

CHAPTER 8 – ECOLOGY

8 ECOLOGY	8-2
8.1 Introduction	8-2
8.2 Scope of Assessment and Methodology	8-2
8.3 Baseline Conditions	8-32
8.4 Assessment of Likely Significance of Effects	8-82
8.5 Additional Mitigation	8-130
8.6 Residual Effects	8-141
8.7 Assessment of Cumulative Effects	8-142
8.8 Summary and Conclusions	8-168

Figures (Volume 3 of this EIA Report)

Figure 8.1: International Designated Sites

Figure 8.2: National, Local / Non-statutory Designated Sites

Figure 8.3: Ancient Woodland and Peatland Records

Visualisations (Volume 4 of this EIA Report)

No visualisations are associated with this Chapter.

Appendices (Volume 5 of this EIA Report)

Appendix 8.1: UK Habitat and Protected Species

- Figure 8.1.1– Survey Areas and Access Constraints
- Figure 8.1.2 – UK Habitat Survey Results
- Figure 8.1.3 – Initial Bat Survey Results
- Figure 8.1.4 – Further Bat Survey Results
- Figure 8.1.5 – Night-time Bat Walkover and Static Bat Survey Results
- Figure 8.1.6 – Other Protected and Notable Species Survey Results

Appendix 8.2: Confidential Badger and Freshwater Pearl Mussel

- Figure 8.2.1 – Badger Survey Results
- Figure 8.2.2 – Freshwater Pearl Mussel Survey Results

Appendix 8.3: Biodiversity Net Gain Assessment

- Figure 8.3.1 – Baseline Habitats
- Figure 8.3.2 – Post Development Habitats

Appendix 8.4: Peatland Condition Assessment

- Figure 8.4.1 – Peatland Condition Assessment Results

8 ECOLOGY

8.1 Introduction

- 8.1.1 This Chapter presents the assessment of the potential effects on non-avian ecology resulting from the Proposed Development. The assessment includes the potential effects on ecologically designated sites, terrestrial habitats and protected species. The assessment is based on best practice guidance including the Chartered Institute for Ecology and Environmental Management's (CIEEM) Guidelines for Ecological Impact Assessment (EcIA) in the UK and Ireland (2018) revised in 2024. This chapter (and its associated Figures and Appendices) is not intended to be read as a standalone assessment and reference should be made to the introductory chapters of this EIA Report (Chapters 1-6).
- 8.1.2 Considerations with regards to ornithology, including discussion of designated sites relevant to birds such as Special Protection Areas (SPA), have been made in **Chapter 9: Ornithology** of this EIA report.
- 8.1.3 Badger (*Meles meles*) and Freshwater Pearl Mussel (FWPM) (*Margaritifera margaritifera*) are discussed within this chapter, but no locational information is provided as these species are subject to persecution. Full details can be found in **Appendix 8.2 Confidential Badger and Freshwater Pearl Mussel**.
- 8.1.4 The specific objectives of this chapter are to:
- describe the assessment methodology and significance criteria applied to this assessment;
 - describe the relevant baseline conditions and identify important ecological features;
 - assess the potential effects on important ecological features;
 - assess the significance of effects on important ecological features;
 - describe the additional measures proposed to address significant effects and legal obligations;
 - describe any residual effects following the implementation of mitigation measures; and
 - describe any cumulative effects arising from other developments.
- 8.1.5 A Habitats Regulations Appraisal (HRA) has been undertaken parallel to this assessment and assesses the effects on European Sites (i.e. Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)¹. Ramsar sites relevant to the Proposed Development are underpinned by SACs and SPAs and are also discussed in the HRA in line with Policy 4 of National Planning Framework 4 (NPF4)².
- 8.1.6 The ecology assessment was undertaken by WSP. It was prepared by professional and experienced ecological consultants with appropriate memberships of CIEEM. A table presenting relevant qualifications and experience of the Ecology lead who has overseen the ecological input into this chapter is included in **Chapter 5: EIA Process and Methodology**.

8.2 Scope of Assessment and Methodology

Legislative Framework, Policy, and Guidance

- 8.2.1 This assessment has been compiled with reference to the following relevant nature conservation legislation, planning policy and guidance documents from which the protection of sites, habitats and species is derived in Scotland. For local policies, the relevant Local Planning Authority (LPA) is noted below.

¹ SSEN Transmission (2025). Beaulay to Blackhillock to New Deer to Peterhead 400 kV Project Habitats Regulation Appraisal Screening Report and Appropriate Assessment

² Scottish Government (2023). National Planning Framework 4. Published by the Scottish Government, Edinburgh. Online at: <https://www.gov.scot/publications/national-planning-framework-4/documents/>

Legislation

- UK Withdrawal from the European Union (Continuity) (Scotland) Act 2021³.
- European Commission Directive on the Conservation of Wild Birds (2009 / 147 / EC) (the Birds Directive)⁴.
- Council Directive 92 / 43 / EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna (the Habitats Directive)⁵.
- Conservation (Natural Habitats &c.) Regulations 1994 (as amended) (the 1994 Habitats Regulations)⁶.
- Conservation of Habitats and Species Regulations 2017 (the 2017 Habitats Regulations)⁷.
- Wildlife and Countryside Act 1981 (as amended)⁸.
- Nature Conservation (Scotland) Act 2004 (as amended)⁹.
- Wildlife and Natural Environment (Scotland) Act 2011 (as amended)¹⁰.
- Protection of Badgers Act 1992 (as amended)¹¹.
- Salmon and Freshwater Fisheries (Consolidation) (Scotland) Act 2003¹².
- Water Environment (Controlled Activities) (Scotland) Regulations 2005 (as amended)¹³.
- Wild Mammals (Protection) Act 1996¹⁴.
- The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017¹⁵.
- Town and Country Planning (Scotland) Act 1997 (as amended)¹⁶.

Policy

- EU Biodiversity Strategy for 2030¹⁷ which sets out commitments to protect and restore biodiversity, including relevant targets on bringing nature back to agricultural land.
- NPF4² which aims to secure positive effects for biodiversity, specifically including the following policies of relevance:
 - *Policy 3 Biodiversity* intends to protect biodiversity, reverse biodiversity loss, deliver positive effects from development and strengthen nature networks; it is relevant with a proposed change to the baseline of the Proposed Development.
 - *Policy 4 Natural places*, intends to protect, restore and enhance natural assets making best use of nature-based solutions; it is relevant as it requires proposals that are likely to have an adverse effect on species protected by legislation to meet the relevant statutory tests, appropriate steps to be taken to establish presence, and the level of protection to be factored into the planning and design of the development. It also requires the precautionary principle to be applied. In a change to the previous policy position which is reflected in policy 4c of NPF4, the Chief Planner¹⁸ 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

³ UK Government (2021). UK Withdrawal from the European Union (Continuity) (Scotland) Act 2021. Online at: <https://www.legislation.gov.uk/asp/2021/4/contents>

⁴ UK Government (2009). Directive 2009/147/EC of the European Parliament and of the Council. Online at: <https://www.legislation.gov.uk/eudr/2009/147/contents>

⁵ UK Government (1992). Council Directive 92/43/EEC. Online at: <https://www.legislation.gov.uk/eudr/1992/43/contents>

⁶ UK Government (1994). The Conservation (Natural Habitats, &c.) Regulations 1994. Online at: <https://www.legislation.gov.uk/uksi/1994/2716/made>

⁷ UK Government (2017). The Conservation of Habitats and Species Regulations 2017. Online at: <https://www.legislation.gov.uk/uksi/2017/1012/contents>

⁸ UK Government (1981). Wildlife and Countryside Act 1981. Online at: <https://www.legislation.gov.uk/ukpga/1981/69>

⁹ UK Government (2004). Nature Conservation (Scotland) Act 2004. Online at: <https://www.legislation.gov.uk/asp/2004/6/contents>

¹⁰ UK Government (2011). Wildlife and Natural Environment (Scotland) Act 2011. Online at: <https://www.legislation.gov.uk/asp/2011/6/contents>

¹¹ UK Government (1992). Protection of Badgers Act 1992. Online at: <https://www.legislation.gov.uk/ukpga/1992/51/contents>

¹² UK Government (2003). Salmon and Freshwater Fisheries (Consolidation) (Scotland) Act 2003. Online at: <https://www.legislation.gov.uk/asp/2003/15/contents>

¹³ UK Government (2005). The Water Environment (Controlled Activities) (Scotland) Regulations 2005. Online at: <https://www.legislation.gov.uk/ssi/2005/348/regulation/4/made>

¹⁴ UK Government (1996). Wild Mammals (Protection) Act 1996. Online at: <https://www.legislation.gov.uk/ukpga/1996/3/contents>

¹⁵ UK Government (2017). The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017. Online at: <https://www.legislation.gov.uk/ssi/2017/101/contents>

¹⁶ UK Government (1997). Town and County Planning (Scotland) Act 1997. Online at: <https://www.legislation.gov.uk/ukpga/1997/8/contents>

¹⁷ European Commission, Directorate-General for Environment (2021). EU Biodiversity Strategy for 2030: bringing nature back into our lives. Publications Office of the European Union. Online at: <https://data.europa.eu/doi/10.2779/677548>

¹⁸ 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/>

making. This Chapter has applied this updated policy to its assessments of the effects of the Proposed Development on Ramsar sites;

- *Policy 5 Soils*, intends to protect carbon-rich soils, restore peatlands and minimise disturbance to soils from development; it is relevant with the Proposed OHL Alignment located within peatland including priority peatland.
- *Policy 6 Forestry, woodland and trees*, which intends to protect and expand forests, woodland and trees; it is relevant due to the presence of woodland and lines of trees within the Proposed OHL Alignment.
- Scottish Biodiversity Strategy (SBS) to 2045¹⁹ which sets out an ambition for Scotland to be Nature Positive by 2030 and to have restored and regenerated biodiversity by 2045. The SBS refers to a series of overarching targets and indicators. The following objectives are relevant to the Proposed Development, based on the location, land-use, habitats and species present:
 - Wetlands, forests, grasslands, rivers, lakes, heath, scrub and rocky habitats – improving and re-establishing biodiverse habitats on a large scale and bringing back species populations by improving and enlarging their habitats.
 - Pollinating insects – reversing the decline of pollinator populations by 2030.
 - Forest ecosystems – achieving an increasing trend for standing and lying deadwood; uneven aged forests and forest connectivity.
 - Urban ecosystems – No net loss of green urban space by 2030; and an increase in the total area covered by green urban space by 2040 and 2050.
 - Agricultural ecosystems – Increasing grassland butterflies; the share of agricultural land with high-diversity landscape features; and restoring drained peatlands under agricultural use.
- The SBS references the Species on the Edge (SOTE) Programme²⁰ instead of using the Scottish Biodiversity List²¹ (SBL) of flora, fauna and habitats considered of principal importance for the conservation of biodiversity. The SOTE aims to deliver nine single-taxa species recovery plans across seven landscape-scale areas to conserve 37 vulnerable coastal species. The East Coast project and associated vulnerable species which are relevant to the Proposed Development, based on the Proposed OHL Alignment, land-use, habitats and species present include:
 - Butterflies: small blue butterfly (*Cupido minimus*) and northern brown argus (*Arícia artaxerxes*).
 - Invertebrates: bordered brown lacewing (*Megalomus hirtus*).
 - Plants: purple oxytropis (*Oxytropis helleri*; albeit the species is restricted to cliffs, coastal heath and dunes and less likely to occur within the Proposed Development).
- Code of Practice on Non-Native Species²². This provides guidance on how to act responsibly within the law that makes it an offense to release non-native animals or non-native plants in the wild.

Local Biodiversity Action Plans

8.2.2 The SBS described above is implemented locally through Local Biodiversity Action Plans.

¹⁹ Scottish Government (2023). Scottish Biodiversity Strategy to 2045. Tackling the Nature Emergency in Scotland. Available at: <https://www.gov.scot/publications/scottish-biodiversity-strategy-2045-tackling-nature-emergency-scotland-2/>

²⁰ NatureScot (online). Species on the Edge. Online at: <https://www.nature.scot/scotlands-biodiversity/species-edge-sote/species-edge-about-programme>

²¹ Scottish Ministers (2012). Scottish Biodiversity List. Online at: <https://www.nature.scot/doc/scottish-biodiversity-list>

²² Scottish Ministers (undated). Code of Practice on Non-Native Species. Online at: <https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2012/08/non-native-species-code-practice/documents/00398608-pdf/00398608-pdf/govscot%3Adocument/00398608.pdf>

- 8.2.3 The Highland Nature Biodiversity Action Plan (HNBAP) delivers this with a series of statements, Action for Habitats²³, that focuses on habitats and species of importance within the region, including; upland and moorland peatland and wetland, woodland and forest, freshwater (rivers, burns and lochs) and agricultural land. The HNBAP also defines local priority species for conservation, including invertebrates, plants, fungi, lichens, fish and mammals.
- 8.2.4 The North East Scotland Biodiversity Partnership (NESBiP), covering Moray and Aberdeenshire, delivers the SBS with a series of statements for Important Habitats for Biodiversity²⁴ found within the region, including; woodlands, wetlands, upland heathlands and grasslands. It also defines Locally Important Species²⁵ which include fungi, plants, and one mammal, the water shrew (*Neomys fodiens*).

Guidance

- 8.2.5 The following guidance documents have been used to inform this assessment:
- Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Ecological Impact Assessment (EclA) in the UK and Ireland²⁶.
 - Environmental Impact Assessment Handbook²⁷.
 - CIEEM advice note on the lifespan of ecological reports and surveys²⁸.
 - CIEEM Competency Framework²⁹.
 - NatureScot standing advice for planning consultations on protected species³⁰.
 - NatureScot Developing with Nature Guidance³¹.
- 8.2.6 Additional guidance is referenced throughout this chapter and in the relevant technical appendices as applicable.

Scope of the Assessment

- 8.2.7 The scope of this assessment has been established through a scoping process. Further information can be found in **Chapter 6: Scope and Consultation**.
- 8.2.8 The CIEEM Guidelines for EclA state: "For the purpose of EclA, 'significant effect' is an effect that either supports or undermines biodiversity conservation objectives for 'important ecological features' or for biodiversity in general". Therefore, the assessment process does not require consideration of effects on ecological features deemed to be below a predefined nature conservation importance threshold and focuses on Important Ecological Features (IEF). IEFs are habitats and species that occur within the Proposed Development's Ecological Zone of Influence (EZoI) and have been evaluated to be of Local or greater importance on a predefined geographical scale.

²³ Highland Environment Forum (2021). Highland Nature Biodiversity Action Plan. Online at: https://www.highlandenvironmentforum.info/wp-content/uploads/2022/01/Highland-Nature-Biodiversity-Action-Plan-2021-2026-_compressed-.pdf

²⁴ NESBiP (online). Important Habitats for Biodiversity. Online at: <https://www.nesbiodiversity.org.uk/biodiversity-information-for-developers/important-habitats-for-biodiversity-in-the-north-east-of-scotland/>

²⁵ NESBiP (online). Locally Important Species. Online at: <https://www.nesbiodiversity.org.uk/biodiversity-information-for-developers/important-local-species/>

²⁶ CIEEM (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland, Terrestrial, Freshwater and Coastal. CIEEM, Winchester.

²⁷ Historic Environment Scotland and NatureScot (2018). Environmental Impact Assessment Handbook. Guidance for competent authorities, consultation bodies, and others involved in the Environmental Impact Assessment process in Scotland. Version 5. Online at: <https://www.nature.scot/sites/default/files/2018-05/Publication%202018%20-%20Environmental%20Impact%20Assessment%20Handbook%20V5.pdf>

²⁸ CIEEM, (2019). Advice Note: On the lifespan of ecological reports & surveys. [Online] Available at: <https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf>

²⁹ CIEEM, (2021). Competency Framework. Online at: <https://cieem.net/resource/competency-framework/>

³⁰ NatureScot (online). Planning and development: standing advice and guidance documents. Online at: <https://www.nature.scot/professional-advice/planning-and-development/planning-and-development-advice/planning-and-development-standing-advice-and-guidance-documents>

³¹ NatureScot (online). Developing with Nature guidance. Online at: <https://www.nature.scot/doc/developing-nature-guidance>

Consultation

- 8.2.9 Full details of the consultation process and responses are included in **Chapter 6: Scope and Consultation** and associated appendices. Notable replies to each of the scoping responses for ecology and nature conservation are detailed within **Appendix 6.3: Scoping Response Matrix**. Consultation responses which have informed the ecological assessment are detailed in **Table 8.1** below.

Table 8.1: Consultation Responses Relevant to Ecology and Nature Conservation

Organisation	Type of Consultation	Response	How Response has been Considered
NatureScot	Bat Survey Approach Call and Email (06 May 2024)	Discussions with NatureScot on the approach to bat surveys, given the scale of the Proposed Development, concluded: - Licensing stages (pre-construction) would require more detail than the current EIA stage. - The EIA stage would need to provide information on species assemblage, local population distribution and exceptional / rare roosts (in terms of species but also key hibernation and maternity roosts); and the magnitude of impacts. - The approach of climbing 150 of the c.600 trees, complemented with transect, static detector and manual activity surveys, would provide this type of information across the landscapes occupied by the project. - NatureScot would also need to provide consenting authorities with a view on whether or not the project is licensable, albeit the detailed surveys needed for licensing of works affecting individual roosts would not necessarily be completed at EIA stage. So, we need the EIA data to get us to a position of confidence around that point. - NatureScot acknowledge the scale of the project and the need to advocate a consistent approach to information gathering to inform both the application / EclA stage and any subsequent post-consent licensing requirements. The best way to guarantee consistency is if the BCT bat survey good practice guidelines are followed. Where it may be necessary to adopt a bespoke approach to adapt to certain circumstances, we expect this to be explained	The discussed approach has been carried forward and the results from the surveys are presented in this chapter, together with full methodological details set out in Appendix 8.1: UK Habitat and Protected Species. Recommendations for pre-construction surveys to inform the details of any required licensing once the final micro-siting of the Proposed Development is completed, are also provided in this chapter.

Organisation	Type of Consultation	Response	How Response has been Considered
		and justified and any limitations for the information gathered made clear. • NatureScot licensing can take up to six weeks to process individual licences so more complex applications are likely to take longer. The early part of any year is also a much busier time for licensing. • Discussion of successful approaches from other projects where, for example, roosting resources, and foraging / commuting resources were given RAG ratings to help inform EIA and inform views on pre-construction licensability. • Discussion of Advanced Bat Survey techniques (ABSTs) such as radio tracking. However, this type of survey would be more appropriate once the details of key roosts are known, a relatively unlikely scenario for northeast Scotland given the small suite of species likely. • The mitigation hierarchy should also be applied with greater weight toward PRF [Potential Roost Feature]-M [PRF is suitable for multiple bats and may be used as a maternity colony]. Also, consideration of the landscape context. The Pathway to 2030 projects are all running to very tight timeframes and, subject to planning approval, construction is likely to commence in 2026. The applications and EIAs are due to be submitted in late 2024 / early 2025. Fieldwork done in 2023 and 2024 will remain valid to inform the EIA and approval decisions and will likely still be relevant to support licence application(s) in 2025. Post-consent, additional bat survey work, and pre-construction	

Organisation	Type of Consultation	Response	How Response has been Considered
		surveys, will be required to ensure sufficient levels of detail to inform any licensing requirements.	
NatureScot	Habitat Survey Approach Call and Email (04 June 2024)	With regards to the Applicant's habitat survey approach, where access has not been possible, NatureScot confirmed the approach to these gap zones is appropriate and with the available data it should be possible to adequately inform the EclA. Additionally, prioritising BNG planning is keenly important and diverting resources to this work is probably essential at this stage.	Where there are gaps in the ground-truthing habitat data due land access constraints, we will rely on the existing Multi-Criteria Analysis (MCA) data, with extrapolation from field data obtained from surrounding locations, as well as existing data from other SSEN Transmission projects that overlap with the Proposed Development.
Aberdeenshire Council - SEPA	Pre-application (23 May 2024)	SEPA have nationally mapped all watercourses in terms of their suitability for riparian planting, and the response suggests watercourses which have been identified as High or Medium priority for riparian planting occur within the proposed corridor [Proposed Development].	The Biodiversity Net Gain (BNG) off-setting strategy will seek opportunities for riparian woodland enhancement, in accordance with SEPA's ' <i>Riparian Vegetation Planting Opportunities</i> ' ³² , where appropriate.
The Highland Council	Pre-application (17 July 2024)		
Moray Council	Pre-application (July 2024)	NPF Policy 3 and MLDP Policy EP2 requires development proposals to contribute to the enhancement of biodiversity, including where relevant, restoring degraded habitats and building and strengthening nature networks and the connections between them. NPF4 Policy 3 (b) requires 'national or major' development to demonstrate how the proposal will conserve, restore and enhance biodiversity, including nature networks, so they are in a demonstrably better state than without intervention. Proposals must demonstrate how they have met all the criteria set out in NPF Policy 3 (b). Further guidance has been produced by NatureScot in respect of NPF4 Policy 3 (c) which is also relevant to larger scaled development.	The ecology assessment complies with policies set out in the Planning Statement. A BNG assessment has been undertaken for the Proposed Development (Appendix 8.3: Biodiversity Net Gain Assessment) and demonstrates how the project contributes to the enhancement of biodiversity.

³² SEPA (online). SEPA Data publication. Available at: <https://www.sepa.org.uk/environment/environmental-data/>

Organisation	Type of Consultation	Response	How Response has been Considered
		Consideration should be given to the Moray Council Biodiversity Study and the opportunities identified in the ongoing work on a Moray Nature Network.	The Moray Nature Network will be considered when looking for areas to target habitat enhancement through the BNG off-setting strategy.
		The area subject to this enquiry is covered by the following environmental designations: River Spey SAC, River Spey SSSI [Site of Special Scientific Interest], Mill Wood SSSI, Buinach and Glenlatterach SSSI and Coleburn Pasture SSSI. Under relevant policies (NPF Policy 4, MLDP Policy EP1), there is a requirement to ensure the qualifying interests of these features are not adversely affected by development, and where there is a potential for a negative impact, this should be mitigated. This approach is also required to ensure adequate protection is offered to protected flora, fauna and habitats. Ecological surveys should be undertaken to assess the potential presence of protected species.	An HRA has been undertaken to assess the impact of the Proposed Development on European / International designated sites (SPAs, SACs and Ramsar). This chapter assesses the impact on national and local designations, as well as habitats and protected species.
The Highland Council	Pre-application (17 July 2024)	Under NPF4, all major and nationally significant projects are also now required to demonstrate biodiversity enhancement and the Council Officers and NatureScot recommend comprehensive assessment of the existing ecological baseline, with all enhancement measures to be set out at the application submission stage, including intended measures to secure any off-site provision by way of legal agreement.	A BNG assessment has been undertaken for the Proposed Development (Appendix 8.3: Biodiversity Net Gain Assessment) and demonstrates how the project contributes to the enhancement of biodiversity.
		SEPA highlighted wetlands are protected by the Water Framework Directive and that a number of wetlands on the Scottish Wetland Inventory lie within the alignment corridors. These include wetlands at NH5110443920, NH5437144419, NH6461840021, NH6673739243, NH6643839066, NH7641741892, NH8896847140	The Proposed Development avoids most of the wetlands identified with the exception of Conan Water (NH5437144419) which has been considered in the assessment.

Organisation	Type of Consultation	Response	How Response has been Considered
		and NH9328645919. This list should be further checked before finalising the alignment and infrastructure located out with suitable buffer zones around these wetlands.	See Chapter 10: Water and Geological Environment for further details on potential GWDTEs.
Aberdeenshire Council	Pre-application (08 July 2024)	The wider Scottish Government environmental strategies must be considered in relation to this application, including but not limited to; 1) 'Biodiversity Strategy to 2045: tackling the nature emergency'. The Scottish Government Biodiversity Strategy's Vision and Outcomes directly references Riparian Woodland and Woodland Connectivity. 2) 'Scotland's Forestry Strategy 2019-2029' Scotland Forestry Strategy Strategic Drivers includes; 'Natural assets, environmental quality and biodiversity', in which the importance of native and semi natural woodland is specifically referenced and includes the below extract: "All Scotland's forests, woodlands and associated open ground habitats provide some biodiversity value. However, suitably managed native, and in particular ancient and semi-natural woodlands, including appropriately restored plantations on ancient woodland sites (PAWS), will contribute the most. 3) Strategic Vision and Outcomes - Biodiversity Strategy to 2045: Tackling the Nature Emergency - gov.scot (www.gov.scot).	The strategies detailed in the consultation response have been detailed within Section 8.3 of this chapter and are considered where appropriate. With reference to woodland including those listed in the Ancient Woodland Inventory (AWI), throughout the optioneering process woodland clearance has been avoided as far as possible.
		Sections 20 and 21 - we refer to protected species in this case, because these sections overlap with the northern part of an area identified as Strathbogie Wildcat Priority Area (WPA). The WPA area focusses on the forests of Bin, Clashindarroch and Gartley Moor with a buffer extending 2 km beyond forest edges onto open ground which includes a mix of land uses, including agriculture, smaller woodland pockets, roads, railway, farms and villages. Wildcats are extremely wary and normally avoid human activity.	Wildcat surveys have been undertaken as per the methods outlined within the Appendix 8.1: UK Habitat and Protected Species.

Organisation	Type of Consultation	Response	How Response has been Considered
		Areas that are more remote and beyond the forestry where there is suitable foraging habitat may have potential to support wildcats. Much of the potential alignment through sections 20 and 21 traverse agricultural fields (arable or grazing) and are unlikely to support wildcats. There are a few parts that cross scrubland, trees and rougher grazing. SSEN have identified where high to medium suitability wildcat habitats are likely to be and will be conducting wildcat habitat suitability walkover surveys, extended to up to 200 m from the potential alignment to inform their EclA on wildcat. Some of these surveys are likely to take place within the WPA and we consider this should be sufficient to inform the EclA. We do not anticipate any significant adverse effects on wildcat (<i>Felis silvestris</i>).	
		In Aberdeenshire, the potential alignment route identified does not cross or directly impact any statutory nature conservation sites. The alignment is close to a few protected areas and within connectivity distances of some protected areas designated for their ornithological interests. SSEN Section 20 – there are 3 Sites of Special Scientific Interest (SSSIs) that lie within 1 km of the alignment option identified in this section. They are Den of Pitlurg SSSI designated for upland birch woodland and valley fen; Mortlach Moss SSSI designated for basin fen (the site is also a Special Area of Conservation (SAC) for base-rich fens); and Whitehill SSSI designated for 3 types of grassland habitats, fen meadow and valley fen. Section 21 is also in proximity to this SSSI. These interests are all habitats, and whilst some of these habitats are watery in nature, their locations are all upstream or out with the catchment of areas affected by the alignments. We therefore do not expect there to be any impacts on these protected areas.	An HRA¹ has been undertaken to assess the impact of the Proposed Development on European / International sites (SPAs, SACs and Ramsar). This chapter presents the assessment of the impact on national and local designations.

Organisation	Type of Consultation	Response	How Response has been Considered
		The NPF4 requirements for all development to provide positive effects for biodiversity will be a key aspect of this proposal. Again, discussions are ongoing with SSEN(T) [SSEN Transmission] regarding this requirement and some of the potential options for enhancement contributions off-site. We will expect a metric based approach to positive effects for this Proposed Development – we are aware this is SSEN(T) policy also. We would expect demonstratable net gain for the Aberdeenshire section – i.e. the calculations should separate out the Aberdeenshire section and show that positive effects are being delivered within Aberdeenshire.	A BNG assessment has been undertaken for the Proposed Development, separated by LPA (Appendix 8.3: Biodiversity Net Gain Assessment) and demonstrates how the project contributes to the enhancement of biodiversity.
Ugie District Salmon Fishery Board	Scoping (09 July 2024)	The consultee enquires about the approach to protect wild salmon and sea trout and also states that the operator is responsible for ensuring the present-day ecology and habitat before the project starts, during the construction stage and in the ongoing operational stage of the project. This might include for example, SSEN Transmission undertaking electro-fishing surveys in various feeder burns close to the project before and after the construction. If the electro-fishing reports show a detrimental effect, some form of remedy or compensation would be sought by the stakeholders in the River Ugie.	Works will be carried out in accordance with the Applicant's General Environmental Management Plans (GEMPs) Working in or Near Water and Watercourse Crossing, thus avoiding pollution of watercourses (Appendix 3.5 General Environmental Management Plans (GEMPs)); as well as adherence to Species Protection Plans (SPPs) for protection of otter and FWPM (Appendix 3.6: Species Protection Plans (SPPs)). Fish habitat suitability surveys were undertaken to inform proposed watercourse crossings for the Proposed Development and fisheries data was requested from fisheries trusts for the Beauly, Nairn, Lossie, Spey, Deveron, Isla and other rivers. Fisheries data from the trusts provide a longer-term overview of relevant fish stocks, as opposed to a 'snapshot' of project-specific electro-fishing surveys, which were not considered feasible (with some of the larger watercourses being inaccessible for safety reasons).
Nairn District Salmon Fishery Board	Scoping (30 July 2024)	Full pre-project monitoring of migratory salmonids and FWPMs would be required to inform the least possible impact from the proposal, particularly with regard to the precise alignment across the River Nairn. Irrespective of whether the direct riparian zone of the river will be disrupted or not, the full impact of any run-off from workings or ongoing permanent impacts on feeder burns entering the River Nairn would have to be fully considered in the EIA. The Nairn DSFB would like to remain fully informed as the proposal	

Organisation	Type of Consultation	Response	How Response has been Considered
		progresses further, particularly with regard to the crossing of the line over the River Nairn catchment.	Further surveys are detailed in Additional Mitigation and monitoring surveys (via electro-fishing) are recommended to inform the proposed installation of culverts in watercourses suitable for fish. Monitoring results will be used to demonstrate there have been no significant changes to the fish species and population size classes using these watercourses post-construction or, if changes have occurred, results will inform the requirement for remedial mitigation measures.
The Highland Council	Scoping (22 August 2024)	The EIAR should provide an account of the habitats present on the Proposed Development site. It should identify rare and threatened habitats, and those protected by European or UK legislation, or identified in national or local Biodiversity Action Plans. Habitat enhancement and mitigation measures should be detailed. Details of any habitat enhancement programmes (such as native-tree planting, stock exclusion, etc.) for the proposed site should be provided. It is expected that the EIAR will address whether or not the development could assist or impede delivery of elements of relevant Biodiversity Action Plans.	Baseline UKHab surveys were undertaken for the UKHab Survey Area. Results are fully detailed in Appendix 8.1: UK Habitat and Protected Species , alongside whether the habitats recorded are Annex I, SBL priority habitats or HNBAP / NESBReC priority habitats. This chapter presents the assessment of the impacts of the Proposed Development on habitats, and details where relevant to any biodiversity action plans.
		An ecological impact assessment for the site should be considered alongside the development EIAR. This should follow the CIEEM guidance on ecological impact assessment and be proportionate to the scale of development. It should cover the ecological resources of the site including protected species within the Highlands Nature Biodiversity Action Plan (HNBAP).	This chapter presents the assessment of the impacts of the Proposed Development on ecological features, following CIEEM guidance as detailed above. This contains protected and notable species, including those listed on the HNBAP.
		It is expected that the proposal shall demonstrate compliance with NPF4 Policy 3b and that using the DEFRA metric, a minimum of 10% of biodiversity enhancement overall, can be brought about.	A BNG assessment has been undertaken for the Proposed Development (Appendix 8.3: Biodiversity Net Gain Assessment). The assessment uses the SSEN

Organisation	Type of Consultation	Response	How Response has been Considered
			Transmission Biodiversity Toolkit³³ and follows SSEN Transmission guidance³⁴ which have been specifically developed for the Scottish context. It is acknowledged by NatureScot and LPAs that the SSEN Transmission toolkit is an appropriate alternative to the Defra Metric for SSEN Transmission projects within Scotland. SSEN Transmission guidance requires a biodiversity net gain of 10% for Proposed Developments, which demonstrates compliance with NPF4 Policy 3B.
		NatureScot will lead on ecology / ornithology designations, priority peatland and protected species. The EIAR should address the likely impacts on the nature conservation interests of all the designated sites in the vicinity of the Proposed Development. It should provide proposals for any mitigation required to avoid these impacts or to reduce them to a level where they are not significant. We note NatureScot are content with the topics scoped into the EIA and have offered comments on the approaches to surveys and methodologies for assessing the wide range of natural heritage interests along the Proposed OHL Alignment. We expect the applicant to engage further with NatureScot ahead of the application's submission, particularly in relation to direct impact on the Torvean Landforms Site of Special Scientific Interest (SSSI), in the production of their shadow Habitats Regulations Appraisal, and priority peatland impacts.	This chapter presents the assessment of the impacts of the Proposed Development on ecological features including designated sites, habitats and protected species. NatureScot were consulted on proportionate survey approach from the onset of the Proposed Development, as detailed within this section. Torvean Landforms SSSI is a geological site and is covered in Chapter 10: Water and Geological Environment.

³³ SSEN Transmission (2025). Biodiversity Project Toolkit (V3.0).

³⁴ SSEN Transmission (2022). TG-NET-ENV-526 Biodiversity Net Gain Toolkit User Guide. Revision 2.0.

Organisation	Type of Consultation	Response	How Response has been Considered
		If wild deer are present or will use the site an assessment of the potential impact on deer will be required. This should address deer welfare, habitats, and other interests.	Given the nature of the Proposed Development (an OHL), deer are unlikely to be displaced by the operational OHL and as such will continue to travel across wayleaves and surrounding habitat much as they do currently. Throughout the optioneering process, woodland clearance has been avoided wherever possible. An outline Construction Environmental Management Plan (CEMP) (Appendix 3.3: Outline Construction Environmental Management Plan (CEMP)) has been produced which details any mitigation for surrounding habitats and transient species. This will mitigate any interim effects to local deer (and wildlife).
		NPF4 commits to delivering positive effects for biodiversity through development. Policy 3 states that, 'Development proposals for national, major and of EIA development should only be supported where it can be demonstrated that the proposal will conserve and enhance biodiversity, including nature networks within and adjacent to the site, so that they are in a demonstrably better state than without intervention, including through future management.' A draft or outline Habitat Management Plan (HMP) and Species Protection Plan (SPP) should be produced as part of the EIA, including any proposals for mitigation and enhancement in relation to important habitats and species. Any compensatory planting plans should be carefully considered and included in the HMP. It is noted that the application will be supported by a Biodiversity Net Gain Metric, this is supported.	A BNG assessment has been undertaken for the Proposed Development (Appendix 8.3: Biodiversity Net Gain Assessment) which includes an outline HMP (Annex G) which will comply with guidance detailed above. The Applicant has a standard set of SPPs (Appendix 3.6: Species Protection Plans (SPPs)) for protected species including FWPM, badger, bat, otter, red squirrel, water vole, wildcat, pine marten and beaver (<i>Castor fiber</i>). Any additional mitigation identified as necessary (over and above the Applicant's SPPs and GEMPs) will be outlined within this chapter.

Organisation	Type of Consultation	Response	How Response has been Considered
		SSEN Transmission has a target for all projects gaining consent to achieve a minimum 10% net gain for biodiversity. NatureScot's Developing with Nature guidance³⁵ has been prepared, in discussion with Scottish Government, to support major development applications. It sets out a number of common measures to enhance biodiversity. For national, major and EIA developments, more detailed assessment and more ambitious measures are likely to be required. The applicant should explore and identify opportunities for biodiversity enhancement as early as possible, including through discussion with key stakeholders. Within the EIA report, information on predicted losses, proposed compensation and delivery of additional positive effects should be clearly summarised. The information must be sufficient to allow the consenting authority and relevant stakeholders to see clearly how effects will be addressed, and the compensation and enhancement delivered.	A BNG assessment has been undertaken for the Proposed Development (Appendix 8.3: Biodiversity Net Gain Assessment) and demonstrates how the project contributes to the enhancement of biodiversity. This chapter includes habitat loss and mitigation where necessary. The BNG off-setting strategy seeks opportunities for enhancement, where appropriate.
RSPB	Scoping (22 August 2024)	The Scottish Government's Fourth National Planning Framework (NPF4) was adopted on 13 February 2023 and now forms part of the statutory development plan. RSPB Scotland believes that developments should leave nature in a better state than before and welcomes the requirement in Policy 3 of NPF4 that all developments must deliver biodiversity enhancement. The proposal therefore should offer 'significant biodiversity enhancements' that can be 'secured within a reasonable timescale and with reasonable certainty' as required by policy 3iv) of NPF4. Any plans need to clearly set out what elements are proposed as mitigation and what is considered enhancement. Biodiversity	A BNG assessment has been undertaken for the Proposed Development (Appendix 8.3: Biodiversity Net Gain Assessment) and demonstrates how the project contributes to the enhancement of biodiversity.

³⁵ NatureScot (online). Developing with Nature guidance. Available at: <https://www.nature.scot/doc/developing-nature-guidance>

Organisation	Type of Consultation	Response	How Response has been Considered
		Enhancement does not need to be included in the EIA Report but that may be the most appropriate place for it, if not, it should be set out in a clearly defined separate document.	
Highland Council	Scoping (04 September 2024)	The Terrestrial Ecology chapter (7) refers to woodland habitats and also refers to woodland listed in the AWI. The assessment of native woodland habitats could be accepted in the Terrestrial Ecology chapter	This chapter presents the assessment for woodland including those listed in the AWI.
		The applicant will also need to provide a breakdown of the impact of the proposals on woodland by type (productive, native or both), as well as making clear the likely impact on woodland listed in the AWI under the various categories and also provide confirmation of the impact on native woodland listed in the Native Woodland Survey of Scotland (NWSS).	This chapters presents the assessment of the Proposed Development and woodland habitats, including those listed in the AWI and NWSS.
Aberdeenshire Council	Scoping (08 August 2024)	It is identified that the LNCS (Local Nature Conservation Site) should be included as part of considerations, with inclusion on the ecological constraints map. Also, that the River Deveron is considered for assessment due to its value as a river habitat and for protected species. There are a couple of issues that require consideration within the EIA, or justification to be provided for not being considered: Local Nature Conservation Sites (LNCS) are mentioned in the Ecology chapter where it is noted that they will not be affected by the proposal. However, the Bin Hill LNCS at Huntly appears to be within the corridor defined in the scoping report and any impact on this site should be considered within the EIA. There are another couple of LNCS close to the identified corridor and any linkages and potential impacts on these should be identified and considered. It	LNCS within 1 km of the Limit of Deviation (LoD) are shown on Figure 8.2: National, Local / Non-statutory Designated Sites. This includes Den of Pitlurg LNCS and Bin Hill LNCS. The OHL oversails the River Deveron and as such direct impacts on the water course or the protected species it supports are not anticipated. The construction and operation of the Proposed Development will adhere to the Applicant's SPPs and GEMPs to avoid any adverse environmental effects. This chapter assesses the impact of the Proposed Development on habitats, including rivers, and the protected species they support.

Organisation	Type of Consultation	Response	How Response has been Considered
		would be useful to have the LNCS sites included in any map of ecological constraints in the ecology chapter of the EIAR. The rivers Ness, Nairn, Findhorn and Spey have been mentioned within the scoping report however the Deveron is a notable omission. It may be that this is an oversight, if not then the reasons for its exclusion should be clarified as it is important in terms of river habitats as well as for protected species such as otter. It is accepted that the eastern section of this proposal is across land that generally is of lower ecological value, particularly when compared to Moray and Highland, however that does make the pockets of higher quality habitat relatively more important. In terms of the statutory national and international designations, it is expected that Nature Scot will provide comment on these and whether they consider the scoping to be acceptable in this regard.	
Marine Directorate	Scoping (01 September 2024)	Science Evidence Data and Digital (MD-SEDD) have issued generic scoping guidance which outlines what information, relating to freshwater and diadromous fish and fisheries, is expected in the EIA report. Use of the checklist, provided in Annex 1 of the standing advice, should ensure that the EIA report contains the required information; the absence of such information may necessitate requesting additional information which may delay the process. Developers are required to submit the completed checklist in advance of their application submission. In addition to identifying the main watercourses and waterbodies within and downstream of the Proposed Development area, developers should identify and consider, at this early stage, any areas of Special Areas of Conservation where fish are a qualifying feature and proposed felling operations particularly in acid sensitive areas.	The HRA¹ assesses the impact on international designated sites where fish are a qualifying feature. The construction and operation of the Proposed Development will adhere to the Applicant's SPPs (Appendix 3.6: Species Protection Plans (SPPs)) and GEMPs (Appendix 3.5: General Environmental Management Plans (GEMPs)) to avoid adverse effects on water quality and fish, as well as their habitat. This chapter includes the effects on habitats, including peatland habitats and proposed felling operations. Additionally, an outline Peat Management Plan has been prepared (Appendix 10.2: Peat Management Plan).

Organisation	Type of Consultation	Response	How Response has been Considered
		Developers should specifically discuss and assess potential impacts and appropriate mitigation measures associated with the following: - Any designated area, for which fish is a qualifying feature, within and / or downstream of the Proposed Development area; - The presence of a large density of watercourses; - The presence of large areas of deep peat deposits; - Known acidification problems and / or other existing pressures on fish populations in the area; and - Proposed felling operations. MD-SEDD recommends that a Water Quality and Fish Monitoring Plan (WQFMP) is carried out to ensure that the proposed mitigation measures are effective. A robust, strategically designed and site specific monitoring programme conducted before, during and after construction can help to identify any changes, should they occur, and assist in implementing rapid remediation before long-term ecological impacts occur.	With regards to water monitoring see Chapter 10: Water and Geological Environment. Further survey is detailed in Additional Mitigation, with fish monitoring surveys (via electro-fishing) recommended where culverts are proposed for installation in watercourses suitable for fish. Fish monitoring surveys will aim to demonstrate there have been no significant changes to the fish species and population size classes using these watercourses post-construction or, if changes have occurred, to inform the requirement for any remedial measures.

Study Area

8.2.10 The provisional survey areas applied to collect relevant baseline information on species included within the scope of the EclA (at least to the point of Evaluation³⁶) are summarised below. These were informed by the approach to habitats and habitat suitability for protected species set out in **Appendix 8.1: UK Habitat and Protected Species**, NatureScot's standing advice for planning and development^{37,30}, relevant species-specific guidelines (**Table 8.2**), and consultations (**Table 8.1**). Any variation from standard guidance was discussed and agreed in advance of surveys with NatureScot (see **Table 8.1**).

8.2.11 Definitions relevant to the assessment:

- Proposed OHL / Proposed OHL Alignment - to describe the alignment;
- Proposed Development – includes all aspects of the development, including access tracks;
- Limit of Deviation (LoD) – the area in which the Proposed Development could be micro-sited; and
- Potential Ecological Footprint – comprises the area used for survey planning; at an earlier stage of the project this was undertaken using a preliminary design which has since evolved into the Proposed Development.

Habitats

8.2.12 The UKHab Survey Area comprised all habitats within the Potential Ecological Footprint and 250 m buffer. This was extended to include access tracks (new access tracks and those assessed to be in poor or very poor condition subject to upgrade) and a 100 m buffer where the access tracks fell outwith the original survey area. As well as later additions to the design (August 2025), and associated buffers. MCA analysis was not applied for these August 2025 additions and therefore this habitat data is presented separately to the overall UKHab survey results (**Appendix 8.1: UK Habitat and Protected Species**).

Protected Species

8.2.13 Targeted protected species survey areas are shown in **Figure 8.1.1: Survey Areas and Access Constraints** comprising 'high' suitability habitat for each species (as well as 'moderate' for wildcat). To define what was considered 'high' or 'moderate' habitat, a habitat suitability assessment was undertaken to classify the suitability of terrestrial habitats in proximity to the Proposed Development to support protected species / groups. Described fully in **Appendix 8.1: UKHab and Protected Species**, suitable habitat parcels were subject to a preliminary walkover survey and assigned an overall suitability category ('high', 'moderate', 'low' or 'negligible') for each targeted species.

8.2.14 Species-specific survey areas were calculated, where applicable, from the 'Potential Ecological Footprint'³⁸ and are detailed below:

- Bat Survey Area – Habitats presenting as 'high' suitability for bats within the Potential Ecological Footprint and 75 m buffer (45 m buffer to account for the Operational Corridor (OC) and 30 m bat survey buffer).
- Badger Survey Area – Habitats presenting as 'high' suitability for badgers within the Potential Ecological Footprint and 145 m buffer (45 m buffer to account for the OC and 100 m badger survey buffer).
- Pine Marten Survey Area – Habitats presenting as 'high' suitability to support pine marten within the Potential Ecological Footprint and 245 m buffer (45 m buffer to account for the OC and 200 m pine marten survey buffer).

³⁶ Evaluation is whether ecological receptors could be affected, and the Assessment is the significance of this effect.

³⁷ NatureScot (online). Planning and development: standing advice and guidance documents. Available at: <https://www.nature.scot/professional-advice/planning-and-development/planning-and-development-advice/planning-and-development-standing-advice-and-guidance-documents>

³⁸ Survey buffers were reduced to a maximum of 30 m from the centre line of proposed upgrades to 'poor and very poor' existing tracks and new permanent access tracks, due to the anticipated reduced scale of impact/disturbance from the access track works.

- Red Squirrel Survey Area – Habitats presenting as ‘high’ suitability to support red squirrel within the Potential Ecological Footprint and 95 m buffer (45 m buffer to account for the OC and 50 m red squirrel survey buffer).
- Otter Survey Area and Water Vole Survey Area – All targeted watercourses, 200 m upstream and downstream of the proposed crossings within the Potential Ecological Footprint where safe access permitted.
- Wildcat Survey Area - All habitats presenting as ‘moderate’ and ‘high’ suitability within the Potential Ecological Footprint and 245 m buffer (45 m buffer to account for the OC and 200 m wildcat survey buffer).
- Great Crested Newt (GCN) Survey Area – All ‘high suitability’ ponds within the Potential Ecological Footprint, with a 45 m buffer to account for the OC and 500 m GCN survey buffer.
- Fish Survey Area – Survey points upstream, midstream and downstream of rivers within the Potential Ecological Footprint, with a 145 m buffer (45 m buffer to account for the OC and 100 m fish survey buffer).

8.2.15 FWPM surveys were undertaken on the following three watercourses: River Spey, Red Burn and Burn of Ordiequish, all of which are within the River Spey catchment (‘FWPM Survey Area’).

8.2.16 Any incidental sighting of notable mammal, reptile, terrestrial invertebrates or other species encountered during targeted surveys was recorded.

8.2.17 Following baseline data collection from the ‘Potential Ecological Footprint’ and associated study areas above, findings from the baseline data (e.g., resting sites, signs of species activity) have been considered in relation to the specific works associated with the Proposed Development and its EZoI. Guidelines for EclA²⁶ define the EZoI as the area over which ecological features may be subject to significant effects as a result of the Proposed Development. This could extend beyond the footprint of the Proposed Development. The EZoI will vary for each ecological feature and will depend on the type of works associated with the Proposed Development. Other factors such as the mobility range of a species, supporting habitat, connectivity and sensitivity to disturbance, are considered when determining if a feature falls within the Proposed Development’s EZoI. The Proposed Development’s EZoI for a feature may be less than the provisional study area noted above but would unlikely be greater. Study areas are based on standing guidance and known disturbance buffers.

Determining Baseline

8.2.18 The methodology for determining the ecological baseline through desk study and field surveys is summarised below and detailed fully within **Appendix 8.1: UK Habitat and Protected Species** and **Appendix 8.2: Confidential Badger and Freshwater Pearl Mussel**.

Desk Study

8.2.19 Statutory designated sites of importance for nature conservation have been searched for within the following radii from the Proposed Development, to assess their potential for connectivity (detailed fully in **Appendix 8.1: UK Habitat and Protected Species**):

- International Sites (Special Protection Areas (SPAs), Special Areas of Conservation (SACs), Ramsar sites and Marine Protection Areas (MPAs)) – 10 km, extended to 20 km for wintering geese;
- National Sites (Sites of Special Scientific Interest (SSSIs), National Nature Reserves (NNRs) and seal haul out sites) – 2 km;
- Local sites (Local Nature Reserves (LNRs)) – 1 km;
- Non-statutory sites (Local Nature Conservation Sites (LNCSSs), Buglife B-lines and Important Invertebrate Areas (IIAs), Butterfly Conservation Scottish Priority Landscapes, Red Squirrel Strongholds, Wildcat Priority Areas (WPAs) and ancient woodland) – 1 km; and

- Other databases – Scotland’s Soils Carbon and Peatland Map³⁹ – LoD.

8.2.20 **Chapter 9: Ornithology** addresses the potential connectivity of any ornithological features of the ornithology designations (SPAs, Ramsar, SSSI) from the Proposed Development.

8.2.21 The HRA¹ assesses the potential for connectivity between European designated sites of importance to nature conservation (SPA, proposed SPAs (pSPAs), SACs, candidate SACs (cSACs) and Ramsar sites) and the Proposed Development.

General Approach to Field Surveys

8.2.22 The general approach to protected species field surveys for the EclA has been to survey a proportion of the Potential Ecological Footprint focused on areas of high suitability for protected species, drawing upon desktop data and survey data from the Route Selection Stage and Alignment Selection Stage of the project, and consultation with NatureScot, The Highland Council, Moray Council and Aberdeenshire Council. A pre-EclA meeting held 30 November 2023 set out the general approach to protected species surveys: to survey up to 20% of the Proposed Alignment, targeting relevant high suitability areas (and medium / high suitability areas for wildcat (which has been raised as a species of interest in consultations)). The focus on high suitability areas (plus moderate suitability for wildcat) was considered to be appropriate and proportionate, given the prior process of selecting a Proposed Corridor, Proposed Route and then a Proposed Alignment, whereby avoidance of the most highly suitable areas (where practicable) was a factor in that selection process. Feedback from attendees at the pre-EclA meeting, and at EIA Scoping in July-August 2024, was taken into account in choosing survey areas, notably woodland and river valleys including the River Beaully, River Nairn, River Findhorn, River Spey, and other major river catchments across the Proposed Alignment. This species data was complemented by the UKHab surveys which were used, together with the aforementioned desktop, consultation and prior survey data, to help identify highly suitable habitats for species.

8.2.23 The aim was to inform the EclA, with detailed surveys to inform any EPS or badger licensing being carried out during the pre-construction phase. By focusing on areas of high (and / or moderate suitability (for wildcat only)) and targeting areas that the prior Route Selection and Alignment Selection Stages’ studies had identified as most likely to support protected species, the approach of surveying up to 20% of the Proposed Alignment for protected species was expected to provide sufficient data to inform the EIA. Surveys that would be required pre-construction, to inform project-wide or location-specific protected species licence applications, were not included in the scope of the EIA surveys, particularly as the programme for EIA submission would mean a gap of nearly two years before construction. The impact assessment set out in **Section 8.4: Assessment of Likely Significant Effects** of this EIA Chapter is precautionary given the proportional survey approach described above, and also recommends confirmatory surveys, in addition to pre-construction surveys, to allow for the fact that a proportion of the Proposed Development has been directly surveyed.

