

**Beauly to Blackhillock to New Deer to
Peterhead 400 kV OHL Project**

Habitats Regulations Appraisal:

**Screening Report and Appropriate
Assessment**



HABITATS REGULATIONS APPRAISAL: SCREENING REPORT AND APPROPRIATE ASSESSMENT

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1 Introduction

1.1 Overview of the Proposed Development

- 1.1.1 This Habitats Regulations Appraisal Screening Report and Appropriate Assessment ('HRA Report') has been prepared by WSP UK Ltd (WSP) on behalf of Scottish Hydro Electric Transmission plc ('the Applicant') who, operating and known as Scottish and Southern Electricity Networks Transmission ('SEN Transmission'), own, operate, develop and maintain the high voltage electricity transmission network across the north of Scotland and remote islands. In this HRA Report 'the Applicant' and 'SEN Transmission' are used interchangeably unless the context requires otherwise.
- 1.1.2 The HRA Report has been prepared to accompany an application for consent under section 37 of the Electricity Act 1989¹ ('the 1989 Act') to construct and operate a new double circuit steel structure 400 kilovolt (kV) overhead transmission line (OHL) to connect into new substation sites at Beaully (Fanellan 400 kV substation), New Deer (Greens 400 kV substation) and Peterhead (Netherton Hub). The project is referred to as the Beaully to Blackhillock to New Deer to Peterhead 400 kV OHL Project ('the Proposed Development') and it will pass through the local planning authority areas of Highland, Moray, and Aberdeenshire. The Proposed Development also includes realignment of a section of the existing 275 kV OHL south of Ferness. The Proposed Development is illustrated in **Figure 1: Proposed Development and International Sites** and a full description can be found below in **Section 2**.
- 1.1.3 An Environmental Impact Assessment Report ('EIA Report') also accompanies the application for consent and should be used as supporting information to this HRA; notably the **EIA Report Volume 2 Chapter 3: Project Description, Chapter 8: Ecology** and **Chapter 9: Ornithology** and their supporting **Volume 3 Figures** and **Volume 5 Appendices**.
- 1.1.4 This HRA Report has been prepared in support of the Proposed Development. It provides objective information to enable the competent authority to determine whether the Proposed Development, either alone or in combination with other plans or projects, is likely to have a significant effect ('LSE') on European sites. In addition, it provides the requisite objective information to enable the competent authority to undertake an appropriate assessment ('AA') of the implications for the European site in the event that an LSE is identified.

1.2 The Habitats Regulations

Domestic Legislation

- 1.2.1 Notwithstanding amendments to domestic legislation, the specific requirements, case law and most of the related policy have not been amended following the UK's departure from the European Union. The requirements of the Birds Directive (Directive 2009/147/EC) and the Habitats Directive (Directive 92/43/EEC) are preserved². Information relating to the UK's existing Special Areas of Conservation ('SACs') and Special Protection Areas ('SPAs') has been transferred to the Emerald Network database to ensure that the UK continues to meet its obligations under the 1979 Convention on the Conservation of European Wildlife and Natural Habitats ('the Bern Convention').
- 1.2.2 The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) transposed into domestic legislation the requirements of the Birds Directive and the Habitats Directive. However, this being an application under section 37 of the 1989 Act and a reserved matter, it is the Conservation of Habitats and Species Regulations 2017 ('the Habitats Regulations') which apply. Both sets of regulations require an equivalent process when assessing plans

¹ The Electricity Act 1989.

² European Union Withdrawal Act 2018, section 2

or projects which have the potential to affect European sites (formerly known as Natura sites) which include SPAs and SACs designated under the Birds Directive and the Habitats Directive respectively.

- 1.2.3 Ramsar sites are wetlands of international importance designated under the Convention on Wetlands of International Importance 1971 ('the Ramsar Convention'). There is no designated legislation for the protection of Ramsar sites. All of the 51 Ramsar sites in Scotland are either SPAs, SACs or Sites of Special Scientific Interest ('SSSIs'). Policy 4c of Scotland's fourth National Planning Framework (NPF4) also now includes consideration of Ramsar sites. Specifically, as of 9th July 2025, Scotland's Chief Planner has directed that all listed Ramsar sites in Scotland should be treated as if they were European sites for the purposes of land use change decision making. In a change to the previous policy position which is reflected in policy 4c of National Planning Framework 4 (NPF4), the Chief Planner³ has directed that all listed Ramsar sites in Scotland should be treated as if they were European sites for the purposes of land use change decision making. The HRA has applied this updated policy to its assessments of the effects of the Proposed Development on Ramsar sites.
- 1.2.4 The Habitats Regulations place a duty upon competent authorities, to consider the potential for effects upon European sites prior to granting consent for projects or plans. Consent for the Proposed Development is required from the competent authority which, in this instance, is the Scottish Ministers.
- 1.2.5 Regulation 63 of the 2017 Habitats Regulations states:
- A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for a plan or project which—*
- (a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects), and*
- (b) is not directly connected with or necessary to the management of that site,*
- must make an appropriate assessment of the implications for that site in view of that site's conservation objectives.'*
- 1.2.6 Regulation 63(3) requires the competent authority, when undertaking an AA, to consult NatureScot and have regard to its representations.
- 1.2.7 Regulation 63(5) prevents consent being granted unless it can be demonstrated beyond reasonable scientific doubt⁴ that the plan or project will not adversely affect the integrity of the European site. This is sometimes referred to as the Integrity Test.
- 1.2.8 Regulation 64 provides that consent may still be granted following a negative assessment if it can be shown that there are no alternative solutions and the plan or project must be carried out for imperative reasons of overriding public interest ('IROPI').
- 1.2.9 The same requirements are found under Regulation 48 (1) to 48 (5) and Regulation 49 of the 1994 Habitats Regulations.

1.3 Stages of Habitats Regulations Appraisal

- 1.3.1 Guidance on the Habitats Directive (European Commission, 2000a) sets out the step-wise approach which should be followed to enable competent authorities to discharge their duties under the Habitats Directive and provides further clarity on the interpretation of Articles 6 (3) and 6 (4). Noting that the Proposed Development is

³ Scottish Government (2025). Ramsar sites: Ministerial and Chief Planner letter - July 2025. Available at: <https://www.gov.scot/publications/ramsar-sites-ministerial-and-chief-planner-letter-july-2025/>

⁴ Based on Waddenzee (Landelijke: Vereniging tot Behoud van de Waddenzee v Staatssecretaris van Landbouw Case C-127/02) and the NatureScot guidance Habitats Regulations Appraisal

not directly connected with or necessary to the management of the European sites the process has been summarised into four distinct stages:

- **Stage 1: Screening:** the process which identifies whether effects upon a European site of a plan or project are possible, either alone or in combination with other plans or projects, and considers whether these effects are likely to be significant.
- **Stage 2: Appropriate Assessment:** the detailed consideration of the effect on the integrity of the European site of the plan or project, either alone or in combination with other plans or projects, with respect to the site's conservation objectives and its structure and function.
- **Stage 3: Assessment of alternative solutions:** the process which examines alternative ways of achieving the objectives of the plan or project that avoid adverse effects on the integrity of the [International Site].
- **Stage 4: Assessment where no alternative solutions exist and where adverse effects remain:** an assessment of whether the development is necessary for imperative reasons of overriding public interest ('IROPI') and, if so, of the compensatory measures needed to maintain the overall coherence of the European site network.

1.3.2 The network of UK SACs and SPAs is known collectively as the national site network but it is referred to in this HRA report as European sites. With reference to NPF4, Ramsar sites and European sites are collectively referred to hereafter as 'International Sites'.

1.4 Guidance

1.4.1 In undertaking this Habitats Regulations Appraisal (HRA), the following guidance was referred to⁵:

- Convention on Wetlands of International Importance especially as Waterfowl Habitat. Ramsar (Iran), 2 February 1971. UN Treaty Series No. 14583. As amended by the Paris Protocol, 3 December 1982, and Regina Amendments, 28 May 1987⁶;
- European Commission: Directorate-General for Environment, Managing Natura 2000 sites – The provisions of Article 6 of the 'Habitats' Directive 92 / 43 / EEC⁷, Publications Office, 2019;
- European Commission (2002), Directorate-General for Environment, Assessment of plans and projects significantly affecting Natura 2000 sites⁸ – Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92 / 43 / EEC – Novembre 2001, Publications Office;
- European Commission: Directorate-General for Environment, The strict protection of animal species of Community interest under the Habitats Directive – Guidance document – A summary⁹, Publications Office of the European Union, 2021;
- Frost D. (2008). The use of 'flight diverters' reduces mute swan *Cygnus olor* collision with power lines at Abberton Reservoir, Essex, England¹⁰. Conservation Evidence, 5, 83-91;
- Joint Nature Conservation Committee (JNCC) (2016). SAC and SPA Standard Data Forms and Ramsar Information Sheets¹¹;

⁵ This guidance is specific to this assessment, however, the guidance referenced in Chapters 8: Ecology and Chapter 9: Ornithology of the EIA Report are relevant and have helped inform this assessment.

⁶ Ramsar (1971) Convention on Wetlands of International Importance especially as Waterfowl Habitats. Available at: https://www.ramsar.org/sites/default/files/documents/library/scan_certified_e.pdf

⁷ European Commission (2019). Managing Natura 2000 sites. Available at: <https://data.europa.eu/doi/10.2779/02245>

⁸ European Commission (2002). Assessment of plans and projects significantly affecting Natura 2000 sites. Available at: https://eur-lex.europa.eu/resource.html?uri=cellar:2b6c4b16-e867-42da-b604-f67ee6fe60c3.0002.03/DOC_2&format=PDF

⁹ European Commission (2021). The strict protection of animal species of community interest under the Habitats Directive – Guidance document – A summary. Available at: <https://data.europa.eu/doi/10.2779/3123>

¹⁰ Frost, D (2008). The use of 'flight diverters' reduces mute swan *Cygnus olor* collision with power lines at Abberton Reservoir, Essex, England. Available at: <https://www.conservationevidence.com/individual-study/2286>

¹¹ Joint Nature Conservation Committee (2016). SAC and SPA Standard Data Forms and Ramsar Information Sheets. Available at: <https://jncc.gov.uk/jncc-assets/SPA-N2K/UK9001031.pdf>

- NatureScot (2018). Guidance Note. The handling of mitigation in Habitats Regulations Appraisal – the People Over Wind CJEU judgement¹²;
- NatureScot (undated). Habitats Regulations Appraisal (HRA)¹³; and
- Scottish Natural Heritage (SNH) (2016) NatureScot guidance on assessing connectivity with Special Protection Areas¹⁴.

¹² NatureScot (2018) The handling of mitigation in Habitats Regulation Appraisal – the People Over Wind CJEU judgement. Available at: <https://www.nature.scot/doc/naturescot-guidance-note-handling-mitigation-habitats-regulations-appraisal-people-over-wind-cjeu>

¹³ Nature Scot. Habitats Regulation Appraisal. Available at: <https://www.nature.scot/professional-advice/planning-and-development/environmental-assessment/habitats-regulations-appraisal-hra>

¹⁴ NatureScot (2016) Assessing Connectivity with Special Protection Areas (SPAs). Available at: <https://www.nature.scot/sites/default/files/2022-12/Assessing%20connectivity%20with%20special%20protection%20areas.pdf>

2 Proposed Development Description

2.1 Introduction

- 2.1.1 This Chapter describes the various elements required for the construction and operation of the new double circuit steel structure 400 kilovolt (kV) OHL to connect into new substation sites at Beauly, New Deer and Peterhead.
- 2.1.2 The location is as shown in **Figure 1** and additional figures in the **EIA Report Volume 3 Figures (Figure 1.2: Site Location Detail and Figure 3.1: Site Layout)**.

2.2 Proposed Development Location

- 2.2.1 Travelling from west to east, the proposed OHL originates in The Highland Council, at the proposed Fanellan 400 kV substation to the southwest of Beauly. It initially travels northeast then east, crossing the River Beauly twice, the A833 and then running parallel to the A862 as far as Easter Moniack. Here, the proposed OHL turns southeast past Reelig and then east across The Aird, passing over the Great Glen Way and then dropping into the Great Glen, crossing the A82 and the Caledonian Canal and River Ness. It continues in a southeasterly direction passing Essich and Drum Mossie Muir and then east, crossing the A9 north of Daviot. Continuing east, the proposed OHL passes to the south of Saddle Hill, and then south of Assich Forest to Mains of Clunas after which it travels southeast through Newlands of Fleenas Wood, crossing the River Findhorn and passing south of Ferness.
- 2.2.2 The Proposed Development then moves into Moray, remaining south of the existing 275 kV OHL. It continues east, passing over the A940 and the Dava Way, then turns northeast across the River Divie towards Hill of Tomechole. It then turns east, crossing the upland forestry north of Loch Dallas and continuing east and then northeast towards Kellas. East of Meikle Hill, the Proposed Development has two options to pass the proposed Kellas Drum Wind Farm. If the windfarm application were to be consented, then the Kellas Alternative Alignment, would be constructed¹⁵. The preferred southern option continues northeast, passing Glenlatterach Reservoir to the south, whereas the Kellas Alternative Alignment continues north, then east, passing Glenlatterach Reservoir to the north. Both options re-join north of Pikey Hill and continue northeast past Teindland. The Proposed Development then takes a southeasterly direction crossing the Spey Valley to the north of Inchberry, taking a similar route to two existing OHLs as it crosses the River Spey and through the Wood of Ordiequish. Here it travels southeast, passing the A96 and B9016 before passing Newmill to the north, then dropping south, to the east of Keith, until it reaches the boundary with Aberdeenshire Council area.
- 2.2.3 Within the Aberdeenshire Council area, the Proposed Development travels east, passing between Cairnie and Ruthven. It continues in a southeasterly direction, crossing the B9022, passing Cobairdy, the River Deveron, and the A97. At Aucharnie, the Proposed Development takes a north easterly direction, passing Drumblair, Feith Hill and Pitglassie, towards Turriff. It continues east and passes between Turriff and Hatton Castle, crosses the Idoch Water, passes Roadside and then turns southeast to connect into the proposed Greens 400 kV substation. From the proposed Greens 400 kV substation, the route continues east past Allathan and the Culsh Monument to the north of New Deer settlement. It then takes a southeasterly direction to the south of Maud, Stuartfield and Inverquhomery and then connects into the proposed Netherton Hub where the OHL ends.
- 2.2.4 The tower ranges¹⁶ of the proposed 400 kV OHL within each local authority area are as follows:
- The Highland Council: BC1-1 to CB7-3 (approximately 56 km);

¹⁵ There may be other circumstances associated with the status of the application for consent of the proposed Kellas Drum Wind Farm where the Kellas Alternative Alignment would be constructed.

¹⁶ The tower numbering system in this report results from the optioneering process and would change as part of the detailed design stage. BC – Beauly to Caledonian Canal; CB – Caledonian Canal to Blackhillock; BN – Blackhillock to New Deer; NP – New Deer to Peterhead.

- Moray Council: CB7-4 to CB16-15 (approximately 59 km); and
- Aberdeenshire Council: CB16-16 to NP4-29 (approximately 71 km).

Removal of Beauly to Knocknagael 132kV OHL (Highland)

- 2.2.5 The existing OHL to be removed runs east from the existing Beauly substation, across the River Beauly, and continues east until it reaches Inchberry Hill where it changes direction to travel southeast. It then passes Dunain Hill, the A82, the Caledonian Canal and the B852 until it reaches approximately 1 km north of Knocknagael substation to the north of Essich, where it goes underground to connect into the substation.

Realignment of the existing Beauly to Blackhillock 275 kV OHL (Highland)

- 2.2.6 The realignment of the existing Beauly to Blackhillock 275 kV OHL is approximately 2.6 km long and is located to the south of Ferness. It starts from where the OHL meets the A939 and ends where the OHL meets the Stripe of Muckle Lyne.

2.3 Development for which Section 37 Consent and Deemed Planning Permission is sought

- 2.3.1 The Proposed Development will include the following works, for which section 37 consent under the 1989 Act and deemed planning permission in terms of section 57(2) of the Planning Act is sought:
- construction of approximately 186 kilometres (km) of new 400 kV double circuit OHL between new substation sites proposed at Beauly (Fanellan 400 kV substation), New Deer (Greens 400 kV substation) and Peterhead (Netherton Hub), including downloads into the substations, also referred to as the 'Proposed OHL Alignment';
 - realignment of approximately 2.6 km section of the existing 275 kV OHL south of Ferness;
 - permanent modifications to existing OHLs at six locations where the Proposed Development crosses existing transmission infrastructure; and
 - construction of temporary OHL diversions to facilitate the permanent modifications to existing OHLs required to construct the Proposed Development.

Kellas Alternative Alignment (Moray)

- 2.3.2 To the south of Kellas in Moray an alternative alignment is proposed (Towers CB9C-10A to CB10-8).
- 2.3.3 See the **EIA Report Volume 2 Chapter 1: Introduction and Background, Paragraph 1.1.4** for further information on the need for this alternative. The alignment that would be taken forward is dependent on the outcome of the section 36 application for the proposed Kellas Drum Wind Farm.

2.4 Ancillary Development

- 2.4.1 The following ancillary works will be required as part of the Proposed Development, or to facilitate its construction and operation:
- removal of approximately 16.9 km of the existing 132 kV OHL and underground cable from Beauly to Knocknagael substations;
 - removal of the redundant section of the existing 275 kV OHL south of Ferness, following its realignment;
 - upgrade of existing, or creation of new, bellmouths at public road access points;
 - the formation of access tracks (permanent, temporary, and upgrades to existing tracks) and the installation of bridges and culverts to facilitate access;
 - working areas around infrastructure to facilitate construction;

- formation of flat areas from which the conductor will be pulled during construction, which will contain earthed metal working surfaces referred to as Equipotential Zones (EPZs);
- vegetation clearance and management;
- other temporary measures required during construction, such as measures to protect road and water crossings during construction (scaffolding etc.); and
- public road improvements which would be required in some areas to facilitate construction traffic.

2.5 Associated Works

- 2.5.1 Associated works required to facilitate the Proposed Development, or would occur because of its construction and operation, but which are not included in the application for Section 37 consent are not assessed in detail in the HRA Report, but are noted in the in-combination section where relevant.
- 2.5.2 More information on these works is presented in **EIA Report Volume 2 Chapter 3: Project Description, Section 3.5.**

2.6 Limits of Deviation

- 2.6.1 In general terms a Limit of Deviation (LoD) defines the maximum extent within which a development can be built. In the case of the Proposed Development, an LoD is required for each of the key components of the project i.e. each of the new steel lattice towers being installed, access track routes and working areas.
- 2.6.2 It should be noted that the design of the Proposed Development described within this EIA Report has been established following the identification of detailed environmental and technical considerations. The design process has included the appointment by SSEN Transmission of an OHL Contractor to inform the design and the constructability of the Proposed Development, including construction access. Investigation of sub-surface and geotechnical conditions has not been concluded at this stage in reporting. It is possible therefore that the location of individual or other infrastructure might alter following geotechnical investigation and detailed design (referred to as micro-siting) to reflect localised land, engineering and environmental constraints, and therefore the LoD provides some flexibility in this regard.
- 2.6.3 Consideration is given to the following principles in defining the LoD for the Proposed Development:
- presumption towards the proposed Proposed OHL Alignment whilst providing flexibility for micro-siting during the detailed design phase;
 - presumption towards avoiding sensitive environmental features and minimising impacts on land use; and
 - presumption towards avoiding residential properties.

Horizontal LoD

- 2.6.4 In general, the horizontal LoD for which consent is sought is as follows:
- OHL infrastructure (i.e. steel lattice towers and all working areas, EPZs, conductors and forestry Operational Corridor (OC)):
 - Suspension towers: 100 m LoD either side of the alignment centreline, and along the alignment.
 - Tension towers: 200 m LoD radius around the tower position.
 - All construction working areas must remain within the LoD.
 - Access tracks out with the OHL infrastructure LoD (distance is either side of the track centre line):
 - 100 m LoD for new temporary or permanent access tracks.
 - 100 m LoD for upgrades to existing tracks in very poor condition.

- 50 m LoD for upgrades to existing tracks in very good, good, fair or poor condition.
- Where access tracks are within the OHL infrastructure LoD, the LoDs would be merged.
- Widening of LoD from towers NP2-9A to NP2-12A due to significant constraints at this location (telecommunication links and underground cable) making micro-siting challenging in the event of unsuitable ground conditions.

2.6.5 For areas within this horizontal LoD that would be exceptions and are therefore excluded from this micro-siting zone, see the **EIA Report Volume 2 Chapter 3: Project Description, Table 3.1: LOD Schedule**. One specific exception of relevance to this HRA Report is:

- Tower CB14-C at the River Spey Speal Area of Conservation (SAC). Here, no permanent infrastructure is to be located. Temporary construction works are to be restricted when micro-siting this site.

Vertical LoD

2.6.6 It is possible that further engineering analysis at the detailed design stage might alter the required heights of towers necessary to maintain statutory ground clearance. A vertical LoD, i.e. the maximum height of a tower above ground level, is therefore also sought to allow a height increase or decrease of 9 m on the proposed tower height presented. The 9 m variation is consistent with the extensions to which steel lattice towers are designed, and therefore any increase or decrease of steel lattice towers would be no greater than 9 m.

Management of Micro-siting Within LoD

- 2.6.7 Where there is a requirement to vary the location (or height) of infrastructure within the LoDs, the relevant environmental information within the EIA Report would be reviewed to establish any potential constraints or adverse change in effect. Further advice on LoD changes would be sought from environmental specialists, and, where relevant, consultation would be sought from The Highland Council, Moray Council and Aberdeenshire Council (as local authorities) and any relevant statutory consultees as required. The outcomes of this HRA Report should also be taken into account in any micro-siting.
- 2.6.8 Prior to any change being made to the Proposed Development within the LoD, a change control process would be undertaken to ensure that there is no unacceptable increase in adverse impacts as a result of the change. This process is managed via the Applicant's internal change control process.

2.7 Description of Overhead Line Infrastructure

Steel Lattice Towers

Standard Towers

- 2.7.1 Three basic types of tower are proposed as OHL support structures within the Proposed Development:
- Suspension towers: these are used for straight sections of OHL where there is no need to manage uplift loads on the support structure. The conductors are suspended from the tower arms.
 - Angle / tension towers: these are used either for straight sections, where there is a need to manage uplift loads on the support structure, where there is an operational security requirement, or where there is a need to change the direction of the Proposed OHL Alignment. The conductors extend from the tower arms horizontally.
 - Terminal towers: proposed at the substations, from which the termination of the OHL to the substation is made. The conductors extend from the tower arms horizontally and downwards into the substation.
- 2.7.2 **Table 2.1** presents the tower designs which will be used for the Proposed Development, all lattice design, constructed from fabricated galvanised steel which will be grey in colour.

Table 2.1: Tower Design Parameters

	Proposed 400 kV OHL	Realignment of existing 275 kV Beaulieu to Blackhillock OHL at Ferness	Modification of 275 kV and 400 kV existing OHL infrastructure	Modification of 132 kV existing OHL infrastructure
Tower suite	Proposed AS4 Tower Suite	L2 Tower Suite	L8 Tower Suite	L4 Tower Suite
Average height (m)	58	47	30	22
Design height range (m)	48 to 72 97 - special tower at the Caledonian Canal	41 to 53	17 to 58	14 to 32
Total no. of towers	549 (554 if Kellas Alternative Alignment were taken forward)	7	17	10
Total no. of towers (temporary)	-	-	9	4

- 2.7.3 For all towers the footprint at the base of each of the four legs is a maximum of 1.5 m x 1.5 m but would typically be 1 m x 1 m.
- 2.7.4 However, for towers in proximity to the Dipple drinking water abstractions (Towers CB12-16A and CB14-1B), the design requires the pile cap to be situated above ground level to minimise impacts on the drinking water abstractions. As such the tower footprint for these towers would be in the region of 5 m x 5 m at the base of each leg. The final dimensions will be confirmed upon completion of ground investigation and foundation design.

Existing Transmission OHL Crossings

- 2.7.5 Where the proposed OHL crosses existing transmission infrastructure either a 'diamond crossing' or 'duck under' (**Plate 2**) tower arrangement will be used to enable the existing OHL to pass underneath the proposed OHL. For both types of crossing the existing OHL would be split into two single circuits (three conductors per circuit), which pass separately under the proposed OHL using a flat formation (horizontal) tower. For existing 275 kV or 400 kV OHLs, the flat formation towers form part of the L8 Tower Suite. For the existing 132 kV OHLs the flat formation towers would be part of the L4 Tower Suite.
- 2.7.6 A permanent ground deployed earth and fibre connection would be installed between the double circuit towers and single circuit towers to maintain both earthing and communication continuity on the existing transmission infrastructure. Alternatively, where there is suitable vertical clearance between the crossing OHL circuits, an earth wire may be suspended between tower peaks above the phase conductors, between the double circuit tower and single circuit flat formation towers.

Plate 1: Diamond Crossing Example (Pink OHL is proposed 400 kV; blue is existing OHL)

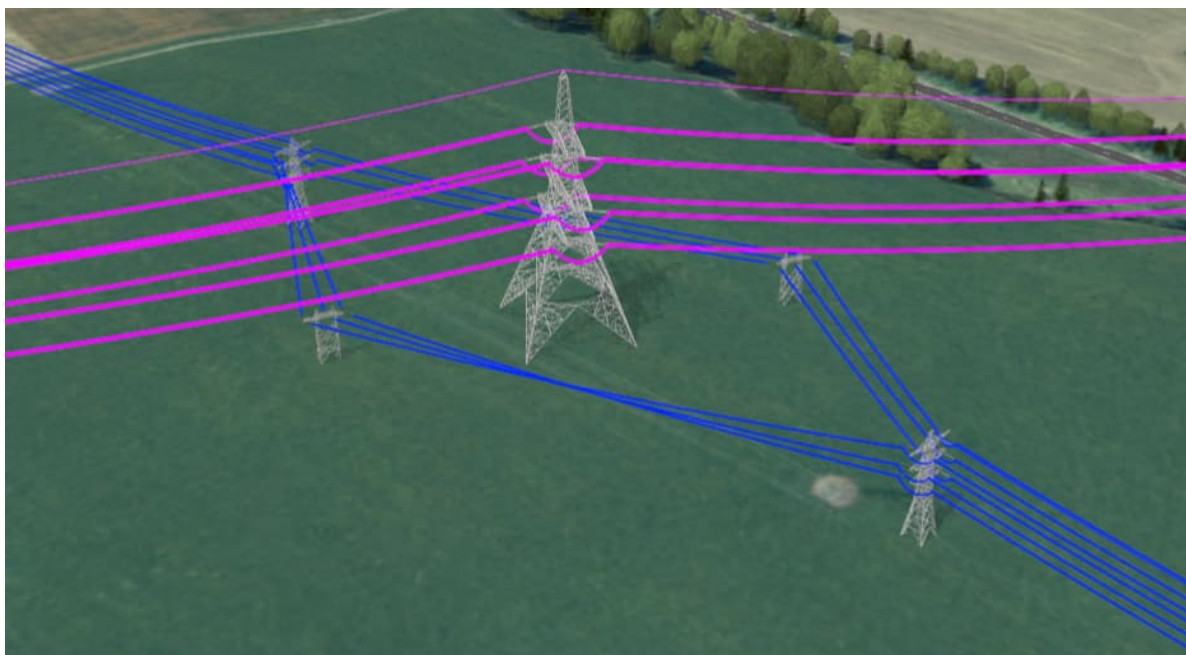
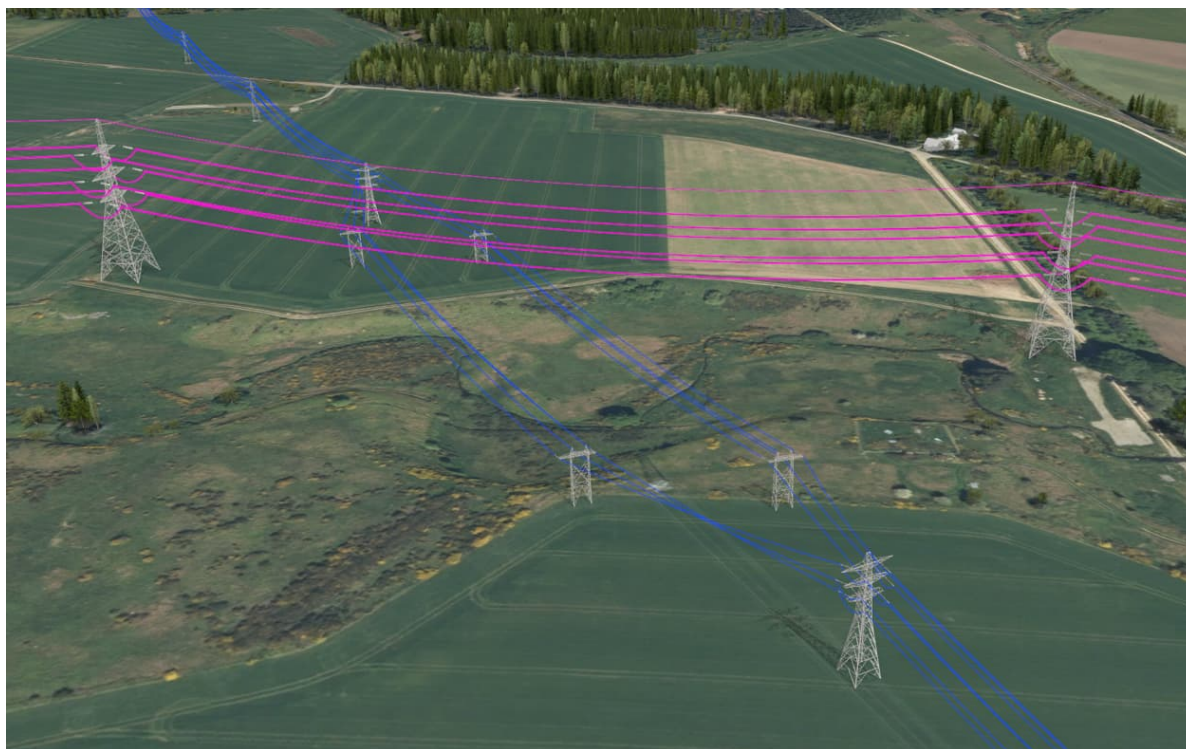


Plate 2: Duck Under Crossing Example (Pink OHL is proposed 400 kV; blue is existing OHL)



Conductors and Span Length

Proposed 400 kV OHL

- 2.7.7 The proposed steel lattice towers would support six conductor bundles (3 wires per bundle) on six horizontal cross-arms (three on each side). The conductor bundles would be supported from insulators attached to each of the cross arms; insulators are proposed to be glass, but can also be made of other material, either porcelain, or composite materials (also known as suspension sets). The OHL will use a mix of single and twin suspension sets

per arm depending on the required strength and will be approximately 5.1 m long for suspension towers and approximately 7.7 m for tension towers.

- 2.7.8 The span length (distance between towers) will vary depending on topography, constraints, and land usage. The current average span length is approximately 338 m with maximum span of 517 m along the Proposed OHL Alignment.
- 2.7.9 The diameter of the conductors will range from 23.9 mm to 37.3 mm.
- 2.7.10 The conductors will achieve a minimum clearance to ground of 9 m under normal operating conditions in all areas. There may be locations along the route that call for additional clearance requirements such as the Caledonian Canal which permits vessels up to a maximum mast height of 35 m resulting in a minimum clearance requirement of 39.1 m when considering the required electrical clearance.
- 2.7.11 An earth wire conductor with a fibre optic core (referred to as Optical Ground Wire or OPGW) will be suspended between tower peaks, above the phase conductors. For some tension towers where the conductor arms are of unequal lengths the earthwire would be off-set to one side of the tower peak to maintain its position equidistant from the conductors on each side.
- 2.7.12 Due to the length of the OHL for the Proposed Development, voltage unbalance can occur between the different phases (conductor arrangements on either side of the tower). To reduce voltage unbalance transposition of the phases is required i.e. the conductors are moved to connect to different arms of the towers; this is illustrated in **Plate 3**. For the Proposed Development this will take place at two locations: Towers CB4-9B to CB4-10B and Towers CB9-13A to CB9-14A (or CB9C-14 and CB9C-14A on the Kellas Alternative Alignment). To facilitate this there is an extended arm on the transposition towers as can be seen in **Plate 4**.

Plate 3: Phase Transposition

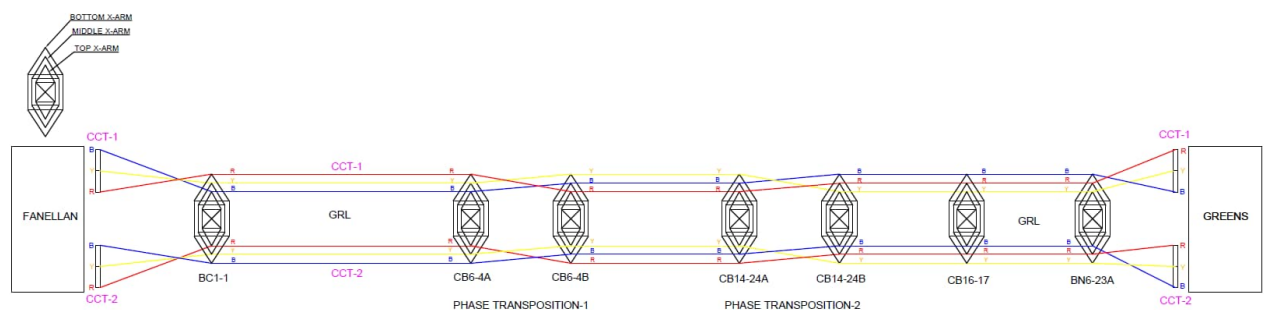
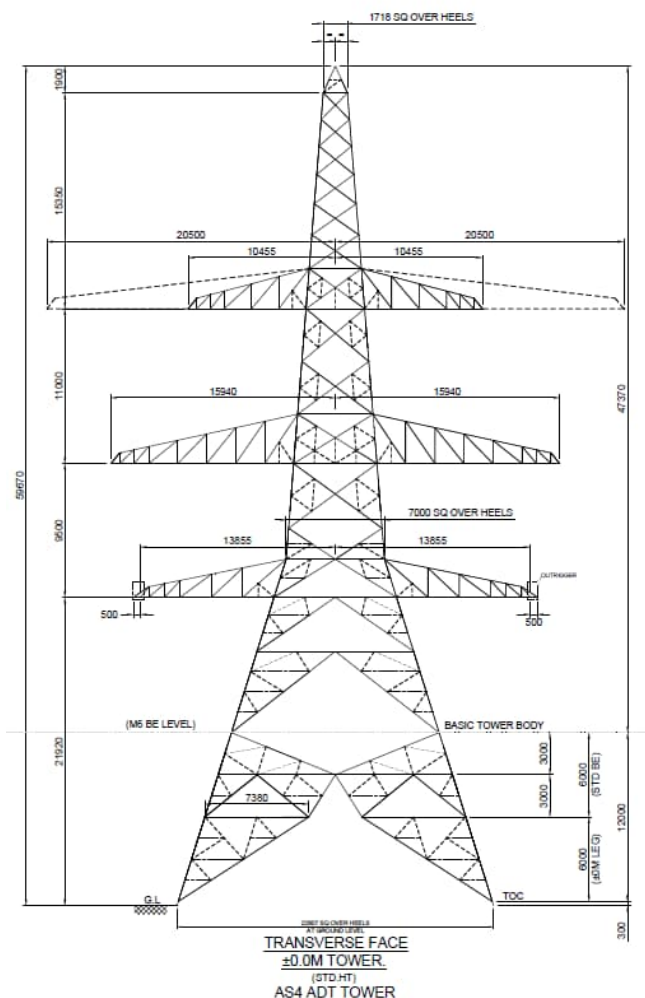


Plate 4: Transposition Tower



Existing 275 kV OHL Realignment at Ferness

- 2.7.13 The proposed steel lattice towers would support six conductor bundles (2 wires per bundle) on six horizontal cross-arms (three on each side). The conductor bundles would be supported from insulators attached to each of the cross arms; insulators are proposed to be glass.
- 2.7.14 The span length (distance between towers) will vary depending on topography, constraints, and land usage. The current average span length across the realigned section is approximately 323 m with a maximum span of 394 m.
- 2.7.15 The diameter of the conductors will range from 20.6 mm to 24.7 mm.
- 2.7.16 An earth wire conductor with a fibre optic core (referred to as Optical Ground Wire or OPGW) will be suspended between tower peaks, above the phase conductors.

2.8 Typical Construction Activities for Overhead Line Infrastructure

- 2.8.1 High voltage OHL construction typically follows a standard sequence of events as follows:
 - Phase 1 – enabling works.
 - Phase 2 – construction works.
 - Phase 3 – commissioning.
 - Phase 4 – removal of existing OHL sections.

- Phase 5 – re-instatement.

Phase 1 - Enabling works

Existing Distribution and Transmission Lines

- 2.8.2 Works would be required to some existing electricity distribution network infrastructure and 132 kV, 275 kV and 400 kV transmission network infrastructure to facilitate safe working and operating conditions given the proximity of the existing OHLs to the proposed OHL. It is anticipated that these network assets would be realigned or undergrounded to make way for the Proposed Development. Where this relates to electricity transmission infrastructure (132 kV and above), it is included as part of the Proposed Development; herein included as **Section 2.5 Associated Works**.

Access during Construction

- 2.8.3 Safe construction access will be required to each tower construction site for delivery of materials, plant, fittings, fixtures, working platforms and operatives. Access requirements to each tower depend on the tower type and the construction operations required at that tower.
- 2.8.4 Many individual tower sites will be accessible from public roads and existing farm / forestry tracks. The location of individual towers has been developed along the Proposed OHL Alignment to utilise (where possible) existing accesses, however access spurs from these tracks may be required.
- 2.8.5 Many of the existing accesses have been identified as requiring upgrade to bring them to a standard required for delivery of the type of plant and volume of materials required to construct the Proposed Development. The extent of upgrade required varies along the Proposed OHL Alignment.
- 2.8.6 Existing road junctions will be utilised where possible, where field, forestry or farm tracks exist, however some formation of new or upgraded access junctions will require formation in agreement with the respective local authority roads department.
- 2.8.7 Access track upgrades, construction and ground protection can be undertaken in a number of ways. The preferred method for each site will be selected by the Principal Contractor based on the suitability to withstand expected construction loads, cause the least environmental damage and be installed / recovered at the lowest cost.
- 2.8.8 The range of construction accesses proposed include:
- patching / upgrade of existing access tracks;
 - installation of permanent access track routes to new tower locations to assist with ongoing operation, maintenance and repair of the proposed asset, and where land use / land management activities can accommodate or benefit from this;
 - installation of temporary metal or plastic roadway panels (e.g. Trackway, or Terrafirma etc);
 - installation of temporary stone roads with geo-textile fabric base (floated track); and
 - use of specialised low ground bearing pressure vehicles.

Existing Accesses Upgrade and Repair

- 2.8.9 Where possible, the Proposed Development seeks to use existing access track networks to facilitate construction. Approximately 137 km of existing access tracks require upgrading to make suitable for safe construction access. These upgrades vary in extent, from filling of potholes, to adding additional layers of aggregates to the running surface, in some cases requiring additional geotextile or geogrids as well as stone to be added to the track structure. Some accesses such as those requiring widening of the running surface may also require changes to drainage arrangements. During use, the access tracks may require ongoing maintenance to ensure a suitable

running surface is maintained. For the purposes of this report the access tracks requiring upgrade have been categorised depending on the level of works required and assumptions have been applied for assessment purposes; **Table 2.2** provides further detail.

Table 2.2: Access Track Upgrade Categories

Condition	Description	Upgrades	HRA Assessment Assumptions
Very Good	Existing stone access road in good condition. Suitable for construction traffic.	Track deemed suitable with virtually no upgrades required. Maintenance upkeep required as and when to keep the tracks integrity.	Treat as if no upgrade required, maintenance only.
Good	Existing stone road, generally suitable for construction traffic.	Pothole repairs and minimal repairs to road surfacing. 100 mm capping layer to be applied and / or widening where deemed necessary. Maintenance upkeep required as & when to keep the tracks integrity.	Treat as if capping only; i.e. no increase in track footprint.
Fair	Existing stone road in need of some upgrade or surface repair. Anticipated solid base but typically surface in poor condition. Road generally wide enough for anticipated Construction traffic.	Stone base and drainage ditches exist. Max. 200 mm stone capping required and / or widening where deemed necessary. Drainage, roadside ditches to be cleared where required. New culvert pipes if to be installed to be plastic twinwall.	The discrete areas that may need widening are not clearly defined at this stage and as such are not included in the assessment.
Poor	Existing stone road in poor condition, narrow or dilapidated. Stone base likely to exist.	Significant stone capping required and / or widening where deemed necessary at max. 300 mm. Drainage, roadside ditches to be cleared where required. New culvert pipes if to be installed to be plastic twinwall. Re-grading may be required to meet gradients.	Assume that track needs to be widened and track footprint is therefore increased.
Very Poor	Existing track only, little or No stone present, typically ATV track.	Full new stone road typically up to 500 mm. Construction on existing track route. Drainage, roadside ditches to be cleared where required. New culvert pipes if to be installed to be plastic twinwall. Re-grading may be required to meet gradients.	Treat as if it were a new track in terms of footprint and potential impact.

Temporary Tracks

2.8.10 Approximately 163km of temporary access track will be required to be installed using one of the following construction methods:

- **Temporary Stone Roads:** Temporary stone roads on a geo-textile fabric base may be used in locations to facilitate safe construction vehicular access to tower locations for construction, but no permanent access is required, or nearby access is sufficient for ongoing operation of the Proposed Development. All temporary stone roads will be removed and reinstated on completion of construction. Track widths will be approximately 7 m (including drainage ditches), reduced to 5m for floated tracks. Where there is a benefit, such as to minimise impacts to peatland, the construction of floating access tracks is proposed, which total 7.14 km in length.

- **Temporary Roadway Panels:** Metal or plastic interlocking roadway panels (e.g. Trackway, Terrafirma or similar) can be installed over existing access tracks or to form new access for the duration of construction works. Metal panels are also used at winch and tensioner positions to form EPZs to protect against induced voltages from adjacent lines or lightning strike running along the conductors during stringing operations. The delivery / installation vehicle would travel to the site loaded with panels and may also pull a trailer loaded with additional panels. The panels are usually unloaded and laid individually directly from the delivery / installation vehicle using the Hiab crane device mounted on the vehicle. The first panels would be laid onto the access then the wagon would drive onto the panels and advance along the access, installing additional panels to extend the 'road' as it proceeds.
- **Specialist Low Ground Bearing Pressure Vehicles:** Vehicles with low ground bearing pressure tyres or with rubber tracks may be employed for certain lightweight operations e.g. taking small quantities of material or a small team of operatives to remote sites where no track exists. Additional access protection may not be needed if these operations can be carried out without leaving track marks, usually only possible in dry conditions. The tracks for these vehicles are referred to as 'All-Terrain Vehicle (ATV)' tracks.

