Scottish & Southern Electricity Networks

TRANSMISSION

Spittal to Loch Buidhe to Beauly 400 kV

OHL Connection

Environmental Impact Assessment

Volume 5 | Technical Appendix

Appendix 8.7 | Report to Inform Habitat Regulations Appraisal (Glen Affric to Strathconon)

July 2025

Scottish & Southern Electricity Networks

TRANSMISSION

Spittal – Loch Buidhe – Beauly 400 kV OHL Connection

Habitats Regulations Appraisal (HRA) Report to inform Appropriate Assessment Glen Affric to Strathconon Special Protection Area

July 2025

CONTENTS

Figures (Volume 3 of this EIA Report)

1 INTRODUCTION

1.1.1 This report has been produced to inform the Habitats Regulations Appraisal (HRA) process for Scottish and Southern Electricity Networks Transmission ("SSEN Transmission") application for consent to construct and operate the Spittal to Loch Buidhe to Beauly 400 kV Overhead Line (OHL) Connection (Proposed Development). The project description and overview of the HRA process are presented in the HRA Screening Assessment Report (Screening Assessment) (**Volume 5, Appendix 8.7**). The Screening Assessment presents the HRA Stage 1 Screening Stage assessment of the Proposed Development with respect to its potential to have a Likely Significant Effect (LSE) on European and Ramsar sites of nature conservation importance, either alone or in-combination with other plans or projects.

1.1.2 Separate reports have been produced for each European or Ramsar site identified in the HRA Screening Report as requiring further assessment.

1.1.3 This report provides information to allow the Competent Authority (i.e. the Scottish Ministers for the Proposed Development) to undertake an HRA Stage 2 Appropriate Assessment (AA) for the Glen Affric to Strathconon Special Protection Area (SPA). The SPA is 50,419.34 ha and qualifies[1] under Article 4.1 by regularly supporting a population of European importance of the Annex 1 species golden eagle (*Aquila chrysaetos)* (10 active territories in 2003, 2.2% of the GB population).

[1] NatureScot Site Link – Glen Affric to Strathconon SPA Citation https://www.nature.scot/sites/default/files/special-protection-area/10233/spa-citation.pdf

2 METHODOLOGY

2.1 Introduction

2.1.1 The approach to the HRA has followed that set out in the Conservation of Habitats and Species Regulations 2017, as amended ('The Habitats Regulations') and NatureScot guidance on the consideration of plans or projects affecting SACs and SPAs [(2), (3) (4)]. It has also taken account of a range of other guidance material including the DTA Publications HRA Handbook [(5)] and that produced by the European Commission (EC) 2018a [(6)], 2018b [(7)], 2007 [(8)], 2002 [(9)].

2.2 Overview of the HRA Process

2.2.1 The HRA process comprises four main stages:

- **Stage 1 Screening** to identify the likely effects of a project on a European site and consider whether the effects are likely to be significant.
- **Stage 2 Appropriate Assessment** to determine whether the integrity of the European site will be adversely affected by the Project.
- **Stage 3 Assessment of Alternative Solutions** to establish if there are any that will result in a lesser effect on the European site.
- **Stage 4 Imperative Reasons of Overriding Public Interest (IROPI)** and **Compensatory Measures** to establish whether it is necessary for the project to proceed despite the effects on the European site, and to confirm that necessary compensatory measures are in place to maintain the coherence of the National Site Network.

2.2.2 The term "Habitats Regulations Appraisal" encompasses both the initial screening stage and, where required, the follow-on Stages 2 – 4. Stage 1 Screening was described in the HRA Screening Report and will not be considered in this report. Stage 2 is discussed in more detail in the following section.

2.3 Stage 2 – Appropriate Assessment

2.3.1 An AA is undertaken by the Competent Authority to determine potential effects of a project upon the integrity of European sites. As the person applying for consent, the Applicant should provide and analyse sufficient information to allow the Scottish Ministers to determine whether the aspects of the project pertinent to their consents will or will not adversely affect the integrity of European sites.

2.3.2 AA should exclusively focus on the qualifying features of the European site, and it must consider any impacts on the conservation objectives of those qualifying interests. It should also be based on and supported by evidence that can stand up to scientific scrutiny. EC guidance states that without proper reasoning the assessment does not fulfil its purpose and cannot be considered 'appropriate' and therefore the development

[2] NatureScot (Updated 2025) Habitats Regulations Appraisal (HRA) Guidance. Accessed July 2025 at https://www.nature.scot/professional-advice/planning-and-development/environmental-assessment/habitats-regulations-appraisal-hra

[3] NatureScot (2022). European Site Casework Guidance – How to consider plans and projects affecting Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

[4] NatureScot (2019). Guidance Note - The handling of mitigation in Habitats Regulations Appraisal - the People Over Wind CJEU judgement.