Habitat Surveys

8.2.24 The online data sources for habitats were used in a multi-criteria analysis (MCA) to assign habitat types to the various land types along the UKHab Survey Area. The data sources used were:

- Ordnance Survey MasterMap (OSMM);
- Native Woodland Survey of Scotland (NWSS)⁴⁰;
- Habitat Map of Scotland (HABMOS)⁴¹;

³⁹ Scotland’s Soils (2016). Carbon and peatland 2016 map. Available at: <https://soils.environment.gov.scot/maps/thematic-maps/carbon-and-peatland-2016-map/>

⁴⁰ Scottish Forestry (online). Native Woodland Survey of Scotland (NWSS). Available at: <https://www.forestry.gov.scot/forests-environment/biodiversity/native-woodlands/native-woodland-survey-of-scotland-nwss>

⁴¹ NatureScot (online). Habitat Data (and the Habitat Map of Scotland). Available at: <https://www.nature.scot/landscapes-and-habitats/habitat-data-and-habitat-map-scotland>

- Ancient Woodland Inventory (AWI)⁴²;
- Carbon and Peatland 2016 map (CPM)³⁹; and
- Scotland Habitat and Land Cover map 2020 (HLCM)⁴³.

8.2.25 Datasets were categorised in order of data quality and reliability and are listed in the hierarchy in which they were used. Data derived from the MCA was assigned a UKHab primary habitat code and updated where necessary based on professional judgement. Information on the MCA may be found within **Appendix 8.1: UK Habitat and Protected Species**.

8.2.26 An initial UKHab survey was undertaken during April and June 2024 to ground truth the results of the MCA. Habitat types were updated where necessary and recorded using the UKHab system⁴⁴. UKHab mapping covered the full extent of the UKHab Survey Area, where accessible. A primary habitat and any relevant secondary codes were assigned to each area-based polygon, point or linear feature. Information on UKHab surveys is provided within **Appendix 8.1: UK Habitat and Protected Species**.

Protected Species Surveys

8.2.27 Protected species surveys for the identification of field evidence and assessment of habitat suitability were undertaken between March 2024 and August 2024 and included bats, badger, pine marten, red squirrel, otter, water vole, wildcat, GCN, fish and FWPM. Relevant guidance was followed as summarised below in **Table 8.2**. Any variation from standard guidance was discussed and agreed in advance of surveys with NatureScot (see **Table 8.1**). Please refer to **Appendix 8.1: UK Habitat and Protected Species** for full details of the methods.

Table 8.2: Summary of Species Surveys

Target Species	Survey Area	Survey Type(s)	Survey Date(s)	Guidance Applied
Bats	Bat Survey Area	Daytime Bat Walkover (DBW) consisting of a ground-level bat Preliminary Roost Assessment (PRA) undertaken to identify Potential Roost Features (PRFs) for bats within woodland habitats, standalone trees, rockfaces, buildings and structures.	March – April 2024	NatureScot's standing advice for planning consultations – bats ⁴⁵ . Bat Surveys for Professional Ecologist, Good Practice Guidelines ⁴⁶ .
		Intrusive Ground Level Tree Assessment (GLTA) of 25% of the Further Assessment Required (FAR) and PRF trees identified within the Bat Survey Area during the DBW.	June – July 2024	
		Dusk Emergence Surveys of 25% of trees identified during GLTA which were unsafe to access via aerial inspection and 25% of structures identified as 'Moderate'	June – July 2024	

⁴² NatureScot (online). Ancient Woodland Inventory. Available at: <https://opendata.nature.scot/datasets/ancient-woodland-inventory/explore>

⁴³ Scottish Government (online). Scotland Habitat and Land Cover Map – 2020. Available at: <https://spatialdata.gov.scot/geonetwork/srv/api/records/88cea3bd-8679-48d8-8ffb-7d2f1182c175>

⁴⁴ UKHab Ltd. (2023). UK Habitat Classification, Version 2.0. Available at: <https://www.ukhab.org>

⁴⁵ NatureScot (online). Standing advice for planning consultations – bats. Online at: <https://www.nature.scot/doc/standing-advice-planning-consultations-bats>

⁴⁶ Collins, J. (ed.) (2023). Bat Surveys for Professional Ecologists, Good Practice Guidelines (4th Edition). The Bat Conservation Trust, London.

Target Species	Survey Area	Survey Type(s)	Survey Date(s)	Guidance Applied
		or 'High' suitability within the Bat Survey Area		
		Night-time Bat Walkover (NBW) of woodland blocks where high numbers of PRFs were recorded.	August 2024	
		Static Detector Surveys of woodland blocks where high numbers of PRFs were recorded.	August 2024	
Badger	Badger Survey Area	Search for potential setts and signs of activity.	March – April 2024	NatureScot's standing advice for planning consultations – badgers ⁴⁷ .
		Camera trapping of potential main setts located within 30 m of the Potential Ecological Footprint.	May – June 2024	Surveying for Badgers: Good Practice Guidelines ⁴⁸ .
Pine marten	Pine Marten Survey Area	Search for potential den sites and signs of activity.	March – April 2024, August 2025	NatureScot's standing advice for planning consultations – pine marten ⁴⁹ . UK BAP Mammals: Interim Guidance for Survey Methodologies, Impact Assessment and Mitigation ⁵⁰ .
Red squirrel	Red Squirrel Survey Area	Search for potential dreys within trees and signs of activity.	March – April 2024, August 2025	NatureScot's standing advice for planning consultations – red squirrel ⁵¹ . Practical Techniques for Surveying and Monitoring Squirrels ⁵² . UK BAP Mammals: Interim Guidance for Survey Methodologies, Impact Assessment and Mitigation ⁵⁰ .

⁴⁷ NatureScot (online). Standing advice for planning consultants: Badgers. Online at: <https://www.nature.scot/doc/standing-advice-planning-consultations-badgers>

⁴⁸ Scottish Badgers (2018). Surveying for Badgers: Good Practice Guidelines, Version 1. Scottish Badgers, Forfar, Angus.

⁴⁹ NatureScot (online) Standing advice for planning consultations – Pine Martens. Online at <https://www.nature.scot/doc/standing-advice-planning-consultations-pine-martens>

⁵⁰ Cresswell, W.J., Birks, J.D.S., Dean, M., Pacheco, M., Trehella, W.J., Wells, D. and Wray, S. (2012). UK BAP Mammals: Interim Guidance for Survey Methodologies, Impact Assessment and Mitigation. The Mammal Society, Southampton.

⁵¹ NatureScot (online) Standing advice for planning consultations – Red Squirrels. Online at: <https://www.nature.scot/doc/standing-advice-planning-consultations-red-squirrels>

⁵² Gurnell, John & Lurz, Peter & McDonald, Robbie & Pepper, Harry. (2009). Practical Techniques for Surveying and Monitoring Squirrels. 11.

Target Species	Survey Area	Survey Type(s)	Survey Date(s)	Guidance Applied
Otter	Otter Survey Area	Search for potential resting sites and signs of activity.	March – April 2024	NatureScot's standing advice for planning consultations – otters ⁵³ .
		Camera trapping of potential resting sites located within 30m of the Potential Ecological Footprint.	April – June 2024	Monitoring the Otter <i>Lutra lutra</i> ⁵⁴ .
Water vole	Water Vole Survey Area	Search for potential burrows and signs of activity.	March – April 2024	NatureScot's standing advice for planning consultations – water voles ⁵⁵ . The Water Vole Mitigation Handbook ⁵⁶ . Water Vole Conservation Handbook ⁵⁷ .
Wildcat	Wildcat Survey Area	Search for potential resting sites and signs of activity.	March – April 2024, August 2025	NatureScot's standing advice for planning consultations – wildcat ⁵⁸ . Wildcat Survey Methods ⁵⁹ .
Great Crested Newt	GCN Survey Area	A Habitat Suitability Index (HSI) assessment of ponds.	March – April 2024	ARG UK Advice Note 5: Great Crested Newt Habitat Suitability Index ⁶⁰ .
		eDNA survey of ponds which returned a 'below average' or greater suitability for GCN during the HSI assessment.	April – July 2024, June 2025	Evaluating the suitability of habitat for the great crested newt ⁶¹ . Testing the validity of a commonly used habitat suitability index at the edge of a species' range: great crested newt ⁶² .

⁵³ NatureScot (online) Standing advice for planning consultation – Otters. Online at: <https://www.nature.scot/doc/standing-advice-planning-consultations-otters>

⁵⁴ Chanin, P. (2003). Monitoring the Otter *Lutra lutra*. Conserving Natura 2000 Rivers Monitoring Series No. 10, English Nature, Peterborough

⁵⁵ NatureScot (online) Standing advice for planning consultations – Water Voles. Online at: <https://www.nature.scot/doc/standing-advice-planning-consultations-water-voles>

⁵⁶ Dean, M., Strachan, R., Gow, D. and Andrews, R. (2016). The Water Vole Mitigation Handbook (The Mammal Society Mitigation Guidance Series). Eds Fiona Mathews and Paul Chanin. The Mammal Society, London.

⁵⁷ Strachan, R., Moorhouse, T. and Gelling, M. (2011). Water Vole Conservation Handbook. Third Edition. Wildlife Conservation Research Unit, Oxford.

⁵⁸ NatureScot (online) Standing advice for planning consultations – Wildcat. Online at: <https://www.nature.scot/doc/standing-advice-planning-consultations-wildcats>

⁵⁹ NatureScot (2014) Wildcat Survey Methods. Available at: <https://www.nature.scot/doc/guidance-wildcat-survey-methods>

⁶⁰ Amphibian and Reptile Groups of the United Kingdom (2010) ARG UK Advice Note 5: Great Crested Newt Habitat Suitability Index. ARG UK, UK Oldham R.S., Keeble J., Swan M.J.S., and Jeffcote M. (2000) Evaluating the suitability of habitat for the great crested newt. Herpetological Journal 10: 143-155

⁶² O'Brien, D. Hall, J., Miró, A., & Wilkinson, J. (2017). Testing the validity of a commonly-used habitat suitability index at the edge of a species' range: great crested newt *Triturus cristatus* in Scotland. *Amphibia-Reptilia* 38: 265-273.

Target Species	Survey Area	Survey Type(s)	Survey Date(s)	Guidance Applied
Fish	Fish Survey Area	A habitat suitability assessment of rivers.	March – April 2024	Habitat Survey Manual ⁶³ .
FWPM	River Spey, Red Burn and Burn of Ordiequish.	A FWPM survey was undertaken of the three watercourses.	June 2024, June 2025	Freshwater Pearl Mussel Survey Protocol for use in site-specific projects ⁶⁴ . NatureScot's standing advice for planning consultations – Freshwater Pearl Mussels ⁶⁵ .

Methodology for the Assessment of Impacts

8.2.28 The following Sections describe the impact assessment methods which have been applied, with the main objective of identifying potential significant effects that would result from the Proposed Development. It is broadly accepted that the significance of an effect reflects the relationship between two factors:

- The value, importance or sensitivity of the resource or system that might be impacted; and
- The magnitude of the impact on that resource and system (i.e., the actual change taking place to the environment).

Identification of Important Ecological Features

8.2.29 It is impractical and inappropriate for an assessment of the ecological effects of a development to consider every species and habitat that may be affected. Instead, it focuses on Important Ecological Features (IEFs). IEFs are species and habitats present within the Proposed Development's EZoI that are of sufficiently high value that certain levels of impact upon them, as a result of the Proposed Development, could result in a significant effect.

8.2.30 In this assessment, species populations and assemblages can qualify as IEF if they are within the EZoI and meet a minimum level of 'Local' importance.

8.2.31 Species populations or assemblages of lesser importance may still be affected, beneficially or adversely, however it is considered that no significant effect can occur.

8.2.32 The description and valuation of ecological features has taken account of any likely changes, including, for example: trends in the population size or distribution of species; likely changes to the extent of habitats; and the effects of other proposed schemes or land-use changes.

8.2.33 Due consideration has been given to ecological features below local importance throughout the construction and operation period, with regards to ensuring legislative protection.

⁶³ SFCC (2007). Habitat Survey Manual. Scottish Fisheries Co-Ordination Centre, Faskally, Perthshire [online]. Available at: <https://sfcc.co.uk/resources/habitat-surveying.html>

⁶⁴ 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>

⁶⁵ NatureScot (2022) Standing advice for planning consultations – Freshwater Pearl Mussels. Available at: <https://www.nature.scot/doc/standing-advice-planning-consultations-freshwater-pearl-mussels>

- 8.2.34 The importance of each ecological feature was evaluated within a geographical context using the categories recommended in the Guidelines for EcIA²⁶. The evaluation considered a variety of factors including for example (but not exclusively) the rarity / sensitivity of a species or habitat; habitat diversity, whether the species population size is notable in a wider context, whether the habitats are important in supporting a rare species, whether species are on the edge of their habitat range or whether the faunal assemblage is characteristic of that habitat type.
- 8.2.35 The Guidelines for EcIA²⁶ note the difficulty of devising valuation criteria that can be consistently applied to designated sites, habitats and species in the same way in all parts of the country. It recommends an approach to valuation that involves teasing apart the different values that can be attached to the ecological features under consideration. However, it is beneficial to give examples of the sorts of criteria used in the valuation process; therefore, the criteria for evaluating ecological importance of relevance to the ecological features with potential for impact from the Proposed Development are summarised below in **Table 8.3**. This table was developed in reference to section 4 of the CIEEM guidelines.

Table 8.3: Evaluation Criteria for Level of Ecological Importance.

Level of Value	Examples
International (Europe)	Extremely rare (endangered), potentially extremely vulnerable to change, of international importance or recognition, very limited potential for substitution. For example: • SPA, SAC, Ramsar site; or area meeting the criteria for designation as such. • Considerable extents of a priority habitat type listed in the Habitats Directive, or smaller area of such habitat that are essential to maintain the viability of a larger area. • Any regularly occurring population of an internationally important species, which is threatened or rare in the UK, i.e., IUCN 'Red List' species, or any species of uncertain conservation status or of global conservation concern. • A regularly occurring significant population / number of any internationally important species, e.g., species listed in Annex II of the Habitats Directive, 1% of the known international population of a particular species.
National (Scotland)	Rare, of national importance or recognition, limited potential for substitution, highly vulnerable to change. For example: • SSSI, National Park, NNR and their qualifying interests; or a site considered worthy of such designation. • Ancient Woodland. • A viable area of a habitat type listed in Annex I of the Habitats Directive, or smaller areas of such habitat essential to maintaining the viability of a larger whole. • A regularly occurring significant population / number of any nationally important species e.g., listed on Schedules 5 and 8 of the Wildlife and Countryside Act 1981 (as amended), or, e.g., 1% of the known UK population of a particular species. • Areas of viable, connected habitat which may support delivery of the SBS to 2045 and meet EU Nature Restoration Law Targets, with actions such as improving and re-establishing biodiversity habitats on a large scale, and bringing back species populations by improving and enlarging their habitats

Level of Value	Examples
	(wetlands, forests, grasslands, rivers and lakes, heath and scrub, rock habitats, and dunes). This is adapted from the SBS to 2045. Species recognised as vulnerable / important in the SBS to 2045 and associated projects / conservation strategies (e.g., Species on the Edge) – which are regularly occurring in moderate to large numbers.
Regional (Highland, North-East Scotland)	Somewhat rare or vulnerable, difficult to substitute. For example: - Areas of internationally or nationally important habitats which are degraded but are considered readily restored. - Sites falling slightly below criteria for selection as a national designated site. - Any regularly occurring significant population of Highland or NESBiP Locally Important Species, e.g., present in regionally important numbers (e.g., >1% of the regional population). - Viable areas of NESBiP Important Habitat, or smaller areas of such habitat essential for maintaining the viability of a larger whole.
District (Local Planning Authority)	Difficult to substitute at a district level, rare or unusual at the district level but well represented elsewhere. For example: - Sites that the Local Authority has determined meet the published ecological selection criteria for designation, including Local Nature Conservation Sites. - Areas identified of conservation interest by organisations such as Scottish Wildlife Trust, Buglife, Butterfly Conservation Trust. - Sites or features that are scarce within the Local Authority area which appreciably enrich the habitat resource. - Areas of internationally or nationally important habitats which are degraded and have little or no potential for restoration. - A regularly occurring population of a species which is large enough to be of district level importance.
Local (Community Council)	Locally important, difficult to substitute at a local level, but well represented elsewhere in the district / region. For example: - A species-rich, good condition example of a common or widespread habitat in the local area. - A regularly occurring population of a species which is large enough to be of local level importance, or of a species scarce in the local area. - Habitats or species considered to enrich the ecological resource within the local context.
Neighbourhood (Site and its vicinity, including areas of habitats contiguous with or linked to those on Site)	- Areas of heavily modified or managed vegetation of low species diversity or low value as habitat to species of nature conservation interest. - Common and widespread species.

Level of Value	Examples
Negligible	No intrinsic nature conservation value associated with habitat or species. Generally, these are areas of hard standing or buildings with no nature conservation interest. Invasive and non-native species which threaten native habitat or species are also included here.

Characterising the Potential Ecological Impact

8.2.36 Change can be described by a range of characteristics. For each IEF, the impacts of construction and operation of the Proposed Development and the resultant effects on IEFs may be characterised by the following:

- Beneficial or adverse (positive or negative) – whether the impact will result in net loss or degradation of a IEF or whether it will enhance or improve it;
- Extent – the spatial area over which an impact occurs;
- Magnitude – the size or intensity of the impact measured in relevant terms, e.g., number of individuals lost or gained, area of habitat lost or created or the degree of change to existing conditions (e.g. noise or lighting levels);
- Duration – the length of time over which the impact occurs. This may be permanent or temporary; short-term (e.g., construction), medium term (e.g., 7-10 years), or long-term (e.g., duration of the operational phase).
- Reversibility – the extent to which impacts are reversible either through natural regeneration and succession or through active mitigation; and
- Timing and frequency – consideration of the timing of events in relation to ecological change, e.g., some impacts may be of greater magnitude if they take place at certain times of year (e.g., breeding season). The extent to which an impact is repeated may also be of importance.

8.2.37 These factors are brought together to assess the magnitude of the impact on a particular IEF and, wherever possible, the magnitude of the impact is quantified. Professional judgment based on knowledge and experience on similar schemes (OHLS and other linear projects) is then used to assign the impacts on the IEF to one of four classes of magnitude, as outlined below in **Table 8.4**. A matrix approach has not been applied to this assessment, in line with CIEEM Guidelines for EcIA²⁶.

Table 8.4: Classes of Impact Magnitude

Level	Description
Major	A permanent or long-term effect on the extent or size or integrity of a site, habitat, species assemblage or community, population or group. If adverse, this is likely to threaten its sustainability; if beneficial, this is likely to enhance its conservation status.
Moderate	A permanent or long-term effect on the extent or size or integrity of a site, habitat, species assemblage or community, population or group. A short-term (temporary) effect which will adversely affect the integrity of a feature in a permanent manner. If adverse, this is unlikely to threaten its sustainability; if beneficial this is likely to be sustainable but is unlikely to enhance its conservation status.
Minor	A permanent, long-term reversible or short-term (temporary) effect on a site, habitat, species assemblage or community, population or group whose magnitude is detectable but will not threaten / change its conservation status.

Level	Description
Negligible	A short-term (temporary) reversible effect on the extent, size or integrity of a site, habitat, species assemblage or community, population or group that is within the normal range.

8.2.38 Potential impacts are characterised initially in the absence of any mitigation, except where this is integral to the design and delivery of the Proposed Development. Integral, or embedded mitigation, as set out in **Section 8.5: Assessment of Likely Significant Effects**, includes the General Environmental Management Plans (GEMPs) and Species Protection Plans (SPPs) that all SSEN-T contractors must implement before any construction commences.

8.2.39 Any additional mitigation or compensation proposed is identified and its likely effectiveness is assessed. An indication of the confidence with which predictions of potential impacts are made is also given.

Significance of Effects

8.2.40 The Guidelines for EclA²⁶ define an ecological significant effect as: "an effect that either supports or undermines the biodiversity conservation objectives for important ecological features or for biodiversity in general."

8.2.41 The ecological significance of the potential effects on IEFs arising from the identified impacts of the Proposed Development, including embedded and additional mitigation measures, is assessed as adverse or beneficial.

8.2.42 For species, conservation status defined in the Guidelines for EclA²⁶ is "determined by the sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its populations within a given geographical area".

8.2.43 For species, a beneficial effect would be ecologically significant if the Proposed Development causes restoration of desired conservation status for a species population; and / or restoration of a site's integrity (where this has been undermined).

8.2.44 The decision as to whether the conservation status of an IEF is likely to be compromised is made using professional judgement based on an analysis of the predicted impacts of the Proposed Development (including consideration of the specific parameters outlined above).

8.2.45 Following the assessment of each IEF that may be impacted and whether the impact has an ecologically significant effect on that IEF, the Guidelines for EclA²⁶ recommend that significant effects are qualified with reference to an appropriate geographic scale. The geographical scale of significance has been used as specified within the Guidelines for EclA, both to evaluate the feature and to assess the scale at which an effect is significant. An ecologically significant effect is defined as an effect (adverse or beneficial) on the integrity of a defined site or ecosystem and / or the conservation status of habitats or species within a given geographical area. The significance of effects upon features is determined considering their importance at a geographic scale (as noted above); however, any given effect may be significant at a reduced scale, depending on the extent and magnitude of the effect.

Limitations and Assumptions

8.2.46 The main limitations to establishing the ecological baseline relate to land access. Please refer to **Appendix 8.1: UK Habitat and Protected Species** and **Appendix 8.2: Confidential Badger and Freshwater Pearl Mussel** for specific details on the limitations associated with access and how these have been addressed, as well as other (sometimes associated) limitations such as the timings of surveys. The limitations detailed within the appendices are not believed to alter the conclusions of this ecological assessment.

8.2.47 The proportional approach to surveys described above under **Section 8.2: Baseline Conditions: General Approach to Field Surveys** meant that not every location within the Proposed Development was directly surveyed for protected species. However, desktop data, survey of habitats, a precautionary assessment of likely significant effects and additional recommendations for confirmatory surveys (as set out in **Section 8.5: Additional Mitigation**) all combine to minimise the limitations of the field survey data for protected species; and importantly allowed for collection of a volume of up-to-date data that could be achieved prior to planning submission. As such, the proportional survey approach is not considered to limit the conclusions made in this ecological assessment.

8.3 Baseline Conditions

Designated Sites

- 8.3.1 This Section summarises the baseline relevant to designated sites located within the Proposed Development and EZol.
- 8.3.2 Designated sites within the Proposed Development's EZol are listed in **Table 8.5** for international designations, **Table 8.6** for national designations and **Table 8.7** for local designations. These are shown on **Figure 8.1: International Designated Sites** and **Figure 8.2: National, Local / Non-statutory Designated Sites**. Details on reasons for designations / qualifying interests are included in **Appendix 8.1: UK Habitat and Protected Species**. In all instances, sites are listed in order of occurrence from west to east along the Proposed Development's EZol. Impacts on specific qualifying interests / designated features are discussed in **Section 8.5: Assessment of Likely Significant Effects**.
- 8.3.3 Highland Council LNCs are under consideration and not yet publicly available.
- 8.3.4 Only designated sites with ecological features are considered below as part of this assessment. Designated sites selected for ornithological features (e.g. SPAs) are detailed and assessed within **Chapter 9: Ornithology** as well as the HRA¹. Similarly, designated sites selected for geological features (SSSIs and LNCs) are considered in **Chapter 10: Water and Geological Environment**.

Table 8.5: International Designated Sites within the Proposed Development's EZol (10 km)

Feature (Name, Designation)	Local Planning Authority	Distance from Proposed Development
Strathglass Complex SAC	The Highland Council	8.9 km west
Conon Islands SAC	The Highland Council	8.4 km north
Inner Moray Firth Ramsar	The Highland Council	0.5 km north
Moniack Gorge SAC	The Highland Council	0.3 km south
Monadh Mor SAC	The Highland Council	7.5 km north
Moray Firth SAC	The Highland Council	1.1 km north
Carn nan Tri-tighearnan SAC	The Highland Council	1.5 km south
Cawdor Wood SAC	The Highland Council	0.3 km north
Lower Findhorn Woods SAC	Moray Council	1.9 km north
Moidach More SAC	Moray Council	1.5 km south

Feature (Name, Designation)	Local Planning Authority	Distance from Proposed Development
River Spey SAC	Moray Council	The Proposed Development traverses the River Spey SAC to the west of Upper Ordiquish and to the southwest of Fochabers, between towers CB14-1B and CB14-2B.
Loch Spynie Ramsar	Moray Council	9.4 km north
Lower River Spey - Spey Bay SAC	Moray Council	3 km north, 2.4 km south (sections both upstream and downstream)
Moray and Nairn Coast Ramsar	Moray Council	3 km north
Mortlach Moss SAC	Aberdeenshire Council	0.5 km south
Turclossie Moss SAC	Aberdeenshire Council	6.7 km north
Buchan Ness to Collieston SAC	Aberdeenshire Council	8.3 km southeast
Southern Trench MPA	Aberdeenshire Council	8.7 km northeast

Table 8.6: National Designated Sites within the Proposed Development's EZol (2 km)

Feature (Name, Designation)	Local Planning Authority	Distance from Proposed Development
Beaully Firth SSSI	The Highland Council	0.5 km north
Beaully protected seal haul out site	The Highland Council	0.2 km north
Moniack Gorge SSSI	The Highland Council	0.3 km west
Carn nan Tri-tighearnan SSSI	The Highland Council	1.5 km south
Cawdor Wood SSSI	The Highland Council	0.5 km north
Moidach More SSSI	Moray Council	1.5 km south
Buinach and Glenlatterach SSSI	Moray Council	1 km north
Gull Nest SSSI	Moray Council	1.2 km southeast
Coleburn Pasture SSSI	Moray Council	The Proposed Development spans the SSSI, between towers CB11-3 (146) and CB11-4 (146-1)).
River Spey SSSI	Moray Council	The Proposed Development traverses the River Spey SSSI to the west of Upper Ordiquish and to the southwest of Fochabers, between towers CB14-1B and CB14-2B.
Mill Wood SSSI	Moray Council	Adjacent to the Proposed Development.
Den of Pitlurg SSSI	Moray Council Aberdeenshire Council	1.1 km southwest
Mortlach Moss SSSI	Aberdeenshire Council	0.5 km south

Feature (Name, Designation)	Local Planning Authority	Distance from Proposed Development
Whitehill SSSI	Aberdeenshire Council	0.2 km north

Table 8.7: Local / Non-Statutory Designated Sites within the Proposed Development's EZol (1 km)

Feature (Name, Designation)	Local Planning Authority	Distance from Proposed Development
Buglife B-line	The Highland Council Moray Council Aberdeenshire Council	Bisects the Proposed Development
Great Glen and the Beaully Catchment Butterfly Conservation Scottish Priority Landscape	The Highland Council	Bisects the Proposed Development
East Invernesshire IIA	The Highland Council	Bisects the Proposed Development
Findhorn Culbin IIA	The Highland Council Moray Council	The IIA is located to both the north and south of the Proposed Development. To the north, the IIA is adjacent to the bellmouth and access tracks. To the south, the IIA is located 0.4 km south of the Proposed Development.
Daviot Loch Moy Red Squirrel Stronghold	The Highland Council	Bisects the Proposed Development
Ordiequish, Whiteash, Ben Aigan Red Squirrel Stronghold	Moray Council	Bisects the Proposed Development
Strathbogie WPA	Aberdeenshire Council	Bisects the Proposed Development
Den of Pitlurg LNCS	Aberdeenshire Council	0.5 km south
Bin Hill LNCS	Aberdeenshire Council	Bisects the Proposed Development

8.3.5 Additionally, ancient woodland listed in the AWI⁶⁶ is located along the Proposed Development, shown in **Figure 8.3: Ancient Woodland and Peatland Records**. Of the 283 AWI parcels identified within 1 km of the Proposed Development, the following are located within each LPA (some of these ancient woodlands span the LPA boundaries and so have been included within each of the LPAs below).

8.3.6 Within the Proposed Development:

- The Highland Council
 - Three are category 1a ancient woodland of semi-natural origin: tower BC5-18 is located within an area of this woodland to the north of the River Ness and A82 (**Figure 8.3: Ancient Woodland and Peatland Records, Sheet 4**); the working area of tower CB2-22 encroaches on an area of this woodland located along the River Nairn (**Figure 8.3: Ancient Woodland and Peatland Records, Sheet 6**); and a proposed access track leading to tower CB1-1 is located within the edge of the final area of this woodland type to the north of the River Ness (**Figure 8.3: Ancient Woodland and Peatland Records, Sheet 4**).

⁶⁶ NatureScot (online). Ancient Woodland Inventory, Online at: <https://opendata.nature.scot/datasets/snh::ancient-woodland-inventory/explore>

- Three are category 2a ancient woodland of semi-natural origin: the OHL to be dismantled currently oversails two areas of this woodland located between towers 40 and 41 along Bunchrew Burn (**Figure 8.3: Ancient Woodland and Peatland Records, Sheet 3**) and between towers 59 and 60 located along Essich Burn (**Figure 8.3: Ancient Woodland and Peatland Records, Sheet 5**); and tower BC2-7B of the Proposed Development is located within an area of 2a woodland in the north of Croiche Wood along the River Beaully (**Figure 8.3: Ancient Woodland and Peatland Records, Sheet 1**).
- Thirty-eight are category 2b long-established of plantation origin (LEPO) woodland: located around the River Beaully, Moniack Burn, The Aird, Holme Wood, River Ness, Drumashie Plantation, Big Burn, Daviot Wood, Clunas Wood, Knockaneorn Wood, New Inn Wood and Dalnaheiglish Wood.
- One is category 3 other (on Roy map) woodland: the working area of tower BC5-18A encroaches on an area of this woodland located north of the River Ness and A82.
- Moray Council
 - One is category 1a ancient woodland of semi-natural origin: the access tracks leading to towers CB15-21 (209-6) and CB15D-22A encroaches on the edge of Dunnyduff Wood (**Figure 8.3: Ancient Woodland and Peatland Records, Sheet 21-22**).
 - One is category 2a ancient woodland of semi-natural origin: the working area of tower HR-B5-13 and the proposed conductor pulling area encroaches on the edge of the woodland (**Figure 8.3: Ancient Woodland and Peatland Records, Sheet 21**).
 - Eleven are category 2b LEPO woodland: located at Bantrach Wood and Glenernerney Wood, Hill of Scare, along the A941, Badentinan Wood, Wood of Ordiequish, Whiteash Hill Wood and around Keith.
 - One is category 3 other (on Roy map) woodland: located along Dorback Burn.
- Aberdeenshire Council
 - Seventeen are category 2b LEPO woodland: located at Brownhill Plantation, Cumrie Plantation, The Bin, Auchmull Wood, Longmoor Wood, along the A97, near Bogcoup, Whin Burn, Wood of Darra, north of the B9170, near New Deer, Crichtie Wood and near Durie.

8.3.7 Within the LoD but not including those listed above:

- The Highland Council
 - One is category 2a ancient woodland of semi-natural origin;
 - Thirteen are category 2b LEPO woodland; and
 - One is category 3 other (on Roy map) woodland.
- Moray Council
 - Two are category 1a ancient woodland of semi-natural origin;
 - Three are category 2a ancient woodland of semi-natural origin; and
 - Four are category 2b LEPO woodland.
- Aberdeenshire Council
 - Three are category 2a ancient woodland of semi-natural origin; and
 - Four are category 2b LEPO woodland.

8.3.8 In addition to those listed above, within 1 km buffer of the Proposed Development:

- The Highland Council
 - Four are category 1a ancient woodland of semi-natural origin;
 - Fourteen are category 2a ancient woodland of semi-natural origin;
 - Fifty-four are category 2b LEPO woodland; and
 - Three are category 3 other (on Roy map) woodland.

- Moray Council
 - Seven are category 1a ancient woodland of semi-natural origin;
 - One is category 1b LEPO woodland;
 - Eight are category 2a ancient woodland of semi-natural origin;
 - Thirty-five are category 2b LEPO woodland; and
 - Six are category 3 other (on Roy map) woodland.
- Aberdeenshire Council
 - One is category 1a ancient woodland of semi-natural origin;
 - Ten are category 2a ancient woodland of semi-natural origin;
 - Thirty-six are category 2b LEPO woodland; and
 - One is category 3 other (on Roy map) woodland.

8.3.9 Following SSEN Transmission guidance⁶⁷, category 1a and 2a woodland is considered ancient woodland and category 1b, 2b and 3, are not considered ancient woodland in relation to 'Irreplaceable Habitat', see **Appendix 8.3: Biodiversity Net Gain**.

8.3.10 Woodlands listed in the NWSS are also present throughout the Proposed Development and are shown on **Figure 8.3: Ancient Woodland and Peatland Records**. These woodlands include native and nearly-native woodland throughout Scotland; their ecological importance is discussed in the Sensitive Receptors subsection below. The following NWSS woodlands intersect with the Proposed Development:

- A total of 116 parcels of NWSS woodland interact with the Proposed Development within the Highland Council as follows:
 - One hundred and one are native woodland and includes lowland mixed deciduous woodland, upland birchwood, native pinewood, wet woodland, upland oakwood and upland mixed ashwood;
 - Five are nearly-native woodland including wet woodland and lowland mixed deciduous woodland;
 - Five are open land habitat; and
 - Five are plantation on ancient woodland sites (PAWS).
- A total of 38 parcels of NWSS woodland interact with the Proposed Development within Moray Council as follows:
 - Thirty-four are native woodland and includes lowland mixed deciduous woodland, upland birchwood, native pinewood, wet woodland, upland mixed ashwood and non-native woodland;
 - One is nearly-native woodland comprising non-native woodland; and
 - One is open land habitat.
- A total of 13 parcels of NWSS woodland interact with the Proposed Development within Aberdeenshire Council as follows:
 - Eleven are native woodland and includes lowland mixed deciduous woodland, upland birchwood, wet woodland and upland mixed ashwood; and
 - Two are nearly-native woodland.

8.3.11 The Carbon and Peatland Map 2016⁶⁸ is a tool to coarsely identify where areas of peatland are likely to occur. The map shows: carbon-rich soils, deep peat and priority peatland habitat. **Table 8.8** details the class descriptions relevant to priority peatland.

⁶⁷ SSEN Transmission (2023). Ancient Woodland – Approach to Assessment and Reporting (BN-NET-ENV-501).

⁶⁸ Scotland's Soils (2016). Carbon and peatland 2016 map. Online at: <https://soils.environment.gov.scot/maps/thematic-maps/carbon-and-peatland-2016-map/>

Table 8.8: Class Descriptions

Class	Description
Class 1	Nationally important carbon-rich soils, deep peat and priority peatland habitat. Areas likely to be of high conservation value.
Class 2	Nationally important carbon-rich soils, deep peat and priority peatland habitat. Areas of potentially high conservation value and restoration potential.
Class 3	Dominant vegetation cover is not priority peatland habitat but is associated with wet and acidic type. Occasional peatland habitats can be found. Most soils are carbon-rich soils, with some areas of deep peat.

8.3.12 Within the Proposed Development, Class 1, Class 2 and Class 3 soils are all located throughout, with concentrated areas of potential deep peat / peatland habitats within Highland and Moray Council areas – **Figure 8.3: Ancient Woodland and Peatland Records**. The following parcels of these peatlands are located within each LPA (some peatlands span the LPA boundaries and so are included within each of the LPAs below):

8.3.13 Within the Proposed Development:

- The Highland Council
 - Thirty-three parcels of Class 1 peatland;
 - Twenty-one parcels of Class 2 peatland; and
 - Sixteen parcels of Class 3 peatland.
- Moray Council
 - Thirty-six parcels of Class 1 peatland;
 - Eleven parcels of Class 2 peatland; and
 - Twelve parcels of Class 3 peatland.
- Aberdeenshire Council
 - Two parcels of Class 1 peatland.

Habitats

8.3.14 This Section summarises the baseline relevant to habitats identified within the UKHab Survey Area (all habitats within the Potential Ecological Footprint and 250 m buffer).

8.3.15 The UKHab primary habitats, total area (ha) and / or length (km) of each habitat within each LPA and details on whether they are priority habitats are detailed below in **Table 8.9**. The results of the UKHab survey are shown in **Figure 8.1.2: UK Habitat Survey Results (Appendix 8.1: UK Habitat and Protected Species)**.

8.3.16 The potential for Groundwater Dependant Terrestrial Ecosystems (GWDTEs) is assessed within **Chapter 10: Water and Geological Environment** and as such is not considered within this chapter.

8.3.17 Some UKHab categories can include both areas and lengths due to their physical nature. For example Other wetland f2f can comprise a range of wetland features, some area features and some linear features. **Table 8.9** presents a breakdown of areas and lengths for habitat types where this is the case.

Highland

- 8.3.18 Within Highland Council, approximately 1144 ha of coniferous woodland was recorded as well as 650 ha of modified grassland, 618 ha of heathland, 564 ha of broadleaved and mixed woodland, 333 ha of arable and horticulture land, 357 ha of blanket bog, 182 ha of other grasslands, 116 ha of scrub and 34 ha of wetlands as well as areas of urban habitat, rivers and hedgerows.

Moray

- 8.3.19 Within Moray Council, approximately 1591 ha of coniferous woodland was recorded as well as 1135 ha of modified grassland, 803 ha of heathland, 455 ha of arable and horticulture land, 354 ha of blanket bog, 306 ha of broadleaved and mixed woodland, 296 ha of other grasslands, 50 ha of scrub and 9 ha of wetlands as well as areas of urban habitat, rivers, inland rock and hedgerows.

Aberdeenshire

- 8.3.20 Within Aberdeenshire Council, approximately 3169 ha of arable and horticulture land was recorded as well as 1551 ha of modified grassland, 390 ha of coniferous woodland, 234 ha of broadleaved and mixed woodland, 70 ha of other grasslands, 30 ha of scrub, 23 ha of heathland and 12 ha of wetlands as well as areas of urban habitat, rivers and hedgerows.

Table 8.9: Summary of UKHab Survey Results

UKHab Primary Habitat	Area / Length (rounded to two decimal places)			Priority Habitat
	The Highland Council	Moray Council	Aberdeenshire Council	
c1 – Arable and horticulture	249.84 ha	18.18 ha	866.14 ha	The Agricultural Land Habitat Action Plan within the HNBAP details the value of high nature-value farming (i.e. habitat networks including field margins, hedgerows and woods / treelines) as it provides habitat for wildlife.
c1b - Temporary grass and clover leys	-	84.94 ha	41.69 ha	
c1b7 - Herb-rich ley	-	-	31.18 ha	
c1c – Cereal crops	21.16 ha	352.05 ha	2209.62 ha	
c1c5 – Winter stubble	19.09 ha	-	8.83 ha	
c1d – Non-cereal crops	39.31 ha	-	11.22 ha	
c1f7 - Polyculture	3.72 ha	-	-	
f1 – Bog	0.65 ha	-	-	Blanket bog, f1a5, qualifies as an Annex I habitat. All blanket bog communities qualify as SBL priority habitat. The Peatland and Wetland Habitat Action Plan within the HNBAP
f1a – Blanket bog	251.77 ha	303.90 ha	-	
f1a5 – Blanket bog (H7130 ⁷⁰)	12.89 ha	9.77 ha	-	
f1a6 – Degraded blanket bog	91.30 ha	40.76 ha	-	

⁷⁰ Annex I habitat code.

UKHab Primary Habitat	Area / Length (rounded to two decimal places)			Priority Habitat
	The Highland Council	Moray Council	Aberdeenshire Council	
				details the importance of restoring peatland and their associated wetlands. NESBiP includes Upland Heathland in the Important Habitats for Biodiversity List ⁶⁹ , of relevance here as an opportunity is to reduce 'management intensity of upland heathland vegetation where it occurs over or alongside degraded blanket bog.
f – Wetland	0.05 ha	-	-	- Reedbeds, purple moor-grass and rush pasture as well as upland flushes, fens and swamps are SBL priority habitats.
f2 - Fen marsh and swamp	2.17 ha	-	-	- The importance of wetlands is highlighted in the Peatland and Wetland Habitat Action Plan within the HNBAP.
f2b – Purple moor-grass and rush pasture	4.86 ha	0.11 ha	-	- Freshwater Habitats are also listed on the NESBiP
f2c – Upland flushes fens and swamps	0.82 ha	1.79 ha	-	- Important Habitats for Biodiversity List ⁷¹ which states lowland wetlands are a priority for nature conservation.
f2e – Reedbeds	2.29 ha	-	-	-
f2f – Other wetlands	24.23 ha	7.51 ha 0.70 km	11.90 ha	-
g1 – Acid grassland	2.87 ha	-	-	- Lowland dry acid grassland is an SBL priority habitat.
g1a - Lowland dry acid grassland	-	2.57 ha	-	- All grassland is mentioned in the NESBiP
g1b – Upland acid grassland	16.82 ha	16.46 ha	-	- Important Habitats for Biodiversity List ⁷² which states most grassland has some biodiversity value as well as scope for enhancement to increase their
g1b6 – Other upland acid grassland	13.01 ha	-	-	-
g1c - Bracken	18.41 ha	18.38 ha	-	-

⁶⁹ North East Scotland Biodiversity Partnership (2020). Upland Heathland. Online at: <https://www.nesbiodiversity.org.uk/wp-content/uploads/2020/12/UplandHeathlandv1.1-blanket-bog-cairn-gorm-edit.pdf>

⁷¹ North East Scotland Biodiversity Partnership (2019). Freshwater Habitats. Online at: <https://www.nesbiodiversity.org.uk/wp-content/uploads/2019/10/FreshwaterHabitatsv1.pdf>

⁷² North East Scotland Biodiversity Partnership (2019). Grassland. Online at: <https://www.nesbiodiversity.org.uk/wp-content/uploads/2019/10/Grasslandsv1.pdf>

UKHab Primary Habitat	Area / Length (rounded to two decimal places)			Priority Habitat
	The Highland Council	Moray Council	Aberdeenshire Council	
g1d – Other lowland acid grassland	1.69 ha	12.32 ha		- importance as habitats for wildlife. Additionally, lowland wet grasslands are detailed in the Freshwater Habitats NESBiP Important Habitats for Biodiversity List⁷¹, in particular those with groundwater influence are considered especially important for conservation. Grasslands are mentioned throughout the HNBAP due to their association with most other habitats including upland and moorland; peatland and wetland; and agricultural land.
g2b - Upland calcareous grassland	-	3.95 ha		
g2b6 - Species-rich grassland with mat-grass in upland areas (H6230 ⁷⁰)	-	7.51 ha		
g3 – Neutral grassland	0.19 ha	-		
g3c – Other neutral grassland	105.38 ha	227.52 ha	67.76 ha	
g3c5 - <i>Arrhenatherum</i> neutral grassland	0.22 ha	-		
g3c7 - <i>Deschampsia</i> neutral grassland	18.07 ha	5.10 ha		
g3c8 – <i>Holcus-Juncus</i> neutral grassland	4.89 ha	2.11 ha	1.87 ha	
g4 – Modified grassland	650.03 ha	1135.26 ha	1550.88 ha	- Annex I priority habitats: h1a7, h1b5 and h1b6. The broad habitat category of upland heathland qualifies as an SBL priority habitat. The Upland and Moorland Habitat Action Plan forms part of the HNBAP. Upland heathland is included in the NESBiP Important Habitats for Biodiversity List⁶⁹.
h - Heathland and shrub	0.54 ha	-		
h1 – Dwarf shrub heath	4.85 ha	3.91 ha	3.06 ha	
h1a - Lowland heathland	-	3.42 ha		
h1a7 - Wet heathland with cross-leaved heath- lowland (H4010 ⁷⁰)	7.86 ha	84.01 ha		
h1b - upland heathland	557.51 ha	551.26 ha	19.68 ha	
h1b5 - Dry heaths - upland (H4030 ⁷⁰)	42.06 ha	-	--	

UKHab Primary Habitat	Area / Length (rounded to two decimal places)			Priority Habitat
	The Highland Council	Moray Council	Aberdeenshire Council	
h1b6 – Wet heathland with cross-leaved heath – upland (H4010 ⁷⁰)	5.64 ha	160.68 ha	-	
h2 – Hedgerows	-	-	0.99 km	Hedgerows are a SBL priority habitat. The agricultural land habitat action plan within the HNBAP, details the importance of hedges as important linear networks for wildlife. NESBiP lists Woodland as an Important Habitat for Biodiversity ⁷³ , within the habitat statement the importance of hedgerows is also detailed.
h2a – Native hedgerow	2.26 km	5.21 km	10.48 km	
h2a6 - Other native hedgerow	0.02 ha 0.34 km	-	0.14 ha 5.45 km	
h2b - Non-native and ornamental hedgerow	-	-	0.21 ha 0.21 km	
h3 - Dense scrub	14.92 ha	-	-	Juniper is listed on the SBL. NESBiP lists Woodland as an Important Habitats for Biodiversity ⁷³ . Within the habitat statement, the importance of scrub is detailed (notably, juniper scrub, for the invertebrates restricted to it).
h3b - Hazel scrub	0.15 ha	-	-	
h3e - Gorse scrub	94.37 ha	26.60 ha	8.83 ha	
h3h - Mixed scrub	5.60 ha	13.69 ha	21.04 ha	
h3j - Willow scrub	0.73 ha	0.27 ha	-	
h3k - Juniper scrub	-	0.38 ha	-	
r - Rivers and lakes	0.01 ha	-	-	
r1 - Standing open water and canals	6.24 ha	8.10 ha	3.57 ha 6.06 km	Rivers recorded as r2a, r2a6 as well as standing water (ponds) qualify as priority habitats on the SBL. Freshwater: rivers, burns and lochs forms a habitat action plan within the HNBAP. Freshwater habitats are also part of the NESBiP List of Important Habitats for Biodiversity ⁷¹ .
r1e - Canals	3.42 ha	-	-	
r1g - Other standing water	4.78 ha 2.38 km	0.59 ha 5.52 km	1.49 ha 0.19 km	
r2 - Rivers and streams	2.34 ha 1.64 km	3.15 ha 0.22 km	1.36 ha 0.18 km	
r2a - Rivers (priority habitat)	12.39 ha 0.96 km	4.71 ha	2.57 ha	

⁷³ North East Scotland Biodiversity Partnership (2019). Woodlands. Online at: <https://www.nesbiodiversity.org.uk/wp-content/uploads/2019/10/Woodlandsv1-1.pdf>

UKHab Primary Habitat	Area / Length (rounded to two decimal places)			Priority Habitat
	The Highland Council	Moray Council	Aberdeenshire Council	
r2a6 - Other priority habitat rivers	14.21 ha 0.28 km	-	-	
r2b - Other rivers and streams	0.47 ha 76.58 km	23.29 ha 115.10 km	1.95 ha 60.03 km	
s1 - Inland rock	-	0.20 ha	-	-
u – Urban	-	-	0.15 ha	NESBiP includes the Built Environment in the List of Important Habitats for Biodiversity ⁷⁴ . This highlights important habitats associated with the built environment, including semi-natural habitats, gardens, allotments, parks, golf courses, railway embankments, roadside verges, Disused quarries, landfill sites, bridges, school grounds, playing fields, urban trees, civic space, SuDS ponds, buildings, graveyards and harbours. These habitats categorised as 'built environment' support several species of birds, amphibians, fish, molluscs, invertebrates and plants.
u1 - Built-up areas and gardens	1.08 ha	-	1.50 ha	
u1b - Developed land - sealed surface	12.94 ha	30.79 ha	20.68 ha	
u1b5 – Buildings	4.19 ha	2.00 ha	9.61 ha	
u1b6 – Other developed land	0.04 ha	0.08 ha	2.09 ha	
u1c – Artificial unvegetated unsealed surface	8.66 ha	8.00 ha	4.29 ha	
u1d – Suburban mosaic of developed / natural surfaces	12.14 ha	17.29 ha	68.02 ha	
u1e – Built linear features	32.51 ha	34.83 ha	40.99 ha 2.11 km	
u1f - Sparsely vegetated urban land	3.56 ha	6.20 ha	0.46 ha	Annex I habitats: w1a5, w1d5 and w1f6. SBL priority habitats: lowland mixed deciduous woodland (w1f, w1f6, w1f7), native pine woodlands (w2a, w2b), upland birchwoods (w1e), upland mixed ashwoods (w1b), upland oakwood
w - Woodland and forest	3.04 ha	-	0.14 ha	
w1 - Broadleaved and mixed woodland	11.07 ha 0.34 km	1.00 ha	2.39 ha	
w1a - Upland oakwood	8.15 ha	-	-	
w1a5 - Western acidic oak	16.73 ha	-	-	

⁷⁴ North East Scotland Biodiversity Partnership (2019). Built Environment. Online at: <https://www.nesbiodiversity.org.uk/wp-content/uploads/2019/10/BuiltEnvironmentv1.pdf>

UKHab Primary Habitat	Area / Length (rounded to two decimal places)			Priority Habitat
	The Highland Council	Moray Council	Aberdeenshire Council	
woodland (H91A070)				(w1a, w1a5) and wet woodland (w1d, w1d5). Woodland and forest forms a habitat action plan within the HNBAP. Woodland is also part of the NESBiP List of Important Habitats for Biodiversity. This details lowland mixed deciduous woodland, native pinewoods, upland birchwoods, upland mixed ashwoods, upland oakwoods, wet and riparian woodland, native pasture and parkland as priority habitats. It also details that whilst coniferous plantation is relatively species poor, it does have conservation value for the species it supports including wildcat, pine marten and red squirrel.
w1b - Upland mixed ashwoods	-	-	0.01 ha	
w1d - Wet woodland	11.65 ha	0.19 ha	3.17 ha	
w1d5 - Alder woodland on floodplains (H91E070)	0.63 ha	-	0.25 ha	
w1e - Upland birchwoods	181.44 ha	35.81 ha	0.11 ha	
w1f - Lowland mixed deciduous woodland	6.51 ha 0.45 km	40.50 ha	9.30 ha 0.26 km	
w1f6 - Oak-hornbeam forests (H916070)	3.35 ha	-	-	
w1f7 - Other Lowland mixed deciduous woodland	3.39 ha	-	3.23 ha	
w1g - Other woodland, broadleaved	265.14 ha 1.01 km	202.76 ha 0.93 km	134.98 ha 3.68 km	
w1h - Other woodland - mixed	43.32 ha 0.49 km	18.93 ha	29.66 ha 0.10 km	
w1h5 - Other woodland - mixed - mainly broadleaved	2.23 ha	0.20 ha	47.81 ha	
w1h6 - Other woodland - mixed - mainly conifer	7.68 ha	6.31 ha	3.04 ha	
w2 - Coniferous woodland	9.75 ha	-	15.22 ha	
w2a - Native pine woodlands	40.76 ha	32.35 ha	0.31 ha	
w2b - Other Scots Pine woodland	528.07 ha 0.25 km	266.65 ha	1.64 ha	

UKHab Primary Habitat	Area / Length (rounded to two decimal places)			Priority Habitat
	The Highland Council	Moray Council	Aberdeenshire Council	
w2c - Other coniferous woodland	565.13 ha	1292.24 ha	372.53 ha 0.21 km	
Total	4116.98 ha 86.97 km	5130.59 ha 127.67 km	5636.58 ha 89.94 km	

Additional Habitat Mapping

- 8.3.21 Where the habitat mapping was extended to include later additions to the Proposed Development, it was done using aerial mapping, neighbouring survey results and professional judgement. These habitats were an extension of those reported above and included mixed woodland, coniferous woodland, modified grassland, cropland and urban habitats including hard standing and buildings.

