject to temporary disturbance at sett locations during the construction phase of the onshore infrastructure of the proposed development. However, due to the proximity of the sett within 150m of the works, to minimise any accidental disturbance appropriate mitigation measures may be required.

A sett was identified 185m from the onshore development area west of Belcamp substation. As such, impacts to badger arising from the proposed development will not extend to the sett location (NRA, 2006). Given the distance of this sett from the onshore development area, and that no piling will occur within 150m of the sett (NRA, 2006), badgers will not be subject to temporary disturbance at sett locations during the construction phase of the onshore infrastructure of the proposed development.

Several inactive mammal burrows were recorded across the study area. Therefore, pre-construction inspection surveys on these features will be carried out to determine possible re-excavation and occupancy. If mammals, particularly badgers are found to be using these burrows prior to construction, a mitigation strategy will be employed involving the closure of these burrows in accordance with NRA guidelines (NRA, 2006).

Suitable foraging habitat for badger will be temporarily lost resulting from the onshore cable route working corridor and temporary compounds during the construction phase. Given that grassland habitats will be reinstated following construction and considering the substantial foraging habitat available to badger across the onshore cable route, any minimal temporary loss of foraging resource is not considered to result in a likely significant effect on badger. Permanent loss of suitable foraging habitat for badger will occur at the grid facility and equate to the loss of c. 3.9 ha of agricultural grassland. This will result in a long-term effect on the local badger population which is not reversible. Badger are widespread in Ireland. This level of effect and scale of habitat loss is not predicted to have a population level effect greater than at a local geographical scale.

Temporary artificial lighting at construction compounds may also alter badger behaviour at these locations. Across the onshore cable route there is substantial foraging and commuting habitat available to badger, as such no likely significant effects are predicted arising from artificial lighting impacts on badger at any geographical scale.

Significance of effect: The onshore infrastructure of the proposed development could result in a negative, short-term (during the construction phase) to long-term (permanent habitat loss) and reversible (where habitats will be reinstated and prey availability returns) to irreversible (where there is permanent habitat loss at the grid facility) likely significant effect at a local geographical scale on foraging and resting badger.

Small mammals

The change in this section is an update to the potential effects of construction on small mammals including Irish stoat which was recorded during update surveys. The significance of effect for small mammals remains the same as assessed in the 2024 EIAR, i.e. there is no likely significant effect at any geographical scale on small mammals as a result of the proposed development.

Therefore, the following text from Section 23.5.2.4 of Chapter 23 in the 2024 EIAR shall be deleted:

"Habitat suitability for small mammals, pygmy shrew, hedgehog, and Irish hare, is present throughout the onshore development area."

And replaced with the following text:

Habitat suitability for small mammals, pygmy shrew, hedgehog, Irish stoat and Irish hare, is present throughout the onshore development area.

There are no other changes to the section. Refer to Section 23.5.2.4 of Chapter 23 of the 2024 EIAR.

23.5.2.5 Otter

There are no changes to the section. Refer to Section 23.5.2.5 of Chapter 23 of the 2024 EIAR.

23.5.2.6 Amphibian and Reptiles

There are no changes to the section. Refer to Section 23.5.2.6 of Chapter 23 of the 2024 EIAR.

23.5.2.7 Bats

The change in this section is an update to the impact assessment on roosting potential for bats and quantity of PRFs that may be affected during the construction phase. Update surveys recorded a total of 45 PRFs which included 44 trees. Of these 38 were assessed as PRF-I which could be used by individual roosting bats opportunistically, and six were assessed as PRF-M which could be suitable for multiple bats. One derelict building, in the vicinity of Blakes Cross South, was also identified as having moderate PRF potential. The significance of effect resulting from the loss of PRFs, and potential bat roosts, remains the same as assessed in the 2024 EIAR, i.e. likely significant effect at a local geographical scale on roosting bats, and a temporary and reversible likely significant effect at a local geographical scale on foraging and commuting bats.

Therefore, the following text from Section 23.5.2.7 of Chapter 23 in the 2024 EIAR shall be deleted:

"For roosting bats, the onshore infrastructure of the proposed development will result in the loss of trees that have been assessed as low to high suitability for roosting bats. No tree roosts were confirmed during surveys. While there were 43 potential roost feature (PRF) trees identified within, or in close proximity to, the onshore development area, not all of these will be removed to facilitate the cable route, i.e. if they are contained within the periphery treeline or hedgerow which the onshore development area overlaps with and will clearly not be removed. It is estimated that a maximum of c. 18 PRF trees assessed as low suitability and two PRF trees assessed as moderate suitability may be removed."

And replaced with the following text:

For roosting bats, the onshore infrastructure of the proposed development will result in the loss of trees that have been assessed as PRF-I to PRF-M suitability for roosting bats. No tree roosts were confirmed during surveys. Trees were identified as a roosting resource. While there were 44 potential roost feature (PRF) trees identified within, or in close proximity to, the onshore development area, not all of these will be removed to facilitate the cable route, i.e. if they are contained within the periphery treeline or hedgerow which the onshore development area overlaps with and will clearly not be removed. It is estimated that a maximum of 18 trees assessed as PRF-I and five trees assessed as PRF-M may be removed or subject to disturbance.

There are no other changes to the section. Refer to Section 23.5.2.7 of Chapter 23 of the 2024 EIAR.

23.5.2.8 Breeding Birds

The change in this section is an update to the additional red-listed species that were recorded during update surveys and that may be affected during the construction phase. A pair of stock dove were recorded at Belcamp substation and curlew were recorded flying at Blakes Cross South, at the landfall and grid facility. The significance of effect on breeding birds remains the same as assessed in the 2024 EIAR, i.e. negative, temporary to medium-term reversible likely significant effect at a local geographical scale on Red-listed yellowhammer and meadow pipit. For all other breeding birds, a negative, temporary and reversible likely significant effect at a local geographical scale.

Therefore, the following text from Section 23.5.2.8 of Chapter 23 in the 2024 EIAR shall be deleted:

"Two Red-listed species breed within the onshore development area and are meadow pipit and yellowhammer."

And replaced with the following text:

Three red-listed species breed within, or in close proximity to, the onshore development area and are meadow pipit, yellowhammer and stock dove.

In addition, the following text from Section 23.5.2.8 of Chapter 23 in the 2024 EIAR shall be deleted:

"Both species will experience temporary to medium-term habitat loss within the onshore development area, along the route, at the landfall site, at contractor and HDD compound locations, and where access tracks will be instated and permanent habitat loss at the proposed grid facility location."