[5] Tyldesley, D. and Chapman, C. (2013) The Habitats Regulations Assessment Handbook, December 2024 edition UK, DTA Publications Limited.

[6] European Commission (2018). Managing Natura 2000 sites. The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC.

[7] European Commission (2018). Guidance on energy transmission Infrastructure and EU nature legislation.

[8] European Commission (2007). Guidance Document on Article 6(4) of the Habitats Directive 92/43/EEC.

[9] European Commission (2002). Assessment of plans and projects significantly affecting Natura 2000 sites.

cannot be consented. In terms of what is reasonable, guidance states "*to identify the potential risks, so far as they may be reasonably foreseeable in the light of such information as can be reasonably obtained*" [10].

2.3.3 In undertaking an AA, there are two phases:

- a scientific evaluation of all the likely significant effects of the project on the relevant qualifying interests of a European site; and
- a conclusion based on outcomes of the scientific evaluation whether the integrity of a European site will be compromised.

2.3.4 The initial onus when carrying out an AA is to prove that no adverse impacts due to a project will occur, either alone or in-combination with other projects, which would compromise a European site's integrity (Section 63(5) & (6) of the Habitats Regulations). Site integrity can be defined as: "*The coherence of its ecological structure and function, across its whole area that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified*" [11].

2.3.5 The assessment will also consider any avoidance or mitigation measures which will be implemented to avoid or reduce the level of impact from the project. The Competent Authority may also consider the use of conditions or restrictions to help avoid adverse effects on site integrity.

2.3.6 If the AA concludes that the integrity of the European site would be adversely affected, consent can only be granted if there are no alternative solutions, IROPI is applicable and compensatory measures have been secured (Section 64 of the Habitats Regulations).

[10] NatureScot (2001). Natura casework guidance: Consideration of proposals affecting SPAs and SACs.

[11] NatureScot (2014). Natura casework guidance: How to consider plans and projects affecting Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

3 INFORMATION TO INFORM THE APPROPRIATE ASSESSMENT

3.1 Introduction

3.1.1 The Screening Assessment determined that an AA was required for Glen Affric to Strathconon SPA because the potential for LSEs cannot be ruled out for breeding golden eagle.

3.1.2 The LSEs on the qualifying interest feature within the SPA are considered to result from the potential for:

- direct loss from mortality due to collision with infrastructure;
- barrier effects as a result of the presence of infrastructure; and
- indirect loss of habitat due to disturbance and displacement.

3.1.3 This section assesses the impacts of the Proposed Development on golden eagle in relation to the conservation objectives for the site. The aim is to identify whether no adverse effect can be concluded (as described in **Section 2**), or whether there will be adverse effects on the integrity of Glen Affric to Strathconon SPA site.

3.1.4 The assessment has drawn on the ornithology survey findings which are presented within **Volume 2, Chapter 9: Ornithology** of the Environmental Impact Assessment Report ("EIA Report") and associated Technical Appendices in **Volume 5**.

3.2 Conservation Objectives and Latest Assessed Condition

3.2.1 The Conservation Objectives (COs)[12] for the qualifying interest features of the Glen Affric to Strathconon SPA site are set out in **Table 3-1**.

Table 3-1 Conservation Objectives for Glen Affric to Strathconon SPA

Qualifying Interest Feature	Conservation Objectives

Golden eagle (breeding)	• To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and
	• To ensure for the qualifying species that the following are maintained in the long term:
	  ◦ Population of the species as a viable component of the site;
	  ◦ Distribution of the species within the site;
	  ◦ Distribution and extent of habitats supporting the species;
	  ◦ Structure, function and supporting processes of habitats supporting the species; and
	  ◦ No significant disturbance of the species.

3.2.2 The latest assessed condition of golden eagle as a qualifying interest feature of the SPA is listed as Favourable Maintained (28 October 2010) on the NatureScot SiteLink [13] site. There are no listed negative pressures for this feature.