Invasive Non-Native Species

- 8.3.22 Invasive Non-Native Species (INNS) were identified throughout the UKHab Survey Area. Within each LPA the following was identified:

- The Highland Council
 - Rhododendron (*Rhododendron ponticum*): recorded along the River Beaully, within broadleaved woodland along the Moniac Burn, within other Scots pine woodland near The Aird and further east within Blackcroft Wood, on the edge of modified grassland near Clunas Wood and within upland birchwoods along Tomnarroch Burn.
- Moray Council
 - Rhododendron: recorded within other coniferous woodland at Slorach's Wood.
 - Japanese knotweed (*Reynoutria japonica* syn. *Fallopia japonica*): recorded along the River Spey and Red Burn.
 - Indian (Himalayan) balsam (*Impatiens glandulifera*): recorded along the River Spey and Red Burn.
- Aberdeenshire Council
 - Rhododendron: recorded along Burn of Cairnie; on the roadside near Cairn Hill; within other broadleaved woodland near a watercourse that feeds into the Burn of Templeland and further east south of Cuminstown; and on the edge of modified grassland north of the B9029.
 - Giant hogweed (*Heracleum mantegazzianum*): recorded along Burn of Cairnie.
 - Indian balsam: recorded along a watercourse that feeds into South Ugie Water.
 - Field horsetail (*Equisetum arvense*) was also identified along the Burn of Cairnie and River Deveron and whilst it is not an INNS it can damage hard landscaping such as tarmac (but not foundations) so has been included here.

Protected Species

- 8.3.23 This Section summarises the baseline relevant to species identified within the relevant survey areas and surrounding environment where there may be suitable habitat. Survey areas are shown on **Figure 8.1.1: Survey Areas and Access Constraints**.

Bats

8.3.24 Results on the initial bat surveys are detailed below in **Table 8.10**, separated by LPA and shown on **Figure 8.1.3: Initial Bat Survey Results**. Full details can be found in **Appendix 8.1: UK Habitat and Protected Species**.

Table 8.10: Initial Bat Survey Results

Survey	Local Planning Authority	Results
DBW	The Highland Council	A total of 344 trees were recorded as potentially suitable for roosting bats (i.e. contained PRFs) and were further assessed as follows: • 136 trees were suitable for PRF inspection at ground-level; • 189 trees were suitable for aerial PRF inspection; and, • a further 19 trees were identified as unsafe for inspection and would therefore require dusk emergence surveys. Following the agreed approach with NatureScot, a proportional number of these trees (with potential to support roosting bats) were randomly selected and subject to further survey, comprising ground-level inspection, aerial inspection and dusk emergence surveys (approximately 25% of each survey type). A rocky crag (S2) (Figure 8.1.3 – Initial Bat Survey Results Page 6 of 19) was noted approximately 13 km southeast of Nairn, with multiple gaps and fissures. This was assessed to be of high suitability for roosting bats during both the active bat season and hibernation season. The dilapidated ruins of a farm steading (S3) (Figure 8.1.3 – Initial Bat Survey Results Page 5 of 19) were noted 280 m west of the River Nairn. This structure was assessed to be of moderate suitability for roosting bats during both the active bat season and hibernation season.
	Moray Council	A total of 178 trees were recorded as potentially suitable for roosting bats (i.e. contained PRFs) and were further assessed as follows: • 37 trees were noted as suitable for further ground-level PRF inspections; • 130 trees were suitable for aerial PRF inspection; and • 11 trees were suitable for dusk emergence surveys. Following the agreed approach with NatureScot, a proportional number of the above-listed trees were randomly selected and subject to further survey, comprising ground-level inspection, aerial inspection and dusk emergence surveys (approximately 25% of each survey type). An exposed rock face was recorded overhanging a watercourse with visible cracks and fissures (S1) (Figure 8.1.3 – Initial Bat Survey Results Page 8 of 19), this was assessed of moderate suitability to support bats during the active bat season and hibernation season. This was noted approximately 13 km south of Forres.
	Aberdeenshire Council	A total of 211 trees were recorded as potentially suitable for roosting bats (i.e. contained PRFs) and were further assessed as follows:

Survey	Local Planning Authority	Results
		63 trees were noted as suitable for further ground-level PRF inspection surveys; 138 trees were suitable for aerial PRF inspection; and - Ten trees were suitable for dusk emergence surveys. Following the agreed approach with NatureScot, a proportional number of these trees were randomly selected and subject to further survey, comprising ground-level inspection, aerial inspection and dusk emergence surveys (approximately 25% of each survey type). One bridge with bat roosting potential was recorded 5 km north of Huntly (B1). Gaps were noted in the brick-and-mortar construction, and it was assessed of moderate suitability to support roosting (and hibernating) bats year-round.

8.3.25 Results of the further bat surveys undertaken within the Bat Survey Area are detailed below in **Table 8.11**, separated by LPA. Results are shown on **Figure 8.1.4: Further Bat Survey Results** and **Figure 8.1.5: Night-time Bat Walkover and Static Bat Survey Results (Appendix 8.1: UK Habitat and Protected Species)**. Full details can be found in **Appendix 8.1: UK Habitat and Protected Species**.

Table 8.11: Further Bat Survey Results

Survey	Local Planning Authority	Results
PRF Inspection	The Highland Council	A total of 77 trees were subject to intrusive PRF inspection. No field signs or bats identified.
	Moray Council	A total of 33 trees were subject to intrusive PRF inspection. A confirmed roost identified in tree 0183b (Figure 8.1.3 – Initial Bat Survey Results Page 7 of 19), confirmed to be soprano pipistrelle from eDNA testing.
	Aberdeenshire Council	A total of 25 trees were subject to intrusive PRF inspection, no field signs or bats identified.
Dusk Emergence Survey	The Highland Council	Four trees subject to dusk emergence surveys. No field signs or bats identified.
	Moray Council	A single tree subject to a dusk emergence survey, no roosts recorded.
	Aberdeenshire Council	Two trees were subject to dusk emergence surveys, no roosts were recorded.
NBW	The Highland Council	All woodland subject to survey displayed bat activity as follows (woodlands shown on Figure 8.1.5: Night-time Bat Walkover and Static Bat Survey Results): Woodland 1 - Activity of soprano pipistrelle, common pipistrelle, brown long-eared bat and Myotis bat species were recorded. Soprano pipistrelle calls

Survey	Local Planning Authority	Results
		were recorded during both transects within the S-SET suggesting this species was roosting within or nearby the woodland. Woodland 2 - Activity of soprano pipistrelle, common pipistrelle and Myotis bat species were recorded. No calls were recorded during S-SETs during the transect. Woodland 3 - Activity of soprano pipistrelle, common pipistrelle, brown long-eared and Myotis bat species were recorded. A single Nyctalus species call was recorded. Soprano pipistrelle, common pipistrelle and Myotis species calls were recorded during both transects within the S-SET, suggesting bats of these species were roosting within or nearby the woodland. Woodland 4 - Activity of soprano pipistrelle, common pipistrelle and Myotis bat species were recorded. Myotis species bat calls were recorded within their S-SET, suggesting bats of this species were roosting within or nearby the woodland. Woodland 5 - Activity of soprano pipistrelle, common pipistrelle and Myotis bat species were recorded. No calls were recorded during S-SETs during the survey. Woodland 13 - Activity of soprano pipistrelle, common pipistrelle, brown long-eared bat and Myotis bat species were recorded. Soprano pipistrelle calls were recorded within their S-SET, suggesting bats of this species were roosting within or nearby the woodland.
	Moray Council	All woodland subject to survey displayed bat activity as follows (woodlands shown on Figure 8.1.5: Night-time Bat Walkover and Static Bat Survey Results): Woodland 6 - Activity of soprano pipistrelle, common pipistrelle and Myotis bat species were recorded. Soprano pipistrelle and common pipistrelle calls were recorded during Transect 1 within their S-SET, suggesting bats of these species were roosting within or nearby the woodland. Woodland 7 - Activity of soprano pipistrelle, common pipistrelle and Myotis bat species were recorded. Soprano pipistrelle and common pipistrelle calls were recorded during Transect 1 within their S-SET, suggesting bats of these species were roosting within or nearby the woodland. Woodland 8 - Activity of soprano pipistrelle, common pipistrelle, Nathusius's pipistrelle and Myotis bat species were recorded. No calls were recorded during S-SETs. Woodland 10 - Activity of soprano pipistrelle and common pipistrelle was recorded. Soprano pipistrelle and common pipistrelle calls were recorded during both transects within their S-SET, suggesting bats of these species were roosting within or nearby the woodland.
	Aberdeenshire Council	All woodland subject to survey displayed bat activity as follows (woodlands shown on Figure 8.1.5: Night-time Bat Walkover and Static Bat Survey Results): Woodland 9 - Activity of soprano pipistrelle, common pipistrelle and Myotis bat species were recorded. Common pipistrelle calls were recorded during

Survey	Local Planning Authority	Results
		Transect 1 within their S-SET, suggesting bats of this species were roosting within or nearby the woodland. Woodland 12 - Activity of soprano pipistrelle, common pipistrelle, brown long-eared bat and Myotis bat species were recorded. Soprano pipistrelle calls were recorded during Transect 2 and soprano pipistrelle, common pipistrelle, Myotis bat species and brown long-eared bat were recorded during Transect 1 within their S-SET, suggesting bats of this species were roosting within or nearby the woodland. Woodland 14 - Activity of soprano pipistrelle and common pipistrelle were recorded. Soprano pipistrelle calls were recorded during Transect 1 within their S-SET, suggesting bats of this species were roosting within or nearby the woodland. Woodland 15 - Activity of soprano pipistrelle and common pipistrelle were recorded during the NBW undertaken. No calls were recorded during S-SETs within this woodland.
Static	The Highland Council	Within Highland Council, 13 static detectors were deployed within six high suitability woodlands (locations shown on Figure 8.1.4: Further Bat Survey Results), all of which recorded high levels of soprano pipistrelle activity with the exception of Woodland 5. Woodland 5, however, recorded a high number of Myotis bat species. Of note was Woodland 2 which recorded notably high levels of soprano pipistrelle and Myotis bat species. Woodland 3 and Woodland 13 both recorded Nyctalus bat species calls. Peaks in bat activity were compared to the species-specific emergence times to identify potential roosts within the woodland. It is likely that roosts are present within or proximal to all of the woodlands subject to static survey. Of note would be Woodland 1 (184 Pipistrellus species calls), Woodland 3 (214 Myotis species calls and 181 Pipistrellus species calls), Woodland 4 (342 Myotis species calls and 132 soprano pipistrelle calls) and Woodland 13 (61 common pipistrelle calls). The numbers of calls recorded during the expected period of S-SET in the aforementioned woodlands suggest that these woodlands contain (or are proximal to) sizeable colony roosts, potentially of conservation value, such as maternity roosts.
	Moray Council	Within Moray Council, 14 static detectors were deployed within four high suitability woodlands (locations shown on Figure 8.1.4: Further Bat Survey Results), all of which recorded high levels of soprano pipistrelle activity with the exception of Woodland 6 and Woodland 7. These woodlands recorded a high number of brown long-eared bat / common pipistrelle and Myotis species respectively. Woodland 7 returned notably high levels of common pipistrelle bat calls, which is not typical for the woodland type and location (adjacent to a river), which would be expected to contain a greater number of soprano pipistrelle and Daubenton's bats (Myotis species). Woodland 10 recorded Nyctalus species calls. Peaks in bat activity were compared to the species-specific emergence times to identify potential roosts within the woodlands. It is likely that roosts are present within all four of the woodlands subject to static survey. Of note

Survey	Local Planning Authority	Results
		would be Woodland 10, which during the S-SET for pipistrelle bats recorded 252 pipistrellus species calls and 161 soprano pipistrelle calls. This suggests that these woodlands contain or are proximal to sizeable colony roosts, potentially of conservation value, such as maternity roosts. Of further note, a single call of Nyctalus species bats was recorded within the Nyctalus species S-SET, however as this comprised of a single call on one occasion, this has been considered an incidental pass, with little evidence to suggest regular activity / habitual roosting within this woodland.
	Aberdeenshire Council	Within Aberdeenshire Council, 11 static detectors were deployed within the four high suitability woodlands (locations shown on Figure 8.1.4: Further Bat Survey Results). Within the four woodlands, calls varied from generally typical to high levels, recording species expected to be present within this area. Woodland 12 recorded a notably high level of soprano pipistrelle calls and Woodland 15 recorded a notably high level of common pipistrelle calls. Peaks in bat activity were compared to the species-specific emergence times to identify potential roosts within the woodlands. It is likely that roosts are present within or proximal to all the woodlands subject to static survey. The survey effort did not identify any notable levels of calls during the S-SET of the bat species recorded, suggesting a colony of bats is roosting elsewhere within the woodlands or proximal, that may be of significant conservation value.

Badger

- 8.3.26 Results of the surveys undertaken within the Badger Survey Area are detailed below in **Table 8.12**, separated by LPA and survey type. Results are shown in **Figure 8.2.1: Badger Survey Results** and detailed fully in **Appendix 8.2: Confidential Badger and Freshwater Pearl Mussel**.

Table 8.12: Badger Survey Results

Survey	Local Planning Authority	Results
Badger Survey	The Highland Council	Within Highland 411 ha of high suitability badger habitat was identified, supporting a total of 80 badger setts within the Badger Survey Area. Of these, eight are main setts, four are annexes, 17 are subsidiary setts and 51 are outlier setts.
	Moray Council	Within Moray, 131 ha of high suitability badger habitat was identified, supporting a total of 36 badger setts within the Badger Survey Area. Of these, five are main setts, three are annexe setts, five are subsidiary setts and 23 are outlier setts.
	Aberdeenshire Council	Within Aberdeenshire, 114 ha of high suitability badger habitat was identified, supporting a total of 60 badger setts within the Badger Survey Area. Of these, seven are main, 11 are annexe setts, ten are subsidiary setts and 32 are outlier setts.

Survey	Local Planning Authority	Results
Camera Trapping	The Highland Council	Camera trapping was undertaken on a potential main sett (HC-34 (B1)) which fell within the Potential Ecological Footprint and was confirmed to be a breeding sett at the time of survey.

Pine Marten

8.3.27 Results of the surveys undertaken within the Pine Marten Survey Area are detailed below in **Table 8.13**, separated by Local Planning Authority and survey type. Results are shown on **Figure 8.1.6: Other Protected and Notable Species Survey Results** and detailed fully in **Appendix 8.1: UK Habitat and Protected Species**.

Table 8.13: Pine Marten Survey Results

Survey	Local Planning Authority	Results
Pine Marten Survey	The Highland Council	Within Highland, 19 ha of high suitability habitat to support pine marten was identified. Four potential denning opportunities were identified, all within Dalnaheiglish Wood. No further evidence beyond the opportunity for denning was found. Within the same area, but not at any potential denning sites, potential pine marten scat was recorded.
	Moray Council	Within Moray, 23 ha of high suitability habitat to support pine marten was identified. Three potential denning opportunities were identified, all within Torchelhill Wood near Orbliston. Two potential denning opportunities were identified alongside scat and feeding remains within Balloch Wood. No further evidence was found near the potential den sites.
	Aberdeenshire Council	Within Aberdeenshire, 106 ha of high suitability habitat to support pine marten was identified. One large tree within Hawk Hill Plantation was recorded with a nest large enough to support pine marten. Three potential denning opportunities were identified north of the Bin Forest. This included a quarry cliff within Cruichie Wood that presented opportunities for den sites. Further areas of suitable habitat for pine marten denning included gaps under root plates and boulders. Two wet and degraded scats were recorded within the same woodland. Pine marten scat and a dry-stone wall with crevices for shelter was also recorded in woodland north of Cairnie. Pine marten scat was identified within Balloch Wood. Two potential denning sites were also identified, but no evidence to confirm use by pine marten was identified.

Red Squirrel

- 8.3.28 Results of the surveys undertaken within the Red Squirrel Survey Area are detailed below in **Table 8.14**, separated by LPA. Results are shown on **Figure 8.1.6: Other Protected and Notable Species Survey Results** and detailed fully in **Appendix 8.1: UK Habitat and Protected Species**.

Table 8.14: Red Squirrel Survey Results

Survey	Local Planning Authority	Results
Red Squirrel Survey	The Highland Council	Within Highland, 187 ha of high suitability habitat to support red squirrel was identified. Within the Red Squirrel Survey Area, 12 potential dreys and one potential feeding station were identified. This included multiple potential dreys in woodland adjacent to the River Findhorn. Further to this, a single sighting of an individual red squirrel was recorded within this woodland section. Further potential red squirrel dreys were identified within Clunas Wood. Two potential squirrel dreys were recorded within Newlands of Fleenas Wood. Within the Red Squirrel Survey Area ample squirrel chewed cones were recorded.
	Moray Council	Within Moray, 223 ha of high suitability habitat to support red squirrel was identified. Within the Red Squirrel Survey Area, one potential drey and squirrel feeding signs were identified within Slorach's Wood; feeding signs were also identified in woodland to the south of Hill of Tomechole; and feeding signs were identified within Balloch Wood. .
	Aberdeenshire Council	Within Aberdeenshire, 23 ha of high suitability habitat to support red squirrel was identified. Within the Red Squirrel Survey Area, a potential drey was identified within Hawk Hill Plantation and another potential drey was identified within Balloch Wood. Squirrel feeding signs were recorded within woodland south of Forgue and within Balloch Wood, all within the Red Squirrel Survey Area.

Otter

- 8.3.29 Results of the surveys undertaken within the Otter Survey Area are detailed below in **Table 8.15**, separated by Local Planning Authority and survey type. Results are shown on **Figure 8.1.6: Other Protected and Notable Species Survey Results** and detailed fully in **Appendix 8.1: UK Habitat and Protected Species**.

Table 8.15: Otter Survey Results

Survey	Local Planning Authority	Results
Otter Survey	The Highland Council	Within Highland, 9.43 km of high suitability habitat to support otter was identified, this included the River Beauly, Moniack Burn, River Ness, River Nairn and River Findhorn. 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: these were also recorded as badger setts with availability for use by otter. One potential couch was recorded in the River Beauly area along with incidences of spraint and anal jelly observed throughout the Otter Survey Area, in this locale. 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 suggesting regular use by otter.
	Moray Council	Within Moray, 8.87 km of high suitability habitat to support otter was identified, this included Dorback Burn, River Divie, Berry Burn, Red Burn, River Spey and River Isla. One confirmed couch, three potential resting sites and multiple spraints were recorded along the River Divie and associated watercourses, within the Otter Survey Area. Four potential holts, one potential couch, five potential resting sites and multiple spraints were identified along the River Spey and Red Burn, within the Otter Survey Area. Of these, three potential resting sites were subject to a programme of camera trapping.
	Aberdeenshire Council	Within Aberdeenshire, 1.87 km of high suitability habitat to support otter was identified, including Burn of Cairnie and River Deveron. 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 suggesting regular use by otter.
Camera Trapping	The Highland Council	No otter activity was recorded at the potential otter resting site.
	Moray Council	No otter activity was recorded at the three potential otter resting sites.

Water Vole

- 8.3.30 Results of the surveys undertaken within the Water Vole Survey Area are detailed below in **Table 8.16** Table 8.16, separated by LPA. Results are shown on **Figure 8.1.6: Other Protected and Notable Species Survey Results** and detailed fully in **Appendix 8.1: UK Habitat and Protected Species**.

Table 8.16: Water Vole Survey Results

Survey	Local Planning Authority	Results
Water Vole Survey	The Highland Council	Within Highland, 9.43 km of high suitability habitat to support water vole was identified, this included the River Beaully, Moniack Burn, River Ness, River Nairn and River Findhorn. One potential burrow was recorded within an unnamed burn within the Water Vole Survey Area. No other field evidence recorded.
	Moray Council	Within Moray, 8.87 km of high suitability habitat to support water vole was identified, this included Dorback Burn, River Divie, Berry Burn, Red Burn, River Spey and River Isla. No evidence was recorded.
	Aberdeenshire Council	Within Aberdeenshire, 1.87 km of high suitability habitat to support water vole was identified, including Burn of Cairnie and River Deveron. No evidence was recorded.

Wildcat

- 8.3.31 Results of the surveys undertaken within the Wildcat Survey Area are detailed below in **Table 8.17**, separated by LPA. Results are shown on **Figure 8.1.6: Other Protected and Notable Species Survey Results** and detailed fully in **Appendix 8.1: UK Habitat and Protected Species**.

Table 8.17: Wildcat Survey Results

Survey	Local Planning Authority	Results
Wildcat Survey	The Highland Council	Within Highland, 251 ha of high and moderate suitability habitat to support wildcat was identified. Two potential den sites and one potential resting site were recorded on the eastern banks of the River Nairn, consisting of a fox den (hair and scat confirming use by fox) and a suitable cavity beneath a fallen tree. Two potential resting sites were recorded along the River Findhorn within boulder piles and rocky crags. Finally, three further potential resting sites were noted within dense scrub, west of Drum Mossie Muir. No evidence of wildcat was recorded.
	Moray Council	Within Moray, 20 ha of high and moderate suitability habitat to support wildcat was identified. Two potential denning sites and five potential resting sites for wildcat were found within the Wildcat Survey Area. Four of the potential denning / resting sites were recorded in a woodland surveyed east of the River Divie.

Survey	Local Planning Authority	Results
		This comprised of two potential resting sites recorded within the hollows beneath the root plate of fallen trees, one potential denning site was a cavity beneath a fallen tree and one potential denning site a sheltered area beneath the overhang of earth banking. Along the northern bank of Glenlatterach Reservoir, two notably dense areas of scrub and a single mammal burrow were noted as suitable denning sites for wildcat. No evidence of wildcat was recorded.
	Aberdeenshire Council	Within Aberdeenshire, 180 ha of high and moderate suitability habitat to support wildcat was identified. Two potential denning sites and 21 potential resting sites for wildcat were found within the Wildcat Survey Area. Two potential denning sites were recorded within woodland habitat north of Bin Forest. These potential denning sites consisted of suitable rock piles with cavities beneath. Six potential resting sites were identified within scrub and heathland habitat located within Drumblair Wood. This included three mammal burrows, shelter beneath a fallen tree root plate, and rock piles and debris from tree and fence works creating shelter beneath. A single fallen Scots pine tree south of Turriff was identified as suitable shelter for wildcat. A potential print was identified under a dry root plate in woodland north of Cairnie. Two potential wildcat scats were identified along a dry ditch within Balloch Wood. Potential denning sites were also identified, but no evidence to confirm use by wildcat was identified.

Fish

8.3.32 Results of the surveys undertaken within the Fish Survey Area are detailed below in **Table 8.18**, separated by LPA and survey type / data source. Results are shown on **Figure 8.1.6: Other Protected and Notable Species Survey Results** and detailed fully in **Appendix 8.1: UK Habitat and Protected Species**.

8.3.33 At the time of writing no fish data was provided from the Findhorn, Nairn and Lossie Rivers Trust.

Table 8.18: Fish Survey Results

Survey / Data Source	Local Planning Authority	Results
Fish Data	The Highland Council	Fisheries Trust data was requested 1 km upstream and downstream of river crossings of the Proposed Development. The following electro-fishing data was returned from the River Beauly: - Upstream recorded in October 2015 – 137 Atlantic salmon (<i>Salmo salar</i>) and 34 eel (<i>Anguilla anguilla</i>). - Upstream recorded in July 2018 – 120 Atlantic salmon and 22 eel. - Upstream recorded in September 2021 – 72 Atlantic salmon, one brown trout (<i>Salmo trutta</i>) and 15 eel.

Survey / Data Source	Local Planning Authority	Results
		- Downstream recorded in October 2024 – 55 Atlantic salmon and 12 eel. - Upstream recorded in October 2024 - 72 Atlantic salmon and 10 eel.
	Moray Council	Fisheries Trust data was requested 1 km upstream and downstream of river crossings of the Proposed Development. The following fish data was returned from the River Spey: 1,993 records of Atlantic salmon, 40 records of brown trout, 131 records of eel and 24 records of minnow (<i>Phoxinus phoxinus</i>). The following electro-fishing data was returned from the Red Burn which runs adjacent to the Proposed Development and feeds into the River Spey downstream of the Proposed Development: - Recorded in July 2017 – 20 Atlantic salmon, 288 brown trout , one eel and three three-spine stickleback (<i>Gasterosteus aculaeatus</i>). - Recorded in September 2020 – 235 brown trout, 41 minnow and three three-spine stickleback. - Recorded in August 2024 – 27 Atlantic salmon, 119 brown trout, three eel, 99 minnow and six nine-spine stickleback (<i>Pungitius pungitius</i>).
	Aberdeenshire Council	Fisheries Trust data was requested 1 km upstream and downstream of river crossings of the Proposed Development. The following electro-fishing data was returned from the River Dveeron: - Recorded in August 2021 - 14 Atlantic salmon and nine brown trout. - Recorded in August 2022 - 16 Atlantic salmon and two eel.
Fish Survey	The Highland Council	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 (Figure 8.1.1 – Survey Areas and Access Constraints). 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 Council	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.

Survey / Data Source	Local Planning Authority	Results
		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 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 with ample bankside vegetation.
	Aberdeenshire Council	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.

Freshwater Pearl Mussel

- 8.3.34 Results of the surveys undertaken within the FWPM Survey Area, separated by Local Planning Authority and survey type, are detailed fully in **Appendix 8.2: Confidential Badger and Freshwater Pearl Mussel**. Results are shown on **Figure 8.2.2: Freshwater Pearl Mussel Survey Results which accompanies Appendix 8.2**. Further assessment of freshwater pearl mussel in this EIA Chapter is based on the data in **Appendix 8.2: Confidential Badger and Freshwater Pearl Mussel** and **Figure 8.2.2: Freshwater Pearl Mussel Survey Results** and is provided in confidence. The data cannot be displayed here due to its sensitivity and the endangered status of this species.

Great Crested Newt

- 8.3.35 Results of the surveys undertaken within the GCN Survey Area are detailed below in **Table 8.19: GCN Survey Results**, separated by Local Planning Authority and survey type. Results are shown on **Figure 8.1.6: Other Protected and Notable Species Survey Results** and detailed fully in **Appendix 8.1: UK Habitat and Protected Species**.
- 8.3.36 As waterbodies within Aberdeenshire Council fall outside the HSI definition of 'higher suitability' GCN areas in Scotland⁶², no further studies were conducted on waterbodies located within the area.

Table 8.19: GCN Survey Results

Survey	Local Planning Authority	Results
HSI	The Highland Council	A total of 31 ponds were identified within the GCN Survey Area. The HSI identified four excellent habitats, 11 good habitats, four average habitats, three below average habitats, six poor and three N/A not present habitats.
	Moray Council	A total of nine ponds were identified within the GCN Survey Area. No ponds within this area returned above a 'poor' HSI result.

Survey	Local Planning Authority	Results
eDNA	The Highland Council	In total, 20 ponds which returned a HSI score of 'below average' or above were subject to eDNA testing (where access allowed). A single pond returned a positive eDNA result for GCN.

Beaver

- 8.3.37 Results are shown on **Figure 8.1.6: Other Protected and Notable Species Survey Results** and detailed fully in **Appendix 8.1: UK Habitat and Protected Species**. The below is only relevant to Highland Council, with no historical data for either Moray or Aberdeenshire Councils.
- 8.3.38 The NatureScot report *Beaver Translocation Consultation - River Beaully Catchment Environmental Report*⁷⁵ identifies records of beaver within the Beaully catchment from 2017 including beavers that were later trapped and translocated to Knapdale. Further records of beaver were identified in 2019, 2020 and 2021. Overall, its estimated there were two territories, separated by the hydro dams located near Aigas. Additionally, a population of beavers is anecdotally reported to be present and associated with the Aigas Loch, approximately 3.5 km southwest and upstream of the Proposed Development⁷⁶.
- 8.3.39 Large watercourses with adjacent sheltered woodland habitat were recorded throughout the species survey areas. No field signs of beaver were incidentally identified during the protected species surveys. However, signs of beaver foraging as well as two potential beaver food caches⁷⁷ were identified during environmental surveys in November 2024, on the banks of the Black Bridge and on the small island in the channel at the bridge (surveys being undertaken for SSEN Transmission's Fanellan substation). Potential beaver slides and mammal paths were also observed on the small island⁷⁸.

Other species

- 8.3.40 During the baseline surveys a single hare and common lizard were recorded. No further signs of the following protected or conservation priority species were identified; however, based on habitat suitability their occasional presence cannot be ruled out:
- Mammals – brown hare (*Lepus europaeus*), hedgehog (*Erinaceus europaeus*), water shrew;
 - Reptiles – common lizard (*Zootoca vivipara*), slow worm (*Anguis fragilis*), adder (*Vipera berus*);
 - Amphibians – common toad (*Bufo bufo*), common frog (*Rana temporaria*), palmate newt (*Lissotriton helveticus*) and smooth newt (*Lissotriton vulgaris*); and
 - Invertebrates – both terrestrial and aquatic.

Kellas Alternative Alignment

Designated Sites

- 8.3.41 For the Kellas Alternative Alignment an additional designated site has been identified within the search parameters as detailed in **Table 8.20** below. These are shown on **Figure 8.2: National, Local / Non-statutory Designated Sites** and details on reasons for designations / qualifying interests are included in **Appendix 8.1: UK Habitat and Protected Species**.

⁷⁵ NatureScot (online). Beaver Translocation Consultation - River Beaully Catchment Environmental Report. Available at: <https://www.nature.scot/doc/beaver-translocation-consultation-river-beaully-catchment-environmental-report>

⁷⁶ Aigas Field Centre (online). Conservation at Aigas. Available at: https://www.aigas.co.uk/conservation/conservation_at_aigas

⁷⁷ Underwater collections of stripped branches.

⁷⁸ Unconfirmed due to only being able to view remotely from the bridge above.

Table 8.20: Designated Sites – Kellas Alternative Alignment

Feature (Name, Designation)	Local Planning Authority	Distance from Proposed Development
Buinach and Glenlatterach SSSI	Moray Council	Kellas Alternative Alignment oversails the Buinach and Glenlatterach SSSI (between towers CB9C-28A and CB9C-29B).
Kellas Oakwood SSSI	Moray Council	1 km northwest

Protected Species and Habitats

- 8.3.42 The Kellas Alternative Alignment has been captured within the various survey areas associated with the habitat and protected species baseline, as set out in **Tables 8.10 – 8.20** above.

Future Baseline

- 8.3.43 In the absence of the Proposed Development and on the assumption that the current land use would continue, it is anticipated that over time, terrestrial habitats within the footprint of the Proposed Development would remain consistent in their extent and condition. It is also assumed that the aquatic habitats would remain broadly the same (in terms of extent) due to management of the surrounding land; however, it is plausible that their condition may deteriorate with agricultural run-off and incidental pollution events.
- 8.3.44 INNS were identified within each of the LPAs (including rhododendron, giant hogweed, Indian balsam and Japanese knotweed) and it is anticipated that these would spread further, if not controlled and removed under the Proposed Development or other funding sources.
- 8.3.45 Any observed trends in species populations, set out below in **Table 8.21**, are predicted to continue in the absence of the Proposed Development.
- 8.3.46 In the absence of the Proposed Development, PRFs within buildings and trees would remain at the Proposed Development and may be used by roosting bats. It is not anticipated that there would be a substantial change in the way riparian and aquatic species (including otter, beaver, water vole, fish and FWPM) would use watercourses, whether the Proposed Development progressed or not.
- 8.3.47 Any positive effects for biodiversity realised through the Proposed Development, such as creation of woodland, grassland and heathland, would not be delivered in the absence of the Proposed Development or other funding sources.

Sensitive Receptors

- 8.3.48 The habitats and species identified as IEFs are presented below in **Table 8.21**, together with the justification for this evaluation, as described in **Paragraphs 8.2.22 to 8.2.29: Methodology for the Assessment of Impacts**. An IEF is a sensitive receptor that occurs within the EZol and which has been evaluated to be of Local nature conservation value or above. Designated sites with no potential for connectivity with the Proposed Development have been scoped out of the assessment, as well as habitats and species (with less than local importance). These ecological features are detailed in the following Section: Issues Scoped Out.

Table 8.21: Evaluation of Features within the Proposed Development's EZol

Feature	LPA	Level of Importance	Further Information on Protection, Conservation Status, Extent / Context of Site
Strathglass Complex SAC	The Highland Council	International	Annex I habitats: Northern Atlantic wet heaths with <i>Erica tetralix</i>; alpine and boreal heaths; sub-arctic <i>Salix spp.</i> scrub; siliceous alpine and boreal grasslands; blanket bogs; siliceous rocky slopes with chasmophytic vegetation; and Caledonian forest. Annex I habitats present as a qualifying feature: oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and / or of the <i>Isoëto-Nanojuncetea</i>; 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 alpinae</i> and <i>Galeopsietalia ladani</i>); calcareous rocky slopes with chasmophytic vegetation; and bog woodland. Otter, an Annex II species, is also present as a qualifying feature. The SAC is located 8.9 km upstream of the Proposed Development and as such the habitats will not be impacted by the works. However, due to the connectivity via the River Beaully otter could be disturbed / displaced as a result of the Proposed Development.
Moniack Gorge SAC	The Highland Council	International	Annex II species, green shield-moss <i>Buxbaumia viridis</i>. The SAC is located 0.3 km upstream of the Proposed Development. The SAC is not considered hydrologically connected and has been scoped out of the hydrology assessment (Chapter 10: Water and Geological Environment). However, as identified within the HRA¹, there is the potential for degradation to the SAC via the spread of INNS (by wind or vehicles).
Cawdor Wood SAC	The Highland Council	International	Annex I habitat, old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles. The SAC is located 0.3 km downstream of the Proposed Development, linked via the Riereach Burn, Caochan-Dubh and Allt-Dearg.
Lower Findhorn Woods SAC	Moray Council	International	The SAC is designated for the Annex I habitat, Tilio-Acerion forests of slopes, screes and ravines. Located 1.9 km downstream of the Proposed Development and linked via the River Findhorn and River Divie and associated tributaries including Fea buie, Dorback Burn, Knockach Burn, Burn of Aulthaunachan and Berry Burn. The Proposed Development oversails the River Findhorn at a point where the valley is in a high gorge, making the nearest proposed infrastructure – a proposed conductor pulling area adjacent to tower CB6-

Feature	LPA	Level of Importance	Further Information on Protection, Conservation Status, Extent / Context of Site
			1 on the western bank - some way vertically above the river's crossing point. This substantially reduces the chance that any of the works would result in effects on the SAC. The following LSEs were identified within the HRA ¹ : spread of INNS and contamination from an accidental spill.
River Spey SAC	Moray Council	International	Annex II species including: FWPM, sea lamprey (<i>Petromyzon marinus</i>), Atlantic salmon and otter. The OHL oversails the River Spey, with tower CB14-1C located adjacent to the SPA. Therefore, the Proposed Development could impact the qualifying features via reduced shading from vegetation clearance or siltation / pollution from run-off.
Mortlach Moss SAC	Aberdeenshire Council	International	The SAC is designated for the Annex I habitat, alkaline fens. The SAC is located 0.5 km south, and slightly upslope of the Proposed Development. The SAC is not considered hydrologically connected and has been scoped out of the hydrology assessment (Chapter 10: Water and Geological Environment). However, the HRA ¹ identified potential degradation to the SAC via spill events combined with bad weather.
Beauly Firth SSSI	The Highland Council	National	The Beauly Firth SSSI is designated for its habitats and vascular plants. The SSSI is located 0.5 km downstream of the Proposed Development and is hydrologically linked via the River Beauly, Newton Burn, Allt Ceardaich and Allt Dionach, as well as several other smaller watercourses. Ornithological features are assessed in Chapter 9: Ornithology .
Beauly protected seal haul out site	The Highland Council	National	The seal haul-out site is located 0.2 km from the Proposed Development and the Beauly Firth is hydrologically linked to the Proposed Development as it is downstream of the River Beauly, Newton Burn, Allt Ceardaich and Allt Dionach as well as several other smaller watercourses.
Moniack Gorge SSSI	The Highland Council	National	Moniack Gorge SSSI is located 0.3 km upstream of the Proposed Development and designated for its woodland and lichen. The SSSI is not considered hydrologically connected and has been scoped out of the hydrology assessment (Chapter 10: Water and Geological Environment). However, similar to the SAC, this site has been included due to the potential degradation via the spread of INNS (via wind or vehicles).
Cawdor Wood SSSI	The Highland Council	National	The SSSI is designated for its woodland and lichen, it is located 1.1 km downstream of the Proposed Development, linked via Riereach Burn and Allt Dearg and their associated tributaries.

Feature	LPA	Level of Importance	Further Information on Protection, Conservation Status, Extent / Context of Site
Buinach and Glenlatterach SSSI	Moray Council	National	The SSSI is designated for its habitats and bisects the Proposed Development, linked via Glenlatterach Reservoir and associated water courses Leanoach Burn and Allt Creach.
Coleburn Pasture SSSI	Moray Council	National	The Proposed Development bisects the SSSI designated for its lowland acid grassland; the OHL oversails the designated site and no towers, or associated infrastructure, are located within the SSSI boundary. The drainage channel within the SSSI is located upstream of any watercourses near the Proposed Development; therefore, there is no potential for connectivity.
River Spey SSSI	Moray Council	National	The SSSI is designated for its aquatic species including fish, FWPM and otter. The OHL oversails the River Spey, with tower CB14-1C located adjacent to the SSSI. No towers, or associated infrastructure, are located within the SSSI boundary. However, the special features could still be impacted via reduced shading from vegetation clearance or siltation / pollution from run-off.
Mill Wood SSSI	Moray Council	National	The SSSI is designated for its woodland, located 0.1 km from the Proposed Development.
Den of Pitlurg SSSI	Moray Council Aberdeenshire Council	National	The SSSI is designated for its habitats, located 0.9 km upstream of the Proposed Development and is not hydrologically connected to the Proposed Development.
Whitehill SSSI	Aberdeenshire Council	National	The SSSI is designated for its habitats and is located 0.2 km from the Proposed Development. The SSSI and Proposed Development are potentially hydrologically linked via drainage channels.
Buglife B-line	The Highland Council Moray Council Aberdeenshire Council	District	The B-Line provides insect pathways that bisect the Proposed Development at several locations throughout all council areas.
Great Glen and the Beaully Catchment Butterfly Conservation	The Highland Council	District	Within Highland, the Proposed Development bisects the Scottish Priority Landscape designated for threatened butterfly and moth species.

Feature	LPA	Level of Importance	Further Information on Protection, Conservation Status, Extent / Context of Site
Scottish Priority Landscape			
East Invernesshire IIA	The Highland Council	District	The IIA surrounds the western extent of the Proposed Development, located within Highland.
Findhorn Culbin IIA	The Highland Council Moray Council	District	The IIA is located to the north and south of the Proposed Development (adjacent to the bellmouths and access tracks to the north of the Proposed Development and 0.4 km south).
Daviot Loch Moy Red Squirrel Stronghold	The Highland Council	District	The Proposed Development bisects the northern extent of the stronghold, the habitats within this area comprise a mosaic of plantation woodland, riparian scrub and moorland.
Ordiequish, Whiteash, Ben Aigan Red Squirrel Stronghold	Moray Council	District	The Proposed Development bisects the centre of the Red Squirrel Stronghold, the habitats within this area comprise plantation woodland and agricultural land.
Strathbogie WPA	Aberdeenshire Council	District	The Proposed Development bisects the northern extent of the WPA, largely through agricultural land with some pockets of plantation woodland.
Den of Pitlurg LNCS	Aberdeenshire Council	District	The LNCS is located 0.5 km upstream from the Proposed Development.
Bin Hill LNCS	Aberdeenshire Council	District	The Proposed Development bisects the north of the LNCS.
Ancient Woodland (1a and 2a)	The Highland Council Moray Council	National	Although there is no legislation specifically protecting ancient woodland sites, they are considered to be an irreplaceable resource of high nature conservation and landscape value; therefore these habitats should be protected from the adverse impacts of development. SSEN Transmission consider these woodlands an Irreplaceable Habitat.

Feature	LPA	Level of Importance	Further Information on Protection, Conservation Status, Extent / Context of Site
			The Scottish Government's policy on control of woodland removal ⁷⁹ and Policy 6 of NPF4 ² states there is a strong presumption against supporting development proposals that would result in the removal of ancient semi-natural woodland or plantations on ancient woodland sites (PAWS) (amongst other types of woodland). PAWS areas may still contain the seedbank of ancient woodland which would allow it to be restored with appropriate management.
Ancient Woodland (1b, 2b and 3)	The Highland Council Moray Council Aberdeenshire Council	Regional	The Scottish Government's policy on control of woodland removal ⁷⁹ and Policy 6 of NPF4 ² states there is a strong presumption against supporting development proposals that would result in the removal of ancient semi-natural woodland or plantations on ancient woodland sites (PAWS) (amongst other types of woodland). PAWS areas may still contain the seedbank of ancient woodland which would allow it to be restored with appropriate management. Owing to the presence of AWI listed woodlands, not considered ancient / irreplaceable, the woodlands within this category are classified as regional importance.
NWSS Woodland	The Highland Council Moray Council Aberdeenshire Council	Regional	Woodlands listed in the NWSS are present throughout the Proposed Development. Policy 6 of NPF4 aims to protect and expand forests, woodland and trees. As the NWSS will be impacted by the Proposed Development, the woodlands are classified as regional importance.
Blanket bog (UKHab codes: f1, f1a, f1a5 and f1a6)	The Highland Council Moray Council	National	Blanket bog is a priority habitat in the SBL and listed in the HNBAP. Whilst all blanket bog is considered Irreplaceable Habitat under NPF4, one parcel of the Annex I habitat (f1a5) was recorded to the east of Assich Forest (Highland) and one parcel was recorded to the west of the River Lossie, where it flows into the Glenlatterach Reservoir (Moray). As part of NPF4 Policy 5, proposals must protect carbon-rich soils, restore peatlands, and minimise disturbance to soils from development. This habitat is considered to be of national importance.
Wetland (UKHab codes: f2, f2b, f2e and f2f)	The Highland Council Moray Council	Local	Wetland habitats are mentioned in the HNBAP; fen wetland habitats are mentioned on the NESBiP LBAP; and reedbeds, purple moor-grass and rush pasture as well as upland flushes, fens and swamps are all SBL priority habitats.

⁷⁹ Scottish Government (no date). The Scottish Government's Policy on Control of Woodland Removal. Available at: <https://www.forestry.gov.scot/publications/support-and-regulations/control-of-woodland-removal/285-the-scottish-government-s-policy-on-control-of-woodland-removal>

Feature	LPA	Level of Importance	Further Information on Protection, Conservation Status, Extent / Context of Site
	Aberdeenshire Council		Although wetland habitats can offer sheltering and foraging opportunities for a range of species, it is found across the wider landscape in larger areas, and thus this habitat is considered of local importance.
Acid grassland (UKHab codes: g1,g1a, g1b, g1b6, g1d, g1c)	The Highland Council Moray Council	Local	Small, scattered and isolated parcels of acid grassland were recorded throughout the UKHab Survey Area. Lowland dry acid grassland qualifies as a priority habitat on the SBL and acid grassland is mentioned on the NESBiP Important Habitats for Biodiversity List and LBAP. Although this habitat can offer sheltering and foraging opportunities for a range of species, this habitat is found across the wider landscape and is therefore considered of local importance.
Calcareous grassland (UKHab code: g2b, g2b6)	Moray Council	Local	Two large parcels of upland calcareous grassland, both including the Annex I habitat (g2b6), were recorded between the village of Fogwatt and Mosstodloch (Moray). Although this habitat can offer sheltering and foraging opportunities for a range of species, this habitat is found across the wider landscape and is therefore considered of local importance.
Neutral grassland (UKHab codes: g3, g3c, g3c5, g3c7 and g3c8)	The Highland Council Moray Council Aberdeenshire Council	Local	Neutral grassland was widespread throughout the UKHab Survey Area. Species rich- neutral grassland is discussed in the NESBiP LBAP. Although this habitat can offer sheltering and foraging opportunities for a range of species, this habitat is found across the wider landscape and is therefore considered of local importance.
Heathland (UKHab codes h, h1, h1a, h1a7, h1b, h1b5 and h1b6)	The Highland Council Moray Council Aberdeenshire Council	Local	Heathland is an SBL priority habitat and is mentioned on the HNBAP and NESBiP LBAP. Additionally, some heathland habitats qualify as Annex I habitats (h1a7, h1b5 and h1b6). This habitat is prevalent in the wider area and is therefore considered of local importance.
Hedgerows (UKHab codes: h2, h2a, h2a6 and h2b)	The Highland Council Moray Council Aberdeenshire Council	Local	Hedgerows are mentioned on the HNBAP, NESBiP LBAP and qualify as a priority habitat on the SBL. This habitat is considered of local importance.

Feature	LPA	Level of Importance	Further Information on Protection, Conservation Status, Extent / Context of Site
Scrub (UKHab code: h3, h3b, h3e, h3h, h3j and h3k)	The Highland Council Moray Council Aberdeenshire Council	Local	Scrub habitat is mentioned on the NESBiP LBAP and was recorded throughout the UKHab Survey Area. This habitat is considered of local importance.
Waterbodies and watercourses (UKHab codes: r, r1, r1e, r1g, r1, r2, r2a, r2a6 and r2b)	The Highland Council Moray Council Aberdeenshire Council	Regional	Multiple rivers and burns, in addition to various ponds, are scattered throughout the UKHab Survey Area and qualify as priority habitats on the SBL. Rivers, lochs and burns are mentioned on the HNBAP and NESBiP LBAP. This habitat is considered to be of regional importance.
Broadleaved and mixed woodland (UKHab codes: w, w1, w1a, w1a5, w1b, w1d, w1d5, w1e, w1f, w1f6, w1f7, w1g, w1h, w1h5 and w1h6)	The Highland Council Moray Council Aberdeenshire Council	Regional	Lowland mixed deciduous woodland and upland birchwoods, upland oakwood and wet woodland qualify as priority habitats on the SBL. Woodlands, especially ancient and long-established ones, are mentioned on the HNBAP. Upland birch woodland, lowland mixed deciduous woodland and wet woodland are mentioned in the NESBiP LBAP. Additionally, parcels of Annex I woodlands (w1a5, w1f6 and w1d5) were recorded around the River Beauly and to the east of the Morriack Burn (Highland). Broadleaved and mixed woodland is considered to be of regional importance.
Coniferous Woodland (UKHab codes: w2a and w2b)	The Highland Council Moray Council Aberdeenshire Council	Regional	Woodlands, especially ancient and long-established ones, are mentioned on the HNBAP, including native pine woodlands. Native pine woodlands qualify as a priority habitat in the SBL and therefore are considered of regional importance.
Invasive Non-Native Species (INNS)	The Highland Council Moray Council Aberdeenshire Council	Local	INNS are present within the EZol.

Feature	LPA	Level of Importance	Further Information on Protection, Conservation Status, Extent / Context of Site
Bats	The Highland Council Moray Council Aberdeenshire Council	National	As European Protected Species (EPS), all bat species found in Scotland are fully protected under the 1994 Habitats Regulations and the 2017 Habitats Regulations. Brown long-eared bat, Daubenton's bat, Natterer's bat (<i>Myotis nattereri</i>) and pipistrelle bats are listed as priority species in the HNBAP. All bat species which occur in Scotland are categorised as of Least Concern on the Global IUCN Red List⁸⁰. Species recorded within the Bat Survey Area (common pipistrelle, soprano pipistrelle, pipistrelle species, <i>Myotis</i> species, <i>Nyctalus</i> species and brown long-eared bat) are Least Concern on the Red List for Scotland. A best estimate of population size in Scotland for common pipistrelle was 875,000; soprano pipistrelle was 1,210,000; and brown long-eared bat was 230,000⁸¹. The Mammal Atlas for Highland⁸² identifies Daubenton's bat in over 60 of its 10 km squares; common pipistrelle in 88 of the 10 km squares; soprano pipistrelle in 40 of the 10 km squares; brown long-eared bat in over 80 of the 10 km squares and Natterer's bat in 17 of the squares. Generally, increases in records over the last 20 years has been attributed to increased recording effort. Lastly, only three individual records of Noctule bat have been recorded since 2000, with only a single record of Nathusius pipistrelle (<i>Pipistrellus nathusii</i>). The Mammal Atlas of North East Scotland and Cairngorms⁸³ reports 1,213 records of common pipistrelle, 872 records of soprano pipistrelle, 366 records of brown long-eared bat, 350 records of Daubenton's bat, 45 records of Natterer's bat, 22 records of Nathusius' pipistrelle and 5 records of Leisler's bat, occurring between 1960-2015. The importance of the Atlas area population of common pipistrelle, soprano pipistrelle and brown-long eared bat in the wider context was unknown; other species were not considered notable. The Atlas indicated that the likely local population trend over the Atlas period for Daubenton's bat was increasing, with other species trends unknown. The North East Scotland Bird Report 2019⁸⁴ included an annual publication on the latest records of mammals in the North East. The 2019 annual report (latest figures) included records of Daubenton's bat, Natterer's bat, Nathusius pipistrelle, common pipistrelle, soprano pipistrelle and brown long-eared bat. Of these records, maternity roosts were reported for common pipistrelles and soprano pipistrelles;

⁸⁰ IUCN (online). Red List of Threatened Species. Online at: <https://www.iucnredlist.org/en>

⁸¹ Mathews, F. and Harrower, C. (2020). IUCN – compliant Red List for Britain's Terrestrial Mammals. Assessment by the Mammal Society under contract to Natural England, Natural Resources Wales and NatureScot. Natural England, Peterborough. Online at: <https://mammal.org.uk/current-research/red-list-for-britains-mammals>

⁸² Highland Biological Recording Group (2011). Atlas of Highland Land Mammals.

⁸³ Littlewood, N., Chapman, P., Francis, I., Roberts, G., Robinson, A., and Sideris, K. (2017). Mammal Atlas of North East Scotland and the Cairngorms.

⁸⁴ Littlewood, N., and Knox, A. (2019). 2019 North East Scotland Bird Report: Mammals in North East Scotland.