And replaced with the following text:

Stock dove typically nest in holes in trees and buildings and were recorded exclusively at Belcamp substation although were not confirmed to nest at this location. Meadow pipit and yellowhammer will experience temporary to medium-term habitat loss within the onshore development area, along the route, at the landfall site, at contractor and HDD compound locations, and where access tracks will be instated and permanent habitat loss at the proposed grid facility location. Stock dove will experience potential temporary habitat loss due to felling of trees at Belcamp; however no breeding was confirmed. There is suitable habitat for stock dove in the vicinity of Belcamp for any displaced birds.

The following text from Section 23.5.2.8 of Chapter 23 in the 2024 EIAR shall be deleted:

"Significance of effect: The onshore infrastructure of the proposed development will result in a negative, temporary (i.e. disturbance experienced during the construction phase) to medium-term (i.e. until habitats have been reinstated and returned to as close to their original state as practicable), reversible likely significant effect at a local geographical scale on Red-listed yellowhammer and meadow pipit. For all other breeding birds, the onshore infrastructure of the proposed development will result in a negative, temporary (i.e. disturbance experienced during the construction phase) and reversible (i.e. on completion of disturbance) likely significant effect at a local geographical scale."

And replaced with the following text:

Significance of effect: The onshore infrastructure of the proposed development will result in a negative, temporary (i.e. disturbance experienced during the construction phase) to medium-term (i.e. until habitats have been reinstated and returned to as close to their original state as practicable), reversible likely significant effect at a local geographical scale on red-listed meadow pipit, yellowhammer and stock dove. For all other breeding birds, the onshore infrastructure of the proposed development will result in a negative, temporary (i.e. disturbance experienced during the construction phase) and reversible (i.e. on completion of disturbance) likely significant effect at a local geographical scale.

There are no other changes to the section. Refer to Section 23.5.2.8 of Chapter 23 of the 2024 EIAR.

23.5.2.9 Wintering waterbirds

The change in this section is an update to peak count numbers and species of wintering waterbirds recorded during update surveys, and that may be affected during the construction phase. Three additional amber-listed species, common sandpiper, wigeon and teal were recorded. In addition, peak counts of black-tailed godwit, dunlin, mute swan, whooper swan, red-breasted merganser and teal increased at the Malahide Estuary, and peak counts of black-tailed godwit and lapwing increased at the landfall & grid facility. The significance of effect on wintering waterbirds remains the same as assessed in the 2024 EIAR, i.e. a negative, temporary to short-term reversible likely significant effect at a local geographical scale.

It should be noted an administrative error was included in Section 23.5.2.9 of Chapter 23 of the 2024 EIAR when reporting against national wintering populations for lapwing, curlew, and golden plover. This has been rectified below to 0.07%, 0.26% and 0.06% respectively.

Therefore, the following text from Section 23.5.2.9 of Chapter 23 in the 2024 EIAR shall be deleted:

"Arable fields east of the Dublin-Belfast railway line were recorded to hold wintering waterbirds such as gull species (peak count of 80 herring gull), lapwing (peak count of 60 recorded which is equivalent to 0.007% of the national wintering population), curlew (peak count of 91 recorded, equivalent to 0.026% of the national wintering population) and golden plover (peak count of 58 recorded, equivalent to 0.006% of the national wintering population), and in numbers which represent significantly lower than 1% of the national population."

And replaced with the following text:

Arable fields east of the Dublin-Belfast railway line were recorded to hold wintering waterbirds such as gull species (peak count of 80 herring gull), lapwing (peak count of 68 recorded which is equivalent to 0.08% of the national wintering population), curlew (peak count of 91 recorded, equivalent to 0.26% of the national wintering population) and golden plover (peak count of 58 recorded, equivalent to 0.06% of the national wintering population), and in numbers which represent significantly lower than 1% of the national population.

In additional, the following text from Section 23.5.2.9 of Chapter 23 in the 2024 EIAR shall be deleted:

"Wintering waterbirds that occurred in numbers of up to national importance at the landfall site and/or Malahide Estuary (i.e. in numbers greater than 1% of the national population) were golden plover, light-bellied brent goose and great crested grebe."

And replaced with the following text:

Wintering waterbirds that occurred in numbers of up to national importance at the landfall site and/or Malahide Estuary (i.e. in numbers greater than 1% of the national population) were golden plover, light-bellied brent goose, black-tailed godwit, red-breasted merganser and great crested grebe.

There are no other changes to the section. Refer to Section 23.5.2.9 of Chapter 23 of the 2024 EIAR.

23.5.2.10 Aquatic and Fisheries

Whilst update surveys resulted in a change to salmonid suitability at three watercourse crossing points: Wx08 Courtlough Stream, Wx23A Cuckoo Stream and Wx24A Mayne River, from unsuitable to suitable the significance of effect due to the crossing methods proposed at these locations on aquatic and fisheries remains the same as assessed in the 2024 EIAR. Therefore, the conclusion of negative, temporary likely significant effects at a local geographical scale for the watercourses described in Table 23.19 of Section 23.5.2.10 of the 2024 EIAR remains unchanged.

There are no changes to the section. Refer to Section 23.5.2.10 of Chapter 23 of the 2024 EIAR.

23.5.3 Operational Phase

There are no changes to the introductory text of this section. Refer to Section 23.5.3 of Chapter 23 of the 2024 EIAR.

23.5.3.1 Designated Sites

There are no changes to the section. Refer to Section 23.5.3.1 of Chapter 23 of the 2024 EIAR.

23.5.3.2 Habitats

There are no changes to the section. Refer to Section 23.5.3.2 of Chapter 23 of the 2024 EIAR.

23.5.3.3 Annex 1 Habitats

There are no changes to the section. Refer to Section 23.5.3.3 of Chapter 23 of the 2024 EIAR.

23.5.3.4 Terrestrial Mammals

The change in this section is an update to the potential operational phase effects on badger and reflect the update badger survey results.

Therefore, the entire Section 23.5.3.4 of Chapter 23 in the 2024 EIAR shall be deleted:

"No badger setts were recorded at the grid facility, therefore operational lighting at the grid facility location will not impact any identified badger setts. Operational maintenance works will involve an annual inspection at the cable TJBs at the landfall site and the joint bays along the onshore cable route. While these works will not be intrusive works, emergency repairs may involve artificial lighting. Emergency repairs and associated artificial lighting will be highly localised and will not result in effects on badgers or terrestrial mammals at any perceptible geographical scale. Therefore, significant, negative effects on terrestrial mammals are not anticipated during the operational phase.

Significance of effect: There will be no likely significant effect at any geographical scale on terrestrial mammals arising from the operation of the onshore infrastructure of the proposed development."