New Permanent Access Tracks

- 2.8.11 Approximately 64 km of new permanent access tracks will be required for the inspection, maintenance and repair of the Proposed OHL Alignment during its operation. These permanent access tracks are subject to further design and landowner agreement; however, where agreement to retain an access is not acquired, the access will be removed and the ground will be reinstated through a methodology and standard agreed with the landowner (See Temporary Stone Road section above in **Paragraph 2.8.10**). The access routes are the current best options identified, but subject to Site Investigation and detailed design, and may be subject to change (within the specified LoD) to achieve favourable gradients or avoid identified constraints.
- 2.8.12 Where there is a benefit, such as to minimise impacts to peatland, the construction of floating access tracks is proposed. Floating access tracks require the placing of a geotextile membrane on existing topsoil and vegetation followed by aggregate layers. Depending on ground conditions two or more layers of geotextile would be placed in layers of 300 mm to 500 mm. The access tracks would be capped with layers of Type 1 aggregate or similar material. Approximately 18 km of new permanent floated track is proposed.
- 2.8.13 Soil stabilisation techniques are used to enhance the durability and functionality of access tracks, whether temporary or permanent. Temporary methods, such as mechanical and chemical stabilisation, provide immediate support and reduce erosion. Permanent techniques, like cement and lime stabilisation, ensure long-term durability and minimal maintenance. These methods also reduce the need for extensive stone and vehicle movements compared to full stone access tracks, making them more efficient and environmentally friendly.
- 2.8.14 Track widths will be approximately 7 m (including drainage ditches), reduced to 5m for floated tracks. There may be the need to include passing places or sections of two-way track which would be wider, however the locations of these are not currently known.

Access Junctions / Bellmouths

- 2.8.15 Formation of 127 temporary and 13 permanent new bellmouth / access junctions within the existing road network are required. A further 98 existing bellmouths will be utilised, which are anticipated to require upgrade work and an additional 32 requiring no upgrade. Deemed consent will be sought for access tracks and junction upgrades as part of the s37 consent application.

Public Road Improvement (PRI) Works

- 2.8.16 To enable larger construction vehicles to access the site a number of PRI works would need to take place. The type of works include short sections of road widening and junction widening. The **EIA Report Volume 5**

Appendix 3.2: Indicative Public Road Improvement (PRI) Works presents additional high-level information which will be progressed further at detailed design stage.

Watercourse Crossings

- 2.8.17 Watercourses have been avoided in the design of the proposed tower positioning and associated accesses as far as possible, although due to the linear nature of Proposed Development and topographical challenges, some watercourse crossings will be required associated with proposed tower accesses. The design of the crossings will be agreed by the Principal Contractor as part of the detailed design, following best practice in consultation with the Scottish Environment Protection Agency (SEPA). Appropriate authorisations will be obtained by the Principal Contractor, as required.
- 2.8.18 All watercourse crossing engineering works (including both temporary and permanent watercourse crossings) will be in compliance with the Water Environment (Controlled Activities) (Scotland) Regulations 2011¹⁷ and will follow best practices in line with SEPA guidance. Further discussion on the water crossings proposed as part of the Proposed Development, and a schedule of watercourse crossings is provided in the **EIA Report Volume 2 Chapter 10: Water and Geological Environment**.

Access during Operation

- 2.8.19 Permanent access tracks would only be required in more remote areas where access during construction requires a higher specification track, and where long-term maintenance needs require permanent access. It is intended however to keep requirements for permanent access tracks to a minimum. Where required, permanent tracks would be reinstated to a width suitable for 4x4 vehicles; however the locations of these are not currently known.

Forestry Clearance

- 2.8.20 The Proposed OHL Alignment has sought to avoid and minimise impacts on woodlands / forestry where possible, however due to the study area being heavily forested and challenging topography along the route, impacts on forestry are unavoidable.
- 2.8.21 Where the Proposed OHL Alignment passes through woodland or forested areas (and elsewhere), an OC established which is defined by the area which during the life of trees growing, they could grow to a height which would compromise the safe operation of the OHL. Trees are therefore removed within the OC to facilitate construction and ensure continued safe operation of the OHL.
- 2.8.22 In general, an OC of 90 m through plantation woodland, which may be reduced to 70 m through broadleaf woodland subject to site specific checks has been applied within which trees are to be permanently removed to ensure safe operation of the Proposed OHL Alignment. Additional forestry removal has also been included for new access track formation with a corridor of 20 m. Where there are new temporary access tracks or for the temporary line diversions (where applicable), tree re-planting will sought to be undertaken following commissioning of the OHL and removal of the temporary development. The requirements and undertaking of felling will be in close consultation with Forestry and Land Scotland and Scottish Forestry and are documented in the **EIA Report Volume 2 Chapter 12: Forestry**.
- 2.8.23 As a result of the construction of the Proposed Development, there would be a net loss of woodland area. The area of woodland in the study area would decrease by approximately 471 hectares. In order to comply with the criteria of the Scottish Government's Control of Woodland Removal Policy¹⁸ off-site compensation planting will be required. The Applicant is committed to providing appropriate compensatory planting. The extent, location

¹⁷ Scottish Government (2011). The Water Environment (Controlled Activities) (Scotland) Regulations 2011. Available at: <https://www.legislation.gov.uk/ssi/2011/209/contents>.

¹⁸ Forestry Commission Scotland (2009). The Scottish Government's Policy on Control of Woodland Removal. Available at: <https://www.forestry.gov.scot/publications/285-the-scottish-government-s-policy-on-control-of-woodland-removal/download>

and composition of such planting will be agreed with Scottish Forestry and will take into consideration any revision to felling and restocking plans prior to the commencement of operation of the Proposed Development.

- 2.8.24 Within the OC habitat will be allowed to regenerate naturally, however natural regeneration of trees will be managed through tree removal / trimming to prevent them interfering with the safe operation and maintenance of the line ('resilience felling'). The Applicant will be using a process of 'managed resilience' which will seek to retain naturally regenerated broadleaved trees and shrubs as close as possible to the line to keep as much tree cover as possible. Smaller-growing species / shrubs thus being able to be retained closer to the line than larger growing species. OHL tree maintenance would take place on a 4-yearly cycle.

Management Felling

- 2.8.25 Fringe planting at specific locations would visually soften the forestry edge of the OC.
- 2.8.26 Where trees are being removed to form the OC there is the potential for the adjacent trees to have an increased risk of windblow. Management felling has been recommended to landowners to manage the risk of windblow as detailed in the **EIA Report Volume 2 Chapter 12: Forestry**. This does not form part of the Proposed Development however it has been considered in **Chapter 12: Forestry** in terms of the forestry blocks that may be affected. The additional felling recommendation introduced by the Proposed Development would only be to potentially bring commercial felling activity forward and as such can be considered to be a temporary indirect effect, with replanting required as a condition of any statutory felling license granted. For the purpose of this HRA Report it has been assumed that management felling would taking place and that areas of management felling will be replanted back to the OC following installation of the OHL (see the **EIA Report Volume 2 Chapter 12: Forestry** for further details).
- 2.8.27 The responsibility for applying for a felling licence lies with the individual landowners, who must submit their applications to Scottish Forestry, along with satisfactory supporting environmental information and management proposals. This process is entirely separate from the current application for the Proposed Development and is regulated independently under the Forestry (Environmental Impact Assessment) (Scotland) Regulations 2017¹⁹ and the Forestry and Land Management (Scotland) Act 2018²⁰ and in compliance with The UK Forestry Standard²¹.

Site Compounds

- 2.8.28 It is currently anticipated that a number of construction compounds and laydown areas would be required given the scale of the Proposed Development, the locations of which would be confirmed by the Principal Contractor.
- 2.8.29 In addition to main compound(s) it is likely that a 'rolling' arrangement for the provision of small sub yards, offices and welfare facilities will be required at convenient positions along the Proposed OHL Alignment, with activity at these sites varying, in accordance with the phase of works at that location. The use of smaller multiple yard sites would minimise the quantity and lengths of journeys required to supply to and recover from each work area. There will also be welfare and parking facilities at each tower working area during foundation and tower erection.
- 2.8.30 The Principal Contractor will include measures to minimise and control impacts from compounds via their Construction Environmental Management Plan (CEMP). Where relevant the CEMP will include measures set out in this HRA Report.

¹⁹ Scottish Government (2017). Forestry (Environmental Impact Assessment) (Scotland) Regulations 2017. Available at: <https://www.legislation.gov.uk/ssi/2017/113/contents>

²⁰ Act of the Scottish Parliament (2018). Forestry and Land Management (Scotland) Act 2018. Available at: <https://www.legislation.gov.uk/asp/2018/8/enacted>

²¹ Forestry Commission, Scottish Forestry, Natural Resources Wales, Forestry Service (2023). The UK Forestry Standard. Available at: https://assets.publishing.service.gov.uk/media/651670336a423b0014f4c5c0/Revised_UK_Forestry_Standard_-_effective_October_2024.pdf

- 2.8.31 The obtaining of any necessary planning consent or other authorisations required for the site compounds will be the responsibility of the Principal Contractor.

Temporary Diversions

- 2.8.32 To facilitate the construction of the Proposed Development, temporary diversions are required to be constructed to allow for continued operation of the network. It is anticipated that a total of nine temporary diversions will be required across the Proposed Development, at locations where the proposed OHL will interact with existing circuits on the network.
- 2.8.33 The temporary diversions are required to be installed prior to any modifications of the existing network taking place to maintain the operability of the existing network. To minimise the outage requirements, the temporary tower or towers is usually offset from the existing alignment to create sufficient space to carry out the construction.
- 2.8.34 The first construction activity to take place is installation of temporary access tracks to the proposed temporary tower or towers and to any of the existing towers within the same section. Once access to the tower locations is established the next step is installation of the foundations. The towers are constructed in the same process as a permanent tower which is described in **Phase 2 – Construction Works**.
- 2.8.35 Once the temporary tower assembly is complete the stringing operations can then take place to move the existing circuit over to the temporary tower or towers. Access is typically required to the closest tension towers at each end of the temporary diversion on the existing line to adjust the conductors as they are moved over to the temporary tower. The sequence for moving the circuits over to the temporary towers is typically as follows:
- A short single circuit outage is taken on the existing OHL to allow for the circuit to be moved across to the temporary tower.
 - This is followed by a double circuit outage to allow for the earth wire to be moved across to the temporary tower to provide lightning protection and communications for protection of the circuit.
 - Upon completion of this, the circuit that has been moved over can then be energised and the temporary diversion is then complete.
- 2.8.36 There may be a requirement to temporarily deploy an above ground fibre connection, which would typically be mounted to strainer posts and contained within ducting. This method can reduce ground disturbance removing the requirement for a temporary undergrounding of the fibre, as well as minimise outage requirements.
- 2.8.37 Once the main construction works have been completed the above sequence is then reversed to move the circuit back over to the modified existing OHL and the temporary tower or towers can then be dismantled and surrounding area reinstated.

Realignment of 275kV OHL south of Ferness.

- 2.8.38 Where it is proposed that the existing 275kV OHL is to be realigned to create a corridor for the Proposed Development, it is anticipated that the construction sequence will be the same as is required for the main development.
- 2.8.39 The majority of the realignment will be built offline with no outages required. Outages will only be required for the replacement of the towers where the realignment joins back into the existing circuits, due to the existing towers not being able to accommodate the change in direction of the alignment. To replace these towers a temporary diversion will be installed to minimise the outages as described previously which will create space away from the live circuit to allow for the new tower to be constructed and existing tower to be dismantled. Upon completion of the replacement tower construction the diversion will be removed and the realignment will be energised in its new position.

Phase 2 – Construction Works

Foundations

- 2.8.40 Different approaches to forming foundations may be used for steel lattice towers, subject to ground conditions at each location. These are likely to comprise of:
- spread type e.g. concrete pad and column; or
 - piled type e.g. driven pre-cast concrete, steel tubular pile, micro pile; or continuous flight auger.
- 2.8.41 Foundation types and designs for each tower will be confirmed following detailed geotechnical investigation at each tower position. All tower positions will require foundations at each leg. The foundation type is expected to be a combination of conventional (concrete pad and chimney) and piled type. This assumption is based on an initial geotechnical desktop survey and the anticipated different construction methodologies required due to the varying terrain. Dimensions of pad and chimney foundations will be confirmed following micro-siting but usually consist of formation to depths of between 3 m and 6 m below ground level (bgl) and will typically be in the order of 6 m x 6 m in plan size for each tower leg. The foundation is located beneath the ground with a layer of soil covering it of sufficient depth for habitats to reinstate. The permanent footprint above ground is approximately 1 m x 1 m (with a maximum dimension of 1.5 m x 1.5 m) and referred to as the 'concrete neck'.
- 2.8.42 Where conditions are suitable, the Applicant may opt to use steel equivalent foundations, known as steel grillages, instead of reinforced concrete. The construction activities and environmental impact, bar the pouring and transport of concrete, are anticipated to be effectively the same as conventional pad and column foundations where steel grillages are utilised.
- 2.8.43 Where ground conditions indicate deep peat (>1.5 m / 2.0 m) or near surface rock, piles, mini-piles or rock anchors may be more appropriate engineering solutions. The piling solution within peat will depend on the material encountered below the peat, however typically a casing would be required to prevent the borehole from collapsing in on itself due to the structural instability of peat. Mini-pile solutions typically involve installing up to twelve piles (each between 150 mm and 300 mm diameter) below each tower leg. The piles are encompassed within a near surface pile cap, upon which the tower leg rests; the exception being two towers where the pile caps will be above ground. The piles normally extend into the existing bedrock to satisfy both compression and uplift design loadings. Pile depths can extend up to 25 m. Where near surface rock is evident, rock anchors are normally employed. Rock anchors do not require a casing, and the pile cap normally rests on the bedrock. The pile cap is secured to the bedrock by interconnecting mini-piles.
- 2.8.44 For the purposes of the HRA Report it has been assumed that individual tower foundations and associated construction activities will require a working area of up to either 80 m x 80 m for suspension towers or up to 100 m x 100 m for tension towers, around each individual tower location. The exact dimensions of the working area around each tower will be confirmed following micro-siting and further design by the Principal Contractor(s).
- 2.8.45 Where encountered, topsoil (including peat) will be stripped from the tower working area to allow installation of tower erection pad(s) as necessary in order to accommodate construction plant. Concrete is likely to be brought to site ready-mixed, although tower locations with difficult and remote access may require limited batching on-site. Once the concrete has been cast and set, the excavation will be backfilled, using the original topsoil where possible.
- 2.8.46 It is anticipated that formation of each tower foundation will take approximately four weeks. Plate 5 provides an illustrative image of tower foundation construction.

Plate 5: Illustrative Image of Tower Foundation Construction



Steel Lattice Tower Construction

2.8.47 Tower construction can typically commence four weeks after the foundations have been cast, subject to weather conditions and concrete curing rates. Tower steelwork would be delivered to each tower construction site either as individual steel members or as prefabricated panels, depending on the method of installation and the available access. A working area, up to either 80 m x 80 m for suspension towers or up to 100 m x 100 m for tension towers, is required at each tower location to facilitate access, laydown and assembly. Tower Working Area Arrangement is dependant on the tower type (suspension and tension) but will have the following constituents:

- crane pad constructed out of crushed stone, geogrid and geotextiles to form a level stable base on which the crane can safely work. The pad can be installed as soon as tower foundation is complete. It must be constructed in accordance with the temporary works design (compacted and tested) to ensure the made-up ground meets the ground bearing capacity required during crane lifting operations;
- piling stone pad where required to provide suitable ground to support the piling rig during operations, either a one level pad or split-level pads to suit the ground profile. The pad can be installed as soon as access is ready. It must be constructed in accordance with the design (compacted and tested) to ensure the made-up ground meets the ground bearing capacity required for the drilling rig;
- telehandler stone pad is required to provide suitable ground to support the telehandler during operations. The pad can be installed as soon as tower foundation is complete. It must be constructed in accordance with the temporary works design (compacted and tested) to ensure the made-up ground meets the ground bearing capacity required during crane lifting operations;
- tower access surround, this area will not require stone however will be used as a laydown area for materials throughout the tower construction process. Where ground is level, trackway matting may be utilised to

spread the load across the ground. If the site is particularly sloped, then the compound will be micro sited as much as possible to provide a sufficient working area; and

- tension towers require a temporary 'holding out position' to raise the tower working platforms which will be utilised when stringing the conductors (see section below). This platform is winched into position by a tractor at one and a half the tower height away and once in position gets locked off and attached to concrete sledges. Where this holding out position cannot be left in situ for the duration of the stringing works due to on-site constraints (e.g., roads / walkways) the platform can be locked off to alternative concrete sledges closer to the tower body.

2.8.48 An illustrative image of tower construction is shown in **Plate 6**.

Plate 6: Illustrative Image of Tower Construction



Conductor Stringing

2.8.49 The conductor would be delivered to site on wooden drums in pre-determined pulling section lengths. Prior to stringing the conductors, temporary protection measures (e.g. netted scaffolds), would be required across public roads and existing access tracks. **Plate 7** provides an illustrative image of temporary scaffolding.

Plate 7: Illustrative Image of Temporary Construction Scaffolds



- 2.8.50 Conductor stringing equipment (i.e. winches, tensioners and ancillary equipment) are set out at EPZs at either end of pre-selected sections of the OHL. They are usually placed approximately one and a half the tower height from the tension tower which terminates the section being pulled. The EPZ landforms will be restored to their original profile.
- 2.8.51 Pilot wires (or 'bonds') would be pulled through the section to be strung. These would be hung on blocks (wheels) at each suspension tower and connected to a winch and tensioner at the respective end of the section. The winch, in conjunction with the tensioner, is used to pull the pilot wires between the structures. The conductor is pulled via the pilot wires through the section under tension to avoid contact with the ground and any underrunning obstacles. Once the conductor has been strung between the ends of the section it is then tensioned and permanently clamped at each tower.
- 2.8.52 The pilot wire can be installed using multiple methods namely conventional and helicopter piloting.
- 2.8.53 Conventional piloting involves fitting running out blocks (wheels) to each of the cross arms and the earthwire peak. The pilot wires are reeled onto the running blocks attached to each arm and the peak of the first tower and then lowered to ground to be attached to a tractor through a spreader bar. Once attached to the tractor pulling will commence to the next tower by driving the tractor along the alignment. Where obstacles such as ravines, poor ground conditions or environmental constraints are encountered, a polypropylene rope or winch bond can be manually laid out and connected to the end of the previously pulled pilot wires. A tractor positioned at an accessible point underneath the line will then be used to winch in the polypropylene rope / winch bond and pull the pilot ropes towards the tractor where they can be reconnected to the next set of pilot bonds. Alternatively in areas which are inaccessible, drones can be used to pull a rope though the area which in turn can be used to pull progressively larger ropes over the inaccessible area, minimising impact. In addition to this trestles or scaffolding shall be put in place to protect crossings. Scaffold trestles / frames can be manually delivered from the nearest access point where an area is not accessible by tractor or ATV. When the next tower is reached the same procedure is repeated where all the pilot wires are lifted up to the running blocks on the tower and lowered back down to the tractor to continue to the next tower until the section is completed.
- 2.8.54 Where it is not considered practical to conventionally pull the pilot wires, helicopter piloting may be utilised. For this process a similar setup is required whereby a helicopter has the bond beneath it which is then attached to the pilot wire. The helicopter then pulls the pilot wire to the first tower and lowers it into the running block before

progressing to the next tower. Once the end of the section is complete the helicopter will continue past the tower before looping back to let the pilot wire rest on the ground. This is repeated for all phase conductors then earth wire. Where any obstacles are present along the route, they may require protection via trestles or scaffolding.

Phase 3 - Commissioning

- 2.8.55 The OHL and support towers would then be subject to an inspection and snagging process. This allows the Principal Contractor and the Applicant to check that the works have been built to specification and are fit to energise. The circuits would then be energised from the substations in a phased sequence.

Phase 4 – Dismantling existing OHLs / Underground Cables

- 2.8.56 The following elements of the project require dismantling / removal:
- removal of the existing 132 kV OHL and short section of underground cable from Beaully substation to Knocknagael substation;
 - realignment of the existing 275 kV OHL south of Ferness; and
 - ad-hoc tower removal at existing transmission OHL crossing locations.
- 2.8.57 Conductors and insulators would be removed. The conductors would be collected using winch and cable drum, using a method similar to that described above. Tower removal is typically completed by cutting the legs and felling the tower in a controlled manner. The towers are then cut into sections using hydraulic shears and sections of tower will either be extracted from the site using an ATV or flown out by helicopter depending on the location of the tower. The tower leg stubs and concrete foundation are normally decommissioned in situ, with stubs folded into an excavation of approximately 1 m depth within the tower's footprint, and the ground reinstated.
- 2.8.58 The existing OC will be returned to the landowner to be incorporated into future forestry planting plans.
- 2.8.59 Approximately 800 m of 132 kV underground cable will need to be removed on the approach to Knocknagael substation. This will likely be carried out using a Cable Puller, or equivalent machine, from the final tower, in a direction away from the substation. Access would be gained through trackway panels, which will be installed to enable dismantling of towers. This method will remove, cut and store the cable for disposal without the need for significant excavation along the length of the cable path, as well as the additional disruption and risks that excavation would introduce. To allow safe removal of the cable around Knocknagael substation, there may need to be localised excavations at the substation boundary to prevent risk of disturbance to other cables or utilities. The requirement or extent of this will be determined at the detailed design stage.
- 2.8.60 Should further surveys identify that the removal of the cable using the Cable Puller method is not possible for part or all of the length, then excavation of all or part of the cable route will be required. The cutting, exhuming and disposal of the cable would then be completed length by length, and the excavation would be backfilled and reinstated following the land management code of conduct guidance. No access tracks or trackway would be anticipated as being required for these works would be carried out using tracked machines. The working area would be kept to the cable path, with access and egress from the final 132 kV tower to be dismantled.

Phase 5 – Reinstatement

- 2.8.61 Following commissioning of the Proposed Development, all construction sites will be reinstated. Reinstatement will form part of the contract obligations for the Principal Contractor and will include the removal of all temporary lattice tower diversions, temporary access tracks, all work sites around the tower locations and the re-vegetation of all construction compounds etc.

- 2.8.62 Reinstatement principles are detailed in the Applicant's **Appendix 3.5: General Environmental Management Plans (GEMPs)**.

Reinstatement of Tower Access Routes

- 2.8.63 Reinstatement of excavated temporary stone tracks will involve the replacement of subsoil and topsoil, and grading and installation of drainage, as required, with turves replaced vegetation side up. Where required, donor turves may be sourced from adjoining areas to replace lost turves and provide a mosaic from which vegetative cover of the established species are able to recover. Where there are insufficient turves, the ground will be allowed to vegetate naturally, although some seeding may be required to stabilise sites and prevent erosion, or where landowner requirements dictate otherwise. Temporary tracks placed on top of the existing ground level (of floated construction type) may not require any reinstatement measures after removal of the stone and geotextile base.

Reinstatement of Tower Sites

- 2.8.64 Topsoil will be stored within the working area for each tower during construction. Where possible, turfs will be removed and stored on top of the topsoil bunds for use in the reinstatement. Sub-soils removed to enable the construction of the foundations will be temporarily stockpiled in separate bunds within the working area.
- 2.8.65 Each site will be allowed to re-vegetate naturally wherever possible.

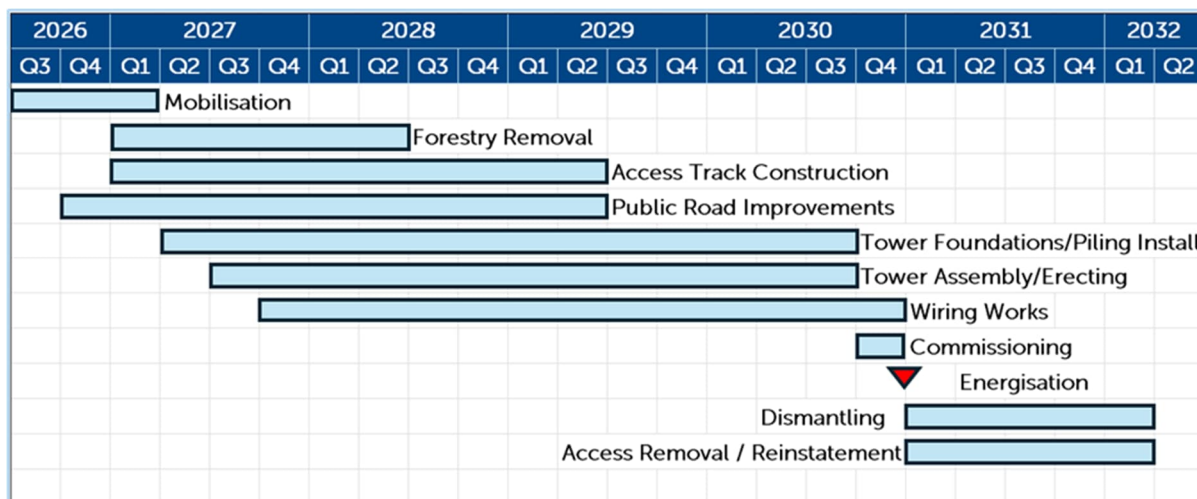
Reinstatement of Construction Compound(s)

- 2.8.66 Construction compound site(s) will be made good at the end of construction with all buildings and materials removed and soils appropriately reinstated.

2.9 Construction Programme

- 2.9.1 It is anticipated that construction and commissioning of the Proposed OHL would take place over a four-year period, although detailed programming of works would be the responsibility of the Principal Contractor in agreement with SSEN Transmission. It is anticipated that construction of the Proposed OHL would commence in 2026, with estimated completion in Quarter 4 of 2030. Dismantling of existing OHLs and reinstatement would follow and is anticipated to be completed by Quarter 2 of 2032. The detailed construction phasing and programme would be subject to change as the design progresses and also due to necessary consents and wayleaves being agreed. **Table 2.3** presents the high-level construction phasing.

Table 2.3: Construction Programme



2.10 Construction Employment and Hours of Work

- 2.10.1 SSEN Transmission takes community responsibilities seriously. The delivery of a major programme of capital investment provides the opportunity to maximise support of local communities.
- 2.10.2 Employment of construction staff would be the responsibility of the Principal Contractor but SSEN Transmission encourages the Principal Contractor to make use of suitable labour and resources from areas local to the location of the works.
- 2.10.3 It is envisaged that there would be a number of separate teams working at the same time at different locations along the Proposed Development route. The resource levels would be dependent on the final construction sequence and would be determined by the Principal Contractor.
- 2.10.4 Construction working is likely to be during daytime periods only. Working hours are currently anticipated to be between approximately 07:00 to 19:00 during British Summer Time (BST) and 07:00 to 18:00 during Greenwich Mean Time (GMT), seven days a week. Special measures and arrangements would be made for works in proximity to sensitive receptors. Any out of hours working would be agreed in advance with the relevant local planning authority.

2.11 Construction Traffic

- 2.11.1 Construction of the Proposed Development will give rise to regular numbers of staff transport movements, with small work crews travelling to and from work site areas. The construction compounds will have a safe area for parking away from public roads.
- 2.11.2 Vehicle movements will be required to construct temporary or upgraded access roads; deliver the foundation and tower components and conductor materials to the site and deliver and collect materials and construction plant from the main site compound and to individual tower locations. The proposed mobile cranes have been assessed as abnormal loads and are considered within **EIA Report Volume 5 Appendix 13.5: Abnormal Load Route Assessment**.
- 2.11.3 The Principal Contractor will determine where access is required, and for which items of plant, and prepare Traffic Management Plans in consultation with the Applicant and the local authorities. Traffic Management Plans will describe all mitigation and signage measures that are proposed on the public road accesses based on access maps and subsequent site assessments.
- 2.11.4 Temporary traffic lights may be required at some locations (e.g. for delivery of scaffold materials or formation of new road access points). For minor tracks and other crossings, the installation of appropriate warning signs and provision of staff with stop / go boards to control any passing traffic may be adequate.
- 2.11.5 Details of all traffic movements are presented in **EIA Report Volume 2 Chapter 13: Transport**. It is assumed that all stone will be imported, however the proposal is to use on-site borrow pits where suitable stone is available, and agreements are met.

2.12 Environmental Management During Construction

- 2.12.1 Relevant environmental management measures during construction are discussed within the Appropriate Assessment part of this HRA Report. Whilst the Proposed Development will be carried out in accordance with SSEN Transmission's General Environmental Management Plans (GEMPs) and Species Protection Plans (SPPs), these are not necessarily treated as intrinsic to the development for the purposes of HRA. This approach is in line with NatureScot guidance on the treatment of mitigation in HRA. They are, however, applied at the relevant points in the sections on Appropriate Assessment. The same approach is taken with discussion of the Construction Environmental Management Plan (CEMP) that the Principal Contractor will be required to develop and

implement. The CEMP will reference the GEMPs and SPPs and include any mitigation measures set out in this HRA Report.

2.13 Operation and Maintenance

- 2.13.1 In general, OHLs require very little maintenance. Regular inspections are undertaken to identify any unacceptable deterioration of components, so that they can be replaced.
- 2.13.2 The OC of the OHL is also monitored through periodic inspection to identify growth of trees which may compromise the resilience of the OHL. Where trees are identified which could pose a risk to the safe operation of the line in the future, these are felled. Removal of other vegetation, e.g. gorse and rhododendron, may be required to ensure the area under the conductors is clear so access can be taken and to facilitate safe maintenance or repair in the event of failure.
- 2.13.3 From time to time, inclement weather, storms or lightning can cause damage to either the insulators or the conductors on OHLs. If conductors are damaged, short sections may have to be replaced. Insulators and conductors are normally replaced after about 40 years, and towers painted every 15 to 20 years.
- 2.13.4 In the event of a fault on the line, delivery of working platforms may be required to tension towers to allow the towers to be safely worked on. These platforms can be delivered on large tracked all-terrain vehicles. In steep or remote areas, it is required to retain access formation to these tension towers to ensure that safe access can be made.
- 2.13.5 If a section of damaged conductor is to be replaced, a new conductor may be pulled through a section, as such it is required to maintain some of the earth work formations made during construction to ensure there is a safe suitable area to create EPZs.

2.14 Decommissioning the Proposed Development

- 2.14.1 The Proposed Development would not have a fixed operational life. The effects associated with the construction phase can be considered to be representative of worst-case decommissioning effects, and therefore no separate assessment of decommissioning has been undertaken as part of the EIA or this HRA.

3 Baseline

3.1 Determining the Baseline

3.1.1 When deciding which International Sites to include in the baseline the following search parameters were used:

- all SACs, SPAs and Ramsar designated within 10 km where it can be demonstrated that there is relevant connectivity to the Proposed Development;
- SACs designated for marine mammals outside the search area will be investigated on a case-by-case basis where it can be shown that there is relevant connectivity to each option; and
- all SPAs and Ramsar designated for certain species of geese and raptors (notably osprey *Pandion haliaetus*) within 20 km from the Proposed Development (maximum foraging distance based on Greylag goose *Anser anser* and Pink-footed goose *Anser brachyrhynchus* 15-20 km).

3.1.2 The International Sites from which the baseline is formed are listed and described in the sections below and illustrated in **Figure 1**.

International Sites

Special Areas of Conservation

- 3.1.3 **Strathglass Complex SAC** located east of Inverness is a complex of Sites designated for a range of habitats including; clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels; wet heathland with cross-leaved heath; dry heaths; alpine and subalpine heaths; mountain willow scrub, montane acid grasslands; tall herb communities; blanket bog; acidic scree; plants in crevices on acid rocks; plants in crevices on base-rich rocks; Caledonian forest, and bog woodland. The site is also designated for the otter *Lutra lutra* population.
- 3.1.4 **Conon Islands SAC** is located northeast of Inverness and is designated for alder woodland on floodplains.
- 3.1.5 **Monadh Mor SAC** is located northeast of Inverness and is designated for bog woodland and the very wet mires often identified by an unstable 'quaking' surface.
- 3.1.6 **Moniack Gorge SAC** is located to the west of Inverness and is designated for green shield-moss *Buxbaumia viridis*.
- 3.1.7 **Moray Firth SAC** is designated for the bottlenose dolphin population and subtidal sandbank habitats and is located north of Inverness.
- 3.1.8 **Carn nan Tri-tighearnan SAC**, located to the south of Nairn, is designated for blanket bog.
- 3.1.9 **Cawdor Wood SAC** is designated for old sessile oak woods with Ilex and Blechnum in the British Isles and is located south of Nairn.
- 3.1.10 **Lower Findhorn Woods SAC** is designated for the Tilio-Acerion forests of slopes, screes and ravines and located to the southwest of Forres.
- 3.1.11 **Moidach More SAC** is designated for blanket bog, located south of Forres.
- 3.1.12 **River Spey SAC** bisects the corridor between Spey Bay and Dufftown / Charlestown of Aberlour. The River Spey SAC is designated for Freshwater pearl mussel (FWPM), *Margaritifera margaritifera*, sea lamprey *Petromyzon marinus*, Atlantic salmon *Salmo salar* and otter *Lutra lutra*.
- 3.1.13 **Lower River Spey - Spey Bay SAC** is designated for alder woodland on floodplains and for coastal shingle vegetation outside the reach of waves.

- 3.1.14 **Mortlach Moss SAC**, located to the east of Cairnie, is designated for its alkaline fens.
- 3.1.15 **Turclossie Moss SAC** is located north of New Pitsligo and is designated for its active raised bogs as well as degraded raised bogs still capable of natural regeneration which is listed as a qualifying feature.
- 3.1.16 **Buchan Ness to Collieston SAC** is located south of Peterhead and is designated for the vegetated sea cliffs of the Atlantic and Baltic Coasts.

Special Protected Areas

- 3.1.17 **North Inverness Lochs SPA** qualifies for supporting a breeding population of European importance of Annex 1 species Slavonian grebe *Podiceps auritus*.
- 3.1.18 **Moray Firth SPA** qualifies for supporting internationally important populations of breeding, overwintering and migratory birds, as well as for its important waterfowl assemblage.
- 3.1.19 **Cromarty Firth SPA** qualifies for the largest intertidal flats in the Moray Basin which support populations of European importance of Annex 1 species including osprey, common tern *Sterna hirundo*, whooper swan *Cygnus cygnus*, bar-tailed godwit *Limosa lapponica*, greylag goose.
- 3.1.20 **Inner Moray Firth SPA** consists of numerous areas of intertidal habitat associated with the Beauly and Inner Moray Firths stretching between Beauly and Ardisier, near Nairn and is broadly consistent with boundary of the Inner Moray Firth Ramsar Site. This site is designated for supporting internationally important breeding populations of osprey and common tern and internationally important non-breeding populations of bar-tailed godwit, greylag goose, red-breasted merganser *Mergus serrator* and redshank *Tringa totanus*. It is also designated for supporting an overwintering waterfowl assemblage of over 20,000 birds.
- 3.1.21 **Loch Ashie SPA** is located approximately 5.7 km south of Inverness and is designated for supporting an internationally important population of Slavonian grebe during the passage periods.
- 3.1.22 **Loch Flemington SPA** is located approximately 13 km northeast of Inverness and is also designated for supporting an internationally important breeding population of Slavonian grebe.
- 3.1.23 **Moray and Nairn Coast SPA** comprises several sections of intertidal habitat stretching between Nairn and Spey Bay and includes Findhorn Bay. This site is designated for supporting an internationally important breeding population of osprey and internationally important non-breeding populations of bar-tailed godwit, pink-footed goose and redshank as well as supporting an overwintering waterfowl assemblage of over 20,000 birds.
- 3.1.24 **Darnaway and Lethen Forest SPA** is located approximately 2 km southwest of Forres and 7.7 km southeast of Nairn. This site is designated for supporting an internationally important breeding population of capercaillie *Tetrao urogallus*.
- 3.1.25 **Loch Spynie SPA** is located approximately 1.5 km north of Elgin and is designated for supporting an internationally important overwintering population of greylag geese.
- 3.1.26 **Moray and Nairn Coast SPA** comprises several sections of intertidal habitat stretching between Nairn and Spey Bay and includes Findhorn Bay. This site is designated for supporting an internationally important breeding population of osprey and internationally important non-breeding populations of bar-tailed godwit, pink-footed goose and redshank as well as supporting an overwintering waterfowl assemblage of over 20,000 birds.
- 3.1.27 **Loch of Strathbeg SPA** is located between Peterhead and Fraserburgh and is designated for supporting an important overwintering waterfowl assemblage of over 20,000 birds including internationally important populations of pink-footed goose, greylag goose, barnacle goose *Branta leucopsis* and whooper swan as well as for its non-breeding waterfowl assemblage. It is also designated for its internationally important breeding population of Sandwich terns *Sterna sandvicensis*.

- 3.1.28 **Ythan Estuary, Sands of Forvie and Meikle Loch SPA** comprises coastal and estuarine habitats stretching between Cruden Bay and the Ythan Estuary and also includes hinterland terrestrial habitat and freshwater waterbodies of Meikle Loch, Sand Loch and Cotehill Loch. This site is designated for supporting an important overwintering waterfowl assemblage of over 20,000 birds including internationally important populations of pink-footed goose, eider *Somateria Mollissima*, lapwing and redshank. It is also designated for its internationally important breeding population of sandwich tern, common tern and little tern *Sternula Albifrons*.
- 3.1.29 **Buchan Ness to Collieston Coast SPA** is located along the sea cliffs and near-coastal waters between Peterhead and Collieston. This site is designated for supporting internationally important populations of breeding seabirds, including fulmar, herring gull, guillemot, kittiwake and shag *Gulosus aristotelis*.

Ramsar Sites

- 3.1.30 **Cromarty Firth Ramsar Site** supports a range of estuarine habitats. Of particular importance are the extensive intertidal mudflats, which support sizeable beds of *Zostera spp.* The tidal flats are bordered locally by saltmarsh which grades into alluvial woodland at the mouth of the River Conon. It provides habitat for internationally important populations of bar-tailed godwit and greylag goose.
- 3.1.31 **Inner Moray Firth Ramsar Site** is designated for supporting important breeding populations of osprey and common tern as well as important non-breeding populations of bar-tailed godwit, greylag goose, scaup *Aythya marila*, teal, wigeon *Anas penelope*, goldeneye *Bucephala clangula*, goosander *Mergus merganser*, red-breasted merganser, redshank, oystercatcher *Haematopus ostralegus*, curlew *Numenius arquata*, and cormorant *Phalacrocorax carbo*. It is also designated for supporting an overwintering waterfowl assemblage of over 20,000 birds.
- 3.1.32 **Moray and Nairn Coast Ramsar Site** is designated for supporting important breeding population of osprey as well as important non-breeding populations of bar-tailed godwit, greylag goose, red-breasted merganser, redshank, pink-footed goose, wigeon, oystercatcher and dunlin *Calidris alpina alpina*. It is also designated for supporting an overwintering waterfowl assemblage of over 20,000 birds.
- 3.1.33 **Loch Spynie Ramsar** is designated for supporting an internationally important overwintering population of greylag geese.
- 3.1.34 **Loch of Strathbeg Ramsar Site** is located between Peterhead and Fraserburgh and is designated for its dune slack pool as well as important populations of breeding, overwintering and migratory birds.
- 3.1.35 **Ythan Estuary and Meikle Loch Ramsar Site** comprises the coastal and estuarine habitats of the Ythan Estuary and the inland freshwater Meikle Loch. The site qualifies for supporting internationally important populations of breeding, overwintering and migratory birds.

3.2 Desk Study and Surveys

- 3.2.1 The ecological baseline established through desk study and field surveys is summarised below and detailed fully within:
- EIA Report Volume 5 Appendix 8.1: UK Habitat and Protected Species;
 - EIA Report Volume 5 Appendix 8.2: Confidential Badger and Freshwater Pearl Mussel;
 - EIA Report Volume 5 Appendix 9.1: Ornithology Technical Report; and
 - EIA Report Volume 5 Appendix 9.2: Confidential Ornithological Information.
- 3.2.2 Ecological surveys were undertaken at an earlier stage of the project using a preliminary design which has since evolved into the Proposed Development. This area defined for survey planning purposes is hereafter referred to as the 'Potential Ecological Footprint'.

Habitats

- 3.2.3 UKHab surveys covered the Potential Ecological Footprint, plus relevant survey buffers, hereafter referred to as the 'UKHab Survey Area'. This encompassed a 250 m buffer from the OHL of the Potential Ecological Footprint, and a 100 m buffer from the centre line of proposed upgrades to 'poor and very poor' existing tracks and new permanent access tracks. The majority of the results of the UKHab Survey are not relevant to this HRA, therefore, aside from the below summary, results will be referenced as and when appropriate.
- 3.2.4 The Potential Ecological Footprint was found to contain the following Annex I priority habitats which are listed as UKHab primary habitats:
- f1a5 – Blanket bog.
 - g2b6 - Species-rich grassland with mat-grass in upland areas.
 - h1a7 - Wet heathland with cross-leaved heath- lowland.
 - h1b5 - Dry heaths - upland, h1b6 – Wet heathland with cross-leaved heath – upland.
 - w1d5 - Alder woodland on floodplains.
 - w1a5 - Western acidic oak woodland.
 - w1f6 - Oak-hornbeam forests.
- 3.2.5 For full details of the results of the UKHab surveys see the **EIA Report Volume 2 Chapter 8: Ecology** and the **EIA Report Volume 5 Technical Appendix 8.1: UK Habitat and Protected Species**.

Invasive Non-Native Species

- 3.2.6 Invasive Non-Native Species (INNS) were identified throughout the UKHab Survey Area. Within each Local Planning Authority (LPA) the following were identified:
- Highland: rhododendron (*Rhododendron ponticum*);
 - Moray: rhododendron and Japanese knotweed (*Reynoutria japonica*); and
 - Aberdeenshire: rhododendron, giant hogweed (*Heracleum mantegazzianum*) and Indian balsam (*Impatiens glandulifera*). Field horsetail (*Equisetum arvense*) was also identified within Aberdeenshire and, whilst it is not an INNS, it can damage hard landscaping such as tarmac (but not foundations).

Protected Species

3.2.7 **Table 3.1** outline the desk studies and surveys that were undertaken for protected species. This work informed the HRA Screening and Appropriate Assessment.