Feature	LPA	Level of Importance	Further Information on Protection, Conservation Status, Extent / Context of Site
			however, none of these were located within the vicinity of the Proposed Development, with the closest being c.26 km away. Non-maternity roosts were also identified for brown long-eared bat and soprano pipistrelle, located over 12 km from the Proposed Development. Soprano pipistrelle, common pipistrelle, brown long-eared bat and Daubenton's bat are categorised as 'threatened and vulnerable species found on Scotland's coasts and islands', through NatureScot's Species on the Edge programme²⁰. However, the nearest 'East Coast' project focuses on avian and invertebrate species rather than bats (bat conservation is targeted in other geographical coasts and islands). Therefore current information in relation to bat species from this conservation programme is limited. On the Red List for Scotland⁸⁵, other species which may use the Proposed Development and LoD based on the available habitats and connectivity, in addition to their known geographical range, include Natterer's bat (Least Concern), Daubenton's bat (Least Concerned), Noctule bat (<i>Nyctalus noctula</i>) (Least Concern) and perhaps less frequently, the Leisler's bat (<i>Nyctalus leisleri</i>) (Near Threatened). Within each of the LPAs the following high suitability habitat to support bats was identified: 73 ha in Highland, 27 ha in Moray and 40 ha in Aberdeenshire. Suitable features to support roosting, foraging and commuting bats were identified throughout the Bat Survey Area and throughout all LPAs. The UK Bat Mitigation Guidelines⁸⁶ provides a framework for assessing the importance of a bat assemblage based on the rarity / range of each species within the different regions of the UK. As the Proposed Development is in northern Scotland and the baseline data includes confirmed presence of at least common pipistrelle, soprano pipistrelle and brown long-eared bat, as well as more bats identified to genus, the bat assemblage meets a threshold for National importance. As per the UK Bat Mitigation Guidelines, the overall importance of an IEF should reflect the highest element of importance within the IEF (whether species, roost type, or supporting features).
Badger	The Highland Council Moray Council	Regional	Both badgers and their setts are protected under the Protection of Badgers Act 1992 as amended by the Wildlife and Natural Environment (Scotland) Act 2011.

⁸⁵ Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Version 1.1. CIEEM, Ampfield. Available at: <https://cieem.net/wp-content/uploads/2023/09/Bat-Mitigation-Guidelines-2023-V1.1.pdf>

⁸⁶ Reason P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for development affecting bats. Version 1.1. Chartered Institute of Ecology and Environmental Management, Ampfield.

Feature	LPA	Level of Importance	Further Information on Protection, Conservation Status, Extent / Context of Site
	Aberdeenshire Council		Badgers are protected against persecution and as such they are listed as Least Concern on the Global IUCN Red List (last assessed 2015)⁸⁷ and the overall population size is inferred to be increasing. The Atlas of Highland Land Mammals⁸² reports an increase in the number of badgers, but owes this change to more intensive recording effort rather than range expansion. The Mammal Atlas of North East Scotland⁸³ details that badgers are now present in almost all lowland areas east of the Cairngorms as well as in Speyside and lowland parts of Moray. Within each of the LPAs the following high suitability habitat to support badger was identified: 411 ha in Highland, 131 ha in Moray and 114 ha in Aberdeenshire. Evidence of badger was identified throughout the Badger Survey Area, see Appendix 8.2: Confidential Badger and Freshwater Pearl Mussel.
Pine Marten	The Highland Council Moray Council Aberdeenshire Council	Regional	Pine marten receive full protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Certain methods of killing or taking pine martens are illegal under the 1994 Habitats Regulations and the 2017 Habitats Regulations. They are listed as a priority species in the HNBAP. Pine marten are listed as Least Concern on the Global IUCN Red List (last assessed 2015)⁸⁸. Their geographical range has increased in the last 10 years inferring their population size has also increased⁸¹. The Atlas of Highland Land Mammals⁸² reports a stable population trend (with the species recorded in 184 10 km squares in 1993 and 169 10 km squares in 2011), suggesting that pine marten have consolidated their range within mainland Highland. The Mammal Atlas of North East Scotland and Cairngorms⁸³ reports 1,316 records of this species between 1960-2015; and records from 371 tetrads⁸⁹ between 2000-2015. The Atlas indicates that the distribution of pine marten largely follows major forest tracts, woodland plantations, and river valleys; whilst potentially under-recorded, it suggests pine marten may be largely absent from lowland agricultural areas. The Atlas indicated the likely local population trend for the Atlas period was increasing. Within each of the LPAs the following high suitability habitat to support pine marten was identified: 19 ha in Highland, 23 ha in Moray and 106 ha in Aberdeenshire. The Pine Marten Survey Area has suitable habitat including woodlands, plantation forestry and river valleys which could support populations of

⁸⁷ IUCN (online). Eurasian Badger. Online at: <https://www.iucnredlist.org/species/29673/45203002>

⁸⁸ IUCN (online). Pine marten. Online at: <https://www.iucnredlist.org/species/12848/45199169>

⁸⁹ Refers to survey squares within the Atlas area.

Feature	LPA	Level of Importance	Further Information on Protection, Conservation Status, Extent / Context of Site
			pine marten. Within the Pine Marten Survey Area, potential denning habitat was recorded in four locations in Highland, five locations in Moray and seven locations in Aberdeenshire.
Red Squirrel	The Highland Council Moray Council Aberdeenshire Council	Regional	Red squirrels and their dreys receive full protection under Schedules 5 and 6 of the Wildlife and Countryside Act 1981 (as amended). They are listed as a priority species in the HNBAP. Red squirrel are listed as being of Least Concern on the Global IUCN Red List (last assessed 2023)⁹⁰. Squirrel pox virus and other disease outbreaks are known to cause high mortality in red squirrel and are implicated in local extinctions and ongoing population declines. Declines in habitat occupancy appear to have stabilised but local initiatives notwithstanding, the reversal of previous trends is unlikely. Population declines within Scottish strongholds in the future are inferred from the continued expansion of grey squirrel (<i>Sciurus carolinensis</i>) population and the lack of progress with combatting disease threats⁸¹. The Atlas of Highland Land Mammals⁸² reports an increase in red squirrel population trends (88 10 km squares in 1993 and 45 10 km grid squares in 2011) as a result of conservation efforts, but this may also be influenced by more concentrated recording efforts. The Mammal Atlas of North East Scotland and Cairngorms⁸³ reports 13,473 records of this species between 1960-2015; and records from 1,059 tetrads between 2000-2015, with nationally significant populations elsewhere in the region (e.g. within remnant Caledonian pine forest in Deeside, Donside and Strathspey). The Atlas indicated that the likely local population trend for the reporting period was increasing. It also considered the likely local population trend for competing grey squirrel to be decreasing over the Atlas period. Within each of the LPAs the following high suitability habitat to support red squirrel was identified: 187 ha in Highland, 223 ha in Moray and 23 ha in Aberdeenshire. Within the Red Squirrel Survey Area, 13 potential dreys and a sighting were recorded in Highland and a single potential drey was recorded in both Moray and two in Aberdeenshire.

⁹⁰ IUCN (online). Eurasian Red Squirrel. Online at: <https://www.iucnredlist.org/species/221730864/221731049>

Feature	LPA	Level of Importance	Further Information on Protection, Conservation Status, Extent / Context of Site
Otter	The Highland Council Moray Council Aberdeenshire Council	Regional	As an EPS, otter is fully protected under the 1994 Habitats Regulations and the 2017 Habitats Regulations. Otter is also listed in Annex II⁹¹ of the Habitats Directive and in Scotland is given the same level of consideration now that the UK has left the EU, in line with the Continuity Act. Otter is listed as Near Threatened on the Global IUCN Red List (last assessed 2020)⁹². 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 restricted⁸¹. The Atlas of Highland Land Mammals⁸² reported otter records in 320 10 km grid squares in 1993 and only 285 10 km grid squares 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). The Mammal Atlas of North East Scotland and Cairngorms⁸³ indicated the likely local population trend for the Atlas period was increasing. The likely local population trend of competing American mink (<i>Neovison vison</i>) was considered decreasing over the Atlas reporting period. The Atlas reported 2,162 records of otter between 1960-2015; and records from 586 tetrads between 2000-2015. Within each of the LPAs 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.
Water vole	The Highland Council Moray Council Aberdeenshire Council	Regional	The water vole receives partial protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). In Scotland, this legal protection is currently restricted to the water vole's places of shelter or protection and doesn't extend to the animal itself. They are listed as a priority species in the HNBAP. Water vole is listed as being of Least Concern on the Global IUCN Red List (last assessed 2023)⁹³. Scottish populations are inferred to have declined very rapidly over recent years. The overall mean annual decline in population size (from 376,000 in 1995 to 50,000 in 2016) is 4.1%, which gives a 10-year decline of 41%, and results in a classification of Vulnerable. Occupancy fell by >80% in most areas covered by the two National Water Vole Surveys (1989-90 and 1996-98), implying a 10-year decline of

⁹¹ Annex II of the Habitats Directive identifies animal and plant species of community interest whose conservation requires the designation of Special Areas of Conservation.

⁹² IUCN (online). Eurasian Otter. Online at: <https://www.iucnredlist.org/species/12419/218069689#population>

⁹³ IUCN (online). Eurasian Water Vole. Online at: <https://www.iucnredlist.org/species/219451656/219451755>

Feature	LPA	Level of Importance	Further Information on Protection, Conservation Status, Extent / Context of Site
			88%, leading to classification as Endangered⁸¹. There is a large ongoing conservation effort across a substantial region of Scotland, mainly focused on mink control (as they predate water vole). Therefore, recent declines and suspected future declines, are considered likely to occur at a lower rate than in England and Wales provided mink populations remain low. The classification for this species is therefore downgraded to Near Threatened. The Atlas of Highland Land Mammals⁸² reports records on water vole in 20 10 km grid squares in 1993, as opposed to the 132 10 km grid squares in 2011; owing this to increased recording efforts rather than range expansion. The Mammal Atlas of North East Scotland and Cairngorms⁸³ reports widespread networks of water vole colonies in upland moorland and montane areas, where they have avoided the collapse that lowland populations suffered, likely due to less frequent or shorter incursion by mink. River catchments (River Ythan, River Deveron and River Dee and Buchan plain) remain well occupied by water vole and it is thought that the species is under recorded in this area. The Atlas reported 1,784 records of water vole between 1960-2015; and records from 316 tetrads between 2000-2015. Within each of the LPAs the following high suitability habitat to support water vole was identified: 9.43 km in Highland, 8.87 km in Moray and 1.87 km in Aberdeenshire. No evidence of the species was recorded; however, a potential burrow was noted in Highland but could not be confirmed due to lack of other field evidence.
Wildcat	The Highland Council Moray Council Aberdeenshire Council	International	As a EPS, the wildcat is fully protected under the 1994 Habitats Regulations and the 2017 Habitats Regulations. Wildcat is listed as being of Least Concern on the Global IUCN Red List (last assessed 2021)⁹⁴. They are listed as a priority species in the HNBAP. Wildcat was widespread in Scotland in 1800; however, population size is estimated to have declined by >80% in the last 3 generations, qualifying the species as Critically Endangered. Additionally, there has been a decline in habitat occupancy (68% in the last 3 generations) as well as strong evidence of cryptic extinction through hybridisation with domestic cats. Conservation efforts are currently in progress, and, in the absence of these efforts, the previous trajectory of rapid decline would be expected to continue in the future⁸¹.

⁹⁴ IUCN (online). European Wildcat. Online at: <https://www.iucnredlist.org/species/181049859/224982454>

Feature	LPA	Level of Importance	Further Information on Protection, Conservation Status, Extent / Context of Site
			The Atlas of Highland Land Mammals⁸² reports that wildcat is widely but sparsely distributed throughout mainland Highland. Records of wildcat have declined from 193 10 km grid squares in 1993, to 17 10 km grid squares in 2011: owing this decline to the difficulties of recording an elusive species, as well as hybridisation with domestic cats. The Mammal Atlas of North East Scotland and Cairngorms⁸³ reports no population trends for wildcat are known for the atlas area; although it is considered likely that the wildcat population is experiencing increased hybridisation. The Atlas reported 488 records of wildcat between 1960-2015; and records from 148 tetrads between 2000-2015. These records include hybrids, therefore the range of wildcat could be significantly higher than genetically distinct wildcat. Saving Wildcats⁹⁵ have facilitated wildcat reintroductions as part of Cairngorms Connect (the biggest habitat restoration project in Britain)⁹⁶, located south of the Proposed Development. Within each of the LPAs the following high and moderate suitability habitat to support wildcat was identified: 251 ha in Highland, 20 ha in Moray and 180 ha in Aberdeenshire. Within the Wildcat Survey Area, two potential denning sites and six potential resting sites were recorded in Highland; two potential denning sites and five potential resting sites were recorded in Moray; and two potential denning sites and 24 potential resting sites were identified in Aberdeenshire.
Fish	The Highland Council Moray Council Aberdeenshire Council	Regional	River lamprey, Atlantic salmon (freshwater only), allis shad and twaite shad are listed on Schedule 3 of the 1994 Habitats Regulations and the 2017 Habitats Regulations. Atlantic salmon is also listed in Annexes II⁹¹ and V⁹⁷ of the Habitats Directive. Allis shad and twaite shad receive partial protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended), which regulates how these species can be killed or taken. Sturgeon, a rare visitor to Scotland, is also an EPS, listed on Annex IV⁹⁸ of the Habitats Directive. In Scotland, migratory salmonids, their spawn and downstream migrating 'smolts' are legally protected under the Salmon and Freshwater Fisheries (Consolidation) (Scotland) Act 2003⁹⁹ – this applies to Atlantic salmon and sea trout. Fish species which occur in Scotland are also covered by the

⁹⁵ Rewilding Europe (online). Saving Wildcats. Online at: <https://rewildingeurope.com/rew-project/saving-wildcats/>

⁹⁶ Cairngorms Connect (online). A wild landscape in the making. Online at: <https://cairngormsconnect.org.uk/>

⁹⁷ Annex V of the Habitats Directive identifies animal and plant species of community interest whose taking in the wild and exploitation may be subject to management measures.

⁹⁸ Annex IV of the Habitats Directive lists animal and plant species of community interest that are endangered, vulnerable, rare or endemic.

⁹⁹ UK Government (2003). Salmon and Freshwater Fisheries (Consolidation) (Scotland) Act 2003. Available at: <https://www.legislation.gov.uk/asp/2003/15/contents>

Feature	LPA	Level of Importance	Further Information on Protection, Conservation Status, Extent / Context of Site
			Environmental Liability Directive, which takes effect in Scotland through the Environmental Liability (Scotland) Regulations 2009¹⁰⁰. SBS to 2045 recognises Atlantic salmon and migratory fish as vulnerable and important species, identifying a priority action for 2030 to implement measures to protect and recover Scotland's wild populations. There is also a specific Scotland Wild Salmon Strategy¹⁰¹ which sets out the species' population trend (decline since the 1970s, continued decline post-2010), threats, pressures and conservation actions. Suitable habitats to support fish were recorded throughout the Fish Survey Area, including the River Beauly, River Ness, River Nairn, River Findhorn, Newton Burn, Big Burn, River Divie, River Lossie, River Spey, River Isla, Dorback Burn, Berry Burn, Red Burn and River Deveron. Data requests recorded Atlantic salmon, brown trout, eel, minnow, three-spine stickleback and nine-spine stickleback in the River Beauly, River Divie and Red Burn (River Spey).
FWPM	The Highland Council Moray Council Aberdeenshire Council	International	FWPM are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). FWPM is also listed in Annex II⁹¹ of the Habitats Directive. FWPM are listed as Endangered on the Global IUCN Red List (last assessed 2010)¹⁰². A nationwide project, Pearls in Peril¹⁰³, that aimed to safeguard important populations of FWPM ran from 2012-2017. Of the 21 rivers targeted, 19 were SACs in Scotland. Suitable habitat with potential to support FWPM was identified within the FWPM Survey Area, see Appendix 8.2: Confidential Badger and Freshwater Pearl Mussel. No FWPM were recorded in field surveys. Historical FWPM records were identified in River Beauly, River Findhorn, River Lossie and River Spey catchments.

¹⁰⁰ UK Government (2009). The Environmental Liability (Scotland) Regulations 2009. Available at: <https://www.legislation.gov.uk/ssi/2009/266/contents>

¹⁰¹ Scottish Government (2022). Scotland's Wild Salmon Strategy. Online at: <https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2022/01/scottish-wild-salmon-strategy/documents/scottish-wild-salmon-strategy/scottish-wild-salmon-strategy/govscot%3Adocument/scottish-wild-salmon-strategy.pdf>.

¹⁰² IUCN (online). Freshwater Pearl Mussel. Online at: <https://www.iucnredlist.org/species/12799/128686456>

¹⁰³ NatureScot (online). Pearls in Peril. Online at: <https://www.nature.scot/professional-advice/protected-areas-and-species/protected-species/life-nature-and-biodiversity-projects/pearls-peril>

Feature	LPA	Level of Importance	Further Information on Protection, Conservation Status, Extent / Context of Site
GCN	The Highland Council Moray Council Aberdeenshire Council	District	GCN are EPS and are fully protected under the 1994 Habitats Regulations and the 2017 Habitats Regulations. GCN are listed as Least Concern on the Global IUCN Red List (last assessed 2021)¹⁰⁴. Marginal habitat to support GCN is located in the Highlands region, around Inverness. Aberdeenshire is considered unsuitable⁶². Within each of the LPAs the following high suitability habitat to support GCN was identified: 7,303 ha and 37 ponds in Highland, 8,771 ha and nine ponds in Moray and 9,748 ha but no ponds in Aberdeenshire. As detailed above, Aberdeenshire is considered unsuitable, and no further survey was undertaken. Within the Highland and Moray portion of the GCN Survey Area, ponds scoring above poor suitability for supporting GCN were subject to eDNA analysis, with a single pond returning positive eDNA for GCN (located in Highland), see page 4 of Figure 8.1.6: Other Protected and Notable Species Survey Results.
Beaver	The Highland Council	District	Beaver are EPS and are fully protected under the the 1994 Habitats Regulations and the 2017 Habitats Regulations. Beaver are listed as Least Concern on the Global IUCN Red List (last assessed 2016)¹⁰⁵. Beavers were reintroduced in 2009, and populations have been increasing since that time, with offspring of the released animals now breeding. Given the low number of mature individuals, localised areas beaver are present and plausible threat from persecution, they are considered Endangered in Scotland⁸¹. There is no evidence of a population decline, the population is expanding. Beaver are present in the River Beaully catchment and suitable habitat exists within the surveyed areas.
Amphibians (except GCN)	The Highland Council Moray Council Aberdeenshire Council	Neighbourhood	All amphibians native to Scotland receive protection under the Wildlife and Countryside Act 1981 (as amended) – however protection for smooth newt, palmate newt, common toad and common frog is limited to protection against selling, offering or advertising for sale, possessing or transporting for the purpose of sale. Suitable habitat for amphibians was recorded throughout the Proposed Development, notably along edge habitat, tussocky moors and grassland, as well as wetland areas for breeding – these habitat types

¹⁰⁴ IUCN (online). Great Crested Newt. Online at: <https://www.iucnredlist.org/species/22212/89706893>

¹⁰⁵ IUCN (online). Eurasian Beaver. Online at: <https://www.iucnredlist.org/species/4007/197499749>

Feature	LPA	Level of Importance	Further Information on Protection, Conservation Status, Extent / Context of Site
			are presented on Figure 8.1.2: UK Habitat Survey Results. However, these habitats are also well represented across the wider landscape, such that suitable habitats occurring within the Proposed Development footprint are unlikely to be relied upon to support locally important amphibian populations, or that the Proposed Development's habitats would enrich the ecological resource within the local context. These amphibian species are not listed as local priority species, and no incidental sightings were recorded during the baseline surveys. However, as suitable habitat exists throughout the Proposed Development and in the surrounding environment their presence cannot be ruled out.
Reptiles - common lizard, slow worm, adder	The Highland Council Moray Council Aberdeenshire Council	Local	All reptiles native to Scotland receive protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) – however this is limited to protection against intentional killing and injury, and offences relating to trade. Suitable habitat for reptiles was recorded throughout the Proposed Development, notably along edge habitat, tussocky moors and grassland, as well as stone and hardstanding areas suitable for basking. However, these habitats are also well represented across the wider landscape, such that the Proposed Development is unlikely to be relied upon to support locally important reptile populations or that the Proposed Development's habitats would enrich the ecological resource within the local context. These reptile species are not listed as local priority species. An incidental sighting of common lizard was recorded within Highland during the baseline surveys and as suitable habitat exists throughout the Proposed Development and in the surrounding environment, their presence cannot be ruled out.
Brown hare	The Highland Council Moray Council Aberdeenshire Council	Neighbourhood	Brown hare is a quarry species. Under the Wildlife and Countryside Act 1981 (as amended), it is protected from intentionally or recklessly killing, injury or taking during its closed season (1 February – 30 September) without a licence. It is also an offence to possess or control, sell or offer for sale, or transport for the purpose of sale any living or dead brown hare (or rabbit), or any derivative of such an animal, which has been killed without a legal right to do so. The Atlas of Highland Land Mammals⁸² reports a fairly stable population with records in 57 10 km grid squares in 1993, and 88 10 km grid squares in 2011. The Mammal Atlas of North East Scotland and Cairngorms⁸³ reports 2,202 records of this species between 1960-2015; and records from 625 tetrads between 2000-2015. The Atlas indicated the likely

Feature	LPA	Level of Importance	Further Information on Protection, Conservation Status, Extent / Context of Site
			local population trend for the Atlas period was decreasing, but that the Atlas area population was not notable in the wider context. Suitable habitat for brown hare (agricultural land, open moorland and grassland) at the Proposed Development is well represented across the wider landscape, such that the Proposed Development is unlikely to be relied upon to support locally important populations or that the Proposed Development's habitats would enrich the ecological resource within the local context. Therefore, brown hare are considered a Neighbourhood level of importance.
Hedgehog	The Highland Council Moray Council Aberdeenshire Council	Neighbourhood	Hedgehog is protected under Schedule 6 of the Wildlife and Countryside Act 1981 (as amended). This offers limited protection relating to prohibited methods of capture. Hedgehog is listed as a priority species in the HNBAP. The Atlas of Highland Land Mammals⁸² reports an increase in records from 108 10 km grid squares in 1993 to 167 10 km grid squares in 2011; owing this to improved records or continued range expansion, with hedgehogs recorded in more cultivated areas and the populated periphery – including woodlands, gardens, roadside verges and hedgerows. The Mammal Atlas of North East Scotland and Cairngorms⁸³ reports 1,067 records of this species between 1960-2015; and records from 359 tetrads between 2000-2015. The distribution of records aligns to woodland edge, parkland, and suburban habitat. The Atlas comments that hedgehogs tend to be scarce in intensively farmed arable areas and indicates that the likely local population trend for the Atlas period was decreasing, with the importance of the Atlas area population in the wider context being unknown. Suitable habitat for hedgehog is present in pockets throughout the Proposed Development, notably near suburban areas including woodland edges and parkland. Suitable habitat to support hedgehog is prevalent in the wider landscape, and as such, the Proposed Development is considered unlikely to be relied upon to support locally important hedgehog populations or the Proposed Development's habitats would enrich the ecological resource within the local context. Therefore, hedgehog are considered a Neighbourhood level of importance.
Water shrew	Moray Council Aberdeenshire Council	Neighbourhood	All shrew species are protected under Schedule 6 of the Wildlife and Countryside Act 1981 (as amended). This offers limited protection relating to prohibited methods of capture.

Feature	LPA	Level of Importance	Further Information on Protection, Conservation Status, Extent / Context of Site
			Water shrew is a NESBiP Locally Important Species. The Mammal Atlas of North East Scotland and Cairngorms⁸³ reports 70 records of this species between 1960-2015; and records from 45 tetrads between 2000-2015. The species is thought to be under-recorded in northeast Scotland. The Atlas suggests a general assumption can be made that the species is likely to be present where habitat is suitable and NESBiP reports that records continue to emerge. Water shrew tend to be associated with fast flowing streams, rivers, ponds, fens and reedbeds. As such there is suitable habitat throughout the Proposed Development and surrounding environment. Notwithstanding, mitigation measures identified for otter and fish to be implemented before / during construction works along watercourses would safeguard the habitat as a potential resource for water shrew, if present. Therefore, water shrew are considered a Neighbourhood level of importance.
Invertebrates	The Highland Council Moray Council Aberdeenshire Council	Neighbourhood	The bordered brown lacewing (<i>Megalomus hirtus</i>), northern brown argus (<i>Aricia artaxerxes</i>), and small blue butterfly (<i>Cupido minimus</i>) have been identified as 'threatened and vulnerable species found on Scotland's coasts and islands' through NatureScot's Species on the Edge programme. These species are specifically targeted for action at the nearest 'East Coast' project. However, the conservation action sites are dotted along the northeast coastline between Brora and near Elgin, then Aberdeen and Dundee. The HNBAP includes several invertebrate species as priority species within the local area. NESBiP notes that the small heath (<i>Coenonympha pamphilus</i>) butterfly is an important species associated with grasslands. Large areas of the Proposed Development offer limited suitability to support invertebrates due to the highly managed nature of agricultural land or plantation forestry. However, areas of heathland, bog, wetland and grassland, as well as wetland habitats, could support a variety of freshwater and aquatic invertebrates. Landscape scale designated sites for invertebrates are present within the Proposed Development including: a Buglife B-line, the Great Glen and the Beaully Catchment Butterfly Conservation Scottish Priority Landscape, East Invernesshire IIA and Findhorn Culbin IIA. Habitats to support invertebrates are also well represented across the wider landscape. The Proposed Development is unlikely to be relied upon to support locally important invertebrate populations and the Proposed Development's habitats would be unlikely to enrich the ecological resource within the local context. Therefore, invertebrates are considered a Neighbourhood level of importance.

Issues Scoped Out

- 8.3.49 Targeted protected species surveys were undertaken in species-specific survey areas shown in **Figure 8.1.1: Survey Areas and Access Constraints** comprising 'high' suitability habitat (as well as 'moderate' for wildcat). To define what was considered 'high' or 'moderate' habitat, a habitat suitability assessment was undertaken to classify the suitability of terrestrial habitats in proximity to the Proposed Development to support protected species / groups. Described fully in **Appendix 8.1: UK Habitat and Protected Species**, suitable habitat parcels were subject to a preliminary walkover survey and assigned an overall suitability category ('high', 'moderate', 'low' or 'negligible') for each targeted species.
- 8.3.50 Consultation with NatureScot, all three LPAs and local fisheries trusts on the scope of assessment is summarised under Consultation (**Table 8.1**). Consultation included a pre-EIA meeting on the approach to the EclA, including the focus on moderate (wildcat only) and high suitability areas for protected species; with follow on discussions on bat survey and habitat survey approaches.
- 8.3.51 CIEEM EclA Guidelines²⁶ state that the assessment process does not require consideration of effects on ecological features deemed to be below a predefined nature conservation value threshold. Therefore, an assessment of the effects upon features of Site level nature conservation value or below, or those which do not occur within the Proposed Development's EZol, have been excluded from further assessment and are detailed below in **Table 8.22**.

Table 8.22: Features Scoped Out

Feature Scoped Out	LPA	Justification
Conon Islands SAC	The Highland Council	The SAC is located 8.4 km north of the Proposed Development with no functional link and no potential for connectivity with qualifying features. No likely significant effects (LSEs) are identified within the HRA ¹ .
Inner Moray Firth Ramsar	The Highland Council	The Ramsar qualifies under Ramsar Criterion 1 by containing a variety of wetland habitats. The Ramsar site is located 0.5 km north of the Proposed Development, linked via the River Beaully. No LSEs are identified within the HRA ¹ with reference to ecological features. Osprey (<i>Pandion haliaetus</i>) is the only feature carried through to Appropriate Assessment (AA), ornithological features of the Ramsar are assessed in Chapter 9: Ornithology and in the HRA ¹ .
Monadh Mor SAC	The Highland Council	The SAC is located 7.5 km north of the Proposed Development beyond the Beaully Firth, with no functional link between the areas and no LSEs identified within the HRA ¹ .
Moray Firth SAC	The Highland Council	The SAC is designated for the Annex II species bottlenose dolphin (<i>Tursiops truncatus</i>) and Annex I habitat present as a qualifying feature: sandbanks which are slightly covered by sea water all the time.

Feature Scoped Out	LPA	Justification
		This SAC supports qualifying features of the marine environment, located 1.1 km north from the Proposed Development and linked via the River Beaully. No LSEs are identified within the HRA ¹ .
Carn nan Tri-tighearnan SAC	The Highland Council	The SAC is located 1.5 km south, upstream of the Proposed Development. There is no functional link between the qualifying features and the Proposed Development. No LSEs identified within the HRA ¹ .
Moidach More SAC	Moray Council	The SAC is located 1.5 km south, upstream of the Proposed Development and there is no functional link between them. No LSEs identified within the HRA ¹ .
Loch Spynie Ramsar	Moray Council	The Ramsar is located 9.4 km north of the Proposed Development and is not functionally linked. No LSEs identified within the HRA ¹ . Ornithological features associated with the Ramsar are assessed in Chapter 9: Ornithology .
Moray and Nairn Coast Ramsar	Moray Council	The site qualifies under Ramsar Criterion 1 for its: sand dunes, shingle, saltmarsh and estuarine alder woodland. The site also qualifies under Ramsar Criterion 2 by supporting vascular plants and invertebrates. The Ramsar is located 3 km downstream of the Proposed Development and linked via the River Spey. The HRA ¹ identified LSEs linked to osprey but did not identify any with regards to the non-ornithological features discussed in this EIA Chapter. Ornithological features of the Ramsar are assessed in Chapter 9: Ornithology and in the HRA ¹ .
Lower River Spey-Spey Bays SAC	Moray Council	Annex I habitats: perennial vegetation of stony banks and alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>). The SAC is located across a number of separate locations, 3 km both downstream and 2.4 km upstream of the Proposed Development and linked via the River Spey. The HRA screened out LSEs for this site – the upstream area would have no pathway for effect on the designated features and given the nature of the works adjacent to the river here (localised crown reduction), neither would there

Feature Scoped Out	LPA	Justification
		be a clear pathway for effect on the downstream areas.
Turclossie Moss SAC	Aberdeenshire Council	The SAC is located 6.7 km north of the Proposed Development, with no functional link between the areas. No LSEs identified within the HRA ¹ .
Buchan Ness to Collieston SAC	Aberdeenshire Council	The SAC is located 8.3 km southeast of the Proposed Development, with no functional link between the areas. No LSEs identified within the HRA ¹ .
Southern Trench MPA	Aberdeenshire Council	The MPA is located 8.7 km northeast of the Proposed Development, with no functional link between the areas.
Carn nan Tri-tighearnan SSSI	The Highland Council	The SSSI is designated for habitats and is located 1.5 km upstream of the Proposed Development, as such the SSSI will not be impacted by the works.
Moidach More SSSI	Moray Council	The SSSI is designated for blanket bog and is located 1.5 km upstream of the Proposed Development, as such the SSSI will not be impacted by the works.
Gull Nest SSSI	Moray Council	The SSSI is designated for blanket bog and is located 1.2 km upstream of the Proposed Development, as such the SSSI will not be impacted by the works.
Mortlach Moss SSSI	Aberdeenshire Council	The SSSI is designated for its basin fen and is located 0.5 km upstream from the Proposed Development, as such the SSSI will not be impacted by the works. The SSSI is not considered hydrologically connected and has been scoped out of the hydrology assessment (Chapter 10: Water and Geological Environment).
Cropland (UKHab codes: c1, c1b, c1b7, c1c, c1c5, c1d and c1f7)	The Highland Council Moray Council Aberdeenshire Council	Due to the relatively low ecological value of these habitats within the UKHab Survey Area as well as their agricultural / residential use, croplands, inland rock and urban habitats have been scoped out of the assessment.
Inland rock (UKHab code: s1)	The Highland Council	

Feature Scoped Out	LPA	Justification
	Moray Council Aberdeenshire Council	
Urban (UKHab codes: u, u1, u1b, u1b5, u1b6, u1c, u1d, u1e and u1f)	The Highland Council Moray Council Aberdeenshire Council	
Modified grassland (UKHab code: g4)	The Highland Council Moray Council Aberdeenshire Council	Due to the relatively low ecological value of this habitat within the UKHab Survey Area as well as the abundance throughout the wider area, modified grassland has been scoped out of the assessment.
Coniferous Woodland (UKHab codes: w2 and w2c)	The Highland Council Moray Council Aberdeenshire Council	Coniferous woodland is prevalent throughout the UKHab Survey Area, often varying in age and dominated by non-native species. Owing to the relatively low ecological value and commercial nature of these woods, coniferous woodland has been scoped out of the assessment.

Kellas Alternative Alignment

- 8.3.52 An assessment of the effects upon features of Site level nature conservation value or below, or those which do not occur within the Proposed Development's EZoI have been excluded from further assessment. Those of relevance to the Kellas Alternative Alignment and those that are not already included above are detailed in **Table 8.23**.

Table 8.23: Features Scoped Out - Kellas Alternative Alignment

Feature Scoped Out	LPA	Justification
Kellas Wood SSSI	Moray Council	The SSSI is located 1 km northwest of the Proposed Development, with no functional link between the areas.

8.4 Assessment of Likely Significance of Effects

Embedded Mitigation

- 8.4.1 The mitigation hierarchy (avoid, mitigate, compensate, enhance) has been applied during the corridor, route and alignment selection stages and throughout the EIA process (**Chapter 4: The Routing Process and Alternatives**). This Chapter assesses potential impacts after the application of mitigation, secured by design (embedded mitigation) and with additional mitigation measures¹⁰⁶ as set out below.
- 8.4.2 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. For example, the routing and alignment stages avoided irreplaceable ancient woodland, Class 1 and Class 2 peatlands and Annex I habitats where practicable.
- 8.4.3 An outline HMP has been prepared as part of **Appendix 8.3: Biodiversity Net Gain Assessment**, **Annex G**. The purpose of which is to set out high-level management expectations for long-term habitat retention and monitoring, to help ensure success of habitat creation (to be tracked against the predicted BNG values).
- 8.4.4 A specialist contractor will be appointed to treat the INNS (rhododendron, Indian balsam, Japanese knotweed and giant hogweed) and will safely remove the plant material at the Proposed Development prior to construction, in accordance with the Wildlife and Natural Environment (Scotland) Act 2011 (as amended).
- 8.4.5 No details of lighting are known at this stage; however, the lighting strategy will be designed such that it would not exceed the minimum requirements in terms of frequency of use during the construction phase. For example, security lighting would be sensor activated and access roads would not be lit under normal operation. This would reduce the effects of artificial lighting on nocturnal and crepuscular species (e.g. badgers, bats). Notwithstanding, the assessment identifies additional specifications to be reviewed at the detailed design stage to further reduce impacts to species (see below). There are no operational lighting requirements.
- 8.4.6 As detailed in **Chapter 10: Water and Geological Environment**, the design process has tried to avoid peat where possible, and any possible micro-siting to further avoid peat during the construction period will be undertaken in consultation with the Environmental Advisor. In areas where peat is unavoidable, the infrastructure has been designed to minimise peat excavation through:
- the use of floated access tracks and floated working areas where feasible;
 - piling of foundations so that peat can be displaced rather than excavated; and
 - locating the pile cap at the most appropriate depth to minimise peat excavation and maximise peat reinstatement, depending on the peat depth in each location.
- 8.4.7 In addition to these design-led mitigations, the following mitigation measures would occur with or without input from the EIA, feeding into the design process and have therefore been captured here.

¹⁰⁶ Actions that would occur with or without input from the environmental assessment feeding into the design process. These include actions that will be undertaken to meet other existing legislative requirements, or actions that are considered to be standard practices used to manage commonly occurring environmental effects.

- 8.4.8 A Construction Environmental Management Plan (CEMP) will be prepared and implemented by the Principal Contractor. An Outline CEMP is provided in **Chapter 3: Project Description, Appendix 3.3: Outline Construction Environmental Management Plan (CEMP)** and sets out how the Principal Contractor will manage the Proposed Development in accordance with all commitments and mitigation detailed within this EIA Report, statutory consents, authorisations, industry best practice and guidance. Notably, the CEMP will focus on how construction of the Proposed Development would be controlled to satisfy general requirements to safeguard the environment and mitigate potentially adverse effects. Together with other matters relating to demolition and construction, the CEMP would include details of how IEFs would be protected.
- 8.4.9 The CEMP will also be supported by the Applicant's series of General Environmental Management Plans (GEMPs) (**Appendix 3.5: General Environmental Management Plans (GEMPs)**), including for:
- 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
 - Bad Weather
- 8.4.10 In addition to the above, the following Species Protection Plans (SPPs) (**Appendix 3.6: Species Protection Plans (SPPs)**) will also support the CEMP, including:
- Freshwater Pearl Mussel
 - Badger
 - Bat
 - Otter
 - Red Squirrel
 - Bird
 - Water Vole
 - Wildcat
 - Pine Marten
 - Wood Ant
 - Beaver (*Castor fiber*)
- 8.4.11 GEMPs and SPPs are documents whose contents have been agreed with regulators including NatureScot and are a standard part of the requirements of all contractors delivering on SSEN-T projects, including the proposed Development. The GEMPs and SPPs include reference to standard survey and site management guidance from (but not limited to) NatureScot and SEPA. Construction will proceed based on the measures set out in the GEMPs and SPPs being carried out.

- 8.4.12 Any additional mitigation measures identified through this assessment or through licensing will supersede standard GEMPs and SPPs.

Pre-Construction Protected Species Surveys

- 8.4.13 Surveys required prior to construction are detailed below, including surveys within the relevant protected species survey window required to re-confirm the ecological baseline and additional mitigation, as well as pre-construction surveys immediately prior to works to inform protected species licensing requirements and ensuring compliance with environmental legislation. Surveys will follow best practice guidance detailed in **Table 8.2** in the Determining Baseline Section.
- 8.4.14 In this Section, where 'additional baseline surveys' are mentioned, this refers to the pre-construction surveys required to confirm and update the surveys carried out for this EIA, and to inform the requirements of protected species licensing, prior to commencement of construction. The precise scope and location of such surveys can only be defined at detailed design stage, and it is expected that micro-siting of the various elements of the Proposed Development would be carried out in consultation with a suitably qualified ecologist (SQE) or Environmental Advisor to ensure that construction – and where relevant, operation – can proceed having taken every step to reduce and avoid the effects outlined within this EIA.
- 8.4.15 The timings of surveying different areas may be scheduled to match the phasing of the Proposed Development over the construction period, to ensure data remains representative and valid. This may be fulfilled by the Project Ecologist / Environmental Advisor if they hold the relevant experience. The findings will be reported to the Principal Contractor's Environmental Manager.
- 8.4.16 All survey methods set out in SPPs incorporate the standard survey methodologies set out in **Section 8.2: Scope of Assessment and Methodology** and as listed in **Table 8.2**. Where surveys in line with any SPP are described below, the standard methodologies and guidance set out in the SPPs will be followed.

Bats (National Level Importance)

- 8.4.17 Avoidance:
- At the detailed design stage, the potential to retain buildings and trees will be considered. If a roost is present (identified through additional baseline surveys), it would be necessary to demonstrate the consideration of possible alternatives to obtain a licence for works affecting bats (alongside other licence tests); and
 - Trees, scrub, and hedgerows would be retained as far as reasonably possible as foraging resources for bats and for connectivity across the landscape.
- 8.4.18 Confirmatory surveys:
- DBW of all suitable habitat which could support roosting bats within 30 m of the Proposed Development (extended to 100 m for piling works) will be undertaken and will encompass any low / moderate suitability areas (including those not previously surveyed in detail to inform the EIA).
 - PRF inspections within 30 m of the Proposed Development (extended to 100 m for piling works) comprising ground-level PRF inspection, aerial PRF inspection and / or dusk emergence surveys. PRF inspections will include all previously identified PRFs, including those which have not been subject to further survey to inform the EIA, as well as those identified in the DBW detailed above. These inspections will be undertaken during the season for detecting maternity roosts. Surveys will conform to the prevailing BCT guidelines and will be undertaken by competent and experienced surveyors, certified in tree climbing where necessary and licensed for bat surveys.

8.4.19 Pre- and during construction works:

- Pre-construction surveys as per the requirements of the above noted GEMPs and SPP for bats. These surveys should begin in the active season 2026, as enabling works are currently anticipated to commence in Autumn 2026.

Badger (Regional Level Importance)

8.4.20 Confirmatory surveys:

- Badger surveys of all suitable habitat (e.g. habitat used for sett construction, foraging and commuting) which could support badger within 100 m of the Proposed Development, will be undertaken, encompassing any low / moderate suitability areas not previously surveyed in detail to inform the EIA. Surveys will follow best practice guidelines.
- Bait-marking surveys following best practice guidance¹⁰⁷ of setts with potential for direct impact from construction of the Proposed Development will be required, to ensure alternative setts are available within a clan's territory, or that a high proportion of setts within a single clan are not being closed without compensation.
- These additional badger surveys, including monitoring of setts with potential for impact, will commence in Summer 2025, to allow bait marking in Winter 2025-2026 (when badgers are most active in terms of territory marking), ahead of enabling works in Autumn 2026.

8.4.21 Pre- and during construction works:

- A pre-construction survey for identification of badger setts within the Proposed Development footprint and a 100 m buffer will be undertaken following best practice guidelines, no more than three months prior to commencement of construction.
- Badger setts identified within 30 m of the working area or within the 100 m buffer applicable to piling works will require detailed assessment / monitoring to ascertain their current activity status. Monitoring will be completed for a minimum of two-weeks during the Summer months, or four-weeks during the Winter. This data will be used to inform both mitigation and licensing requirements.
- Should badger setts be identified within the 30m disturbance buffer of tree clearance, trees will be felled away from badger setts and ensure badger pathways are not blocked.
- Project wide licenses will be applied for using the above data, in line with the SPP for badgers, and works will also be carried out in line with relevant GEMPs that are listed above.

Pine Marten (Regional Level Importance)

8.4.22 Confirmatory surveys:

- Pine marten surveys of all suitable habitat (e.g. woodland or rocky outcrops used for denning, foraging and commuting habitat) which could support the species within 250 m of the Proposed Development, will be undertaken and will encompass any low / moderate suitability areas not previously surveyed in detail to inform the EIA.

8.4.23 Pre- and during construction works:

- A survey to search for pine marten dens will be undertaken within the Proposed Development footprint and a 250 m buffer. Surveys will be undertaken by competent and experienced surveyors and would follow best practice guidelines. Surveys will be undertaken as close to the commencement of construction as possible,

¹⁰⁷ Delahay, R. J., Brown, J. A., Mallinson, P. J., Spyvee, P. D., Handoll, D., Rogers, L. M. and Cheeseman, C. L. (2001). The use of marked bait in studies of the territorial organization of the European Badger (*Meles meles*). *Mammal Review*, Volume 30, Issue 2, Pages 73-87.

and always within the most recent survey period (pine martens are active year-round but are best surveyed between May and September, and ideally in June-August when scats are most abundant).

- Pre-construction surveys will inform licensing and mitigation requirements, where works occur within 30 m of dens (or 100 m for piling works), as set out in the SPP for Pine Marten.

Red Squirrel (Regional Level Importance)

8.4.24 Confirmatory surveys:

- Red squirrel surveys of all suitable habitat (e.g. mature to semi-mature coniferous woodland including commuting and foraging habitat) which could support the species occurring within 50 m of the Proposed Development will be undertaken, encompassing any low / moderate suitability areas not previously surveyed in detail to inform the EIA.

8.4.25 Pre- and during construction works:

- A survey to search for red squirrel dreys will be undertaken of suitable habitats within the Proposed Development footprint and a 50 m buffer. Surveys would be undertaken by competent and experienced surveyors and would follow best practice guidelines. Surveys will be undertaken as close to the commencement of construction as possible, and no more than three months before the start of works. During the breeding season (February - September), affected dreys will be re-surveyed every 3 weeks to confirm status, as red squirrels can move dreys at this sensitive time, causing the status of dreys to change (e.g. from disused to breeding or vice versa). Any licensing requirements identified from surveys will be addressed in line with the SPP for Red Squirrel and relevant GEMPs for habitats (woodlands) used by this species will also be followed.

Otter (Regional Level Importance)

8.4.26 Confirmatory surveys:

- Otter surveys of all suitable habitat (watercourses and waterbodies as well as neighbouring terrestrial habitat) which could support the species within 200 m of the Proposed Development, will be undertaken, encompassing any low / moderate suitability areas not previously surveyed in detail to inform the EIA.

8.4.27 Pre- and during construction works:

- Surveys for otter will be carried out no more than three months prior to construction or enabling works and in accordance with the requirements of the SPP for otter. Surveys will follow best practice prevailing guidelines and will inform licensing and mitigation requirements, where otter holts or resting sites are identified within 30 m of the working area (or 100 m for piling works), as set out in the Otter SPP.

Water vole (Regional Level Importance)

8.4.28 Confirmatory surveys:

- Water vole surveys of all suitable habitat (watercourses and waterbodies with slow-moderate flow as well as surrounding terrestrial habitat) which could support the species within 50 m of the Proposed Development, will be undertaken, encompassing any low / moderate suitability areas not previously surveyed in detail to inform the EIA.

8.4.29 Pre- and during construction works:

- A survey to search for evidence of water vole will be undertaken along all watercourses within the Proposed Development and up to a 50 m buffer where suitable habitat exists. Surveys will be undertaken by competent and experienced surveyors. Surveys will follow best practice prevailing guidelines and will be undertaken as close to the start of works as possible, not more than two months prior to commencement, and always within

the most recent survey period (surveys can be carried out between April and October or from May to September in upland locations).

- All licensing and other mitigation measures as described in the SPP for Water Vole must be in place prior to commencement of construction, including any on-going construction-phase monitoring.

Wildcat (International Level Importance)

8.4.30 Confirmatory surveys:

- Wildcat surveys of all suitable habitat (e.g. woodland edge habitat, rocky areas, moorland) which could support the species within 200 m of the Proposed Development, will be undertaken, encompassing any low suitability areas not previously surveyed in detail to inform the EIA.

8.4.31 Pre- and during construction works:

- A survey to search for wildcat dens and resting sites will be undertaken, covering the Proposed Development footprint and a 200 m buffer. Surveys will be undertaken by competent and experienced surveyors and will follow best practice guidelines. The guidance within the Wildcat SPP will be followed and survey results will inform the need for and scope of any licenses and / or mitigation.

Fish (Regional Level Importance) and Freshwater Pearl Mussel (International Level Importance)

8.4.32 Confirmatory surveys:

Fish

- For any in-channel works associated with access tracks (e.g. water crossings) which fall out with the Fish Survey Area (areas assessed shown in **Figure 8.1.1: Survey Areas and Access Constraints**), a fish habitat suitability survey will be carried out to determine the suitability of these watercourses to support fish species.
- For all in-channel works associated with access tracks (culverts), a pre-construction monitoring survey in the form of electro-fishing will be undertaken, where safe to access.
- These surveys will begin during the upcoming survey season (June to September inclusive) in 2026 prior to works commencing in Autumn 2026.

Freshwater Pearl Mussel

- For any in-channel works associated with access tracks (culverts) which fall out with the FWPM Survey Area (River Spey, Red Burn and Burn of Ordiequish within the River Spey catchment), a FWPM habitat suitability survey will be carried out to determine the suitability of these watercourses to support FWPM.
- Where suitable habitat exists, a FWPM survey will be undertaken April – September inclusive in 2025, prior to work commencing in mid-2026. This will cover 100 m upstream and 500 m downstream of the Proposed Development⁶⁴, to inform further mitigation where necessary, should FWPM be present (i.e. through micro-siting and detailed design).

8.4.33 Pre- and during works:

- If salmonid populations and / or suitable spawning habitat is identified during the additional baseline surveys, the following will apply.
 - Salmonid spawning takes place between November and January with eggs likely to remain until April. Where impacts to salmonids are anticipated, a works restriction period of 1 October to 31 May (inclusive) will be implemented.
 - Any in-channel works will be isolated by means of a sealed wall of gravel filled 'dumpy bags' (or other suitable means). The isolated works area will cover the minimum area of channel possible, such that free passage of fish in an up- and downstream direction is maintained for the duration of in-channel works.

Where deemed necessary, a fish rescue will be undertaken, whereby fish will be removed from within the works area using electro-fishing equipment and released back to the watercourses upstream. Further fish rescues will be required if the in-channel wall is overtopped (e.g., during a high-water event).

- Fish rescues will be undertaken by competent and experienced aquatic ecologists, with the relevant certifications and permits.
- A report on the implementation of construction mitigation / fish rescues will be prepared by the aquatic ecologist and submitted to the Principal Contractor's Environmental Manager.
- The Environmental Advisor will closely monitor the culvert construction.
- A pre-construction survey for FWPM will be undertaken immediately prior to works (including vegetation clearance) commencing by a licensed SQE, to ensure the results of the baseline surveys have not altered. Surveys will be undertaken from April to September, inclusive, of the Proposed Development and 100 m upstream and 500 m downstream.
- The Applicant's approach to FWPM protection (**Appendix 3.6: Species Protection Plans (SPPs)**) is based on the 'avoidance' of impacts, 'disturbance' is not a legal option due to the sedentary lifestyle of adults and juveniles as this could result in them being killed or injured. Should FWPM be identified within the disturbance buffers of the Proposed Development, any access tracks or watercourse crossings will be microsituated to avoid any impacts on FWPM.
- Following pre-construction surveys, the SQE will agree mitigation measures with the Principal Contractor and if there is any doubt about the mitigation resulting in complete avoidance of impacts, then the Applicant will be informed before NatureScot's Licensing Team is contacted for further advice.
- Watercourse crossing works will be monitored by a FWPM licenced SQE.
- GEMPs will be followed, in particular, Soil Management, Working in or Near Water, Working with Concrete, Watercourse Crossings, Forestry and Bad Weather (**Appendix 3.5: General Environmental Management Plans (GEMPs)**). When applying the measures in these GEMPs there will be a presumption against temporary dams or pumping into / out of watercourses.
- All licensing and other mitigation measures as described in the SPP for FWPM must be in place prior to commencement of construction, including any on-going construction-phase monitoring.

Great Crested Newt (District Level Importance)

8.4.34 Confirmatory surveys (The Highland Council and Moray Council only):

- Should subsequent changes to the design or microsituation result in any ponds being within 500 m of the Proposed Development which have not previously been subject to survey (as they fall out with the GCN Survey Area), those ponds will be subject to HSI assessment to determine their suitability to support GCN.
- Any ponds that return a HSI score of below average or greater will be subject to eDNA surveys.
- Surveys will be undertaken during the GCN survey season (April to June inclusive) in Spring 2025, ahead of enabling works commencing in mid-2026. The timings of surveying different areas may be scheduled to match the phasing of the Proposed Development over the construction period, to ensure data remains valid. This may be fulfilled by the SQE or Environmental Advisor if they hold the relevant experience. The findings will be reported to the Principal Contractor's Environmental Manager.

8.4.35 Pre- and during works (The Highland Council and Moray Council only):

- Pre-construction surveys of all ponds within 500m of the Proposed Development. Initial HSI assessments undertaken for each pond and those which achieve a below average or better score will be subject to eDNA surveys.
- And ponds returning positive eDNA results will be subject to GCN surveys within the survey season (April – June) 2025, ahead of enabling works currently anticipated to commence in mid-2026.

Beaver (District Level Importance)

8.4.36 Confirmatory surveys (The Highland Council only):

- Beaver surveys of suitable habitat (freshwater and surrounding terrestrial habitat) within 100m of the Proposed Development, following best practice guidance^{108,109}.

8.4.37 Pre- and during works (The Highland Council only):

- All licensing and other mitigation measures as described in the SPP for Beaver must be in place prior to commencement of construction, including any on-going construction-phase monitoring.

Summary of Pre-construction / Construction Protected Species Survey Requirements

8.4.38 **Table 8.24** below provides a summary of the surveys required, detailed above, for each of the protected species IEFs.