And replaced with the following:

There were a total of six badger setts recorded across the study area. Two badger setts were recorded at the grid facility, with surveys confirming activity at setts located in a ditch at the western periphery of the onshore development area. The setts will remain available to badger post-construction. The grid facility will be in close proximity to the setts and in the long term may discourage badger from re-inhabiting. External artificial lighting installed at the grid facility could alter badger behaviour and long-term use of the setts, if not suitably designed. At the grid facility, external artificial lighting will be switched off during the hours of darkness with the exception for emergency repairs to outdoor equipment. Motion sensor technology will be implemented to control lighting at access doors and security gates within the grid facility. During the operational phase, there will be an effect in the short-term while badger habituate to the onshore development area, in particular the presence of built infrastructure at the gird facility. Changes in habitat availability at the grid facility are assessed in Section 23.5.2.4. Any potential effect is not considered a long-term effect and is expected to occur at a local geographical scale.

Other badger setts identified include, an inactive sett identified at the landfall site in an area of scrub near the coastline, an active sett identified approximately 5 m from the onshore development area at Wx22 (Sluice Stream), and a main sett located at Blakes Cross South approximately 85m from the onshore development area. Operational maintenance works will involve an annual inspection at the cable TJBs at the landfall site and the joint bays along the onshore cable route. While these works will not be intrusive works, emergency repairs may involve artificial lighting. The only potential operational effects on setts at Wx22 (Sluice Stream) and Blakes Cross South is emergency repairs. Emergency repairs and associated artificial lighting will be highly localised and will not result in effects on badgers or terrestrial mammals at any perceptible geographical scale. Therefore, significant, negative effects on terrestrial mammals at landfall site, Wx22 (Sluice Stream) and Blakes Cross are not anticipated during the operational phase.

Significance of effect: There will be a short-term likely significant effect at a local scale while badger habituate to the onshore infrastructure of the proposed development, in particular at the gird facility.

23.5.3.5 Otter

There are no changes to the section. Refer to Section 23.5.3.5 of Chapter 23 of the 2024 EIAR.

23.5.3.6 Amphibian and Reptiles

There are no changes to the section. Refer to Section 23.5.3.6 of Chapter 23 of the 2024 EIAR.

23.5.3.7 Bats

There are no changes to the section. Refer to Section 23.5.3.7 of Chapter 23 of the 2024 EIAR.

23.5.3.8 Breeding Birds

There are no changes to the section. Refer to Section 23.5.3.8 of Chapter 23 of the 2024 EIAR.

23.5.3.9 Wintering Waterbirds

There are no changes to the section. Refer to Section 23.5.3.9 of Chapter 23 of the 2024 EIAR.

23.5.3.10 Aquatic and Fisheries

There are no changes to the section. Refer to Section 23.5.3.10 of Chapter 23 of the 2024 EIAR.

23.5.4 Decommissioning

There are no changes to the section. Refer to Section 23.5.4 of Chapter 23 of the 2024 EIAR.

23.6 Mitigation and Monitoring Measures

Following the submission of the consent application for the proposed development in June 2024, the Flemington Local Area Plan (LAP) was adopted in December 2024. The lands included within the LAP are adjacent to the grid facility boundaries along the southern extents.

Potential impacts from the grid facility on the Flemington LAP were raised in the RFI as noted in the introduction of this Chapter. As a result, the Developer has consulted with Fingal County Council (FCC) to ensure that potential impacts from the proposed development on the LAP, and in particular any future residents of this LAP, are mitigated as much as possible and to ensure any impacts are not significant.

The Landscape Plan for the grid facility has been updated to provide additional planting of native woodland along the southern boundary of the site. This is to ensure further screening is in place between the proposed grid facility and the LAP lands as per RFI Section 13 (e).

In addition, a change is required for this section to provide reference to the Habitat and Species Management Plan which has been updated in response to RFI Section 20 (b) and the NPWS submission (included in Appendix A23.9).

Therefore, the following introductory text shall be deleted from Section 23.6 of Chapter 7 of the 2024 EIAR:

"*Mitigation provided at two key areas is shown on landscape plans and referred to in this section: one for the grid facility area (see planning drawing 281240_MCR_ONS_GF_DR_YE_1010 Grid facility Landscape Plan in Appendix 7.1) and one for Blakes Cross North (see planning drawing 281240_MCR_ONS_GF_DR_YE_1011 Blakes Cross North Landscape Plan , in Appendix 7.1). These plans show the combined landscaping and biodiversity mitigation proposals at these locations. A Habitat and Species Management Plan has been prepared for these areas to ensure the desired outcome for biodiversity is achieved, see Appendix 23.10."*

And replaced with the following text:

Mitigation provided at two key areas is shown on landscape plans and referred to in this section: one for the grid facility area (see planning drawing 281240_MCR_ONS_GF_DR_YE_1010 *Grid facility Landscape Plan* in Appendix A7.1) and one for Blakes Cross North (see planning drawing 281240_MCR_ONS_GF_DR_YE_1011 *Blakes Cross North Landscape Plan*, in Appendix 7.1). These plans show the combined landscaping and biodiversity mitigation proposals at these locations. A Habitat and Species Management Plan has been prepared for these areas to ensure the desired outcome for biodiversity is achieved, see Appendix A23.9.

There are no other changes to the introductory text in this section. Refer to Section 23.6 of Chapter 23 of the 2024 EIAR.

23.6.1 Construction Phase

A change is required for this section to provide reference to the Habitat and Species Management Plan which has been updated in response to RFI Section 20 (b) and the NPWS submission (included in Appendix A23.9).

Therefore, the following introductory text shall be deleted from Section 23.6 of Chapter 7 of the 2024 EIAR:

A suitably qualified Ecological Clerk of Works (ECoW) will be appointed to ensure the mitigation measures outlined in this section, in the Habitat and Species Management Plan (Appendix 23.10) and in Volume 8, Appendix 9.1: Onshore Construction Environmental Management Plan (CEMP) are implemented during the construction phase of the onshore infrastructure of the proposed development.

And replaced with the following text:

A suitably qualified Ecological Clerk of Works (ECoW) will be appointed to ensure the mitigation measures outlined in this section, in the Habitat and Species Management Plan (Appendix A23.9) and in Volume 8, Appendix 9.1: Onshore Construction Environmental Management Plan (CEMP) are implemented during the construction phase of the onshore infrastructure of the proposed development.

23.6.1.1 Designated Sites

There are no changes to the section. Refer to Section 23.6.1.1 of Chapter 23 of the 2024 EIAR.

23.6.1.2 Habitats

The change in this section is an update required to account for the updated Landscape Plan at the grid facility as detailed in Section 23.6. Additionally, a change is required for this section to provide reference to the Habitat and Species Management Plan which has been updated in response to RFI Section 20 (b) and the NPWS submission (included in Appendix A23.9).

Measures to mitigate against habitat loss of hedgerows and trees/treelines

Therefore, the following text from Section 23.6.1.2 of Chapter 23 in the 2024 EIAR shall be deleted:

"Trees and woodland will be planted around the periphery of the grid facility. This planting area will measure a total 8,325m^2."