[12] NatureScot Site Link – Glen Affric to Strathconon SPA COs https://www.nature.scot/sites/default/files/special-protection-area/10233/conservation-objectives.pdf
[13] NatureScot 2025. Glen Affric to Strathconon SPA. Accessed Jan 2025 at: https://sitelink.nature.scot/site/10233

3.3 Potential Impacts and Relevant Mitigation Measures

3.3.1 Figure 1 illustrates the location of the Proposed Development in relation to Glen Affric to Strathconon SPA. The Proposed Development is located approximately 5.1 km east of the SPA at its closest point and runs north-south roughly parallel to the eastern edge of the SPA for approximately 25 km at the southern end of the Proposed Development.

3.3.2 The Screening Assessment, taking a precautionary approach, concluded that in the absence of mitigation, it is possible that construction activities could result in LSEs on the SPA from indirect impacts on golden eagle due to disturbance and displacement from habitat. Additionally, operation of the Proposed Development could result in direct loss of birds from mortality due to collision with infrastructure and indirect barrier effects from the presence of infrastructure.

3.3.3 Embedded project mitigation measures are set out in the Environmental Impact Assessment Report (EIAR) and the General Environmental Management Plans (GEMPs) (**Volume 5, Appendix 3.3: GEMPS**), Bird Species Protection Plans (SPPs) (**Volume 5, Appendix 3.4: SPPs**) and will be further reinforced in the final Construction Environmental Management Plan (CEMP) (an outline CEMP has been included in **Volume 5, Appendix 3.6**).

3.3.4 The Bird SPP has been developed in consultation with NatureScot and kept under review to ensure that it is in line with current guidance, and, if appropriate, updated accordingly. Measures within the Bird SPP relevant to the SPA include, but are not limited to:

- The Ecological Clerk of Works (ECoW) will review whether construction activities are likely to affect breeding birds and, if so, what mitigation options are available. A hierarchical approach to mitigation will be applied to any occupied bird habitat that may be affected under the Project works. Priority will be given to assessing and mitigating impacts to species listed on Schedule 1.
- The ECoW will attend site on a regular basis throughout the construction period to ensure all environmental mitigation relevant to breeding birds is delivered.
- A hierarchical approach to mitigation of Programme / Avoid / Risk Assess will be applied to any birds that may be affected under the Project works. Works to be programmed outwith breeding season, where practicable.
- Appropriate protection zones will be put in place (see Appendix A of Bird SPP) and will be set by the ECoW.
- NatureScot advise that a buffer zone of 750 - 1,000 m to protect nesting golden eagles. For activities with a high potential for visual and audial disturbance (e.g. forestry operations), a buffer zone ≥1,500 m may be necessary.
- A Protected Species Risk Assessment will be completed by the ECoW when works need to be done in protection zones, to assess if disturbance can be avoided.
- An emergency procedure will be implemented if breeding birds are encountered, with all works within 50 m (non-scheduled species) or max protection distance (scheduled species) immediately ceasing.
- Specific mitigation such as dissuasion techniques (habitat management, active dissuasion/disturbance) and removal of disused nests.

3.3.5 The mitigation measures set out in the EIAR follow industry best practice and are routinely deployed on SSEN Transmission projects. They will be stipulated in construction contracts and the implementation and audit of these measures will be overseen by a suitably qualified and experienced Environmental / Ecological Clerk of Works (ECoW).

3.3.6 The embedded mitigation measures for the Proposed Development are considered sufficient, and no further species-specific mitigation is proposed for the golden eagle.

3.4 Assessment of Effects

3.4.1 The Proposed Development is located approximately 5.1 km east of the SPA at its closest point. NatureScot SPA connectivity guidance[14] states that golden eagle has a core foraging range from their nest site during the breeding season of 6 km, with a maximum range of up to 9 km. Desk study records showed one Highland Raptor Study Group (HRSG) record of a pair with fledged young (data from 2023) at a breeding location 8.7 km west of the Proposed Development and this nest is assumed to form part of the SPA population.

3.4.2 Breeding raptor surveys did not record any golden eagle territories in the section of the Proposed Development east of the SPA. One adult was observed flying close to Loch nam Bonnach in mid-May 2024, and no further sightings were documented during the surveys. The desk-based study did not identify any breeding territories within 6 km of the Proposed Development in this section.