Table 8.24: Summary of Pre-construction / Construction Protected Species Survey Requirements

Protected Species	Confirmatory surveys	Pre- and during works surveys
Bats	DBW of all suitable habitat within 30 m of the Proposed Development (extended to 100 m for piling works). PRF inspections within 30 m of the Proposed Development (extended to 100 m for piling works).	Pre-construction surveys as detailed within Embedded Mitigation above, following the requirements of the SPP for bats.
Badger	Badger surveys of all suitable habitat within 100 m of the Proposed Development. Bait-marking surveys of setts with potential for direct impact from construction of the Proposed Development.	Pre-construction surveys as detailed within Embedded Mitigation above, following the requirements of the SPP for badger.
Pine marten	Pine marten surveys of all suitable habitat within 250 m of the Proposed Development.	Pre-construction surveys as detailed within Embedded Mitigation above, following the requirements of the SPP for pine marten.
Red squirrel	Red squirrel surveys of all suitable habitat within 50 m of the Proposed Development.	Pre-construction surveys as detailed within Embedded Mitigation above, following the requirements of the SPP for red squirrel.
Otter	Otter surveys of all suitable habitat within 200 m of the Proposed Development.	Pre-construction surveys as detailed within Embedded Mitigation above, following the requirements of the SPP for otter.

¹⁰⁸ Campbell-Palmer, R., Gow, D., Campbell, R., Dickinson, H., Girling, S., Gurnell, J., Halley, D., Jones, S., Lisle, S., Parker, H., Schwab, G. and Rosell, F. (2016). The Eurasian Beaver Handbook: Ecology and Management of Castor fiber. Pelagic Publishing, UK.

¹⁰⁹ NatureScot (online). Standing advice for planning consultations – Beavers. Available at: <https://www.nature.scot/doc/standing-advice-planning-consultations-beavers>

Protected Species	Confirmatory surveys	Pre- and during works surveys
Water vole	Water vole surveys of all suitable habitat within 50 m of the Proposed Development.	Pre-construction surveys as detailed within Embedded Mitigation above, following the requirements of the SPP for water vole.
Wildcat	Wildcat surveys of all suitable habitat within 200 m of the Proposed Development.	Pre-construction surveys as detailed within Embedded Mitigation above, following the requirements of the SPP for wildcat.
Fish	Fish habitat suitability surveys for any in-channel works associated with access tracks (water course crossings) which fall out with the Fish Survey Area. A pre-construction monitoring survey (electro-fishing), where safe to access, for any in-channel works associated with access tracks (water course crossings).	Salmonid spawning takes place between November and January with eggs likely to remain until April and alevin emerging from the gravel as 'fry' in May. Where impacts to salmonids are anticipated, a works restriction period of 1 October to 31 May (inclusive) will be implemented. Any in-channel works would be isolated by means of a sealed wall of gravel filled 'dumpy bags' (or other suitable means). The isolated works area would cover the minimum area of channel possible, such that free passage of fish in an up- and downstream direction is maintained for the duration of in-channel works. Where deemed necessary, a fish rescue would be undertaken, whereby fish would be removed from within the works area using electro-fishing equipment and released back to the watercourses upstream. Further fish rescues would be required if the in-channel wall is overtopped (e.g., during a high-water event). Fish rescues undertaken by competent and experienced aquatic ecologists, with the relevant certifications and permits. A report on the implementation of construction mitigation / fish rescues prepared by the aquatic ecologist and submitted to the Principal Contractor's Environmental Manager. The Environmental Advisor will closely monitor the culvert construction. GEMPs will be followed, in particular Working in or Near Water and Watercourse Crossings.

Protected Species	Confirmatory surveys	Pre- and during works surveys
FWPM	A FWPM habitat suitability survey for any in-channel works associated with access tracks (culverts) which fall out with the FWPM Survey Area. Where suitable habitat exists, a FWPM survey will be undertaken (covering 100 m upstream and 500 m downstream).	The Applicant's approach to FWPM protection is based on the 'avoidance' of impacts, 'disturbance' is not a legal option due to the sedentary lifestyle of adults and juveniles as this could result in them being killed or injured. Following pre-construction surveys, the SQE will agree mitigation measures with the Principal Contractor and if there is any doubt about the mitigation resulting in complete avoidance of impacts, then the Applicant will be informed before NatureScot's Licensing Team is contacted for further advice. GEMPs will be followed, in particular, Soil Management, Working in or Near Water, Working with Concrete, Watercourse Crossings, Forestry and Bad Weather. The Environmental Advisor will closely monitor the culvert construction. Pre-construction surveys as detailed within Embedded Mitigation above, following the requirements of the SPP for FWPM.
GCN	HSI assessment of any ponds within 500 m of the Proposed Development that are new or not previously subject to survey (as they fall out with the GCN Survey Area). Any ponds that return a HSI score of below average or greater will be subject to eDNA surveys.	Pre-construction surveys of all ponds within 500m of the Proposed Development. Initial HSI assessments undertaken for each pond and those which achieve a below average or better score will be subject to eDNA surveys. Ponds returning positive eDNA results will be subject to GCN surveys within the survey season (April – June) 2025, ahead of enabling works currently anticipated to commence in mid-2026.
Beaver	Beaver survey of suitable habitat within 100m of the Proposed Development.	Pre-construction surveys as detailed within Embedded Mitigation above, following the requirements of the SPP for beaver.

Protected Species Licensing

- 8.4.39 Details on the project wide licenses required for the Proposed Development are detailed below, for further details see the Applicant's SPPs which set out the protocols for use of project-wide licences (**Appendix 3.6: Species Protection Plans (SPPs)**).

Bats (National Level Importance)

- 8.4.40 Where no suitable alternative exists and other licensing tests can be satisfied, a licence would be obtained for works affecting bats. A project wide licence for works affecting bats will be sought from NatureScot due to the PRFs and potential roosts which will be disturbed and / or destroyed by the Proposed Development. This would include roost destruction from essential demolition and / or tree felling; as well as potential disturbance effects where structures and trees with roosts can be retained but occur in proximity to construction works (e.g., within 30 m and 100 m for piling). The licence would be in place prior to commencement of works affecting bats.

Wildcat (International Level Importance)

- 8.4.41 If works are deemed likely to disturb wildcat, a project wide licence for works affecting wildcat will be sought from NatureScot due to the potential dens that will be disturbed by the Proposed Development (**Appendix 3.6: Species Protection Plans (SPPs)**).

Fish (Regional Level Importance)

- 8.4.42 It is anticipated that Controlled Activities Regulations (CAR)¹¹⁰ would apply. It is possible that the works may progress under the General Binding Rules¹¹¹, but if a CAR licence is required then this would be obtained prior to construction works.

Freshwater Pearl Mussel (International Level Importance)

- 8.4.43 The Applicant's approach to FWPM protection (**Appendix 3.6: Species Protection Plans (SPPs)**) is based on the 'avoidance' of impacts, 'disturbance' is not a legal option due to the sedentary lifestyle of adults and juveniles as this could result in them being killed or injured. Should FWPM be identified within the disturbance buffers of the Proposed Development, any access tracks or watercourse crossings will be micro-sited to avoid any impacts on FWPM.

Beaver

- 8.4.44 Following the mitigation hierarchy detailed within the Beaver SPP (**Appendix 3.6: Species Protection Plans (SPPs)**), the Proposed Development will aim to avoid disturbance to beavers through micro-siting. If this is not possible, a licence will be required where disturbance or destruction of lodges / chambered burrows or dams cannot be avoided. Licences must be obtained before the commencement of works. There is a presumption against licensing during the kit dependency period between 1st April and 16th August. Licensed activity in this situation would have to wait until the beavers had finished breeding and the young are fully mobile (**Appendix 3.6: Species Protection Plans (SPPs)**).

Other Protected Species

- 8.4.45 A project wide licence for works affecting badger, pine marten, red squirrel, otter and water vole will be sought from NatureScot due to the resting sites and setts that may be disturbed and / or destroyed by construction of the Proposed Development.
- 8.4.46 An Environmental Advisor and specialists will be appointed by Principal Contractor for the duration of the construction phase. Their role and responsibility will include coordinating input from specialists, reviewing incoming information from additional surveys and coordinating subsequent recommendations of mitigation and licensing requirements. Based on the current understanding of the Proposed Development and baseline information, the requirement for specialist ecological input (e.g. appointment of a licensed bat surveyor) has been identified in the subsequent assessment.

¹¹⁰ UK Government (online). The Water Environment (Controlled Activities) (Scotland) Regulations 2011. Available at: <https://www.legislation.gov.uk/ssi/2011/209/contents>

¹¹¹ UK Government (online). The Environmental Authorisations (Scotland) Regulations 2018. Available at: <https://www.legislation.gov.uk/sdsi/2018/9780111039014/schedule/9>

- 8.4.47 An independent Environmental Clerk of Works (EnvCoW) will be appointed by the Applicant to monitor, report and advise on the environmental compliance of the construction works. The EnvCoW will report to the Environmental Advisor and the Applicant. The EnvCoW will be competent, demonstrated by relevant experience and accreditations.

Predicted Construction Impacts

- 8.4.48 In this Section and in the Predicted Operational Impacts, the assessment outcomes pertain to the entire Proposed Development. Where impacts are lesser in one LPA than in another, the highest overall level of impact for the IEF being discussed is used in the description of impact significance. The detail of each IEF occurring in each LPA is set out in the description of baseline conditions above, to aid each local authority in their contributions to the decision-making process for this EIA.
- 8.4.49 Classes of Impact Magnitude are assigned using the criteria in **Table 8.4**. Note that the geographical scale (*sensu* CIEEM EcIA Guidelines) at which effects are significant does not always equate to the importance of the IEF (for example, a local effect on a Nationally important feature).
- 8.4.50 Decommissioning impacts are assumed, as a worst-case scenario, to be the same as those for construction.
- 8.4.51 A summary of all significant effects as a result of predicted construction impacts is included in **Table 8.26** at the end of this Section.

Designated Sites

- 8.4.52 The below designated sites are located within the EZoI and have been identified as sensitive receptors above. They are grouped by international, national and local designations and listed in geographical occurrence from west to east along the Proposed Development.
- 8.4.53 With regards to hydrological connectivity between the below designated sites and the Proposed Development, only designated sites located within 1 km of the Proposed Development are considered within **Chapter 10: Water and Geological Environment**. Designated sites beyond 1 km are not anticipated to have any hydrological connection due to remoteness from the Proposed Development. Ecological connectivity via watercourses can be greater than 1 km and is discussed on a case-by-case basis below and in the HRA¹ where relevant.

International Sites (International Level Importance)

Highland

- 8.4.54 Strathglass Complex SAC is located 8.9 km upstream of the Proposed Development, connected via the River Beaulieu and River Farrar. Given the distance from the Proposed Development, the designated habitats associated with the SAC would not be affected by the works. Additionally, with the embedded mitigation in the Otter SPP, the potential disturbance / displacement of otter associated with the SAC would be adverse, direct, spatially local, temporary and reversible – hence of a minor magnitude. As such these effects would be considered less than local level. Any effects would be **not significant**.
- 8.4.55 Moniac Gorge SAC is located 0.3 km upstream of the Proposed Development, it is not considered hydrologically connected and has been scoped out of the hydrology assessment (**Chapter 10: Water and Geological Environment**). Given the designated site is located upstream of the Proposed Development and with the embedded mitigation detailed above, especially the GEMP on Soil Management, the potential impact to the SAC would be of spatially local scale, adverse, indirect, temporary and reversible – hence a minor magnitude. As such these effects would be considered less than local level. Any effects would be **not significant**.

- 8.4.56 Cawdor Wood SAC is located 0.3 km downstream of the Proposed Development, linked via Riereach Burn, Caochan-Dubh and Allt-Dearg. Given the embedded mitigation detailed above, notably GEMPs on Working In or Near Water, Watercourse Crossings and Working With Concrete, the potential for degradation / pollution to the SAC would be adverse, indirect, of localised spatial scale, temporary and reversible and of overall minor magnitude. As such these effects would be considered less than local level. Any effects would be **not significant**.

Moray

- 8.4.57 Lower Findhorn Woods SAC is located 1.9 km downstream of the Proposed Development, linked via the River Findhorn, Dorback Burn, the River Divie and their associated tributaries. The Proposed Development oversails the River Findhorn at a point where the valley is in a high gorge, making the nearest proposed infrastructure – a proposed conductor pulling area adjacent to tower CB6-1 on the western bank – some way vertically above the river's crossing point. This substantially reduces the chance that any of the works would result in effects on the SAC. The following LSEs were identified within the HRA¹: spread of INNS and contamination from an accidental spill. Given the embedded mitigation detailed above, notably GEMPs on Working In or Near Water, Watercourse Crossings, Working With Concrete and Biosecurity (On Land), the potential for degradation / pollution to the SAC would be adverse, indirect, of localised spatial scale, temporary and reversible and of overall minor magnitude. As such these effects would be considered less than local level. Any effects would be **not significant**.
- 8.4.58 The Proposed Development oversails the River Spey SAC. Tower CB14-1B and associated working areas are located out with the SAC boundary (**Figure 3.1: Site Layout**). However, selective felling and crown reduction will be required within the riparian woodlands of the SAC for the OC of the Proposed Development, covering approximately 70 m along both sides of the bank of a tributary which feeds into the main river body. Selective felling and crown reduction of overhanging vegetation will result in a loss of shading for fish. Whilst the embedded mitigation, notably GEMPs on 'Working In or Near Water', 'Watercourse Crossings' and 'Working With Concrete', 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. As such, potential degradation / pollution to the SAC due to selective felling and crown reduction works would be adverse, direct, of localised spatial magnitude, permanent and irreversible. As these effects could impact International populations of FWPM, an endangered species¹¹², they are considered of moderate overall magnitude and **significant** for the River Spey SAC.

Aberdeenshire

- 8.4.59 Mortlach Moss SAC is located 0.5 km south, upstream of the Proposed Development. Given the SAC is not considered hydrologically connected to the Proposed Development and with the embedded mitigation detailed above, especially the GEMP on 'Working in Sensitive Habitats', the potential impact on the SAC would be adverse, indirect, of localised spatial magnitude, temporary and reversible. As such these minor magnitude (overall) effects would be considered less than local level. Any effects would be **not significant**.

¹¹² IUCN (undated). Freshwater Pearl Mussel. Online at: <https://www.iucnredlist.org/species/12799/128686456>

National Sites (National Level Importance)*Highland*

- 8.4.60 Beauly Firth SSSI is located 0.5 km downstream of the Proposed Development, hydrologically linked via the River Beauly as well as several smaller watercourses. Given the distance from the Proposed Development and embedded mitigation detailed above, especially GEMPs on 'Working In or Near Water' and 'Watercourse Crossings', the potential for degradation / pollution to the SSSI would be adverse, indirect, of localised spatial scale, temporary and reversible. As such these overall minor magnitude effects would be considered less than local level. Any effects would be **not significant**.
- 8.4.61 Beauly protected seal haul-out site is located 0.2 km from the Proposed Development. The Beauly Firth is hydrologically linked to the Proposed Development via the River Beauly and several other smaller watercourses. Albeit the short distance from the Proposed Development, seals would unlikely swim up the river (and the haul-out site is crudely mapped as a block area rather than finely mapped to suitable habitat) and embedded mitigation detailed above, the potential for degradation / pollution to the site would be adverse, indirect, of localised spatial scale, temporary and reversible. As such these overall minor magnitude effects would be considered less than local level. Any effects would be **not significant**.
- 8.4.62 Moniack Gorge SSSI is located 0.3 km upstream of the Proposed Development. The SSSI is not considered hydrologically connected as it located upslope of the Proposed Development (**Chapter 10: Water and Geological Environment**). Given the lack of downstream hydrological connectivity and embedded mitigation detailed above, especially the GEMP on 'Soil Management', the potential for degradation / pollution to the SAC would be adverse, indirect, of localised spatial scale, temporary and reversible. As such overall minor magnitude effects would be considered less than local level. Any effects would be **not significant**.
- 8.4.63 Cawdor Wood SSSI is located 0.5 km downstream of the Proposed Development, linked via Riereach Burn and Allt Dearg and their associated tributaries. Given the distance from the Proposed Development and embedded mitigation detailed above, notably GEMPs on 'Working In or Near Water', 'Watercourse Crossings' and 'Working With Concrete', the potential degradation / pollution to the SSSI would be adverse, indirect, of localised spatial scale, temporary and reversible. As such overall minor magnitude effects would be considered less than local level. Any effects would be **not significant**.

Moray

- 8.4.64 Buinach and Glenlatterach SSSI is located 1 km downstream of the Proposed Development, hydrologically linked via Glenlatterach Reservoir and associated watercourses. Given the distance from the Proposed Development and embedded mitigation detailed above, notably the GEMPs for Working In or Near Water, Working With Concrete and Watercourse Crossings, the potential for degradation / pollution to the SSSI would be adverse, indirect, of localised spatial scale, temporary and reversible. As such overall minor magnitude effects would be considered less than local level. Any effects would be **not significant**.
- 8.4.65 Coleburn Pasture SSSI is bisected by the Proposed Development; however the OHL oversails the designated site and there is no associated infrastructure within the SSSI boundary. A permanent access track would be constructed around the northern perimeter of the SSSI, to avoid impacts on the designated feature (lowland acid grassland). Given the methods used to avoid the designated features of the SSSI and embedded mitigation detailed above, especially the GEMP on 'Working in Sensitive Habitats', the potential for degradation / pollution to the SSSI would be adverse, indirect, of localised spatial scale, temporary and reversible. As such overall minor magnitude effects would be considered less than local level. Any effects would be **not significant**.

- 8.4.66 The Proposed Development oversails the River Spey SSSI. Tower CB14-1B and its associated working areas are located out with the SSSI boundary (**Figure 3.1: Site Layout**). However, selective felling and crown reduction will be required within the riparian woodlands of the SSSI for the OC of the Proposed Development, covering approximately 70 m along both sides of the bank of a tributary which feeds into the main river body. Selective felling and crown reduction 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 SSSI (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. As such, potential degradation / pollution to the SSSI due to selective felling and crown reduction works would be adverse, direct, of localised spatial magnitude, permanent and irreversible. As these effects could impact International populations of FWPM, an endangered species, they are considered of moderate overall magnitude and **significant** for the River Spey SSSI.
- 8.4.67 Mill Wood SSSI is located immediately adjacent to an access track associated with the Proposed Development. The SSSI is located at the same elevation and is therefore considered to be hydrologically linked (**Chapter 10: Water and Geological Environment**). No infrastructure or associated working areas are located within the SSSI and micro-siting within the LoD will avoid the SSSI (**Chapter 3: Project Description**), as such there will be no direct impacts. Given the distance from the Proposed Development and embedded mitigation including from GEMPs on Watercourse Crossings, Working in or Near Water and Working With Concrete (detailed above), the potential for degradation / pollution to the SSSI would be adverse, indirect, of localised spatial scale, temporary and reversible. As such overall minor magnitude effects would be considered less than local level. Any effects would be **not significant**.

Moray and Aberdeenshire

- 8.4.68 Den of Pitlurg SSSI is located 1.1 km downslope of the Proposed Development and is hydrologically linked. Given the distance from the Proposed Development and embedded mitigation including from GEMPs on Watercourse Crossings, Working in or Near Water and Working With Concrete (detailed above), the potential for degradation / pollution to the SSSI would be adverse, indirect, of localised spatial scale, temporary and reversible. As such overall minor magnitude effects would be considered less than local level. Any effects would be **not significant**.

Aberdeenshire

- 8.4.69 Whitehill SSSI is located 0.2 km downslope from the Proposed Development and is hydrologically linked via drainage channels. Given the sedentary nature of the designated features (habitats), distance from the Proposed Development and embedded mitigation including from GEMPs on Watercourse Crossings, Working in or Near Water and Working With Concrete (detailed above), the potential for degradation / pollution to the SSSI would be adverse, indirect, of localised spatial scale, temporary and reversible. As such overall minor magnitude effects would be considered less than local level. Any effects would be **not significant**.

Local Sites (District Level Importance)

- 8.4.70 The Buglife B-line bisects the Proposed Development at several locations throughout all LPAs. Localised habitat loss as a result of the Proposed Development would result in the loss of foraging resource for invertebrates using these areas. However, the habitats affected are widespread in the surrounding environment. The nature of the Proposed Development ensures that following construction, habitat connectivity will be maintained for invertebrates (see oHMP, **Annex G of Appendix 8.3: Biodiversity Net Gain Assessment**). Additionally, the dismantling of Beauly to Knocknagael 132 kV OHL is located within the B-line near Inverness and such habitats will be reinstated to natural habitat, following the Restoration GEMP¹¹³. Given the embedded mitigation from the

¹¹³ The wayleave through forestry is assumed to be re-absorbed into woodland either naturally or part of plantation rotations. There will be no active reinstalment.

GEMP on Working in Sensitive Habitats detailed above, it is not anticipated that the integrity of the B-line should be affected as habitat connectivity would be maintained. The potential for degradation to the B-line would be adverse, direct, of localised spatial scale, permanent and irreversible. As such overall minor magnitude effects would be considered less than local level. Any effects would be **not significant**.

Highland

- 8.4.71 Great Glen and the Beaully Catchment Butterfly Conservation Scottish Priority Landscape is bisected by the Proposed Development. Habitat loss as a result of the Proposed Development would result in the loss of foraging resource for invertebrates using these areas. However, the habitats affected are prevalent in the surrounding area. Following construction of the Proposed Development, habitat connectivity will be maintained for invertebrates through mitigation and habitat reinstatement. Additionally, the dismantling of Beaully to Knocknagael 132 kV OHL is located within the designated area and such habitats where the OHL is located will be reinstated to natural habitat following the Restoration GEMP (see oHMP, **Annex G of Appendix 8.3: Biodiversity Net Gain Assessment**). Given the embedded mitigation from the GEMP on Working in Sensitive Habitats detailed above, it is not anticipated that the integrity of the designated site should be affected as habitat connectivity would be maintained. The potential degradation to the landscape would be adverse, direct, of localised spatial scale, permanent and irreversible. As such overall minor magnitude effects would be considered less than local level. Any effects would be **not significant**.
- 8.4.72 East Invernesshire IIA encompasses the Proposed Development west of Inverness. Habitat loss as a result of the Proposed Development would result in the loss of foraging resource for invertebrates using these areas. However, the habitats affected are prevalent in the surrounding area. Following construction of the Proposed Development, habitat connectivity will be maintained for invertebrates through mitigation and habitat reinstatement. Additionally, the dismantling of Beaully to Knocknagael 132 kV OHL is located within the IIA and such habitats where the OHL is located will be reinstated to natural habitat following the Restoration GEMP (see oHMP, **Annex G of Appendix 8.3: Biodiversity Net Gain Assessment**). Given the embedded mitigation from the GEMP on Working in Sensitive Habitats detailed above, it is not anticipated that the integrity of the designated site should be affected as habitat connectivity would be maintained. The potential degradation to the IIA would be adverse, direct, of localised spatial scale, permanent and irreversible. As such overall minor magnitude effects would be considered less than local level. Any effects would be **not significant**.
- 8.4.73 The Proposed Development bisects the northern extent of Daviot Loch Moy Red Squirrel Stronghold. The Proposed Development and OC would result in a loss of woodland in this area and cause habitat fragmentation (13.10 ha). Where woodland would be lost, the wayleave would comprise bracken, scrub and heathland (**Appendix 8.3: Biodiversity Net Gain Assessment**) as well as areas of forest edge planting (**Chapter 12: Forestry**) to allow habitat connectivity. Any impacts on red squirrels *per se* are detailed below. The potential degradation to the stronghold would be adverse, direct, of localised spatial scale, permanent and irreversible, but occurring at the northern edge of the stronghold rather than cutting through it. Alongside the forest edge planting, the GEMP on Working in Sensitive Habitats would reduce the magnitude of the habitat loss and fragmentation. As such, overall minor magnitude effects would be considered less than local level. Any effects would be **not significant**.

Highland and Moray

- 8.4.74 Findhorn Culbin IIA is located directly adjacent to access tracks associated with the Proposed Development. Given the distance from the Proposed Development and the maintained habitat connectivity and embedded mitigation detailed, including from the GEMP on Working in Sensitive Habitats above, the potential degradation to the IIA would be adverse, indirect, of localised spatial scale, temporary and reversible. As such overall minor magnitude effects would be considered less than local level. Any effects would be **not significant**.

Moray

- 8.4.75 The Proposed Development bisects the centre of the Ordiequish, Whiteash, Ben Aigan Red Squirrel Stronghold. The Proposed Development would result in a loss of woodland (32.62 ha) in this area and cause habitat fragmentation. Where woodland would be lost, the wayleave would comprise bracken, scrub and heathland (**Appendix 8.3: Biodiversity Net Gain Assessment**) as well as areas of forest edge planting (**Chapter 12: Forestry**) to allow habitat connectivity. Any impacts on red squirrels in general are detailed below. The potential for degradation to the stronghold, with fragmentation through the centre of the Stronghold, would even with the GEMP in Working in Sensitive Habitats be adverse, direct, of localised spatial scale, permanent and irreversible. As such overall moderate magnitude effects would be considered of local level. Any effects would be **significant**.

Aberdeenshire

- 8.4.76 The Proposed Development bisects the northern extent of Strathbogie WPA, predominantly through agricultural land (2.07 ha cropland and 9.67ha modified grassland) and woodland (13.21 ha) as well as a small area of neutral grassland (0.22 ha). The majority of the woodland habitat within the WPA is located to the south of the Proposed Development. As wildcat tend to live on woodland edges, in the margins of mountains and moorlands, with rough grazing and generally avoid high mountain areas, exposed coasts and intensively farmed lowlands¹¹⁴, it is considered the Proposed Development lies within sub-optimal habitat for wildcat. Whilst the Proposed Development would result in a loss of habitat, and cause temporary disturbance as well as localised areas of woodland fragmentation in isolated blocks or woodland edges, it would have limited impact on wildcat as the habitats within this area are primarily agricultural land and sub-optimal for wildcat, especially as maintaining the 200m protection zone noted in the Wildcat SPP could be readily maintained in this area. Any impacts on wildcat in general are detailed below. The potential degradation to the WPA would be adverse, direct, of localised spatial scale, permanent and irreversible - but as the Proposed Development is at its northern edge this would not isolate the WPA from other suitable habitats for wildcat. As such these overall minor magnitude effects would be considered less than local level. Any effects would be **not significant**.
- 8.4.77 Den of Pitlurg LNCS is located 0.5 km downslope of the Proposed Development and as such is hydrologically linked. Given the distance from the Proposed Development and embedded mitigation including from GEMPs on Watercourse Crossings, Working in or Near Water and Working With Concrete (detailed above), the potential degradation / pollution to the LNCS would be adverse, indirect, of localised spatial scale, temporary and reversible. As such these overall minor magnitude effects would be considered less than local level. Any effects would be **not significant**.
- 8.4.78 The Proposed Development bisects the north of Bin Hill LNCS and would result in the loss of habitat from within the LNCS boundary. Where the LNCS is bisected the Proposed Development is located within coniferous plantation woodland and modified grassland which are not designated features of the LNCS. Woodland loss will result in the loss of 6.11 ha coniferous woodland at Brownhill Plantation and Cumrie Plantation, as well as 3.23 ha modified grassland. The OHL oversails the Burn of Cairnie and associated riparian corridor. The UKHab survey did not identify botanically rich grassland, fen or wet woodland (designated features of Bin Hill LNCS), within the footprint of the Proposed Development (**Figure 8.1.2: UK Habitat and Protected Species**). Therefore, the potential for degradation to the LNCS would be adverse, direct, of localised spatial scale, permanent and irreversible - but does not directly affect habitats of importance for the designation and works would be conducted in line with the GEMP on Working in Sensitive Habitats. As such these overall minor magnitude effects would be considered less than local level. Any effects would be **not significant**.

¹¹⁴ NatureScot (online). Wildcats. Available at: <https://www.nature.scot/plants-animals-and-fungi/mammals/land-mammals/wildcats>

Habitats

- 8.4.79 The BNG assessment (**Appendix 8.3: Biodiversity Net Gain Assessment**) details the following change in Biodiversity Units (BU) as a result of the Proposed Development:
- Highland – The baseline BU is 1566.82 BU and 4.72 Linear Units – Hedgerow (L-HU). The post development BNG is 623.87 BU and 0.00 L-HU. Overall, on-site biodiversity within the Proposed Development has a 60 % decrease in BU and a 100% decrease in L-HU.
 - Moray - The baseline BU is 1084.73 BU and 1.89 L-HU. The post development BNG is 668.57 BU and 0 L-HU. Overall, on-site biodiversity within the Proposed Development has a 38 % decrease in BU and a 100% decrease in L-HU.
 - Aberdeenshire - The baseline BNG is 433.36 BU and 4.78 L-HU. The post development BNG is 304.27 BU and 0 L-HU. Overall, on-site biodiversity within the Proposed Development has a 30 % decrease in BU and a 100% decrease in L-HU.
- 8.4.80 NPF4 Policy 3 requires all new developments to secure positive effects for biodiversity which would be in proportion to the scale of the development. The Applicant's internal policy also requires new developments to deliver a measurable and minimum 10% net gain through design.
- 8.4.81 Impacts and effects of habitat loss, habitat degradation and fragmentation, and due to INNS, are described below.

Habitat Loss

- 8.4.82 A high-level comparison of the broad habitats which would be lost versus those which would be created through ecological enhancement measures outlined in the BNG assessment is set out in **Table 8.25: Summary of Changes to Habitats from BNG Assessment** below. This does not include Irreplaceable Habitats which require a bespoke approach; Irreplaceable Habitats include ancient woodland (category 1a and 2a) and blanket bog of moderate or good condition.
- 8.4.83 Note that the baseline areas and lengths of habitats in **Table 8.25** are those areas and lengths included in the BNG analysis – they are a subset of the larger areas of longer lengths of habitats shown in **Table 8.9**. The reasoning for inclusion of only a subset of habitats in the BNG baseline is described in the Assumptions and Limitations Section of **Appendix 8.3: Biodiversity Net Gain Assessment**.

Table 8.25: Summary of Changes to Habitats from BNG Assessment

Habitat Loss	Baseline Area / Length	Baseline BU	Post Development Area / Length	Post Development BU	Change in BU
Highland					
Bracken	0.26 ha	1.04	89.65 ha	340.81	339.77 (+32,670 %)
Broadleaved and mixed woodland	130.03 ha	1,124.45	0.00 ha	0.00	-1,124.45 (-100 %)
Coniferous woodland	59.13 ha	136.36	0.00 ha	0.00	-136.36 (-100 %)

Habitat Loss	Baseline Area / Length	Baseline BU	Post Development Area / Length	Post Development BU	Change in BU
Cropland	8.46 ha	16.92	8.17 ha	13.68	-3.24 (-19 %)
Heathland	11.55 ha	175.18	7.06 ha	31.12	-144.06 (-82 %)
High Distinctiveness Grassland	4.35 ha	58.59	3.04 ha	26.96	-31.63 (-54 %)
Low Distinctiveness Grassland	17.29 ha	35.60	59.60 ha	110.46	74.86 (+210 %)
Scrub	2.89 ha	12.80	46.33 ha	98.99	86.19 (+673 %)
Urban	7.28 ha	0.00	27.43 ha	0.00	0.00
Wetland	0.60 ha	6.09	0.56 ha	1.86	-4.23 (-70 %)
Line of trees	0.67 km	4.30	0.00 km	0.00	-4.30 (-100 %)
Hedgerow	0.06 km	0.41	0.00 km	0.00	-0.41 (-100 %)
Moray					
Bracken	0.00 ha	0.00	97.14 ha	370.06	370.06
Broadleaved and mixed woodland	62.16 ha	526.96	0.00 ha	0.00	-526.96 (-100 %)
Coniferous woodland	140.15 ha	280.30	0.00 ha	0.00	-280.30 (-100 %)
Cropland	12.44 ha	24.88	10.92 ha	18.30	-6.58 (-26 %)

Habitat Loss	Baseline Area / Length	Baseline BU	Post Development Area / Length	Post Development BU	Change in BU
Heathland	8.72 ha	153.32	7.05 ha	31.06	-122.26 (-80 %)
High Distinctiveness Grassland	4.17 ha	44.36	3.62 ha	26.55	-17.81 (-40 %)
Low Distinctiveness Grassland	19.63 ha	40.54	65.06 ha	120.57	+80.03 (+197 %)
Scrub	0.54 ha	2.33	46.91 ha	98.62	+96.29 (+4,132 %)
Urban	2.54 ha	0.00	19.68 ha	0.00	0.00
Wetland	1.52 ha	12.05	1.49 ha	3.42	-8.63 (-72 %)
Line of trees	0.33 km	1.52	0.00 km	0.00	- 1.52 (-100 %)
Hedgerow	0.08 km	0.37	0.00 km	0.00	- 0.37 (-100 %)
Aberdeenshire					
Bracken	0.00 ha	0.00	28.87 ha	109.48	109.48
Broadleaved and mixed woodland	20.68 ha	173.54	0.00 ha	0.00	-173.54 (-100 %)
Coniferous woodland	39.72 ha	79.46	0.00 ha	0.00	-79.46 (-100 %)
Cropland	52.26 ha	104.54	50.26 ha	84.14	-20.40 (-20 %)
Heathland	0.20 ha	3.04	0.20 ha	0.81	-2.23 (-74 %)

Habitat Loss	Baseline Area / Length	Baseline BU	Post Development Area / Length	Post Development BU	Change in BU
High Distinctiveness Grassland	1.35 ha	15.46	1.02 ha	7.99	-7.47 (-48 %)
Low Distinctiveness Grassland	26.06 ha	54.82	39.47 ha	70.54	15.72 (29 %)
Scrub	0.06 ha	0.22	14.48 ha	30.27	30.05 (13,659 %)
Urban	3.91 ha	0.00	9.96 ha	0.00	0.00
Wetland	0.26 ha	2.29	0.26 ha	1.04	-1.25 (-55 %)
Line of Trees	0.72 km	3.31	0.00 km	0.00	-3.31 (-100 %)
Hedgerow	0.27 km	1.47	0.00 km	0.00	-1.47 (-100 %)

8.4.84 Further detail on the following habitat groups is detailed within **Appendix 8.1: UK Habitat and Protected Species**. In all cases below, the GEMP for Working in Sensitive Habitats is embedded.

Woodland

8.4.85 All woodlands have been grouped together due to their overlapping geographical boundaries, this includes those listed in the AWI and NWSS. The NWSS will be captured through woodland types identified within the UKHab. Geographic-scale ecological importances of woodland types are as presented in **Table 8.21**.

8.4.86 As detailed in **Chapter 12: Forestry**, all ancient woodlands were assessed to identify their remnant characteristics and condition status, in line with the requirements of an ancient woodland condition survey as identified by the Woodland Trust¹¹⁵. This includes evaluating features such as tree species composition, ground flora, structural diversity, and the presence of deadwood or veteran trees, as these are key indicators of woodland health and ecological integrity.

Nationally Important Woodlands

8.4.87 Nationally important woodlands that are considered irreplaceable ancient woodland, category 1a and 2a, subject to felling / crown reduction are listed below as they occur along the Proposed Development, from west to east:

- Croiche Wood is category 2a ancient woodland of semi-natural origin, considered Irreplaceable Habitat and located on the banks of the River Beauly. Approximately 0.92 ha of this ancient woodland will be lost to the

¹¹⁵ Woodland Trust (2018). Ancient woodland restoration: Survey and assessment of ancient woodland sites. Practical guidance module 2. Available at: [ancient-woodland-restoration-survey-and-assessment.pdf](#)

Proposed Development's footprint (including the OC). Forestry surveys identify the woodland is comprised of downy birch (*Betula pubescens*) and willow (*Salix sp.*). Additionally, due to the tower's peripheral location and the relatively small footprint of its installation, the overall impact on the woodland is minimal. A significant portion of the surrounding woodland will be retained, thereby preserving the majority of the habitat and its associated ecological functions (**Chapter 12: Forestry**).

- Within Dochfour Estate, approximately 2.5 ha of ancient woodland (category 1a), located near Dochgarroch / A82 is subject to felling. This section of woodland is listed as PAWS in the NWSS. Forestry surveys identify the woodland is currently a mixed commercial forest (**Chapter 12: Forestry**).
- Within Nairnside Estate, approximately 0.78 ha of ancient woodland (category 1a), located along the River Nairn, will be subject to selective felling and crown reduction. The woodland sits on a steep slope leading down to the River Nairn, species present include downy birch, willow, rowan (*Sorbus aucuparia*) and alder (*Alnus glutinosa*). To balance habitat conservation with infrastructure requirements, it is proposed to crown reduce sections of native woodland rather than conduct full-scale felling. This approach aims to maintain the ecological integrity of the woodland while ensuring compliance with safety and operational requirements (**Chapter 12: Forestry**).
- Within Dunnyduff Wood, approximately 0.02 ha of category 1a woodland will be felled at the edge of the ancient woodland block. Forestry surveys identified the areas as young native broadleaves including sessile oak and downy birch planted in 2006 (**Chapter 12: Forestry**).
- Within Mill Wood, approximately 0.06 ha of ancient woodland (category 2a) will be subject to crown reduction. Forestry surveys found a diverse mix of native broadleaved species including sessile oak (*Quercus petraea*), downy birch, willow and hazel (*Corylus avellana*), which contribute to a structurally varied and ecologically important habitat. Therefore, crown reduction aims to maintain the ecological integrity of the woodland while ensuring compliance with safety and operational requirements (**Chapter 12: Forestry**).

8.4.88 Category 1a and 2a ancient woodland of semi-natural origin is considered irreplaceable; however, it is considered that the removal of trees which would otherwise compromise the construction and operation of the Proposed Development would be unlikely to threaten the long-term integrity of the wider ancient woodland network. This is due to the retainment of remaining woodland blocks, their soils and supporting environmental conditions. The effects to irreplaceable woodland listed on the AWI have therefore been assessed as adverse, direct, localised spatial magnitude, permanent and irreversible. Overall, although this loss would not threaten the wider long-term integrity of the ancient woodland network, its irreplaceable nature means that this overall moderate magnitude effect would be considered **significant**.

Regionally Important Woodlands

8.4.89 Approximately 130.03 ha of regionally important broadleaved and mixed yew woodland within Highland, 62.16 ha within Moray and 20.68 ha within Aberdeenshire would be lost to the Proposed Development's footprint (including the OC), including woodlands listed on the AWI that are not considered irreplaceable. The felling of trees within these areas, to maintain the Proposed Development's OC, would result in the loss of pertinent specimens including sycamore (*Acer pseudoplatanus*), alder, downy birch, hazel, ash (*Fraxinus excelsior*), sessile oak, horse-chestnut (*Aesculus hippocastanum*), silver birch (*Betula pendula*), beech (*Fagus sylvatica*), European larch (*Larix decidua*) and Scots pine (*Pinus sylvestris*). However, this would be unlikely to alter the function of the adjoining woodland as these unaffected trees and supporting environmental conditions would otherwise be retained. The effects to broadleaved, mixed and yew woodland have therefore been assessed as: adverse, direct, of a localised spatial scale, permanent and irreversible - but not at a level that would affect the integrity of broadleaved and mixed woodlands. As such these overall minor magnitude effects would be considered less than local level. Overall, this would be **not significant**.

8.4.90 Approximately 59.13 ha of coniferous woodland within Highland, 140.15 ha within Moray and 39.72 ha within Aberdeenshire occurs within the Proposed Development's footprint (including the OC), including woodlands listed on the AWI that are not considered irreplaceable. The felling of trees within these areas, to enable construction and to maintain the Proposed Development's OC, would result in the loss of these Scots pine dominated woodlands. However, this is considered unlikely to alter the function of the adjoining woodland, as these trees and supporting environmental conditions would otherwise be retained. The effects to native pinewood have therefore been assessed as: adverse, direct, of localised spatial scale, permanent and irreversible- but not at a level that would affect the integrity of coniferous woodlands. As such these overall minor magnitude effects would be considered less than local level. Overall, this would be **not significant**.

8.4.91 Approximately 0.67 km of line of trees in Highland, 0.33 km in Moray and 0.72 km in Aberdeenshire occurs within the Proposed Development's footprint. The felling of these tree lines to maintain the Proposed Development's OC, would result in the loss of these mixed woodland and coniferous woodland line of trees. However, this would be unlikely to alter the function of the remaining treelines acting as boundary features and supporting environmental conditions would otherwise be retained. The effects to treelines have therefore been assessed as: adverse, direct, of localised spatial scale, permanent and irreversible- but not at a level that would affect the integrity of tree lines. As such these overall minor magnitude effects would be considered less than local level. Overall, this would be **not significant**.

Blanket Bog (Nationally Important)

8.4.92 Approximately 8.43 ha of blanket bog within Highland and 4.43 ha within Moray is in good or moderate condition and considered Irreplaceable Habitat. The Peatland Condition Assessment (**Appendix 8.4: Peatland Condition Assessment**) deemed the blanket bog throughout the Proposed Development to be in modified condition, with active peat formation likely limited to minor depressions and hollows. This irreplaceable blanket bog would be lost to the Proposed Development's footprint through construction and installation of towers and through creation of temporary works areas over a period of up to four years. The removal of irreplaceable blanket bog, which if not removed would otherwise compromise the installation of the Proposed Development, would be unlikely to threaten the long-term integrity of this wider habitat in the surrounding area. Existing environmental conditions supporting this habitat would also otherwise be retained. The effects to irreplaceable blanket bog have therefore been assessed as: adverse, direct, localised spatial scale, permanent and irreversible. As the Proposed Development is impacting Irreplaceable Habitat over a four-year construction period, these overall moderate magnitude effects are considered **significant**.

8.4.93 The Applicant is committed to restore a greater extent of Irreplaceable blanket bog (moderate and good condition) than is permanently lost (1.66 ha in Highland and 1.4 ha in Moray). Temporarily lost blanket bog (6.77 ha in Highland and 3.03 ha in Moray) will be reinstated after completion of the Proposed Development, within four years.

8.4.94 Approximately 1.10 ha of blanket bog within Moray is within the Proposed Development's footprint and is in less than moderate condition and as such is not considered Irreplaceable Habitat (**Appendix 8.3: Biodiversity Net Gain Assessment**). The removal of blanket bog which if not removed would otherwise compromise the installation of the Proposed Development would be unlikely to threaten the long-term integrity of this habitat in the surrounding area. The supporting environmental conditions would otherwise be retained. The effects to blanket bog of less than moderate condition have therefore been assessed as: adverse, direct, localised spatial scale, permanent and irreversible – but this subset of the habitat is not considered irreplaceable. As such these overall minor magnitude effects to blanket bog of lower than moderate condition would be considered less than local level. This would be **not significant**.

Wetland (Locally Important)

- 8.4.95 Approximately 0.60 ha of wetland habitat within Highland, 1.52 ha within Moray and 0.26 ha within Aberdeenshire is located within the Proposed Development's footprint. The subset of this wetland, which if not removed would otherwise compromise the installation of the Proposed Development, would be unlikely to threaten the long-term integrity of this habitat in the surrounding area. Further details on hydrological impacts and effects are detailed in **Chapter 10: Water and Geological Environment**. The supporting environmental conditions would otherwise be retained. The effects to wetland habitats have therefore been assessed as: adverse, direct, localised spatial scale, permanent and irreversible, albeit not occurring at a level that reduces the general availability of wetland habitats. As such these overall minor magnitude effects would be considered less than local level. This would be **not significant**.

Grassland (Locally Important)

- 8.4.96 Approximately 4.35 ha of high distinctiveness grassland within Highland, 4.17 ha within Moray and 1.35 ha in Aberdeenshire are located within the Proposed Development's footprint. Additionally, approximately 17.29 ha of low distinctiveness grassland within Highland, 19.63 ha within Moray and 26.06 ha in Aberdeenshire are also located within the Proposed Development's footprint. The subset of this grassland which if not removed would otherwise compromise the installation of the Proposed Development would be unlikely to threaten the long-term integrity of this habitat in the surrounding area. The supporting environmental conditions would otherwise be retained. The effects to grasslands have therefore been assessed as: adverse, direct, localised spatial scale, permanent and irreversible – but not at a level that affects overall integrity of the habitat. As such these overall minor magnitude effects would be considered less than local level. This would be not significant.

Heathland (Locally Important)

- 8.4.97 Approximately 11.55 ha of heathland, within Highland, 8.72 ha in Moray and 0.20 ha in Aberdeenshire occur within the Proposed Development's footprint. The subset of this heathland which if not removed would otherwise compromise the installation of the Proposed Development would be unlikely to threaten the long-term integrity of this habitat in the surrounding area. The supporting environmental conditions would otherwise be retained. The effects to heathland habitats have therefore been assessed as: adverse, direct, localised spatial scale, permanent and irreversible– but not at a level that affects overall integrity of the habitat. As such these overall minor magnitude effects would be considered less than local level. This would be **not significant**.

Hedgerows (Locally Important)

- 8.4.98 Approximately 0.06 km of hedgerow in Highland, 0.08 km in Moray and 0.27 km in Aberdeenshire occurs within the Proposed Development's footprint. The subset of hedgerow habitats which if not removed would otherwise compromise the installation of the Proposed Development would be unlikely to threaten the long-term integrity of this habitat in the surrounding area and the supporting environmental conditions would otherwise be retained. A combination of hedgerows, shrubs and scrub will be planted within the OC as part of the roadside mitigation designed to slightly offset the impact of sequential views from key tourist routes and soften the appearance of the Proposed Development from the road (**Appendix 7.6 Forestry Landscape Mitigation Principles**). The effect to hedgerows has therefore been assessed as: adverse, direct, localised spatial scale, permanent and irreversible– but not at a level that affects overall integrity of the habitat. As such these overall minor magnitude effects would be considered less than local level. This would be **not significant**.

Scrub (Locally Important)

- 8.4.99 Approximately 2.89 ha of scrub within Highland, 0.54 ha within Moray and 0.06 ha within Aberdeenshire occur within the Proposed Development's footprint. The subset of scrub which would otherwise compromise the installation of the Proposed Development would be unlikely to threaten the long-term integrity of this habitat in the surrounding area. The supporting environmental conditions would otherwise be retained. The effect to scrub has therefore been assessed as: adverse, direct, localised spatial scale, permanent and irreversible– but not at a level that affects overall integrity of the habitat. As such these overall minor magnitude effects would be considered less than local level. This would be **not significant**.

Waterbodies and watercourses (Regionally Important)

- 8.4.100 The OHL oversails watercourses (including the River Spey SAC and Lower Findhorn Woods SAC which are discussed separately above), however, watercourse crossings / culverts are required for access tracks and therefore construction of the Proposed Development would directly impact on watercourses. Waterbodies are located throughout the LoD but are largely avoided by the Proposed Development, except for a single unnamed waterbody located within the working area of Tower CB1-6A. The working area will be micro-sited to ensure the waterbody is avoided. The embedded mitigation detailed above (especially GEMPs on Working In or Near Water Watercourse Crossings and Working with Concrete) will be implemented to prevent pollution of these watercourses and waterbodies. The degradation / pollution to the watercourses and waterbodies would be adverse, direct, localised spatial scale, temporary and reversible– but not at a level that affects overall integrity of the habitat. As such these overall minor magnitude effects would be considered less than local level. This would be **not significant**.

Habitat Degradation and Fragmentation

- 8.4.101 Temporary works comprising access routes, bellmouths and working platforms are expected to result in short-term damage and / or degradation of the following habitats within each LPA:
- Highland
 - National importance: blanket bog.
 - Regional importance: broadleaved woodland, mixed woodland and coniferous woodland.
 - Local importance: wetland, acid grassland, neutral grassland, heathland and scrub.
 - Unimportant habitats (scoped out): cropland, modified grassland and developed land.
 - Moray:
 - National importance: blanket bog.
 - Regional importance: broadleaved woodland, mixed woodland and coniferous woodland.
 - Local importance: wetland, acid grassland, calcareous grassland, neutral grassland, heathland and scrub.
 - Unimportant habitats (scoped out): cropland, modified grassland and developed land.
 - Aberdeenshire:
 - Regional importance: broadleaved woodland, mixed woodland and coniferous woodland.
 - Local importance: wetland, neutral grassland, heathland and scrub.
 - Unimportant habitats (scoped out): cropland, modified grassland and developed land.
- 8.4.102 This effect of habitat degradation and fragmentation is expected to be adverse, direct, localised spatial scale, temporary and reversible. As such these overall minor magnitude effects from temporary works would be considered less than local level. Any effects would be **not significant**.

Invasive Non-Native Species

- 8.4.103 Invasive non-native plant species, identified in both terrestrial and riparian habitats, may spread further if interfered with during construction works (disturbed ground, causing spread via carrier or wind). Whilst not considered an IEF, movement of construction traffic has the potential to cause the accidental spread of INNS to and / or from affected areas, which may have a detrimental effect on otherwise unaffected areas. Further spread of INNS is considered unlikely due to biosecurity measures outlined in the Embedded Mitigation including the GEMPs on Soil Management and Contaminated Land. Any spread would be adverse, direct, localised spatial scale, temporary and reversible. As such these overall minor magnitude effects would be considered less than local level. Any effects would be **not significant**

Protected Species

Bats (National Level Importance)

- 8.4.104 Full details on the baseline for bats are within **Appendix 8.1: UK Habitat and Protected Species** and shown on **Figure 8.1.3: Initial Bat Survey Results**, **Figure 8.1.4: Further Bat Survey Results** and **Figure 8.1.5: Night-time Bat Walkover and Static Bat Survey Results**.
- 8.4.105 Predicted impacts / effects that have been considered are as follows.
- 8.4.106 Adverse:
- Artificial Light at Night (ALAN).
 - Works affecting roosts / roosting bats (e.g., disturbance, destruction).
 - Loss of roost resources (i.e., PRFs).
 - Mortality and injury.
 - Noise.
 - Habitat fragmentation.

Artificial Light at Night (ALAN)

- 8.4.107 Whilst it is anticipated that the majority of construction works would be undertaken during hours of daylight, it is possible that artificial lighting is used to illuminate parts of the Proposed Development during the construction phase. As described in guidance from the Bat Conservation Trust (BCT) and Institute of Lighting Professionals (ILP)¹¹⁶, ALAN can affect bats at roosting sites, when foraging, and travelling across the landscape by:
- attracting prey species which could in turn attract bats, but in illuminated areas bats would be at greater risk of predation themselves; this could also alter population dynamics from areas where prey and bats have been displaced;
 - deterring bats from using illuminated roost features due to increased risk of predation; and
 - creating a barrier to movement between roosts and foraging sites and wider habitats.
- 8.4.108 These effects of ALAN would mainly relate to the active season but could still apply to the Winter months (when bats hibernate) if ALAN is directed at a roost / PRF¹¹⁷. The effects of ALAN on bat hibernation is currently unknown and field observations contradictory, however, should ALAN rouse a bat from hibernation then it will also deter the bat from re-entering the roost. The effects of ALAN have included increased predation risk, which in turn disrupts emergence activity and causes deteriorated foraging. Direct illumination on a roost / PRF can cause a

¹¹⁶ BCT and ILP (2023). Guidance Note 08/23: Bats and artificial lighting at night.