And replaced with the following text:

Native trees and woodland will be planted around the periphery of the grid facility. This planting area will measure a total 9,748m^2.

Therefore, the following text from Section 23.6.1.2 of Chapter 23 in the 2024 EIAR shall be deleted:

"To enhance the biodiversity potential of hedgerow and tree planting, management measures will be undertaken which are outlined under the Biodiversity Enhancement section below and are described in the Habitat and Species Management Plan (see Appendix 23.10)".

And replaced with the following text:

To enhance the biodiversity potential of hedgerow and tree planting, management measures will be undertaken which are outlined under the Biodiversity Enhancement section below and are described in the Habitat and Species Management Plan (see Appendix A23.9).

Measures to avoid dispersal of Non-native Invasive Species

Therefore, the following text from Section 23.6.1.2 of Chapter 23 in the 2024 EIAR shall be deleted:

"See Appendix 23.10 Habitat and Species Management Plan for prescriptive detail on invasives species management methods and treatment."

And replaced with the following text:

See Appendix A23.9 Habitat and Species Management Plan for prescriptive detail on invasives species management methods and treatment.

In addition, the following text has been added to Section 23.6.1.2 (at the end of sub section titled *Measures to mitigate against habitat loss of hedgerows and trees/treelines)* of Chapter 23 in the 2024 EIAR to address RFI Section 20 (b):

Where there is tree felling and hedgerow removal along the onshore cable route, the Developer will prepare and agree a felling and replacement plan with Fingal County Council, if required prior to construction.

There are no other changes to the section. Refer to Section 23.6.1.2 of Chapter 23 of the 2024 EIAR.

23.6.1.3 Habitat Enhancement

The change in this section is an update required to account for the updated Landscape Plan at the grid facility as detailed in Section 23.6. Additionally, a change is required for this section to provide reference to the Habitat and Species Management Plan which has been updated in response to RFI Section 20 (b) and the NPWS submission (included in Appendix A23.9).

Therefore, the following text from Section 23.6.1.3 of Chapter 23 in the 2024 EIAR shall be deleted:

"The following biodiversity planting has been proposed and will be managed as outlined here and in Appendix 23.10 Habitat and Species Management Plan, to maximise its biodiversity potential for the widest range of species."

And replaced with the following text:

The following biodiversity planting has been proposed and will be managed as outlined here and in Appendix A23.9 Habitat and Species Management Plan, to maximise its biodiversity potential for the widest range of species.

Habitat enhancement for hedgerow and trees

Therefore, the following text from Section 23.6.1.3 of Chapter 23 in the 2024 EIAR shall be deleted:

"Trees and woodland will be planted around the periphery of the grid. This planting area will measure a total 8,325m2.

See Appendix 23.10 Habitat and Species Management Plan for details on management of hedgerows and tree planting to enhance the biodiversity potential."

And replaced with the following text:

Trees and woodland will be planted around the periphery of the grid. This planting area will measure a total 9,748m^2.

See Appendix A23.9 Habitat and Species Management Plan for details on management of hedgerows and tree planting to enhance the biodiversity potential.

In addition, the following text has been updated to capture comments provided by National Parks and Wildlife Service (NPWS) in their submission that relate to the planting method of habitat enhancement for semi-natural grasslands.

Habitat enhancement for semi-natural grasslands

Therefore, the following text from Section 23.6.1.3 of Chapter 23 in the 2024 EIAR shall be deleted:

"A species rich grassland mix will be used in appropriate grassland areas of the grid facility in an area of 33,483m2. At Blakes Cross North an additional area of species rich grassland will be sown, measuring 5,500m2.

The species rich grassland seed mix will include the species as listed, or a similar native grassland seed mix: Festuca pratensis, Festuca ovina, Lolium prenne L., Festuca rubra, Festuca rubra subsp.

Commutate, Poa pratensis, Poa trivialis, Alopecurus pratensis, Phelum pratense, Plantago lanceolata, Prunella vulgaris, Achillea millefolium, Daucus carota, Leucanthemum vulgare, Galium verum, Rumex acetosella, Lotus corniculatus, Rhinanthus minor, Trifolium repens and Trifolium pratense, Centaurea nigra, Hypochoeris radicata, Anthriscus sylvestris, Vicia sepium, Lathyrus pratensis, Conopodium majus.

In addition, the attenuation basin in the grid facility, which will be infrequently wet depending on rainfall levels, will be planted with a riparian grass and herb mix. The planted area will measure a total area of 6,411m2. This species rich grassland mix will include important food plants for the butterflies and invertebrates and will benefit foraging bats and birds. This riparian grass and herb mix will include the following species as listed, or a similar native species mix: Juncus effusus, Ranunculus peltatus, Sagittaria sagittifolia, Potamogenton natans, Mentha aquatica, Ceratophylium demersum, Glyceria maxima, Hydrocharis morus-rane, Sparganium erectum, Berula eracta, Filipendula ulmaria, Callitriche platycarpa, Lychnis flos-cuculi, Myosotis scorpiodes, Iris psedudacorus, Alisma plantago-aquatica, Althaea officinalis, Berula eracta, Filipendula ulmaria, Mentha aquatica, Glyceria fluitans, Lychnis flos-cuculi, Myosotis scorpiodes, Iris psedudacorus, Alisma plantago-aquatica, Althaea officinalis.

Areas of seeded grassland will be managed through a once or twice annual mowing regime, whereby mowing is undertaken outside of the breeding bird period (1 March to 31 August). Cuttings will be removed from the site after each mow. Strips will also be left unmown with seed heads intact for the winter period providing a winter food resource for birds.

Insecticides and herbicides will not be used to manage habitats, with the exception of the treatment of non-native invasive species.

See Appendix 23.10 Habitat and Species Management Plan for details on management of grassland to enhance the biodiversity potential."

And replaced with the following text:

A species rich grassland mix will be used in appropriate grassland areas of the grid facility in an area of 35,756^{m2}. At Blakes Cross North an additional area of species rich grassland will be sown, measuring 5,500^{m2}.

Establishment of grassland habitats at these locations will be implemented using hay transfer. This is an effective near-natural solution for grassland restoration which avoids importing a seed mix and instead utilises the existing seed bank and seed resource. Adjacent, or nearby, grassland similar to the grassland that is being removed will be cut when grasses and flowering plants are in seed. These cuttings will be laid over the reinstated bare ground for natural colonisation.

The same method of establishment will be used for the attenuation basin in the grid facility, which will be infrequently wet depending on rainfall levels, will be planted with riparian vegetation. The planted area will measure a total area of 5,284m2. Grassland cuttings for the establishment of riparian vegetation will be taken from nearby drainage ditches or riparian channels where appropriate species are abundant, and permission has been obtained from landowners.