Direct loss from mortality due to collision with infrastructure

3.4.3 Golden eagle was recorded in flight on sixteen occasions during surveys of Section E of the Proposed Development in the 12-month vantage point survey period, nine flights of one bird and seven of two birds. All other Sections of the Proposed Development are beyond 9 km from the SPA and flights recorded within these Sections are not considered to be connected to the SPA population. Flights in Section E were recorded crossing the proposed alignment on three occasions, one of which at Collision Risk Height (CRH) (>5 to 70 m). Observations were most frequent over Cul Mor (west of towers no. 85 to 90); approximately 6 km east of the SPA boundary. There are a low number of flights across the proposed alignment at CRH and the flight locations are at the outer edge of golden eagle core breeding range.

3.4.4 The level of activity and land use suggests that the area to the east of Proposed Development does not represent an important foraging area for golden eagle (lowland, more intensively farmed and built development) with more suitable and preferred foraging habitat situated to the west of the Proposed Development (upland habitat) closer to the SPA. There is an existing 132 kV OHL which runs between the SPA and the Proposed Development along the River Connon which golden eagles were recorded crossing during baseline surveys, indicating their ability to cross OHLs. These factors indicate that there is a low risk of an SPA population breeding golden eagle colliding with the OHL and therefore no additional mitigation measures (for example line marking with bird flight diverters) is necessary for this species on this stretch of the alignment. Given the low risk of collision, collision mortality impacts on the SPA will be negligible and therefore no adverse effects on golden eagle in relation to the conservation objectives for the site are predicted.

Barrier effects as a result of the presence of infrastructure

3.4.5 The SPA is 5.1 km west of the Proposed Development. The habitat east of the Proposed Development is not an important foraging area for golden eagle and few flights were observed across or east of the proposed alignment. Given the low number of flights east-west observed and anticipated to cross the proposed alignment, the development is not expected to result in a significant barrier to golden eagle flights. The baseline surveys also show evidence of golden eagle flying over existing OHLs which lie between the Proposed Development and the SPA, indicating habituation to this infrastructure and an ability to cross OHLs. Therefore, no adverse effects on golden eagle in relation to the conservation objectives for the site are predicted.

Indirect loss of habitat due to disturbance and displacement.

[14] NatureScot (2016) Assessing Connectivity with Special Protection Areas. Version 3.

3.4.6 The SPA is 50,419.34 ha in area. The Proposed Development is over 5.1 km east of the eastern boundary of the SPA and does not represent an important foraging area for golden eagle. The closest golden eagle territory identified within the SPA is approximately 8.8 km from the Proposed Development. As a result, there will not be any disturbance or displacement from construction of the Proposed Development within the core foraging range of this territory. There may be some temporary displacement of golden eagles from hunting areas at the edge of their maximum advised foraging range of 9 km. However, any displacement would be localised to individual tower locations where construction activity is taking place at any one time. If birds are displaced there is abundant alternative hunting habitat closer to the SPA which birds will be able to utilise. Temporary disturbance of habitats along the proposed alignment will therefore not result in any significant effects on the breeding population of the SPA and no adverse effect on golden eagle in relation to the conservation objectives for the site are predicted..