¹¹⁷ Downs, N. C., Beaton, V., Guest, J., Polanski, J., Robinson, S. L., and Racey P. A. (2003). The effects of illuminating the roost entrance on the emergence behaviour of *Pipistrellus pygmaeus*. *Biological Conservation*, Volume 111, Issue 2, Pages 247-252.

sudden decline in the number of emerging bats, this could be that the bats have either abandoned the roost or they were entombed / starved. ALAN can cause bats to completely abandon roosts¹¹⁸.

- 8.4.109 It is anticipated that the majority of situations where ALAN would be required would be over Winter months when daylight is limited, with only occasional use during the active season for specific tasks. As the requirement for security lighting is unknown and cannot be ruled out, it has been assessed. It is anticipated there would be no barrier effect due to the nature of the Proposed Development. There is potential for night-time security lighting illuminating sections of the Proposed Development during the active season. This could attract prey species, increase a bats risk of predation, and deter them from using PRFs at trees and buildings retained at / around the Proposed Development. In the absence of additional mitigation measures (**Section 8.5**), these effects of ALAN on the local bat populations would be adverse, direct, of low spatial magnitude (district), temporary and reversible - leading to an overall effect summarised as being at a local level on the CIEEM scale. ALAN would not be a significant impact for bats.

Works Affecting Roosts / Roosting Bats

- 8.4.110 It is noted that whilst the assemblage of bat species, roosts and supporting habitat has been valued as a single IEF (bats), primarily due to limitations in baseline data collection and as a precautionary approach, the impacts on different roost types (where known) have been explored.
- 8.4.111 Within each of the LPAs the following potential roost features (PRF), previously subject to preliminary roost assessment (PRA) will be lost or subject to disturbance. It should be noted that the duration of construction – four years – would mean that disturbance over that timescale is likely to lead to roost abandonment, making for a functional loss of roosts. Hence, disturbance and roost loss are considered together herein:
- Highland:
 - Tree PRFs: 91 are located within areas subject to felling requirements; 31 within 30 m of the Proposed Development would be subject to disturbance; 77 out with 30 m but within 100 m of the Proposed Development would be subject to disturbance from piling works; and 45 out with 100 m but within the LoD could be subject to disturbance as a result of micro-siting.
 - Structure: a single structure (S3) with suitable features for roosting bats lies within the Proposed Development which would be subject to loss / disturbance. Another structure (S2) is located within 100 m of the Proposed Development and would be subject to disturbance from piling works.
 - No confirmed roosts identified from proportional further survey effort.
 - The NBW and Static surveys confirmed bat activity from the six woodlands surveyed. Notably, the numbers of calls recorded during the expected period of S-SET in Woodland 1, Woodland 3, Woodland 4 and Woodland 13 suggest that these woodlands contain or are proximal to sizeable colony roosts (potentially including maternity roost) of these species of conservation value.
 - Moray:
 - Tree PRFs: 26 are located within areas subject to felling requirements; eight within 30 m of the Proposed Development would be subject to disturbance; 79 out with 30 m but within 100 m of the Proposed Development would be subject to disturbance from piling works; and 56 out with 100 m but within the LoD could be subject to disturbance as a result of micro-siting.
 - Structure: a structure (S1) with suitable features for roosting bats is located within 100 m of the Proposed Development and would be subject to disturbance from piling works.
 - A confirmed soprano pipistrelle roost (tree 0183b) was identified out with the LoD (147 m from the Proposed Development) from proportional further survey effort.

¹¹⁸ Voigt, C.C, C. Azam, J. Dekker, J. Ferguson, M. Fritze, S. Gazaryan, F. Hölker, G. Jones, N. Leader, D. Lewanzik, H.J.G.A. Limpens, F. Mathews, J. Rydell, H. Schofield, K. Spoelstra, M. Zagmajster (2018): Guidelines for consideration of bats in lighting projects. EUROBATs Publication Series No. 8. UNEP/EUROBATs Secretariat, Bonn, Germany, 62 pp.

- The NBW and Static surveys confirmed bat activity from the four woodlands surveyed. Based on peaks in bat activity when compared to the S-SET, it is likely that roosts are present within all four of the woodlands. Of note, Woodland 10 had high numbers of pipistrelle species calls, suggesting that this woodland contains or is proximal to sizeable colony roosts (potentially including maternity roosts) of these species of conservation value. Of further note, a single call of *Nyctalus* species bats was recorded within the *Nyctalus* species S-SET.
- Aberdeenshire:
 - Tree PRFs: 11 are located within areas subject to felling requirements; 37 within 30 m of the Proposed Development would be subject to disturbance; 71 out with 30 m but within 100 m of the Proposed Development would be subject to disturbance from piling works; and 25 out with 100 m but within the LoD could be subject to disturbance as a result of micro-siting.
 - Structure: a bridge (B1) with suitable features for roosting bats is located within the Proposed Development and will be subject to loss / disturbance.
 - No confirmed roosts were identified from proportional further survey effort; and
 - The NBW and Static surveys confirmed bat activity from the four woodlands surveyed. Based on peaks in bat activity when compared to the S-SET, it is likely that roosts are present within or proximal to all four of the woodlands. The survey effort did not identify any notable levels of calls during the S-SET of bat species recorded that would suggest a colony of bats is roosting within nearby woodlands which would be of significant conservation value.

8.4.112 Due to the proportional approach to protected species surveys, it is considered likely that further PRFs will be present out with the Bat Survey Area, within the Proposed Development and LoD, with some PRFs supporting bat roosts. A single bat roost was confirmed during the initial surveys, and more undetected bat roosts will likely be present in trees / woodland where suitable features exist. As such, the precautionary principle has been applied and the potential for works affecting undetected bat roosts within trees and structures within the Proposed Development and LoD has been assessed. If any undetected Summer breeding (maternity), non-breeding, or hibernation roosts are present within the Proposed Development, they would be lost where felling is required. If Summer breeding (maternity), non-breeding, or hibernation roosts are present within 30 m (100 m for piling) of the Proposed Development, they will be subject to disturbance. Works nearby PRFs during the maternity period, which are used as maternity roosts, pose an elevated risk to the welfare and reproductive health of a maternity colony, as disturbance during this sensitive period may displace the colony and result in fatalities. Similarly, works nearby PRFs during the hibernation period, where used by hibernating bats, pose an elevated risk to the welfare of bats - even if bats would not be harmed because works cease. Disturbance to hibernating bats during this period may displace them during a vulnerable period when prey is scarce and result in fatalities. In the absence of additional mitigation measures, the loss of roosts (including maternity and / or hibernation roosts) within the Proposed Development would be adverse, direct, of medium spatial magnitude (regional), permanent and irreversible. This is potentially significant at a regional level.

8.4.113 Works affecting hibernation and / or maternity roosts within the Proposed Development (e.g., roost loss) have potential to cause a significant effect; however, disturbance effects on roosts located outwith the Proposed Development would likely be not significant. The precautionary principle has been applied because there is insufficient information to consider an absence of maternity and hibernation roosts.

8.4.114 Bats can switch roosts within and between seasons and tree roosts in particular can be difficult to detect¹¹⁹. Therefore, the loss of roosting resources (i.e. PRFs) has also been considered and the precautionary principle has been applied due to incomplete information on PRFs across the entire Proposed Development and the likely potential for undetected roosts within suitable habitat.

¹¹⁹ Andrews (2018) Bat Roosts in Trees: A Guide to Identification and Assessment for Tree-Care and Ecology Professionals. Pelagic Publishing.

- 8.4.115 As a result of the Proposed Development and OC there will be a loss of 130.03 ha of broadleaved and mixed woodland in Highland, 62.16 ha in Moray and 20.68 ha in Aberdeenshire. Additionally, there will be a loss of 59.13 ha of coniferous woodland in Highland, 140.15 ha in Moray and 39.72 ha in Aberdeenshire. These woodlands have potential to provide PRFs which may support roosting bats. In the absence of additional mitigation measures, the loss of roosting resource (including maternity and / or hibernation roosts) within the Proposed Development would be adverse, direct, of medium spatial magnitude (regional), permanent and irreversible.
- 8.4.116 Overall, the combined effects of disturbance and potential loss of roost resources for bats is considered to be **significant** at a regional level.

Mortality and Injury

- 8.4.117 It is possible that construction works required to demolish buildings or fell trees (with PRFs described above) could result in accidental injury or killing of bats, where they may be roosting and remain undetected. In this example, this effect would be from direct contact with a bat, resulting in loss of the roost. Injury or killing of bats from direct contact would be adverse and long-term (injury) or permanent (death) for an individual bat. It would be reasonable to assume that demolition / felling works would cease in the event that an unexpected bat / roost is observed or suspected (due to the legislation protecting bats and in line with the bat SPP (**Appendix 3.6: Species Protection Plans (SPPs)**)). Therefore, the effects of accidental injury or killing of an individual or low number of bats would be adverse, direct, of low spatial magnitude (local), permanent and irreversible for individual bats. However, this would be medium-term and is considered reversible at a local population scale. It would not be a driver of the overall significance of the effects of construction on bats.

Noise

- 8.4.118 Noise disturbance could affect bats, resulting in disturbance where retained roosts and PRFs are located within 30 m of the Proposed Development (extended to 100 m for piling). Managing the times at which noise is produced will avoid disturbance to foraging and commuting bats in the active season (May to September inclusive), as such construction work is likely during daylight hours only (**Chapter 3: Project Description**). Overall, the resulting effect would be adverse, direct, of low spatial magnitude (local), temporary and reversible. It would not be a driver of the overall significance of the effects of construction on bats.

Habitat Fragmentation

- 8.4.119 The tree felling requirements to maintain the Proposed Development's OC would result in irreversible fragmentation of woodland habitat resources for bats. However, the creation of the OC through woodland would also create a new edge habitat, providing commuting routes for bat species, offering a sheltered edge and foraging resource. Additionally, the sequential development of scrub, heathland and bracken habitats within these previous woodland areas (both coniferous plantations and broadleaved, mixed and yew woodland) would provide alternative cover, foraging and habitat connectivity opportunities for bats traversing the OC. The resulting effect would be adverse, direct, of low spatial magnitude (localised), permanent and irreversible. It would not be a driver of the overall significance of the effects of construction on bats.

Significance

- 8.4.120 Overall, the combined effects on bats using the Proposed Development and surrounding area would be of overall moderate magnitude, **significant** at a regional scale, driven primarily by the scale of disturbance and potential for loss of roost resources. These effects combine to give an overall moderate magnitude class of effect. A regional scale has been applied because of the scale of the Proposed Development spanning three LPAs and the effects on bats and their roosts at such a scale.

Badger (Regional Level Importance)

8.4.121 Full details on the baseline for badger are within **Appendix 8.2: Confidential Badger and Freshwater Pearl Mussel** and shown on **Figure 8.2.1: Badger Survey Results**.

8.4.122 Predicted impacts / effects that have been considered are as follows.

- Adverse:
 - Works affecting setts / resting badgers (e.g., disturbance, destruction).
 - Mortality and injury.
 - Spatial reduction in territory / range and associated resources (e.g., foraging habitat, sett opportunities).
 - Habitat fragmentation.

Works affecting setts / resting badgers

8.4.123 The sett ID for all of the below setts is detailed within **Appendix 8.2: Confidential Badger and Freshwater Pearl Mussel**.

8.4.124 The construction of the Proposed Development would result in the unavoidable loss of the following setts:

- Highland: one outlier sett and one subsidiary sett.
- Moray: one outlier sett and one subsidiary sett.

8.4.125 Within a 30 m proximity of works associated with the Proposed Development, the following setts have the potential to be disturbed during construction:

- Highland: two main setts, two annexe setts, 12 outlier setts and four subsidiary setts.
- Moray: one main sett and one annexe sett.
- Aberdeenshire: one annexe sett and five outlier setts.

8.4.126 Within the wider 100 m buffer of working areas and access tracks for the Proposed Development, the following setts have the potential to be disturbed during piling associated with construction:

- Highland: one main sett, two annexe setts, 14 outlier setts and five subsidiary setts.
- Moray: one main sett, one annexe sett, four outlier setts and one subsidiary sett.
- Aberdeenshire: one main sett, four annexe setts, 12 outlier setts and one subsidiary sett.

8.4.127 Beyond the 100m buffer but within the LoD, the following setts have the potential to be disturbed should the location of the Proposed Development be micro-sited:

- Highland: one main sett, one annexe sett, four outlier setts and two subsidiary setts.
- Moray: one main sett, six outlier setts and one subsidiary sett.
- Aberdeenshire: three main setts and five outlier setts.

8.4.128 It is considered likely that the above-described setts (shown on **Figure 8.2.1: Badger Survey Results**) that have the potential to be impacted or disturbed will be used by different badger social groups, owing to the large area covered by the Proposed Development.

8.4.129 Due to the proportional approach to protected species surveys, further undetected badger setts will likely exist outwith the Badger Survey Area, potentially within the footprint of the Proposed Development and LoD. It is also recognised that new setts may be constructed by badgers within the working area at any time. As such, the precautionary principle has been applied and the potential for works affecting undetected badger setts within the Proposed Development and LoD has been assessed. If any setts or resting sites are present within the Proposed Development footprint, they would be lost (if micro-siting is not possible). If setts or resting sites are present within 30 m (100 m for piling) of the Proposed Development, they will be subject to temporary disturbance. The loss of setts within the Proposed Development would be adverse, direct, localised spatial scale, permanent and irreversible for individual setts. There would be legal obligations and licensing requirements associated with any works affecting confirmed setts. At a local population level, this may be reversible.

Mortality and injury

8.4.130 Given the relatively high levels of badger activity within the Badger Survey Area, in the absence of mitigation measures there is an elevated risk of accidental killing of, or injury to, badgers during general construction activities (e.g. plant movement or excavations), or specific works affecting badger setts (e.g. sett destruction). Accidental killing or injury of badgers would be adverse, direct, of low spatial scale (local), permanent and irreversible for an individual. However, this would be medium-term and reversible at a local population scale.

Spatial reduction in territory / range and associated resources

8.4.131 As well as sett loss and disturbance, the social groups within the vicinity of the Proposed Development are anticipated to lose a proportion of foraging habitat (e.g. cropland, grassland as shown on **Figure 8.1.2: UK Habitat Survey Results**). This is based on the spatial distribution of other setts across the wider Badger Study Area and assumption that they occupy / forage across the LoD. The loss of foraging habitat and associated territory would be adverse, direct, of low spatial scale (district), permanent and irreversible.

Habitat Fragmentation

8.4.132 Habitat loss associated with the Proposed Development would result in localised fragmentation of woodland, heathland, grassland and agricultural land used for foraging and commuting by badger. These habitats are abundant and widespread in the surrounding environment. The creation of the new OC and the sequential development of scrub, heathland and bracken habitats would provide alternative cover, foraging, commuting and sett building opportunities for badgers. The resulting effect of habitat loss for the Proposed Development would be adverse, direct, low spatial scale (district), permanent and irreversible.

Significance

8.4.133 In the context of the high density of badger setts in the region and the landscape / land use providing an abundance of foraging habitat, the above effects would be adverse for the social groups using the Proposed Development and surrounding area. However, this would not undermine the biodiversity conservation objectives of the regional population. This would not affect the long-term distribution and abundance of the area's populations, especially given the abundance of high suitability habitats. The habitat described in **Section 8.3: Baseline Conditions** do not include moderate or low suitability habitat that badgers could also use and be present in. The overall minor magnitude effect would be less than local and **not significant**.

Pine Marten (Regional Level Importance)

8.4.134 Full details on the baseline for pine marten are within **Appendix 8.1: UK Habitat and Protected Species** and shown on **Figure 8.1.6: Other Protected and Notable Species Survey Results**.

8.4.135 Predicted impacts / effects that have been considered are as follows:

- Adverse:
 - Works affecting resting sites / dens.

- Mortality and injury.
- Changes to resources and habitat fragmentation.

Works affecting resting sites / dens

8.4.136 No suitable denning habitat identified during the baseline surveys will be lost to the construction of the Proposed Development in any of the LPAs.

8.4.137 Within a 30 m proximity of the working areas and access tracks for the Proposed Development, the following resting sites have the potential to be disturbed during construction:

- Moray
 - PM12 Potential denning habitat.
- Aberdeenshire
 - PM11 Potential denning habitat.
 - PM14 Potential denning habitat.

8.4.138 Beyond the 30 m buffer but within the outer 100 m proximity of the working areas and access tracks for the Proposed Development, the following resting sites have the potential to be disturbed during construction:

- Highland
 - PM2 Potential denning habitat.
- Aberdeenshire
 - PM9 Potential denning habitat.
 - PM15 Potential denning habitat.
 - PM16 Potential denning habitat.

8.4.139 No suitable denning habitat identified during the baseline surveys is located beyond the 100m buffer but within the LoD. The features detailed above are shown on **Figure 8.1.6: Other Protected and Notable Species Survey Results**.

8.4.140 Due to the proportional approach to protected species surveys, further undetected pine marten dens may exist outwith the Pine Marten Survey Area, within the Proposed Development footprint and LoD. As such, the precautionary principle has been applied and the potential for works affecting undetected pine marten resting sites within the Proposed Development and LoD has been assessed. If any dens or resting sites are present within the Proposed Development, they would be lost (if micro-siting is not possible). If dens or resting sites are present within 30 m (100 m if the den is suspected to be used for breeding) of the Proposed Development, they will be subject to disturbance and could result in the temporary loss of habitat during the construction phase. The loss of dens within the Proposed Development would be adverse, direct, of low spatial magnitude (district), permanent and irreversible. There would be legal obligations and licensing requirements associated with any works affecting confirmed dens. At a local population level, this may be reversible.

Mortality and Injury

8.4.141 Given the presence of pine marten throughout the Proposed Development and LoD, in the absence of mitigation measures there is an elevated risk of accidental killing of, or injury to, this species during general construction activities (e.g. vehicle collision or entrapment) or specific works affecting resting sites (e.g. tree felling, den destruction). Felling trees with undetected pine marten tree den sites could result in the killing of or injury to the individuals occupying them. Such impacts would require a development licence from NatureScot, prior to the Proposed Development commencing. However, should the impacts occur, they are not predicted to adversely affect the pine marten's conservation integrity due to the measures detailed within this report (baseline surveys, embedded and additional mitigation). Effects associated with mortality or injury of pine marten would be adverse;

direct, of localised spatial magnitude, permanent and irreversible for the individual animals. It would be unlikely to occur at a scale that would cause an overall reduction in the regional population.

Changes to resources and habitat fragmentation

- 8.4.142 As a result of the tree felling associated with the Proposed Development and OC, pine marten will lose potential denning sites as well as foraging and commuting resource (e.g. woodland and moorland as shown in **Figure 8.1.2: UK Habitat Survey Results**). However, adjacent woodland habitats unaffected by the Proposed Development remain well connected to the wider landscape and woodland resource. Additionally, scrub and heathland will establish within the wayleave which will provide alternative foraging and commuting resource for pine marten. The resulting effect of changes to resource and habitat fragmentation would be adverse, direct, of low spatial magnitude (district), permanent and irreversible.

Significance

- 8.4.143 In the context of the suitability of woodland and moorland habitats (see **Figure 8.1.2: UK Habitat and Protected Species**) to support pine marten within the Proposed Development and LoD and the landscape / land use providing an abundance of foraging habitat, the above effects would be adverse for the immediate population using the Proposed Development and surrounding area. However, this would not undermine the biodiversity conservation objectives of the regional population. The above-described effects would not affect the long-term distribution and abundance of the area's pine marten populations; therefore, the overall effect of works affecting pine marten resting sites (through disturbance and loss), or through mortality and injury, would be classed as minor, less than local and **not significant**.

Red Squirrel (Regional Level Importance)

- 8.4.144 Full details on the baseline for red squirrel are within **Appendix 8.1: UK Habitat and Protected Species** and shown on **Figure 8.1.6: Other Protected and Notable Species Survey Results**.

- 8.4.145 Predicted impacts / effects that have been considered are as follows.

- Adverse:
 - Works affecting resting sites / dreys;
 - Mortality and injury
 - Changes to resources and habitat fragmentation.

Works affecting resting sites / dreys

- 8.4.146 The construction of the Proposed Development would result in the unavoidable loss of the following potential dreys:

- Aberdeenshire
 - RS15.

- 8.4.147 Within the outer 50 m proximity of the working areas and access tracks for the Proposed Development, the following potential dreys have the potential to be disturbed during construction:

- Highland
 - RS3, RS5, RS6, RS7 and RS8.

- 8.4.148 Beyond the 50 m buffer but within the LoD, the following dreys have potential to be disturbed should the location of the Proposed Development be micro-sited:

- Highland
 - RS1, RS9, RS11 and RS12.

- Moray
 - RS4.

8.4.149 The features detailed above are shown on **Figure 8.1.6: Other Protected and Notable Species Survey Results**.

8.4.150 Due to the proportional approach to protected species surveys, further undetected red squirrel dreys could be present out with the Red Squirrel Survey Area, within the Proposed Development and LoD. As such, the precautionary principle has been applied and the potential for works affecting undetected red squirrel dreys within the Proposed Development and LoD has been assessed. If any dreys or resting sites are present within the footprint of the Proposed Development, they would be lost (if micro-siting is not possible). If dreys are present within 50 m of the Proposed Development, they will be subject to disturbance. The loss of dreys within the Proposed Development would be adverse, direct, of low spatial magnitude (district), permanent and irreversible. There would be legal obligations and licensing requirements associated with any works affecting confirmed dreys. At a local population level, this may be reversible.

Mortality and Injury

8.4.151 Given the presence of red squirrel throughout the Proposed Development and LoD, in the absence of mitigation measures there is an elevated risk of accidental killing of, or injury to, this species during general construction activities (e.g. vehicle collision or entrapment) or specific works affecting resting sites (e.g. tree felling, drey destruction). Felling trees with undetected dreys could result in the accidental killing of or injury to the red squirrel occupying them. Such impacts would require a development licence from NatureScot, prior to the Proposed Development commencing. However, should the impacts occur, they are not predicted to adversely affect the red squirrel's conservation integrity at a district scale. Effects associated with mortality or injury of protected species would be adverse, direct, of localised spatial magnitude, permanent and irreversible.

Changes to resources and habitat fragmentation

8.4.152 As a result of the tree felling associated with the Proposed Development and OC, red squirrel will lose potential dreys as well as foraging and commuting resource (i.e. woodlands as shown on **Figure 8.1.2: UK Habitat Survey Results**). However, the remaining woodland is still well connected to the wider landscape and woodland resource. Additionally, scrub and heathland will establish within the wayleave providing alternative foraging and commuting resource for red squirrel. The resulting effect of changes to resources and habitat fragmentation for the Proposed Development would be adverse, direct, of low spatial magnitude (district), permanent and irreversible.

Significance

8.4.153 In the context of the suitability of woodland habitats (see **Figure 8.1.2: UK Habitat Survey Results** and **Figure 8.1.6: Other Protected and Notable Species Survey Results**) to support red squirrel within the region (and the landscape / land use providing an abundance of foraging habitat), the above effects would be adverse for the immediate population using the Proposed Development and immediate surrounding area. However, this would not undermine the biodiversity conservation objectives of the regional red squirrel population and the long-term regionally important distribution and abundance of the population would not be affected. Therefore, the overall effects of works affecting red squirrel resting sites (through disturbance and loss), injury and mortality, and habitat fragmentation, would be classed as minor, less than local and **not significant**.

Otter (Regional Level Importance)

8.4.154 Full details on the baseline for otter are within **Appendix 8.1: UK Habitat and Protected Species** and shown on **Figure 8.1.6: Other Protected and Notable Species Survey Results**.

8.4.155 Predicted impacts / effects that have been considered are as follows.

- Adverse:
 - Works affecting resting sites.
 - Mortality and injury.
 - Changes to resources and habitat fragmentation.

Works affecting resting sites

8.4.156 No potential resting sites identified during the baseline surveys will be lost to the construction of the Proposed Development.

8.4.157 Within the outer 30 m proximity of the working areas and access tracks for the Proposed Development, the following resting sites have the potential to be disturbed during construction:

- Highland
 - Potential rest site: O5A
- Moray
 - Potential holt: O7
 - Potential Couch: O8

8.4.158 Beyond the 30 m buffer but within the 200 m buffer applied for breeding sites, the following resting sites have potential to be disturbed:

- Highland
 - Potential holt: O18
- Moray
 - Potential holt: O10, O11 and O12

8.4.159 The features detailed above are shown on **Figure 8.1.6: Other Protected and Notable Species Survey Results**.

8.4.160 Due to the proportional approach to protected species surveys, further undetected otter holts or resting sites could be present out with the Otter Survey Area, within the Proposed Development and LoD. As such, the precautionary principle has been applied and the potential for works affecting undetected otter holts or resting sites within the Proposed Development and LoD has been assessed. If any holts or resting sites are present within the Proposed Development, they would be lost (if micro-siting is not possible). If holts or resting sites are present within 30 m (200 m for breeding holts) of the Proposed Development, they will be subject to temporary disturbance. The loss of holts or resting sites within the Proposed Development would be adverse, direct, of low spatial magnitude (district), permanent and irreversible. There would be legal obligations and licensing requirements associated with any works affecting confirmed holts or resting sites. At a local population level, this may be reversible.

Mortality and Injury

8.4.161 Given the presence of otter throughout the Proposed Development and LoD, in the absence of mitigation measures there is an elevated risk of accidental killing of, or injury to, this species during general construction activities (e.g. vehicle collision or entrapment) or specific works affecting resting sites (e.g. disturbance causing holt abandonment). Incidental events would be adverse, direct, of low spatial magnitude (local), permanent and irreversible for an individual. However, this would be medium-term and reversible at a local population scale.

Changes to resources and habitat fragmentation

- 8.4.162 As a result of the habitat loss and disturbance associated with the Proposed Development and OC, otter could lose potential holt sites or resting sites (i.e. habitats within 200 m of watercourses as shown in **Figure 8.1.2: UK Habitat Survey Results**). However, the remaining riparian habitat remains well connected to the wider landscape and riparian resource.
- 8.4.163 It is reasonable to assume that embedded good construction practices (set out in Embedded Mitigation) would remove / sufficiently reduce the risk of accidental pollution of watercourses during construction and this is not discussed further. However, construction works at the banksides and in-channel have potential to cause a temporary fragmentation of resources within an otter(s) territory, potentially resulting in their displacement. This would be temporary (during watercourse crossings / culverting under access tracks). As a highly mobile species, it is considered likely that otter would be continue using bankside habitat for passage up and downstream of the works.
- 8.4.164 Changes to resource and habitat fragmentation would be adverse, direct, of low spatial magnitude (district), permanent and irreversible.

Significance

- 8.4.165 In the context of the suitability of riparian habitats (see **Figure 8.1.2: UK Habitat Survey Results** and **Figure 8.1.6: Other Protected and Notable Species Survey Results**) to support otter within the region and the landscape / land use providing an abundance of foraging habitat, the above effects would be adverse for the immediate populations using the Proposed Development and surrounding area. However, this would not undermine the biodiversity conservation objectives of the population at a regional scale and it is considered that the long-term distribution and abundance of the areas otter populations would not be affected. The overall effect Therefore, the overall effects of works affecting otter resting sites (through disturbance and loss), injury and mortality, and habitat fragmentation would be classed as minor, less than local and **not significant**.

Water vole (Regional Level Importance)

- 8.4.166 Full details on the baseline for water vole are within **Appendix 8.1: UK Habitat and Protected Species** and shown on **Figure 8.1.6: Other Protected and Notable Species Survey Results**.
- 8.4.167 Predicted impacts / effects that have been considered are as follows.
- Adverse:
 - Works affecting resting sites (burrows).
 - Mortality and injury.
 - Changes to resources and habitat fragmentation.

Works affecting resting sites

- 8.4.168 No evidence of water vole was identified during the baseline surveys within 50 m of the Proposed Development.
- 8.4.169 Due to the proportional approach to protected species surveys, undetected water vole burrows may exist out with the Water Vole Survey Area, within the Proposed Development and LoD. As such, the precautionary principle has been applied and the potential for works affecting undetected burrows has been assessed. If any burrows are present within the Proposed Development, they would be lost (where micro-siting is not possible). If burrows are present within 10 m of the Proposed Development, they will be subject to disturbance. The loss of burrows within the Proposed Development would be adverse, direct, of low spatial magnitude (district), permanent and irreversible. There would be legal obligations and licensing requirements associated with any works affecting confirmed burrows. At a local population level, this may be reversible.

Mortality and Injury

- 8.4.170 Given the potential presence of water vole throughout the Proposed Development and LoD, in the absence of mitigation measures there is an elevated risk of accidental killing of, or injury to, this species during general construction activities (e.g. trampling or entrapment) or specific works affecting resting sites (e.g. burrow destruction). Incidental events would be adverse, direct, of low spatial magnitude (local), permanent and irreversible for an individual. However, this would be medium-term and reversible at a local population scale.

Changes to resources and habitat fragmentation

- 8.4.171 As a result of the habitat loss associated with the Proposed Development and OC, water vole could lose habitat, including places of shelter and foraging resource, where riparian / wetland areas are affected. However, the remaining riparian / wetland habitat remains well connected to the wider landscape and riparian resource.
- 8.4.172 It is reasonable to assume that embedded good construction practices (set out in Embedded Mitigation) would remove / sufficiently reduce the risk of pollution of watercourses located within the Proposed Development's footprint during construction; and is therefore not discussed further. However, construction works at the banksides and in-channel would have potential to cause a fragmentation of resources within a water voles territory and their displacement. This would be temporary (during culverting under access tracks). As a mobile species, it is possible that water voles would be able to use bankside habitat to continue passage up and downstream of the works.
- 8.4.173 Changes to resource and habitat fragmentation would be adverse, direct, of low spatial magnitude (local), permanent and irreversible.

Significance

- 8.4.174 In the context of the suitability of riparian habitats (see **Figure 8.1.2: UK Habitat Survey Results** and **Figure 8.1.6: Other Protected and Notable Species Survey Results**) to support water vole within the region and the landscape / land use providing an abundance of foraging habitat, the above effects would be adverse for the immediate populations using the Proposed Development and surrounding area. However, this would not undermine the biodiversity conservation objectives of the regional population and would not affect the long-term distribution and abundance of the area's water vole populations. The overall effects of works affecting water vole resting sites (through disturbance and loss), injury and mortality, and habitat fragmentation would be classed as minor, less than local and **not significant**.

Wildcat (International Level Importance)

- 8.4.175 Full details on the baseline for wildcat are within **Appendix 8.1: UK Habitat and Protected Species** and shown on **Figure 8.1.6: Other Protected and Notable Species Survey Results**.
- 8.4.176 Predicted impacts / effects that have been considered are as follows.
- Adverse:
 - Works affecting resting sites.
 - Mortality and injury.
 - Changes to resources and habitat fragmentation.

Works affecting resting sites

- 8.4.177 No potential resting sites identified during the baseline surveys will be lost to the construction of the Proposed Development.
- 8.4.178 Within the outer 200 m proximity of the working areas and access tracks for the Proposed Development, the following resting sites have potential to be disturbed during construction:

- Highland
 - Potential denning site: WC2; and
 - Potential resting site: WC3, WC4, WC5, WC6, WC7 and WC38.
- Moray
 - Potential resting site: WC12 and WC14.
- Aberdeenshire
 - Potential denning site: WC15 and WC16.
 - Potential resting site: WC17, WC18, WC19, WC20, WC22, WC23, WC24, WC25, WC26, WC27, WC28, WC29, WC30, WC31, WC32, WC33, WC34, WC35, WC36, WC37, WC39, WC40 and WC41.

8.4.179 Beyond the 200 m buffer but within the LoD, the following wild cat resting sites have the potential to be disturbed should the location of the Proposed Development be micro-sited:

- Highland
 - Potential denning site: WC1.

8.4.180 The features detailed above are shown on **Figure 8.1.6: Other Protected and Notable Species Survey Results**.

8.4.181 Due to the proportional approach to protected species surveys, undetected wildcat dens could be present out with the Wildcat Survey Area, within the Proposed Development and LoD. As such, the precautionary principle has been applied and the potential for works affecting undetected dens has been assessed. If any undetected dens are present within the Proposed Development, the Proposed Development would need to be micro-sited. Wildcat are currently in unfavourable conservation status in Scotland; therefore it is unlikely that a licence will be issued by NatureScot for wildcat den destruction. If dens are present within 200 m of the Proposed Development, they will be subject to disturbance. The disturbance of dens within the Proposed Development would be adverse, direct, of low spatial magnitude (local), permanent and irreversible. There would be legal obligations and licensing requirements associated with any works affecting confirmed dens¹²⁰. At a local population level, this may be reversible.

Mortality and Injury

8.4.182 Given the potential presence of wildcat throughout the Proposed Development and LoD, in the absence of mitigation measures there is an elevated risk of accidental killing of, or injury to, this species during general construction activities (e.g. vehicle collision or entrapment) or specific works affecting resting sites (e.g. den destruction). Incidental events would be adverse, direct, of low spatial magnitude (local), permanent and irreversible for an individual.

Changes to resources and habitat fragmentation

8.4.183 As a result of the tree felling associated with the Proposed Development and OC, wildcat will lose potential denning sites as well as foraging and commuting resource (woodland edge habitat as shown on **Figure 8.1.2: UK Habitat Survey Results**). However, adjacent woodland remains well connected to the wider landscape and woodland resource. Additionally, scrub and heathland will establish within the wayleave, providing alternative foraging and commuting resource for wildcat. The resulting effect of changes to resources and habitat fragmentation for the Proposed Development would be adverse, direct, of low spatial magnitude (local), permanent and irreversible.

¹²⁰ Destruction of a confirmed den would unlikely be licensed owing to the unfavourable conservation status of wildcat in Scotland.

Significance

8.4.184 In the context of the suitability of woodland and woodland edge habitat (see **Figure 8.1.2: UK Habitat Survey Results** and **Figure 8.1.6: Other Protected and Notable Species Survey Results**) to support wildcat within the region and the landscape / land use providing an abundance of foraging habitat, the above effects would be adverse for the wildcat population using the Proposed Development and surrounding area. However, the remaining connectivity of woodland immediately adjacent to the Proposed Development to the wider landscape means that, combined with mitigation for disturbance to dens, any localised loss of habitat and fragmentation would not undermine the biodiversity conservation objectives of the population. This would not affect the long-term distribution and abundance of the area's wildcat populations. The overall effect is classed as minor, less than local and **not significant**.

Fish (Regional Level Importance)

8.4.185 Full details on the baseline for fish are within **Appendix 8.1: UK Habitat and Protected Species**.

8.4.186 Predicted impacts / effects that have been considered are as follows:

- Adverse:
 - Habitat degradation and fragmentation.
 - Mortality and injury.
 - Habitat degradation and fragmentation

8.4.187 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 the Proposed Development and topographical challenges, some watercourse crossings will be required, associated with proposed access tracks. The design of watercourse crossings will be agreed by the Principal Contractor as part of the detailed design, following best practice in consultation with SEPA. Appropriate authorisations will be obtained by the Principal Contractor, as required. All watercourse crossings (including both temporary and permanent) will comply with the Water Environment (Controlled Activities) (Scotland) Regulations 2011 and will follow best practices in line with SEPA guidance. Fair, poor and very poor access tracks will receive new culvert pipes where required (**Chapter 3: Project Description**). Installation will follow the Watercourse Crossings and Working in or Near Water GEMPs (**Appendix 3.5: General Environmental Management Plans (GEMPs)**) to ensure works avoid sensitive times¹²¹, do not impede fish passage, and seeks to avoid fish mortalities. Further discussion on the water crossings proposed as part of the Proposed Development, and a schedule of watercourse crossings is provided in **Chapter: 10 Water and Geological Environment**.

8.4.188 Due to the proportional approach to protected species surveys, watercourses suitable for fish could be present out with the Fish Survey Area, within the Proposed Development and LoD. As detailed above, the OHL will oversail watercourses within the Proposed Development; however, in-channel works and culverts will be required for access tracks, which were not included within the Fish Survey Area and baseline surveys as this information was not known at the time of survey. As such, the precautionary principle has been applied and the potential for works affecting undetected fish habitat within the Proposed Development and LoD has been assessed.

8.4.189 It is reasonable to assume that embedded good construction practices (set out in Embedded Mitigation) would reduce the risk of pollution (e.g., silt, chemicals, waste materials) and sedimentation of surface waters arising from construction to a low probability. Any accidental pollution incident affecting habitat quality would be adverse, direct, of low spatial magnitude (local), temporary and reversible.

¹²¹ Salmonid spawning takes place between November and January with eggs likely to remaining in April. Where impacts to salmonids are anticipated, a works restriction period of 1 October to 31 May (inclusive) should be implemented

8.4.190 Construction works at the banksides and in-channel associated with the culverts required for access tracks, would also have potential to impact fish spawning habitat – both from physical obstruction but also by noise and vibration. However, the Proposed Development is unlikely to cause an obstruction to fish migration (usually done during the night) via visual disturbance as construction work is likely during daylight hours only (**Chapter 3: Project Description**). Potential habitat degradation and fragmentation would be adverse, direct, localised spatial magnitude, temporary (during culvert construction) and reversible.

Mortality and injury

8.4.191 There would be an associated risk of accidental killing of individuals during construction as watercourses are potentially suitable for salmonids. Individual deaths would be adverse, direct, of low spatial magnitude (local), permanent and irreversible, albeit this would be of low probability.

Significance

8.4.192 In the context of the suitability to support fish throughout the watercourses located within the Proposed Development, the above effects would be adverse for the local populations of fish using the Proposed Development and surrounding watercourses. The impacts associated with the above effects would not undermine the conservation objectives for fish (notably salmonids), should suitable habitat be present. The overall effect would be classed as minor, less than local and **not significant**.

Freshwater Pearl Mussel (International Level Importance)

8.4.193 Full details on the baseline for FWPM are within **Appendix 8.2: Confidential Badger and Freshwater Pearl Mussel** and shown on **Figure 8.2.2: Freshwater Pearl Mussel Survey Results**.

8.4.194 Predicted impacts / effects that have been considered are as follows.

- Adverse:
 - Habitat degradation and fragmentation.
 - Mortality and injury.

Habitat degradation and fragmentation

8.4.195 The approach to watercourses and working methods is detailed above in the section entitled: Fish.

8.4.196 Due to the proportional approach to protected species surveys, watercourses suitable for FWPM could be present out with the areas surveyed (River Spey catchment), within the Proposed Development and LoD. As detailed above, the OHL will oversail watercourses within the Proposed Development; however, in-channel works and culverts will be required for access tracks, which were not included within the FWPM Survey Area and baseline surveys (this information was not known at the time of survey). As such, the precautionary principle has been applied and the potential for works affecting undetected FWPM habitat within the Proposed Development and LoD has been assessed.

8.4.197 It is reasonable to assume that embedded good construction practices (set out in Embedded Mitigation) would reduce the risk of pollution (e.g., silt, chemicals, waste materials) and sedimentation of surface waters arising from construction to a low probability. Sedimentation causes smothering in FWPM and is often caused by tree felling and / or soil erosion. Any incident affecting habitat quality would be adverse, direct, of low spatial scale (local), temporary and reversible.

8.4.198 Additionally, the effects detailed in Fish above are relevant to FWPM as they overwinter on the gills of salmonids in their first year of life.

Mortality and injury

- 8.4.199 There would be an associated risk of accidentally causing FWPM deaths via sedimentation, causing smothering or accidental killing of individuals during construction. Individual deaths would be adverse, direct, of low spatial magnitude (local), permanent and irreversible, albeit this would be of low probability.

Significance

- 8.4.200 In the context of the suitability to support FWPM throughout the watercourses located within the Proposed Development, the above effects would be adverse for the local population of FWPM using the Proposed Development and surrounding area. The impacts associated with the above effects would not undermine the conservation objectives for FWPM, should suitable habitat be present. However, the FWPM SPP focuses strongly on complete avoidance of any impact to this species, given its endangered status. Therefore any impact to FWPM, inside or outside a designated site, regardless of its minor and potentially less than local magnitude, must be classed as **significant**.

Great Crested Newt (District Level Importance)

- 8.4.201 Full details on the baseline for GCN are within **Appendix 8.1: UK Habitat and Protected Species** and shown on **Figure 8.1.6: Other Protected and Notable Species Survey Results**.

- 8.4.202 Predicted impacts / effects that have been considered are as follows.

- Adverse:
 - Works affecting terrestrial habitat and breeding ponds.
 - Mortality and injury.
 - Changes to resources and habitat fragmentation.

Works affecting terrestrial habitat and breeding ponds

- 8.4.203 Within Highland, 28 ponds were deemed suitable for GCN and a single pond returned a positive eDNA result for GCN.
- 8.4.204 No ponds were deemed suitable to support GCN within Moray.
- 8.4.205 No further studies were conducted on waterbodies within Aberdeenshire as per the baseline (**Section 8.3**).
- 8.4.206 Due to the proportional approach to protected species surveys, GCN breeding ponds and surrounding terrestrial habitat could be present out with the GCN Survey Area, within the Proposed Development and LoD. As such, the precautionary principle has been applied and the potential for works affecting undetected breeding ponds within the Proposed Development and LoD has been assessed. If any GCN habitat is present within the Proposed Development footprint, it would be lost (if micro-siting not possible). If such habitat is present within 500 m of the Proposed Development, it will be subject to disturbance. The loss of GCN habitat within the Proposed Development would be adverse, direct, of low spatial magnitude (local), permanent and irreversible. There would be legal obligations and licensing requirements associated with any works affecting confirmed breeding ponds. At a local population level, this may be reversible.

Mortality and injury

- 8.4.207 Given the potential presence of GCN throughout the Proposed Development and LoD (within Highland) there is an elevated risk of accidental killing of, or injury to, this species during general construction activities (e.g. trampling or entrapment) or specific works affecting resting sites (e.g. GCN habitat destruction including breeding ponds and terrestrial habitat). Incidental events would be adverse, direct, of low spatial magnitude (local), permanent and irreversible for an individual. However, this would be medium-term and reversible at a local population scale.

Changes to resources and habitat fragmentation

8.4.208 Ponds within the LoD will not be affected by the Proposed Development and working areas will be micro-sited to ensure they are avoided. There will be loss to the surrounding terrestrial habitat including rough grassland, scrub, hedgerows and woodland¹²² (as shown in **Figure 8.1.2: UK Habitat Survey Results**), however, the remaining habitat is still well connected to the wider landscape and habitat resource. Should construction cause further habitat fragmentation between hibernacula and breeding ponds, further mitigation may be required (e.g. underpasses under temporary roads). The resulting effect of habitat loss for the Proposed Development would be adverse, direct, localised spatial scale, permanent and irreversible.

Significance

8.4.209 In the context of the suitability to support GCN within Highland and Moray and the landscape / land use providing an abundance of terrestrial habitat, the above effects would be adverse for the immediate populations using the Proposed Development and surrounding area. However, this would not undermine the biodiversity conservation objectives of the population at a district scale and the long-term distribution and abundance of the area's population would not be affected. The overall minor effect would be less than local and **not significant**.

Reptiles (Local Level Importance)

8.4.210 Full details on the baseline for reptiles are within **Appendix 8.1: UK Habitat and Protected Species** and shown on **Figure 8.1.6: Other Protected and Notable Species Survey Results**.

8.4.211 Whilst reptiles are only protected under the Wildlife and Countryside Act 1981 (as amended) from reckless killing and injury, the below has been included as best practice with regards to their hibernacula and basking sites.

8.4.212 Predicted impacts / effects that have been considered are as follows:

- Adverse:
 - Works affecting hibernacula / basking sites.
 - Mortality and injury.
 - Changes to resources and habitat fragmentation.
- Beneficial:
 - Creation of hibernacula / basking sites.

Works affecting hibernacula / basking sites

8.4.213 Due to the proportional approach to protected species surveys, undetected reptile hibernacula and basking sites could be present out with the baseline survey areas, within the Proposed Development and LoD. As such, the precautionary principle has been applied and the potential for works affecting undetected hibernacula within the Proposed Development and LoD has been assessed. If any hibernacula or basking sites are present within the Proposed Development, they would be lost (if micro-siting is not possible). The loss of hibernacula / reptile habitat within the Proposed Development would be adverse, direct, localised spatial magnitude, permanent and irreversible. At a local population level, this may be reversible.

¹²² Langton, T.E.S., Beckett, C.L., and Foster, J.P. (2001), Great Crested Newt Conservation Handbook, Froglife, Halesworth.

Mortality and injury

- 8.4.214 Given the potential presence of reptiles throughout the Proposed Development and LoD, there is an elevated risk of accidental killing of, or injury to, these species during general construction activities (e.g. trampling or entrapment) or specific works affecting resting sites (e.g. hibernacula). Incidental events would be adverse, direct, of low spatial magnitude (local), permanent and irreversible for an individual. However, this would be medium-term and reversible at a local population scale.

Changes to resources and habitat fragmentation

- 8.4.215 As a result of the habitat loss associated with the Proposed Development and OC, reptiles will lose potential hibernacula (e.g. log piles, brash), basking sites (e.g. stone, bare ground) as well as foraging and commuting resource. However, the remaining habitat is still well connected to the wider landscape and the woodland clearance will result in the creation of edge habitat beneficial for reptiles (see habitat baseline **Figure: 8.1.2 UK Habitat Survey Results**). The resulting effect of habitat loss for the Proposed Development would be adverse, direct, localised spatial magnitude, permanent and irreversible.

Creation of hibernacula / basking sites.

- 8.4.216 As a result of the habitat loss including tree clearance, there could be a loss of reptile habitat including hibernacula and basking sites. The opportunity to relocate / create hibernacula exists throughout the Proposed Development and LoD by moving existing hibernacula which will be lost or creating hibernacula by leaving bundles on brash and log piles. Additionally, basking habitat will be available in any stone or bare ground. The resulting effect of reptile habitat creation would be beneficial, direct, localised spatial scale and permanent.

Significance

- 8.4.217 In the context of the suitability to support reptiles locally and the landscape / land use providing an abundance of suitable habitat, the above effects would be adverse for the immediate populations using the Proposed Development and surrounding area. However, this would not undermine the biodiversity conservation objectives of the population at a local scale. This would not affect the long-term distribution and abundance of the locally valued populations. The overall minor, less than local effect would be **not significant**.

Beaver (District Level Importance)

- 8.4.218 Full details on the baseline for beaver are within **Appendix 8.1: UK Habitat and Protected Species** and shown on **Figure 8.1.6: Other Protected and Notable Species Survey Results**.
- 8.4.219 Predicted impacts / effects that have been considered are as follows.

- Adverse:
 - Works affecting resting sites (lodges / burrows).
 - Mortality and injury.
 - Changes to resources and habitat fragmentation.

Works affecting resting sites (lodges / burrows)

- 8.4.220 No potential resting sites identified during the baseline surveys will be lost to the construction of the Proposed Development. No evidence of beaver which would be subject to disturbance was recorded within a 50 m proximity (100 m proximity for piling) of the Proposed Development.

- 8.4.221 Further undetected beaver lodges or burrows could be present within 100 m of the Proposed Development. If any resting sites are present within the Proposed Development, they would be lost (if micro-siting is not possible). If resting sites are present within 50 m (100 m for piling) of the Proposed Development, they will be subject to temporary disturbance. The resting sites within the Proposed Development would be adverse, direct, localised spatial magnitude (district), permanent and irreversible. There would be legal obligations and licensing requirements associated with any works affecting confirmed resting sites. At a local population level, this may be reversible.

Mortality and Injury

- 8.4.222 Given the presence of beaver approximately 0.59 km north of the Proposed Development and the connectivity via the River Beauly, in the absence of mitigation measures there is an elevated risk of accidental killing of, or injury to, this species during general construction activities (e.g. vehicle collision or entrapment) or specific works affecting resting sites (e.g. disturbance causing resting site abandonment). Incidental events would be adverse, direct, localised spatial magnitude, permanent and irreversible for an individual. However, this would be medium-term and reversible at a local population scale.

Changes to resources and habitat fragmentation

- 8.4.223 Should beaver move into the area surrounding the Proposed Development, habitat loss and disturbance associated with the Proposed Development and OC, could cause them to lose resting sites. However, the remaining riparian habitat remains well connected to the wider landscape and riparian resource (**Figure 8.1.2: UK Habitat Survey Results**).
- 8.4.224 It is reasonable to assume that embedded good construction practices (set out in Embedded Mitigation) would remove / sufficiently reduce the risk of accidental pollution of watercourses during construction and this is not discussed further. However, construction works at the banksides and in-channel have potential to cause a temporary fragmentation of resources within a beaver(s) territory, potentially resulting in their displacement. This would be temporary (during watercourse crossings / culverting under access tracks). As a highly mobile species, it is considered likely that beaver would continue using bankside habitat for passage up and downstream of the works.
- 8.4.225 Changes to resource and habitat fragmentation would be adverse, direct, localised spatial magnitude, permanent and irreversible.

Significance

- 8.4.226 In the context of the suitability to support beaver within the region and the landscape / land use providing an abundance of foraging habitat, the above effects would be adverse for the immediate populations using the Proposed Development and surrounding area. However, this would not undermine the biodiversity conservation objectives of the population at a district scale and it is considered that the long-term distribution and abundance of the areas beaver populations would not be affected. The overall effect would be minor, less than local and **not significant**.

Summary of Significant IEFs from Construction Phase Impacts

- 8.4.227 A summary of the significant effects as a result of the predicted construction phase impacts are included below in **Table 8.26**.

Table 8.26: Summary of significant IEFs from construction phase impacts

IEF	Summary
River Spey SAC	Potential degradation / pollution to the SAC would be adverse, direct, of localised spatial magnitude, permanent and irreversible. As these moderate effects could impact international populations of FWPM in the SAC, they are considered significant.
River Spey SSSI	Potential degradation / pollution to the SSSI would be adverse, direct, of localised spatial magnitude, permanent and irreversible. As these moderate effects could impact international populations of FWPM they are considered significant.
Ordiequish, Whiteash, Ben Aigan Red Squirrel Stronghold	Potential for degradation to the stronghold would be adverse, direct, of localised spatial scale, permanent and irreversible. As such overall moderate magnitude effects would be considered of local level. Any effects would be significant.
Ancient Woodland (category 1a and 2a ancient woodland of semi-natural origin)	The moderate effects to irreplaceable woodland listed on the AWI has been assessed as adverse, direct, localised spatial magnitude, permanent and irreversible. Overall, although this loss is local and would not threaten the wider long-term integrity of the ancient woodland network, its irreplaceable nature means that this would be considered significant.
Blanket bog	The moderate effects to irreplaceable blanket bog has been assessed as: adverse, direct, localised spatial magnitude, permanent and irreversible. As the Proposed Development is impacting Irreplaceable Habitat, these effects are considered significant.
Bats	The combined moderate effects on bats using the Proposed Development and surrounding area would be significant at a regional scale. A regional scale has been applied because of the scale of the Proposed Development spanning three LPAs and the effects on bats and their roosts at such a scale.
FWPM	The FWPM SPP focuses strongly on complete avoidance of any impact to the species, given its endangered status. Therefore any impact to FWPM, inside or outside a designated site, regardless of its minor and potentially less than local magnitude, must be classed as significant.