Areas of established grassland will be managed through a once or twice annual mowing regime, whereby mowing is undertaken outside of the breeding bird period (1 March to 31 August). Cuttings will be removed from the site after each mow. Strips will also be left unmown with seed heads intact for the winter period providing a winter food resource for birds.

Insecticides and herbicides will not be used to manage habitats, with the exception of the treatment of non-native invasive species.

See Appendix A23.9 Habitat and Species Management Plan for details on management of grassland to enhance the biodiversity potential.

23.6.1.4 Annex 1 Habitats

There are no changes to the section. Refer to Section 23.6.1.4 of Chapter 23 of the 2024 EIAR.

23.6.1.5 Terrestrial Mammals

The change in this section is an update to the mitigation measures during construction phase on badger as a result of the updated badger surveys. Therefore, the entire Section 23.6.1.5 of Chapter 23 in the 2024 EIAR shall be deleted in its entirety and replaced with the text below.

Mitigation measure to ensure protection of badger setts from disturbance

A summary of the mitigation measures as they relate to each badger sett are presented in Table A23.12, with locations of badger setts shown in Figures A23.5 to Figure A23.6.

As the usage of setts by badger can change over time, a pre-construction check of the activity status of all setts will be required within 12 months and at least 3 months of any construction works commencing within vicinity of setts.

In order to prevent any disturbance to badger setts, no heavy machinery shall be used within 30m of a badger sett at any time. No works shall be undertaken within 50m of active setts during the breeding season. Light machinery shall not be used within 20m of a sett entrance. No pile driving shall be undertaken within 150m of active setts during the breeding season (December to June inclusive).

Prior to works commencing, a non-interference zone of 30m will be established around each of the setts. If the sett is active, a non-interference zone will be extended to 50m during the breeding season (December to June inclusive).

The mitigation measures as they relate to each setts are summarised in Table A23.12

For any setts identified during pre-construction surveys within 150m of the onshore development area, monitoring will be undertaken using trail cameras to confirm the status of the sett in line with NRA (2006a) guidelines. If any sett occurring within 150m is confirmed to be a breeding sett, no works will occur within 50m of the sett during the badger breeding period (1 December to 30 June). A 50m exclusion zone will be implemented and demarcated to ensure protection of sett occurring within 50m from disturbance during the construction phase. Additionally, if a sett is confirmed to be a breeding sett no piling will occur within a 150m exclusion zone during the breeding period (1 December to 30 June).

Table A23.12. Mitigation measures for badger sett during construction

Sett no.	Mitigation measure for badger sett
1	Pre-construction check of sett to establish current activity status within 12 months of any construction works commencing.
2	Pre-construction check of sett to establish current activity status within 12 months of any construction works commencing. If active, any pile driving works within 150m of the sett during the breeding season (December to June inclusive) will only be carried out with the approval of and, if required, under the supervision of an ECoW.
3	Pre-construction check of sett to establish current activity status within 12 months of any construction works commencing. The sett will require temporary closure. The sett closure will occur prior to construction of the grid facility and will remain closed for the period of construction at this location. The sett will be reopened following the completion of construction at the grid facility. The sett will be closed under the supervision of an ECoW and will follow the steps outlined below as per Transport Infrastructure Ireland (TII) guidance (TII, 2006). • Monitor for a minimum 5 days, using trail cameras, light sticks or sand pads, prior to any sett closure works to determine the level of activity. • If the sett is found to be active during monitoring, sett closure (exclusion works) will only be undertaken within the period July to November, inclusive, in any given year to avoid the badger breeding season. • If the sett is found to be inactive during monitoring (including during the breeding season confirming that there is no possibility of cubs below ground), sett closure (exclusion works) can take place during any season. • Erect a chain link or sheep net fence around the sett entrances at a distance of 5 m. Fence to be dug into the ground by a minimum of 30 cm and to be a final height of a minimum of 1 m from the ground surface. • Install a one-way badger gate (using a make with a proven track record in badger sett closures and obtained through an appropriate wildlife management or ecological equipment supplier) into the fence fabric.

Sett no.	Mitigation measure for badger sett
	• Gates will be left installed, with regular inspections, over a minimum period of 21 days (including period with gates tied open) before the sett is deemed inactive. • Following exclusion, to ensure no badger re-enter the sett and to protect the sett from accidental destruction during construction works, badger resistance fencing will be erected around the sett and accompanied by appropriate signage.
4	Pre-construction check of sett to establish current activity status within 12 months of any construction works commencing. The sett will require temporary closure. The sett closure will occur prior to construction of the grid facility and will remain closed for the period of construction at this location. The sett will be reopened following the completion of construction at the grid facility. The sett will be closed under the supervision of an ECoW and will follow the steps outlined below as per Transport Infrastructure Ireland (TII) guidance (TII, 2006). • Monitor for a minimum 5 days, using trail cameras, light sticks or sand pads, prior to any sett closure works to determine the level of activity. • If the sett is found to be active during monitoring, sett closure (exclusion works) will only be undertaken within the period July to November, inclusive, in any given year to avoid the badger breeding season. • If the sett is found to be inactive during monitoring (including during the breeding season confirming that there is no possibility of cubs below ground), sett closure (exclusion works) can take place during any season. • Erect a chain link or sheep net fence around the sett entrances at a distance of 5 m. Fence to be dug into the ground by a minimum of 30 cm and to be a final height of a minimum of 1 m from the ground surface. • Install a one-way badger gate (using a make with a proven track record in badger sett closures and obtained through an appropriate wildlife management or ecological equipment supplier) into the fence fabric. • Gates will be left installed, with regular inspections, over a minimum period of 21 days (including period with gates tied open) before the sett is deemed inactive. • Following exclusion, to ensure no badger re-enter the sett and to protect the sett from accidental destruction during construction works, badger resistance fencing will be erected around the sett and accompanied by appropriate signage.
5	Pre-construction check of sett to establish current activity status within 12 months of any construction works commencing. No heavy machinery shall be used within 30m of badger setts at any time, unless agreed and supervised by an Ecological Clerk of Works (ECoW). Lighter machinery (generally wheeled vehicles) shall not be used within 20m of a sett entrance, unless agreed and supervised by an ECoW. During pre-construction monitoring if the sett is deemed active, no works shall be undertaken within 50m of active setts during the breeding season. No pile driving shall be undertaken within 150m of active setts during the breeding season (December to June inclusive). Non-interference zone of 30m (outside of breeding season- July to November inclusive) or 50m (if the sett is active during the breeding season – December to June inclusive) to be established as appropriate using temporary fencing and accompanied by appropriate signage. Works within the 30m/50m/150m distance bands will only be carried out with the approval of and, if required, under the supervision of an ECoW. Works within 50m of the sett will only be carried out during daylight hours so as not to disturb foraging badgers; unless otherwise agreed with ECoW.
6	Pre-construction check of sett to establish current activity status within 12 months of any construction works commencing. No heavy machinery shall be used within 30m of badger setts at any time, unless agreed and supervised by an Ecological Clerk of Works (ECoW). Lighter machinery (generally wheeled vehicles) shall not be used within 20m of a sett entrance, unless agreed and supervised by an ECoW. During pre-construction monitoring if the sett is deemed active, no works shall be undertaken within 50m of active setts during the breeding season. No pile driving shall be undertaken within 150m of active setts during the breeding season (December to June inclusive). Non-interference zone of 30m (outside of breeding season- July to November inclusive) or 50m (if the sett is active during the breeding season – December to June inclusive) to be established as appropriate using temporary fencing and accompanied by appropriate signage. Works within the 30m/50m/150m distance bands will only be carried out with the approval of and, if required, under the supervision of an ECoW. Works within 50m of the sett will only be carried out during daylight hours so as not to disturb foraging badgers; unless otherwise agreed with ECoW.