Table 3.1: Summary of Species Surveys²²

Target Species	Survey Area	Survey Type (s)	Survey Date (s)	Guidance Applied
Otter	An otter survey was undertaken 200 m upstream and downstream of all 'high' suitability watercourses which were proposed crossings within the Potential Ecological Footprint ²³ (the 'Otter Survey Area') where safe access permitted.	Search for potential resting sites and signs of activity.	March – April 2024	NatureScot's standing advice for planning consultations – otters ²⁴ .
		Camera trapping of potential resting sites located within 30 m of the Proposed Development.	April – June 2024	Monitoring the Otter <i>Lutra lutra</i> ²⁵ .
Fish	A Habitat Suitability Assessment of the upstream, midstream and downstream point of rivers within the Potential Ecological Footprint and 45 m Operational Corridor plus a 100 m buffer was undertaken ('Fish Survey Area').	A habitat suitability assessment of rivers.	March – April 2024	Habitat Survey Manual ²⁶ .
FWPM	River Spey, Red Burn and Burn of Ordiequish, all of which are in the River Spey catchment.	A FWPM survey was undertaken of the three watercourses. The June 2025 surveys were carried out further upstream on Red Burn than the 2024 surveys, following a change to design	June 2024, June 2025	FWPM Survey Protocol for use in site-specific projects ²⁷ . NatureScot's standing advice for planning consultations – FWPMs ²⁸ .

²² Surveys were not undertaken for all access tracks; only crossings on new tracks or upgrades of poor and very poor condition tracks.

²³ Ecological surveys were undertaken at an earlier stage of the project using a preliminary design which has since evolved into the Proposed Development. This area defined for survey planning purposed is hereafter referred to as the 'Potential Ecological Footprint'.

²⁴ NatureScot (online) Standing advice for planning consultation – Otters. Available at: <https://www.nature.scot/doc/standing-advice-planning-consultations-otters>.

²⁵ Chanin, P. (2003). Monitoring the Otter *Lutra lutra*. Conserving Natura 2000 Rivers Monitoring Series No. 10, English Nature, Peterborough.

²⁶ SFCC (2007). Habitat Survey Training Course Manual. Scottish Fisheries Co-Ordination Centre, Faskally, Perthshire.

²⁷ NatureScot (2018). Freshwater pearl mussel survey protocol – for use in site-specific projects. Available online: <https://www.nature.scot/sites/default/files/2018-04/Freshwater-pearl-mussel-survey-protocol-for-use-in-site-specific-projects.pdf>.

²⁸ NatureScot (2022) Standing advice for planning consultations – Freshwater Pearl Mussels. Available at: <https://www.nature.scot/doc/standing-advice-planning-consultations-freshwater-pearl-mussels>.

Target Species	Survey Area	Survey Type (s)	Survey Date (s)	Guidance Applied
		that brought an access track adjacent to the banks of the burn.		

Otter

- 3.2.8 As an EPS, otter is fully protected under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) – Schedule 2. Otter is also listed in Annex II²⁹ of the Habitats Directive and in Scotland is still given the same level of consideration now that the UK has left the EU.
- 3.2.9 Otter is listed as Near Threatened on the Global IUCN Red List (last assessed 2020)³⁰. In Scotland, a best population estimate is 8,000. Due to perceived declines between regional surveys in 2003-04 and 2011-12, otter is precautionarily Vulnerable in Scotland, however there were survey limitations that could have affected the results, and the geographical distribution of otter is not highly restricted.
- 3.2.10 The Atlas of Highland Land Mammals reported otter records in 320 10 km squares in 1993 and only 285 in 2011. This decline was attributed to the inclusion of the national otter survey in the preceding atlas period, the otters' range is not thought to be decreasing.
- 3.2.11 The Mammal Atlas of North East Scotland and Cairngorms indicated the likely local population trend for the Atlas period was increasing. The likely local population trend of competing American mink (*Neovison vison*) was considered decreasing over the Atlas period. The Atlas reported 2,162 records of otter between 1960-2015; and records from 586 tetrads between 2000-2015.
- 3.2.12 Within each of the local planning authorities the following high suitability habitat to support otter was identified: 9.43 km in Highland, 8.87 km in Moray and 1.87 km in Aberdeenshire. Within the Otter Survey Area, one potential holt, one potential couch and seven potential resting sites were recorded in Highland; four potential holts, one confirmed couch, one potential couch and eight potential resting sites were recorded in Moray; and one confirmed holt and one potential holt were recorded in Aberdeenshire. See **Table 3.2** for otter survey results.
- 3.2.13 An otter survey was undertaken 200 m upstream and downstream of all 'high' suitability watercourses which were proposed crossings within the Potential Ecological Footprint³¹ (the 'Otter Survey Area') where safe access permitted.

²⁹ Annex II of the Habitats Directive identifies animal and plant species of community interest whose conservation requires the designation of Special Areas of Conservation.

³⁰ IUCN (online). Eurasian Otter. Online at: <https://www.iucnredlist.org/species/12419/218069689#population>.

³¹ Ecological surveys were undertaken at an earlier stage of the project using a preliminary design which has since evolved into the Proposed Development. This area defined for survey planning purposed is hereafter referred to as the 'Potential Ecological Footprint'.

3.2.14 **Table 3.2** outlines the survey results for otters. This work informed the HRA Screening and Appropriate Assessment.

Table 3.2: Otter Survey Results

Survey	Local Planning Authority	Results
Otter Survey	Highland	Nine potential resting sites were found within the Otter Survey Area. Five potential resting sites were recorded in the Beauly area, of which, one was subject to further survey (see camera trapping below). Two of these potential resting sites were recorded on the eastern bank of the River Beauly were recorded as badger setts, that were available for use by otter. One potential couch was recorded in the River Beauly area along with incidences of spraint and anal jelly throughout the Otter Survey Area. One potential resting site was found under an upturned rowing boat on the banks of a small loch adjacent to the River Beauly. Mammal paths were identified leading to this, with the likelihood of use increased by an otter sighting nearby. One potential resting site was recorded under a tree base on the Moniack Burn. Several spraints were found throughout the Otter Survey Area of varying ages.
	Moray	One confirmed couch was recorded within the Otter Survey Area. Eight potential resting sites, four potential holts and one potential couch were also recorded. Of these, three potential resting sites were subject to a programme of camera trapping. Several spraints were found throughout the Otter Survey Area of varying ages.
	Aberdeenshire	One confirmed holt and one potential holt were recorded within the Otter Survey Area. The confirmed holt was located in a field margin along the River Deveron. Several spraints were recorded nearby this section along with otter feeding remains.
Camera Trapping	Highland	No otter activity was recorded at the potential otter resting site.
	Moray	No otter activity was recorded at the three potential otter resting sites.

Fish

3.2.15 Local fisheries board monitoring data was requested for salmonid records less than ten years old, for 1 km upstream and downstream of the following watercourses which are proposed crossings within the Potential Ecological Footprint:

- River Beaully requested from the Ness and Beaully Fisheries Trust³²;
- Rivers Findhorn, Nairn and Lossie requested from Findhorn, Nairn and Lossie Rivers Trust³³;
- River Spey requested from the Spey Fisheries Board³⁴ and
- Rivers Deveron and Isla requested from the Deveron, Bogie and Isla Rivers Charitable Trust³⁵

³² Ness and Beaully Fisheries Trust. Available at: nessandbeaully.org.uk.

³³ Findhorn, Nairn and Lossie Rivers Trust. Available at: <https://www.fnlrt.org.uk/>.

³⁴ Spey Fisheries Board Available at: <https://riverspey.org/about-us/spey-fishery-board/>

³⁵ Deveron, Bogie and Isla Rivers Charitable Trust. Available at: deveron.org

3.2.16 The results of the data requests for data from the relevant fisheries boards is described in **Table 3.3**.

Table 3.3: Fisheries Trust Data 1 km Upstream and Downstream of River Crossings of the Proposed Development

Species	Local Planning Authority	Number	Record Source	Watercourse	Closest record from Proposed Development
Atlantic salmon	Moray	1,993	Data provided by Spey Fisheries Trust	River Spey	50 m north of Proposed Development
Brown trout	Moray	40	Data provided by Spey Fisheries Trust	River Spey	50 m north of Proposed Development
Eel (<i>Anguilla Anguilla</i>)	Moray	131	Data provided by Spey Fisheries Trust	River Spey	50 m north of Proposed Development
Atlantic salmon	Highland	384	Data provided by Beauly Fisheries Trust	River Beauly	80 m south of Proposed Development
Brown trout	Highland	1	Data provided by Beauly Fisheries Trust	River Beauly	80 m south of Proposed Development
Eel	Highland	50	Data provided by Beauly Fisheries Trust	River Beauly	80 m south of Proposed Development

3.2.17 A Habitat Suitability Assessment of the upstream, midstream and downstream point of rivers within the Potential Ecological Footprint and 45 m OC plus 100 m buffer was undertaken ('Fish Survey Area'). The results are outlined below in **Table 3.4**.

Table 3.4: Fish Survey Results

Survey	Local Planning Authority	Results
Fish Survey	Highland	Watercourses likely to support salmonid and other fish species were recorded within the Fish Survey Area. This included larger rivers and associated tributaries of the River Beauly, River Ness, River Nairn and River Findhorn, along with burns such as Newton Burn and Big Burn. Habitat such as stable gravel beds for fish spawning, along with riffles and runs with large pebble and cobble substrate suitable to support salmonid parr were noted within several watercourses including the River Findhorn and River Beauly (before the Beauly River dam). Atlantic salmon and brown trout are likely to persist within multiple larger river and burn habitats within the Highland Council area due to connectivity with the sea via Moray Firth and Spey Bay.
	Moray	Watercourses likely to support salmonid species, eels and lamprey were recorded within the Fish Survey Area. This included larger rivers and associated tributaries of the River Divie, River Lossie, River Spey, and River Isla along with burns such as Dorback Burn, Berry Burn and Red Burn. Habitat such as stable gravel beds for fish spawning, along with riffles and runs with large pebble and cobble substrate suitable to support salmon and trout parr were noted within several watercourses including the River Divie and Dorback Burn. Salmonid

Survey	Local Planning Authority	Results
		species are likely to persist within large river and burns within the Moray Council area due to connectivity with the sea via Spey Bay and Moray Firth. Habitat to support lamprey juveniles and spawning activity was recorded within multiple watercourses including Dorback Burn and the River Spey and included stable sand with organic plant matter and gravel beds. Habitat suitable to support eels was also recorded within the River Spey and included areas containing silt and areas with ample bankside vegetation.
	Aberdeenshire	Watercourses with suitability to support salmonid and other fish species were identified within the Fish Survey Area. Habitat such as stable gravel beds for fish spawning as well as large pebble and cobble substrate suitable to support salmonid parr were noted within the River Deveron and associated tributaries. Salmonid species are likely to persist within large river and burns within the Aberdeenshire Council area due to connectivity with the sea via the Moray Firth.

FWPM

- 3.2.18 The results of the FWPM desk study are outlined in **Table 1.1** of **Confidential Appendix 1: Freshwater Pearl Mussel Data** to this HRA Report. This table is provided separately to decision-makers in confidence due to the highly sensitive nature of the data therein.
- 3.2.19 The results of the FWPM surveys are outlined in **Table 1.2** of **Confidential Appendix 1: Freshwater Pearl Mussel Data** to this HRA Report. This table is provided separately to decision-makers in confidence due to the highly sensitive nature of the data therein.

Ornithology

Desk Study

- 3.2.20 The ornithology study concentrated on statutory and non-statutory designated sites of nature conservation value cited for their ornithological interests located in proximity to and / or potentially connected with the Proposed Development and on legally protected and notable species of conservation concern described as Target Species.
- 3.2.21 **Table 3.5** presents summary details of information gathered through the desk study and data requests on the presence and distribution of Target Species within the Study Area (2 km from the Proposed Development route). Full details are presented in the **EIA Report Volume 5 Appendix 9.2: Confidential Ornithological Information**.

Table 3.5: Summary of Ornithological Records Obtained through Desk Study

Species	Summary of Data Received / Collected	Sources
Scarce Raptors		
White-tailed eagle	Records of white-tailed eagle were obtained from the predominantly open moorland areas in the Moray section of the Proposed Development, between the Dava Moorlands and Bednawinny Moss Moorlands and Newtyle Forest Focal Areas.	Clash Gour Wind Farm EIA Report.
Golden eagle	Records of golden eagle were obtained from the predominantly open moorland areas in the Moray section of the Study Area between the Dava Moorlands and Glen Latterach Moorlands and Woodlands Associated with Hill of Mulundy and Wangie Wood Focal Areas (Moray).	Clash Gour and Kellas Drum Wind Farm EIA Reports.
Osprey	Records of osprey were obtained from throughout the Highland and Moray sections of the Proposed OHL Alignment (as defined in 2.3.1), between Beauly River Corridor and River Spey Corridor / Wood of Ordiequish Focal Areas, including at least 14 breeding records in the wider Study Area associated with at least five Focal Areas. Activity, where reported, was typically associated with open waterbodies and river corridors.	Highland Raptor Study Group (HRSG); North East Raptor Study Group (NERSG); Spittal–Loch Buidhe–Beauly 400kV Connection Project; LT37 Beauly to Blackhillock Reinforcement Project; Cairn Duhie, Clash Gour, Hill of Glaschyle; Kellas Drum and Teindland Wind Farm EIA Reports.
Honey buzzard	Records of honey buzzard were obtained from wooded areas in the Highland section of the Proposed OHL Alignment, between the Beauly River Corridor and Drum Mossie Muir and River Nairn Focal Areas, including records indicating the presence of breeding in the wider Study Area associated with two Focal Areas.	HRSG; LT37 Beauly to Blackhillock Reinforcement Project.
Red kite	Records of red kite were obtained from throughout the Highland and Moray sections of the Proposed OHL Alignment, between Beauly River Corridor / Wood of Ordiequish Focal Areas, including two breeding records in the wider Study Area associated with one of these Focal Areas.	HRSG; Spittal–Loch Buidhe–Beauly 400kV Connection Project; LT37 Beauly to Blackhillock Reinforcement Project and Teindland Wind Farm EIA Report.
Goshawk	Records of goshawk were obtained from predominantly wooded areas in the Highland and Moray sections of the Proposed OHL Alignment, between the the Dulsie Wood and associated Woodland and River Spey Corridor / Wood of Ordiequish Focal Areas, including breeding records in the wider Study Area associated with at least four Focal Areas.	HRSG; NERSG; FLS, LT37 Beauly to Blackhillock Reinforcement Project; Cairn Duhie, Clash Gour, Hill of Glaschyle; Kellas Drum and

Species	Summary of Data Received / Collected	Sources
		Teindland Wind Farm EIA Reports.
Hen harrier	Records of hen harrier were obtained from the predominantly open moorland areas in the Moray section of the Proposed OHL Alignment, between the Dava Moorlands and Brown Muir Focal Areas, including breeding records in the wider Study Area associated with at least two Focal Areas.	Spittal–Loch Buidhe–Beauly 400kV Connection Project; LT37 Beauly to Blackhillock Reinforcement Project; Cairn Duhie, Clash Gour, Hill of Glaschyle and Teindland Wind Farm EIA Reports.
Peregrine	Records of peregrine were obtained from throughout the Highland and Moray sections of the Study Area, between the Beauly River Corridor and River Spey Corridor / Wood of Ordiequish Focal Areas, including a breeding record in the wider Study Area associated with at least one Focal Area.	HRSG; LT37 Beauly to Blackhillock Reinforcement Project; Cairn Duhie, Clash Gour and Kellas Drum, Teindland Wind Farm EIA Reports.
Merlin	Records of merlin were obtained from the predominantly open moorland areas in the Moray section of the Proposed OHL Alignment, between the Dava Moorlands and Brown Muir Focal Areas, including breeding records in the wider Study Area associated with at least two Focal Areas.	HRSG; Cairn Duhie, Clash Gour and Kellas Drum, Teindland Wind Farm EIA Reports.
Hobby	Records of hobby were obtained from the predominantly open moorland areas in the Moray section of the Proposed OHL Alignment, between the Dava Moorlands and Bednawinny Moss Moorlands and Newtyle Forest Focal Areas.	Clash Gour and Teindland Wind Farm EIA Reports.
Short-eared owl	Records of short-eared owls were obtained from the predominantly open moorland areas in the Moray section of the Proposed OHL Alignment, between the Dava Moorlands and Glen Latterach Moorlands and Woodlands Associated with Hill of Mulundy and Wangie Wood Focal Areas (Moray).	Cairn Duhie, Clash Gour and Kellas Drum Wind Farm EIA Reports.
Barn owl	Records of barn owls were obtained from the predominantly open moorland areas in the Moray section of the Proposed OHL Alignment, between the Dava Moorlands and Bednawinny Moss Moorlands / Newtyle Forest Focal Areas.	Cairn Duhie and Clash Gour Wind Farm EIA Reports.
Capercaillie and Black Grouse		
Capercaillie	Records of capercaillie were obtained from the forested areas within the Highland and Moray sections of the Proposed OHL Alignment, between the Drum Mossie Muir / River Nairn Corridor and River Spey Corridor / Wood of Ordiequish Focal Areas. These included records of lekking birds in the wider Study Area associated with three of these Focal Areas, most of which were historical. The only records provided by RSPB Scotland from their surveys in 2023 and 2024 were an incidental sighting of a female flying over a road in 2023 and of a single male observed in woodland, both of which were associated with the Dulsie Wood and associated Woodlands Focal Area.	RSPB Scotland; Clash Gour EIA Report.
Black grouse	Records of black grouse were obtained from throughout the open moorland areas within the Highland and Moray sections of the Proposed OHL Alignment, between The Aird and Bednawinny Moss Moorlands and Newtyle Forest Focal Areas, including records of	RSPB Scotland; LT37 Beauly to Blackhillock Reinforcement Project; Cairn Duhie, Clash Gour and Kellas

Species	Summary of Data Received / Collected	Sources
	lekking birds in the wider Study Area associated with at least three of these Focal Areas.	Drum, Teindland Wind Farm EIA Reports.
Divers		
Red- and black-throated diver	Records of red- and black throated divers were obtained from the predominantly open moorland areas comprising waterbodies in the Moray section of the Proposed OHL Alignment, between the Dava Moorlands and Bednawinny Moss Moorlands and Newtyle Forest Focal Areas, including breeding records by both species in the wider Study Area associated with these two Focal Areas.	Cairn Duhie and Clash Gour Wind Farm EIA Reports.
Overwintering Waterfowl		
Pink-footed and greylag goose	Records of pink-footed and greylag geese were obtained from throughout the Highland and Moray sections of the Proposed OHL Alignment, between Beaully River Corridor and River Isla Corridor Focal Areas. Activity, where reported, was typically associated with river corridors as well as open moorland areas and was recorded throughout the overwintering period.	Spittal–Loch Buidhe–Beaully 400kV Connection Project; LT37 Beaully to Blackhillock Reinforcement Project; Cairn Duhie, Clash Gour, Kellas Drum and Teindland Wind Farm EIA Reports.
Whooper swan	Records of whooper swan were obtained from the Moray section of the Proposed OHL Alignment, between the Dulsie Wood and associated Woodlands and Dava Moorlands Focal Areas (Moray).	LT37 Beaully to Blackhillock Reinforcement Project; Cairn Duhie Wind Farm EIA Report.
Wading Birds		
Golden plover, curlew and lapwing	Records of golden plover, curlew and lapwing were obtained from the predominantly open moorland areas in the Moray section of the Proposed OHL Alignment, between the Dava Moorlands and Brown Muir Focal Areas, including breeding recorded in the wider Study Area associated with these Focal Areas.	Cairn Duhie, Clash Gour and Kellas Drum, Teindland Wind Farm EIA Reports.
Passerines Target Species		
Common & Scottish crossbill	Common and / or Scottish crossbill occur within all 10 km grid squares within which all Focal Areas along the Proposed OHL Alignment sit (i.e. from Beaully River Corridor to New Deer to Peterhead Focal Areas), where they will predominantly be affiliated with coniferous woodland habitats.	Balmer <i>et al</i> (2013); LT37 Beaully to Blackhillock Reinforcement Project; Hill of Glaschyle Wind Farm EIA Report.
Crested tit	Crested tit occur within almost all 10 km grid squares within which the Focal Areas in the western half of the Proposed OHL Alignment sit (i.e. between Beaully River Corridor and River Spey and Wood of Ordiequish Focal Areas), where they will predominantly be affiliated with coniferous woodland habitats.	Balmer <i>et al</i> (2013); LT37 Beaully to Blackhillock Reinforcement Project; Hill of Glaschyle Wind Farm EIA Report.
Corn bunting	Corn bunting occur in the 10 km grid squares within which the River Deveron Corridor and New Deer to Peterhead Focal Areas sit (i.e. in the eastern half of the Proposed OHL Alignment), where they will be associated with arable farmland habitats.	Balmer <i>et al</i> (2013).

Field Surveys

- 3.2.22 As with the desk study, the field surveys concentrated on Target Species.
- 3.2.23 Not all the birds recorded below are relevant to the HRA, however, most are noted in this ornithology section where it makes sense for context. The relevant surveys will be discussed where appropriate in the screening

assessment. As described in **EIA Volume 2 Chapter 9: Ornithology**, NatureScot agreed to the survey approach in their scoping response of July 2024.

Flight Activity Surveys

Raptors

- 3.2.24 **Table 3.6** Summary of Raptor Flights Recorded During Flight Activity Surveys below presents a summary of raptor flights recorded during the flight activity surveys, through which a total of 226 flights by 11 different species were recorded. Full details of the flight activity survey results are provided in the **EIA Report Volume 5 Appendix 9.1: Ornithology Technical Report** and shown on **Figure 9.1.4a-o: Flight Activity Survey Results (2022-2024)**.
- 3.2.25 Osprey was the second most frequently recorded raptor species, albeit significantly less often than red kite, with 18 flights comprising 23 individuals recorded. All flights occurred during the breeding season, as expected for this summer migrant species. Flights were most frequently recorded in the Drummossie Muir and River Nairn Corridor Focal Area. Of the 17 flights recorded, 3.2 comprising 3.4 birds were at the adjusted PCH.
- 3.2.26 Flight activity by all other raptor Target Species, which included white-tailed eagle, golden eagle, hen harrier, marsh harrier, peregrine, merlin, short-eared owl and barn owl, was recorded infrequently with no more than three flights being recorded for each species across the surveyed Focal Areas and throughout the entire survey programme. These species were predominantly recorded over the open moorland habitats of the Assich Forest / Strathdearn Foothills Focal Area and the agricultural habitats of the New Deer-Peterhead Focal Area, reiterating that the latter was only surveyed during the non-breeding season.

Table 3.6: Summary of Raptor Flights Recorded During Flight Activity Surveys

Species	Focal Area	Total No. Of Flights	Total No. of Birds	No. of Flights at PRC	No. of Birds at PRC	Adjusted No. of Flights at PRC	Adjusted No. of Birds at PRC	Adjusted Time at PRC (secs)
Red kite	Beauly River Corridor	16	18	1	1	1	1	40.5
	The Aird	7	8	2	2	2.1	2.1	588
	River Ness / Caledonian Canal Corridor	40	50	2	2	2	2	840
	Drummossie Muir / River Nairn Corridor*	60	87	8	10	8.5	10.8	3133.5
	Assich Forest / Strathdearn Foothills#	36	41	12	13	12.2	13.2	3394.5
	Dulsie Wood & assoc. Woodlands	6	6	0	0	0.1	0.1	67.5
	Dava Moorlands+	14	16	9	11	9.1	11.1	1408.5
	TOTALS	179	226	32	39	35	40.3	9472.5
Osprey	Drummossie Muir / River Nairn Corridor*	13	18	1	1	1.2	1.5	424.5
	Dulsie Wood & assoc. Woodlands	4	4	1	1	1	1	15
	Dava Moorlands+	1	1	1	1	1	1	15
	TOTALS	18	23	3	3	3.2	3.4	454.5
Goshawk	Assich Forest / Strathdearn Foothills#	5	6	2	2	2	2	352.5
	Dulsie Wood & assoc. Woodlands	1	1	0	0	0	0	0
	Dava Moorlands+	1	2	0	0	0	0	0

Species	Focal Area	Total No. Of Flights	Total No. of Birds	No. of Flights at PRC	No. of Birds at PRC	Adjusted No. of Flights at PRC	Adjusted No. of Birds at PRC	Adjusted Time at PRC (secs)
	New Deer-Peterhead%	7	7	0	0	0	0	0
	TOTALS	14	16	2	2	2	2	352.5
White-tailed eagle	Assich Forest / Strathdearn Foothills#	1	1	1	1	1	1	330
	Dulsie Wood & assoc. Woodlands	2	2	2	2	2	2	259.5
	TOTALS	3	3	3	3	3	3	589.5
Golden eagle	Assich Forest / Strathdearn Foothills#	1	2	1	2	1	2	586.5
	TOTALS	1	2	1	2	1	2	586.5
Hen harrier	Dava Moorlands+	3	3	0	0	0	0	0
	TOTALS	3	3	0	0	0	0	0
Merlin	Assich Forest / Strathdearn Foothills#	2	3	0	0	0	0	0
	TOTALS	2	3	0	0	0	0	0
Peregrine	New Deer-Peterhead%	1	1	0	0	0	0	0
	TOTALS	1	1	0	0	0	0	0
Marsh harrier	New Deer-Peterhead%	1	1	1	1	1	1	172.5
	TOTALS	1	1	1	1	1	1	172.5
Short-eared owl	New Deer-Peterhead%	3	3	0	0	0	0	0
	TOTALS	3	3	0	0	0	0	0
Barn owl	New Deer-Peterhead%	1	1	0	0	0	0	0
	TOTALS	1	1	0	0	0	0	0

* Drum Mossie Muir / River Nairn Corridor data reflects flights recorded from both VPs 3 and 18 combined.

Assich Forest Strathdearn Foothills data reflects flights recorded from VPs 4 / 19 and 5 combined.

+ Dava Moorlands data reflects flights recorded from VPs 20 and 21 combined.

% New Deer-Peterhead data reflects flights recorded from VPs 23 and 24 combined.

Waterfowl and Wading Birds

3.2.27 **Table 3.7** presents a summary of the recorded flight activity by waterfowl and wading birds during the flight activity surveys. A total of 179 flights by nine different species were recorded (not including unidentified goose species).

3.2.28 In the flight activity surveys methodology, flights considered to be at PCH were those recorded at heights of between 10 m and 60m, as this aligned with the parameters provided at the outset of the survey programme. Current design, when received, showed that the bottom phase conductors would be approximately 9 m above ground level at the lowest point and, excepting the single 97 m tall special tower, the earth wire on the tallest towers would be 72 m above ground level. Typically, these would represent the heights above ground level between which birds would be at risk of colliding with the conductors (i.e. between 9 m to 72 m). Of the Proposed Development's 549 towers, only 1 % are greater than 72 m in height. In order to take a more precautionary approach and accommodate the discrepancy between flights recorded at PCH during the surveys (0 m – 60 m) and flights which may have been at actual PCH (9 m – 72 m), 10% of flights which were recorded in the height band above the survey PCH height bands (i.e. Height Band 4 (60 m+)) and which intersected with the horizontal LoD of the proposed tower and OHL alignment have been included in the final 'adjusted' number of flights (and constituent number of birds) at PRC in the following flight activity results tables. This has typically

resulted in a decimalised number. Consultation with NatureScot confirmed that this approach was considered to be reasonable.

- 3.2.29 Pink-footed goose was the most frequently recorded species, comprising 102 flights of 9369 individuals in total. Flights were recorded throughout the surveyed parts of the Proposed OHL Alignment from Beaully River Corridor Focal Area at the western extent to the New Deer-Peterhead Focal Area at the eastern extent. Recorded pink-footed geese were associated with lowland agricultural areas along river corridors, as well as occurring over woodlands and open moorland. Flights were recorded throughout the overwintering period, with the majority occurring during the autumn and spring passage periods, most likely reflecting migratory movements rather than daily commuting flights between local roosting and foraging areas. Of the 102 flights recorded, only 14.1 (comprising 1274.6 individuals) were at, or included, time at the adjusted PCH, with all other flights being recorded entirely above PCH.
- 3.2.30 Greylag goose was the next most frequently recorded waterfowl species with 27 flights comprising 108 individuals. Flights occurred throughout the year, reflecting that activity comprised both resident / naturalised birds as well as migratory overwintering birds. As with pink-footed geese, flights were recorded throughout the surveyed parts of the Proposed OHL Alignment from the Beaully River Corridor Focal Area to the New Deer-Peterhead Focal Area and were similarly associated with a variety of habitats, including lowland agricultural areas along river corridors and open moorlands. Of the 27 flights recorded, only 9.2 (comprising 37.6 individuals) were at the adjusted PCH.
- 3.2.31 Curlew was the most frequently recorded species of wading bird with 28 flights comprising 37 individuals recorded. Flights were predominantly recorded during the breeding season and occurred most frequently over the open moorland habitats of the Drummossie Muir / River Nairn Corridor, Assich Forest / Strathdearn Foothills and Dava Moorlands Focal Areas. Of the 28 flights recorded, eight (comprising 11 individuals) were at the adjusted PCH.
- 3.2.32 Flight activity by all other waterfowl and wading bird Target Species, which included whooper swan, golden plover, lapwing, oystercatcher, snipe and whimbrel, was recorded infrequently with no more than six flights being recorded for each species across the surveyed Focal Areas and throughout the entire survey programme. These species were typically recorded over lowland agricultural areas along river corridors and open moorlands, with the majority of flights being recorded outside of PCH.

Table 3.7: Summary of Waterfowl and Wading Bird Flights Recorded During Flight Activity Surveys

Species	Focal Area	Total No. Of Flights	Total No. of Birds	No. of Flights at PRC	No. of Birds at PRC	Adjusted No. of Flights at PRC	Adjusted No. of Birds at PRC	Adjusted Flight Time at PRC (secs)
Whooper swan	Beaully River Corridor	1	14	0	0	0	0	0
	Drummossie Muir / River Nairn Corridor*	1	19	0	0	0	0	0
	Dulsie Wood & assc. Woodlands	1	6	0	0	0.1	0.6	54
	River Spey Corridor / Wood of Ordiequish	1	8	1	8	1	8	60
	New Deer-Peterhead%	2	6	0	0	0.1	0.1	67.5
	TOTALS	5	39	1	8	1.2	8.7	181.5
Pink-footed goose	Beaully River Corridor	6	346	2	25	2	25	135
	River Ness/ Caledonian Canal Corridor	7	436	0	0	0.1	10	67.5

Species	Focal Area	Total No. Of Flights	Total No. of Birds	No. of Flights at PRC	No. of Birds at PRC	Adjusted No. of Flights at PRC	Adjusted No. of Birds at PRC	Adjusted Flight Time at PRC (secs)
	Drum Mossie Muir / River Nairn Corridor*	4	542	0	0	0.1	7.2	184.5
	Assich Forest / Strathdearn Foothills#	15	1846	2	458	2.2	459.9	672.5
	Dulsie Wood & assoc. Woodlands	16	1400	2	222	2.3	237	1354.7
	Dava Moorlands+	3	204	0	0	0.3	20.4	432
	River Spey Corridor / Wood of Ordiequish	24	2518	2	98	2.9	214.5	1044
	River Isla Corridor	9	746	2	276	2.1	287.5	372
	New Deer-Peterhead%	18	1501	2	10	2.1	13.1	304.5
	TOTALS	102	9539	12	1089	14.1	1274.6	4566.5
Greylag goose	Beaully River Corridor	2	13	0	0	0	0	0
	River Ness/ Caledonian Canal Corridor	3	24	1	13	1	13	210
	Drum Mossie Muir / River Nairn Corridor*	5	21	1	7	1	7	60
	Assich Forest / Strathdearn Foothills#	8	18	4	8	4	8	360
	Dulsie Wood & assoc. Woodlands	2	3	0	0	0	0	0
	Dava Moorlands+	6	27	3	8	3.2	9.6	484.5
	New Deer-Peterhead%	1	2	0	0	0	0	0
	TOTALS	27	108	9	36	9.2	37.6	1114.5
Unidentified goose sp.	Drum Mossie Muir / River Nairn Corridor*	2	260	0	0	0	0	0
	Dulsie Wood & assoc. Woodlands	2	3	0	0	0	0	0
	TOTALS	4	263	0	0	0	0	0
Golden plover	Assich Forest/ Strathdearn Foothills#	1	36	0	0	0.1	3.6	81
	New Deer-Peterhead%	1	5	0	0	0	0	0
	TOTALS	2	41	0	0	0.1	3.6	81
Curlew	Beaully River Corridor	1	1	0	0	0	0	0
	The Aird	3	3	1	1	1	1	45
	Drum Mossie Muir / River Nairn Corridor*	7	9	1	1	1	1	75
	Assich Forest / Strathdearn Foothills#	10	12	2	3	2	3	135
	Dulsie Wood & assoc. Woodlands	1	1	0	0	0	0	0
	Dava Moorlands+	6	11	4	6	4	6	498
	TOTALS	28	37	8	11	8	11	768
Lapwing	Drum Mossie Muir / River Nairn Corridor*	1	1	0	0	0	0	0

Species	Focal Area	Total No. Of Flights	Total No. of Birds	No. of Flights at PRC	No. of Birds at PRC	Adjusted No. of Flights at PRC	Adjusted No. of Birds at PRC	Adjusted Flight Time at PRC (secs)
	Dava Moorlands ⁺	1	2	1	2	1	2	45
	TOTALS	2	3	1	2	1	2	45
Oystercatcher	Beaully River Corridor	2	4	0	0	0	0	0
	River Ness / Caledonian Canal Corridor	3	5	0	0	0	0	0
	Dulsie Wood & assoc. Woodlands	1	2	0	0	0	0	0
	TOTALS	6	11	0	0	0	0	0
Snipe	Drum Mossie Muir / River Nairn Corridor*	1	1	0	0	0	0	0
	Dava Moorlands ⁺	1	1	0	0	0	0	0
	Bednawinny Moss	1	1	0	0	0	0	0
	New Deer-Peterhead [%]	3	5	0	0	0	0	0
	TOTALS	6	8	0	0	0	0	0
Whimbrel	Dulsie Wood & assoc. Woodlands	1	1	0	0	0	0	0
	TOTALS	1	1	0	0	0	0	0

* Drum Mossie Muir / River Nairn Corridor data reflects flights recorded from both VPs 3 and 18 combined.

Assich Forest Strathdearn Foothills data reflects flights recorded from VPs 4 / 19 and 5 combined.

⁺ Dava Moorlands data reflects flights recorded from VPs 20 and 21 combined.

[%] New Deer-Peterhead data reflects flights recorded from VPs 23 and 24 combined.

Scarce Breeding Bird Surveys

Raptors

- 3.2.33 The presence of ten species of scarce breeding raptor was identified throughout the surveyed Focal Areas, including white-tailed and golden eagle, osprey, honey buzzard, red kite, goshawk, hen harrier, peregrine, merlin and barn owl. The species recorded broadly aligned with those recorded during the flight activity surveys, with the exception of marsh harrier and short-eared owl and the addition of honey buzzard.
- 3.2.34 Red kite, osprey and merlin were recorded most extensively, with these species being frequently recorded throughout most of the surveyed Focal Areas in the west of the Site, particularly those comprising open moorland habitats. Goshawk were recorded slightly less frequently and within slightly fewer Focal Areas but were typically affiliated with Focal Areas supporting open moorland habitats, as well as forestry. Confirmed and probable breeding by these species was identified in several of the Focal Areas.
- 3.2.35 Sightings of white-tailed and golden eagle were relatively scarce and typically involved individual birds sighted over Focal Areas dominated by open moorland habitat. There was no evidence of breeding by either of these species.
- 3.2.36 Details of scarce breeding raptor observations are summarised in **Table 3.8** for both the 2023 and 2024 surveys.

Table 3.8: Summary of Raptor Activity Recorded During Scarce Breeding Bird Surveys

Target Species	Focal Area	Summary of Survey Records	
		2023	2024
Red Kite	Beaully River Corridor	Numerous sightings, plus identification of two nest sites, the closest approximately 180 m south of the Proposed OHL Alignment.	Several sightings, but no active nests recorded.
	Drummossie Muir / River Nairn Corridor	Numerous sightings, plus identification of a nest site, approximately 620 m from the Proposed OHL Alignment.	A single observation of one bird in flight.
	Assich Forest / Strathearn Foothills	Numerous sightings over the moorland and adjacent forestry, but no evidence of breeding other than a nest site located outside the Focal Area, approximately 1 km from the Proposed OHL Alignment.	Numerous sightings over the moorland and adjacent forestry, but no evidence of breeding.
	Dulsie Wood and assoc. Woodlands	A single sighting of an individual over woodland recorded during capercaillie surveys.	Surveys not repeated.
	Dava Moorlands	Three sightings of individual birds.	Three flights of individual birds across open habitat.
	Bednawinny Moss and Newtyle Forest	Observation of an individual to the north of the Proposed OHL Alignment.	Surveys not repeated.
	Glen Latterach Moorlands (and Woodlands)	Observation of an individual along the Proposed OHL Alignment.	No sightings recorded.
Osprey	Beaully River Corridor	Two nest sites identified, both over 1 km from the Proposed OHL Alignment.	No sightings recorded.
	Drummossie Muir / River Nairn Corridor	Numerous sightings, plus identification three nest sites, the closest approximately 730 m from the Proposed OHL Alignment.	Confirmed occupation of the nearest nest site identified in 2023.
	Assich Forest / Strathearn Foothills	A single sighting of a bird flying south of Clunas Reservoir.	A single sighting of a bird flying over the west of the Focal Area.
	Dava Moorlands	Observation of a single bird recorded south of the Proposed OHL Alignment.	No sightings recorded.
	Glen Latterach Moorlands (and Woodlands)	Several records of single birds, the majority observed over / around Glenlatterach Reservoir.	Two observations of individual birds in the vicinity of Glenlatterach Reservoir.
	River Spey Corridor / Wood of Ordiequish	Two osprey nest sites identified, one just over 500 m north of the Proposed OHL Alignment and the	Surveys not repeated.

Target Species	Focal Area	Summary of Survey Records	
		2023	2024
		other over 1.3 km to the south.	
Goshawk	Assich Forest / Strathearn Foothills	Four sightings of individual male and female birds recorded over the moorland and adjacent forest habitats.	No sightings recorded.
	Dulsie Wood and assoc. Woodlands	Two sightings including a displaying bird recorded over the forestry during capercaillie surveys.	Surveys not repeated.
	Dava Moorlands	A confirmed nest site located over 1 km south of the Proposed OHL Alignment.	One flight of an individual bird to the south of the Proposed OHL Alignment.
	Glen Latterach Moorlands (and Woodlands)	A single bird observed to the west of Glenlatterach Reservoir.	
White-tailed eagle	Drummossie Muir / River Nairn Corridor	Sighting of a single bird to the north of the OHL alignment.	No sightings recorded.
	Assich Forest / Strathearn Foothills	Three sightings, all of individual birds, recorded across the open moorland south of the Proposed OHL Alignment.	Two sightings of individual birds recorded across the open moorland habitat.
	Brown Muir	Sighting of a single bird to the south of the proposed OHL alignment.	Surveys not repeated.
Golden eagle	The Aird	Single sighting of a male bird flying overhead.	Surveys not repeated.
	Assich Forest / Strathearn Foothills	Two sightings of birds in flight across the moorland to the south of Proposed OHL Alignment.	No sightings recorded.
	Dava Moorlands	A single sighting of an immature bird flying across moorland southeast of the Proposed OHL Alignment.	One flight of an individual bird to the south of the Proposed OHL Alignment.
	Glen Latterach Moorlands (and Woodlands)	A single sighting of an individual bird south of Glenlatterach Reservoir and the Proposed OHL Alignment.	No sightings recorded.
Honey Buzzard	Beaully River Corridor	Three observations of single birds.	No sightings recorded.
Hen harrier	Assich Forest / Strathearn Foothills	Two records of a male bird(s) hunting over the moorland south of the Proposed OHL Alignment.	No sightings recorded.
	Dava Moorlands	A confirmed nest site located over 2 km from the Proposed OHL Alignment, along with several sightings over the moorland habitat.	No sightings recorded.
Peregrine	Beaully River Corridor	Sightings of individual birds. The historic nest site	No sightings recorded.

Target Species	Focal Area	Summary of Survey Records	
		2023	2024
		provided by HRSG was visited but was not active.	
	Drum Mossie Muir / River Nairn Corridor	Two sightings of individual birds to the north of the Proposed OHL Alignment.	No sightings recorded.
	Dava Moorlands	A single sighting of an individual bird at the western end of the Focal Area.	No sightings recorded.
Merlin	The Aird	Single sighting of an individual hunting bird over associated moorland.	Surveys not repeated.
	Drum Mossie Muir / River Nairn Corridor	Three records of individual birds recorded over moorland to the south of the Proposed OHL Alignment.	No sightings recorded.
	Assich Forest / Strathearn Foothills	Several sightings, predominantly of hunting birds, recorded across the moorland habitat with one confirmed and one probable nest site identified over 2 km south of the Proposed OHL Alignment.	Three observations of an individual adult birds in flight over the moorland in the west of the Focal Area.
	Dava Moorlands	Several records of hunting birds over the moorland habitat and a possible, but unconfirmed nest site located over 500 m of the proposed OHL alignment.	No sightings recorded.
	Bednawinny Moss and Newtyle Forest	Three sightings of the same bird over the open moorland habitat.	Surveys not repeated.
	Glen Latterach Moorlands (and Woodlands)	A nest site located over 1 km south of the Proposed OHL Alignment.	No sightings recorded.
Barn owl	Drum Mossie Muir / River Nairn Corridor	An occupied barn owl box identified within a small block of woodland approximately 500 m from the Proposed OHL Alignment.	No sightings recorded.
	Dava Moorlands	Two barn owl roosts identified in buildings, one within 500 m of the Proposed OHL Alignment where a bird was also seen nearby, the other located over 2 km from the Proposed OHL Alignment.	No sightings recorded.

Divers

- 3.2.37 Red-throated divers were only recorded in three Focal Areas. Three observations of up to two birds were recorded on Clunas Reservoir, within the Assich Forest / Strathearn Foothills Focal Area in 2023, and there were

four observations, including three of a pair of birds, associated with Clunas Reservoir in 2024. However, there was no evidence of breeding at this location in either year.