Predicted Operational Impacts

Designated Sites

8.4.228 There is potential for an increase in recreational pressure through improved accessibility at the following designated sites:

- **Moniack Gorge SAC** - 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 LSEs identified within the HRA assessment.
- **Cawdor Wood SAC / SSSI** - 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.

- River Spey SAC / SSSI - Due to the proximity of the Proposed Development to the River Spey SAC and SSSI, construction and operational maintenance will be required which may result in increased recreational pressures to the sites. As the Proposed Development may require construction within between 7 m and 25 m of the SAC / SSSI, 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.
- Mortlach Moss SAC - No works will be required within the designated site as a result of the Proposed Development and the SAC is slightly upslope, however, given the proximity this may require further measures. LSE identified due to increased recreational pressure in operation.
- Coleburn Pasture SSSI – Due to the proximity of the Proposed Development to the SSSI, and the access track directly north of the SSSI, there could be an increase in recreational pressure as the SSSI is now more accessible.
- Mill Wood SSSI - Due to the proximity of the Proposed Development to the SSSI, there could be an increase in recreational pressure as the SSSI is now more accessible.

8.4.229 No other additional impacts have been identified.

Habitats

8.4.230 There will be no additional habitat loss during the operational phase; however, the OC will be maintained throughout the operation of the Proposed Development (i.e. operational felling, this will involve removal of any self-set trees or maintenance of scrub above a certain height) for resilience and to allow access.

Protected Species

Enhanced habitat for foraging, heterogeneity and connectivity

- 8.4.231 The enhanced habitat for foraging, heterogeneity and connectivity is applicable to several species: bats, badger, pine marten, red squirrel, wildcat and reptiles, and as such they have been assessed together.
- 8.4.232 The wayleave will comprise bracken (50%), scrub (25%) and heathland (25%) following woodland removal for the OC, and as such these habitats will provide increased linear habitat structure for foraging and commuting bats. The scrub and heathland within the OC will provide foraging and commuting habitat for badger, pine marten, red squirrel and wildcat. Additionally, these habitats can provide opportunities for resting sites for badger, pine marten and wildcat. The woodland edge habitat and tussocks associated with the heathland will provide suitable habitat for reptiles, with open areas potentially used for basking.
- 8.4.233 Fringe planting or any woodland compensation, if comprising broadleaved species would attract aerial invertebrates (prey for bats) and if coniferous would retain needles to attract prey species all year round. Once any woodland compensation has established in the future, they could also support roosting opportunities for bats. These habitats would also support badger, red squirrel, pine marten and wildcat resting sites, foraging and commuting habitat.
- 8.4.234 Following construction, many habitats would be reinstated on a like for like or better basis (**Appendix 8.3: Biodiversity Net Gain Assessment**). Grasslands, heathlands and wetlands will provide suitable habitat for a variety of invertebrates which in turn may provide a foraging resource for bats, and potential foraging opportunities for badger, pine marten, water vole, wildcat and reptiles.

- 8.4.235 Any enhanced foraging habitat for protected species within the Proposed Development would take time to establish, but the end-effects would be long-term or permanent. As such the overall effects of habitat reinstatement and enhancement associated with the Proposed Development will be beneficial, direct, of low spatial magnitude (district) and permanent. However, the enhanced foraging habitat is minor and **not significant** as it does not affect the conservation status of these habitats at a local scale.

Disturbance

- 8.4.236 Operational maintenance along the wayleave (e.g. vegetation maintenance) has potential to disturb protected species where located in close proximity including bats, badger, pine marten, red squirrel, otter, water vole, wildcat, beaver and reptiles. Where resting sites are known to exist, trees will be hand felled or using the least disturbing machinery as possible. Overall, the effects associated with disturbance will be adverse, direct, of localised spatial scale, temporary and reversible and as such are minor, less than local and **not significant**.

Bats

- 8.4.237 There is evidence that the Proposed Development could also be used for foraging by bats. Froidevaux et al. found that during high humidity, light emitted by OHLs (with greater voltage than 200 kVs) owing to corona discharges would attract insects and therefore increase bat foraging intensity¹²³. Overall, the effects of bats foraging along the Proposed development will be beneficial, direct, of localised spatial scale and permanent. Overall this minor, less than local and is **not significant**.

- 8.4.238 No additional impacts have been identified for protected species other than those above.

Kellas Alternative Alignment

Predicted Construction Impacts

Designated Sites

- 8.4.239 Kellas Alternative Alignment is located closer to Buinach and Glenlatterach SSSI than the Proposed Development and oversails the designated site: no towers or associated infrastructure are located within the boundary of the SSSI. Upland birchwood (a designated feature of the SSSI) and other broadleaved woodland located at the edge of the SSSI will be subject to crown reduction where this occurs within the OC. The forestry survey identified the woodland comprises mainly native broadleaves at low density with birch (being the dominant component) and sporadic Scots pine. The landform is dominated by the steep slopes towards the Leanoch burn at the Ess of Glenlatterach due north of the dam (**Chapter 12: Forestry**). Given the embedded mitigation, the potential for degradation / pollution to the SSSI would be adverse, direct, localised spatial scale, permanent and irreversible. Any effects would be minor, less than local and **not significant**.

Habitats

- 8.4.240 The BNG assessment (**Appendix 8.3: Biodiversity Net Gain Assessment**) details the following change in Biodiversity Units (BU) as a result of the Proposed Development:
- Moray (Kellas Alternative Alignment) - The baseline BU is 1082.90 BU and 1.89 L-HU. The post development BNG is 661.32 BU and 0 L-HU. Overall, on-site biodiversity within the Proposed Development has a 39 % decrease in BU and a 100% decrease in L-HU.
- 8.4.241 NPF4 Policy 3 requires all new developments to secure positive effects for biodiversity which would be in proportion to the scale of the development. The Applicant's internal policy also requires new developments to deliver a measurable and minimum 10% net gain through design.

¹²³ Froidevaux, J, S, P., Jones, G., Kerbiriou, C. and Park, K, J. (2023). Acoustic activity of bats at power lines correlates with relative humidity: a potential role for corona discharges. Available at: <https://royalsocietypublishing.org/doi/10.1098/rspb.2022.2510>

Habitat Loss

8.4.242 A high-level comparison of the broad habitats which would be lost versus those which would be created through ecological enhancement measures outlined in the BNG assessment is set out in **Table 8.27: Summary of Changes to Habitats from BNG Assessment (Kellas Alternative Alignment)** below. This does not include Irreplaceable Habitats which require a bespoke approach; Irreplaceable Habitats include ancient woodland (category 1a and 2a) and blanket bog of moderate or good condition.

Table 8.27: Summary of Changes to Habitats from BNG Assessment (Kellas Alternative Alignment)

Habitat Loss	Baseline Area / Length	Baseline BU	Post Development Area / Length	Post Development BU	Change in BU
Moray (Kellas Alternative Alignment)					
Bracken	0.00 ha	0.00	96.75 ha	368.57	368.57
Broadleaved and mixed woodland	63.06 ha	535.25	0.00 ha	0.00	-535.25 (-100 %)
Coniferous woodland	139.11 ha	278.70	0.00 ha	0.00	-278.70 (-100 %)
Cropland	12.44 ha	24.88	10.92 ha	18.30	-6.58 (-26 %)
Heathland	7.89 ha	135.86	5.01 ha	19.09	-116.77 (-86 %)
High Distinctiveness Grassland	5.07 ha	51.04	4.01 ha	29.02	-22.02 (-43 %)
Low Distinctiveness Grassland	20.07 ha	43.18	65.04 ha	120.48	77.30 (179 %)
Scrub	0.58 ha	2.46	48.71 ha	102.44	99.98 (4,064 %)
Urban	2.82 ha	0.00	20.62 ha	0.00	0.00
Wetland	1.52 ha	12.05	1.49 ha	3.42	-8.63 (-72 %)
Line of trees	0.33 km	1.52	0.00 km	0.00	- 1.52 (-100 %)

Habitat Loss	Baseline Area / Length	Baseline BU	Post Development Area / Length	Post Development BU	Change in BU
Hedgerow	0.08 km	0.37	0.00 km	0.00	- 0.37 (-100 %)

8.4.243 The remaining construction and operational impacts are consistent within the Proposed Development for the Kellas Alternative Alignment as the habitats and suitability to support protected species is consistent throughout the area.

8.5 Additional Mitigation

8.5.1 The below additional mitigation is required for IEFs with significant effects, as well as those which require legal compliance, where not already detailed within the embedded mitigation.

Designated Sites

8.5.2 With regards to increased recreational pressure and the relevant designated sites (Moniack Gorge SAC, Cawdor Wood SAC / SSSI, River Spey SAC / SSSI, Mortlach Moss SAC, Coleburn Pasture SSSI and Mill Wood SSSI), any increase in recreational pressures may lead to direct habitat damage through increased erosion, litter, or pollutants. 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. Appropriate mitigation measures such as signage and fencing to avoid recreational access is advised on working areas and access routes.

8.5.3 No additional mitigation is generally required for designated sites with relation to the Proposed Development. However, additional woodland edge planting will be considered in the oHMP, **Annex G of Appendix 8.3 Biodiversity Net Gain Assessment**, for the Ordiequish, Whiteash, Ben Aigan Red Squirrel Stronghold.

8.5.4 Note that the rigour of the embedded mitigation in the FWPM SPP (**Appendix 3.6: Species Protection Plans (SPPs)**), where complete avoidance of impacts to the species is required and works must stop to allow an SQE to seek NatureScot advice if avoidance is not possible, would be applied to the River Spey SAC and SSSI. With specific regard to the required crown reduction along the banks of the River Spey at Tower CB14-1B, any works here must be supervised by a SQE and must use hand-operated tools only. All arisings must be removed from the bankside immediately and stored at least 10 m away from the water's edge. Access to trees for crown reduction must be on foot only. Reduction must be kept to the minimum necessary to ensure that shading is not decreased for salmonids or FWPM along the relevant section of the river.

Habitats

8.5.5 All habitats subject to temporary habitat loss will be reinstated on a like for like or better basis as detailed in **Appendix 8.3 Biodiversity Net Gain Assessment**. As per the Applicant's 10% net gain ambitions, off-site habitat enhancement and creation will be explored as part of the BNG off-setting strategy to account for the biodiversity loss associated with the Proposed Development.

Woodland

8.5.6 An area of 32.05 ha will comprise woodland edge planting throughout the Proposed Development (see **Chapter 12: Forestry**). Additionally, the Landscape and Visual Impact Assessment (LVIA) planting includes: 21.26 ha of scattered tree planting, 21.64 ha of hedgerows, 10.03 ha of hedgerow and shrub mosaic and 42.45 ha of infill shrubs (see **Chapter 7: Landscape and Visual**).

Peatland (Blanket Bog Habitats)

- 8.5.7 As detailed in **Chapter 10: Water and Geological Environment**, where peat has been excavated for temporary infrastructure, as much excavated peat as possible will be reused within the temporary infrastructure areas, or in reinstatement of earthworks around the infrastructure including:
- track verges;
 - reinstatement of any temporary working areas; and
 - reinstatement of peat in voids or earthworks around infrastructure.
- 8.5.8 Areas of blanket bog where stringing of wires is required will require these wires to be installed on foot.
- 8.5.9 There are limited opportunities for peat reinstatement within the Proposed Development, and as such alternative options are required for reinstating excavated peat. The Applicant is in consultation with NatureScot to discuss the following approaches for peat re-use:
- peat reinstatement within areas of eroded peat;
 - peat reinstatement within areas of cut peat;
 - ditch blocking; and
 - forest to bog restoration.

Protected Species

Bats (National Level Importance)

- 8.5.10 Additional mitigation measures have been identified to inform the steps needed to reduce the effects, as well as to comply with legal obligations associated with works affecting bats – the legal obligations are covered in the SPP for bats but there remains a significant, regional level effect on bats due to construction impacts on suitable roosting habitat. These measures have been prepared with reference to the Bat Mitigation Guidelines¹²⁴.

Sensitive timings of works

- Preference would be given to vegetation clearance / felling during the transitional roosting period for bats – April, September and October – because bats are likely to be more resilient / less vulnerable (than during maternity and hibernation periods) and are likely to make use of a network of roosts¹¹⁹;
- If a maternity roost is identified through additional surveys, demolition / felling of the roost structure would be timed to avoid the maternity period (May to August). If the additional surveys are undertaken during the optimal season without substantial limitations (e.g. access, weather) on the detectability of maternity roosts and there is no evidence of maternity roosts, demolition / felling may be timed during this period. Pre-works surveys would apply (see below); and
- If a hibernation roost is identified following additional surveys, demolition / felling would be timed to avoid the hibernation period (mid-November to end-March). If the additional surveys are undertaken during the optimal season without substantial limitations (e.g. equipment failure) on the detectability of hibernation roosts and there is no evidence of hibernation roosts, demolition / felling may be timed during this period. Pre-works surveys would apply (see below).

Sensitive lighting

- Artificial lighting will not spill over to vegetation (woodland edges, lines of trees, hedgerows, scrub, etc.) that is retained around the Proposed Development; and

¹²⁴ Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Version 1.1. CIEEM, Ampfield. Available at: <https://cieem.net/wp-content/uploads/2023/09/Bat-Mitigation-Guidelines-2023-V1.1.pdf>

- The specifications of artificial lighting will consider use of LED luminaires with peak wavelengths higher than 550 nm to avoid the component of light most disturbing to bats, and a warm white spectrum (ideally less than 2700 Kelvin) to reduce blue light component. Prevailing guidance from BCT and ILP¹²⁵ will be followed.

Compensation

- To compensate for the loss of roost resources (i.e. PRFs), a combination of the following would be undertaken:
 - artificial bat boxes will be fixed on trees retained or bat rockets (free-standing bat boxes) will be installed where no suitable trees exist within / on the periphery of the Proposed Development;
 - where possible, reclaimed PRFs from trees to be felled will be translocated onto existing trees retained within / on the periphery of the Proposed Development; and
 - veteranisation¹²⁶ of existing trees within / on the periphery of the Proposed Development, to artificially create PRFs.
- Compensatory bat boxes / bat rockets / reclaimed PRFs / veteranisation will be installed, at a ratio of one compensatory measure for every tree containing PRFs lost, to align with best practice guidance which states 'there should be no reduction in the roosting resource following development and preferably the roosting resource should be increased'¹²⁷. This would be in addition to any specific compensation measures required for the loss of confirmed bat roosts through licensing. The compensatory measures would be installed between 3-4 m above ground, at a variety of aspects and away from artificial lighting. The location of bat rockets must be carefully considered to ensure they would be sheltered and connected to natural habitat (i.e., not within open habitat) and away from artificial lighting.
- The approximate locations and appropriate compensatory method would be identified at detailed design stage, then further advice on siting will be sought from the Project Ecologist / Environmental Advisor.
- A competent arborist will be appointed to remove and reclaim the PRFs wherever possible without compromising the structure of the PRF and health of any retained tree to which it would be fixed.
- A competent arborist who understands tree physiology and can create features which are very close to natural features will be appointed. Chainsaw hollows have been found to have thermal profiles similar to natural tree hollows, unlike bat boxes, and therefore have a better capacity for buffering bats from extreme temperatures.
- Compensatory PRFs will be installed prior to tree felling / structure demolition. The methods employed will be decided by the Environmental Advisor, Environmental Manager and competent arborist.

Monitoring

- It is anticipated that monitoring surveys of compensatory PRFs that would be required for the loss of confirmed roosts would be conditioned through licensing; and
- As detailed in the Bat Mitigation Guidelines¹²⁴, a 10 year monitoring period is required for each of the artificially created PRFs: bat box, bat rocket and / or veteranisation feature installed to compensate for the loss of roost resources. This is required because of the importance of the IEF (national) and the scale of impact prior to mitigation (Regional). Monitoring would be undertaken by a licensed bat surveyor, between 2-10 years after the removal of the original roost resource (regardless of the potentially ongoing construction phase) – guidance suggests year 3, year 5, year 7 and year 10. The guidance references fewer later monitoring checks are better than intense survey effort, because the features require time to embed into the local bat

¹²⁵ ILP (2023). Guidance Note, GN08/23, Bats and Artificial Lighting At Night. Online at: <https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/>

¹²⁶ Veteranisation techniques mimic the effects of the natural tree ageing process and decay, as well as events such as lightning strike/storms and damage caused by deer, grey squirrels, and woodpeckers.

¹²⁷ Collins, J (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition). The Bat Conservation Trust, London.

population's resource network. If any boxes are found to be defective during these inspections, the features would be replaced.

Badger (Regional Level Importance)

- 8.5.11 Whilst the effects on badgers are not deemed significant, additional mitigation measures have been identified to inform the steps needed to comply with legal obligations associated with works affecting badgers. The below measures have been prepared with reference to the NatureScot guidance⁴⁷ and provide additional mitigation not described in the Applicant's SPP for Badgers.

Avoidance

- For retained setts that occur within 30 m of the Proposed Development, it is recommended that a 30 m exclusion zone is setup to exclude heavy plant (to prevent sett tunnel collapse). Only small plant and hand-held machinery will be operated within the 30 m zone, under supervision of the Environmental Advisor. Care should be taken to avoid direct impacts to any mammal burrow entrances in all areas.

Sensitive timings of works

- Construction works will avoid the use of noisy plant and machinery in the two hours before sunset within the vicinity of a sett (i.e. 30 m).

Sensitive lighting

- Artificial lighting will be directed away from surrounding setts as well as vegetation (lines of trees, hedgerows, scrub, etc.) and riparian corridors surrounding the Proposed Development, to retain dark corridors for crepuscular and nocturnal species ; and
- The use of background lighting overnight will be minimised as far as reasonably possible, whilst still fulfilling safety and security requirements.

Compensation

- Where breeding setts are destroyed, or no other suitable setts within a clan territory exists, an artificial sett must be provided. The site for an artificial sett must be carefully selected and all work supervised by a suitably qualified Environmental Advisor. The most successful artificial setts have been located less than 100 m from the original natural sett and constructed at least six months before the badgers are excluded.
- Primary foraging habitat¹²⁸ will be lost as a result of the Proposed Development (improved grassland and broadleaved woodland); however, where broadleaved woodland is lost to retain the OC, scrub and heathland will be created. Scrub is a secondary foraging habitat for badger and alongside heathland should include fruit-bearing species (e.g. bramble, blueberry and crowberry), as well as connecting areas of retained habitat.

Monitoring

- It is anticipated that monitoring surveys of compensatory artificial sett creation that would be required for the loss of main setts, would be conditioned through licensing.

Pine Marten (Regional Level Importance)

- 8.5.12 Whilst effects on pine marten are not considered significant, additional mitigation measures have been identified to inform the steps needed to comply with legal obligations associated with works affecting pine marten. These have been prepared with reference to the NatureScot guidance⁴⁹.

¹²⁸ <https://www.nature.scot/sites/default/files/2018-04/Guidance-Managing-land-as-a-foraging-resource-for-badgers.pdf>

Compensation

- As detailed under Habitats above, an area of 32.05 ha will comprise woodland edge planting and the LVIA planting includes: 21.26 ha of scattered tree planting, 21.64 ha of hedgerows, 10.03 ha of hedgerow and shrub mosaic and 42.45 ha of infill shrubs. This will provide suitable habitat for pine marten.
- If the Proposed Development results in the unavoidable loss of a den then artificial denning boxes will be installed in their place. To provide pine marten with opportunities for shelter where denning habitat is directly affected by the Proposed Development.

Monitoring

- Should there be an unavoidable loss of any breeding dens (identified during additional surveys or pre-construction surveys), it is anticipated that monitoring surveys of compensatory breeding / denning boxes that would be required for the loss of breeding dens would be conditioned through licensing.

Red Squirrel (Regional Level Importance)

- 8.5.13 Whilst effects on red squirrel are not considered significant, additional mitigation measures have been identified to inform the steps needed to comply with legal obligations associated with works affecting red squirrel. These have been prepared with reference to the NatureScot guidance⁵¹.

Compensation

- As detailed under Habitats in Embedded Mitigation above, an area of 32.05 ha will comprise woodland edge planting and the LVIA planting includes: 21.26 ha of scattered tree planting, 21.64 ha of hedgerows, 10.03 ha of hedgerow and shrub mosaic and 42.45 ha of infill shrubs. Which in time can provide suitable habitat for red squirrel.

Otter (Regional Level Importance)

- 8.5.14 Whilst effects on otter are not considered significant, additional mitigation measures have been identified to inform the steps needed to comply with legal obligations associated with works affecting otters. These have been prepared with reference to the NatureScot guidance⁵³.

Sensitive timings of works

- Construction works along watercourses would be restricted to hours of daylight; works would commence from two hours after sunrise and cease two hours before sunset. During Winter when daylight is limited, allowances may be agreed to work from one hour after sunrise / before sunset, at the discretion of the Environmental Manager / Environmental Advisor.

Compensation

- In the event that there are unavoidable losses of any holts (identified during additional surveys or pre-construction surveys), installation of artificial holts will provide otter with opportunities for shelter where natural holts are lost / directly affected by the Proposed Development.

Monitoring

- In the event that compensatory artificial holts are required where micro siting is not possible, it is anticipated that monitoring surveys of these compensatory artificial holts that would be required for the loss of natural holts would be conditioned through licensing.

Water vole (Regional Level Importance)

- 8.5.15 No additional mitigation proposed.

Wildcat (International Level Importance)

- 8.5.16 Whilst effects on wildcat are not considered significant, additional mitigation measures have been identified to inform the steps needed to comply with legal obligations associated with works affecting wildcat. These have been prepared with reference to the NatureScot guidance⁵⁸.

Sensitive timings of works

- Restrict work to daylight hours.

Sensitive lighting and noise

- Minimise external lighting and noise from generators at night.

Compensation

- As detailed under Habitats above, an area of 32.05 ha will comprise woodland edge planting and the LVIA planting includes: 21.26 ha of scattered tree planting, 21.64 ha of hedgerows, 10.03 ha of hedgerow and shrub mosaic and 42.45 ha of infill shrubs. Wildcat could use this habitat for foraging and commuting.

Fish (Regional Level Importance) and FWPM (International Level Importance)

- 8.5.17 Additional mitigation measures have been identified to inform the steps needed to reduce the effects, as well as to comply with legal obligations associated with works affecting fish and FWPM. These have been prepared with reference to the relevant guidance^{129,65}.

Avoidance

- Removal of bankside vegetation for the construction of culverts would be minimised as far as reasonably possible; priority would be given to avoid tree felling in riparian areas. Avoiding siltation and removal of shading from surrounding trees.
- Avoid crossing through any watercourses close to a FWPM bed, or, where unavoidable, constructing temporary bridges.
- Maintain natural water levels in areas occupied by FWPM.

Sensitive timings of works

- If salmonid populations and / or suitable spawning habitat is identified during the additional baseline surveys, the following would apply:
 - There would be no in channel works between 30 September and 1 June to protect spawning migratory salmonids, their spawn, and migrating 'smolts'.
 - Construction works along suitable watercourses would be restricted to hours of daylight; works would commence from two hours after sunrise and cease two hours before sunset. During Winter when daylight is limited, allowances may be agreed to work from one hour after sunrise / before sunset, at the discretion of the Environmental Manager.

Sensitive lighting

- Artificial lighting will not spill over to watercourses including small watercourses and ditches around the periphery of the Proposed Development. These will remain unlit corridors at night.

¹²⁹ SEPA (online). Introduction to the Controlled Activities Regulations. Online at: <https://www.sepa.org.uk/media/34800/introduction-to-the-controlled-activities-regulations.pdf>

Monitoring

- Should the additional baseline surveys and pre-construction monitoring identify suitable habitat for fish where there will be in channel works, an electro-fishing survey would be undertaken post-construction in these locations. The survey will be undertaken in the next seasonal window following construction (between 1 July and 30 September). Surveys would be undertaken by competent and experienced surveyors, with the relevant certifications and permits. Surveys would follow prevailing best practice guidelines. The objective would be to demonstrate there have been no significant changes to the species and population size classes using these watercourses post-construction or, if changes have occurred, to inform the requirement for any remedial measures.

GCN (District Level Importance)

- 8.5.18 Whilst effects on GCN are not considered significant, additional mitigation measures have been identified to inform the steps needed to comply with legal obligations associated with works affecting GCN. These have been prepared with reference to the relevant guidance¹³⁰.

Pre- and during works

- Alter vegetation types to displace GCN from areas affected (so long as there is suitable alternative habitat nearby). This can be done via phased strimming to a short sward. Non-tussocky grassland can be strimmed in winter as it is not a suitable hibernacula. Alternatively, strimming could take place during the breeding season (March – June) when GCN are in their breeding ponds. Care must be taken to ensure connecting habitat between hibernacula and breeding ponds is not fragmented.
- Where works are within 500 m of confirmed breeding ponds, erect amphibian fencing to prevent GCN moving into areas where they will be at risk. Care will be taken to avoid bisecting groups of ponds even if not all ponds have returned a positive eDNA result (GCN could use ponds surrounding those with a positive eDNA result) or separating ponds from surrounding hibernacula (e.g. tree roots, hedges).
- Should construction cause further habitat fragmentation between hibernacula and breeding ponds, further mitigation may be required (e.g. underpasses under temporary roads).

Licensing

- Any mitigation works will require a licence from NatureScot as these measures could damage or disturb GCN, if present.

Reptiles (Local Level Importance)

- 8.5.19 Whilst effects on reptiles are not considered significant, additional mitigation measures have been identified to inform the steps needed to comply with legal obligations associated with works affecting reptiles. These have been prepared with reference to the relevant guidance¹³¹.

Avoidance

- Time works to avoid the period when reptiles may be hibernating (October-March), if feasible, where suitable habitat exists. Or alternatively, if works are taking place during this time, ensure pre-construction surveys include identification of potential hibernacula for avoidance.

Pre- and during works

- Use fencing around working areas to prevent reptiles moving into areas where they could be killed or injured.

¹³⁰ NatureScot (online) Standing advice for planning consultation – Great Crested Newts. Online at: <https://www.nature.scot/doc/standing-advice-planning-consultations-great-crested-newts>

¹³¹ NatureScot (online) Standing advice for planning consultation – Reptiles (Adder, Slow Worm & Common lizard). Online at: <https://www.nature.scot/doc/standing-advice-planning-consultations-reptiles-adder-slow-worm-common-lizard>

- Alter habitat to displace reptiles from areas where they could be killed or injured (e.g. careful phased strimming of grassland to a short sward, provided there is a suitable safe area nearby that they can easily move to).
- Maintain these areas of strimmed vegetation throughout works so reptiles do not return.

Compensation

- Should there be a loss of suitable basking habitat or hibernacula, these features will be carefully moved / or created under supervision of the Environmental Advisor in the surrounding habitat for use by reptiles.

Kellas Alternative Alignment

8.5.20 The additional mitigation identified above also applies to the Kellas Alternative Alignment. There is no additional mitigation identified for the Kellas Alternative Alignment.

Summary of Additional Mitigation

8.5.21 **Table 8.28** below summarises the additional mitigation identified in relation to ecology. Woodland and peatland have not been included below. Any additional mitigation required in relation to woodland and peatland loss will be addressed within **Chapter 12: Forestry** and **Chapter 10: Water and Geological Environment**, respectively.

Table 8.28: Summary of Additional Mitigation

Mitigation ID	IEF	Details
EC1	Ordiequish, Whiteash, Ben Aigan Red Squirrel Stronghold	Additional woodland edge planting to be considered in the oHMP (Annex G of Appendix 8.3 Biodiversity Net Gain Assessment).
EC2	Bats	Sensitive timings of works • Vegetation clearance / felling during the transitional roosting period for bats – April, September and October. • Avoid demolition / felling of maternity roosts (should they be identified) during the maternity period (May to August). • Avoid demolition / felling of hibernation roosts (should they be identified) during the hibernation period (mid-November to end-March). Sensitive lighting • Artificial lighting will not spill over to vegetation that is retained around the Proposed Development. • The specifications of artificial lighting will consider use of LED luminaires with peak wavelengths higher than 550 nm to avoid the component of light most disturbing to bats, and a warm white spectrum (ideally less than 2700 Kelvin) to reduce blue light component. Compensation • Artificial bat boxes will be fixed on trees retained or bat rockets (free-standing bat boxes) will be installed where no suitable trees exist within / on the periphery of the Proposed Development;

Mitigation ID	IEF	Details
		- Where possible, reclaimed PRFs from trees to be felled will be translocated onto existing trees retained within / on the periphery of the Proposed Development. - Veteranisation of existing trees within / on the periphery of the Proposed Development, to artificially create PRFs. Monitoring - Monitoring surveys of compensatory PRFs that would be required for the loss of confirmed roosts would be conditioned through licensing. - A 10 year monitoring period is required for each of the artificially created PRFs.
EC3	Badger	Avoidance - For retained setts that occur within 30 m of the Proposed Development, it is recommended that a 30 m exclusion zone is setup to exclude heavy plant (to prevent sett tunnel collapse). Only small plant and hand-held machinery will be operated within the 30 m zone, under supervision of the Environmental Advisor. Care will be taken to avoid direct impacts to any mammal burrow entrances in all areas. Sensitive timings of works - Construction works will avoid the use of noisy plant and machinery in the two hours before sunset within the vicinity of a sett (i.e. 30 m). Sensitive lighting - Artificial lighting will be directed away from surrounding setts as well as vegetation and riparian corridors surrounding the Proposed Development, to retain dark corridors for crepuscular and nocturnal species. - The use of background lighting overnight will be minimised as far as reasonably possible, whilst still fulfilling safety and security requirements. Compensation - Where breeding setts are destroyed, or no other suitable setts within a clan territory exists, an artificial sett must be provided. Monitoring - Monitoring surveys of compensatory artificial sett creation that would be required for the loss of main setts, would be conditioned through licensing.
EC4	Pine Marten	Compensation - Compensatory planting. - If the Proposed Development results in the unavoidable loss of a den then artificial denning boxes will be installed in their place.

Mitigation ID	IEF	Details
		Monitoring Monitoring surveys of compensatory breeding / denning boxes that would be required for the loss of breeding dens would be conditioned through licensing.
EC5	Red squirrel	Compensation Compensatory planting.
EC6	Otter	Sensitive timings of works - Construction works along watercourses would be restricted to hours of daylight; works would commence from two hours after sunrise and cease two hours before sunset. During Winter when daylight is limited, allowances may be agreed to work from one hour after sunrise / before sunset, at the discretion of the Environmental Manager / Environmental Advisor. Compensation - Should there be an unavoidable loss of any holts (identified during additional surveys or pre-construction surveys), installation of artificial holts to provide otter with opportunities for shelter where natural holts are lost / directly affected by the Proposed Development. Monitoring - Monitoring surveys of these compensatory artificial holts that would be required for the loss of natural holts would be conditioned through licensing.
EC7	Wildcat	Sensitive timings of works - Restrict work to daylight hours. Sensitive lighting and noise - Minimise external lighting and noise from generators at night. Compensation - Compensatory planting.
EC8	Fish and FWPM	Avoidance - Removal of bankside vegetation for the construction of culverts would be minimised as far as reasonably possible; priority would be given to avoid tree felling in riparian areas. - Crown reduction along River Spey at Tower CB14-1B to be supervised by a SQE, done with hand-operated tools only and all arisings stored 10m from water's edge. Access to trees for crown reduction must be on foot only. - Avoid crossing through any watercourses close to a FWPM bed, or, where unavoidable, constructing temporary bridges. - Maintain natural water levels in areas occupied by FWPM.

Mitigation ID	IEF	Details
		Sensitive timings of works - If salmonid populations and / or suitable spawning habitat is identified during the additional baseline surveys, the following would apply: - No in channel works between 30 September and 1 June to protect spawning migratory salmonids, their spawn, and migrating 'smolts'. - Construction works along suitable watercourses would be restricted to hours of daylight; works would commence from two hours after sunrise and cease two hours before sunset. During Winter when daylight is limited, allowances may be agreed to work from one hour after sunrise / before sunset, at the discretion of the Environmental Manager. Sensitive lighting - Artificial lighting will not spill over to watercourses including small watercourses and ditches around the periphery of the Proposed Development. These will remain unlit corridors at night. Monitoring - Should the additional baseline surveys and pre-construction monitoring identify suitable habitat for fish where there will be in channel works, an electro-fishing survey would be undertaken post-construction in these locations. The survey will be undertaken in the next seasonal window following construction (between 1 July and 30 September).
EC9	GCN	Pre- and during works - Alter vegetation types to displace GCN from areas affected (so long as there is suitable alternative habitat nearby). Alternatively, strimming could take place during the breeding season (March – June) when GCN are in their breeding ponds. Care must be taken to ensure connecting habitat between hibernacula and breeding ponds is not fragmented. - Where works are within proximity of GCN habitat, erect amphibian fencing to prevent them moving into areas where they will be at risk. Licensing - Any mitigation works will require a licence from NatureScot.
EC10	Reptiles	Avoidance Time works to avoid the period when reptiles may be hibernating (October-March), if feasible, where suitable habitat exists. Or alternatively, if works are taking place during this time, ensure pre-construction surveys include identification of potential hibernacula for avoidance.

Mitigation ID	IEF	Details
		Pre- and during works • Use fencing around working areas to prevent reptiles moving into areas where they could be killed or injured. • Alter habitat to displace reptiles from areas where they could be killed or injured. • Maintain these areas of trimmed vegetation throughout works so reptiles do not return. Compensation • Should there be a loss of suitable basking habitat or hibernacula, these features will be carefully moved / or created under supervision of the Environmental Advisor in the surrounding habitat.

8.6 Residual Effects

Designated Sites

- 8.6.1 The HRA¹ concluded that the Proposed Development will not undermine the conservation objectives of any international sites, and therefore, there will be no adverse effect on the integrity of any international sites.
- 8.6.2 There are no significant residual effects on any of the designated sites.

Habitats

Woodland

- 8.6.3 The planting detailed above in Additional Mitigation alongside the provisions of the oHMP (**Annex G Appendix 8.3 Biodiversity Net Gain Assessment**) are anticipated to offset the loss of woodland resulting from the construction of the Proposed Development.

Peatland

- 8.6.4 The provisions of the oHMP (**Annex G of Appendix 8.3 Biodiversity Net Gain Assessment**) are anticipated to offset the loss of priority peatland habitat resulting from the construction of the Proposed Development. The habitat and species' enhancements targeted through priority peatland restoration measures of the oHMP are not expected to be realised in the short-term as it will take time for the habitat conditions to recover from the initial disturbance of habitat management measures. However, in the medium to long-term, the prescriptions of the oHMP are anticipated to increase the extent of priority peatland-type habitat and the condition of priority peatland habitat available and therefore, increase the abundance of associated flora and fauna at a local scale.
- 8.6.5 Therefore, following the provisions of the oHMP, the residual effects on bog habitat are predicted to be no significant residual effects and are predicted to be in the medium term, and eventually in the long-term, delivering significant beneficial residual effects within areas included within the oHMP.

Protected Species

Bats (National Level Importance)

- 8.6.6 With the additional mitigation in place, and application of the 1994 Habitats Regulations for licensing works affecting bats, it is anticipated that the magnitude of impacts to bats which may be using the Proposed Development would be reduced but would **remain significant**. Any residual effects would be minor in all three LPAs, at a district scale.

Other protected species

- 8.6.7 With the above additional measures in place, it is anticipated that the magnitude of impacts to the remaining protected species (badger, pine marten, red squirrel, otter, water vole, wildcat, fish, FPWM, GCN, reptiles and beaver) which may be using the Proposed Development would be reduced. Any residual effects would be minor and **not significant** at a local scale in all three LPAs.

Kellas Alternative Alignment

- 8.6.8 The residual effects are consistent for the Kellas Alternative Alignment, as the baseline is consistent with the Proposed Development throughout the area.

8.7 Assessment of Cumulative Effects

- 8.7.1 Cumulative effects can result from individually not significant but collectively significant actions taking place over time or concentrated in a location. **Chapter 5: EIA Process and Methodology, Table 5.2 Cumulative Developments**, sets out Stage 1 cumulative schemes which are associated SSEN Transmission network upgrades. **Appendix 5.1: Cumulative Developments** details third-party developments located within a 5 km study area of the Proposed Development, which have been considered as part of the in-combination cumulative assessment. The cumulative developments are shown in **Figure 5.1: Cumulative Developments**.
- 8.7.2 The following Section identifies developments which may combine with the Proposed Development to create a significant cumulative effect on each IEF. The study area has been reduced or increased for certain IEFs based on the relevant EZoI. The assessment of cumulative effects on ecological receptors is based on professional judgement, consideration of baseline conditions within the Proposed Development and the surrounding area, together with the findings from various technical studies.

In-combination Effects: Stage 1 – Associated SSEN Transmission Network Upgrades

- 8.7.3 It is possible that any developments affecting IEFs within this EZoI could combine with the Proposed Development to elevate the significance of effects on these IEFs. The following developments within Stage 1 have been considered:
- The Highland Council
 - Fanellan Hub 400 kV Substation
 - Aberdeenshire Council
 - Greens 400 kV Substation
 - Netherton Hub 400 kV Substation
- 8.7.4 It is anticipated that all of the above projects would be undertaken in line with the Applicant's baseline mitigation SPP and GEMP documents and procedures (**Appendix 3.5 General Environmental Management Plans (GEMPs)** and **Appendix 3.6: Species Protection Plans (SPPs)**).

Designated Sites

- 8.7.5 Where designated sites cover the same geographical location they have been considered together in the cumulative assessment below (see **Figure 8.1: International Designated Sites** and **Figure 8.2: National, Local / Non-statutory Designated Sites**). There is largely no functional connectivity or effect for designated sites with the exception of those detailed below in **Table 8.29**.

Table 8.29: Cumulative Effects on Designated Sites from Stage 1 – Associated SSEN Transmission Network Upgrades

Feature	LPA	Cumulative Effects
Buglife B-line	The Highland Council Aberdeenshire Council	Fanellan Hub 400 kV Substation and the Proposed Development are located within the Buglife B-line near Beauly. The habitats within the B-line are largely agricultural land and plantation forestry as well as some moorland and scrub. These habitats are prevalent in the surrounding area and as such the potential cumulative effect of habitat loss of the landscape would be adverse, direct, of localised spatial magnitude, permanent and irreversible. Any cumulative effects would be not significant .
Great Glen and the Beauly Catchment Butterfly Conservation Scottish Priority Landscape	The Highland Council	Fanellan Hub is located within the Great Glen and the Beauly Catchment Butterfly Conservation Scottish Priority Landscape, as well as the Proposed Development. The habitats affected are largely agricultural land and coniferous plantation around Fanellan Hub. These habitats are prevalent in the surrounding area and as such the potential cumulative effect of habitat loss of the landscape would be adverse, direct, localised spatial magnitude, permanent and irreversible. Any cumulative effects would be not significant .
East Inverness-shire IIA	The Highland Council	Fanellan Hub is located within the IIA as well as the Proposed Development. The habitats within these locations are largely agricultural land and plantation forestry. These habitats are prevalent in the surrounding area and as such the potential cumulative effect of habitat loss on the IIA would be adverse, direct, localised spatial magnitude, permanent and irreversible. Any cumulative effects would be not significant .

Habitats

- 8.7.6 As a result of the BNG assessment (**Appendix 8.3 Biodiversity Net Gain Assessment**) and outline HMP (**Annex G of Appendix 8.3 Biodiversity Net Gain Assessment**), all habitats subject to permanent or temporary habitat loss will be created / reinstated on a like for like or better basis where possible (woodland and irreplaceable habitat cannot be replaced). These assessments will follow the trading rules of BNG and align with the Applicant's 10% net gain ambitions (**Appendix 8.3 Biodiversity Net Gain Assessment**).
- 8.7.7 The habitats present within the Stage 1 cumulative developments are predominantly agricultural land comprising modified grassland and cropland. Pockets of woodland, wetland, grassland, heathland, scrub and hedgerows were also recorded within the development boundaries or within the immediate surroundings.
- 8.7.8 Owing to the nature of the habitats located within the Stage 1 cumulative developments (i.e. modified and semi-natural habitats) and their prevalence in the surrounding area, the potential cumulative effect of habitat loss would be adverse, direct, localised spatial magnitude, permanent and irreversible. Any cumulative effects would be **not significant**.

Protected Species

- 8.7.9 The cumulative effects for protected species from Stage 1 cumulative developments are detailed below in **Table 8.30**. The EZol has been defined for each species using standard guidance and professional judgement.
- 8.7.10 With regards to operational lighting at the above cumulative developments the following is known from the EIA or assumed where it has not been completed yet:
- Fanellan Hub 400 kV Substation - The substation would not be generally illuminated. Floodlights would be installed but would only be used in the event of a fault during the hours of darkness; during the over-run of planned works; or when sensor activated as security lighting for night-time access. The proposed access roads would not be lit under normal operation. The perimeter fence would use infra-red lighting which would only switch to visible light if the fence alarm were activated. A light would be provided permanently at access gates.
 - Greens 400 kV Substation - There is potential for night-time security lighting for maintenance or in response to a network event and thus unlikely to be on all night.
 - Netherton Hub 400 kV Substation - During normal operation, security lighting would be sensor activated, and access roads would not be lit.
- 8.7.11 This would reduce the effects of artificial lighting on nocturnal and crepuscular species (e.g., bats, badger, otter, beaver).

Table 8.30: Cumulative Effects for Protected Species from Stage 1 – Associated SSEN Transmission Network Upgrades

Feature	LPA	Cumulative Effects
Bats	The Highland Council Aberdeenshire Council	The EZol which has been assessed for cumulative impacts to bat is 4 km because the core sustenance zone¹³² for common pipistrelle bats is 2 km, for soprano pipistrelle, pipistrelle species and brown long-eared bats is 3 km and for Myotis species and Nyctalus species is 4 km¹³³. Therefore, it is possible that any developments affecting roosts and supporting bat habitat (e.g., woodland, flight paths) within this EZol could combine with the Proposed Development to elevate the significance of effects on bats using the Proposed Development and surrounding area. It is anticipated that all of the projects would be undertaken in line with the Applicant's baseline mitigation bat SPP. It is anticipated that for all projects construction would be predominantly undertaken during hours of daylight and that they would only require emergency lighting during their operation (as detailed above), such that the effects of ALAN would remain not significant. Preliminary baseline data collection for these developments and a review of aerial imagery indicated that there is potential for additional loss of PRFs / roosting resources and other supporting habitat (e.g., for commuting and foraging). It would be reasonable to assume that the mitigation hierarchy would be applied alongside a consideration of alternatives, such that features of importance would be retained as far as reasonably possible (e.g., by avoiding / micro-siting around features). Where unavoidable, it is assumed that compensation for loss of confirmed roosts would be secured through licensing. It is unknown if the loss of roosting resources (PRFs)

¹³² A core sustenance zone, as applied to bats, refers to the area surrounding a communal bat roost within which habitat availability and quality will have a significant influence on the resilience and conservation status of the colony using the roost.

¹³³ Bat Conservation Trust (2016). Core Sustenance Zones: Determining zone size. Available at: <https://www.bats.org.uk/our-work/landscapes-for-bats/core-sustenance-zones>

Feature	LPA	Cumulative Effects
		from each network upgrade would be compensated for – therefore applying a precautionary approach, this could have a significant cumulative effect. There is also potential for fragmentation of roosting and foraging resources within the core sustenance zone (up to 4 km). Where the above projects would result in a loss of woodland edge habitat, lines of trees or hedgerows that can offer connectivity between roosts and foraging resources. Whilst this could result in additional loss of roosting and foraging resources, the wider landscape within which the Proposed Development and above projects are located has a patchwork of linear features (e.g., woodland edge habitat, watercourses, hedgerows, lines of trees), such that if some are lost or bisected, bats would still be able to navigate across their core sustenance zone, between existing and otherwise unaffected roosting and foraging resources. Therefore, the effects are not significant. There is potential for accidental injury to or killing of bats when felling trees with PRFs to facilitate installation of the above projects. As set out in the assessment of this effect from the Proposed Development, it would be reasonable to assume that felling works would cease in the event that an unexpected bat / roost is observed or suspected (due to legislation protecting bats), such that the effects of accidental injury or killing of an individual bat or low number of bats would be short-term and reversible at a local population scale. Any incidental injury / mortality impacts during construction of the substations in combination with the Proposed Development would still be not significant. Any compensatory PRFs (e.g., bat boxes, bat rockets, reclaimed PRFs, veteranisation) identified during the impact assessment for the Proposed Development would be located in cognisance of these other developments, such that the PRFs would be effective and safeguarded from future impacts. For example, they will be located over 30 m away from other developments, in unlit areas, and in places with retained connectivity to wider bat habitat. Overall, construction or operation of the Proposed Development concurrently or sequentially to these known network upgrades would be unlikely to cause a significant cumulative effect on bats using the surrounding area throughout the region.
Badger	The Highland Council Aberdeenshire Council	The EZoI which has been assessed as 1 km, using professional judgement. It is possible that any developments affecting setts and supporting habitat (e.g., foraging and commuting habitat) within this EZoI could combine with the Proposed Development to elevate the significance of effects on badgers using the Proposed Development and surrounding area. It is anticipated that all of the projects would be undertaken in line with the Applicant's baseline mitigation badger SPP. Preliminary baseline data collection for these developments and a review of aerial imagery indicated that there is potential for additional loss of setts and foraging resources. It would be reasonable to assume that the mitigation hierarchy would be applied alongside a consideration of alternatives, such that features of importance for badgers would be retained as far as reasonably possible (e.g., by avoiding / micro-siting around setts). Where unavoidable, it is assumed that compensation for loss of breeding setts would be secured through licensing. It is unknown if the loss of setts from each project (if present) would be compensated for –

Feature	LPA	Cumulative Effects
		however, this would not change the regional conservation status on badger and is therefore not significant. There is also potential for fragmentation of commuting and foraging resources within the Ezol (up to 1 km). Where the above developments would result in loss of badger foraging habitat (e.g. broadleaved woodland, improved grassland), the wider landscape within which the Proposed Development are located has suitable well-connected habitat. Such that if some are lost or bisected, badgers would still be able to navigate across their EZol between existing and otherwise unaffected setts and foraging resources. This effect remains not significant. Ranges into other social group territories may become more frequent if badgers are displaced; however it has been evidenced that badgers display flexibility in their social dynamics and some badgers may already display behaviours such as 'super-ranging'¹³⁴. Any cumulative effects on the inter-social dynamics would be not significant. Mitigation measures will reduce the potential for effects on badger from the network upgrades. However, there is potential for accidental injury to or killing of badgers throughout construction, including during vegetation clearance and tree felling to facilitate installation of the above projects. As set out in the assessment of this effect from the Proposed Development, effects of injury to or killing of an individual would be short-term and reversible at a local population scale. Any incidental injury/ mortality impacts during construction of the above projects in combination with the Proposed Development would remain not significant. Any compensatory setts identified during the impact assessment for the Proposed Development would need to be located in cognisance of these other developments, such that the artificial setts would be effective and safeguarded from future impacts. For example, they will be located over 30 m away from other developments, in unlit areas, and in places with retained connectivity to wider habitat. Overall, construction or operation of the Proposed Development concurrently or sequentially to these known projects would be unlikely to cause a significant cumulative effect on badgers using the surrounding area.
Pine Marten and Red Squirrel	The Highland Council	Pine marten and red squirrel use similar resources (i.e. woodland) and as such have been assessed together. The EZol has been assessed as 1 km for both pine marten and red squirrel, using professional judgement. It is possible that any developments affecting resting sites and supporting habitat (e.g., foraging and commuting habitat) within this EZol could combine with the Proposed Development to elevate the significance of effects on pine marten and red squirrel using the Proposed Development and surrounding area. It is anticipated that all of the projects would be undertaken in line with the Applicant's baseline mitigation pine marten and red squirrel SPPs. Preliminary baseline data collection for these developments and a review of aerial imagery indicated that there is potential for additional loss of

¹³⁴ Gaughran, A., Kelly, D. J., MacWhite, T., Mullen, E., Maher, P., Good, M. and Marples, N. M. (2018). Super-ranging. A new ranging strategy in European badgers. PLoS ONE 13(2). Available at: https://www.researchgate.net/publication/323194069_Super-ranging_A_new_ranging_strategy_in_European_badgers

Feature	LPA	Cumulative Effects
		resting sites and foraging and commuting resources (i.e. woodland) at Fanellan and Coachford. It would be reasonable to assume that the mitigation hierarchy would be applied alongside a consideration of alternatives, such that features of importance would be retained as far as reasonably possible (e.g., by avoiding / micro-siting around resting sites). Where unavoidable, it is assumed that compensation for loss of resting sites would be secured through licensing. It is unknown if the loss of resting sites (if present) would be compensated for, however, it is unlikely to affect the conservation objectives of these species and is therefore not significant. There is potential for accidental injury to or killing of pine marten and red squirrel throughout construction, particularly during vegetation clearance and tree felling, to facilitate installation of the above projects. As set out in the assessment of these IEFs from the Proposed Development, effects of accidental injury to or killing of an individual would be short-term and reversible at a local population scale. Any incidental injury / mortality impacts during construction of the above network upgrades in combination with the Proposed Development would still be not significant. Overall, construction or operation of the Proposed Development concurrently or sequentially to these known network upgrades would be unlikely to cause a significant cumulative effect on pine marten or red squirrel populations using the surrounding area.
Otter, Water Vole and Beaver	The Highland Council Aberdeenshire Council	Otter, water vole and beaver use similar resources (i.e. riparian habitat) and as such have been assessed together. The EZol has been assessed as 1 km for all species, using professional judgement. Whilst otter can have much larger territories (up to 32 km for males and 20 km for females¹³⁵), any impact as a result of the network upgrades are at a much smaller scale, hence the 1 km EZol. It is possible that any developments affecting riparian habitat and wetlands could also effect resting sites and foraging and commuting habitat within this EZol which could combine with the Proposed Development to elevate the significance of effects on otter, water vole and beaver using the Proposed Development and surrounding area It is anticipated that all of the projects would be undertaken in line with the Applicant's baseline mitigation otter, water vole and beaver SPPs. Preliminary baseline data collection for these developments and a review of aerial imagery indicated there is potential for additional disturbance of resting sites and foraging and commuting resources (i.e. riparian corridors), as follows: • Fanellan – Otter and beaver confirmed along the River Beaully. Watercourses considered sub-optimal for water vole due to agriculture practices and livestock up to the edge of the banksides • Greens – Otter confirmed at Burn of Greens. Suitable habitat for water vole.