23.6.1.6 Otter

There are no changes to the section. Refer to Section 23.6.1.6 of Chapter 23 of the 2024 EIAR.

23.6.1.7 Amphibians

There are no changes to the section. Refer to Section 23.6.1.7 of Chapter 23 of the 2024 EIAR.

23.6.1.8 Bats

The change in this section is an update to the use of terminology, PRF-I and PRF-M, as per Collins (2023) and set out earlier in the Addendum. As referred to in the 2024 EIAR, terminology low, moderate or high suitability PRFs, have been replaced with PRF-I or PRF-M, as appropriate. This section has been updated to reflect this change along with any consequential mitigation measures to ensure protection of bats from loss of roots.

Therefore, the following text from the end of Section 23.6.1.8 of Chapter 23 in the 2024 EIAR shall be deleted:

"Mitigation measures to ensure protection of bats from loss of roosts

Pre-construction surveys will be undertaken as set out below:

- *Low suitability trees will be subject to a visual inspection at height using an endoscope. If no bats are confirmed to use the tree it will be felled on the same day using sectional felling or soft felling technique. Limbs and tree sections will be left in situ on the ground for at least 24 hours before they are processed, to allow any bats to fly out.*
- *Trees of moderate suitability or higher will be subject to a roost emergence and re-entry survey to confirm there are no bats using the tree prior to felling. If no bats are found to use the tree, it will be felled on the same day using sectional felling or soft felling technique. Limbs and tree sections will be left in situ on the ground for at least 24 hours before they are processed, to allow any bats to fly out.*
- *For trees identified as having moderate PRF suitability, which could be used as a maternity roost, these will be felled during the period March-April and/or October-early November which is outside the maternity season and when bats are capable of flight.*
- *For trees identified as having low PRF suitability, subject to visual inspection as outlined above, these trees can be felled during the period March to early November as there is an unlikely risk of these features having suitability to hold a maternity roost.*
- *To minimise habitat loss due to the removal of PRF trees and areas of treeline, bat boxes to the specification of a woodcrete box intended for bats that normally reside in tree cavities58, or similar, will be installed in appropriate locations within lands under the control of the applicant, including lands at the grid facility and Blakes Cross North. A variety of types of bat boxes will be erected to provide bats with alternatives and a variety of conditions. Bat boxes will be installed by a suitably qualified ecologist, or the project ECoW."*

And replaced with the following text:

Mitigation measures to ensure protection of bats from loss of roosts

Pre-construction surveys will be undertaken as set out below:

- PRF-I suitability trees will be subject to a visual inspection at height using an endoscope. If no bats are confirmed to use the tree it will be felled on the same day;
- Trees of PRF-M suitability or higher will be subject to three roost emergence or re-entry surveys, or three climbing inspections (separated by at least three weeks), undertaken between May and September to confirm there are no bats using the tree prior to felling (Collins, 2023 Table 6.4). Surveys will be carried out by a suitably qualified ecologist. If no bats are found to use the tree, it will be felled on the same day using sectional felling or soft felling technique. Limbs and tree sections will be left in situ on the ground for at least 24 hours before they are processed, to allow any bats to fly out. Cutting the roost feature will be avoided and the roost feature will be left facing upwards to allow any bats present to fly out easily (Reason and Wray (2023).

- For trees identified as having moderate PRF suitability which could be used as a maternity roost, the approach outlined above applies.
- PRF-Ms will not be felled during the period mid-November to February when bats are not capable of flight (i.e. during the hibernation period).

During construction methodology is set out below:

- Felling will use sectional felling or soft felling technique. Limbs and tree sections will be left in situ on the ground for at least 24 hours before they are processed, to allow any bats to fly out; and
- To minimise habitat loss due to the removal of PRF trees and areas of treeline, bat boxes to the specification of a woodcrete box intended for bats that normally reside in tree cavities[1], or similar, will be installed in appropriate locations within lands under the control of the Developer, including lands at the grid facility and Blakes Cross North. A variety of types of bat boxes will be erected to provide bats with alternatives and a variety of conditions. Bat boxes will be installed by a suitably qualified ecologist, or the project ECoW.

There are no other changes to the section. Refer to Section 23.6.1.8 of Chapter 23 of the 2024 EIAR.

23.6.1.9 Breeding Birds

A change is required for this section to provide reference to the Habitat and Species Management Plan and the NPWS submission (included in Appendix A23.9).

The following text from Section 23.6.2.1 of Chapter 23 in the 2024 EIAR shall be deleted:

"See Appendix 23.10 Habitat and Species Management Plan for details on management of habitats for yellowhammer."

And replaced with the following text:

See Appendix A23.9 Habitat and Species Management Plan for details on management of habitats for yellowhammer.

The following text from Section 23.6.2.1 of Chapter 23 in the 2024 EIAR shall be deleted:

"See Appendix 23.10 Habitat and Species Management Plan for details on management of habitats for meadow pipit."

And replaced with the following text:

See Appendix A23.9 Habitat and Species Management Plan for details on management of habitats for meadow pipit.

There are no other changes to the section. Refer to Section 23.6.1.9 of Chapter 23 of the 2024 EIAR.

23.6.1.10 Wintering Waterbirds

There are no changes to the section. Refer to Section 23.6.1.10 of Chapter 23 of the 2024 EIAR.

23.6.1.11 Aquatic and Fisheries

There are no changes to the section. Refer to Section 23.6.1.11 of Chapter 23 of the 2024 EIAR.

[1]An example of such a box is the Convex Bat Box which is a woodcrete box intended for bats that normally reside in tree cavities. It has two access options, one at the front and one at the bottom allowing bats to land on the tree and crawl inside. Available at: https://www.wildcare.co.uk/convex-bat-box.html

23.6.2 Operational Phase

23.6.2.1 Habitat management

A change is required for this section to provide reference to the Habitat and Species Management Plan and the NPWS submission (included in Appendix A23.9).