- 3.2.38 There were two observations of red-throated divers in the Dava Moorlands Focal Area in 2023, one of a single bird and another of a pair recorded on lochans to the west of Knock of Braemoray over 3 km south of the Proposed OHL Alignment. However, there was no evidence of breeding at this location.
- 3.2.39 A red-throated diver was observed on Glenlatterach Reservoir, within the Glen Latterach Moorlands and Woodlands associated with Hill of Mulundy and Wangie Wood Focal Area, in May 2023, but there was no evidence of breeding at this location either.
- 3.2.40 There were no records of black-throated divers in either the 2023 or 2024 surveys.

Wading / Wetland Birds

- 3.2.41 Breeding waders included golden plover, curlew, lapwing, oystercatcher and snipe a were recorded in the majority of Focal Areas comprising open moorland or farmland habitats. Additionally, a potential goldeneye breeding territory was identified in the Beauly River Corridor Focal Area during scarce raptor surveys. Two small breeding colonies of common gull were also recorded at Clunas Reservoir and Glen Latterach Reservoir in the Assich Forest / Strathdearn Foothills and Glen Latterach Moorlands and Woodlands associated with Hill of Mulundy and Wangie Wood Focal Areas respectively. Details of breeding wading birds, goldeneye and common gull are summarised in **Table 3.9** for both 2023 and 2024.

Table 3.9: Summary of Breeding Wader Activity Recorded During Scarce Breeding Bird Surveys

Species	Focal Area	Summary of Survey Records	
		2023	2024
Golden Plover	Assich Forest / Strathdearn Foothills	Four territories, none within 500 m of the Proposed OHL Alignment.	A single territory within 500 m of the Proposed OHL Alignment.
	Dava Moorlands	A single territory within 500 m of the Proposed OHL Alignment.	Two territories, both within 500 m of the Proposed OHL Alignment.
	Glen Latterach Moorlands (and Woodlands)	Two territories, both within 500 m of the Proposed OHL Alignment.	No territories recorded.
Curlew	The Aird	A single territory not within 500 m of the Proposed OHL Alignment.	Surveys not repeated.
	Drumossie Muir / River Nairn Corridor	Nine territories, three within 500 m of the Proposed OHL Alignment.	Three territories, two within 500 m of the Proposed OHL Alignment.
	Assich Forest / Strathdearn Foothills	Seven territories, three within 500 m of the Proposed OHL Alignment.	Five territories, two within 500 m of the Proposed OHL Alignment.
	Dava Moorlands	16 territories, seven within 500 m of the Proposed OHL Alignment.	Four territories, all within 500 m of the Proposed OHL Alignment.
	Bednawinny Moss and Newtyle Forest	Three territories, none within 500 m of the Proposed OHL Alignment.	Surveys not repeated.
	Glen Latterach Moorlands (and Woodlands)	13 territories, nine within 500 m of the Proposed OHL Alignment	Two territories, both within 500 m of the Proposed OHL Alignment.

Species	Focal Area	Summary of Survey Records	
		2023	2024
	Brown Muir	Two territories, one within 500 m of the Proposed OHL Alignment	Surveys not repeated.
Lapwing	The Aird	A single territory not within 500 m of the Proposed OHL Alignment	Surveys not repeated.
	Drumossie Muir / River Nairn Corridor	Six territories, four within 500 m of the Proposed OHL Alignment	No territories recorded.
	Assich Forest / Strathearn Foothills	Three territories, two within 500 m of the Proposed OHL Alignment	No territories recorded.
	Bednawinny Moss and Newtyle Forest	Three territories, two within 500 m of the Proposed OHL Alignment	Surveys not repeated.
	Glen Latterach Moorlands (and Woodlands)	Six territories, two within 500 m of the Proposed OHL Alignment	No territories recorded.
	Dava Moorlands	Seven territories, five within 500 m of the Proposed OHL Alignment.	No territories recorded.
Oystercatcher	Drumossie Muir / River Nairn Corridor	A single territory not within 500 m south of the Proposed OHL Alignment.	No territories recorded.
	Assich Forest / Strathearn Foothills	Two territories, both within 500 m of the Proposed OHL Alignment.	two territories, both within 500 m of the Proposed OHL Alignment.
	Bednawinny Moss and Newtyle Forest	A single territory, not located within 500 m of the Proposed OHL Alignment.	Surveys not repeated.
Snipe	The Aird	A single territory approximately 2.3 km south of the Proposed OHL Alignment.	Surveys not repeated.
	Drumossie Muir / River Nairn Corridor	16 territories, seven within 500 m of the Proposed OHL Alignment.	Four territories, all within 500 m of the Proposed OHL Alignment.
	Dava Moorlands	Nine territories, five within 500 m of the Proposed OHL Alignment.	A single territory within 500 m of the Proposed OHL Alignment.
	Assich Forest / Strathearn Foothills	Eleven territories, six within 500 m of the Proposed OHL Alignment.	No territories recorded.
	Bednawinny Moss and Newtyle Forest	Two territories, neither within 500 m of the Proposed OHL Alignment.	Surveys not repeated.
	Brown Muir	Two territories, neither within 500 m of the Proposed OHL Alignment.	Surveys not repeated.
Goldeneye	Beaully River Corridor	No sightings recorded.	Potential breeding territory identified over 500 m southeast of the Proposed OHL Alignment.

Species	Focal Area	Summary of Survey Records	
		2023	2024
Common Gull	Assich Forest / Strathdearn Foothills	Colony comprising approximately eight pairs at Clunas Reservoir, within 500 m of the Proposed OHL Alignment.	Colony comprising approximately ten pairs at Clunas Reservoir, within 500 m of the Proposed OHL Alignment.
	Glen Latterach Moorlands (and Woodlands)	Colony comprising approximately six pairs at Glen Latterach Reservoir, within 500 m of the Proposed OHL Alignment.	Colony comprising approximately ten pairs at Glen Latterach Reservoir, within 500 m of the Proposed OHL Alignment.

Capercaillie Surveys

- 3.2.42 There were no sightings of capercaillie or evidence of the species' presence in any of the woodlands covered by the surveys, with the exception of the record provided by RSPB Scotland from their surveys of 2023 and 2024 as provided in the Desk Study Section.

Goose Field Use Surveys

- 3.2.43 The only goose species recorded during the field surveys was pink-footed goose, with five records of foraging / loafing geese recorded throughout the survey period. All records were observed within the western half of the Goose Field Use Survey Area and within approximately 500 m of the Proposed Development. A peak count of 150 birds was recorded west of Maud in November 2023. The distribution of records is shown in the **EIA Report Volume 5 Appendix 9.1: Ornithology Technical Report, Figure 9.1.8: Goose Field Use Survey Results (2023 / 24)**.
- 3.2.44 In addition to observations within fields, seven records of pink-footed geese passing overhead were made. The largest flock recorded was one of 1,500 birds flying due south in October 2023, suggesting that it was of birds on migration. Otherwise, flocks comprised no more than 100 birds.

4 Stage 1 Screening Assessment

4.1 Background

- 4.1.1 International Sites and their ecological features with the potential to be affected by the Proposed Development have been assessed based on their proximity to the Proposed Development (see above **International Sites**), as well as their potential to be connected directly (e.g. via watercourses) or indirectly (e.g. whereby associated qualifying species use habitats within, or in proximity for foraging or roosting (termed 'functionally linked' habitat)). The Proposed Development and areas of indirect linkage to the International Sites are described as the Proposed Development's Zone of Influence (Zol). As such, the Zol can extend beyond the Proposed Development's footprint, for example where there are ecological or hydrological links beyond the site boundaries.

4.2 Potential Impacts

- 4.2.1 Prior to undertaking the HRA Screening Assessment, the potential impact pathways associated with the Proposed Development were considered. This was used as a mechanism to begin to understand the potential ecological Zol of the Proposed Development and connectivity to surrounding International Sites.
- 4.2.2 For activities associated with the Proposed Development, potential impacts and potential effects have been identified in **Table 4.1 (construction)** and **Table 4.2 (operation)** alongside the Zol for each of these effects.
- 4.2.3 The Proposed Development would not have a fixed operational life. The effects associated with the construction phase can be considered to be representative of worst-case decommissioning effects, and therefore no separate assessment on decommissioning has been undertaken as part of the EIA or this HRA.

Table 4.1: Potential Impacts During Construction / Decommissioning

Activity	Potential Impact	Potential Effect	Zone of Influence (Zoi)
Habitat Loss			
Vegetation Removal. Excavations and permanent hard standing and access tracks. Removal of underground cable and OHL. Creation and use of temporary access tracks and working areas.	Direct loss (through vegetation removal and excavation works, damage from access) or indirect loss (changes to hydrology) of designated sites or functionally linked habitat.	Reduction in area or reduction in quality of available designated or functionally linked habitat, resulting in a reduced carrying capacity for qualifying species e.g. loss of breeding habitat / places of shelter, loss of foraging habitat. Loss of plant species within an area for which these are fundamental to the structure / function of the site e.g. river habitats and woodland habitats.	Direct or indirect loss or damage to habitat within an International Site or functionally linked habitat supporting qualifying features. The Zoi for indirect effects via surface water is any habitat located downstream of watercourses that cross or are directly adjunct to any of the Proposed Development.
Injury or Mortality			
Installation of permanent and temporary infrastructure.	Injury or mortality of fauna through collision with infrastructure whilst it is being installed or removed, or otter when travelling away from river or bank. Injury or mortality of birds through construction due to vegetation clearance.	Decrease in productivity of qualifying species that could result in population declines.	The boundary of the Proposed Development (extent of the works areas). This may go beyond this depending on the species but will be judged on case-by-case basis.
Disturbance and Displacement			
Construction activity including use of plant and presence of workforce.	Production of auditory and visual stimuli due to noise, lighting, vibration and movement of construction vehicles and personnel.	Disturbance of qualifying species resulting in a reduction of energy intake and / or an increase in energy expenditure. Displacement (caused by disturbance) could prevent qualifying species from accessing otherwise suitable habitat. Disturbance and displacement could potentially lead to a reduction in survival or productivity rates.	The boundary of the Proposed Development (extent of the works areas). This may go beyond this depending on the species but will be judged on case-by-case basis.

Activity	Potential Impact	Potential Effect	Zone of Influence (Zol)
Changes to Water Quality			
Use of chemicals (for example fuels, solvents, concrete etc.).	Release of pollutants or fine material from works areas to surface water flows.	The introduction of toxic pollutants or sediments leading to direct effects (e.g., poisoning) or indirect effects (e.g., through impacts on prey species, water visibility or impacts on habitats) on qualifying features of International Sites.	International Site habitat or functionally linked habitats that are hydrologically connected to water bodies within the same catchment and downstream of the Proposed Development. The Zol for this impact was assessed as a maximum of 5 km downstream of the Proposed Development.
Collision Risk			
Creation of new Overhead Lines (OHL) and towers.	Mortality through collision with power lines. This can occur when a bird flies into a wire and is killed either from the impact, from hitting the ground, or from injuries sustained in the process. Geese and swans are considered most vulnerable to collision with OHLs, most likely due to where OHLs are positioned and the results of increased injury in comparison to other birds due to their heavy bodies and flight behaviour (Frost, 2008).	Decrease in productivity of qualifying species that could result in population declines.	The boundary of the Proposed Development (extent of the works areas). This may go beyond this depending on the species but will be judged on case-by-case basis.
Introduction or Spread of Invasive Non-Native Species (INNS)			
Introduction or Spread of INNS into the designated sites during construction	Introduction or spread of INNS in the designated sites during construction as a result of vehicle movements, movements of material or disposal of waste and / or vegetation.	Deterioration in habitat condition as a result of the introduction or spread of INNS, resulting in impacts to qualifying species. Direct impacts to qualifying species.	The boundary of the Proposed Development (extent of the works areas). This may go beyond this depending on the species but will be judged on case-by-case basis. Hydrological connections to the designated sites. The Zol was identified as a maximum of 5 km downstream of the Proposed Development.

Table 4.2: Potential Impacts During Operation

Activity	Potential Impact	Potential Effect	Zone of Influence (Zoi)
Disturbance			
Maintenance activities	Production of auditory and visual stimuli due to noise, lighting, vibration and movement of maintenance vehicles and personnel. Habitat loss due to maintenance of wayleaves. Injury or mortality during operation due to maintenance activities such as vegetation clearance.	Disturbance of qualifying species resulting in a reduction of energy intake and / or an increase in energy expenditure. Direct injury or mortality during maintenance activities such as vegetation clearance.	The boundary of the Proposed Development and associated access routes (extent of the works areas). This may go beyond this depending on the species but will be judged on case-by-case basis.
Increases in recreational pressure through improved accessibility	Increases in recreational pressure leading to greater disturbance as a result of OHL access tracks for maintenance creating improved access routes into previously inaccessible areas within the designated sites.	Disturbance of qualifying species resulting in a reduction of energy intake and / or an increase in energy expenditure.	The boundary of the Proposed Development and associated access routes (extent of the works areas). This may go beyond this depending on the species but will be judged on case-by-case basis.
Collision Risk			
Presence of new Overhead Lines (OHL) and towers.	Mortality through collision with power lines. This can occur when a bird flies into a wire and is killed either from the impact, from hitting the ground, electrocution, or from injuries sustained in the process. Geese and swans are considered most vulnerable to collision with OHLs, most likely due to where OHLs are positioned and the results of increased injury in comparison to other birds due to their heavy bodies and flight behaviour (Frost, 2008).	Decrease in productivity of qualifying species that could result in population declines.	The boundary of the Proposed Development. This may go beyond this depending on the species but will be judged on case-by-case basis.

Activity	Potential Impact	Potential Effect	Zone of Influence (Zol)
Changes in Water Quality			
Release of chemicals (for example fuels, solvents, concrete etc.)	Release of pollutants or fine material from the site to surface water flows.	The introduction of toxic pollutants or sediments leading to direct effects (e.g. poisoning) or indirect effects (e.g. through impacts on prey species, water visibility or impacts on habitats) on qualifying features of International Sites.	International Site habitat or functionally linked habitats that are hydrologically connected to water bodies within the same catchment and downstream of the Proposed Development. The Zol for this impact was assessed as a minimum of 5 km downstream of the Proposed Development. Where there is connectivity to SPAs supporting certain bird species (such as geese), this distance is increased to 20 km.

4.3 Relevant International Designations

- 4.3.1 **Table 4.3** presents the International Sites and their ecological features with the potential to be connected to and therefore potentially affected by the Proposed Development.
- 4.3.2 Details of the Qualifying Features of each of the International Sites identified within the Zol of the Proposed Development, the approximate distance and potential connectivity are included in the table. Where designations lie outside of the above identified Zol for the Proposed Development and do not have connectivity to the International Sites, these have been excluded from further consideration. The designations have been listed from west to east.
- 4.3.3 Currently Ramsar sites do not have Conservation Objectives assigned to them, therefore, for the purposes of this assessment it is assumed they are the same as the SPA / SAC with same / similar boundaries and connected features.

Table 4.3: Relevant International Designations

Qualifying Features	Conservation Objectives	Site Condition Assessment and Negative Pressures
Glen Affric to Strathconon SPA - Approximately 9.9 km west at the closest point		
The site is designated under Article 4.1 for the breeding population of golden eagle.	To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained. To ensure for the qualifying species that the following are maintained in the long-term: - population of the species as a viable component of the site; - distribution of the species within the site; - distribution and extend of habitats supporting the species; - structure, function and supporting processes of habitats supporting the species; and - no significant disturbance of the species.	<u>Condition Assessment</u> Favourable maintained <u>Pressures</u> None – recorded
Strathglass Complex SAC - Approximately 8.9 km west at the closest point		
The site is designated for the following habitats: - Northern Atlantic wet heaths with <i>Erica tetralix</i> - Alpine and boreal heaths - Sub-Arctic <i>Salix</i> spp. Scrub - Siliceous alpine and boreal grassland - Blanket bogs - Siliceous rocky slopes with chasmophytic vegetation - Caledonian forest	1. To ensure that the qualifying features of Strathglass Complex SAC are in favourable condition and make an appropriate contribution to achieving favourable conservation status. 2. To ensure that the integrity of Strathglass Complex SAC is restored by meeting objectives 2A, 2B and 2C for each qualifying feature. 2A. Maintain / Restore the extent and distribution of the habitat within the site. 2B. Maintain / Restore the structure, function and supporting processes of the habitat. 2C. Maintain / Restore the distribution and viability of typical species of the habitat.	<u>Condition Assessment</u> - Clear water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels – Favourable maintained - Wet heathland with cross- leaved heath – Unfavourable recovering - Dry heaths – Unfavourable recovering - Alpine and boreal heaths – Unfavourable recovering - Sub-Arctic <i>Salix</i> spp. scrub – Unfavourable recovering

Qualifying Features	Conservation Objectives	Site Condition Assessment and Negative Pressures
• Clear water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels • European dry heaths • Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels • Siliceous scree of the montane to snow levels (<i>Androsacetalia aplinae</i> and <i>Galeopsietalia ladani</i>) • Calcareous rock slopes with chasmophytic vegetation • Bog woodland The site is also designated for the presence of otter.		• Siliceous alpine and boreal grassland – Favourable maintained • Blanket bogs – Unfavourable recovering • Siliceous rocky slopes with chasmophytic vegetation – Favourable maintained • Caledonian forest – Unfavourable no change • Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels – Favourable recovered • Siliceous scree of the montane to snow levels (<i>Androsacetalia aplinae</i> and <i>Galeopsietalia ladani</i>) – Favourable maintained • Calcareous rock slopes with chasmophytic vegetation – Favourable maintained • Bog woodland – Favourable maintained • Otter – Favourable maintained <u>Pressures</u> Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels • Water management • Water quality

Qualifying Features	Conservation Objectives	Site Condition Assessment and Negative Pressures
		Wet heathland with cross-leaved heath - Overgrazing Dry heaths - Overgrazing Alpine and boreal heaths - Overgrazing Sub-Arctic Salix spp. Scrub - Overgrazing Blanket bogs - Overgrazing Caledonian forest - Overgrazing
Conon Islands SAC - Approximately 8.4 km north at the closest point		
The site is designated for alder woodland on floodplains. The following are also listed as reasons for designation although not qualifying species: - Atlantic salmon <i>Salmo salar</i> - Otter - Freshwater pearl mussel	1. To ensure that the qualifying feature of Conon Islands SAC is in favourable condition and makes an appropriate contribution to achieving favourable conservation status. 2. To ensure that the integrity of Conon Islands SAC is restored by meeting objectives 2A, 2B and 2C for the qualifying feature. 2A. Maintain the extent and distribution of the habitat within the site. 2B. Restore the structure, function and supporting processes of the habitat. 2C. Restore the distribution and viability of typical species of the habitat.	<u>Condition Assessment</u> Alder woodland on floodplains - Unfavourable no change <u>Pressures</u> Invasive species - Water management
Monadh Mor SAC - Approximately 7.5 km north at the closest point		
The site is designated for:	1. To ensure that the qualifying features of Monadh Mor SAC are in favourable condition and make an appropriate contribution to achieving favourable conservation status.	<u>Condition Assessment</u> Very wet mires often identified by an unstable 'quaking' surface

Qualifying Features	Conservation Objectives	Site Condition Assessment and Negative Pressures
Very wet mires often identified by an unstable 'quaking' surface and bog woodland	2. To ensure that the integrity of Monadh Mor SAC is maintained by meeting objectives 2A, 2B and 2C for each qualifying feature. 2A. Maintain the extent and distribution of the habitat within the site. 2B. Maintain the structure, function and supporting processes of the habitat. 2C. Maintain the distribution and viability of typical species of the habitat	- Favourable maintained Bog woodland - Favourable maintained <u>Pressures</u> - Natural events
Moniack Gorge SAC - Approximately 0.3 km west at the closest point		
The site is designated for: Green shield-moss <i>Buxbaumia viridis</i>	1. To ensure that the qualifying feature of Moniack Gorge SAC is in favourable condition and makes an appropriate contribution to achieving favourable conservation status. 2. To ensure that the integrity of Moniack Gorge SAC is maintained by meeting the following objectives for the site: 2a. Maintain the population of the species as a viable component of the site. 2b. Maintain the distribution of the species throughout the site. 2c. Maintain the habitats supporting the species within the site.	<u>Condition Assessment</u> Favourable maintained <u>Pressures</u> None listed but Conservation Advice Package (NatureScot, 2020) notes: "effects that could lead to a permanent reduction in the green shield-moss population through the direct destruction of plants, loss of decaying wood occupied by the species, lack of decaying wood to colonise or changes to the microclimate within the SAC", should be considered when assessing impacts of any plan or project on the SAC.
Moray Firth SAC - Approximately 1.1 km north at the closest point		
The site is designated for: - Subtidal sandbanks - Bottlenose dolphin <i>Tursiops truncatus</i>	1. To ensure that the qualifying features of Moray Firth SAC are in favourable condition and make an appropriate contribution to achieving Favourable Conservation Status. 2. To ensure that the integrity of Moray Firth SAC is maintained or restored in the context of environmental changes by meeting objectives for each qualifying feature. For subtidal sandbanks the objectives are: 2a. Extent and distribution of the habitat within the site.	<u>Condition Assessment</u> Subtidal sandbanks - Favourable maintained Bottlenose dolphin - Favourable maintained

Qualifying Features	Conservation Objectives	Site Condition Assessment and Negative Pressures
	2b. Structure and function of the habitat and the supporting environment on which it relies. 2c. Distribution and viability of typical species of the habitat. For bottlenose dolphins the objectives are: 2a. The population of bottlenose dolphin is a viable component of the site. 2b. The distribution of bottlenose dolphin throughout the site is maintained by avoiding significant disturbance. 2c. The supporting habitats and processes relevant to bottlenose dolphin and the availability of prey for bottlenose dolphin are maintained.	<u>Pressures</u> All qualifying features: • Aquaculture (shellfish) • Anchorages and moorings • Ballast • Boat use • Cables and pipelines • Marine deposit sites • Other coastal development Bottlenose dolphin only: • Fishing including use of acoustic deterrent devices (ADDs) • Seismic surveys • Oil and gas development • Ports and harbours.
Moray Firth SPA - 0.85 km at the closest point		
The site qualifies under Article 4.1 as it regularly supports: • 5.8% of the Great Britain (GB) population of great northern diver <i>Gavia immer</i> • 1.9% of the GB population of red-throated diver <i>Gavia stellata</i>	1. To ensure that the qualifying feature of Moray Firth SPA is in favourable condition and makes an appropriate contribution to achieving favourable conservation status. 2. To ensure that the integrity of Moray Firth SPA is maintained by meeting the following objectives for the site: 2a. Maintain the population of the species as a viable component of the site. 2b. Maintain the distribution of the species throughout the site.	<u>Condition Assessment</u> All favourable aside from European shag: • Unfavourable at breeding colony SPA. • Favourable (non-breeding season).

Qualifying Features	Conservation Objectives	Site Condition Assessment and Negative Pressures
3.9% of the GB population of Slavonian grebe The site further qualifies under Article 4.2 by regularly supporting populations of European importance of the following migratory and wintering species: - Greater scaup - Common eider - Long-tailed duck <i>Clangula hyemalis</i> - Common scoter <i>Melanitta nigra</i> - Velvet scoter <i>Melanitta fusca</i> - Common goldeneye - Red-breasted merganser - European shag - Red-throated diver - Slavonian grebe	2c. Maintain the habitats supporting the species within the site.	<u>Pressures</u> Greater scaup: - Game / fisheries management. - Natural event. - Recreation / disturbance. Common eider: - Plant pests and diseases. Long-tailed duck: - Climate Change. - Game / fisheries management. - Plant pests and diseases. - Recreation / disturbance. Common scoter: - Game / fisheries management. - Natural event. - Recreation / disturbance. Common goldeneye: - Climate Change. Red-throated diver: - Plant pests and diseases. Slavonian grebe: - Natural event. - Recreation / disturbance.

Qualifying Features	Conservation Objectives	Site Condition Assessment and Negative Pressures
Inner Moray Firth SPA – 505 m north at the closest point		
The site is designated under Article 4.1 for supporting internationally important breeding and non-breeding populations: - Bar-tailed godwit non-breeding - Common tern breeding - Osprey breeding And under Article 4.2 for supporting the following migratory populations of: - Cormorant non-breeding - Curlew non-breeding - Goldeneye non-breeding - Goosander non-breeding - Greylag goose non-breeding - Oystercatcher non-breeding - Red-breasted merganser non-breeding - Redshank non-breeding - Scaup non-breeding - Teal <i>Anas crecca</i> non-breeding - Wigeon non-breeding It is also designated under Article 4.2 for supporting and overwintering no breeding waterfowl assemblage of over 20,000 birds.	To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and To ensure for the qualifying species that the following are maintained in the long-term: - population of the species as a viable component of the site; - distribution of the species within site; - distribution and extent of habitats supporting the species; - structure, function and supporting processes of habitats supporting the species; and - no significant disturbance of the species.	<u>Condition Assessment</u> Bar-tailed godwit - Favourable maintained. Common tern - Unfavourable no change. Cormorant - Unfavourable no change. Curlew - Favourable maintained. Goldeneye - Favourable maintained. Goosander - Unfavourable no change. Greylag goose - Favourable maintained. Osprey - Favourable maintained. Oystercatcher - Favourable maintained. Red-breasted merganser - Unfavourable no change. Redshank - Favourable maintained. Scaup - Favourable maintained. Teal

Qualifying Features	Conservation Objectives	Site Condition Assessment and Negative Pressures
		- Favourable maintained. Waterfowl assemblage - Favourable maintained. Wigeon - Favourable maintained. <u>Pressures</u> Waterfowl assemblage - Recreation / disturbance
Inner Moray Firth Ramsar – 509 m north at the closest point		
The site is designated for wetland habitats including intertidal flats with eelgrass <i>Zostera</i> beds, saltmarsh, and a sand and shingle spit as well as its waterfowl assemblage and internationally important populations of greylag goose and common redshank.	As for Inner Moray Firth SPA above.	<u>Condition Assessment</u> Bar-tailed godwit - Favourable maintained. Greylag goose - Favourable maintained. Red-breasted merganser - Unfavourable no change. Redshank - Favourable maintained. Saltmarsh - Favourable maintained. Sand dunes - Unfavourable no change. Shingle - Favourable declining. Waterfowl assemblage - Favourable maintained.

Qualifying Features	Conservation Objectives	Site Condition Assessment and Negative Pressures
		<u>Pressures</u> All species except greylag goose • Recreation / disturbance. Waterfowl assemblage • Recreation / disturbance. Saltmarsh • Overgrazing. Sand dunes • Invasive species, undergrazing. Shingle • Invasive species, Recreation / disturbance
Cromarty Firth SPA - Approximately 13.2 km inland at the closest point		
The site is designated under Article 4.1 for populations of European importance of osprey, common tern, whooper swan, and bar-tailed godwit, as well as over 20,000 wintering waterfowl under Article 4.2. The site is also designated under Article 4.2 for a population of European importance of migratory greylag geese.	To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and To ensure for the qualifying species that the following are maintained in the long-term: • population of the species as a viable component of the site; • distribution of the species within site; • distribution and extent of habitats supporting the species; • structure, function and supporting processes of habitats supporting the species; and • no significant disturbance of the species.	<u>Condition Assessment</u> All favourable aside from: Common tern breeding population • Unfavourable. Whooper swan non-breeding population • Unfavourable. Scaup non-breeding population • Unfavourable.

Qualifying Features	Conservation Objectives	Site Condition Assessment and Negative Pressures
		<u>Pressures</u> Bar-tailed godwit • Recreation / disturbance Common tern • Recreation / disturbance • Other Curlew • Recreation / disturbance Dunlin • Recreation / disturbance Knot • Recreation / disturbance Oystercatcher • Recreation / disturbance Pintail • Recreation / disturbance Red-breasted merganser • Recreation / disturbance Redshank • Recreation / disturbance

Qualifying Features	Conservation Objectives	Site Condition Assessment and Negative Pressures
		Scaup - Recreation / disturbance Wigeon - Recreation / disturbance Waterfowl assemblage - Recreation / disturbance
Cromarty Firth Ramsar - Approximately 13.2 km inland at the closest point		
The site is designated for its intertidal mudflats and sandflats.	As for the Cromarty Firth SPA above.	All in favourable condition. Intertidal mudflats - Invasive species Waterfowl assemblage - Recreation / disturbance
Loch Ashie SPA - Approximately 2.9 km south at the closest point		
The site is designated under Article 4.1 for supporting an internationally important breeding population of Slavonian grebe.	To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and To ensure for the qualifying species that the following are maintained in the long-term: - population of the species as a viable component of the site; - distribution of the species within site; - distribution and extent of habitats supporting the species;	<u>Condition Assessment</u> Slavonian grebe Favourable maintained. <u>Pressures</u> None listed.

Qualifying Features	Conservation Objectives	Site Condition Assessment and Negative Pressures
	- structure, function and supporting processes of habitats supporting the species; and - no significant disturbance of the species.	
Loch Flemington SPA – 4.4 km north at the closest point		
The site is designated under Article 4.1 for supporting an internationally important breeding population of Slavonian grebe.	To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and To ensure for the qualifying species that the following are maintained in the long-term: - population of the species as a viable component of the site; - distribution of the species within site; - distribution and extent of habitats supporting the species; - structure, function and supporting processes of habitats supporting the species; and - no significant disturbance of the species.	<u>Condition Assessment</u> Slavonian grebe - Unfavourable no change <u>Pressures</u> Invasive species - Water management.
Moray and Nairn Coast SPA - 3 km north at the closest point		
The site is designated for supporting an internationally important breeding population of: - Osprey - Bar-tailed godwit non-breeding - Dunlin non-breeding. - Greylag goose non-breeding - Osprey breeding - Oystercatcher non-breeding	To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and To ensure for the qualifying species that the following are maintained in the long-term: - population of the species as a viable component of the site; - distribution of the species within site; - distribution and extent of habitats supporting the species;	<u>Condition Assessment</u> Bar-tailed godwit - Unfavourable declining. Dunlin - Favourable maintained. Greylag goose - Unfavourable declining. Osprey - Favourable maintained.

Qualifying Features	Conservation Objectives	Site Condition Assessment and Negative Pressures
• Pink-footed goose non-breeding • Red-breasted merganser non-breeding • Redshank non-breeding. • Wigeon non- breeding As well as supporting an overwintering nonbreeding waterfowl assemblage of over 20,000 birds.	• structure, function and supporting processes of habitats supporting the species; and • no significant disturbance of the species.	Oystercatcher • Favourable maintained. Pink-footed goose • Unfavourable declining. Red-breasted merganser • Favourable maintained. Redshank • Unfavourable declining. Wigeon • Favourable maintained. Waterfowl assemblage • Favourable declining. <u>Pressures</u> Bar-tailed godwit • Military activities. Dunlin • Military activities. • Recreation / disturbance • Water management. Greylag goose • Military activities. Osprey • Recreation / disturbance. Oystercatcher • Water quality

Qualifying Features	Conservation Objectives	Site Condition Assessment and Negative Pressures
		Red-breasted merganser • Military activities. • Recreation / disturbance Redshank • Military activities. • Recreation / disturbance Wigeon • Military activities. • Recreation / disturbance Waterfowl assemblage • Recreation / disturbance
Moray and Nairn Coast Ramsar - 3 km north at the closest point		
The site is designated for its coastal and estuarine habitats including sand dunes, shingle, saltmarsh and estuarine alder <i>Alnus glutinosa</i> woodland. It also supports vascular plants of conservation interest including • Sea centaury <i>Centaurium littorale</i>. • Baltic rush <i>Juncus balticus</i>. • Oysterplant <i>Mertensia maritima</i>. • Dwarf eelgrass <i>Zoster noltei</i>. • <i>Ochthebius lenensis</i> (a water beetle). • <i>Tetanocera freyi</i> (snail killing fly). It also qualifies for supporting internationally important populations of breeding, overwintering and migratory birds.	As Moray and Nairn Coast SPA above.	<u>Condition Assessment</u> Greylag goose non-breeding • Unfavourable declining Intertidal mudflats and sandflats • Favourable maintained Pink-footed goose non- breeding • Favourable maintained Redshank non-breeding • Unfavourable declining. Saltmarsh • Partially destroyed. Sand dunes • Unfavourable no change Shingle

Qualifying Features	Conservation Objectives	Site Condition Assessment and Negative Pressures
		- Favourable maintained. Waterfowl assemblage, non- breeding - Favourable maintained. Wet woodland - Unfavourable declining. <u>Pressures</u> Bird species and waterfowl assemblage - Pressures as listed for Moray and Nairn Coast SPA Saltmarsh - Recreation / disturbance - Dumping / storage of materials Sand dunes - Invasive species. Shingle - Recreation / disturbance Wet woodland - Forestry operations - Invasive species
Carn nan Tri-tighearnan SAC - 1.5 km southeast at the closest point		
The site is designated for blanket bogs	1. To ensure that the qualifying features of Carn nan Tri-tighearnan SAC are in favourable condition and make an appropriate contribution to achieving favourable conservation status. 2. To ensure that the integrity of Carn nan Tri-tighearnan SAC is restored by meeting listed objectives. 2a. Maintain the extent and distribution of blanket bog within the site. 2b. Maintain the structure, function and supporting processes of the habitat	<u>Condition Assessment</u> Blanket bog Favourable recovered <u>Pressures</u> Recreation / disturbance

Qualifying Features	Conservation Objectives	Site Condition Assessment and Negative Pressures
	2c. Maintain the distribution and viability of typical species of the habitat	
Cawdor Wood SAC – 0.3 km north at the closest point		
The site is designated for western acidic oak woodland.	1. To ensure that the qualifying features of Cawdor Wood SAC are in favourable condition and make an appropriate contribution to achieving favourable conservation status. 2. To ensure that the integrity of Cawdor Wood SAC is restored by meeting listed objectives.	<u>Condition Assessment</u> Western acidic oak woodland Unfavourable no change. <u>Pressures</u> Invasive species.
Darnaway and Lethen Forest SPA - 3.6 km north at the closest point		
The site is designated for supporting an internationally important breeding population of capercaillie.	To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and To ensure for the qualifying species that the following are maintained in the long-term: - population of the species as a viable component of the site; - distribution of the species within site; - distribution and extent of habitats supporting the species; - structure, function and supporting processes of habitats supporting the species; and - no significant disturbance of the species.	<u>Condition Assessment</u> Unfavourable No change. <u>Pressures</u> Plant pests and diseases – <i>Dothistroma septosporum</i> on conifers.
Lower Findhorn Woods SAC – 1.9 km north at the closest point		
The site is designated for the Tilio-Acerion forests of slopes, screes and ravines and located to the southwest of Forres.	1. To ensure that the qualifying features of Lower Findhorn Woods SAC are in favourable condition and make an appropriate contribution to achieving favourable conservation status. 2. To ensure that the integrity of Lower Findhorn Woods SAC is restored by meeting listed objectives.	<u>Condition Assessment</u> Tilio-Acerion forests of slopes, screes and ravines Unfavourable declining. <u>Pressures</u>

Qualifying Features	Conservation Objectives	Site Condition Assessment and Negative Pressures
		Invasive species
Moidach More SAC - 1.5 km southeast at the closest point		
The site is designated for blanket bog including very wet mires often identified by an unstable 'quaking' surface.	1. To ensure that the qualifying features of Moidach More SAC are in favourable condition and make an appropriate contribution to achieving favourable conservation status. 2. To ensure that the integrity of Moidach More SAC is restored by meeting listed objectives.	<u>Condition Assessment</u> Blanket bog - Favourable maintained <u>Pressures</u> - Burning - Water Management
Loch Spynie SPA - 9.7 km north at the closest point		
The site is designated for greylag goose - non-breeding.	To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and To ensure for the qualifying species that the following are maintained in the long-term: - population of the species as a viable component of the site; - distribution of the species within site; - distribution and extent of habitats supporting the species; - structure, function and supporting processes of habitats supporting the species; and - no significant disturbance of the species.	<u>Condition Assessment</u> Greylag goose - Unfavourable declining. <u>Pressures</u> - Natural event. - Water management
Loch Spynie Ramsar - 9.4 km north at the closest point		
The site is designated for - Eutrophic loch. - Greylag goose.	To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and	<u>Condition Assessment</u> Eutrophic loch Unfavourable recovering Greylag goose

Qualifying Features	Conservation Objectives	Site Condition Assessment and Negative Pressures
	To ensure for the qualifying species that the following are maintained in the long-term: • population of the species as a viable component of the site; • distribution of the species within site; • distribution and extent of habitats supporting the species; • structure, function and supporting processes of habitats supporting the species; and • no significant disturbance of the species.	• Unfavourable declining <u>Pressures</u> Agricultural operations • Invasive species • Water management Greylag goose • Natural event
River Spey SAC - Bisects the Proposed Development		
The site is designated for • Otter • FWPM • Sea lamprey • Atlantic Salmon	1. To ensure that the qualifying features of River Spey SAC are in favourable condition and make an appropriate contribution to achieving favourable conservation status. 2. To ensure that the integrity of River Spey SAC is restored by meeting listed objectives and restore the distribution and viability of FWPM host species and their supporting habitats.	<u>Condition Assessment</u> Otter • Favourable maintained FWPM • Unfavourable declining Sea lamprey • Favourable maintained Atlantic Salmon • Unfavourable recovering <u>Pressures</u> Otter • Over grazing. FWPM • Extraction • Invasive species • Water quality • Wildlife crime

Qualifying Features	Conservation Objectives	Site Condition Assessment and Negative Pressures
		Atlantic Salmon - Agricultural operations Invasive species - Water management
Lower River Spey – Spey Bay SAC – 3 km north, 2.4 km south (site is in multiple separate locations)		
The site is designated for: - Alder woodland on floodplains - Coastal shingle vegetation outside the reach of waves	1. To ensure that the qualifying features of Lower River Spey SAC are in favourable condition and make an appropriate contribution to achieving favourable conservation status. 2. To ensure that the integrity of Lower River Spey – Spey Bay SAC is restored by meeting listed objectives.	<u>Condition Assessment</u> Alder woodland - Unfavourable no change Coastal shingle vegetation - Favourable declining <u>Pressures</u> - Invasive species
Tips of Corsemaul and Tom Mor SPA - 9 km southwest at the closest point		
The site is designated under Article 4.2 for supporting an internationally important breeding population of common gull.	To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and To ensure for the qualifying species that the following are maintained in the long-term: - population of the species as a viable component of the site; - distribution of the species within site; - distribution and extent of habitats supporting the species; - structure, function and supporting processes of habitats supporting the species; and - no significant disturbance of the species.	<u>Condition Assessment</u> Common gull Unfavourable declining. <u>Pressures</u> No negative pressures.

Qualifying Features	Conservation Objectives	Site Condition Assessment and Negative Pressures
Mortlach Moss SAC - 0.5 km south at the closest point.		
The site is designated for base-rich fens	To ensure that the qualifying features of Mortlach Moss SAC are in favourable condition and make an appropriate contribution to achieving favourable conservation status. To ensure that the integrity of Mortlach Moss SAC is restored by meeting listed objectives.	<u>Condition Assessment</u> Base-rich fens Favourable maintained <u>Pressures</u> None recorded.
Turclossie Moss SAC – 6.7 km north at the closest point.		
The site is designated for: - Active raised bog - Degraded raised bog	To ensure that the qualifying features of the SAC are in favourable condition and make an appropriate contribution to achieving favourable conservation status. To ensure that the integrity of the SAC is restored by meeting listed objectives.	<u>Condition Assessment</u> Active raised bog - Unfavourable recovering Degraded raised bog - Unfavourable declining <u>Pressures</u> Active raised bog - Invasive species - Water management Degraded raised bog - Invasive species - Water management
Loch of Strathbeg SPA - 12.2 km north at the closest point		
The site is designated under Article 4.1 for supporting including internationally important populations of	To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and	<u>Condition Assessment</u> Goldeneye Not assessed.

Qualifying Features	Conservation Objectives	Site Condition Assessment and Negative Pressures
- Sandwich tern (breeding) - Barnacle goose (non breeding). - Whooper swan (non breeding) As well as under Article 4.2 for its non-breeding waterfowl assemblage of over 20,000 birds including pink-footed goose and greylag goose	To ensure for the qualifying species that the following are maintained in the long-term: - population of the species as a viable component of the site; - distribution of the species within site; - distribution and extent of habitats supporting the species; - structure, function and supporting processes of habitats supporting the species; and - no significant disturbance of the species.	Greylag goose - Unfavourable declining Pink-footed goose - Favourable maintained Sandwich tern - Unfavourable no change Svalbard barnacle goose - Unfavourable declining Teal - Favourable maintained Waterfowl assemblage - Favourable declining Whooper swan - Favourable maintained <u>Pressures</u> No negative pressures aside from Sandwich tern - Natural event
Loch of Strathbeg Ramsar - 12.2 km north at the closest point		
The site is designated for its eutrophic freshwater loch habitat and important populations of breeding, overwintering and migratory birds which it supports including: - Goldeneye. - Greylag goose. - Pink-footed goose. - Sandwich tern.	To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and To ensure for the qualifying species that the following are maintained in the long-term: - population of the species as a viable component of the site; - distribution of the species within site; - distribution and extent of habitats supporting the species;	<u>Condition Assessment</u> Eutrophic Loch - Unfavourable no change. Goldeneye - not assessed. Greylag goose - Unfavourable no change. Pink-footed goose - Favourable maintained.

Qualifying Features	Conservation Objectives	Site Condition Assessment and Negative Pressures
- Svalbard barnacle. - Goose. - Teal.	- structure, function and supporting processes of habitats supporting the species; and - no significant disturbance of the species.	Sandwich tern – not assessed. Svalbard barnacle goose – not assessed. Sandwich tern – not assessed. Teal – not assessed. Waterfowl assemblage - Favourable maintained. Whooper swan - Favourable maintained. <u>Pressures</u> Eutrophic Loch - Agricultural operations - Water quality. Bird species - As per Loch of Strathbeg SPA
Ythan Estuary, Sands of Forvie and Meikle Loch SPA – 9.5 km southeast at the closest point.		
The site qualifies under Article 4.1 for the breeding populations of: - Sandwich tern. - Common tern. - Little tern. The site also qualifies under Article 4.2 for the wintering population of - Pink-footed goose. The site also qualifies under Article 4.2 for the internationally important wintering assemblage of waterfowl including: - Pink-footed goose	To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and To ensure for the qualifying species that the following are maintained in the long-term: - population of the species as a viable component of the site; - distribution of the species within site; - distribution and extent of habitats supporting the species; - structure, function and supporting processes of habitats supporting the species; and - no significant disturbance of the species.	<u>Condition Assessment</u> Common tern - Unfavourable no change. Eider <i>Somateria mollissima</i> - Favourable declining. Lapwing <i>Vanellus vanellus</i> - Favourable maintained. Little tern - Favourable maintained. Pink-footedgoose - Favourable maintained.