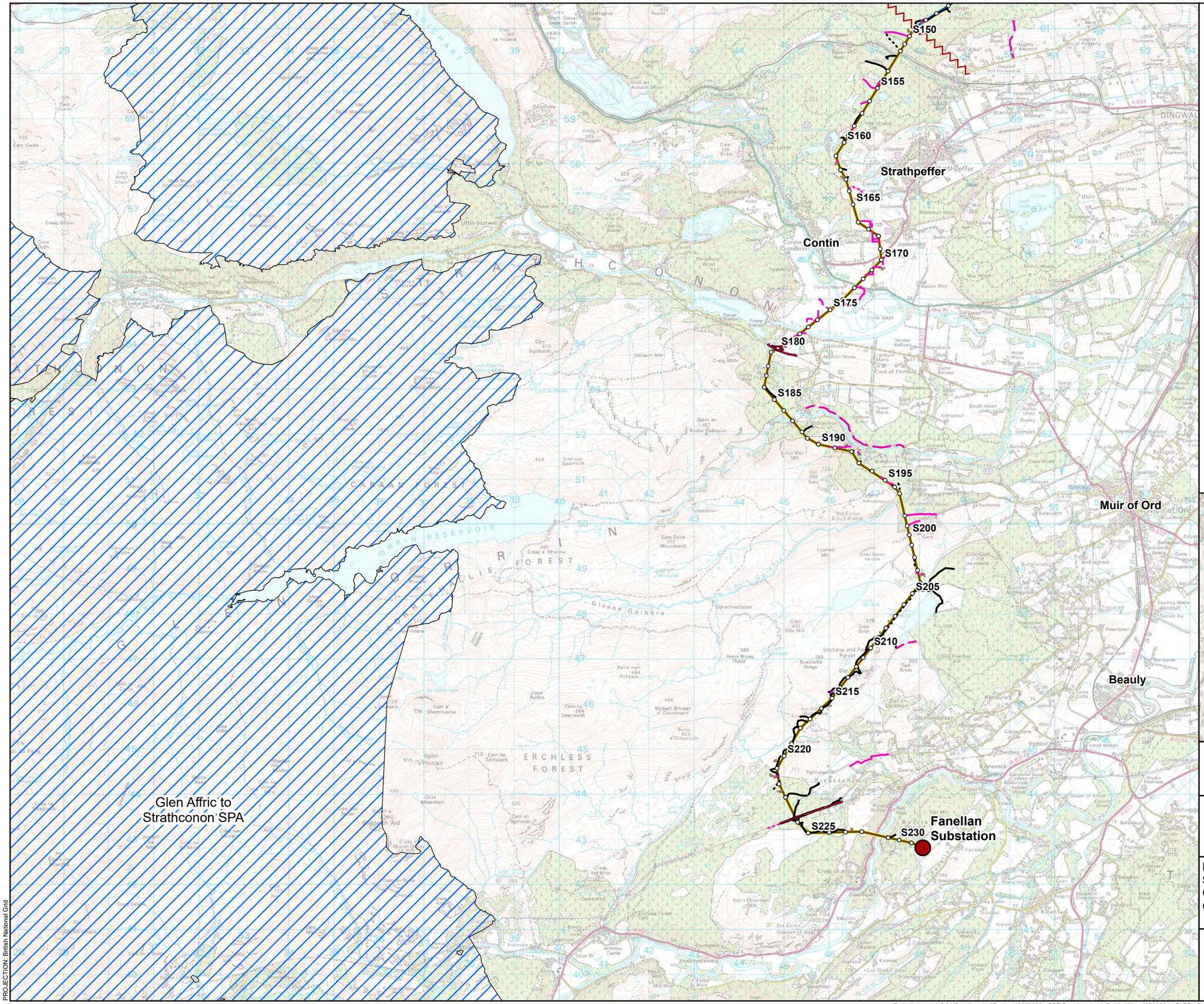
In-combination Effects

3.4.7 The Proposed Development will have no adverse effects on the golden eagle qualifying interest feature of the SPA. Given the distance of the Proposed Development from the SPA and the relatively low number of flights recorded across the alignment, effects are predicted to be negligible and no in-combination effects are predicted.

3.5 Summary of Effect on Site Integrity

3.5.1 The desk study and survey did not identify any breeding territories within 6 km of the Proposed Development and the Proposed Development area does not represent an important foraging area for golden eagle. There are a low number of flights across the proposed alignment at collision risk height and the flight locations are at the outer edge of golden eagle core breeding range. For these reasons, the impacts of indirect habitat loss or degradation, and risks of collision and of barrier effect and displacement is negligible.

3.5.2 No adverse effects on golden eagle in relation to the conservation objectives for the site are predicted as a result of the Proposed Development and therefore no adverse effect on the integrity of Glen Affric to Strathconon SPA is anticipated, either for the project alone or in-combination with other projects.



- Tower Location
- Alignment Section D
- Alignment Section E
- Special Arrangement
- Temporary Tower Compound Area
- Equipotential Zone (EPZ) (Pulling Position)
- Temporary Access Track - Trackway Panel
- Temporary Access Track - Cut/Fill
- Temporary Access Track - Floating
- Existing Access Track - Upgrade Required
- Permanent Access Track - Cut/Fill
- Permanent Access Track - Floating
- Alignment Section Break
- Special Protection Area (SPA)

SCALE: See Scale Bar	VERSION: A03
SIZE: A3	DRAWN: CI
PROJECT: 0652629	CHECKED: PW
DATE: 8/11/2025	APPROVED: KG

Figure 1
Spittal - Loch Buidhe - Beauly 400 kV OHL Connection
Glen Affric to Strathconon SPA

PROJECTION: British National Grid

Path: \\uksprdgisfs01\Data\London\Projects\0652629 - SSE Beauly to Loch Buidhe\Maps\0720281 - SLBB - Designated Sites.aprx / 0720281 - SLBB - HRA - 02 - Glen Affric to Strathconon SPA - A03