The following text from Section 23.6.2.1 of Chapter 23 in the 2024 EIAR shall be deleted:

"See Appendix 23.10 Habitat and Species Management Plan for details of the operational management of habitats at the grid facility and Blakes Cross North to enhance the biodiversity potential."

And replaced with the following text:

See Appendix A23.9 Habitat and Species Management Plan for details of the operational management of habitats at the grid facility and Blakes Cross North to enhance the biodiversity potential.

There are no other changes to the section. Refer to Section 23.6.2 of Chapter 23 of the 2024 EIAR.

23.6.2.2 Monitoring

A change is required for this section to provide reference to the Habitat and Species Management Plan and the NPWS submission (included in Appendix A23.9).

The following text from Section 23.6.2.2 of Chapter 23 in the 2024 EIAR shall be deleted:

"See Appendix 23.10 Habitat and Species Management Plan for details of the monitoring schedule of habitats at the grid facility and Blakes Cross North."

And replaced with the following text:

See Appendix A23.9 Habitat and Species Management Plan for details of the monitoring schedule of habitats at the grid facility and Blakes Cross North.

There are no other changes to the section. Refer to Section 23.6.2 of Chapter 23 of the 2024 EIAR.

23.6.2.3 Decommissioning

There are no changes to the section. Refer to Section 23.6.2.3 of Chapter 23 of the 2024 EIAR.

23.7 Residual Effects

23.7.1 Construction Phase

The only change in this section is required to incorporate revisions made as a result of update survey results and subsequent changes to the construction phase and residual effects for badger.

For the purposes of clarity, Table 23.20 from Chapter 23 of the 2024 EIAR shall be deleted and replaced with Table A23.13. The change in the table is highlighted in grey.

Table A23.13 Summary of construction phase potential effects, pre-mitigation and post-mitigation, and any identified residual effects (Replacing Table 23.20 of Chapter 23 of the 2024 EIAR)

Feature	Potential Effect (Pre-Mitigation)	Predicted Effect (Post-Mitigation)
Designated Sites		
European sites (SACs/SPAs)	Negative, temporary to short-term, reversible likely significant effects at a local geographical scale on hydrologically and hydrogeologically connected international sites: Malahide Estuary SAC, Rogerstown Estuary SAC, Baldoyle Bay SAC, Malahide Estuary SPA, Rogerstown Estuary SPA, Baldoyle Bay SPA and North-West Irish Sea cSPA.	Water quality impacts: No likely significant residual effect. Dust impacts: No likely significant residual effect. Disturbance and displacement: any remaining likely significant effect would be imperceptible at any geographical scale. No likely significant residual effect. See explanation below under Wintering waterbirds heading.

Feature	Potential Effect (Pre-Mitigation)	Predicted Effect (Post-Mitigation)
	Dust impacts: Negative, temporary, reversible likely significant effects at a local geographical scale on immediately adjacent national sites: Malahide Estuary SAC, Malahide Estuary SPA and North-West Irish Sea cSPA. Disturbance and displacement: Negative, temporary to short-term, reversible likely significant effects predicted at a local geographical scale on international sites: Malahide Estuary SPA, Rogerstown Estuary SPA, Baldoyle Bay SPA, North-West Irish Sea cSPA, North Bull Island SPA, River Nanny Estuary and Shore SPA, South Dublin Bay and River Tolka Estuary SPA, Skerries Islands SPA, Rockabill SPA, Lambay Island SPA and Boyne Estuary SPA.	
National sites (NHAs/pNHAs)	Water quality impacts: Negative, temporary to short-term, reversible likely significant effects at a local geographical scale on hydrologically and hydrogeologically connected national sites: Malahide Estuary pNHA, Rogerstown Estuary pNHA, Knock Lake pNHA, Sluice River Marsh pNHA and Baldoyle Bay pNHA. Dust impacts: Negative, temporary, reversible likely significant effects at a local geographical scale on immediately adjacent national sites: Malahide Estuary pNHA and Rogerstown Estuary pNHA. Disturbance and displacement: Negative, temporary to short-term, reversible likely significant effects predicted at a local geographical scale on national sites: Malahide Estuary pNHA, Rogerstown Estuary pNHA, Baldoyle Bay pNHA, Skerries Island NHA, North Dublin Bay pNHA, Laytown Dunes/Nanny Estuary pNHA, Portraine Shore pNHA, Ireland's Eye pNHA and South Dublin Bay pNHA.	Water quality impacts: No likely significant residual effect. Dust impacts: No likely significant residual effect. Disturbance and displacement: any remaining likely significant effect would be imperceptible at any geographical scale. No likely significant residual effect. See explanation below under Wintering waterbirds heading.
Habitats		
CB1 Shingle and gravel banks, CD1 Embryonic dunes, CS3 Sedimentary Sea cliffs	No likely significant effect.	No likely significant residual effect.
FW2 Lowland depositing river	Habitat loss: Negative, short to medium-term, reversible likely significant effect at a local geographical scale. Water quality impacts: Negative, temporary likely significant effect at a local geographical scale.	Habitat loss: Short-term, reversible likely significant residual effect at a local geographical scale until lowland depositing rivers are reinstated at dry working areas. Water quality impacts: No likely significant residual effect.
FW4 Drainage ditches	No likely significant effect.	No likely significant residual effect.
GS4 Wet grassland/GM1 Marsh, GS1 Dry calcareous and neutral grassland, GS2 Dry meadows and grassy verges	No likely significant effect.	No likely significant residual effect.
WL1 Hedgerows, WL2 Treelines	Habitat loss: Negative, permanent likely significant effect at a local geographical scale. Non-native invasive species: Negative, long-term likely significant effect at a local geographical scale.	Habitat loss: Short-term, reversible likely significant residual effect at a local geographical scale until replacement planting is established at the landfall site and Blakes Cross North. Non-native invasive species: No likely significant residual effect.