Qualifying Features	Conservation Objectives	Site Condition Assessment and Negative Pressures
- Eider - Lapwing - Redshank		Redshank - Favourable maintained. Sandwich tern - Favourable maintained. Waterfowl assemblage - Favourable maintained. <u>Pressures</u> Common tern - Recreation / disturbance. Eider - Agricultural operations - Water quality Lapwing – not assessed Little tern – not assessed Pink-footed goose - Agricultural operations. Redshank - Agricultural operations.
Ythan Estuary and Meikle Loch Ramsar - 9.5 km southeast at the closest point		
The site qualifies for supporting - Common tern - Little tern The site also qualifies under Criterion 5 by supporting over 20,000 waterbirds.	To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and To ensure for the qualifying species that the following are maintained in the long-term: population of the species as a viable component of the site;	<u>Condition Assessment</u> Pink-footed goose - Favourable maintained Sandwich tern - Favourable maintained

Qualifying Features	Conservation Objectives	Site Condition Assessment and Negative Pressures
The site qualifies by supporting Eider. The site qualifies for supporting over 1% of the populations of: - Sandwich tern. - Pink-footed goose. The site also supports populations of: - Redshank - Lapwing	- distribution of the species within site; - distribution and extent of habitats supporting the species; - structure, function and supporting processes of habitats supporting the species; and - no significant disturbance of the species.	Waterfowl assemblage - Favourable maintained Common tern – not assessed Eider – not assessed Lapwing – not assessed Little tern – not assessed Redshank – not assessed <u>Pressures</u> Pink-footed goose: - Recreation / disturbance Waterfowl assemblage: - Agricultural operations - Water management No pressures recorded for the remaining qualifying features.
Buchan Ness to Collieston Coast SPA – 6.9 km east at the closest point		
The site is designated for supporting internationally important populations of breeding seabirds: - Fulmar breeding. - Guillemot breeding. - Herring gull breeding - Kittiwake breeding. - Seabird assemblage breeding. - Shag breeding.	To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and To ensure for the qualifying species that the following are maintained in the long-term: - population of the species as a viable component of the site; - distribution of the species within site; - distribution and extent of habitats supporting the species; - structure, function and supporting processes of habitats supporting the species; and - no significant disturbance of the species.	<u>Condition Assessment</u> Fulmar - Unfavourable declining. Guillemot - Favourable maintained. Herring gull - Unfavourable no change. Kittiwake - Unfavourable no change. Shag - Unfavourable no change.

Qualifying Features	Conservation Objectives	Site Condition Assessment and Negative Pressures
		Seabird assemblage Favourable recovered. <u>Pressures</u> No negative pressures
Buchan Ness to Collieston SAC – 8.3 km southeast at the closest point		
The site is designated for the vegetated sea cliffs.	To ensure that the qualifying features of Strathglass Complex SAC are in favourable condition and make an appropriate contribution to achieving favourable conservation status. To ensure that the integrity of Strathglass Complex SAC is restored by meeting listed objectives.	<u>Condition Assessment</u> Vegetated sea cliffs Favourable declining. <u>Pressures</u> No negative pressures

4.4 Likely Significant Effects

- 4.4.1 **Table 4.4** details the results of the screening assessment. If there is no connection, or it is obvious that the Proposed Development will not undermine the conservation objectives despite a connection, no likely significant effect is concluded. All International Sites where there is potential for LSE are taken forward to **Appropriate Assessment**.
- 4.4.2 LSEs are considered, in line with the outcome of CJEU C-323 / 17 People Over Wind and Peter Sweetman vs Coillte Teoranta³⁶ in the absence of mitigation or measures that are not intrinsic to the Proposed Development.

³⁶ European Union (2018) CJEU C-323 / 17 People Over Wind and Peter Sweetman vs Coillte Teoranta. Available at: <https://curia.europa.eu/juris/liste.jsf?language=en&num=c-323/17>

Table 4.4: Screening Assessment

Qualifying Features and Connectivity	Screening Assessment
Glen Affric to Strathconon SPA	
The site is designated for a breeding population of golden eagle. This SPA is approximately 9.9 km at the closest point to the Proposed Development. The designation is connected to the Proposed Development through the River Beauly, however given the distance it is not considered to be hydroloically connected.	<u>Habitat Loss</u> There is no pathway for effect through direct habitat loss as the designated site is approximately 9.9 km away from the Proposed Development. In terms of indirect loss i.e. functionally linked habitat; a golden eagle's core ranging distance is 6 km; this includes areas of moorland, mountainous regions, islands and remote glens. They nest in eyries on cliffsides and in tall trees. Suitable habitat for golden eagle is not present in or around the Proposed Development which is largely arable land, grassland and small areas of woodland. Given the extensive availability of suitable foraging and nesting habitat in the wider landscape to the west of the Proposed Development, any temporary loss of habitat during construction or the minor permanent loss of habitat required for operation or access is considered unlikely to affect the population of golden eagles in the designated site. No LSE identified due to habitat loss during construction / decommissioning.
	<u>Injury or Mortality</u> The Proposed Development is situated sufficiently beyond the 6 km core ranging distance for golden eagle. Additionally, during surveys sightings of golden eagle were scarce and no evidence of breeding was observed (see Section 3.2). Therefore, it is highly unlikely that individuals associated with this SPA would occur in proximity to, and hence be at risk of adverse effects from, the Proposed Development. No LSE identified due to injury / mortality during construction / decommissioning.
	<u>Disturbance and Displacement</u> The Proposed Development is situated sufficiently beyond the 6 km core ranging distance for golden eagle. Additionally, during surveys sightings of golden eagle were scarce and no evidence of breeding was observed (see FWPM
	4.4.3 The results of the FWPM desk study are outlined in Table 1.1 of Confidential Appendix 1: Freshwater Pearl Mussel Data to this HRA Report. This table is provided separately to decision-makers in confidence due to the highly sensitive nature of the data therein.
	4.4.4 The results of the FWPM surveys are outlined in Table 1.2 of Confidential Appendix 1: Freshwater Pearl Mussel Data to this HRA Report. This table is provided separately to decision-makers in confidence due to the highly sensitive nature of the data therein.

Qualifying Features and Connectivity	Screening Assessment
	Ornithology). Therefore, it is highly unlikely that individuals associated with this SPA would occur in proximity to, and hence be at risk of adverse effects from, the Proposed Development. No LSE identified due to disturbance or displacement during construction / decommissioning. <u>Collision Risk</u> The Proposed Development is situated sufficiently beyond the 6 km core ranging distance for golden eagle for which this site is designated. Additionally, during surveys sightings of golden eagle were scarce and no evidence of breeding was observed (see FWPM 4.4.5 The results of the FWPM desk study are outlined in Table 1.1 of Confidential Appendix 1: Freshwater Pearl Mussel Data to this HRA Report. This table is provided separately to decision-makers in confidence due to the highly sensitive nature of the data therein. 4.4.6 The results of the FWPM surveys are outlined in Table 1.2 of Confidential Appendix 1: Freshwater Pearl Mussel Data to this HRA Report. This table is provided separately to decision-makers in confidence due to the highly sensitive nature of the data therein. Ornithology). Therefore, it is highly unlikely that individuals associated with this SPA would occur in proximity to, and hence be at risk of adverse effects from, the Proposed Development. No LSE identified due to collision risk during construction / decommissioning. <u>Introduction or Spread of INNS</u> No works will be required within the designated site. Due to the distance of the Proposed Development from the designated site, there is not expected to be any risk of introduction or spread of INNS into the designated site during construction or operation. No LSE identified due to the introduction or spread of INNS during construction / decommissioning. <u>Increases in Recreational Pressures</u> No works will be required within the designated site. Due to the distance from the designated site, there is not expected to be any vegetation clearance or other works which would increase accessibility to the SPA. LSEs on the qualifying habitats and species, as a result of increased recreational pressures and disturbance, can be ruled out at this stage. No LSE identified due to increased recreational pressures and disturbance during operation.

Qualifying Features and Connectivity	Screening Assessment
Strathglass Complex SAC	
The site is approximately 8.9 km from the Proposed Development and is located upstream via the River Beauly. Given the distance and the fact that it is upstream it would be considered beyond the maximum Zol for this development on habitats, therefore, habitats for this site will be screened out (see full list of habitats Table 4.3). The below information relates to otters designated for this site. Within Strathglass Complex SAC otters are known to frequent Loch Beinn a' Mheadhoin as well as the River Farrar. It is likely that they are also present in the River Cannich and River Affric, as well as their associated lochs.	<u>Habitat Loss</u> There is no pathway for effect through direct habitat loss as works will not be undertaken within the SAC. In addition, access routes or construction areas will not be required within or in proximity to the SAC. There will be temporary loss of a small amount of functionally linked supporting habitat outside of the SAC for otter, during construction. Given the distance and the extensive availability of suitable foraging and resting habitat within the SAC, any temporary loss of habitat during construction or the minor permanent loss of habitat required for operation or access outside the SAC is considered highly unlikely to adversely impact the population of otter or the integrity of the designated site. No LSE identified due to habitat loss during construction / decommissioning. <u>Changes In Water Quality</u> The designated site is approximately 8.9 km from the Proposed Development and is located upstream via the River Beauly. Given the distance and the fact that the designation is upstream means it would be considered beyond the maximum Zol for this development. No LSE identified due to changes in water quality during construction / decommissioning. <u>Injury or Mortality</u> Some works for construction and decommissioning are required in proximity to the River Beauly and its riparian habitats. There may be a risk of injury or mortality of otter during construction within riparian habitats, or due to vegetation clearance during operation to maintain wayleaves. LSE identified due to injury / mortality during construction / decommissioning and wayleave maintenance. <u>Disturbance and Displacement</u> Some works are required in proximity to the River Beauly and its riparian habitats which would be used by otter passing along the river corridor from the SAC. There may be a risk of disturbance and displacement of otter during construction / decommissioning within riparian habitats, or due to vegetation clearance during operation to maintain wayleaves. LSE identified due to disturbance and displacement during construction / decommissioning and wayleave maintenance. <u>Introduction or Spread of INNS</u> No works will be required within the designated site because of the Proposed Development. Due to the distance from the designated site, and the lack of hydrological or other connectivity, there is not expected to be any risk of introduction or spread of INNS into the designated site during construction or operation.

Qualifying Features and Connectivity	Screening Assessment
	No LSE identified due to introduction or spread of INNS during construction / decommissioning. <u>Increases in Recreational Pressures</u> No works will be required within the designated site. Due to the distance from the designated site, there is not expected to be any vegetation clearance or other works which would increase accessibility into the designated site. No LSE identified due to increases in recreational pressures during operation.
Conon Islands SAC	
The site is designated for alder woodland on floodplains. The site is approximately 8.4 km from the Proposed Development at its closest point and is not considered to be functionally or hydrologically connected.	<u>Habitat Loss</u> There is no pathway for effect through direct habitat loss within the designated site as works will not be undertaken within the SAC. In addition, access routes or construction areas will not be required within or in proximity to the SAC. No LSE identified due to habitat loss during construction / decommissioning. <u>Changes in Water Quality</u> There is no hydrological connectivity between the Proposed Development and the designated site. As such, there is no pathway for any water quality changes during construction or operation through pollution events or sedimentation. No LSE identified due to changes in water quality during construction / decommissioning. <u>Introduction or Spread of INNS</u> No works will be required within the designated site because of the Proposed Development. Due to the distance of the Proposed Development from the designated site, and the lack of hydrological or other connection, there is not expected to be any risk of introduction or spread of INNS into the designated site during construction or operation. No LSE identified due to the introduction or spread of INNS during construction / decommissioning. <u>Increases in Recreational Pressures</u> No works will be required within the designated site. Due to the distance from the designated site, there is not expected to be any vegetation clearance or other works which would increase accessibility into the designated site. No LSE identified due to increases in recreational pressures during construction / decommissioning.
Monadh Mor SAC	

Qualifying Features and Connectivity	Screening Assessment
The site qualifies for its very wet mires and bog woodland habitats. The site is approximately 7.5 km from the Proposed Development at its closest point and is not considered to be functionally or hydrologically connected.	<u>Habitat Loss</u> There is no pathway for effect through direct habitat loss within the designated site as works will not be undertaken within the SAC. In addition, access routes or construction areas will not be required within or in proximity to the SAC. No LSE identified due to habitat loss during construction / decommissioning. <u>Changes in Water Quality</u> There is no direct hydrological connectivity between the Proposed Development and the designated site. As such, there is no pathway for any water quality changes during construction or operation through pollution events or sedimentation to affect the designated site. No LSE identified due to changes in water quality during construction / decommissioning. <u>Introduction or Spread of INNS</u> No works will be required within the designated site as part of the Proposed Development. Due to the distance, and the lack of hydrological or other connection, there is not expected to be any risk of introduction or spread of INNS into the designated site during construction or operation. No LSE identified due to introduction or spread of INNS during construction / decommissioning. <u>Increases in Recreational Pressures</u> No works will be required within or in proximity to the designated site. No LSE identified due to increases in recreational pressures during operation.
Moniack Gorge SAC	
The site qualifies for the green shield-moss within the SAC. The site at Moniack is of an ideal humidity for this species (along with an interesting humidity-loving bryophyte and lichen assemblage). The woodland also has a number of very large logs in various stages of decay, which are a favoured habitat by the moss. The site is located approximately 0.3 km southwest and upslope of the Proposed Development with no water course connecting the SAC and the Proposed Development. Green shield-moss is a highly specialised and atypical moss whose habitat	<u>Habitat Loss</u> The main factor that could affect the green shield-moss population at Moniack Gorge SAC is from competition with other mosses and liverworts through micro-habitat succession on occupied deadwood. Other threats and pressures include the removal of dead and dying trees, including debris, or forest management to reduce old growth forests, both of which would reduce the availability of suitable habitat; therefore, it is essential that the extent is maintained and continuity of sheltered native woodland within the site. None of this habitat will be removed as works will not be undertaken within the SAC and access routes or construction areas would not be required within the SAC. No LSE identified due to habitat loss during construction / decommissioning. <u>Changes to Water Quality</u> Moniack Gorge is an extremely steep sided site with a fast flowing burn, with a small border of flat land next to the water course. The SAC is located approximately 0.3 km southwest and upslope of the Proposed

Qualifying Features and Connectivity	Screening Assessment
requirements are very specific, being restricted to well-decayed wood, particularly conifer logs, in damp, sheltered places in woodland.	Development. Given the elevated SAC being upslope of it, the Proposed Development is not considered likely to cause changes in water quality that would result in any loss of ability to <i>Maintain the habitats supporting the species within the site</i>. No LSE identified due to changes in water quality during construction / decommissioning. <u>Introduction or Spread of INNS</u> The Proposed Development is not located within the designated site and access routes will not be required to be within or in proximity to the designated site. However, INNS are noted as a pressure on the woods at this site and one of the conservation objectives is to <i>Maintain the habitats supporting the species within the site</i>. LSE identified due to introduction or spread of INNS during construction / decommissioning <u>Increases in Recreational Pressures</u> An access track is required to go through a small part of the wood north of the SAC. However, this is of sufficient distance that it will not increase pressure on green shield moss. In addition, as discussed above, Moniack Gorge is an extremely steep sided site and therefore access tracks and clearance would not be required nearby. No LSE identified due to increases in recreational pressures in construction / decommissioning.
Moray Firth SAC	
The site is designated for bottlenose dolphin and Subtidal sandbanks. The Proposed Development is approximately 1.1 km inland from this coastal SAC.	<u>Habitat Loss</u> There is no pathway for direct effect as the Proposed Development is located outside of the SAC. The SAC is of sufficient distance from the Proposed Development that access routes and construction areas are highly unlikely to be located within the designated site. The qualifying species of the SAC, the bottlenose dolphin, is a marine species. No impacts on marine habitats are expected as the Proposed Development is located inland away from the coast. No LSE identified due to habitat loss during construction / decommissioning. <u>Changes to Water Quality</u> Due to distance and nature of the designation it is considered highly unlikely the Proposed Development will have any effects on the SAC. Part of the Proposed Development crosses the River Beaully which flows into the Moray Firth. However, Inverness is located downstream of the Proposed Development separating it from the SAC. It is considered unlikely that any changes in water quality will have a significant effect on the qualifying species or habitats. In addition, while dolphins may be susceptible to changes in water quality, they are a marine species located in a large body of water. Is considered unlikely that dolphins would be close enough to shore to be affected by any changes in water quality, and any changes would likely be sufficiently diluted upon entering the Moray Firth to have no LSEs.

Qualifying Features and Connectivity	Screening Assessment
	While the Proposed Development crosses the River Ness and River Nairn, which feed into the Moray Firth, due to the distance from the designated site, any changes to water quality in the River Ness and / or River Nairn would be sufficiently diluted that no potential for effects is expected as a result of the Proposed Development No LSE identified due to changes in water quality during construction / decommissioning. <u>Disturbance and Displacement</u> No pathway for effect as the Proposed Development, at the closest point are approximately 1.2 km from any supporting habitats of the bottlenose dolphin. No LSE identified due to disturbance and displacement during construction / decommissioning. <u>Injury and Mortality</u> No pathway for effect as the Proposed Development, at the closest point are approximately 1.2 km from any supporting habitats of the bottlenose dolphin. No LSE identified due to injury and mortality during construction / decommissioning. <u>Introduction or Spread of INNS</u> No works will be required within the designated site as a result of the Proposed Development. Due to the distance from the designated site (1.2 km at the closet point), there is not expected to be any risk of introduction or spread of INNS into the designated site during construction or operation. No LSE identified due to introduction or spread of INNS during construction / decommissioning <u>Increases in Recreational Pressures</u> No works will be required within the designated site as a result of the Proposed Development. Due to the distance from the designated site, there is not expected to be any vegetation clearance or other works which would increase accessibility into the designated site. No LSE identified due to increases in recreational pressures during operation.
Moray Firth SPA	
The site qualifies for supporting internationally important populations of overwintering and migratory birds, as well as for its important waterfowl assemblage. One species is designated for breeding, the Shag. The Proposed Development is located approximately 0.85 km inland from this SPA. Part of the Proposed Development crosses the River Beaul	<u>Habitat Loss</u> There is no potential pathway for direct habitat loss as there are no works within the SPA. In addition, no access routes or construction will to be located within the SPA. The SPA has qualifying features that primarily use the marine offshore environment for foraging and resting habitat. Great northern divers and red-throated divers are almost entirely restricted to marine and coastal habitats (see Section 3.2 for results on divers). No marine or offshore habitats are likely to be affected by the Proposed Development. Slavonian grebe are largely coastal birds and occasionally are found on large inland waterbodies including lochs. No coastal habitats or inland waterbodies are located immediately adjacent to the part of the

Qualifying Features and Connectivity	Screening Assessment
which flows into the Moray Firth. However, Inverness is located downstream of the Proposed Development separating it from the SPA.	Proposed Development closest to the designated site. The shag, designated for breeding, nests in small colonies on rocky ledges and in caves along the coast and is rarely seen inland. No LSE identified due to habitat loss during construction / decommissioning. <u>Changes to Water Quality</u> Due to distance and nature of the designation it is considered highly unlikely the Proposed Development will have any effects on the SPA. Part of the Proposed Development crosses the River Beauly which flows into the Moray Firth. However, Inverness is located downstream of the Proposed Development separating it from the SPA, therefore, it is considered likely that any changes in water quality are unlikely to be significant or have an adverse effect on the qualifying species or habitats. While the Proposed Development crosses the River Ness and River Nairn, which feed into the Moray Firth, any changes to water quality in the River Ness and / or River Nairn would be sufficiently dilute that no potential for effects is expected as a result of the Proposed Development. No LSE identified due to changes in water quality during construction / decommissioning. <u>Injury or Mortality</u> The Proposed Development is located approximately 0.85 km inland from this SPA, which is designated for its seabird / seaduck populations. Therefore, the birds associated with it would not be at risk of being injured by works associated with the Proposed Development nor are they expected to regularly fly inland where they may intersect with the Proposed OHL Alignment. No LSE identified due to injury / mortality during construction / decommissioning. <u>Disturbance and Displacement</u> The Proposed Development is located approximately 0.85 km inland from this SPA, which is designated for its seabird / seaduck populations. Therefore, the birds associated with it would not be at risk of being disturbed by works associated with the Proposed Development nor are they expected to regularly fly inland where they may intersect with the Proposed OHL Alignment. No LSE identified due to disturbance and displacement during construction / decommissioning. <u>Collision Risk</u> The Proposed Development is located approximately 0.85 km inland from this SPA, which is designated for its non-breeding seabird / seaduck populations. Therefore, the birds associated with it would not be at risk of being disturbed by works associated with the Proposed Development nor are they expected to regularly fly inland where they may intersect with the OHL alignment. Consequently, it is reasonable to assume negligible / no risk of adverse effects on the seabird populations associated with this designated site. No LSE identified due to collision risk during construction / decommissioning. <u>Introduction or Spread of INNS</u>

Qualifying Features and Connectivity	Screening Assessment
	No works will be required within the designated site as a result of the Proposed Development. Due to the distance from the designated site (over 0.85 km at the closet point), there is not expected to be any risk of introduction or spread of INNS into the designated site during construction or operation. No LSE identified due to introduction or spread of INNS during construction / decommissioning <u>Increases in Recreational Pressures</u> No works will be required within the designated site as a result of the Proposed Development. Due to the distance from the designated site (over 0.85 km from the alignment options at the closest point), there is not expected to be any vegetation clearance or other works which would increase accessibility into the designated site. Therefore, LSEs on the qualifying habitats and species as a result of increased recreational pressures and disturbance can be ruled out at this stage. No LSE identified due to increases in recreational pressures during construction / decommissioning
Cromarty Firth SPA and Ramsar	
The site is designated for populations of European importance of osprey, common tern, whooper swan, and bar-tailed godwit, as well as over 20,000 wintering waterfowl. The site is also designated for a population of European importance of migratory greylag geese. The Ramsar site is also notified for its intertidal mudflats and sandflats. There is no pathway for effect for these. The Proposed Development is located approximately 13.2 km inland from this SPA, which is designated for its breeding seabird and overwintering pink-footed goose populations, as well as its broader non-breeding waterfowl assemblage. Although greylag geese were recorded flying across the Proposed OHL Alignment inland of the SPA / Ramsar Site they were observed infrequently and in low numbers and their recognised foraging grounds around the Inner Moray Firth are associated with near-coastal fields to the west of the Beaully Firth,	<u>Habitat Loss</u> No pathway for effect through direct habitat loss within the SPA as works will not be undertaken within the designated site. Access routes or construction areas will not be required within or in proximity to the SPA. While the breeding seabirds associated with this site would not be at risk of being affected by the Proposed Development there is a possibility that greylag geese may commute that far to access known foraging grounds. However, the Proposed Development does not overlap with, or come into close proximity to, any of the traditional foraging grounds which are known to be used by geese associated with this SPA (Mitchell and Hearn, (2004) and Mitchell, (2012). No LSE identified due to habitat loss during construction / decommissioning. <u>Changes to Water Quality</u> Part of the Proposed Development is in proximity to the River Beaully which flows into Cromarty Firth. However, given the context of the location with Inverness located downstream of the works between the Proposed Development and the SPA, it is considered highly unlikely that any changes in water quality will be significant or have an adverse effect on the qualifying species or habitats. Any water quality changes would likely be sufficiently dilute upon entering the Moray Firth to have no LSEs. Further west of the Proposed Development the River Nairn and River Ness flow into the Moray Firth, to which the Cromarty Firth is connected. However, the Cromarty Firth is not directly fed by these watercourses and is instead fed by the River Beaully. As such, due to the distance from the designation, there is not considered to be any direct pathways for effect through changes to water quality in these watercourses. Any changes to water quality in the River Ness and / or River Nairn would be sufficiently dilute that no potential for effects are expected.

Qualifying Features and Connectivity	Screening Assessment
along the southern shore between Alturlie Point / Castle Stuart and Ardesier and across the Black Isle (Hearn and Mitchell, (2004)³⁷ and Mitchell, (2012)³⁸), which are not intersected or segregated by the Proposed Development. Therefore, those birds which were observed flying across the Proposed OHL Alignment are unlikely to have been affiliated with the SPA / Ramsar site. The core osprey foraging range is 10 km (SNH, 2016b and Hardey <i>et al</i>, 2013).	No LSE identified due to changes in water quality during construction / decommissioning. <u>Injury or Mortality</u> While potentially suitable functionally linked supporting habitat for wintering greylag goose and osprey exists within the Proposed Development, there is not expected to be a risk of injury or mortality due to construction or operation. Wintering geese are found on semi-aquatic habitats, estuaries, marshes and flooded arable land. As geese are unlikely to be present within trees or hedgerows and are largely restricted to open habitats that will allow them to escape when disturbed, it is considered that there is no credible risk of injury or mortality of greylag geese during construction or operation. In addition, due to the distance from the designated site, there is not considered to be a risk of injury or mortality of the remaining qualifying species including osprey. No LSE identified due to injury / mortality during construction / decommissioning. <u>Disturbance and Displacement</u> As no works are required within the SPA, no pathway for effects due to disturbance and displacement of birds within the SPA is expected. The Proposed Development does not overlap with or come into close proximity to any of the traditional foraging grounds which are known to be used by geese associated with this SPA (Mitchell and Hearn, (2004) and Mitchell, (2012)). No LSE identified due to disturbance and displacement during construction / decommissioning. <u>Collision Risk</u> The Proposed Development is located almost 12 km inland from this SPA, there is a possibility that pink-footed geese may commute that far to access known foraging grounds. However, the Proposed Development does not overlap with, or come into close proximity to any of the traditional foraging grounds which are known to be used by geese associated with this SPA (Mitchell and Hearn, (2004) and Mitchell, (2012))³⁸. No LSE identified due to collision risk during construction / decommissioning. <u>Introduction or Spread of INNS</u> No works will be required within the designated site. Due to the distance of the Proposed Development from the designated site (over 12 km at the closet point), there is not expected to be any risk of introduction or spread of INNS into the designated site during construction or operation. No LSE identified due to introduction or spread of INNS during construction / decommissioning. <u>Increases in Recreational Pressures</u>

³⁷ Hearn, RD & CR Mitchell. (2004). Greylag Goose *Anser anser* (Iceland population) in Britain and Ireland 1960 / 61–1999 / 2000. Waterbird Review Series, The Wildfowl & Wetlands Trust / Joint Nature Conservation Committee, Slimbridge.

³⁸ Mitchell, C (2012). Mapping the distribution of feeding Pink-footed and Iceland Greylag Geese in Scotland. Wildfowl & Wetlands Trust / Scottish Natural Heritage Report, Slimbridge. 108pp.

Qualifying Features and Connectivity	Screening Assessment
	No works will be required within the designated site. Due to the distance from the designated site, there is not expected to be any vegetation clearance or other works which would increase accessibility into the designated site. No LSE identified due to increases in recreational pressures during construction / decommissioning.
Inner Moray Firth SPA and Ramsar	
For a list of the designated features of this SPA and Ramsar see Table 4.3, only breeding osprey will be further assessed, all other qualifying interests will be screened out (see below). The SPA is 505 m at closest point and the Ramsar is 509 m from the Proposed Development. The Inner Moray Firth SPA and Ramsar Site is only scoped in for assessment of potential effects on its qualifying osprey population, which nest in and around the Beaully and Inner Moray Firths and use the inshore coastal waters to forage. All other qualifying interests associated with the Inner Moray Firth SPA and Ramsar site are scoped out. Although greylag geese were recorded flying across the OHL alignment, inland of the SPA / Ramsar site, they were observed infrequently and in low numbers. Their recognised foraging grounds around the Inner Moray Firth are associated with near-coastal fields to the west of the Beaully Firth, along the southern shore between Alturlie Point / Castle Stuart and Ardesier and across the Black Isle (Hearn and Mitchell, (2004)³⁹ and Mitchell, (2012)⁴⁰), which are not intersected or segregated by the Proposed Development.	<u>Habitat Loss</u> The core osprey foraging range is 10 km (SNH, 2016b), therefore all osprey nest sites and locations of frequently observed osprey activity within this distance from the SPA / Ramsar Site complex are considered to be affiliated with birds associated with the SPA / Ramsar Site. This includes osprey activity recorded in the River Beaully Corridor, River Ness / Caledonian Canal Corridor, Drummoissie Muir and River Nairn Corridor and Assich Forest / Strathdearn Foothills Focal Areas. Therefore, there is a potential pathway for effect due to loss of functionally linked supporting habitats outside of the SPA during construction and decommissioning. Ospreys may use habitat within the Proposed Development Zol to forage, and therefore they are functionally linked. Given the wide availability of suitable foraging and commuting habitats for the qualifying species within the surrounding landscape, any minor loss of habitats during construction and operation is temporary, and unlikely to affect the conservation objectives of the qualifying species. However, at this stage, LSEs due to the loss of functionally linked supporting habitat used by qualifying species outside of the SPA cannot be fully ruled out. LSE identified due to potential loss of functionally linked supporting habitat in construction / decommissioning and wayleave maintenance for qualifying species - osprey only. <u>Changes to Water Quality</u> The Proposed Development crosses the River Ness and River Nairn, which feed into the Moray Firth. However, given nature of the designation (a large waterbody) it is considered highly unlikely the Proposed Development will have any effects on the SPA, any unlikely changes to water quality would be sufficiently dilute that no potential for effects is expected. No LSE identified due to changes in water quality in construction / decommissioning. <u>Injury or Mortality</u>

³⁹ Hearn, RD & CR Mitchell. 2004. Greylag Goose *Anser anser* (Iceland population) in Britain and Ireland 1960 / 61–1999 / 2000. Waterbird Review Series, The Wildfowl & Wetlands Trust / Joint Nature Conservation Committee, Slimbridge.

⁴⁰ Mitchell, C. (2012). Mapping the distribution of feeding Pink-footed and Iceland Greylag Geese in Scotland. Wildfowl & Wetlands Trust / Scottish Natural Heritage Report, Slimbridge. 108pp.

Qualifying Features and Connectivity	Screening Assessment
Therefore, those birds which were observed flying across the Proposed OHL Alignment are unlikely to have been affiliated with the SPA / Ramsar site. All other overwintering waterfowl and wading birds and breeding common terns for which the site is designated are strongly affiliated with the coastal and estuarine habitats of the Beaully and Inner Moray Firths and were recorded rarely if at all during field surveys of the adjacent, inland sections of the Proposed Development. All other overwintering waterfowl and wading birds and breeding common terns for which the site is designated are strongly affiliated with the coastal and estuarine habitats of the Beaully and Inner Moray Firths and were recorded rarely if at all during field surveys of the adjacent, inland sections of the Proposed Development (Section 3.2). There is no pathway for effect for the habitats included in the Ramsar citation: shingle, saltmarsh, sand dunes intertidal mudflats and sandflats.	Due to the distance from the SPA, injury or mortality of qualifying species within the designated site is not considered likely. However, as suitable supporting habitat for qualifying species exists within the Proposed Development, there is potential for injury or mortality of osprey from the SPA in functionally linked habitats outside the site, during construction. LSE identified due to injury and mortality of osprey using functionally linked habitats during construction / decommissioning. <u>Disturbance and Displacement</u> Due to the distance from the SPA, disturbance or displacement of qualifying species within the designated site is not considered likely. However, as suitable supporting habitat for qualifying species exists within the Proposed Development, there is potential for disturbance or displacement of osprey from the SPA in functionally linked habitats outside the site, during construction / decommissioning. LSE identified due to disturbance and displacement of qualifying species using functionally linked habitats during construction / decommissioning. <u>Collision Risk</u> Potential for osprey to be adversely affected by collisions with overhead lines when moving from inland habitats towards the coast. LSE identified due to collision risk of osprey using functionally linked habitats during construction / decommissioning. <u>Introduction or Spread of INNS</u> No works will be required within the designated site as a result of the Proposed Development. However, due to the distance of the Proposed Development from the designated site, risk of introduction or spread of INNS into the designated site during construction or operation cannot be ruled out. LSE identified due to introduction or spread of INNS during construction / decommissioning. <u>Increases in Recreational Pressures</u> No works will be required within the designated site as a result of the Proposed Development. Due to the distance from the designated site, there is not expected to be any vegetation clearance or other works which would increase accessibility into the designated site. No LSE identified due to increases in recreational pressures during operation.
Loch Ashie SPA	

Qualifying Features and Connectivity	Screening Assessment
The site is designated for supporting an internationally important breeding population of Slavonian grebe, approximately 2.9 km at closest point.	<u>Habitat Loss</u> As work will not be undertaken within the SPA there is no potential pathway for direct habitat loss. In addition, due to the distance of the Proposed Development from the international site, no access routes or construction areas will be located within the SPA. Slavonian grebe are largely coastal birds, but are found on large inland waterbodies including lochs during breeding season. No coastal habitats or large inland waterbodies are located within the Proposed Development or the adjacent Proposed Development. No LSE identified due to habitat loss during construction / decommissioning. <u>Changes to Water Quality</u> Proposed Development is hydrologically connected to Loch Ashie. However, the loch is located upstream of these watercourses. As such, any LSEs due to changes to water quality can be ruled out at this stage. No LSE identified due to changes in water quality during construction / decommissioning. <u>Disturbance and Displacement</u> The Slavonian grebe has a predominantly aquatic habitat and feeds predominately on fish and crustaceans. The Proposed Development at the closest point is located 2.9 km from the designated site. At this distance there is not expected to be any disturbance due to noise, vibration or visual disturbance during construction or operation. No LSE identified due to disturbance and displacement during construction / decommissioning. <u>Injury or Mortality</u> As no works are required within proximity to any supporting habitat for Slavonian grebe, there are not expected to be any pathways for LSEs as a result of injury or mortality of the qualifying species during construction or operation. No LSE identified due to injury / mortality during construction / decommissioning. <u>Collision Risk</u> Slavonian grebes are not likely to undertake regular flights to and from the lochs which may intersect with the Proposed OHL Alignment, therefore it is reasonable to assume negligible / no risk of adverse effects on the populations of these designated sites. No LSE identified due to collision risk during construction / decommissioning. <u>Introduction or Spread of INNS</u> No works will be required within the designated site as a result of the Proposed Development. Due to the distance from the designated site, there is not expected to be any risk of introduction or spread of INNS into the designated site during construction or operation.

Qualifying Features and Connectivity	Screening Assessment
	No LSE identified due to introduction or spread of INNS during construction / decommissioning <u>Increases in Recreational Pressures</u> No works will be required within the designated site as a result of the Proposed Development. Due to the distance from the designated site, there is not expected to be any vegetation clearance or other works which would increase accessibility into the designated site. No LSE identified due to increases in recreational pressures during operation.
Loch Flemington SPA	
The site is designated for supporting an internationally important breeding population of Slavonian grebe and is approximately 4.4 km from the Proposed Development.	<u>Habitat Loss</u> There is no potential pathway for effect as no works within the SPA are required. In addition, due to the distance of the Proposed Development from the International Site, no access routes or construction areas will be located within the SPA. Slavonian grebe are largely coastal birds, and are found on large inland waterbodies including lochs during breeding season. No coastal habitats or large inland waterbodies are located within the zone of influence of the Proposed Development. No LSE identified due to habitat loss during construction / decommissioning. <u>Changes to Water Quality</u> There is no direct hydrological connection between the Proposed Development and Loch Flemington. As the designated site is approximately 5.5 km at the closest point from any of the Proposed Development, any changes to water quality are not considered to have any LSEs on the designated site or the qualifying features. No LSE identified due to changes in water quality during construction / decommissioning. <u>Disturbance and Displacement</u> There is no pathway for effect as the Slavonian grebe has a predominantly aquatic habitat and feeds predominately on fish and crustaceans. The Proposed Development at the closest point are located approximately 5.5 km from the designated site. At this distance there is not expected to be any disturbance due to noise, vibration or visual disturbance during construction or operation. No LSE identified due to disturbance and displacement during construction / decommissioning. <u>Injury or Mortality</u> As no works are required within proximity to any supporting habitat for Slavonian grebe, there are not expected to be any pathways for LSEs as a result of injury or mortality of the qualifying species. No LSE identified due to injury / mortality during construction / decommissioning.

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	<u>Collision Risk</u> Slavonian grebes are not likely to undertake regular flights to and from the lochs which may intersect with the OHL alignment, therefore it is reasonable to assume negligible / no risk of adverse effects on the populations of these designated sites. No LSE identified due to collision risk during construction / decommissioning. <u>Introduction or Spread of INNS</u> No works will be required within the designated site as a result of the Proposed Development. Due to the distance from the designated site, there is not expected to be any risk of introduction or spread of INNS into the designated site during construction or operation. No LSE identified due to introduction or spread of INNS during construction / decommissioning <u>Increases in Recreational Pressures</u> No works will be required within the designated site as a result of the Proposed Development. Due to the distance from the designated site, there will be no vegetation clearance or other works which would increase accessibility into the designated site. No LSE identified due to increases in recreational pressures during construction / decommissioning.
Moray and Nairn Coast SPA and Ramsar	
For a list of the designated features of this SPA see Table 4.3; only osprey that forage across the SPA will be further assessed, all other qualifying interests will be screened out (see below). Approximately 3 km at the closest point. The River Spey runs through the designation and the Proposed Development. The Moray and Nairn Coast SPA and Ramsar site is only scoped in for assessment of potential effects on its qualifying osprey population, which nest in and around the Moray Firth and use the inshore coastal waters to forage. All other qualifying interests associated with the Moray and Nairn Coast SPA and Ramsar site are scoped out. The core osprey foraging range is 10 km (SNH, 2016), therefore all osprey nest sites and locations of frequently observed osprey activity within this	<u>Habitat Loss</u> There is no potential pathway for direct habitat loss within the designated site as no works within the SPA are required. In addition, due to the distance of the Proposed Development from the designated site, no access routes or construction areas will be located within the SPA. However, there is a potential pathway for effect as a result of the loss of functionally linked supporting habitats. This SPA has qualifying features that may use habitat within the Proposed Development footprint to forage and nest and therefore they are functionally linked. Osprey utilise a range of habitats for breeding including large trees, cliff ledges, coastal rocks and tall man-made structures; the population as of 2008-2012 (JNCC., 2019)) has up to nine foraging pairs within the SPA (and seven breeding). LSE on osprey as a result of loss of functionally linked supporting habitats during construction cannot be ruled out at this stage. Pairs of osprey breeding within the SPA would not be directly affected but there are breeding pairs outwith the SPA that may forage across it and may be affected by loss of functionally linked foraging habitat within the Zol of the Proposed Development.

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distance from the SPA / Ramsar site complex are considered to be affiliated with birds associated with the SPA / Ramsar site. This includes osprey activity recorded in the Brown Muir and River Spey Corridor / Wood of Ordiequish Focal Areas. It is feasible that osprey within 10.5 km of the SPA (the distance from the Proposed Development to the SPA) would be so affiliated also. Although pink-footed and greylag geese were recorded flying across the Proposed OHL Alignment inland of the SPA / Ramsar site they were generally observed infrequently and / or in low numbers. Additionally, their recognised foraging grounds around the Moray Firth and Nairn Coast are associated with near-coastal fields between Findhorn Bay and the lower reaches of the River Spey, as well to the east of Nairn for pink-footed geese (Mitchell and Hearn, (2004)⁴¹ and Mitchell, (2012)), which are not intersected or segregated by the Proposed Development, and so those birds which were observed flying across the Proposed OHL Alignment are unlikely to have been affiliated with the SPA / Ramsar site. Flights for pink-footed goose were recorded throughout the overwintering period, but were most frequent during the autumn and spring passage periods, most likely reflecting migratory movements rather than daily commuting flights between local roosting and foraging areas. All other overwintering waterfowl and wading birds and breeding common terns for which the site is designated are strongly affiliated with the coastal	LSE identified due to potential loss of functionally linked supporting habitats (construction / decommissioning) for foraging osprey that may breed outwith the SPA and within the Zol of the Proposed Development. <u>Changes to Water Quality</u> The Proposed Development is over 10 km from the designation and would therefore not be considered hydrologically connected. No LSE identified due to changes in water quality in construction / decommissioning. <u>Injury and Mortality</u> As detailed above, as potentially suitable supporting habitat for ospreys exists within the Proposed Development, there is potential for disturbance and displacement of the species on supporting habitats outside of the designated site. LSE identified due to foraging ospreys travelling to supporting habitats during construction / decommissioning, that may breed outwith the SPA and within the Zol of the Proposed Development. <u>Disturbance and Displacement</u> As detailed above, as potentially suitable supporting habitat for the qualifying bird species exists within the Proposed Development, there is potential for disturbance and displacement of the species on supporting habitats outside of the designated site. LSE identified due to foraging ospreys travelling to supporting habitats during construction / decommissioning, that may breed outwith the SPA and within the Zol of the Proposed Development. <u>Collision Risk</u> LSE identified due to foraging ospreys travelling to supporting habitats during construction / decommissioning, that may breed outwith the SPA and within the Zol of the Proposed Development. <u>Introduction or Spread of INNS</u> No works will be required within the designated site as a result of the Proposed Development and give the distance the designated site is not hydrologically connected to the Proposed Development. No LSE identified due to introduction or spread of INNS in construction / decommissioning. <u>Increases in Recreational Pressures</u>

⁴¹ Mitchell, CR & RD Hearn. (2004). Pink-footed Goose *Anser brachyrhynchus* (Greenland / Iceland population) in Britain 1960 / 61 – 1999 / 2000. Waterbird Review Series, The Wildfowl & Wetlands Trust / Joint Nature Conservation Committee, Slimbridge.