¹³⁵ NatureScot (online). Otter. Available at: <https://www.nature.scot/plants-animals-and-fungi/mammals/land-mammals/otter>

Feature	LPA	Cumulative Effects
		Netherton – Otter confirmed at Burn of Ludquharn. Limited suitability for water vole. It is anticipated that all of the projects apply the mitigation hierarchy alongside a consideration of alternatives, such that features of importance would be retained as far as reasonably possible (e.g., by avoiding / micro-siting around resting sites). Where unavoidable, it is assumed that compensation for loss / disturbance of resting sites would be secured through licensing. It is unknown if the loss of resting sites (if present) would be compensated for, however, it is unlikely to affect the conservation objectives of these species and is therefore not significant. Mitigation measures will reduce the potential for effects on these species from the network upgrades. However, there is potential for accidental injury to or killing of otter, water vole and beaver throughout construction including vegetation clearance and tree felling in riparian areas / wetland habitats to facilitate installation of the above projects. As set out in the assessment of this effect from the Proposed Development, effects of injury to or killing of an individual would be short-term and reversible at a local population scale. Any incidental injury / mortality impacts during construction of the above projects in combination with the Proposed Development would still be not significant. Overall, construction or operation of the Proposed Development concurrently or sequentially to these known projects would be unlikely to cause a significant cumulative effect on otter, water vole and beaver using the surrounding riparian habitat.
Wildcat	The Highland Council Aberdeenshire Council	The EZoI which has been assessed as 1 km , using professional judgement. It is possible that any developments affecting resting sites and supporting habitat (e.g., foraging and commuting habitat) within this EZoI could combine with the Proposed Development to elevate the significance of effects on wildcat using the Proposed Development and surrounding area. It is anticipated that all of the projects would be undertaken in line with the Applicant's baseline mitigation wildcat SPP. Preliminary baseline data collection for these developments and a review of aerial imagery indicated that there is potential for additional disturbance of resting sites and foraging and commuting resources (i.e. woodland edges, uplands). It would be reasonable to assume that the mitigation hierarchy would be applied alongside a consideration of alternatives, such that features of importance would be retained as far as reasonably possible (e.g., by avoiding / micro-siting around dens). Where unavoidable, it is assumed that compensation for disturbance of resting sites would be secured through licensing. Overall, it is unlikely to affect the conservation objectives of the species and is therefore not significant. Mitigation measures will reduce the potential for effects on wildcat from the network upgrades. However, there is potential for accidental injury to or killing of wildcat throughout construction including vegetation clearance and tree felling to facilitate installation of the above network upgrades. As set out in the assessment of this effect from the Proposed Development, effects of injury to or killing of an individual would be short-term and reversible at a local population scale. Any incidental injury / mortality impacts during construction of the above projects in combination with the Proposed Development would still be not significant.

Feature	LPA	Cumulative Effects
		Overall, construction or operation of the Proposed Development concurrently or sequentially to these network upgrades would be unlikely to cause a significant cumulative effect on wildcat using the surrounding area.
Fish and FWPM	The Highland Council Aberdeenshire Council	Fish and FWPM use similar resources (i.e. watercourses) and as such have been assessed together. It is anticipated that network upgrades which overlap / interact with the EZol for fish and FWPM (Fanellan only) would be subject to the same legal obligations for these species, including restrictions on timings of works to protect spawning migratory salmonids, their spawn, and migrating 'smolts', as well as prevention of sedimentation to prevent smothering of FWPM or fish eggs. It is assumed that existing hydrological connections will be maintained at watercourses. It is anticipated that all of the projects would be undertaken in line with the Applicant's baseline mitigation FWPM SPP. It is therefore considered unlikely for the Proposed Development to combine with any other developments to cause a significant cumulative effect on fish and FWPM.
Reptiles	The Highland Council Aberdeenshire Council	The EZol has been assessed as 1 km, using professional judgement. It is possible that any developments affecting suitable reptile habitat (i.e. edge habitat, tussocky habitat, hibernacula, basking sites) within this EZol could combine with the Proposed Development to elevate the significance of effects on reptiles using the Proposed Development and surrounding area. It is anticipated that network upgrades which overlap / interact with the EZol for reptiles would be subject to the same legal obligations for the species and would employ similar methods to displace individuals from the site (e.g. phased strimming). It is therefore considered unlikely for the Proposed Development to combine with any other developments to cause a significant cumulative effect on reptiles.

Summary of Significant Cumulative Effects from Stage 1 – Associated SSEN Transmission Network Upgrades

- 8.7.12 A summary of the significant effects as a result of the in-combination effects of Stage 1 upgrades, is detailed in **Table 8.31**, below.

Table 8.31: Significant Effects - Stage 1 – Associated SSEN Transmission Network Upgrades

Feature	LPA	Cumulative Effects
Bats	The Highland Council Aberdeenshire Council	Loss of confirmed roosts - it is unknown if the loss of roosting resources (PRFs) from each network upgrade would be compensated for – therefore applying a precautionary approach, this could have a significant cumulative effect.

In-combination Effects: Stage 2 – Other Developments

- 8.7.13 It is possible that any developments affecting IEFs within this EZol could combine with the Proposed Development to elevate the significance of effects on these IEFs. The developments included within Stage 2 are listed in **Appendix 5.1: Cumulative Developments** and shown in **Figure 5.1: Cumulative Developments**.

- 8.7.14 It is anticipated that all of the Stage 2 developments would be undertaken in line with relevant best practice (e.g. pollution prevention, protected species mitigation etc.).
- 8.7.15 Only Stage 2 developments within the EZol for each IEF are included below.
- 8.7.16 No information was available within the public domain for the following developments:
- The Highland Council
 - H05 Western Isles HVDC UGC
 - Aberdeenshire Council
 - A01 Greens Underground Cable Connection
 - A02 Netherton Hub 400 kV OHL Connection to New Deer and Peterhead – Tie-in
 - A03 Netherton Hub 400 kV OHL Connection to New Deer and Peterhead – Rebuild
 - A07 Spittal - Peterhead UGC Permitted Development
 - A08 EGL3 UGC Permitted Development
- 8.7.17 Where designated sites cover the same geographical location they have been considered together in the cumulative assessment below in **Table 8.32** (see **Figure 8.1: International Designated Sites** and **Figure 8.2: National, Local / Non-statutory Designated Sites**). The EZol is considered to be 10 km for international sites, 2 km for national sites and 1 km for local / non-statutory sites.
- 8.7.18 The results of the cumulative assessment for habitats is detailed in **Table 8.33** and for protected species in **Table 8.34**. The EZol is 4 km for bats and 1 km for all other protected species and it is possible that any developments affecting resting sites and supporting habitat within this EZol could combine with the Proposed Development to elevate the significance of effects on these species using the Proposed Development and surrounding area.

Table 8.32: Cumulative Effects on Designated Sites from Stage 2 – Other Developments

Feature	LPA	Stage 2 Developments within the EZol	Cumulative 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 cumulative effects would be not significant .
Moniack Gorge SAC and SSSI	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 cumulative effects are anticipated.
Cawdor Wood SAC and SSSI	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 cumulative effects are anticipated.

Feature	LPA	Stage 2 Developments within the EZol	Cumulative Effects
Lower Findhorn Woods SAC	Moray Council	H09 Cairn Duhie Wind Farm Redesign H11 Balmore Wind Farm H15 Ourack Wind Farm M01 Kellas Drum Windfarm M02 Berry Burn Wind Farm M08 Corshellach Energy Storage	H09 Cairn Duhie Wind Farm Redesign, H11 Balmore Wind Farm, H15 Ourack Wind Farm, M01 Kellas Drum Windfarm, M02 Berry Burn Wind Farm and M08 Corshellach Energy Storage 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 cumulative effects would be not significant .
River Spey SAC and SSSI	Moray Council	M01 Kellas Drum Windfarm M04 Rosarie Quarry M05 Teindland Wind Farm M07 Blackhills Wind Farm M13 Elchies (Rothies III) Wind Farm Grid Connection works M14 Marchfield Quarry M17 Aultmore Wind Farm Redesign	M13 Elchies (Rothies III) Wind Farm Grid Connection works is located nearby the SAC and SSSI and crosses the River Spey. M01 Kellas Drum Windfarm, M04 Rosarie Quarry, M05 Teindland Wind Farm, 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 cumulative effects would be not significant .
Lower River Spey - Spey Bay SAC	Moray Council	M04 Rosarie Quarry M05 Teindland Wind Farm M07 Blackhills Wind Farm M13 Elchies (Rothies 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 (Rothies 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.

Feature	LPA	Stage 2 Developments within the EZol	Cumulative Effects
			Due to these factors, and the fact that there is no clear pathway for effect from the Proposed Development alone (as detailed in the HRA ¹) any cumulative effects would be not significant .
Beaully Firth SSSI	The Highland Council	H02 Beaully BESS H05 Western Isles HVDC UGC H06 Beaully BESS H08 Beaully Substation	H02 Beaully BESS, H05 Western Isles HVDC UGC, H06 Beaully BESS and H08 Beaully Substation are located within the SSSI's EZol. It is assumed that best practice will be implemented to prevent pollution and any effects on the designated features of the SSSI. Potential degradation / pollution to the SSSI would be adverse, local, direct, temporary and reversible. Any cumulative effects would be not significant .
Buinach and Glenlatterach SSSI	Moray Council	M01 Kellas Drum Windfarm	M01 Kellas Drum Windfarm overlaps the boundary of the SSSI, however, it is assumed that best practice will be implemented to prevent pollution and any effects on the designated features of the SSSI. Potential degradation / pollution to the SSSI would be adverse, local, direct, temporary and reversible. Any cumulative effects would be not significant .
Coleburn Pasture SSSI	Moray Council	M07 Blackhills Wind Farm	M07 Blackhills Wind Farm is located 600 m from the SSSI but does not appear to be hydrologically connected. It is assumed that best practice will be implemented to prevent pollution and any effects on the designated features of the SSSI. Potential degradation / pollution to the SSSI would be adverse, local, indirect, temporary and reversible. Any cumulative effects would be not significant .
Mill Wood SSSI	Moray Council	M03 Gibston Farm BESS M09 Drum Farm Energy Storage M11 Keith Battery Storage	M03 Gibston Farm BESS, M09 Drum Farm Energy Storage and M11 Keith Battery Storage are located within the EZol however are not functionally linked. It is assumed that best practice will be implemented to prevent pollution and any effects on the designated features of the SSSI. Potential degradation / pollution to the SSSI would be adverse, local, indirect, temporary and reversible. Any cumulative effects would be not significant .

Feature	LPA	Stage 2 Developments within the EZol	Cumulative Effects
Den of Pitlurg SSSI and LNCS	Moray Council Aberdeenshire Council	M12 Blackhillock Battery Storage M15 Cairdshill Wind Farm	M12 Blackhillock Battery Storage and M15 Cairdshill Wind Farm are located within the EZol. However none of the sites are functionally linked to the SSSI. It is assumed that best practice will be implemented to prevent pollution and any effects on the designated features of the SSSI. Potential degradation / pollution to the SSSI would be adverse, local, indirect, temporary and reversible. Any cumulative effects would be not significant .
Buglife B-line	Highland Council Moray Council Aberdeenshire Council	H01 Knocknagael BESS H02 Beaulieu BESS H03 Beaulieu to Denny Overhead Line Diversion H04 Spittal to Loch Buidhe to Beaulieu 400 kV Project H05 Western Isles HVDC UGC H07 Kilmorack Substation H08 Beaulieu Substation H09 Cairn Duhie Wind Farm Redesign H10 Aigas Substation H12 Ballach Wind Farm H15 Ourack Wind Farm M02 Berry Burn Wind Farm M04 Rosarie Quarry M05 Teindland Wind Farm M06 Blackmuir Quarry M08 Corshellach Energy Storage	All of the Stage 2 Developments listed are located within the B-line or within the EZol. The habitats within these locations are prevalent in the surrounding area and as such the potential habitat loss of the landscape would be adverse, direct, localised spatial magnitude, permanent and irreversible. Any cumulative effects would be not significant .

Feature	LPA	Stage 2 Developments within the EZol	Cumulative Effects
		M10 Cairdshill Quarry M12 Blackhillock Battery Storage M13 Elchies (Roths III) Wind Farm Grid Connection works M15 Cairds Hill Wind Farm M17 Aultmore Wind Farm Redesign A02 Netherton Hub 400 kV OHL Connection to New Deer and Peterhead – Tie-in A03 Netherton Hub 400 kV OHL Connection to New Deer and Peterhead – Rebuild A04 Stromar Offshore Wind Farm Onshore Works A05 Muir Mhor Onshore Works A06 Caledonia Offshore Wind Farm Onshore Works A07 Spittal - Peterhead UGC A08 EGL3 UGC A10 Greenvolt Onshore Works A11 Buchan Offshore Wind Farm Onshore Works A12 Greenvolt Onshore Works A16 Salamander Offshore Wind Farm	

Feature	LPA	Stage 2 Developments within the EZoI	Cumulative Effects
Great Glen and the Beaully Catchment Butterfly Conservation Scottish Priority Landscape	The Highland Council	H02 Beaully BESS H03 Beaully to Denny Overhead Line Diversion H04 Spittal to Loch Buidhe to Beaully 400 kV Project H05 Western Isles HVDC UGC H06 Beaully BESS H07 Kilmorack Substation H08 Beaully Substation H09 Cairn Duhie Wind Farm Redesign H10 Aigas Substation H12 Ballach Wind Farm H18 Fairburn Wind Farm Extension	All of the Stage 2 Developments listed are located within the Great Glen and the Beaully Catchment Butterfly Conservation Scottish Priority Landscape. The habitats within these locations are prevalent in the surrounding area and as such the potential habitat loss of the landscape would be adverse, direct, localised spatial magnitude, permanent and irreversible. Any cumulative effects would be not significant.
East Inverness-shire IIA	The Highland Council	H02 Beaully BESS H03 Beaully to Denny Overhead Line Diversion H04 Spittal to Loch Buidhe to Beaully 400 kV Project H05 Western Isles HVDC UGC H06 Beaully BESS H07 Kilmorack Substation H08 Beaully Substation H10 Aigas Substation H12 Ballach Wind Farm	All of the Stage 2 Developments listed are located within the IIA. The habitats within these locations are prevalent in the surrounding area and as such the potential habitat loss of the landscape would be adverse, direct, localised spatial magnitude, permanent and irreversible. Any cumulative effects would be not significant.

Feature	LPA	Stage 2 Developments within the EZoI	Cumulative Effects
		H18 Fairburn Wind Farm Extension	
Findhorn Culbin IIA	The Highland Council Moray Council	H09 Cairn Duhie Wind Farm Redesign H11 Balmore Wind Farm H17 Tom Nan Clach Wind Farm Extension M02 Berry Burn Wind Farm	H09 Cairn Duhie Wind Farm Redesign is located within the IIA, to the north of Lochan Tutach. M02 Berry Burn Wind Farm is also located within the IIA, however, it is only the access track which follows an existing access track within the boundary of the IIA. H11 Balmore Wind Farm is located immediately adjacent to the IIA, west of the River Findhorn and H17 Tom Nan Clach Wind Farm Extension is located within the EZoI. The habitats within these locations are prevalent in the surrounding area and as such the potential habitat loss of the landscape would be adverse, direct, localised spatial magnitude, permanent and irreversible. Any cumulative effects would be not significant .
Ordiequish, Whiteash, Ben Aigan Red Squirrel Stronghold	Moray Council	M04 Rosarie Quarry M05 Teindland Wind Farm M13 Elchies (Rothies III) Wind Farm Grid Connection works M17 Aultmore Wind Farm Redesign	M13 Elchies (Rothies III) Wind Farm Grid Connection works bisects the Ordiequish, Whiteash, Ben Aigan Red Squirrel Stronghold where it crosses the B9103. The remaining developments, M04 Rosarie Quarry, M05 Teindland Wind Farm and M17 Aultmore Wind Farm Redesign are out with the stronghold but within the EZoI. They are located beyond main roads and rivers and as such there is no connectivity. The potential degradation to the stronghold would be adverse, direct, localised spatial magnitude, permanent and irreversible. Any cumulative effects would be not significant .
Strathbogie WPA	Aberdeenshire Council	M15 Cairdshill Wind Farm A14 Hill of Stoneyfield Wind Farm A15 Glens Of Foudland Wind Farm Bainshole	A14 Hill of Stoneyfield Wind Farm overlaps the perimeter of the WPA located within commercial plantation forestry. M15 Cairdshill Wind Farm and A15 Glens Of Foudland Wind Farm Bainshole are located within the EZoI. The potential degradation to the WPA would be adverse, direct, localised spatial magnitude, permanent and irreversible. Any cumulative effects would be not significant .

Table 8.33: Cumulative Effects on Habitats from Stage 2 – Other Developments

Feature	LPA	Relevant Stage 2 Developments	Cumulative Effects
Ancient Woodland	The Highland Council	H02 Beaulieu BESS. Category 2b AWI within the boundary, Category 2a AWI approximately 74 m from the boundary.	Categories 2b and 3 of the AWI are not considered irreplaceable habitat and are largely commercial forestry plantation. The loss and potential degradation / pollution to these woodlands would be adverse, local, direct, permanent and irreversible. Due to the managed nature of these woodlands, any cumulative effects would be not significant. Where irreplaceable ancient woodland (categories 1a and 2a) is present within the immediate surroundings of a development it may be subject to degradation / pollution as a result of works. It is assumed each development would follow general best practice regarding pollution prevention and as such effects would be adverse, local, indirect, temporary and reversible. Any cumulative effects would be not significant. Where irreplaceable ancient woodland is present within the remaining developments, it would be reasonable to assume that the mitigation hierarchy would be applied alongside a consideration of alternatives, such that these woodlands would be retained as far as reasonably possible (e.g., by avoiding / micro-siting around them). Where unavoidable, it is assumed that compensation for loss of such woodlands would be agreed with NatureScot, owing to their irreplaceable nature. Effects would be adverse, of a regional scale, direct, permanent and irreversible. As it is unknown at this stage whether there would be a loss of irreplaceable habitat, the precautionary principle has been applied as there is potential for significant cumulative effects.
	Moray Council	H03 Beaulieu to Denny Overhead Line Diversion. Category 2b AWI within the boundary.	
	Aberdeenshire Council	H04 Spittal to Loch Buidhe to Beaulieu 400 kV Project. Category 1a, 2a and 2b AWI within the boundary.	
		H05 Western Isles HVDC UGC. Category 1a, 2a, 2b and 3 AWI within the boundary.	
		H07 Kilmorack Substation. Category 2b AWI within the boundary.	
		H08 Beaulieu Substation. Category 2b AWI within the boundary.	
		H09 Cairn Duhie Wind Farm Redesign. Category 2b AWI within the boundary.	
		H10 Aigas Substation. Category 2a and 2b AWI within the boundary.	
		H11 Balmore Wind Farm. Category 3 AWI within the boundary.	
		H12 Ballach Wind Farm. Category 2b AWI within the boundary.	
		H14 Carn Na Saobhaidh Wind Farm. Category 1a, 2a and 2b AWI within the boundary.	
		H16 Lynemore Wind Farm. Category 1a, 2a and 3 AWI within the boundary.	
		H18 Fairburn Wind Farm Extension – ancient woodland present within the site. Category 1a and 2a AWI within the boundary.	
		M01 Kellas Drum Windfarm. Category 2a AWI within the boundary.	
		M02 Berry Burn Wind Farm. Category 2b AWI within the boundary.	
		M05 Teindland Wind Farm. Largely comprised of category 2b AWI.	

Feature	LPA	Relevant Stage 2 Developments	Cumulative Effects
		M06 Blackmuir Quarry. Category 2b AWI within the boundary. M07 Blackhills Wind Farm. Category 2b AWI immediately adjacent to the boundary. M08 Corshellach Energy Storage. Category 2b AWI within the boundary. M12 Blackhillock Battery Storage. Category 2b AWI within the boundary. M13 Elchies (Rothies III) Wind Farm Grid Connection works. Category 2b AWI within the boundary. M15 Cairdshill Wind Farm. Largely comprised of category 2b AWI. M17 Aultmore Wind Farm Redesign. Category 2b AWI within the boundary. A03 Netherton Hub 400 kV OHL Connection to New Deer and Peterhead – Rebuild. Category 2a and 2b AWI within the boundary. A04 Stromar Offshore Wind Farm Onshore Works. Category 2a and 2b AWI within the boundary. A05 Muir Mhor Onshore Work. Category 2a AWI immediately adjacent to the boundary. A06 Caledonia Offshore Wind Farm Onshore Works. Category 2a AWI immediately adjacent to the boundary. A11 Buchan Offshore Wind Farm Onshore Works. Category 2a and 2b AWI within the boundary. A12 Greenvolt Onshore Works. Category 2b AWI within the boundary. A15 Glens Of Foudland Wind Farm Bainshole. Category 2b AWI within the boundary.	
Peatland	The Highland Council Moray Council	H04 Spittal to Loch Buidhe to Beaulay 400 kV Project. Class 1 and Class 2 peatland throughout the site. Blanket bog recorded within the site.	It would be reasonable to assume that the mitigation hierarchy would be applied alongside a consideration of alternatives, such that these peatlands would be retained as far as reasonably possible (e.g., by avoiding / micro-siting around them). Where unavoidable, it is assumed

Feature	LPA	Relevant Stage 2 Developments	Cumulative Effects
		H05 Western Isles HVDC UGC. Class 1 and Class 2 peatland throughout the site. H09 Cairn Duhie Wind Farm Redesign. Class 1 and Class 2 peatland throughout the site. Loss of blanket bog. H12 Ballach Wind Farm. Class 1 and Class 2 peatland throughout the site. Bog located within the site. H14 Carn Na Saobhaidh Wind Farm. Class 1 and Class 2 peatland throughout the site. H15 Ourack Wind Farm. Class 1 peatland throughout the site. Direct loss of blanket bog. H16 Lynemore Wind Farm. Class 1 peatland throughout the site. Blanket bog recorded. H17 Tom Nan Clach Wind Farm Extension. Class 1 and Class 2 peatland throughout the site. Dominated by degraded blanket bog. H18 Fairburn Wind Farm Extension. Class 1 and Class 2 peatland throughout the site. M01 Kellas Drum Windfarm. Class 1 and Class 2 peatland throughout the site. Direct loss of blanket mire. M02 Berry Burn Wind Farm. Class 1 and Class 2 peatland throughout the site. Blanket bog recorded. M08 Corshellach Energy Storage. Class 1 and Class 2 peatland throughout the site. M13 Elchies (Rothes III) Wind Farm Grid Connection works. Class 1 peatland within the site. Blanket bog and modified bog recorded. M17 Aultmore Wind Farm Redesign. Class 1 peatland within the site. A02 Netherton Hub 400 kV OHL Connection to New Deer and Peterhead – Tie-in. Pocket of Class 1 peatland within the site.	that compensation for loss of such peatlands would be compensated for or agreed with NatureScot, where irreplaceable blanket bog exists. Additionally, it is assumed the targets of NPF4 will ensure enhancement of surrounding areas or the creation of such habitats. Effects would be adverse, of a regional scale, direct, permanent and irreversible. As it is unknown at this stage whether there would be a loss of irreplaceable habitat, the precautionary principle has been applied as there is potential for significant cumulative effects.

Feature	LPA	Relevant Stage 2 Developments	Cumulative Effects
		A03 Netherton Hub 400 kV OHL Connection to New Deer and Peterhead – Rebuild. Pocket of Class 1 peatland within the site. A04 Stromar Offshore Wind Farm Onshore Works. Pocket of Class 1 peatland within the site. A06 Caledonia Offshore Wind Farm Onshore Works. Pocket of Class 1 peatland within the site. A07 Spittal - Peterhead UGC. Pocket of Class 1 peatland within the site. A15 Glens Of Foudland Wind Farm Bainshole. Pocket of Class 1 peatland within the site.	

Table 8.34: Cumulative Effects on Protected Species from Stage 2 – Other Developments

Feature	LPA	Relevant Stage 2 Developments	Cumulative Effects
Bats	The Highland Council Moray Council Aberdeenshire Council	H01 Knocknagael BESS. Likely PRFs. H02 Beaulieu BESS. PRFs. H03 Beaulieu to Denny Overhead Line Diversion. PRFs. H07 Kilmorack Substation. PRFs H08 Beaulieu Substation. Supporting habitat. H09 Cairn Duhie Wind Farm Redesign. Confirmed presence. H10 Aigas Substation. Confirmed roost and PRFs. H13 Inverness College Campus. PRFs. H15 Ourack Wind Farm. Confirmed presence.	The EZol which has been assessed is 4 km, therefore, it is possible that any developments affecting roosts and supporting bat habitat (e.g., woodland, flight paths) within this EZol could combine with the Proposed Development to elevate the significance of effects on bats using the Proposed Development and surrounding area. The developments listed here have included bat surveys results within available resources, however, it is also likely that more of the Stage 2 developments contain potential PRFs and suitable commuting and foraging habitat for bats. As such a precautionary approach has been applied. It is anticipated that any construction would be predominantly undertaken during hours of daylight and that they would not require lighting during their operation, such that the effects of ALAN would remain not significant. There is potential for additional loss of PRFs / roosting resources and other supporting habitat (e.g., for commuting and foraging). It would be reasonable to assume that the mitigation hierarchy would be applied alongside a consideration of alternatives, such that features of importance would be retained as far as

Feature	LPA	Relevant Stage 2 Developments	Cumulative Effects
		H16 Lynemore Wind Farm. Confirmed presence. H17 Tom Nan Clach Wind Farm Extension. Confirmed presence. H18 Fairburn Wind Farm Extension. Confirmed presence. M01 Kellas Drum Windfarm. Confirmed presence. M13 Elchies (Rothes III) Wind Farm Grid Connection works. PRFs M15 Cairdshill Wind Farm. Confirmed presence. A10 Abbotshaugh Energy Storage. PRFs.	reasonably possible (e.g., by avoiding / micro-siting around features). Where unavoidable, it is assumed that compensation for loss of confirmed roosts would be secured through licensing. It is unknown if the loss of roosting resources (PRFs) from each network upgrade would be compensated for – therefore this is significant. There is also potential for fragmentation of roosting and foraging resources within a core sustenance zone (up to 4 km). Where the above developments would bisect / remove woodland, lines of trees or hedgerows that can offer connectivity between roosts and foraging resources. Whilst this could result in additional loss of roosting and foraging resources, the wider landscape within which the Proposed Development and above projects are located has a patchwork of linear features (e.g., woodland edge habitat, watercourses, hedgerows, lines of trees), such that if some are lost or bisected, bats would still be able to navigate across their core sustenance zone between existing and otherwise unaffected roosting and foraging resources. Overall the cumulative effect of fragmentation is not significant. There is potential for accidental injury to or killing of bats when felling trees with PRFs to facilitate installation of the developments. As set out in the assessment of this effect from the Proposed Development, it would be reasonable to assume that felling works would cease in the event that an unexpected bat / roost is observed or suspected (due to legislation protecting bats), such that the effects of injury to or killing of an individual or low number of bats would be short-term and reversible at a local population scale. Any incidental injury / mortality impacts during construction of the connections in combination with the Proposed Development would still have a not significant cumulative effect. Any compensatory PRFs (e.g., bat boxes, bat rockets, reclaimed PRFs, vetenerisation) identified during the impact assessment for the Proposed Development would need to be located in cognisance of these other developments such that the PRFs would be effective and safeguarded from future impacts. For example, they will be located over 30 m away from other developments, in unlit areas, and in places with retained connectivity to wider bat habitat. Given the cumulative loss of roosting resources, the overall cumulative impact on bats would be significant.

Feature	LPA	Relevant Stage 2 Developments	Cumulative Effects
Badger	The Highland Council Moray Council Aberdeenshire Council	H02 Beaully BESS. Confirmed presence. H03 Beaully to Denny Overhead Line Diversion. Confirmed presence. H06 Beaully BESS. Confirmed presence. H07 Kilmorack Substation. Confirmed presence. H08 Beaully Substation. Confirmed presence. H10 Aigas Substation. Confirmed presence. H16 Lynemore Wind Farm. Confirmed presence. H18 Fairburn Wind Farm Extension. Confirmed presence. M01 Kellas Drum Windfarm. Confirmed presence. M09 Drum Farm Energy Storage. Confirmed presence. M10 Cairdshill Quarry. Loss of one outlier sett. M13 Elchies (Rothes III) Wind Farm Grid Connection works. Confirmed presence. M15 Cairdshill Wind Farm. Confirmed presence. M16 Dykeside Farm Quarry. Confirmed presence. A05 Muir Mhor Onshore Works. Confirmed presence. A09 New Deer 2 Battery Energy Storage System. Suitable habitat.	Preliminary baseline data collection for these developments and a review of aerial imagery covering areas indicated that there is potential for additional loss of setts and foraging resources. It would be reasonable to assume that the mitigation hierarchy would be applied alongside a consideration of alternatives, such that features of importance would be retained as far as reasonably possible (e.g., by avoiding / micro-siting around setts). Where unavoidable, it is assumed that compensation for loss of breeding setts would be secured through licensing. It is unknown if the loss of setts from each project (if present) would be compensated for. Overall the cumulative effect is not significant. There is also potential for fragmentation of commuting and foraging resources within the EZol (up to 1 km). Where the above upgrades would result in habitat loss suitable as a foraging resource (e.g. broadleaved woodland, improved grassland), the wider landscape within which the Proposed Development and developments are located has suitable well-connected habitat, such that if some are lost or bisected, badgers would still be able to navigate across their EZol between existing and otherwise unaffected setts and foraging resources. Overall the cumulative effect is not significant. Ranges into other social group territories may become more frequent if badgers are displaced, however it has been evidenced that badgers display flexibility in their social dynamics and some badgers may already display behaviours such as 'super-ranging'. Any cumulative effects on the inter-social dynamics would be not significant. There is potential for incidental injury to or killing of badgers throughout construction including vegetation clearance and tree felling to facilitate installation of the above projects. As set out in the assessment of this effect from the Proposed Development, effects of injury to or killing of an individual would be short-term and reversible at a local population scale. Any incidental injury / mortality impacts during construction of the other developments in combination with the Proposed Development would still be not significant. Any compensatory setts identified during the impact assessment for the Proposed Development would need to be located in cognisance of these other developments such that the setts would be effective and safeguarded from future impacts. For example, they will be located over 30 m away from other

Feature	LPA	Relevant Stage 2 Developments	Cumulative Effects
		A10 Abbotshaugh Energy Storage. Confirmed presence. A12 Greenvolt Onshore Works. Confirmed presence. A14 Hill of Stoneyfield Wind Farm. Confirmed presence A16 Salamander Offshore Wind Farm. Confirmed presence.	developments, in unlit areas, and in places with retained connectivity to wider habitat. Overall, construction or operation of the Proposed Development concurrently or sequentially to these known developments would be unlikely to cause a significant cumulative effect on badgers using the surrounding area.
Red squirrel	The Highland Council Moray Council Aberdeenshire Council	H07 Kilmorack Substation. Confirmed presence. H10 Aigas Substation. Confirmed presence. H16 Lynemore Wind Farm. Confirmed squirrel presence. M13 Elchies (Rothes III) Wind Farm Grid Connection works. Confirmed presence. A09 New Deer 2 Battery Energy Storage System. Suitable habitat.	Pine marten and red squirrel use similar resources (i.e. woodland) and as such have been assessed together. Preliminary baseline data collection for these developments and a review of aerial imagery covering areas indicated that there is potential for additional loss of resting sites and foraging and commuting resources (i.e. woodland). It would be reasonable to assume that the mitigation hierarchy would be applied alongside a consideration of alternatives, such that features of importance would be retained as far as reasonably possible (e.g., by avoiding / micro-siting around resting sites). Where unavoidable, it is assumed that compensation for loss of resting sites would be secured through licensing. It is unknown if the loss of resting sites from each project (if present) would be compensated for.
Pine marten	The Highland Council Moray Council Aberdeenshire Council	H18 Fairburn Wind Farm Extension. Confirmed presence. M13 Elchies (Rothes III) Wind Farm Grid Connection works. Confirmed presence. A09 New Deer 2 Battery Energy Storage System. Suitable habitat.	There is potential for incidental injury to or killing of pine marten and red squirrel throughout construction including vegetation clearance and tree felling to facilitate installation of the above projects. As set out in the assessment of these IEFs from the Proposed Development, effects of injury to or killing of an individual would be short-term and reversible at a local population scale. Any incidental injury / mortality impacts during construction of the other developments in combination with the Proposed Development would still be not significant cumulative effect. Overall, construction or operation of the Proposed Development concurrently or sequentially to these known network upgrades would be unlikely to cause a significant cumulative effect on pine marten or red squirrel using the surrounding area.

Feature	LPA	Relevant Stage 2 Developments	Cumulative Effects
Otter	The Highland Council Moray Council Aberdeenshire Council	H07 Kilmorack Substation. Confirmed presence. H10 Aigas Substation. Confirmed presence. H16 Lynemore Wind Farm. Confirmed presence. H17 Tom Nan Clach Wind Farm Extension. Confirmed presence. H18 Fairburn Wind Farm Extension. Confirmed presence. M01 Kellas Drum Windfarm. Confirmed presence. M09 Drum Farm Energy Storage. Confirmed presence. A05 Muir Mhor Onshore Works. Confirmed presence. A10 Abbotshaugh Energy Storage. Suitable habitat for foraging and commuting.	Otter, beaver and water vole use similar resources (i.e. riparian habitat) and as such have been assessed together. Preliminary baseline data collection for these developments and a review of aerial imagery covering areas indicated that there is potential for additional disturbance of resting sites and foraging and commuting resources (i.e. riparian corridors). It would be reasonable to assume that the mitigation hierarchy would be applied alongside a consideration of alternatives, such that features of importance would be retained as far as reasonably possible (e.g., by avoiding / micro-siting around resting sites). Where unavoidable, it is assumed that compensation for loss / disturbance of resting sites would be secured through licensing. It is unknown if the loss of resting sites from the other developments (if present) would be compensated for. There is potential for incidental injury to or killing of otter, beaver and water vole throughout construction including vegetation clearance and tree felling to facilitate installation of the other developemnts. As set out in the assessment of this effect from the Proposed Development, effects of injury to or killing of an individual would be short-term and reversible at a local population scale. Any incidental injury / mortality impacts during construction of the above projects in combination with the Proposed Development would still be not significant cumulative effect.
Water vole	The Highland Council Moray Council Aberdeenshire Council	H16 Lynemore Wind Farm. Potential field signs. H18 Fairburn Wind Farm Extension. Confirmed presence A10 Abbotshaugh Energy Storage. Suitable habitat.	Overall, construction or operation of the Proposed Development concurrently or sequentially to these known projects would be unlikely to cause a significant cumulative effect on otter, beaver and water vole using the surrounding area.
Beaver	The Highland Council Moray Council Aberdeenshire Council	H02 Beaully BESS. Confirmed presence.	

Feature	LPA	Relevant Stage 2 Developments	Cumulative Effects
Wildcat	The Highland Council Moray Council Aberdeenshire Council	None of the developments within this section considered wildcat.	Whilst none of the developments listed wildcat within the available resources, it is assumed there is suitable habitat throughout for the species and as such they have been considered here. Preliminary baseline data collection for these developments and a review of aerial imagery covering areas indicated that there is potential for additional disturbance of resting sites and foraging and commuting resources (i.e. woodland edges, uplands). It would be reasonable to assume that the mitigation hierarchy would be applied alongside a consideration of alternatives, such that features of importance would be retained as far as reasonably possible (e.g., by avoiding / micro-siting around dens). Where unavoidable, it is assumed that compensation for disturbance of resting sites would be secured through licensing. There is potential for incidental injury to or killing of wildcat throughout construction including vegetation clearance and tree felling to facilitate installation of the above network upgrades. As set out in the assessment of this effect from the Proposed Development, effects of injury to or killing of an individual would be short-term and reversible at a local population scale. Any incidental injury / mortality impacts during construction of the other developments in combination with the Proposed Development would still be not significant. Overall, construction or operation of the Proposed Development concurrently or sequentially to these network upgrades would be unlikely to cause a significant cumulative effect on wildcat using the surrounding area.
Fish and FWPM	The Highland Council Moray Council Aberdeenshire Council	H17 Tom Nan Clach Wind Farm Extension. Confirmed brown trout presence. A16 Salamander Offshore Wind Farm. Suitable habitat.	Fish and FWPM use similar resources (i.e. watercourses) and as such have been assessed together. It has been assumed that network upgrades which overlap / interact with the EZoI for fish and FWPM would be subject to the same legal obligations for these species. Including restrictions on timings of works to protect spawning migratory salmonids, their spawn, and migrating 'smolts' as well as prevention of sedimentation to prevent smothering of FWPM or fish eggs. It is assumed that hydrological connections will be maintained at watercourses. It is therefore considered unlikely for the Proposed Development to combine with any other developments to cause a significant cumulative effect on fish and FWPM.

Feature	LPA	Relevant Stage 2 Developments	Cumulative Effects
Reptiles	The Highland Council	H10 Aigas Substation. Confirmed common lizard presence.	It has been assumed that network upgrades which overlap / interact with the EZoI for reptiles would be subject to the same legal obligations for the species and would employ similar methods to displace individuals from the site (e.g. phased strimming). It is therefore considered unlikely for the Proposed Development to combine with any other developments to cause a significant cumulative effect on reptiles.
	Moray Council	H18 Fairburn Wind Farm Extension. Confirmed adder, slow worm and common lizard presence.	
	Aberdeenshire Council	A09 New Deer 2 Battery Energy Storage System. Suitable habitat.	
		A10 Abbotshaugh Energy Storage. Suitable habitat.	
		A13 Whitestones Solar Project. Suitable habitat.	

Kellas Alternative Alignment

- 8.7.19 The cumulative effects are consistent for the Kellas Alternative Alignment as the ecological baseline is consistent throughout the area.

8.8 Summary and Conclusions

- 8.8.1 **Summary Table 8.35: Summary of Predicted Impacts and Residual Effects** provides a summary of the impacts and significance of effects on sensitive receptors from the Proposed Development.

Table 8.35: Summary of Predicted Impacts and Residual Effects

Receptor	Likely Significant Effect	Effect Significance (Pre-Additional Mitigation)	Additional Mitigation	Residual Effect
Strathglass Complex SAC	- Injury / mortality - Disturbance / displacement	Not significant	N/A	Not significant
Moniack Gorge SAC	Introduction or spread of INNS	Not significant	N/A	Not significant
Cawdor Wood SAC	- Changes in water quality - Introduction or Spread of INNS - Increase in recreational pressures	Not significant	N/A	Not significant
Lower Findhorn Woods SAC	- Changes in water quality - Introduction or Spread of INNS	Not significant	N/A	Not significant
River Spey SAC	- Habitat loss - Changes in water quality - Injury or mortality - Disturbance or displacement - Introduction or spread of INNS - Increase in recreational pressures	Significant	Note that the rigour of the embedded mitigation in the FWPM SPP, where complete avoidance of impacts to the species is required and works must stop to allow an SQE to seek NatureScot advice if avoidance is not possible, would be applied to the River Spey SAC. Regarding crown reduction along the banks of the River Spey at Tower CB14-1B, any works here must be supervised by a SQE and must use hand-operated tools only. All arisings must be removed from the bankside immediately and stored at least 10 m away from the water's edge. Access to trees for crown reduction must be on foot only. Reduction must be kept to the minimum necessary to ensure that shading is not	The HRA concluded that the Proposed Development will not undermine the conservation objectives of the SAC, and therefore, there will be no adverse effect on the integrity of the site ¹ .

Receptor	Likely Significant Effect	Effect Significance (Pre-Additional Mitigation)	Additional Mitigation	Residual Effect
			decreased for salmonids or FWPM along the relevant section of the river.	
Mortlach Moss SAC	- Changes in water quality - Introduction or Spread of INNS - Increase in recreational pressures	Not significant	N/A	Not significant
Beauly Firth SSSI	Changes in water quality	Not significant	N/A	Not significant
Beauly protected seal haul out site	Changes in water quality	Not significant	N/A	Not significant
Moniack Gorge SSSI	Introduction or spread of INNS	Not significant	N/A	Not significant
Cawdor Wood SSSI	- Changes in water quality - Introduction or Spread of INNS - Increase in recreational pressures	Not significant	N/A	Not significant
Buinach and Glenlatterach SSSI	- Habitat loss - Changes in water quality - Introduction or spread of INNS - Increase in recreational pressures	Not significant	N/A	Not significant
Coleburn Pasture SSSI	- Habitat loss - Pollution	Not significant	N/A	Not significant
River Spey SSSI	- Habitat loss - Changes in water quality	Significant	See River Spey SAC above.	See River Spey SAC above.

Receptor	Likely Significant Effect	Effect Significance (Pre-Additional Mitigation)	Additional Mitigation	Residual Effect
	- Injury or mortality - Disturbance or displacement - Introduction or spread of INNS - Increase in recreational pressures			
Mill Wood SSSI	- Changes in water quality - Introduction or spread of INNS	Not significant	N/A	Not significant
Den of Pitlurg SSSI	- Changes in water quality - Introduction or spread of INNS	Not significant	N/A	Not significant
Whitehill SSSI	- Pollution - Introduction or spread of INNS	Not significant	N/A	Not significant
Buglife B-line	- Habitat loss - Changes in water quality - Introduction or spread of INNS	Not significant	N/A	Not significant
Great Glen and the Beaully Catchment Butterfly Conservation Scottish Priority Landscape	- Habitat loss - Changes in water quality - Introduction or spread of INNS	Not significant	N/A	Not significant
East Invernesshire IIA	- Habitat loss - Changes in water quality - Introduction or spread of INNS	Not significant	N/A	Not significant

Receptor	Likely Significant Effect	Effect Significance (Pre-Additional Mitigation)	Additional Mitigation	Residual Effect
Findhorn Culbin IIA	- Changes in water quality - Introduction or spread of INNS	Not significant	N/A	Not significant
Daviot Loch Moy Red Squirrel Stronghold	- Habitat loss - Injury or mortality - Disturbance or displacement - Introduction or spread of INNS	Not significant	N/A	Not significant
Ordiequish, Whiteash, Ben Aigan Red Squirrel Stronghold	- Habitat loss - Injury or mortality - Disturbance or displacement - Introduction or spread of INNS	Significant	Additional woodland edge planting will be considered in the oHMP for the Ordiequish, Whiteash, Ben Aigan Red Squirrel Stronghold (Annex G of Appendix 8.3 Biodiversity Net Gain).	Not significant
Strathbogie WPA	- Habitat loss - Injury or mortality - Disturbance or displacement - Introduction or spread of INNS	Not significant	N/A	Not significant
Den of Pitlurg LNCS	- Changes in water quality - Introduction or spread of INNS	Not significant	N/A	Not significant
Bin Hill LNCS	- Habitat loss - Changes in water quality - Introduction or spread of INNS	Not significant	N/A	Not significant
Ancient Woodland (1a and 2a)	Habitat loss	Significant	An area of 32.05 ha will comprise woodland edge planting throughout the Proposed Development (see Chapter 12: Forestry). Additionally, the	Significant (irreplacable)

Receptor	Likely Significant Effect	Effect Significance (Pre-Additional Mitigation)	Additional Mitigation	Residual Effect
			Landscape and Visual Impact Assessment (LVIA) planting includes: 21.26 ha of scattered tree planting, 21.64 ha of hedgerows, 10.03 ha of hedgerow and shrub mosaic and 42.45 ha of infill shrubs (see Chapter 7: Landscape and Visual).	
Ancient Woodland (1b, 2b and 3)	Habitat loss	Not significant	N/A	Not significant
NWSS Woodland	Habitat loss	Not significant	N/A	Not significant
Blanket bog	Habitat loss	Significant	As detailed in Chapter 10: Water and Geological Environment, where peat has been excavated for temporary infrastructure, as much excavated peat as possible will be reused within the temporary infrastructure areas, or in reinstatement of earthworks. Areas of blanket bog where stringing of wires is required will require these wires to be installed on foot. Alternative options are required for reinstating excavated peat and the Applicant is in consultation with NatureScot. Additionally, further information on peatland reinstatement is detailed within the Peatland Management Plan (Appendix 10.2) and the oHMP (Annex G of Appendix 8.3 Biodiversity Net Gain).	Significant (irreplacable)
Wetland	Habitat loss	Not significant	N/A	Not significant

Receptor	Likely Significant Effect	Effect Significance (Pre-Additional Mitigation)	Additional Mitigation	Residual Effect
Acid grassland	Habitat loss	Not significant	N/A	Not significant
Calcareous grassland	Habitat loss	Not significant	N/A	Not significant
Neutral grassland	Habitat loss	Not significant	N/A	Not significant
Heathland	Habitat loss	Not significant	N/A	Not significant
Hedgerows	Habitat loss	Not significant	N/A	Not significant
Scrub	Habitat loss	Not significant	N/A	Not significant
Waterbodies and watercourses	Habitat loss	Not significant	N/A	Not significant
Broadleaved and mixed woodland	Habitat loss	Not significant	N/A	Not significant
Native coniferous Woodland	Habitat loss	Not significant	N/A	Not significant
INNS	Introduction or spread of INNS	Not significant	N/A	Not significant
Bats	- Artificial Light at Night (ALAN). - Works affecting roosts / roosting bats (e.g., disturbance, destruction). - Loss of roost resources (i.e., PRFs). - Mortality and injury. - Noise.	Significant	At the detailed design stage, the potential to retain buildings and trees will be considered. If a roost is present the consideration of possible alternatives will be considered. Trees, scrub, and hedgerows would be retained as far as reasonably possible.	Significant

Receptor	Likely Significant Effect	Effect Significance (Pre-Additional Mitigation)	Additional Mitigation	Residual Effect
	Habitat fragmentation.		Preference would be given to vegetation clearance / felling during the transitional roosting period for bats – April, September and October. If a maternity or hibernation roost is identified through additional surveys, demolition / felling of the roost structure / tree would be timed to avoid these sensitive periods. Artificial lighting will not spill over to vegetation that is retained around the Proposed Development. Prevailing guidance from BCT and ILP¹¹⁶ will be followed. Compensatory bat boxes / bat rockets / reclaimed PRFs / veteranisation will be installed, at a ratio of one compensatory measure for every tree containing PRFs lost. Compensatory PRFs will be installed prior to tree felling / structure demolition. It is anticipated that monitoring surveys of compensatory PRFs that would be required for the loss of confirmed roosts would be conditioned through licensing. As detailed in the Bat Mitigation Guidelines⁹⁷, a 10 year monitoring period is required for each of the artificially created PRFs: bat box, bat rocket and / or veteranisation feature installed to compensate for the loss of roost resources.	
Badger	Works affecting setts / resting badgers (e.g., disturbance, destruction).	Not significant	Exclusion zone for retained setts that occur within 30 m of the Proposed Development. Only small plant and hand-held machinery will be operated	Not significant

Receptor	Likely Significant Effect	Effect Significance (Pre-Additional Mitigation)	Additional Mitigation	Residual Effect
	- Mortality and injury. - Spatial reduction in territory / range and associated resources (e.g., foraging habitat, sett opportunities). - Habitat fragmentation.		within the 30 m zone. Care will be taken to avoid direct impacts to any mammal burrow entrances in all areas. Construction works will avoid the use of noisy plant and machinery in the two hours before sunset within the vicinity of a sett. Artificial lighting will be directed away from surrounding setts as well as vegetation and riparian corridors surrounding the Proposed Development to retain dark corridors. The use of background lighting overnight will be minimised as far as reasonably possible whilst still fulfilling safety and security requirements. Where breeding setts are destroyed, or no other suitable setts within a clan territory exists, an artificial sett must be provided. Primary foraging habitat will be lost as a result of the Proposed Development (improved grassland and broadleaved woodland), however, where broadleaved woodland is lost to retain the OC, scrub and heathland will be created. Monitoring surveys of compensatory artificial sett creation would be required for the loss of main setts.	
Pine Marten	- Works affecting resting sites / dens. - Mortality and injury.	Not significant	It is anticipated that monitoring surveys of compensatory breeding boxes that would be required for the loss of breeding dens would be conditioned through licensing.	Not significant

Receptor	Likely Significant Effect	Effect Significance (Pre-Additional Mitigation)	Additional Mitigation	Residual Effect
	Changes to resources and habitat fragmentation.			
Red Squirrel	- Works affecting resting sites / dreys. - Mortality and injury. - Changes to resources and habitat fragmentation.	Not significant	N/A	Not significant
Otter	- Works affecting resting sites. - Mortality and injury. - Changes to resources and habitat fragmentation.	Not significant	Construction works along watercourses would be restricted to hours of daylight; works would commence from two hours after sunrise and cease two hours before sunset. During Winter when daylight is limited, allowances may be agreed to work from one hour after sunrise / before sunset, at the discretion of the Environmental Manager. Artificial lighting will not spill over otter habitat, including main watercourses and smaller burns and ditches. These will remain unlit corridors at night. It is anticipated that monitoring surveys of compensatory artificial holts that would be required for the loss of natural holts would be conditioned through licensing.	Not significant
Water vole	- Works affecting resting sites (burrows). - Mortality and injury. - Changes to resources and habitat fragmentation.	Not significant	N/A	Not significant

Receptor	Likely Significant Effect	Effect Significance (Pre-Additional Mitigation)	Additional Mitigation	Residual Effect
Wildcat	- Works affecting resting sites. - Mortality and injury. - Changes to resources and habitat fragmentation.	Not significant	Restrict work to daylight hours. Minimise external lighting and noise from generators at night.	Not significant
Fish	Habitat degradation and fragmentation.	Not significant	Removal of bankside vegetation for the construction of culverts would be minimised as far as reasonably possible; priority would be given to avoid tree felling.	Not significant
Fish and FWPM	Mortality and injury.	Not significant	Avoid crossing through any watercourses close to a FWPM bed, or, where unavoidable, constructing temporary bridges. Maintain natural water levels in areas occupied by FWPM. If salmonid populations and / or suitable spawning habitat is identified during the additional baseline surveys, the following would apply. There would be no in channel works between 30 September and 1 June to protect spawning migratory salmonids, their spawn, and migrating 'smolts'. Construction works along suitable watercourses would be restricted to hours of daylight; works would commence from two hours after sunrise and cease two hours before sunset. During Winter when daylight is limited, allowances may be agreed to work from one hour after sunrise /	Not significant

Receptor	Likely Significant Effect	Effect Significance (Pre-Additional Mitigation)	Additional Mitigation	Residual Effect
			before sunset, at the discretion of the Environmental Manager. Artificial lighting will not spill over to watercourses including small watercourses and ditches around the periphery of the Proposed Development. These will remain unlit corridors at night. Should the additional baseline surveys and pre-construction monitoring identify suitable habitat for fish where there will be in channel works, an electro-fishing survey would be undertaken post-construction in these locations. The survey will be undertaken in the next seasonal window following construction (between 1 July and 30 September).	
GCN	- Works affecting terrestrial habitat and breeding ponds. - Mortality and injury. - Changes to resources and habitat fragmentation.	Not significant	Alter vegetation types to displace GCN from areas affected (so long as there is suitable alternative habitat nearby). Erect amphibian fencing to prevent GCN moving into areas where they will be at risk. The mitigation measures detailed above could cause damage or disturbance to GCN, if present, and will require a licence from NatureScot.	Not significant
Reptiles	- Works affecting hibernacula. - Mortality and injury. - Changes to resources and habitat fragmentation.	Not significant	Time works to avoid the period when reptiles may be hibernating (October-March), if feasible. Use fencing to prevent reptiles moving into areas where they could be killed or injured. Alter habitat to displace reptiles from areas where they could be killed or injured (e.g. careful	Not significant

Receptor	Likely Significant Effect	Effect Significance (Pre-Additional Mitigation)	Additional Mitigation	Residual Effect
			strimming of grassland to a short sward, provided there is a suitable safe area nearby that they can easily move to). Should there be a loss of suitable basking habitat or hibernacula, these will be moved to the surrounding habitat for use by reptiles.	