Feature	Potential Effect (Pre-Mitigation)	Predicted Effect (Post-Mitigation)
Annex I Habitats		
Perennial vegetation of stony banks (1220), Embryonic shifting dunes (2210), Vegetated sea cliffs of the Atlantic and Baltic coasts (1230)	No likely significant effect.	No likely significant residual effect.
Terrestrial Mammals		
Badger	Habitat loss: Negative short term to long-term, reversible to irreversible likely significant effect at a local geographical scale. Disturbance and displacement: Negative, temporary to short-term, reversible likely at a local geographical scale.	Short-term likely significant residual effect at a local scale while badger habituate to the onshore infrastructure, in particular at the gird facility. No long-term significant residual effect.
Small mammals (pygmy shrew, hedgehog, Irish hare)	No likely significant effect.	No likely significant residual effect.
Otter		
Foraging and commuting otter	Habitat loss: No likely significant effect. Water quality impacts: Negative, temporary to short-term, reversible likely significant effect at a local geographical scale. Disturbance and displacement: Negative, temporary to short-term, reversible likely at a local geographical scale.	No likely significant residual effect.
Amphibian and Reptiles		
Smooth newt & common frog	Habitat loss: Negative, temporary to short-term, reversible likely significant effect at a local geographical scale. Water quality impacts: Negative, temporary to short-term, reversible likely significant effect at a local geographical scale.	No likely significant residual effect.
Common lizard	No likely significant effect.	No likely significant residual effect.
Bats		
Foraging/commuting bats	Habitat loss: No likely significant effect. Disturbance and displacement: Negative, temporary and reversible likely significant effect at a local geographical scale.	No likely significant residual effect.
Roosting bats	Habitat loss: Negative, permanent likely significant effect at a local geographical scale.	No likely significant residual effect.
Breeding Birds		
Breeding birds	Habitat loss: negative, temporary to medium-term, reversible likely significant effect at a local geographical scale on Red-listed yellowhammer and meadow pipit. For all other breeding birds this impact is temporary. Disturbance and displacement: negative, temporary, reversible likely significant effect at a local geographical scale.	Habitat loss: Short-term, reversible likely significant residual effect at a local geographical scale until habitats are reinstated and replacement planting is established at the landfall site and Blakes Cross North. Disturbance and displacement: any remaining likely significant effect would be imperceptible at any geographical scale. No likely significant residual effect.

Feature	Potential Effect (Pre-Mitigation)	Predicted Effect (Post-Mitigation)
Wintering Waterbirds		
Wintering waterbirds	Habitat loss: No likely significant effect. Disturbance and displacement: Negative, temporary to short-term, reversible likely significant effect at a local geographical scale.	Habitat loss: No likely significant residual effect. Disturbance and displacement: any remaining likely significant effect would be imperceptible at any geographical scale. No likely significant residual effect. See explanation below under Wintering waterbirds heading.
Aquatic and Fisheries		
Aquatic & fish species	Negative, temporary to medium-term, reversible likely significant effect at a local to Regional/County geographical scale.	Habitat loss: Temporary, reversible likely significant residual effect at a local geographical scale until watercourses are reinstated at dry working areas.

There are no other changes to the section. Refer to Section 23.7.1 of Chapter 23 of the 2024 EIAR.

23.7.2 Operational Phase

The change in this section is required to incorporate revisions made as a result of update survey results and subsequent changes to the operational phase residual effects for badger.

Therefore, the following text from Section 23.7.2 of Chapter 23 in the 2024 EIAR shall be deleted:

"No likely significant effects were identified on terrestrial ecology occurring landward of the HWM and on Important Ecological Features as a result from the operational phase of the onshore infrastructure and onshore cable route of the proposed development."

And replaced with the following text:

With the exception of badger, no likely significant effects were identified on terrestrial ecology occurring landward of the HWM and on Important Ecological Features as a result from the operational phase of the onshore infrastructure and onshore cable route of the proposed development.

In addition, the following text has been added to Section 23.7.2 of Chapter 23 in the 2024 EIAR:

Terrestrial mammals

Two badger setts were recorded at western periphery of the grid facility. While the setts will remain available to badger post-construction, the grid facility will be in close proximity to the setts and in the long term may discourage badger from re-inhabiting. It is predicted that there will be a short-term residual effect on the local population at this location while badger habituate to the onshore infrastructure of the proposed development, in particular the gird facility itself. No long-term residual effects are anticipated at a population level due to the resilient nature and widespread distribution of badger in Ireland.

There are no other changes to the section. Refer to Section 23.7.2 of Chapter 23 of the 2024 EIAR.

23.7.3 Decommissioning

There are no changes to the section. Refer to Section 23.7.3 of Chapter 23 of the 2024 EIAR.

23.8 Transboundary Effects

There are no changes to the section. Refer to Section 23.8 of Chapter 23 of the 2024 EIAR.

23.9 Cumulative Effects

The Cumulative Effects Assessment (CEA) is presented in Volume 6, Chapter 38: Cumulative and Inter-Related Effects.

In response to RFI Section 5, the CEA has been updated to align with the UK Guidance document *Nationally Strategic Infrastructure Projects (NSIP) Advice on Cumulative Effects Assessment*. However, it should be noted that the overall conclusions of the CEA from an onshore biodiversity perspective remain unchanged from the 2024 EIAR (as stated below).

Therefore, the entirety of Section 23.9 of Chapter 23 of the 2024 EIAR shall be deleted and replaced with the text herein:

A long list of "other existing and/or approved developments" which were deemed to be potentially relevant for inclusion in the cumulative impact assessment was compiled (refer to Volume 6, Chapter 38: Cumulative and Inter-related Effects (hereafter referred to as 'Chapter 38')). A screening exercise of the "long list" was carried out in order to determine whether each of those "other existing and/or approved developments" has the potential to give rise to likely significant cumulative effects with the proposed development from an onshore biodiversity perspective. Many of the "other existing and/or approved developments" were screened out for a number of reasons including their location, scale and nature of the project. Those projects which were "screened in" were carried forward for assessment. The results of the assessment are presented in Section 38.2.3.14 of Chapter 38.

The assessment concluded that there are no likely significant direct or indirect cumulative effects predicted for Biodiversity during the construction, operation or decommissioning phases of the proposed development.

23.10 Reference

In response to RFI Section 1 (b), updates were made to provide up to date information in this chapter.

Therefore, the following references shall be added to Section 23.10 of Chapter 23 of the 2024 EIAR:

CIEEM (2024) *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine (Version 1.3)*.

Collins, J. (Ed.). (2023). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (4th ed.). Bat Conservation Trust

Middleton, N., Froud, A., & French, K. (2022). *Social Calls of the Bats of Britain and Ireland: Expanded and Revised Second Edition*. Pelagic Publishing Ltd.

National Biodiversity Data Centre. *Biodiversity Maps*. Available at: https://maps.biodiversityireland.ie/ [Accessed January 2025]

National Parks and Wildlife Service (NPWS) (2025) *Applications for Regulation 54 Derogations for Annex IV species: Guidance for Applicants*.

Planning and Development Act 2024 (No. 34 of 2024)

Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Chartered Institute of Ecology and Environmental Management, Ampfield.

Transport Infrastructure Ireland (TII) (2006). Guidelines for the Treatment of Badgers prior to the Construction of National Road Schemes. TII formerly National Roads Authority (NRA).

There are no further changes to this section. Refer to Section 23.10 of the 2024 EIAR.