Qualifying Features and Connectivity	Screening Assessment
and estuarine habitats of the Beaully and Inner Moray Firths and were recorded rarely if at all during field surveys of the adjacent, inland sections of the Proposed Development. There is no pathway for effect on the habitats included in the Ramsar citation: shingle, wet woodland, saltmarsh or sand dunes.	No works will be required within the designated site as a result of the Proposed Development. Due to the distance from the designated site, there is not expected to be any vegetation clearance or other works which would increase accessibility into the designated site. No LSE identified due to increases in recreational pressures during operation.
Carn nan Tri-tighearnan SAC	
The site is designated for blanket bog habitat. The designation is located 1.5 km upslope at its closest point to the Proposed Development. Blanket bogs - Carn nan Tri-Tighearnan lies on a plateau at more than 600 m altitude. It is an example of an upland bog in the eastern Scottish Highlands. It is characterised by cool climate conditions and extreme 'wetness'. Dense sheets of lichen- rich blanket bog are dominated by species of reindeer-moss lichen Cladonia. Such bog is very similar in character to areas of peat formation in central and eastern Norway. Other vegetation on this site consists of a dwarf-shrub cover, beneath which can be found relatively continuous carpets of Sphagnum. Surface patterning resulting from combinations of high-ridges and hummocks is evident in many places.	<u>Habitat Loss</u> There is no pathway for effect as the Proposed Development is located outside of the SAC. The SAC is of sufficient distance and the works that access routes and construction areas will not be located within the designated site. No LSE identified due to habitat loss during construction / decommissioning. <u>Changes to Water Quality</u> This bog is situated over 600 m above sea level and is located upstream of the connecting watercourses. Due to the altitude, distance and nature of the designation it is considered highly unlikely the Proposed Development will have any effects on the SAC. Any water quality changes would occur downstream of the SAC, and as such would not be likely to have LSEs on the designated site. No LSE identified due to changes in water quality during construction / decommissioning. <u>Introduction or Spread of INNS</u> No works will be required within the designated site as a result of the Proposed Development. While the designated site is hydrologically connected at Riereach Burn, it is located upstream and uphill of the Proposed Development. No LSE identified due to introduction or spread of INNS in construction / decommissioning <u>Increases in Recreational Pressures</u> No works will be required within the designated site as a result of the Proposed Development. Due to the distance from the designated site, there is not expected to be any vegetation clearance or other works which would increase accessibility into the designated site. No LSE identified due to increases in recreational pressures during operation.

Qualifying Features and Connectivity	Screening Assessment
Cawdor Wood SAC	
The site is designated for the western acidic oak woodland habitats. Approximately 0.3 km at closest point. The designated site is potentially hydrologically connected to the Proposed Development.	<u>Habitat Loss</u> There is no pathway for effect as the Proposed Development is located outside of the SAC. The SAC is of sufficient distance from the Proposed Development that access routes and construction will not be located within the designated site. No LSE identified due to habitat loss during construction / decommissioning. <u>Changes to Water Quality</u> The designated site is potentially hydrologically connected to the Proposed Development and is located 0.3 km downstream. Changes in water quality that would affect the habitats are thought unlikely, however, large-scale pollution events during construction / decommissioning may have an adverse impact on the integrity woodland habitats within the designated site. Both Allt Dearg and Riereach Burn flow through the woodland and contamination of soils could adversely affect the integrity of the qualifying habitat. LSE identified due to changes in water quality during construction / decommissioning. <u>Introduction or Spread of INNS</u> No works will be required within the designated site as a result of the Proposed Development. However, as the designated site is hydrologically connected to the Proposed Development due to the Allt Dearg and Riereach Burn crossings, which flow into the designated site, there is potential for introduction or spread of INNS via the river. In addition, invasive species are listed as a particular threat to the designated site. LSE identified due to risk of spread of INNS during construction / decommissioning. <u>Increases in Recreational Pressures</u> LSEs on the qualifying habitats and species because of increased recreational pressures due to increased access. Therefore, disturbance cannot be ruled out at this stage. LSE identified due to potential increase in recreational pressures during operation.
Darnaway and Lethen Forest SPA	
The site is designated for an internationally important breeding population of capercaillie. The Proposed Development is located 3.6 km from Darnaway and Lethen Forest SPA. The SPA is connected to forest habitat in the wider surrounding area. Indeed, the capercaillie population associated with the SPA is considered to be so fragmented and	<u>Habitat Loss</u> The Proposed Development will be largely located over arable, bog and grassland where possible in some areas it does pass through capercaillie core areas (Forestry Commission Scotland, 2008)⁹. Surveys have been undertaken of all woodland blocks along the Proposed Development connected with Darnaway and Lethen Forest and to date no evidence of capercaillie has been found. However, as it is not possible to rule out the presence of capercaillie in the woodland along the entirety.

Qualifying Features and Connectivity	Screening Assessment
exists at such low density that birds which occur outwith the SPA are considered to be part of the wider metapopulation (i.e. a group of spatially separated populations which interact and are dependent on one another). Darnaway and Lethan Forest SPA was originally designated for a population of 23 individuals based on counts undertaken between 1999 and 2003. However, the population is understood to have declined significantly over recent decades in line with national trends. Indeed, lek count surveys undertaken between 2015 and 2024 show the number of lekking males recorded in the broadly associated Nairn and Moray sub-recording areas to have reduced from less than 10 to none since 2023 (Cairngorms Capercaillie Project, 2024)⁴². While this does not include immature, non-lekking males and females, the population has clearly reduced to critical levels, such that the current population affiliated with the SPA is likely to be no more than 10 or 15 individuals. As noted above however, capercaillie population associated with the SPA is considered to exist as part of a metapopulation distributed throughout the wider surrounding area (i.e. Nairn and Moray). Based on the counts upon which the Easter Ross, Nairn and Moray population estimate (70) is based, only six capercaillie were recorded in just four 5 km² grid squares; two of which were within the Nairn and Moray sub-recording areas (these grid squares were those affiliated with the Darnaway and Lethan Forest SPA and Dulsie Wood) (Wilkinson et al, 2023).	LSE identified due to loss of functionally linked habitat during construction / decommissioning. <u>Changes to Water Quality</u> The designated site is directly hydrologically connected to the Proposed Development as it crosses the River Findhorn and the River Divie which flow into or adjacent the site several kilometres upstream of the SPA. However, given the distance and the fact that the supporting habitats for capercaillie in the SPA are terrestrial, rather than riparian or aquatic, LSE can be ruled out at this stage. No LSE identified due to changes in water quality in construction / decommissioning. <u>Injury or Mortality</u> As the Proposed Development is located within the core areas for capercaillie and contains woodland habitats which may be suitable supporting habitat for the species, it is not possible to rule out their presence. Although it should be noted that no capercaillie have been recorded within Proposed Development to date. As such, there may be potential for injury or mortality of capercaillie during construction / decommissioning, through injury during vegetation clearance or other construction activities, or fence collisions with construction fencing (which capercaillie are known to be at risk of (Forestry Commission Scotland, 2008). LSE identified due to potential for injury or mortality during construction / decommissioning. <u>Disturbance and Displacement</u> As the Proposed Development is located within the core areas for capercaillie and contains woodland habitats which may be suitable supporting habitat for the species, it is not possible to rule out their presence. As such, there may be potential for disturbance or displacement of the qualifying species during construction through noise, vibration or visual means. LSE identified due to disturbance and displacement in construction / decommissioning. <u>Collision Risk</u> Studies of capercaillie in Europe have noted the species to be at risk of collisions with overhead power lines, with casualties being recorded (Bevanger; 1995¹⁰; Bevanger <i>et al</i>, 2012)¹¹. As the Proposed Development crosses potentially suitable habitat within the capercaillie core areas, there is potential for collisions with OHLs to be a risk to the qualifying species during operation. LSE identified due to collision risk in operation. <u>Introduction or Spread of INNS</u>

⁴² Cairngorms Capercaillie Project (2024). Capercaillie Lek Count Report 2024. Available at: <https://cairngormscapercaillie.scot/capercaillie-lek-count-report-2024/>.

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Therefore, it is estimated that the population associated with the Nairn and Moray sub-recording area is approximately half that of the wider Easter Ross, Nairn and Moray recording area. Hence, it is reasonable to assume that the SPA population is more likely to be in the region of 30-40 individuals.	No works will be required within the designated site as a result of the Proposed Development. As discussed above, the Proposed Development is directly hydrologically connected, and the river corridor could provide a ready means of transport for species such as Japanese knotweed and Indian balsam. LSE identified for SPA capercaillie due to introduction of INNS during construction / decommissioning. <u>Increases in Recreational Pressures</u> Given the consideration of the wider metapopulation and how sensitive this species is to disturbance, the potential for increases in disturbance created by additional access means LSE cannot be ruled out at this stage. LSE identified due to increases in recreational pressure during operation.
Lower Findhorn Woods SAC	
The qualifying features of this SAC are Tilio-Acerion forests of slopes, screes and ravines. The designation is approximately 1.9 km downstream and therefore may be hydrologically connected.	<u>Habitat Loss</u> There is no pathway for direct habitat loss within the SAC, as the Proposed Development does not pass within or in proximity to the designated site. The SPA is also of sufficient distance from the Proposed Development that access routes and construction areas will not be located within the designated site. The Proposed Development, at the closest point, would be over 1.9 km from the designated site. As such, any minor loss of woodland during construction is considered highly unlikely to result in an LSE on the SAC habitats. No LSE identified due to habitat loss in construction / decommissioning. <u>Changes to Water Quality</u> The designation is approximately 1.9 km downstream from the Proposed Development. Given the distance, and the fact that no works will be undertaken in the watercourse, and no access tracks will be in proximity means changes in water quality are highly unlikely, however, cannot be ruled out at this stage. LSE identified due to changes in water quality in construction / decommissioning. <u>Introduction or Spread of INNS</u> No works will be required within the designated site as a result of the Proposed Development. However, it is hydrologically connected, as it crosses the River Findhorn and the River Divie which flow into the site. Vegetation clearance and construction on the slopes above the rivers may pose a risk of the spread of INNS into the designated site. LSE identified due to introduction or spread of INNS in construction / decommissioning <u>Increases in Recreational Pressures</u> No works will be required within the designated site as a result of the Proposed Development. Due to the distance from the designated site, there is not expected to be any vegetation clearance or other works which would increase accessibility into the designated site.

Qualifying Features and Connectivity	Screening Assessment
	No LSE identified due to increases in recreational pressures during operation.
Moidach More SAC	
The site is designated for blanket bogs. Approximately 1.5 km and upstream of the Proposed Development, therefore not considered hydrologically connected.	<u>Habitat Loss</u> There is no pathway for effect as work will not be undertaken within the SAC. Any construction corridors and access routes will be located outside of the SAC. No LSE identified due to habitat loss in construction / decommissioning. <u>Changes to Water Quality</u> Moidach More SAC is uphill and upstream from the Proposed Development. As such, it is considered unlikely that any changes to surface or ground water quality would have a LSE on the qualifying habitats. In addition, while the Proposed Development would cross the River Divie, it is considered unlikely that any change to water quality within the river would have an LSE on the habitats within the designated site due to the upstream location. No LSE identified due to changes in water quality in construction / decommissioning. <u>Introduction or Spread of INNS</u> No works will be required within the designated site. While the Proposed Development is hydrologically connected at the River Divie, the designated site is located upstream and uphill of the Proposed Development. Due to the uphill and upstream location of the designated site, and no requirement for works within the designated site, there is not expected to be a risk of the spread or introduction of INNS. No LSE identified due to introduction or spread of INNS in construction / decommissioning. <u>Increases in Recreational Pressures</u> No works will be required within the designated site as a result of the Proposed Development. There is not expected to be any vegetation clearance or other works which would increase accessibility into the designated site. No LSE identified due to increases in recreational pressures during operation.
Loch Spynie SPA and Ramsar	
The SPA is designated for Greylag goose non-breeding. Approx 9.7 km from the Proposed Development. There is no direct hydrological connection to the designated site. There are no pathways for effect on any of the habitats also included in the Ramsar citation – eutrophic lochs, open water transition fens, wet	<u>Habitat Loss</u> There is no pathway for direct loss of habitats within the SPA, as the Proposed Development does not pass within the designated site. Access routes or construction areas will not be located within the SPA. The Proposed Development is located almost 10 km inland from this SPA, which is designated for its populations of overwintering greylag geese. The Proposed Development does not overlap with, or come into proximity to,

Qualifying Features and Connectivity	Screening Assessment
woodland and the vascular plant assemblage. The Ramsar site is 9.4 km from the Proposed Development Although greylag geese were recorded flying across the Proposed OHL Alignment inland of the SPA / Ramsar site they were generally observed infrequently and / or in low numbers. Additionally, their recognised foraging grounds around the Moray Firth and Nairn Coast are associated with near-coastal fields between Findhorn Bay and the lower reaches of the River Spey (Mitchell and Hearn, (2004)⁴³ and Mitchell, (2012)), which are not intersected or segregated by the Proposed Development, and so those birds which were observed flying across the Proposed OHL Alignment are unlikely to have been affiliated with the SPA / Ramsar site.	any of the traditional foraging grounds which are known to be used by geese associated with this SPA (Mitchell and Hearn, (2004) and Mitchell, (2012). No LSEs on greylag geese as loss of functionally linked supporting habitat outside of the SPA can be ruled out. <u>Changes to Water Quality</u> Loch Spynie is not directly hydrologically connected to the Proposed Development. Due to the distance from the designated site, any changes in water quality as a result are considered likely to be sufficiently dilute not to result in a LSE. No LSE identified due to changes in water quality in construction / decommissioning. <u>Injury or Mortality</u> The Proposed Development does not overlap with, or come into close proximity to any of the traditional foraging grounds which are known to be used by geese associated with this SPA (Mitchell and Hearn, (2004) and Mitchell, (2012)) and although there was a relatively high frequency of flights inland along the River Spey corridor, the vast majority of these were not at PRC. Consequently, it is reasonable to assume negligible / no risk of adverse effects on the bird populations associated with this designated site. No LSE identified due to injury or mortality in construction / decommissioning. <u>Disturbance and Displacement</u> As no works are required within the SPA, no pathway for effects due to disturbance and displacement of greylag geese within the designated site is expected. However, as potentially suitable functionally linked supporting habitat for greylag geese exists within the Proposed Development footprint, there is potential for disturbance and displacement of the species on supporting habitats outside of the designated site. This may occur during construction due to increase noise, vibration or visual disturbance, or during operation due to the maintenance of wayleaves. The Proposed Development does not overlap with, or come into close proximity to, any of the traditional foraging grounds which are known to be used by geese associated with this SPA (Mitchell and Hearn, (2004) and Mitchell, (2012)) and although there was a relatively high frequency of flights inland along the River Spey corridor, the vast majority of these were not at PRC. Therefore, it is reasonable to assume no risk of adverse effects on the bird populations associated with this designated site. No LSE identified due to disturbance and displacement in construction / decommissioning. <u>Collision Risk</u>

⁴³ Mitchell, CR & RD Hearn. (2004). Pink-footed Goose *Anser brachyrhynchus* (Greenland / Iceland population) in Britain 1960 / 61 – 1999 / 2000. Waterbird Review Series, The Wildfowl & Wetlands Trust / Joint Nature Conservation Committee, Slimbridge.

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	There is a potential pathway for effect. Geese and swans are considered most vulnerable to collision with OHL, most likely due to where OHLs are positioned and the results of increased injury in comparison to other birds due to their heavy bodies (Frost, 2008). The Proposed Development does not overlap with, or come into close proximity to, any of the traditional foraging grounds which are known to be used by geese associated with this SPA (Mitchell and Hearn, (2004) and Mitchell, (2012)) and although there was a relatively high frequency of flights inland along the River Spey corridor, the vast majority of these were not at PRC. Therefore, it is reasonable to assume no risk of adverse effects on the bird populations associated with this designated site. No LSEs on greylag geese due to collision risk in construction / decommissioning. <u>Introduction or Spread of INNS</u> No works will be required within the designated site as a result of the Proposed Development. Due to the distance of the Proposed Development from the designated site (over 9 km at the closest point), and the lack of hydrological or other connectivity, there is not considered to be a pathway for the introduction or spread of INNS in the designated site. No LSEs on the qualifying habitats and species due to the introduction or spread of INNS during construction / decommissioning. <u>Increases in Recreational Pressures</u> No works will be required within the designated site as a result of the Proposed Development. Due to the distance from the designated site (over 9 km at the closest point), there is not expected to be any vegetation clearance or other works which would increase accessibility into the designated site. No LSEs on the qualifying habitats and species as a result of increased recreational pressures and disturbance during operation.
River Spey SAC	
The qualifying interests of the River Spey are the FWPM, Atlantic salmon, sea lamprey and otter. The designation is situated 19 m east and at the same elevation as the Proposed Development (nearest proposed tower) and therefore is considered to be hydrologically connected. The OHL will oversail the River Spey and no works will be undertaken in the watercourse.	<u>Habitat Loss</u> No construction will be required within the watercourses, as such, LSEs on sea lamprey, Atlantic salmon and FWPM due to direct habitat loss are not expected. However, otters occupy very large home ranges (between 20 – 30 km), which includes functionally linked terrestrial habitat. As the Proposed Development is in proximity to the River Spey, LSEs on otter due to loss of functionally linked supporting habitat outside of the SAC cannot be ruled out. LSE identified for functionally linked terrestrial habitat, due to construction. <u>Changes in Water Quality</u>

Qualifying Features and Connectivity	Screening Assessment
	While no works will be required within the watercourse, due to the proximity of the Proposed Development to the River Spey, there is potential for changes in water quality during construction due to pollution events or sediment runoff. Clearance of vegetation during construction or following completion to maintain access may also result in increased risk of runoff. In addition, as the floodplain and river gravels hold groundwater, any impacts on these areas has the potential to impact the groundwater and River Spey. Any excavations associated with the towers and creation of access tracks may have the potential to impact groundwater movements and would require careful design to avoid impacts on the River Spey, and riparian vegetation. As such, LSEs due to changes in water quality cannot be ruled out at this stage. LSE identified due to water quality changes in construction. <u>Injury or Mortality</u> Injury or mortality to otter passing along river corridor is possible during construction / decommissioning activities should construction / decommissioning be required within these habitats. As a tower is located in proximity to the river corridor within the designation, it is not possible to rule out the potential for injury or mortality of otter. While no works will be undertaken within the watercourse, any potential for changes in water quality due to pollution events of increased sedimentation may result in injury or mortality of salmon, sea lamprey and FWPM within the river. LSE identified due to risk of injury / mortality to qualifying species during construction / decommissioning. <u>Disturbance and Displacement</u> The River Spey supports salmon and sea lamprey which may migrate through the areas the Proposed Development oversails and there is one tower proposed close to the western bank of the Spey. FWPM rely on salmon to complete their life cycle. While work will not be undertaken within the watercourse, disturbance due to vibration from adjacent construction cannot be ruled out at this stage. In addition, there is a potential pathway for disturbance and displacement of otter using the riparian and aquatic habitats of the River Spey during construction. Adjacent construction may have the potential to result in noise, vibration or visual disturbance, temporarily displacing otter during construction. Wayleave maintenance and decommissioning could also disturb otter using the riparian corridor on the western bank. LSE identified due to disturbance / displacement of qualifying species in construction / decommissioning, and for otter during wayleave maintenance. <u>Introduction or Spread of INNS</u> Due to the proximity of the works there is potential for the introduction or spread of INNS into the River Spey SAC. Based on the locations of elements of the Proposed Development, works may be required as close as 7 m

Qualifying Features and Connectivity	Screening Assessment
	from the designated site. As such, there may be a risk of INNS spreading into the watercourse due to movements of vehicles or personnel, vegetation clearance or movement of materials. LSEs on the qualifying habitats and species due to the introduction or spread of INNS cannot be ruled out at this stage. LSE identified due to risk of spread of INNS in construction / decommissioning and wayleave maintenance. <u>Increases in Recreational Pressures</u> Due to the proximity of the Proposed Development to the River Spey SAC, construction and operational maintenance will be required which may result in increased recreational pressures to the SAC. As the Proposed Development may require construction within between 7 m and 25 m of the SAC, it is likely that vegetation clearance will be required in order to access construction and operational locations. This may inadvertently create clear access routes for recreational users to access the watercourse. Any increase in recreational pressures may lead to disturbance of the qualifying species, or direct habitat damage through increased erosion, litter, or pollutants. LSE identified due to increased recreational pressure in operation.
Lower River Spey – Spey Bays SAC	
The site is designated for alder woodland on floodplains and coastal shingle vegetation outside the reach of waves. It has two separate components; Spey Bay is approximately 2.4 km north / downstream, and Lower River Spey is 3 km south / upstream of the Proposed Development. Due to this distance and the nature of the features it is not considered functionally linked to the Proposed Development – although downstream of the Proposed Development and linked to the River Spey SAC, there is no clear pathway for effect on the SAC qualifying features due to this hydrological linkage.	<u>Habitat Loss</u> There is no pathway for direct habitat loss within the SAC, as no works will be required within the designated site. In addition, due to the distance from the site, no access routes or construction areas are anticipated to be required within the designated site. No LSE identified due habitat loss during construction / decommissioning. <u>Changes to Water Quality</u> The Spey Bays of the SAC is downstream of the Proposed Development and linked to the River Spey SAC, however, there is no clear pathway for effect on the SAC qualifying features due to this hydrological linkage. Given the distance and the nature of the features LSE can be ruled out at this stage. No LSE identified due changes in water quality during construction / decommissioning. <u>Introduction or Spread of INNS</u> The Spey Bays part of the SAC is downstream of the Proposed Development and linked to the River Spey SAC, however, there is no clear pathway for effect on the SAC qualifying features due to this hydrological linkage. Given the distance and the nature of the features LSE can be ruled out at this stage. No LSE identified due changes in water quality during construction / decommissioning. <u>Increases in Recreational Pressures</u>

Qualifying Features and Connectivity	Screening Assessment
	LSEs on the qualifying habitats and species as a result of increased recreational pressures and disturbance can be ruled out at this stage. No LSE identified.
Tips of Corsemaul and Tom Mor SPA	
The site is designated for supporting an internationally important breeding population of common gull. 9 km at its closest point to the Proposed Development.	<u>Habitat Loss</u> There is no pathway for effect due to direct habitat loss within the SPA as the Proposed Development is located outside of the designated site. The SPA is of sufficient distance from the Proposed Development that access routes and construction areas will not be located within the designated site. Additionally, the birds associated with the SPA are expected to predominantly use agricultural land well within that distance in which to forage. No LSE identified due to habitat loss during construction / decommissioning. <u>Changes to Water Quality</u> There is no hydrological connection between the designated site and the Proposed Development. In addition, the designated site is located uphill. No LSE identified due to changes in water quality during construction / decommissioning. <u>Injury or Mortality</u> The birds associated with the SPA are expected to predominantly use agricultural land well within that distance in which to forage, and suitable habitat for common gull is widespread within the surrounding landscape. No LSE identified due to injury or mortality during construction / decommissioning. <u>Disturbance and Displacement</u> As no works are required within the SPA, no pathway for effects due to disturbance and displacement of birds within the designated site is expected. As detailed above, the birds associated with the SPA are expected to predominantly use agricultural land well within that distance in which to forage, and suitable habitat for common gull is widespread within the surrounding landscape. No LSE identified due to disturbance and displacement during construction / decommissioning. <u>Collision Risk</u> As detailed above, the birds associated with the SPA are expected to predominantly use agricultural land well within that distance in which to forage, and suitable habitat for common gull is widespread within the surrounding landscape.

Qualifying Features and Connectivity	Screening Assessment
	No LSE identified due to collision risk during construction / decommissioning. <u>Introduction or Spread of INNS</u> No works will be required within the designated site. Due to the distance of the Proposed Development from the designated site, and the lack of hydrological or other connectivity, there is not considered to be a pathway for the introduction or spread of INNS in the designated site. No LSE identified due to introduction or spread during construction / decommissioning. <u>Increases in Recreational Pressures</u> No works will be required within the designated site. Due to the distance from the designated site, there is not expected to be any vegetation clearance or other works which would increase accessibility into the designated site. No LSE identified due to introduction or spread during operation.
Mortlach Moss SAC	
The site is designated for base-rich fens. The designation is located approximately 0.5 km south and slightly upslope of the Proposed Development.	<u>Habitat Loss</u> There is no pathway for effect due to direct habitat loss within the SAC as the Proposed Development is located outside of the designated site. Access routes and construction areas will not be located within the designated site. No LSE identified due habitat loss in construction / decommissioning <u>Changes in Water Quality</u> The designation is located approximately 0.6 km south and slightly upslope of the Proposed Development, therefore changes in water quality are highly unlikely. However given the proximity, potential groundwater linkages, and the risk of a spill combined with bad weather conditions, LSE cannot be ruled out. LSE identified due changes in water quality in construction / decommissioning. <u>Introduction or Spread of INNS</u> No works will be required within the designated site as a result of the Proposed Development and the SAC is slightly upslope, however, give the proximity this may require further measures. LSE identified due to introduction or spread of INNS pressure in operation. <u>Increases in Recreational Pressures</u> No works will be required within the designated site as a result of the Proposed Development and the SAC is slightly upslope, however, give the proximity this may require further measures. LSE identified due to increased recreational pressure in operation.
Turclossie Moss SAC	

Qualifying Features and Connectivity	Screening Assessment
The site is designated for blanket bogs. Approximately 6.7 km at the closest point.	<u>Habitat Loss</u> The SAC is of sufficient distance from the Proposed Development, and access routes and construction areas will not be located within the designated site. No LSE identified due habitat loss during construction / decommissioning. <u>Changes in Water Quality</u> The habitats on-site are sensitive to hydrological changes. However, as there is a lack of hydrological connectivity to the designated site, there is no pathway for LSEs due to change in water quality. No LSE identified due changes in water quality during construction / decommissioning. <u>Introduction or Spread of INNS</u> No works will be required within the designated site as a result of the Proposed Development. Due to the distance from the designated site (over 7 km at the closest point), and lack of hydrological or other connections, there is not considered to be a pathway for the introduction or spread of INNS in the designated site. No LSE identified due introduction or spread of INNS during construction / decommissioning. <u>Increases in Recreational Pressures</u> No works will be required within the designated site as a result of the Proposed Development. Due to the distance from the designated site (over 7 km at the closest point), there will not be any vegetation clearance or other works which would increase accessibility into the designated site. LSEs on the qualifying habitats and species as a result of increased recreational pressures and disturbance can be ruled out at this stage. No LSE identified due to increased recreational pressure during operation.
Loch of Strathbeg SPA and Ramsar	
The Proposed Development is located over 12.2 km inland from this SPA / Ramsar site, which is designated for its populations of overwintering waterfowl, including pink-footed geese and greylag geese. There is no pathway for effect on the habitat included in the Ramsar citation: eutrophic loch.	<u>Habitat Loss</u> The Proposed Development is located over 12.2 km inland from this SPA, which is designated for its populations of overwintering waterfowl, including pink-footed geese and greylag geese. However, the Proposed Development does not overlap with, or come into close proximity to any of the core traditional foraging grounds which are known to be used by geese associated with this SPA (Mitchell and Hearn, (2004) and Mitchell, (2012)) and while some more peripheral foraging areas are known to be used by geese in the vicinity of the Proposed Development around the North and South Ugie Waters (Keller et al (1997)⁴⁵), the flight activity and field use

⁴⁵ Keller V.E., Gallo-Orsi U., Patterson I.J. and Naef-Daenzar B. (1998). Feeding Areas Used by Individual Pink-footed Geese *Anser brachyrhynchus* around the Loch of Strathbeg, North-east Scotland. Wildfowl (1997) 48: 52-64.

Qualifying Features and Connectivity	Screening Assessment
Although pink-footed and greylag geese were recorded flying across the Proposed OHL Alignment inland of the SPA / Ramsar site they were generally observed infrequently and / or in low numbers. Additionally, their recognised foraging grounds around the Moray Firth and Nairn Coast are associated with near-coastal fields between Findhorn Bay and the lower reaches of the River Spey, as well to the east of Nairn for pink-footed geese (Mitchell and Hearn, (2004)⁴⁴ and Mitchell, (2012)), which are not intersected or segregated by the Proposed Development, and so those birds which were observed flying across the Proposed OHL Alignment are unlikely to have been affiliated with the SPA / Ramsar Site. Flights of pink-footed geese were recorded throughout the overwintering period, but were most frequent during the autumn and spring passage periods, most likely reflecting migratory movements rather than daily commuting flights between local roosting and foraging areas.	surveys undertaken over the winter of 2023 / 24 did not identify regular flight activity or foraging activity by substantial numbers of birds in the vicinity of the Proposed Development. No LSE identified due habitat loss in construction / decommissioning. <u>Changes in Water Quality</u> Due to the distance from the designated sites and the lack of hydrological connectivity, there is no pathway for LSE due to changes in water quality. No LSE identified due changes in water quality in construction / decommissioning. <u>Injury or Mortality</u> While potentially suitable supporting habitat for the qualifying species exists within the Proposed Development, there is not considered to be a pathway for injury or mortality of the qualifying species during construction or operation. Overwintering waterfowl, including pink-footed geese and greylag geese use open habitats such as grassland and arable land. It is considered likely that the species are able to escape any disturbance during construction or operation, and suitable habitat is widespread within the surrounding landscape. No LSEs for greylag geese, pink-footed geese, barnacle geese and whooper swans due to injury or mortality in construction / decommissioning. <u>Disturbance or Displacement</u> While potentially suitable supporting habitat for the qualifying species exists within the Proposed Development, there is not considered to be a pathway for injury or mortality of the qualifying species during construction or operation. Overwintering waterfowl, including pink-footed geese and greylag geese use open habitats such as grassland and arable land. It is considered likely that the species are able to escape any disturbance during construction or operation, and suitable habitat is widespread within the surrounding landscape. No LSEs for greylag geese, pink-footed geese, barnacle geese and whooper swans due to disturbance and displacement during construction / decommissioning. <u>Collision Risk</u> The Proposed Development is located over 12.2 km inland from this SPA, which is designated for its populations of overwintering waterfowl, including pink-footed geese and greylag geese. However, the Proposed Development does not overlap with, or come into close proximity to any of the core traditional foraging grounds which are known to be used by geese associated with this SPA (Mitchell and Hearn, (2004) and Mitchell, (2012)) and while some more peripheral foraging areas are known to be used by geese in the vicinity of the Proposed

⁴⁴ Mitchell, CR & RD Hearn. (2004). Pink-footed Goose *Anser brachyrhynchus* (Greenland / Iceland population) in Britain 1960 / 61 – 1999 / 2000. Waterbird Review Series, The Wildfowl & Wetlands Trust / Joint Nature Conservation Committee, Slimbridge.

Qualifying Features and Connectivity	Screening Assessment
	OHL Alignment around the North and South Ugie Waters (Keller et al (1997)⁴⁶), the flight activity and field use surveys undertaken over the winter of 2023 / 24 did not identify regular flight activity or foraging activity by substantial numbers of birds in the vicinity of the Proposed Development. Consequently, it is reasonable to assume negligible / no risk of adverse effects on the goose populations associated with this designated site. No LSEs for greylag geese, pink-footed geese, barnacle geese and whooper swans due to collision risk during construction / decommissioning. No LSE identified. <u>Introduction or Spread of INNS</u> No works will be required within the designated site as a result of the Proposed Development. Due to the distance of the Proposed Development from the designated site (over 12 km at the closest point), there is not considered to be a pathway for the introduction or spread of INNS in the designated site. No LSEs due to the introduction or spread of INNS during construction / decommissioning. <u>Increases in Recreational Pressures</u> No works will be required within the designated site as a result of the Proposed Development. Due to the distance from the designated site (over 12 km at the closest point), there will not be expected to be any vegetation clearance or other works which would increase accessibility into the designated site. No LSEs as a result of increased recreational pressures and disturbance during operation.
Ythan Estuary, Sands of Forvie and Meikle Loch SPA and Ramsar	
The site is designated for its breeding seabird and overwintering pink-footed goose populations, as well as its broader non-breeding waterfowl assemblage. The Proposed Development is located approximately 9.5 km inland from this SPA and Ramsar site.	<u>Habitat Loss</u> The Proposed Development is located almost 10 km inland from this SPA, which is designated for its breeding seabird and overwintering pink-footed goose populations, as well as its broader non-breeding waterfowl assemblage. While the breeding seabirds associated with this site would not be at risk of being affected by the Proposed Development there is a possibility that pink-footed geese may commute that far to access known foraging grounds. However, the Proposed Development does not overlap with, or come into close proximity to any of the traditional foraging grounds which are known to be used by geese associated with this SPA (Mitchell and Hearn, (2004) and Mitchell, (2012))³⁸. Consequently, it is reasonable to assume negligible / no risk of adverse effects on the bird populations associated with this designated site. No LSEs for pink-footed geese as a result of the loss of functionally linked supporting habitats outside of the SPA during construction / decommissioning. <u>Changes in Water Quality</u>

⁴⁶ Keller V.E., Gallo-Orsi U., Patterson I.J. and Naef-Daenzar B. (1998). Feeding Areas Used by Individual Pink-footed Geese *Anser brachyrhynchus* around the Loch of Strathbeg, North-east Scotland. Wildfowl (1997) 48: 52-64.

Qualifying Features and Connectivity	Screening Assessment
	Due to the distance from the designated sites and the lack of hydrological connectivity, there is no pathway for LSE due to changes in water quality. No LSEs due to changes in water quality during construction / decommissioning. <u>Injury or Mortality</u> While potentially suitable supporting habitat for pink-footed geese exists within the Proposed Development, there is not considered to be a pathway for injury or mortality. Pink-footed geese are largely found in open habitats such as grassland or arable land. Given the wide availability of this habitat in the wider landscape, it is considered likely that the species would be able to fly and escape any disturbance during construction or operation, minimising the risk of injury or mortality. No LSEs for pink-footed geese as a result of injury or mortality during construction and operation. <u>Disturbance or Displacement</u> As discussed, while potentially suitable supporting habitat for pink-footed geese exists within the Proposed Development, there is not considered to be a pathway for disturbance or displacement. Pink-footed geese are largely found in open habitats such as grassland or arable land. Given the wide availability of this habitat in the wider landscape, it is considered likely that the species would be able to fly and escape any disturbance during construction or operation. No LSEs for pink-footed geese, due to disturbance and displacement during construction / decommissioning. <u>Collision Risk</u> As discussed, while potentially suitable supporting habitat for pink-footed geese exists within the Proposed Development, there is not considered to be a pathway for collision risk. Pink-footed geese are largely found in open habitats such as grassland or arable land. Given the wide availability of this habitat in the wider landscape, it is considered likely that the species would be able to fly and escape any disturbance during construction or operation. No LSE due to collision risk during construction / decommissioning. <u>Introduction or Spread of INNS</u> No works will be required within the designated site as a result of the Proposed Development. Due to the distance from the designated site, and lack of hydrological connectivity, there is not considered to be a pathway for the introduction or spread of INNS in the designated site. No LSE due to the introduction or spread of INNS during construction / decommissioning. <u>Increases in Recreational Pressures</u>

Qualifying Features and Connectivity	Screening Assessment
	No works will be required within the designated site as a result of the Proposed Development. Due to the distance from the designated site, there is not expected to be any vegetation clearance or other works which would increase accessibility into the designated site. No LSE due to increases in recreational pressures during operation.
Buchan Ness to Collieston Coast SPA	
The Proposed Development is located approximately 7 km inland from this SPA. This site is designated for supporting internationally important populations of breeding seabirds: • Fulmar • Guillemot • Herring gull • Kittiwake • Shag • Seabird assemblage	<u>Habitat Loss</u> There is no pathway for effect due to direct habitat loss within the SPA as the Proposed Development is located outside of the designated site. The SPA is of sufficient distance from the Proposed Development, that access routes and construction areas will not be located within the designated site. Fulmar, guillemots and kittiwake are largely restricted to entirely offshore habitats except when breeding. Breeding sites are located on sea cliffs. As no works are required on or in proximity to sea cliff habitats, there is no pathway for LSEs as a result of loss of supporting habitats. Shags are rarely found inland and are largely restricted to rocky coastal habitats. As no works are required on or in proximity to coastal habitats, there is no pathway for LSEs as a result of loss of supporting habitats. Herring gulls are widespread and are found across the UK, utilising rural and urban sites. While herring gull supporting habitat is likely present within the Proposed Development given the varied habitat which herring gulls utilise, and the wide availability of habitat within the surrounding landscape, LSEs for herring gull due to a loss of functionally linked supporting habitats outside of the SPA can be ruled out. No LSE due to habitat loss during construction / decommissioning. <u>Changes in Water Quality</u> Due to the distance from the designated site and the lack of hydrological connectivity, there is no pathway for LSE due to changes in water quality. No LSE due to changes to water quality during construction / decommissioning. <u>Injury or Mortality</u> The birds associated with SPA would not be at risk of being disturbed by works associated with the Proposed Development nor are they expected to regularly fly inland where they may intersect with the Proposed OHL Alignment. No LSE as a result of injury or mortality during construction or operation.

Qualifying Features and Connectivity	Screening Assessment
	<u>Disturbance or Displacement</u> The birds associated with it would not be at risk of being disturbed by works associated with the Proposed Development nor are they expected to regularly fly inland where they may intersect with the Proposed OHL Alignment. LSEs for herring gull due to disturbance and displacement from functionally linked habitat can be ruled out. No LSE due to disturbance or displacement during construction / decommissioning <u>Collision Risk</u> The birds associated with it would not be at risk of being disturbed by works associated with the Proposed Development nor are they expected to regularly fly inland where they may intersect with the Proposed OHL Alignment. No LSE due to collision risk during construction / decommissioning <u>Introduction or Spread of INNS</u> No works will be required within the designated site as a result of the Proposed Development. Due to the distance of the Proposed Development from the designated site, and lack of hydrological connectivity, there is not considered to be a pathway for the introduction or spread of INNS in the designated site. No LSE due to introduction or spread of INNS during construction / decommissioning <u>Increases in Recreational Pressures</u> No works will be required within the designated site as a result of the Proposed Development. Due to the distance from the designated, there is not expected to be any vegetation clearance or other works which would increase accessibility into the designated site. No LSE due to increases in recreational pressures during operation.
Buchan Ness to Collieston Coast SAC	
The site is designated for vegetated sea cliff habitats. 7.9 km southeast from the Proposed Development at its closest point.	<u>Habitat Loss</u> Access routes and construction areas will not be located with the SAC. No LSEs due to habitat loss during construction / decommissioning. <u>Changes in Water Quality</u> Due to the distance from the designated site and the lack of hydrological connectivity, there is no pathway for LSEs due to changes in water quality. No LSEs due to changes in water quality during construction / decommissioning. <u>Introduction or Spread of INNS</u>

Qualifying Features and Connectivity	Screening Assessment
	No works will be required within the designated site as a result of the Proposed Development. Due to the distance of the Proposed Development from the designated site, and lack of hydrological connectivity, there is not considered to be a pathway for the introduction or spread of INNS in the designated site. No LSEs on the qualifying habitats and species due to the introduction or spread of INNS during construction / decommissioning. <u>Increases in Recreational Pressures</u> No works will be required within the designated site as a result of the Proposed Development. Due to the distance from the designated site, there is not expected to be any vegetation clearance or other works which would increase accessibility into the designated site. No LSEs on the qualifying habitats and species as a result of increased recreational pressures and disturbance during operation.

Screening Conclusion

- 4.4.7 Based on the above screening process for the Proposed Development alone, it can be concluded based on objective evidence and expert opinion and in the absence of mitigation that the International Sites upon which the Proposed Development may have LSEs are as follows:

Table 4.5: Proposed Development LSEs

Designation	LSE Identified (Yes / No)						
	Habitat Loss	Changes in Water Quality	Injury or Mortality	Disturbance or Displacement	Collision Risk	Introduction or Spread of INNS	Increase in Recreational Pressures
Glen Affric to Strathconon SPA	No	N / A	No	No	No	No	No
Strathglass Complex SAC	No	No	Yes	Yes	N / A	No	No
Conon Islands SAC	No	No	N / A	N / A	N / A	No	No
Monadh Mor SAC	No	No	N / A	N / A	N / A	No	No
Moniack Gorge SAC	No	No	N / A	N / A	N / A	Yes	No
Moray Firth SAC	No	No	No	No	N / A	No	No
Moray Firth SPA	No	No	No	No	No	No	No

Designation	LSE Identified (Yes / No)						
	Habitat Loss	Changes in Water Quality	Injury or Mortality	Disturbance or Displacement	Collision Risk	Introduction or Spread of INNS	Increase in Recreational Pressures
Cromarty Firth SPA and Ramsar	No	No	No	No	No	No	No
Inner Moray Firth SPA and Ramsar	Yes	No	Yes	Yes	Yes	Yes	No
Loch Ashie SPA	No	No	No	No	No	No	No
Loch Flemington SPA	No	No	No	No	No	No	No
Moray and Nairn Coast SPA and Ramsar (Osprey)	Yes	No	Yes	Yes	Yes	No	No
Carn nan Tri-tighearnan SAC	No	No	N / A	N / A	N / A	No	No
Cawdor Wood SAC	No	Yes	N / A	N / A	N / A	Yes	Yes
Darnaway and Lethen Forest SPA	Yes	No	Yes	Yes	Yes	Yes	Yes
Lower Findhorn Woods SAC	No	Yes	N / A	N / A	N / A	Yes	No
Moidach More SAC	No	No	N / A	N / A	N / A	No	No
Loch Spynie SPA and Ramsar	No	No	No	No	No	No	No
River Spey SAC	Yes	Yes	Yes	Yes	N / A	Yes	Yes
Lower River Spey – Spey Bays SAC	No	No	N / A	N / A	N / A	No	No
Tips of Corsemaul and Tom Mor SPA.	No	No	No	No	No	No	No
Mortlach Moss SAC	No	Yes	N / A	N / A	N / A	Yes	Yes
Turclossie Moss SAC	No	No	N / A	N / A	N / A	No	No
Loch of Strathbeg Ramsar and SPA	No	No	No	No	No	No	No

Designation	LSE Identified (Yes / No)						
	Habitat Loss	Changes in Water Quality	Injury or Mortality	Disturbance or Displacement	Collision Risk	Introduction or Spread of INNS	Increase in Recreational Pressures
Ythan Estuary, Sands of Forvie and Meikle Loch SPA and Ythan Estuary and Meikle Loch Ramsar	No	No	No	No	No	No	No
Buchan Ness to Collieston Coast SPA	No	No	No	No	No	No	No
Buchan Ness to Collieston Coast SAC	No	No	N / A	N / A	N / A	No	No

5 Appropriate Assessment

5.1.1 This section investigates the potential adverse effects of the Proposed Development alone on the integrity of the International Sites that were screened in for potential LSE. The designations included in the assessment are as follows:

- Strathglass Complex SAC – otter only:
 - Injury or Mortality, and Disturbance and Displacement.
- Moniack Gorge SAC:
 - Spread of INNS.
- Inner Moray Firth SPA and Ramsar – osprey only:
 - Habitat Loss, Injury and Mortality, Disturbance and Displacement and Collision Risk and Introduction or Spread of INNS.
- Moray and Nairn Coast SPA and Ramsar (Osprey):
 - Habitat Loss (functionally linked), Injury or Mortality, Disturbance and Displacement and Collision Risk.
- Cawdor Wood SAC:
 - Changes in Water Quality, Introduction or Spread of INNS and Increase in Recreational Pressures.
- Darnaway and Lethen Forest SPA:
 - Habitat Loss, Injury and Mortality, Disturbance and Displacement, Collision Risk, Introduction or Spread of INNS and Increase in Recreational Pressures.
- River Spey SAC:
 - Habitat Loss, Changes in Water Quality, Injury and Mortality, Disturbance and Displacement, Introduction or Spread of INNS and Recreational Pressures.
- Lower Findhorn SAC:
 - Changes to Water Quality and Introduction or Spread of INNS.
- Mortlach Moss SAC:
 - Changes in Water Quality, Introduction or Spread of INNS and Recreational Pressures.

5.2 General Mitigation Measures

5.2.1 The design of the Proposed Development has been informed by the findings of initial desk studies for corridor, routing and alignment stages, as well as the suite of ecological field surveys. Alternative design options were considered that would allow retention of ecological interests or, where no alternative existed, to justify the requirement. Throughout the design process, findings of the ecological surveys were relayed to the Applicant and engineering and environmental teams. The Alignment Selection Stage avoided Annex I habitats where practicable.

5.2.2 The mitigation hierarchy (avoid, mitigate, compensate, enhance) has been applied during the corridor, route and Alignment Selection Stage and throughout the EIA process. All works would be carried out in accordance with industry best practice construction measures, guidance and legislation. Therefore, mitigation, secured by design (embedded mitigation) and with additional mitigation measures as set out below. General Environmental Management Plans (GEMPs) have been developed by the Applicant which must be adhered to by the Contractor. The GEMPs are listed below, although not all may be relevant to this HRA:

- Oil Storage and Refuelling;
- Soil Management;
- Working in or near Water;

- Working in Sensitive Habitats;
- Working with Concrete;
- Watercourse Crossings;
- Waste Management;
- Contaminated Land;
- Private Water Supplies;
- Forestry;
- Dust Management;
- Biosecurity on Land;
- Restoration; and
- Bad weather.

5.2.3 For protected species discussed below there have been Species Protection Plans (SPP) developed. The SPPs detail the procedures that must be followed where there is a potential for sensitive protected species to be present. Each SPP outlines the responsibilities of the Applicant and their contractors, legislative protection for protected species, best practice measures to follow and an approved methodology for carrying out certain mitigation activities. Only those relevant to this HRA have been listed:

- FWPM Species Protection Plan;
- Otter Species Protection Plan; and
- Bird Species Protection Plan.

5.2.4 The GEMPs and SPPs will be used to develop a detailed Construction Environmental Management Plan (CEMP) which will be used by the project team responsible for planning, organising and delivering the work, and will be continually developed as the Proposed Development moves forward.

5.3 Potential Effects and Mitigation Measures

Strathglass Complex SAC

Otter

5.3.1 Below are the Conservation Objectives for the Strathglass Complex SAC:

- To ensure that the qualifying features of Strathglass Complex SAC are in favourable condition and make an appropriate contribution to achieving favourable conservation status.
- To ensure that the integrity of Strathglass Complex SAC is restored by meeting the following objectives for each qualifying feature:
 - Maintain / Restore the extent and distribution of the habitat within the site.
 - Maintain / Restore the structure, function and supporting processes of the habitat.
 - Maintain / Restore the distribution and viability of typical species of the habitat.

5.3.2 The Strathglass Complex SAC otter population is in favourable condition. In the otter surveys undertaken for this Proposed Development no active holts were found. The Strathglass otters are known to frequent Loch Beinn a' Mheadhoin as well as the River Farrar, and are also present in the River Cannich and River Affric, as well as their associated lochs. As discussed, otters have a wide home range. Males living in rivers and streams can have a mean linear range of around 40 km and females living in the same habitat can have a linear home range of 20 km. Males have been known to range as far as 80 km. Therefore, otters from this SAC population may use riparian habitats in proximity to the Proposed Development.

Injury and Mortality & Disturbance and Displacement

- 5.3.3 Some works are required in proximity to the River Beaully and its riparian habitats. There may be a risk disturbance and displacement of otter during construction within riparian habitats, or due to vegetation clearance during operation to maintain wayleaves.
- 5.3.4 There have been no active holts recorded, however, there may be otters travelling through the river corridor. Therefore, precautionary measures outlined in the Otter SPP, relevant GEMPs and CEMP will be applied to ensure the Proposed Development does not undermine the conservation objectives, these include but are not limited to:
- All works close to waterbodies and watercourses showing signs of regular use by otters should not take place at night or within 2 hours of sunset / sunrise, if possible.
 - Where works close to waterbodies and watercourses are required at night, lighting should be directed away from riparian areas.
 - All works close to water courses and waterbodies must follow best practice measures outlined in the CEMP to ensure their protection against pollution, silting and erosion.
 - Any temporarily exposed pipe systems should be capped when staff are off-site to prevent otters from gaining access.
 - All exposed trenches and holes should be provided with mammal exit ramps e.g. wooden planks or earth ramps when Contractors are off-site.
 - Vegetated buffers along watercourses will be maintained wherever possible to allow for the continued movements of foraging and commuting otters.
 - Locating of works has been supported by detailed surveys for the presence of otter holts or places of shelter.

Conclusion

- 5.3.5 With the above tried and tested mitigation in place, it is predicted that the Conservation Objectives of the Strathglass Complex SAC will not be undermined by the Proposed Development, and consequently there will be no adverse effect on the integrity of the site.

Moniack Gorge SAC

- 5.3.6 Below are the Conservation Objectives for the Moniack Gorge SAC:
- To ensure that the qualifying feature of Moniack Gorge SAC is in favourable condition and makes an appropriate contribution to achieving favourable conservation status.
 - To ensure that the integrity of Moniack Gorge SAC is maintained by meeting the following objectives for the site:
 - Maintain the population of the species as a viable component of the site.
 - Maintain the distribution of the species throughout the site.
 - Maintain the habitats supporting the species within the site.

Green shield moss

- 5.3.7 Moniack Gorge is designated for Green shield moss which is currently in favourable condition. The site is an extremely steep sided site with a fast flowing burn, with a small border of flat land next to the watercourse. The SAC is located approximately 0.3 km southwest and upslope of the Proposed Development, which is not connected to the watercourse in the SAC.

Spread of INNS

- 5.3.8 The Proposed Development is not located within the designated site and access routes will not be required to be within or in proximity to the designated site. However, invasive species are noted as a pressure on the woods at this site and one of the conservation objectives is to *Maintain the habitats supporting the species within the site*.
- 5.3.9 Therefore, precautionary measures outlined in the relevant GEMPs and CEMP will be applied to ensure the Proposed Development does not undermine the conservation objectives, these include but are not limited to:
- Access routes for construction and operational maintenance will avoid the designated site.
 - Based on current survey findings and pre-construction surveys, where required, specific biosecurity measures will be prepared to ensure that appropriate mitigation and avoidance measures are in place to prevent the introduction of spread of INNS. This may require specific controls depending on the nature of the species identified.
 - Best practice biosecurity measures will be followed for any works within or in proximity to designated sites, including following GEMPs relevant to invasive species. This may include but is not limited to wheel washing facilities, cleaning of equipment and PPE, and demarcation around identified INNS.
 - Best practice biosecurity measures will be followed for any works within or near designated sites. These measures will be detailed.
- 5.3.10 Given the proximity of the SAC to the Proposed Development (approximately 0.3 km) it is advised that using the southern limit of the LoD is avoided.

Conclusion

- 5.3.11 With the above tried and tested mitigation in place, it is predicted that the Conservation Objectives of the SAC will not be undermined by the Proposed Development, and consequently there will be no adverse effect on the integrity of the site.

Inner Moray Firth SPA and Ramsar and Moray and Nairn Coast SPA and Ramsar

- 5.3.12 Given the similarity in LSEs and in the tried and tested mitigation measures applied to them, these two sites are discussed together below. The Inner Moray Firth SPA and Ramsar has potential LSE for the introduction of INNS, that will be discussed at the end of the section.
- 5.3.13 The osprey discussed below could reasonably be attributed to either SPA and the conservation objectives are the same.
- To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained.
 - To ensure for the qualifying species that the following are maintained in the long-term:
 - Population of the species as a viable component of the site.
 - Distribution of the species within site.
 - Distribution and extent of habitats supporting the species.
 - Structure, function and supporting processes of habitats supporting the species.
 - No significant disturbance of the species.

Osprey

Habitat Loss, Injury and Mortality & Disturbance and Displacement

- 5.3.14 In terms of foraging habitat, osprey are likely to use most of the large rivers and waterbodies spanned by, or located in close proximity to the Proposed OHL Alignment. These are the River Beaul, River Ness and Caledonian

Canal, River Nairn, River Findhorn, River Spey, River Isla and River Deveron, and the Clunas and Glen Latterach Reservoirs. Osprey were also recorded over and around Achagour Fishery during the flight activity surveys and are likely to use this as a foraging resource as well. However, the Proposed Development will not result in the direct loss of any habitat associated with these rivers and waterbodies. Therefore, the effect of habitat loss on both SPAs is predicted to be *de minimis* in scale.

- 5.3.15 Goodship and Furness (2022) identify an upper range disturbance distance of 750 m for osprey during the breeding season (the only time of year when the species is present in the UK). There are four osprey nest sites located within 750 m of the Proposed OHL Alignment two located within the Dulsie Wood and associated Woodlands Focal Area and two located within the River Spey Corridor / Wood of Ordiequish Focal Area.
- 5.3.16 The nest sites located within the Dulsie Wood and associated Woodlands Focal Area are located within 350 m of each other and are both within 500 m of the Proposed OHL Alignment – one approximately 440 m away and the other approximately 175 m away. Both of these nest sites are also located within 250 m of the proposed access track which is to be upgraded. Notably, both of these nest sites are also located within 500 m of the existing OHL by approximately 490 m and 225 m respectively. Both of these nest site records were provided by contractors undertaking ground investigation works in 2024, with the further away nest site being occupied while the closer nest site, an artificial nesting platform, was reported to be inactive at the time of inspection but showed signs of activity earlier in the season. Whilst ospreys can nest in close proximity to one another, this is relatively unusual in Scotland (Hardey *et al*, 2013). Therefore, these are considered be alternative nest sites used by the same pair of ospreys. Nonetheless, precautionary measures outlined in the Bird SPP will be applied to avoid disturbance of nesting birds during the breeding season through both track upgrade, construction and OHL installation works. Therefore, construction works at this location are not expected to affect the presence or breeding success of osprey at this location.
- 5.3.17 Of the two nest sites located within the River Spey Corridor / Wood of Ordiequish Focal Area, the closest is located approximately 500 m away from the proposed OHL alignment. This nest site record was provided by NESRSG, however no information on the recent occupancy status or breeding success of this nest site was provided. The other is located approximately 575 m from the proposed OHL alignment and was identified during scarce raptor surveys in 2023. Notably, the land between the closest nest site and the Proposed Development is intersected by a busy A-class road while the other nest site is located approximately 260m from the same A-class road. Goodship and Furness (2022) state that birds which are exposed to human presence can become accustomed to associated disturbance. It is reasonable to assume therefore that if these nest sites are active then the birds associated with them are habituated to a relatively high level of daily noise disturbance from the passing traffic. Therefore, disturbance from construction activities down to at least 500 m from these nest sites is unlikely to adversely affect birds associated with them, especially when precautionary measures outlined in the Bird SPP are applied.
- 5.3.18 A further three nest sites are located within 750 m of proposed access tracks within the River Spey Corridor and Wood of Ordiequish Focal Area, all of which are located within 500 m, with two being within 200 m. However, with application of the standard precautionary measures outlined in the Bird SPP to avoid disturbance of nesting birds during the breeding season, any disturbance to ospreys using these nest sites will be avoided or minimised to a negligible level. Therefore, the construction / upgrade and use of access tracks in the vicinity of these nest sites is not expected to adversely disturb breeding ospreys at these locations.
- 5.3.19 As noted above in relation to habitat loss, the Proposed Development traverses a number of large rivers and waterbodies which ospreys are likely to use as a foraging resource as well as to commute along. However, any disturbance associated with the construction of the Proposed Development at these locations will be highly localised, specifically focussed around the individual works areas rather than extending over large areas. Ospreys will still have access to these foraging areas, albeit potentially displaced to areas outwith the influence of the disturbance source(s), but the scale of any such effect is predicted to be negligible against the wider availability of foraging habitat further up- or downstream the rivers or across the large waterbodies. Similarly, any displacement

effects on osprey flight paths along commuting corridors are anticipated to be negligible; at worst potentially causing birds to take minor detours around the disturbance source's zone of influence whilst continuing on to intended destination.

- 5.3.20 Works involving helicopter are likely to exert a very specific and intense disturbance influence which would be very likely to disturb ospreys from nests or foraging sites. As with all other construction works however, helicopter activities would be carried out with application of the standard precautionary measures outlined in the Bird SPP to avoid disturbance of nesting birds during the breeding season, such that any potential disturbance to ospreys from helicopter activities will be avoided or minimised to a negligible level.
- 5.3.21 The desk study and field surveys identified 16 osprey nest sites within the Study Area. This includes four nest sites which are located within the species' 750 m upper range disturbance distance (Goodship and Furness, 2022) from the existing OHL: two located within the River Spey Corridor and Wood of Ordiequish Focal Area and two located within the Dulsie Wood and associated Woodlands Focal Area. While the two River Spey Corridor and Wood of Ordiequish Focal Area nest sites will be at least 500 m away from the Proposed Development, the two located within the Dulsie Wood and associated Woodlands Focal Area will both be within 500 m of the OHL, by approximately 440 m and 175 m.
- 5.3.22 Consequently, any disturbance effects on osprey during the construction phase are anticipated to be temporary and highly localised.

Operation and Collision Risk

- 5.3.23 As mentioned in relation to construction phase disturbance, the Dulsie Wood and associated Woodlands Focal Area nest sites are located within 350 m of each other and so are considered to be alternative nest sites used by the same pair of ospreys, rather than used by two different pairs. They are also located within 500 m of the existing OHL, by approximately 490 m and 225 m respectively. The 2024 records suggesting that the birds prefer the nest site which is located slightly further away from the existing OHL. However, the encroachment of the Proposed Development to approximately 440 m away from the preferred nest site is not considered to pose a significantly different influence to the current proximity to the existing OHL as ospreys are not thought to be unduly deterred by OHLs in the vicinity of their nest sites. Ospreys are known to successfully nest on OHL towers and the relocated osprey nest near Alyth in Perth and Kinross, which has been used annually since its establishment in 2014, is located approximately 250 m from Alyth substation and the associated 275kV OHL. There was also an observation during one of the flight activity surveys in June 2023 from VP 8 in the Dulsie Wood and associated Woodlands Focal Area which suggested that an osprey was attempting to build a nest on one of the towers with several sticks being deposited on it, although there were no further observations to suggest this nest was progressed.
- 5.3.24 The presence of the existing OHL also does not appear to deter birds from accessing suitable foraging areas such as the River Spey, Glenlatterach Reservoir or the Achagour Fishery, where ospreys were recorded hunting during the field surveys. Additionally, ospreys were frequently recorded flying over the existing OHL at various locations along the Proposed OHL Alignment throughout the field surveys, indicating that locally occurring birds are aware of and undeterred from the existing OHL in going about their normal behaviour within the landscape.
- 5.3.25 This demonstrates that ospreys which occur along the Proposed OHL Alignment and nest in close proximity to it do so despite the presence of the existing OHL and do not seem to be unduly disturbed or displaced by the presence of the structures throughout the landscape. It is reasonable to assume therefore, that even though the Proposed Development will be taller, there are not anticipated to be any significant displacement effects on osprey from the operational Proposed Development.
- 5.3.26 NatureScot (2016a) recommends the use of line markers (or diverters) as a practical and effective way of reducing bird collision risk with OHLs, with research showing that collision rates can be reduced by up to 94% (from

Prinsen *et al*, 2011⁴⁷). However, it is noted that the efficacy of line marking varies considerably between species and regions and is very unlikely to eliminate mortality entirely (especially for crepuscular or nocturnal species). It is the earth wire, located between the tops of the towers which poses the greater collision risk as it is thinner and hence less detectable than the thicker, triple bundled conductors.

- 5.3.27 NatureScot (2016a) advises that the placement of diverters should be informed by survey evidence informing activity hotspots and regular flight corridors. The field surveys undertaken identified three flight activity hotspots for osprey: River Beaully Corridor, Drum Mossie Muir and the River Spey Corridor. Additionally, despite relatively few flights being recorded by other Important Ornithological Features (IOFs) the various river corridors and large water bodies spanned, or passed in close proximity by the Proposed Development are also considered likely to represent focal areas for bird flight activity at different times of year.
- 5.3.28 Therefore, bird diverters are proposed to be installed at the following locations in order to reduce collision risk for osprey, red kite and potentially vulnerable bird species in general;
- River Beaully crossings: Tower BC1-6A to Tower BC2-2A and Tower BC2-6A to Tower BC3-2A;
 - River Ness / Caledonian Canal crossing: Tower BC5-21 to Tower CB1-3;
 - Drum Mossie Muir: Tower CB1-12 to Tower CB2-9;
 - River Nairn crossing: Tower CB2-20A to Tower CB2-23;
 - Saddle Hill: Tower CB3-7 to Tower CB3-21;
 - Clunas Reservoir (adjacent to): Tower CB4-17 to Tower CB5-1;
 - Achagour Fishery: Tower CB5-20 to Tower CB5-23;
 - River Findhorn Crossing: Tower CB6-1 to Tower CB6-2;
 - Glenlatterach Reservoir (adjacent to): Tower CB9-20 to Tower CB9-21;
 - River Spey crossing: Tower CB12-16 to Tower CB14-2;
 - River Isla crossing: Tower CB15-12A to Tower CB15-14A; and
 - River Deveron crossing: Tower BN2-9A to Tower BN2-11A.
- 5.3.29 The extent over which diverters are proposed to be placed at each location is based on the factors which may influence the area over which birds may be more likely to come into contact with the OHL such as the width of river crossings and the angle at which the Proposed Development intersects them, sections of OHL which lie across the nearest and / or most likely approach / departure routes for flights into or out of key habitat features (i.e. waterbodies), the extent of suitable habitat being traversed and adjacent topographical and habitat features which may concentrate or disperse bird flightpaths.
- 5.3.30 Diverters will be installed at 5-10 m intervals between the towers specified above in line with NatureScot (2016a) within the bounds of what engineering constraints permit (Renewables Grid Initiative (RGI), 2024).
- 5.3.31 A number of bird diverter designs are available and these are discussed in RGI (2024⁴⁸) and EirGrid (2016⁴⁹). The design which is proposed for installation on the above listed sections has not been confirmed, but an indicative example is shown in **Plate 8** below. The final bird diverter design would be selected in consultation with NatureScot.

⁴⁷ Prinsen, H.A.M., Smallegange, J.J., Boere, G.C. & Pires, N. (Eds.) (2011). *Guidelines on how to avoid or mitigate impact of electricity power grids on migratory birds in the African-Eurasian region*. Bonn: AEWA Conservation Guidelines No. 14, CMS Technical Series No. 29, AEWA Technical Series No. 50, CMS Raptors MOU Technical Series No. 3.

⁴⁸ RGI (2024). Avian-power line collision. Overview of risk factors and effectiveness of line markers. Energy & Nature Methodology Report. September 2024. Available at: https://renewables-grid.eu/fileadmin/user_upload/Nature/Wire_Marker_Methodology_Report_min.pdf

⁴⁹ EirGrid (2016). EirGrid Evidence Based Environmental Studies Study 5: Birds. Literature review and evidence-based field study on the effects of high voltage transmission lines on birds. May 2016. Available at: <https://cms.eirgrid.ie/sites/default/files/publications/EirGrid-Evidence-Based-Environmental-Study-5-Birds.pdf>.

Plate 8: Example Bird Diverter



- 5.3.32 The installation of bird diverters at the above-listed locations is considered to significantly reduce the risk of osprey, red kite and other bird collisions at flight activity hotspots.

Spread of INNS – Inner Moray Firth SPA and Ramsar

- 5.3.33 The Proposed Development is not located within the designated site and access routes will not be required to be within or in proximity to the designated site. However, invasive species are noted as a pressure on the woods at this site and one of the conservation objectives is to Maintain the habitats supporting the species within the site.
- 5.3.34 Therefore, precautionary measures outlined in the relevant GEMPs and CEMP will be applied to ensure the Proposed Development does not undermine the conservation objectives, these include but are not limited to:
- Access routes for construction and operational maintenance will avoid the designated site.
 - Based on current survey findings and pre-construction surveys, where required, specific biosecurity measures will be prepared to ensure that appropriate mitigation and avoidance measures are in place to prevent the introduction of spread of INNS. This may require specific controls depending on the nature of the species identified.
 - Best practice biosecurity measures will be followed for any works within or in proximity to designated sites, including following GEMPs relevant to invasive species. This may include but is not limited to wheel washing facilities, cleaning of equipment and PPE, and demarcation around identified INNS.
 - Best practice biosecurity measures will be followed for any works within or near designated sites.

Conclusion

- 5.3.35 With the above tried and tested mitigation in place, it is predicted that the Conservation Objectives of these two SPAs and Ramsar site will not be undermined by the Proposed Development, and consequently there will be no adverse effect on the integrity of the site.

Cawdor Wood SAC

- 5.3.36 The conservation objectives for the Cawdor Wood SAC are as follows:
- To ensure that the qualifying features of Cawdor Wood SAC are in favourable condition and make an appropriate contribution to achieving favourable conservation status.
 - To ensure that the integrity of Cawdor Wood SAC is restored by meeting listed objectives.

Western acidic oak woodland

- 5.3.37 Cawdor Wood supports a relatively large area of ancient woodland. Oak dominates much of the site with varying amounts of Scots pine, beech and juniper. Greater woodrush and bluebell carpet the ground below the oaks, and the wood is unusual because both juniper and holly are present in the understory. The deep gorges, cutting into Moine schist and Old Red Sandstone, support ash and wych elm woodland.

- 5.3.38 The site has been notified as a SSSI for the woodland habitats and also for the outstanding lichen flora. Cawdor Wood is one of only a few ancient woods remaining in Britain which has a relatively dry continental climate and which is located in an area with no significant air pollution, resulting in the outstanding lichen interest of the site.
- 5.3.39 The site is in unfavourable condition and conservation objectives seek to avoid deterioration and achieve favourable conservation status.

Changes to Water Quality

- 5.3.40 The designated site is potentially hydrologically connected to the Proposed Development and is located 1.1 km downstream. Changes in water quality that would affect the habitats are thought unlikely, however, a large-scale pollution event during construction may have an adverse impact on the integrity woodland habitats within the designated site. Both Allt Dearg and Riereach Burn flow through from the Proposed Development to the woodland, and contamination of soils could adversely affect the integrity of the qualifying habitat.
- 5.3.41 Therefore, precautionary measures outlined in the relevant GEMPs and CEMP will be applied to ensure Proposed Development does not undermine the conservation objectives, these include but are not limited to:
- Emergency spill response kits will be available and maintained during construction works.
 - The Environmental Clerk of Works (EnvCoW) will have authority to stop any works that are or have potential to impair the water environment.
 - A wet weather protocol would be developed detailing the procedures to be adopted by all site staff during periods of heavy rainfall (e.g. inspection and maintenance regimes of sediment and runoff control measures), in extreme cases works may be temporarily suspended until weather / ground conditions allow.
 - An overarching Pollution Prevention Plan (PPP) will be prepared by the Principal Contractor. This plan aligns with the contractor's environmental procedures, SEPA Guidance for Prevention of Pollution and SEN General Environmental Management Plans (GEMP) available upon request. The PPP acts as a live document throughout the construction phase to reflecting changing conditions on-site.

Spread of INNS

- 5.3.42 No works will be required within the designated site as a result of the Proposed Development. However, as the designated site is hydrologically connected to the Proposed Development via the Allt Dearg and Riereach Burn crossings, which flow into the designated site, there is potential for introduction or spread of INNS. The closest point of the Proposed Development to the SAC is in a smaller valley separated from Rierach Burn by a hill. However, invasive species are listed as a particular threat to the designated site. Given the closeness of this nearest part of the development to the SAC – 0.3km – there is still the potential for windblown fragments of INNS to reach the SAC.
- 5.3.43 Therefore, precautionary measures outlined in the relevant GEMPs and CEMP will be applied to ensure Proposed Development does not undermine the conservation objectives, these include but are not limited to:
- Access routes for construction and operational maintenance will avoid the designated site.
 - Based on current survey findings and pre-construction surveys, where required, specific biosecurity measures will be prepared to ensure that appropriate mitigation and avoidance measures are in place to prevent the introduction of spread of INNS. This may require specific controls depending on the nature of the species identified.
 - Best practice biosecurity measures will be followed for any works within or in proximity to designated sites, including following GEMPs relevant to invasive species. This may include but is not limited to wheel washing facilities, cleaning of equipment and PPE, and This may include but is not limited to wheel washing facilities, cleaning of equipment and PPE, and demarcation around identified INNS.

- Best practice biosecurity measures will be followed for any works within or near designated sites. These measures will be detailed.

Increases in Recreational Pressures

- 5.3.44 Due to the proximity of the Proposed Development to the SAC, construction and operational maintenance will be required which may result in increased recreational pressures to the SAC. This may inadvertently create clear access routes for recreational users to access the watercourse. Any increase in recreational pressures may lead to direct habitat damage through increased erosion, litter, or pollutants.
- 5.3.45 Discussions will be needed with the appropriate managing bodies to ensure that the routes do not increase access into areas where recreational access would pose a particular threat.
- 5.3.46 Appropriate mitigation measures such as signage and fencing to avoid recreational access is advised on working areas and access routes.

Conclusion

- 5.3.47 With the above tried and tested mitigation in place, it is predicted that the Conservation Objectives of the SAC will not be undermined by the Proposed Development, and consequently there will be no adverse effect on the integrity of the site.

Darnaway and Lethen Forest SPA

- 5.3.48 The conservation objectives for the Darnaway and Lethen Forest SPA are as follows:
- To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained.
 - To ensure for the qualifying species that the following are maintained in the long-term:
 - Population of the species as a viable component of the site.
 - Distribution of the species within site.
 - Distribution and extent of habitats supporting the species.
 - Structure, function and supporting processes of habitats supporting the species.
 - No significant disturbance of the species.

Capercaillie

- 5.3.49 Darnaway and Lethen Forest SPA was originally designated for a population of 23 individuals based on counts undertaken between 1999 and 2003. However, the population is understood to have declined significantly over recent decades in line with national trends. Indeed, lek count surveys undertaken between 2015 and 2024 show the number of lekking males recorded in the broadly associated Nairn and Moray sub-recording areas to have reduced from less than ten to none since 2023 (Cairngorms Capercaillie Project, 2024)⁵⁰. While this does not include immature, non-lekking males and females, the population has clearly reduced to critical levels, such that the current population affiliated with the SPA is likely to be no more than 10-15 individuals. As noted above however, capercaillie population associated with the SPA is considered to exist as part of a metapopulation distributed throughout the wider surrounding area (i.e. Nairn and Moray). Based on the counts upon which the Easter Ross, Nairn and Moray population estimate (70) is based, only six capercaillie were recorded in just four 5 km² grid squares; two of which were within the Nairn and Moray sub-recording areas (these grid squares were those affiliated with the Darnaway and Lethen Forest SPA and Dulsie Wood) (Wilkinson et al, 2023).

⁵⁰ Cairngorms Capercaillie Project (2024). Capercaillie Lek Count Report 2024. Available at: <https://cairngormscapercaillie.scot/capercaillie-lek-count-report-2024/>.

- 5.3.50 Therefore, it is estimated that the population associated with the Nairn and Moray sub-recording area is approximately half that of the wider Easter Ross, Nairn and Moray recording area. Hence, it is reasonable to assume that the SPA population is more likely to be in the region of 30-40 individuals.
- 5.3.51 There were no sightings of capercaillie or evidence of the species' presence in any of the woodlands covered by the surveys, with the exception of the record provided by RSPB Scotland from their surveys of Dulsie Wood, as provided in the Desk Study Section. The only records provided by RSPB Scotland from their surveys in 2023 and 2024 were an incidental sighting of a female flying over a road in 2023 and of a single male observed in woodland, both of which were associated with the Dulsie Wood and associated Woodlands Focal Area.

Habitat Loss

- 5.3.52 RSPB Scotland provided records for two capercaillie lek sites within the Dulsie Wood and associated Woodlands Focal Area, the closest of which is located just within 1 km of the Proposed OHL Alignment, although the last record of this having been attended was in 2013. Records for two lek sites were also provided for the River Spey Corridor / Wood of Ordiequish Focal Area but these were both located over 1 km from the Proposed OHL Alignment and had also not been attended since at least 2017. Therefore, there will be no loss of active capercaillie lek sites as a result of the Proposed Development.
- 5.3.53 The records received from RSPB Scotland through the desk study have identified that the woodlands connecting Dulsie Wood and Darnaway Forest support some of the last remaining capercaillie which represent the Nairn and Moray population, and which are considered to be affiliated with the population associated with Darnaway and Lethen Forest SPA. These connecting woodlands are therefore considered to represent functionally linked land for the SPA capercaillie population and are likely to be fundamental to the persistence of the capercaillie population both in terms of the SPA and the wider Nairn and Moray area.
- 5.3.54 The felling of woodland to clear the wayleave for the Proposed OHL Alignment where the Proposed Development traverses these woodlands (i.e. between Clunas Wood (southeast of Cawdor) and New Inn Wood (Ferness)) will therefore represent the loss of capercaillie habitat which is functionally linked to Darnaway and Lethen Forest SPA. It will also further sever the connectivity between the woodlands associated with Dulsie Wood and those associated with the SPA which is already severed by the A939 and the existing OHL.
- 5.3.55 It is worth noting however, that the sections of woodland which the Proposed Development traverses are not extensive tracts of capercaillie's preferred mature, open-structured pine forest, but are more fragmented patches of mixed-age broadleaved and coniferous plantation woodland which are considered to be less preferable to capercaillie. Therefore, the habitat which will be affected is not likely to represent important breeding habitat, but is more likely to form part of their local movement corridors between adjoining woodlands. Given this movement corridor is already severed, as noted above, the installation of the Proposed Development will further fragment the connectivity of the local woodlands. It is also worth noting however, that the section the Proposed Development which traverses Dulsie Wood is aligned in proximity to and largely parallel with the existing OHL, with the separation distance ranging from 100 m – 600 m, much of it being within 250 m although the full extent of these gaps will not be felled. Therefore, while the effective width of the severance gap will be increased, the fragmentation effect will remain relatively localised to the same linear corridor.
- 5.3.56 Woodlands within and surrounding Dulsie Wood are predominantly managed for commercial purposes, with all of the coupes throughout the surrounding woodlands being in different stages of forestry rotation, including some larger, more extensive swathes of recently clear-felled woodland. Therefore, the loss of less preferable woodland from along the Proposed Development's narrow wayleave is considered to be negligible in the wider geographic context.
- 5.3.57 Despite capercaillie's preference for more extensive mature pine forest, they also utilise areas of more open habitat amongst forests such as bog, heathland and naturally regenerating woodland for foraging and moving amongst. Therefore, it is expected that locally occurring birds will still cross the Proposed Development's

wayleave in order to move between adjoining woodlands, as they do with the existing OHLs wayleave, the severance effect may just make birds more wary.

- 5.3.58 In conclusion, although the habitat loss and degradation will be permanent, it will mainly affect less preferred habitat, will be relatively localised and broadly consistent with the existing fragmentation corridor formed by the existing OHL and will be negligible in extent compared to forestry activities in the wider surrounding woodlands. Therefore, the impact of this habitat loss and degradation is considered to be no more than minor magnitude in the context of the local capercaillie population only and despite the species' critical status and international importance. This would extend to the qualifying population of the Darnaway and Lethen Forest SPA, the effect of habitat loss being indirect to the SPA itself and *de minimis* in scale.

Injury and Mortality & Disturbance and Displacement

- 5.3.59 Goodship and Furness (2022) identify an upper range disturbance distance of 1 km lekking capercaillie and 100 m for nesting females during the breeding season. As noted above, RSPB Scotland provided records for four capercaillie lek sites within the Proposed Development Study Area: two in the Dulsie Wood and associated Woodlands Focal Area and two in the River Spey Corridor / Wood of Ordiequish Focal Area.
- 5.3.60 Both of the lek sites in the River Spey Corridor / Wood of Ordiequish Focal Area are located over 1 km from the Proposed OHL Alignment and had not been attended since at least 2017. Indeed, no records of capercaillie were provided in this area since 2017 and it is considered unlikely that the species is present there anymore. Therefore, no impacts to lekking capercaillie are predicted in this Focal Area.
- 5.3.61 Of the two lek sites located within the Dulsie Wood and associated Woodlands Focal Area, one is located just within 1 km of the Proposed OHL Alignment. However, this lek site had not been attended since 2013 and it is therefore no longer considered to be active. In any case, even assuming it is active during the construction phase, with the application of precautionary measures outlined in the Bird SPP within 1 km of this lek site no disturbance effects are anticipated.
- 5.3.62 As noted above, the records received from RSPB Scotland have identified that the woodlands connecting Dulsie Wood and Darnaway Forest support some of the last remaining capercaillie which represent the Nairn and Moray population, and which are considered to be affiliated with the population associated with Darnaway and Lethen Forest SPA. Therefore, it is likely the construction works taking place throughout these woodlands, including track upgrades and use, will pose a disturbance risk to locally occurring capercaillie. However, any disturbance associated with the construction of the Proposed Development in this area will be highly localised, specifically focussed around the individual works areas rather than extending over large areas. The most extensive construction phase activity will be the felling of forestry to clear the wayleave for the Proposed Development, although this will also be localised to the area being felled at any particular time.
- 5.3.63 The precautionary measures outlined in the Bird SPP will be applied to avoid disturbance of nesting birds during the breeding season. It is therefore anticipated that any disturbance impacts will only affect birds moving through the adjacent forestry which come into close proximity with the works areas and these birds will be able to move away of their own accord. Given the localised nature of the works and associated disturbance, it is unlikely to prevent birds from accessing important foraging areas or being able to access their intended destinations.
- 5.3.64 Works involving helicopter are likely to exert a very specific and intense disturbance influence which would be very likely to disturb capercaillie from lekking or nesting sites. As with all other construction works however, helicopter activities would be carried out with application of the standard precautionary measures outlined in the Bird SPP to avoid disturbance of nesting and lekking birds during the breeding season such that any potential disturbance to capercaillie from helicopter activities will be avoided or minimised to a negligible level.
- 5.3.65 The records received from RSPB Scotland through the desk study have identified that the woodlands associated with the Dulsie Wood and associated Woodlands Focal Area support some of the last remaining capercaillie

which represent the Nairn and Moray population. However, there are no known active lek sites within 1 km of the Proposed Development and the majority of evidential records which were provided, and which are assumed to reflect the species' core distribution and most suitable habitat, were from the deeper parts of the woodlands located over 500 m from the Proposed Development.

- 5.3.66 Consequently, any disturbance effects on capercaillie during the construction phase are anticipated to be temporary and highly localised.

Displacement during Operation

- 5.3.67 As noted above in relation to construction phase disturbance, these woodlands in which capercaillie continue to persist are already intersected by the existing OHL. Even if the distribution of capercaillie within the surrounding woodlands is influenced by the existing OHL, given that the Proposed Development will be aligned in relatively close proximity to, and broadly parallel with the existing OHL it is reasonable to assume that it will not exert a significantly different disturbance or displacement effect to that which already exists. Furthermore, since the existing OHL traverses fragmented patches of mixed-age broadleaved and coniferous plantation woodland which is considered to be less preferable to capercaillie it is considered more likely that locally occurring birds are habituated to and not unduly disturbed or displaced by the presence of the existing OHL through their habitat.
- 5.3.68 Therefore, based on the above, it is concluded that there are not anticipated to be any significant displacement effects on capercaillie from the operational Proposed Development.

Collision Risk

- 5.3.69 No flight activity surveys were undertaken to inform potential collision risk to capercaillie based on the species' low abundance, sparse distribution and preferred forest habitat which would have made the chances of detection extremely low. Nonetheless, no capercaillie were recorded in any of the woodlands covered by the dedicated surveys with the only recent sightings records being of two individuals provided by RSPB Scotland from 2023 and 2024 in the Dulsie Wood and associated Woodlands Focal Area.
- 5.3.70 The only location where capercaillie are likely to be at risk of collision with the Proposed Development is where the Proposed OHL Alignment traverses the woodland associated with Dulsie Wood, between Clunas Wood (southeast of Cawdor) and New Inn Wood (Ferness). Along this section, the Proposed Development severs a number of interconnected woodland blocks which, although not optimal habitat for capercaillie, are still suitable for their use.
- 5.3.71 Grouse, as a species group, are generally considered to be susceptible to collision with OHLs due to their heavy body forms, small wings and rapid flight characteristics which restricts evasive reactions to unexpected obstacles (Bevanger, 1998). This is likely to be particularly applicable to capercaillie given their large size. Indeed, the RGI (2024) class capercaillie as being at 'very high risk' of collision based on the results of studies in Germany and Spain.
- 5.3.72 However, capercaillie are generally recognised to fly at low height, typically flying at or below the tree canopy level within their preferred forest habitat and therefore below the level of the thinner, less visible earth wire. This was acknowledged by NatureScot and RSPB Scotland in a meeting held to discuss capercaillie survey assessment and mitigation on 26 November 2024⁵¹. Indeed, deer fences, which are typically no more than 2 m in height, are considered to pose a bigger risk of collision mortality to capercaillie (Fletcher and Baines, 2020, Watson and Moss, 2016⁵² and Forrester *et al*, 2007). While lower-level flights are likely to occur within the zone occupied by the lower-strung conductor wires, the stringing configuration and greater thickness would make them more visible and therefore a lower risk of being collided with. However, it should be recognised that capercaillie flying

⁵¹ This meeting was held primarily to discuss capercaillie surveys, the scope of the assessment and potential mitigation with NatureScot and RSPB Scotland.

⁵² Watson, A. and Moss, R. (2016). Grouse. New Naturalist Series. Collins.

between adjacent woodlands on opposite sides of the Proposed OHL Alignment at PCH may be caught out by suddenly flying out into the OHL wayleave and encountering the OHL towers or conductors with little time or space to react and avoid colliding with them. Therefore, it is considered that the Proposed Development will pose a collision risk to capercaillie. It is also worth noting though, that the section the Proposed Development which traverses Dulsie Wood is aligned in relatively close-parallel to the existing OHL, with the separation distance ranging from 100 m – 600 m, much of it being within 250 m. Therefore, birds inhabiting the surrounding woodlands will be familiar with the presence of the existing OHL and may exert some degree of habituation to, and avoidance of it. Consequently, it is reasonable to assume that the introduction of the Proposed Development may pose less of a risk to locally occurring birds than if it were to be a completely new feature in their landscape.

- 5.3.73 Although the theoretical collision risk to capercaillie is 'very high' and the effect of any collisions with the Proposed Development would be permanent, in reality, collision events are anticipated to be very rare due to the species' scarcity and low density in the Nairn and Moray area. Nonetheless, any collision mortalities would have an adverse effect on the regional population, and by extension the population associated with the Darnaway and Lethen Forest SPA.
- 5.3.74 Although the loss of woodland habitat to clear the wayleave for the OHL through Dulsie Wood and the associated woodlands is concluded to have a not significant effect on the local capercaillie population, habitat management measures described below in relation to mitigating the operational impacts of collision risk are considered to offset the loss of suitable, albeit less preferred, woodland habitat with a heathland ground layer.
- 5.3.75 Whilst the Applicant's Bird SPP provides suitable overarching measures to identify the presence of and prevent disturbance to breeding birds including lekking and nesting capercaillie, the following additional measures, are prescribed specifically in relation to capercaillie in order to reinforce the protection measures for this critically endangered species. These measures have been developed from recommendations made by NatureScot and RSPB Scotland during the meeting on 26 November 2024.

Pre-construction Surveys

- 5.3.76 In order to establish as clear an understanding of capercaillie distribution and abundance in the vicinity of the Proposed Development where it intersects suitable capercaillie habitat, pre-construction surveys will be carried out in the two years preceding the commencement of construction works. Since works are due to commence in Q2 2026, this will include 2025 as well as 2026 before works commence in those woodlands which potentially support capercaillie.
- 5.3.77 For completeness, these surveys will include all woodlands covered by the surveys which were undertaken (see **Section 3.1**) located within 1.5 km of the Proposed Development LoD. The surveys will include both presence / absence surveys in late winter / early spring dedicated capercaillie lek surveys conducted between mid-April and early May, following the methods of SNH (2013). By covering all previously surveyed woodlands where capercaillie are known to have occupied over the last ten years, will provide confidence and reassurance on the species presence and distribution and hence the potential for constraints and the requirement for implementation of protection measures for capercaillie.

Outline Capercaillie Species Protection Plan

- 5.3.78 Whilst the Applicant's Bird SPP provides suitable overarching measures to identify the presence of and prevent disturbance to breeding birds including lekking and nesting capercaillie, a number of additional outline measures, are prescribed specifically in relation to capercaillie, to reinforce the protection measures for this critically endangered species. These measures have been developed from recommendations made by NatureScot and RSPB Scotland during the meeting on 26 November 2024 noted in **EIA Chapter 9: Ornithology** (see **Table 9.1**) and are presented in **Appendix 9.3: Outline Capercaillie Species Protection Plan**; and are summarised below. The outline measures should be built upon and finalised based on the findings of the dedicated pre-construction capercaillie surveys.

- 5.3.79 Pre-construction surveys in areas of suitable capercaillie habitat intersected by the Proposed Development carried out in the two years preceding the commencement of construction (2025 and 2026). The surveys will include both presence / absence surveys in late winter / early spring and dedicated capercaillie lek surveys conducted between mid-April and early May, following the methods of SNH (2013)⁵³.
- 5.3.80 Avoidance of construction works in capercaillie woodlands during the capercaillie breeding season (March-August inclusive).
- 5.3.81 Appointment of an EnvCoW (or Suitably Qualified Ornithologist (SQO)) to supervise and oversee construction works being undertaken within woodlands occupied by capercaillie and be responsible for monitoring compliance with the measures prescribed in the Applicant's Bird SPP and the Outline Capercaillie SPP.
- 5.3.82 Delivery of a Toolbox Talk to all Site Operatives working in capercaillie woodlands, so that they are aware of the potential presence of capercaillie, how to identify them, their behaviour and protection status and the specific protection measures set out in both the Applicant's Bird SPP and the Outline Capercaillie SPP.
- 5.3.83 Completion of pre-felling / vegetation clearance and pre-construction checks in former / potentially suitable capercaillie woodlands, even where pre-construction surveys have not identified the presence of capercaillie. Checks will extend to at least 1 km either side of the works areas during the capercaillie lekking period (April to mid-May (SNH, 2013)⁵³) and 100 m either side of the works areas during the nesting and chick rearing period (May to August), as advised in consultation with NatureScot and RSPB Scotland (see the **EIA Report Chapter 9: Ornithology, Table 9.1**). Works will only be permitted to advance into new areas upon confirmation by the EnvCoW / SQO.
- 5.3.84 Ideally, no fences will be installed within known capercaillie woodlands. However, where fences are unavoidable these, and any existing fences located capercaillie woodlands traversed by the Proposed Development, will be fitted with markers to make them more visible and to reduce the risk of capercaillie collision mortalities. These will involve either orange plastic mesh, wooden pales or reflective metal plate markers, as described in Trout and Kortland (2012)⁵⁴ (as advocated by the Cairngorms Capercaillie Project Capercaillie Emergency Plan) (NatureScot and Cairngorms National Park Authority, 2024⁵⁵).
- 5.3.85 The impact assessment has also concluded that Proposed Development poses a risk of collision to capercaillie where it traverses Dulsie Wood and associated woodlands. As this species typically flies at lower heights it is more at risk from the lower strung conductors than the higher conductors and earth wire. While the greater thickness and twin-strung, triple bundles configuration of the lower conductors will make them more visible than the earth wire, capercaillie are still likely to be at risk of collision based on their physiology and flight characteristics. Birds may also be caught out when flying between adjacent woodlands on opposite sides of the Proposed OHL Alignment and suddenly encountering the OHL towers or conductors with little time or space to react and avoid colliding with them.
- 5.3.86 In order to reduce the risk of capercaillie colliding with the OHL where it passes through Dulsie Wood and the associated woodlands, it is proposed to manage the ground layer habitat and vegetation in order to encourage the birds to walk across the wayleave rather than fly across it. Capercaillie's preferred ground layer vegetation typically comprised heather *Calluna spp.* and blaeberry *Vaccinium myrtillus* (e.g. Forrester *et al*, 2007) and it is proposed to investigate the feasibility of retaining and / or establishing this heathland habitat along the sections of wayleave which intersect the woodlands associated with Dulsie Wood. Such conditions already exist along some corresponding sections of the existing Beauly to Blackhillock 275 kV OHL's wayleave.

⁵³ NatureScot (2013). Guidance Licensing - Capercaillie survey methods. Available at: <https://web.archive.org/web/20230328162103/https://www.nature.scot/sites/default/files/2018-07/Guidance-Licensing-Capercaillie-survey-methods.pdf>

⁵⁴ Trout, R. and Kortland, K. (2012). Fence marking to reduce grouse collisions. Available at: <https://cdn.forestresearch.gov.uk/2012/12/ftn019.pdf>

⁵⁵ NatureScot and Cairngorms National Park Authority (2024). Capercaillie Emergency Plan 2025-2030. Available at: <https://cairngorms.co.uk/capercaillie-emergency-plan/>.

- 5.3.87 The intersected woodlands along the Proposed Proposed OHL Alignment occur between the following OHL towers:
- tower CB5-10 to Tower CB5-17A (Clunas Wood and Newlands of Fleenas Wood); and
 - tower CB5-21 to Tower CB6-6A (Dulsie Wood, Dalnaheiglish Wood to the B9007).
- 5.3.88 From the habitat surveys undertaken to inform the **EIA Report Volume 2 Chapter 8: Ecology**, the OHL passes through a mixture of upland birch woodland, Scot's pine and other native pine woodlands and coniferous plantation woodland. Of these however, it was only the comparatively small areas of Scot's pine and other native pine woodlands which supported a ground layer comprising heather and blaeberry. The ground layer within the upland birch woodland areas typically comprised grass and bracken while the coniferous plantation woodlands had limited ground flora.
- 5.3.89 In areas where the heather and blaeberry ground flora already exist the vegetation will be protected from damage as much as possible during the felling and construction phase in order to retain this heathland character throughout the operational phase. Areas in which the ground layer vegetation is too disturbed and damaged during construction may require to be reinstated and seeded to encourage the heathland vegetation to re-establish.
- 5.3.90 In areas where heather and blaeberry do not already exist it is proposed to seed these areas with an appropriate heathland seed mix and / or using heathland brush-bales containing seed capsules either translocated from elsewhere within the Site or from another local source. Additionally, blaeberry plugs may be necessary to encourage the inclusion of this species in the ground flora community. The establishment of heathland vegetation in these areas may be dependent on factors such as soil condition and light conditions and so consideration of will be necessary to understand full feasibility. Where heathland conditions cannot be achieved a rough, tussock grassland habitat is considered to be appropriate.
- 5.3.91 In order to fully understand and develop the wayleave heathland habitat management through Dulsie Wood and the associated woodlands, a detailed habitat and soil condition assessment is recommended. Based on the results of this assessment a Capercaillie Heathland Habitat Management Plan will be prepared detailing the measures required to protect and retain existing heathland vegetation, establish heathland vegetation in areas where it is currently not present and monitoring and maintenance of the vegetation throughout the Proposed Development's operational lifespan.
- 5.3.92 Through the effective retention / establishment of heathland vegetation along the Proposed Development's wayleave where it traverses Dulsie Wood and associated woodlands, it is anticipated that the risk of capercaillie collisions with the OHL conductors will be reduced to a negligible level.

Spread or Introduction of INNS

- 5.3.93 To prevent the introduction or spread of INNS the following measures should be adhered to:
- Access routes for construction and operational maintenance will avoid the designated site.
 - Based on current survey findings and pre-construction surveys, where required, specific biosecurity measures will be prepared to ensure that appropriate mitigation and avoidance measures are in place to prevent the introduction of spread of INNS. This may require specific controls depending on the nature of the species identified.
 - Best practice biosecurity measures will be followed for any works within or in proximity to designated sites, including following GEMPs relevant to invasive species. This may include but is not limited to wheel washing facilities, cleaning of equipment and PPE, and demarcation around identified INNS.
 - Best practice biosecurity measures will be followed for any works within or near designated sites. These measures will be detailed.

Increases in Recreational Pressure

- 5.3.94 Although no significant adverse effects to capercaillie were predicted from the Proposed Development, the following measures are prescribed in order to prevent increased human access and associated disturbance to capercaillie as a result of creating new access tracks into forested areas inhabited by the species.
- 5.3.95 While the majority of access tracks into the section of the Proposed OHL Alignment which traverses Dulsie Wood and associated woodlands, where capercaillie are still known to exist in Nairn and Moray, will be via existing access tracks, a small number of new permanent access tracks will need to be created. These potentially pose a risk of increasing public recreational access into these woodlands increasing the area over which human disturbance can extend and displace capercaillie. Some of these are only accessible via private access roads or established forest tracks which are already accessible to the public and so are unlikely to significantly increase public access and disturbance. However, there is one access track off the minor C-class road running to the east of Dulsie Wood where a new permanent access track is to be formed through potentially suitable capercaillie woodland. In order to deter members of the public from entering the woods via this new access track, a locked gate will be installed where it meets the public road. This will include signage ordering 'No parking - 24-hour access required'.

Conclusion

- 5.3.96 The Conservation Objectives of the SPA will not be undermined by the Proposed Development, and with the above mitigation measures in place, including the tried and tested measures described, there will be no adverse effect on the integrity of the site.

River Spey SAC

- 5.3.97 The conservation objectives for the River Spey SAC are to avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and to ensure for the qualifying species that the following are maintained in the long-term:
- population of the species, including range of genetic types for salmon, as a viable component of the site;
 - distribution of the species within site;
 - distribution and extent of habitats supporting the species;
 - structure, function and supporting processes of habitats supporting the species;
 - no significant disturbance of the species;
 - distribution and viability of FWPM host species; and
 - structure, function and supporting processes of habitats supporting FWPM host species.
- 5.3.98 The Proposed Development over-sails the River Spey SAC. Currently, Tower CB14-1B is located out with the SAC boundary; however the associated temporary aspects of the Proposed Development including the working areas and compound fencing encroach on the SAC boundary, at the top of the western bank within a field of winter stubble, encroaching on the field margin and riparian broadleaved woodland. At the detailed design stage, the location of Tower CB14-1B and associated temporary working areas will be microsituated outwith the boundary of the SAC. Tree removal and crown reduction will be required within the riparian woodlands of the SAC for the OC of the Proposed Development. Tree loss and removal of overhanging vegetation will result in a loss of shading for fish. Whilst the embedded mitigation will prevent run-off and siltation which could significantly impact the designated features of the SAC (fish and FWPM), the potential for loss of shading and the risk of overhanging vegetation to be removed falling onto salmon redds or FWPM habitats cannot be entirely ruled out. The embedded mitigation set out in the FWPM SPP notes the need for complete avoidance of any disturbance to that species.

5.3.99 Given this more detail on mitigation from the relevant documents has been detailed in this section for this SAC.

5.3.100 The General Compliance Requirements from the *Working in or Near Water GEMP* are as follows:

- plan all works in accordance with best practice;
- ensure all necessary authorisations under the Controlled Activities Regulations (CAR) are in place;
- identify all activities that will be undertaken in or near watercourses (including all identifiable drainage paths);
- avoid works within 10 m of a watercourse unless no other practical options exist and leave a vegetated buffer strip;
- where works are undertaken within 10 m of any watercourse or drain, ensure specific pollution prevention controls are in place;
- communicate risks associated with working in or near watercourses to all personnel and include control measures in the site-specific construction method statements;
- keep site tidy and do not store materials too close to watercourses or surface water features; and
- ensure that all watercourses are routinely monitored for changes in water quality and keep a written record of monitoring. If water quality deteriorates, stop works, identify the source of the problem and implement appropriate mitigation measures. Ensure any potential pollution incident is reported in line with procedures, including to SSEN Transmission.

Freshwater Pearl Mussel (FWPM)

Changes in Water Quality

- 5.3.101 FWPMs are long-lived freshwater molluscs that live in the gravel beds of clear, unpolluted rivers. For part of their lifecycle, they are dependent upon a healthy population of salmonids (young salmon or trout) which act as host species to the larval stage of the mussels. In the River Spey, salmon seem to be the preferred host species. The mussel larvae attach to the gills of salmonid fish in mid to late summer and drop off the following spring. When they detach from their hosts they must land in sandy or gravelly substrates to settle and grow to adulthood.
- 5.3.102 FWPM are currently *Unfavourable Declining* in the River Spey SAC, this is likely due to an artificially low population due to historic unsustainable pearl fishing. NatureScot carries out monitoring, called 'site condition monitoring' for the designated site features. The FWPM monitoring in the River Spey SAC showed a significant apparent decrease in mussel density between 2000 and 2014. The small and isolated populations in the upper Spey are not recruiting and some appear to have disappeared. Mussels are not successfully recruiting at an adequate density to maintain the population upstream of Grantown on Spey. One reason for the lack of recruitment in the upper Spey may be fine sediment resulting in anoxic conditions in the river gravels, which immature mussels cannot tolerate. Another issue is water quality because there is lower flow in the upper river, and so less dilution. Important also for the restoration of the Freshwater mussel is to have large and healthy host population, Atlantic salmon is discussed in the next section.
- 5.3.103 FWPMs are filter feeders and so vulnerable to alterations to water levels and flows and impacts on water quality. As a tower is going in directly adjacent to the River Spey, the most likely potential impact from the development on FWPM would be changes in water quality. They can be affected by chemical pollutants entering the river or being smothered by the release of soil or other material into the river. FWPMs are particularly sensitive to any increase in phosphorus levels which feeds algal growth, blocking the spaces in the river gravels they rely on and reducing the amount of oxygen available to them.
- 5.3.104 As the mussel is a sessile animal, avoidance based on known locations of the species has been key to ensure no effect. As noted above, in the *Conservation Advice Pack* for the River Spey SAC it is noted that FWPMs largely occur downstream from Grantown-on Spey with few colonies in the upper reaches. Grantown on Spey is almost 40 km south from where the Proposed Development bisects the river. During the surveys conducted in 2024 for

this development shells were identified on two locations on the banksides of the River Spey, however, the River Spey itself was not surveyed due to the depth of the river making it inaccessible for survey. The closest recording found in the desk study was 2.4 km south - upstream - of the Proposed Development (based on NatureScot data; see **Confidential Appendix 1: Freshwater Pearl Mussel Data**). A large population and evidence indicated recent successful recruitment.

5.3.105 However, the River Spey contains extensive areas of suitable habitat, good populations of host species (salmon and trout) for the larval stage and an abundant food supply, and so suitable habitat with breeding FWPM downstream of the proposed Development cannot be ruled out. Additional, harmful pollutants including silt from site run off can travel very long distance downstream in rivers. Therefore, precautionary measures outlined in the FWPM SPP, the relevant GEMPs and the CEMP will be applied to ensure Proposed Development does not undermine the conservation objectives to restore the FWPM to favourable condition, these include but are not limited to:

- Store chemicals and fuels in a safe place;
- An Emergency Procedure if FWPM is found unexpectedly; and
- Strict adherence to SEPA's 'The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended): A Practical Guide' (which is mandatory to ensure legal compliance), the Guidance for Pollution Prevention documents and any additional best practice in SSEN Transmission's General Environmental Management Plans should ensure that pollution pathways are eliminated.

Atlantic salmon

Injury and Mortality, Disturbance and Displacement & Changes to Water Quality

5.3.106 Atlantic salmon live in both freshwater and marine environments as part of their lifecycle. They hatch and live in freshwater as juveniles and migrate to sea as adults. After one year or more at sea the adults return to their natal river to spawn. This homing behaviour has resulted in the development of genetically distinct populations of Atlantic salmon between Scottish rivers and several populations may exist within the same river. In the River Spey the salmon population has shown a decrease in the spring multi-sea winter fish since 1952. Since Atlantic salmon migrate up and down stream, any barriers to fish passage have important negative effects.

5.3.107 Atlantic salmon numbers have declined throughout their geographic range, including in Scottish rivers. They are impacted by a range of pressures in the freshwater and marine phases of their lifecycle. In the freshwater environment these pressures may include, amongst others: over exploitation, loss of habitat connectivity, habitat degradation, climate change-related changes to surface water temperature and hydrology, built development (such as hydropower), invasive non-native species, direct and diffuse pollution, water temperature uplift from distilleries, predation and the inappropriate stocking of conspecifics.

5.3.108 The conservation objective that is relative here is to restore the population to favourable condition from its current state of *Unfavourable Recovering*. Effects should be avoided that could lead to a permanent reduction in the Atlantic salmon population or that prevent the population recovering, through mortality, injury, or impacts caused by disturbance or displacement. Although no work will be undertaken in the watercourse, as the works will be adjacent to the river, although unlikely, the potential impact from the Proposed Development on Atlantic salmon would be injury or mortality disturbance or displacement caused by noise or light pollution, or changes in water quality cause by runoff or spills. Therefore, the following mitigation will be implemented to ensure the Proposed Development does not undermine the conservation objective to restore the Atlantic Salmon population to favourable condition.

5.3.109 The River Spey supports salmon and sea lamprey which may migrate through the areas the Proposed Development crosses. While work will not be undertaken within the watercourse, disturbance due to vibration from adjacent construction cannot be ruled out at this stage. In addition, there is a potential pathway for

disturbance and displacement of otter using the riparian and aquatic habitats of the River Spey during construction. Adjacent construction may have the potential to result in noise, vibration or visual disturbance, temporarily displacing otter during construction.

5.3.110 An EnvCoW would be appointed to provide monitoring of construction activities relating to the installation of infrastructure such as:

- Ensuring that work near water body does not create physical barriers to fish movement.
- That if necessary changing work practices or construction methods to avoid excessive noise and illumination (especially at night) and avoid this type of working during spawning season. For salmon this will be November – February. To control and limit noise emissions and vibration levels for fish noise control will be applied during construction works at source to minimise noise (including vibration):
 - Equipment - noise emissions limits for equipment used at site.
 - Equipment – Method of directly controlling noise e.g., by retrofitting controls to plant and machinery.
 - Equipment – Indirect method of controlling noise e.g., acoustic screens.
 - Equipment - Indirect method of controlling noise e.g., benefits and particularly use of alternative construction.
 - methodology to achieve objective such as vibratory piling techniques as opposed to more controversial but noisier techniques; selection of quieter tools / machines; application of quieter processes.
- Noise and Vibration Control Measures:
 - all plant will be operated with covers closed on silencers on equipment fitted where available.
 - plant not in use will be switched off.
 - vehicles not in use will be switched off. There will be a no idling policy.
 - where possible, site traffic will be one-way to prevent the need for reversing. If required, reversing alarms will be restricted to warble and not tonal types.
 - shouting and the use of radios when entering to and from site and when working on-site will be minimised.
 - all plant and equipment will be fully maintained. All machinery will be well maintained to remove noise often associated with wear and tear / indicative of mechanical failure.
 - where practicable, materials will be handled in a manner that reduces noise and vibration to an acceptable level.
 - static plant will be shielded or provided with screens or enclosures where practicable.
 - daytime working hours should be adhered to - where evening or night time working hours are expected, consultation with local authority and local community will be carried out.
 - generators for temporary lighting to be operated only when required. The position of temporary lighting will be positioned downwards on the working areas that will avoid light spillage out with the work area.
 - Avoiding working within the waterbody and limiting the length of bank working area where possible.

5.3.111 A site-specific CEMP will be developed detailing measures to manage, control and monitor the potential effects of noise, pollution and personnel / vehicular movements.

Sea lamprey

Injury and Mortality, Disturbance and Displacement & Changes to Water Quality

5.3.112 The sea lamprey is a primitive species of jawless fish that is eel-like in shape and is anadromous (lives in both sea and fresh water). It spends the majority of its life as a larva (also termed ammocoete) buried in fine sediment in rivers where it filter feeds by trapping water-borne fine organic matter. Its larval phase lasts for approximately five

years after which it metamorphoses and migrates to sea. Relatively little is known about its marine phase, but adult sea lamprey have been found in both shallow coastal and deep off-shore waters where they feed on a variety of fish.

- 5.3.113 After approximately one to two years the adults will return to fresh water to spawn in well oxygenated river gravels. Adult sea lamprey require migration routes that are free of obstacles. Impassable manmade structures, e.g. dams and weirs, will restrict their distribution across a catchment—natural obstacles, e.g. waterfalls, will also do the same. Habitat degradation is one of the key factors affecting this species. It requires clean, well oxygenated water and suitable substrates to use as spawning and nursery habitat. Activities such as river engineering or poor catchment management that could result in these habitats being damaged or removed could affect sea lamprey. Indirect unwanted effects such as the smothering of habitat with fine material as a result of eutrophication could also affect it. Sea lamprey also require water bodies in good ecological status or higher. The River Fiddich – River Spey confluence to the tidal limit was classified by SEPA as being in Moderate ecological status due to the effects of phosphorous associated with sewage discharges. Whether the status of this water body has been, or can be, improved should be investigated.
- 5.3.114 The River Spey supports sea lamprey which may migrate through the areas the Proposed Development crosses. At this SAC the lamprey population is currently *Favourable Maintained*. The reaches downstream of Aviemore provide appropriate habitats for all stages of development of the sea lamprey and these support a relatively large population at the northern limit of its British distribution. While work will not be undertaken within the watercourse, disturbance due to vibration from adjacent construction cannot be ruled out at this stage. In addition, there is a potential pathway for disturbance and displacement of otter using the riparian and aquatic habitats of the River Spey during construction. Adjacent construction may have the potential to result in noise, vibration or visual disturbance, temporarily displacing otter during construction.
- 5.3.115 An EnvCoW would be appointed to provide monitoring of construction activities relating to the installation of infrastructure such as:
- ensuring that work near water body does not create physical barriers to fish movement;
 - that if necessary changing work practices or construction methods to avoid excessive noise and illumination (especially at night) and avoid this type of working during spawning season. For sea lamprey this will be May - July. For more information on noise mitigation see
 - Strict adherence to SEPA's 'The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended): A Practical Guide' (which is mandatory to ensure legal compliance), the Guidance for Pollution Prevention documents and any additional best practice in SSEN Transmission's General Environmental Management Plans should ensure that pollution pathways are eliminated.
 - Atlantic salmon above; and
 - avoiding working within the waterbody and limiting the length of bank working area where possible.

Otter

Injury and Mortality, Disturbance and Displacement & Changes to Water Quality

- 5.3.116 Otters are highly adaptable and can often live comfortably within the vicinity of a development if it used for foraging and commuting within their territory, and appropriate mitigation is in place to protect them from disturbance. If, on the other hand, an area is identified as a breeding site or has a natal den within it, the otters are much more vulnerable and sensitive to disturbance. In these instances, significant mitigation measures will have to be put in place. Based on current survey information there are no natal dens or holts within the survey area relevant to this SAC. Resting sites were found within the survey area, however after a four-week camera trapping exercise at the three sites closest to the Proposed Development and no otter activity was recorded. However, the possibility of evidence is found in preconstruction surveys cannot be ruled out.

- 5.3.117 Otters require continued proximity to unpolluted open water, including lochs, rivers and streams. There should be a plentiful food supply and habitats for providing shelter for both resting and breeding. They are wide ranging and normally occur at low densities. At this site the otter population is *Favourable Maintained*. The otter associated with the SAC are likely to have holts or resting places outside the site boundary as well as within the site itself. Recreational disturbance can have an effect, but they have large ranges and can largely avoid people.
- 5.3.118 Whilst no works will be required within the watercourse, due to the proximity of the Proposed Development to the River Spey, there is potential for changes in water quality during construction due to pollution events or sediment runoff. Clearance of vegetation during construction or following completion to maintain access may also result in increased risk of runoff. In addition, as the floodplain and river gravels hold groundwater, any impacts on these areas have the potential to impact the groundwater and River Spey. Any excavations associated with the tower adjacent to the River Spey and creation of access tracks may have the potential to impact groundwater movements.
- 5.3.119 Injury or mortality to otter passing along river corridor or foraging on the riverbank is possible during construction activities. As a tower is located in proximity to the river corridor within the designation, it is not possible to rule out the potential for injury or mortality and disturbance and displacement of otter. Adjacent construction may have the potential to result in noise, vibration or visual disturbance, temporarily displacing otter during construction, or the activity of excavating the tower and the associated machinery and equipment may cause injury or mortality. Therefore, precautionary measures outlined in the Otter SPP will be applied to ensure the Proposed Development does not undermine the conservation objectives to restore the otter to favourable condition, these include but are not limited to:
- All works close to waterbodies and watercourses showing signs of regular use by otters should not take place at night or within two hours of sunset / sunrise, if possible.
 - Where works close to waterbodies and watercourses are required at night, lighting should be directed away from riparian areas.
 - All works close to water courses and waterbodies must follow best practice measures to ensure their protection against pollution, silting and erosion.
 - Any temporarily exposed pipe system should be capped when staff are off-site to prevent otters from gaining access.
 - All exposed trenches and holes should be provided with mammal exit ramps e.g., wooden planks or earth ramps when Contractors are off-site.
 - An emergency procedure should be implemented by site workers if otter / otter shelters are unexpectedly encountered. All work within 30 m (100 m for high noise / vibration activities) or 200 m for breeding sites should cease until a suitably qualified and experienced ecologist has inspected the site and determined the appropriate course of action. For more information on noise mitigation see
 - Strict adherence to SEPA's 'The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended): A Practical Guide' (which is mandatory to ensure legal compliance), the Guidance for Pollution Prevention documents and any additional best practice in SSEN Transmission's General Environmental Management Plans should ensure that pollution pathways are eliminated.
 - Atlantic salmon above.
 - An exceptional circumstance procedure will be implemented should mitigation options not prove satisfactory in a particular case. Works will be halted whilst mitigation is determined (under consultation with NatureScot if required).
 - Site-specific Environmental Management Plan (SSEMP) will be developed as the works progress, available for each section of access or tower, detailing how each specific location will manage pollution. This will be available to members of staff on-site and will be kept up to date via ArcGIS software.

5.3.120 There are currently no active holts or places of shelter identified within the relevant survey area, however if discovered in preconstruction surveys the following should apply:

- Avoidance is the preferred option for active holts / places of shelter identified within 30 m of works (100 m for high noise / vibration activities) or 200 m for confirmed breeding sites or. Protection zones of either 30 m, 100 m or 200 m should be marked and signed on the ground with appropriate material to restrict work access.
- Protection zones must be maintained until works are completed. Site staff should be briefed of their purpose through a Toolbox Talk and works micro-sited outwith the protection zone. If other disturbance can be avoided in this way, there is no need to obtain a Licence from NatureScot for the works.
- If a Project Licence is in place, and a breeding holt will be disturbed, a Method Statement must be submitted to NatureScot for written approval in accordance with Part 2 of the Otter SPP prior to any works commencing.

All Qualifying Features

Introduction or Spread of INNS

5.3.121 Due to the proximity of the works there is potential for the introduction or spread of INNS into the River Spey SAC. Based on the locations of elements of the Proposed Development, works may be required as close as 7 m from the designated site. As such, there may be a risk of INNS spreading into the watercourse due to movements of vehicles or personnel, vegetation clearance or movement of materials.

5.3.122 Therefore, precautionary measures outlined in the relevant GEMPs and CEMP will be applied to ensure Proposed Development does not undermine the conservation objectives, these include but are not limited to:

- Access routes for construction and operational maintenance will avoid the designated site.
- Based on current survey findings and pre-construction surveys, where required, specific biosecurity measures will be prepared to ensure that appropriate mitigation and avoidance measures are in place to prevent the introduction or spread of INNS. This may require specific controls depending on the nature of the species identified.
- Best practice biosecurity measures will be followed for any works within or in proximity to designated sites, including following GEMPs relevant to invasive species. This may include but is not limited to wheel washing facilities, cleaning of equipment and PPE, and demarcation around identified INNS.
- Best practice biosecurity measures will be followed for any works within or near designated sites. These measures will be detailed.

Increases in Recreational Pressures

5.3.123 On the east of the River Spey runs the long-distance trail the *Speyside Way*, therefore, where the Proposed Development is situated on this side of the river there is already footfall. However, on the west side measures to reduce recreational pressures must be considered.

5.3.124 Due to the proximity of the Proposed Development to the River Spey SAC on the west of the river, construction and operational maintenance will be required which may result in increased recreational pressures to the SAC. As the Proposed Development may require construction within between 7 m and 25 m of the SAC, it is likely that vegetation clearance will be required in order to access construction and operational locations. This may inadvertently create clear access routes for recreational users to access the watercourse. Any increase in recreational pressures may lead to disturbance of the qualifying species, or direct habitat damage through increased erosion, litter, or pollutants.

5.3.125 Discussions will be needed with the appropriate managing bodies to ensure that the access routes do not increase access into areas where recreational access would pose a particular threat.

- 5.3.126 Appropriate mitigation measures such as signage and fencing to avoid recreational access is advised on working areas and access routes. The **EIA Report Appendix 14.2: Draft Outdoor Access Management Plan** discusses access management.

Conclusion

- 5.3.127 The Conservation Objectives of the SAC will not be undermined by the Proposed Development, and with the tried and tested mitigation described, consequently there will not be any adverse effect on the integrity of the site.

Lower Findhorn Woods SAC

- 5.3.128 Designated for the Tilio-Acerion forests of slopes, screes and ravine, the conservation objectives are as follows:

- To ensure that the qualifying features of Lower Findhorn Woods SAC are in favourable condition and make an appropriate contribution to achieving favourable conservation status.
- To ensure that the integrity of Lower Findhorn Woods SAC is restored by meeting listed objectives.

- 5.3.129 The SAC is a considerable distance from the nearest part of the Porpoised Development which sits in a high gorge above the upper part of the River Findhorn. However, the SAC is downstream of the Proposed Development; therefore, the main risk would be an accidental spill. To prevent any contamination in such an event the following should be adhered to:

- Emergency spill response kits will be available and maintained during construction works.
- The EnvCoW will have authority to stop any works that are or have could be a spill and pollutants moving downstream towards the SAC. To prevent this happening the following measures will be put in place.
- A wet weather protocol would be developed detailing the procedures to be adopted by all site staff during periods of heavy rainfall (e.g. inspection and maintenance regimes of sediment and runoff control measures), in extreme cases works may be temporarily suspended until weather / ground conditions allow.
- An overarching Pollution Prevention Plan (PPP) will be prepared by the principal contractor. This plan aligns with the contractor's environmental procedures, SEPA Guidance for Prevention of Pollution and SSEN General Environmental Management Plans (GEMP) available upon request. The PPP acts as a live document throughout the construction phase to reflecting changing conditions on-site.

Spread of INNS

- 5.3.130 The Proposed Development is not located within the designated site and access routes will not be required to be within or in proximity to the designated site. However, invasive species can be found in high abundance in the riverine environment and can spread in riverine corridors.

- 5.3.131 To prevent the introduction or spread of INNS the following measures should be adhered to:

- Access routes for construction and operational maintenance will avoid the designated site.
- Based on current survey findings and pre-construction surveys, where required, specific biosecurity measures will be prepared to ensure that appropriate mitigation and avoidance measures are in place to prevent the introduction of spread of INNS. This may require specific controls depending on the nature of the species identified.
- Best practice biosecurity measures will be followed for any works within or in proximity to designated sites, including following GEMPs relevant to invasive species. This may include but is not limited to wheel washing facilities, cleaning of equipment and PPE, and demarcation around identified INNS.
- Best practice biosecurity measures will be followed for any works within or near designated sites. These measures will be detailed.

- 5.3.132 The Conservation Objectives of the SAC will not be undermined by the Proposed Development, and with the tried and tested mitigation described, consequently there will not be any adverse effect on the integrity of the site.

Mortlach Moss SAC

Base-rich fens

- 5.3.133 The conservation objectives for Mortlach Moss SAC are as follows:

- To maintain the current extent of base-rich fen communities.
- To maintain the present hydrological regime whereby the specialised plant communities are not compromised by nutrient rich water flows and sediment deposition from the surrounding slopes.

Changes in Water Quality

- 5.3.134 Mortlach Moss lies within the Bin Forest about 5 km north of Huntly. The SAC is a small alkaline fen (or moss), with associated flushes, which has developed in an isolated peat hollow which was once a small loch. The wetland vegetation is influenced by the underlying base-rich geology and the moss receives water from springs and as rainwater. The basin fen community found at Mortlach, with abundant bottle sedge and lesser tussock sedge, is nationally rare. The species diversity of the site is partly caused by the fine mosaic of low-lying, wetter areas and higher hummocks, with the intermixture of acid-loving and base-tolerant species reflecting the varied chemical content of the supporting spring waters.
- 5.3.135 Site Condition Monitoring carried out in September 2005 found that the vegetation communities were in favourable condition with the water table remaining high throughout the site. There was some scrub encroachment, mainly willow and pine, which should be removed as it could lead to drying out of the moss, but the site as a whole remained in favourable condition.
- 5.3.136 As there is no direct hydrological connection, the SAC is slightly upslope and is not immediately adjacent to the development; the risk here would be a spill combined with bad weather conditions. To prevent any contamination in such an event the following should be adhered to:
- Emergency spill response kits will be available and maintained during construction works.
 - The EnvCoW will have authority to stop any works that are or have potential to impair the water environment.
 - A wet weather protocol would be developed detailing the procedures to be adopted by all site staff during periods of heavy rainfall (e.g. inspection and maintenance regimes of sediment and runoff control measures), in extreme cases works may be temporarily suspended until weather / ground conditions allow.
 - An overarching Pollution Prevention Plan (PPP) will be prepared by the Principal Contractor. This plan aligns with the contractor's environmental procedures, SEPA Guidance for Prevention of Pollution and SSEN General Environmental Management Plans (GEMP) available upon request. The PPP acts as a live document throughout the construction phase to reflecting changing conditions on-site.

Spread of INNS

- 5.3.137 The Proposed Development is not located within the designated site and access routes will not be required to be within or in proximity to the designated site. However, invasive species are noted as a pressure on the woods at this site and one of the conservation objectives is to *Maintain the habitats supporting the species within the site*.
- 5.3.138 To prevent the introduction or spread of INNS the following measures should be adhered to:
- Access routes for construction and operational maintenance will avoid the designated site.
 - Based on current survey findings and pre-construction surveys, where required, specific biosecurity measures will be prepared to ensure that appropriate mitigation and avoidance measures are in place to prevent the

introduction of spread of INNS. This may require specific controls depending on the nature of the species identified.

- Best practice biosecurity measures will be followed for any works within or in proximity to designated sites, including following GEMPs relevant to invasive species. This may include but is not limited to wheel washing facilities, cleaning of equipment and PPE, and demarcation around identified INNS.
- Best practice biosecurity measures will be followed for any works within or near designated sites. These measures will be detailed.

Increases in Recreational Pressures

- 5.3.139 Due to the proximity of the Proposed Development to the SAC, construction and operational maintenance will be required which may result in increased recreational pressures to the SAC. This may inadvertently create clear access routes for recreational users to access the watercourse. Any increase in recreational pressures may lead to disturbance of the qualifying species, or direct habitat damage through increased erosion, litter, or pollutants.
- 5.3.140 Discussions will be needed with the appropriate managing bodies to ensure that the routes do not increase access into areas where recreational access would pose a particular threat.
- 5.3.141 Appropriate mitigation measures such as signage and fencing to avoid recreational access is advised on working areas and access routes.
- 5.3.142 Given the proximity of the SAC to the Proposed Development (approximately 0.6 km) it is advised that using the southern limit of the LoD is avoided where possible and that should it be used, the Applicant's change control process for micro-siting within LoD is utilised to ensure that there are no adverse effects on-site integrity.

Conclusion

- 5.3.143 With the above tried and tested mitigation in place, it is predicted that the Conservation Objectives of the Mortlach Moss SAC will not be undermined by the Proposed Development, and consequently there will not be any adverse effect on the integrity of the site.

6 In combination

- 6.1.1 It is a requirement of Regulation 63(a) of the Habitats Regulations to not only assess the impacts of a development project alone, but also to investigate whether there might be 'in-combination' effects with other projects or plans. The scale of the developments for inclusion is based on the likelihood for significant cumulative impacts with the Proposed Development. As such, our criteria for inclusion comprises EIA scale development; larger energy industry developments such as windfarms, battery storage facilities, substations, overhead lines, underground cables or quarries that are not EIA development but which have the potential for significant cumulative impacts.
- 6.1.2 In general, a study area of 5 km distance from the Proposed Development has been used to identify In-combination Developments for all environmental topics as the majority of the study areas for each of the individual environmental topic assessments is 5 km or less. The exceptions to this are Landscape and Visual and Ornithology cumulative effects, where a distance of 10 km has been used specifically to include windfarm developments due to the increased likelihood of these types of developments having a wider zone of theoretical visibility and being within ranging distance of scoped in ornithological species.
- 6.1.3 The individual topic based technical Chapters of the EIA Report consider the cumulative effects of the Proposed Development with other existing or future committed developments that have the potential to result in significant cumulative effects in combination with those resulting from the Proposed Development. The developments which form part of the wider network transmission upgrade project are discussed in detail in **EIA Report Volume 2 Chapter 2: Project Need** and are therefore linked to the Proposed Development:
- Stage 1: the Proposed Development has been assessed cumulatively with the developments listed in the **EIA Report Volume 2 Chapter 5: EIA Process and Methodology** to understand the likely significant effects of the wider network transmission upgrade as a whole.
 - Stage 2: an in combination cumulative assessment has been undertaken with the remaining cumulative developments to determine the overall potential for in-combination cumulative effects.
- 6.1.4 For Stage 1 Projects, it is possible that any developments affecting International Sites could combine with the Proposed Development to elevate the significance of effects on these sites. The following developments within Stage 1 have been considered. All three are awaiting determination as to whether they will be consented:
- The Highland Council
 - Fanellan Hub 400 kV Substation: A new 400 kV substation and converter station located in the Beauly area.
 - Aberdeenshire Council
 - Greens 400 kV Substation: A new 400 kV substation located 2.5 km southeast of Cuminestown.
 - Netherton Hub 400 kV Substation: A new strategic development near Flushing and Longside that consists of a 400 kV substation, 132 kV substation, a HVDC switching station, two HVDC converter stations and a spares warehouse and operations base.
- 6.1.5 Where applications for SSEN Transmission projects have not yet been submitted, they are at an earlier stage than would normally be included within an EIA cumulative assessment or a HRA in-combination assessment. The limitations of including these SSEN Transmission Cumulative Developments within the assessment is that the detailed environmental assessments have not yet been finalised, and as a result the likely significant effects and any proposed mitigation have not been fully identified at this stage, to inform this in combination assessment. Therefore, the assessment has been based on the available information known at this stage for these developments.

- 6.1.6 There is only potential for in-combination effects where the Proposed Development has the same potential impact pathways as the other schemes on the same International Sites. Therefore, the International Sites included in this in-combination assessment are within the study area and have the same potential impact pathway.
- 6.1.7 There was found to be no such potential impact pathway for any for the developments listed as part of Stage 1 on any of the relevant International Sites.
- 6.1.8 With regard to Stage 2 developments which are listed in **Table 6.1** below: Moray and Nairn Coast SPA and Ramsar, Darnaway and Lethen Forest SPA, Lower Findhorn Woods SAC and Mortlach Moss SAC all had LSEs arising from the Proposed Development alone, but did not have the same potential impact pathways from other projects, therefore they are not considered further in this in-combination assessment.

Table 6.1: In-combination impacts on International Sites from Other Developments

International Designation	LPA	Relevant Stage 2 Developments	In-combination Effects
Strathglass Complex SAC	The Highland Council	H03 Beauly to Denny Overhead Line Diversion H04 Spittal to Loch Buidhe to Beauly 400 kV Project H05 Western Isles HVDC UGC H10 Aigas Substation H12 Ballach Wind Farm H18 Fairburn Wind Farm Extension	H03 Beauly to Denny Overhead Line Diversion, H04 Spittal to Loch Buidhe to Beauly 400 kV Project, H05 Western Isles HVDC UGC, H10 Aigas Substation, H12 Ballach Wind Farm and H18 Fairburn Wind Farm Extension are located downstream of the SAC, within the EZol. As such the habitat designations of the SAC will not be affected by these developments. It is assumed that best practice will be implemented to prevent pollution and any effects on otter, a designated feature of the SAC. Potential disturbance to otter associated with the SAC would be adverse, local, indirect, temporary and reversible. Any in-combination effects would not result in LSEs.
Moniack Gorge SAC	The Highland Council	H01 Knocknagael BESS H02 Beauly BESS H03 Beauly to Denny Overhead Line Diversion H04 Spittal to Loch Buidhe to Beauly 400 kV Project H05 Western Isles HVDC UGC H06 Beauly BESS H07 Kilmorack Substation H08 Beauly Substation H10 Aigas Substation.	Whilst these developments are all located within the EZol, there is no functional link to the SAC and as such no in-combination LSEs are anticipated.
Cawdor Wood SAC	The Highland Council	H11 Balmore Wind Farm	With regards to H11 Balmore Wind Farm, Cawdor Wood SAC and SSSI is located 6.5 km northwest of the site. Given the sedentary nature of the designated features (oakwood) and distance, no in-combination LSEs are anticipated.
River Spey SAC	Moray Council	M01 Kellas Drum Wind Farm	M13 Elchies (Rothes III) Wind Farm Grid Connection works is located nearby the SAC and SSSI and crosses the River Spey. M01 Kellas Drum Wind Farm, M04 Rosarie Quarry, M05 Teindland Wind Farm,

International Designation	LPA	Relevant Stage 2 Developments	In-combination Effects
		M04 Rosarie Quarry M05 Teindland Wind Farm M07 Blackhills Wind Farm M13 Elchies (Rothes III) Wind Farm Grid Connection works M14 Marchfield Quarry M17 Aultmore Wind Farm Redesign	M07 Blackhills Wind Farm, M14 Marchfield Quarry and M17 Aultmore Wind Farm Redesign are all located within the SAC's EZol. It is assumed that best practice will be implemented to prevent pollution and any effects on the designated features of the SAC. Potential degradation / pollution to the SAC would be adverse, local, indirect, temporary and reversible. Any effects would not lead to in-combination LSEs .
Lower River Spey - Spey Bay SAC	Moray Council	M04 Rosarie Quarry M05 Teindland Wind Farm M07 Blackhills Wind Farm M13 Elchies (Rothes III) Wind Farm Grid Connection works M14 Marchfield Quarry M17 Aultmore Wind Farm Redesign	M04 Rosarie Quarry, M05 Teindland Wind Farm, M07 Blackhills Wind Farm, M13 Elchies (Rothes III) Wind Farm Grid Connection works, M14 Marchfield Quarry and M17 Aultmore Wind Farm Redesign are located within the EZol of the Lower River Spey - Spey Bay SAC. It is assumed that best practice will be implemented to prevent pollution and any effects on the designated features of the SAC. Potential degradation / pollution to the SAC would be adverse, local, indirect, temporary and reversible. Due to these factors, and the fact that there is no clear pathway for effect from the Proposed Development alone as set out in the screening assessment above, would mean that there are no in-combination LSEs for this site.

7 Conclusions

7.1.1 The Proposed Development was found to have the potential to indirectly impact the following International Sites through the noted LSEs:

- Strathglass Complex SAC – otter only:
 - Injury or Mortality, and Disturbance and Displacement.
- Moniack Gorge SAC:
 - Spread of INNS.
- Inner Moray Firth SPA and Ramsar – osprey only:
 - Habitat Loss, Injury and Mortality, Disturbance and Displacement and Collision Risk and Introduction or Spread of INNS.
- Moray and Nairn Coast SPA and Ramsar (Osprey):
 - Injury or Mortality, Disturbance and Displacement and Collision Risk.
- Cawdor Wood SAC:
 - Changes in Water Quality, Introduction or Spread of INNS and Increase in Recreational Pressures.
- Darnaway and Lethen Forest SPA:
 - Habitat Loss, Injury and Mortality, Disturbance and Displacement, Collision Risk and Introduction or Spread of INNS.
- River Spey SAC:
 - Habitat Loss, Changes in Water Quality, Injury and Mortality, Disturbance and Displacement, Introduction or Spread of INNS and Recreational Pressures.
- Lower Findhorn SAC:
 - Changes to Water Quality and Introduction or Spread of INNS.
- Mortlach Moss SAC:
 - Changes in Water Quality, Introduction or Spread of INNS and Recreational Pressures.

7.1.2 Following the Appropriate Assessment, consideration of mitigation options, and other schemes in the surrounding area, it is concluded that the Proposed Development will not undermine the Conservation Objectives of any International Sites, and therefore, there will be no adverse effect on their integrity.