

# **Corriegarth 2 Windfarm Grid Connection**

## **Biodiversity Net Gain Assessment Report**

**July 2022**



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## EXECUTIVE SUMMARY

Scottish and Southern Electricity Networks Transmission, operating under licence held by Scottish Hydro Electric Transmission plc, hereafter referred to as 'SSEN Transmission', owns, operates and develops the high voltage electricity transmission system in the north of Scotland and remote islands.

The proposed Corriegarth 2 Windfarm is located next to the operational Corriegarth Windfarm, on the Corriegarth Estate, Gorthleck approximately 15 km north-east of Fort Augustus and 10 km south-east of Foyers. The proposed Corriegarth 2 Windfarm will comprise 16 wind turbines, with a maximum tip height of approximately 150 m, windfarm tracks and electrical infrastructure. SSEN Transmission is required to provide the Corriegarth 2 Windfarm with a 132 kilovolts (kV) connection to the National Grid.

To enable this connection a mixture of new 132kV overhead line (OHL), approximately 70 m in length, and underground cables (UGC), approximately 900 m in length, is proposed ('the Proposed Development'). This connection will connect the Corriegarth 2 Windfarm, from the proposed Corriegarth 2 Windfarm Substation to the existing 132kV transmission line from Corriegarth Windfarm Substation.

WSP UK Ltd was commissioned to undertake a Biodiversity Net Gain (BNG) assessment to quantify the potential biodiversity impact resulting from the Proposed Development. The BNG assessment was undertaken in line with SSEN Transmission's Biodiversity Net Gain Toolkit Guide<sup>1</sup> and the SSEN Transmission Assessment Methodology & Associated Guidance<sup>2</sup>.

The habitat within the Proposed Development covers 2.87 ha. This area is comprised of *g1b6* Other upland acid grassland, *h1b6* Wet heathland with cross-leaved heath; upland and *u1e* Built linear features, providing a total of 40.52 Biodiversity Units (BU). No Linear Units (LU) were recorded within the Site.

The Proposed Development will result in the loss of 12.14 BU and only 5.36 BU will be replaced on site following construction. Overall, this results in a 55.8% loss in BU (6.78 BU) as a result of the Proposed Development.

High-level recommendations to achieve No Net Loss (NNL) through the enhancement of upland heathland habitat are included within this report. The minimum area required for habitat enhancement to achieve NNL is 2.19 ha. Enhancement can include the construction of deer fencing to prevent grazing or planting of heathland species in areas of poor/moderate condition.

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<sup>1</sup> SHE Transmission (2019), Biodiversity Net Gain Toolkit User Guide. SSEN, Perth.

<sup>2</sup> SHE Transmission (2019). Biodiversity Net Gain Technical Assessment Methodology & Associated Guidance. SSEN, Perth

# 1. INTRODUCTION

## 1.1 Background Information

- 1.1.1 Scottish and Southern Electricity Networks Transmission (SSEN Transmission), operating under licence held by Scottish Hydro Electric Transmission plc, owns, operates and develops the high voltage electricity transmission system in the north of Scotland and remote islands
- 1.1.2 The proposed Corriegarth 2 Windfarm is located next to the operational Corriegarth Windfarm, on the Corriegarth Estate, Gorthleck approximately 15 km north-east of Fort Augustus and 10 km south-east of Foyers, at approximate National Grid Reference (NGR) NH 54967 13765 (the 'Site'). The proposed Corriegarth 2 Windfarm will comprise 16 wind turbines, with a maximum tip height of approximately 150 m, windfarm tracks and electrical infrastructure. SSEN Transmission is required to provide the Corriegarth 2 Windfarm with a 132 kilovolts (kV) connection to the National Grid.
- 1.1.3 To enable this connection a mixture of new 132kV overhead line (OHL), approximately 70 m in length, and underground cables (UGC), approximately 900 m in length, is proposed ('the Proposed Development') shown in **Figure 1, Appendix A**. This connection will connect the Corriegarth 2 Windfarm, from the proposed Corriegarth 2 Windfarm Substation to the existing 132kV transmission line from Corriegarth Windfarm Substation.
- 1.1.4 SSEN Transmission will progress the following project elements, shown on **Figure 1**, through the identified consenting routes:
- 70 m of 132kV OHL, with associated permanent access track (approximately 100 m in length), hereafter known as 'the Proposed OHL', under Section 37 of The Electricity Act 1989; and
  - 900 m of 132kV UGC, hereafter known as 'the Proposed UGC', under the Town and Country Permitted Development (Scotland) Order 1992 (as amended) with further detail provided below.
- 1.1.5 The OHL also includes the ancillary works of permanent access track. Deemed planning permission under Section 57 (2) of the Town and Country Planning (Scotland) Act 1997, as amended, is being sought for these ancillary works as part of the Section 37 (s37) application.
- 1.1.6 A temporary access track will be constructed parallel to the UGC to facilitate construction of the UGC. This would take access from the existing windfarm access track with no upgrade required to the existing access track entrance off the existing B862 public road. The temporary access track would be reinstated once construction is complete.
- 1.1.7 WSP UK Ltd was commissioned by SSEN Transmission to undertake a Biodiversity Net Gain (BNG) assessment to quantify the potential biodiversity impact resulting from the Proposed Development. The BNG assessment was undertaken in line with SSEN Transmission's Biodiversity Net Gain Toolkit Guide<sup>3</sup> and the SSEN Transmission Assessment Methodology & Associated Guidance<sup>4</sup>.
- 1.1.8 The assessment was based upon the findings of a UK Habitat Classification (hereafter 'UKHab') survey<sup>5</sup>, following the UK Habitat Classification User Manual<sup>6</sup>, which was undertaken in March 2022. Habitat Condition Assessment (HCA) data was also gathered during the survey. The biodiversity on Site was quantified using the SSEN Biodiversity Toolkit 3.0<sup>7</sup> (herein referred to as 'the toolkit'), which provides a biodiversity baseline value for the Site, along with the predicted post-development value. This information

<sup>3</sup> SHE Transmission (2019), Biodiversity Net Gain Toolkit User Guide. SSEN, Perth.

<sup>4</sup> SHE Transmission (2019). Biodiversity Net Gain Technical Assessment Methodology & Associated Guidance. SSEN, Perth.

<sup>5</sup> WSP (2022). Corriegarth 2 Windfarm Grid Connection, Habitat and Protected Species Baseline Report. May 2022. Edinburgh.

<sup>6</sup> Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020). The UK Habitat Classification User Manual Version 1.1 at <http://www.ukhab.org/> [accessed: June 2022].

<sup>7</sup> SSEN (2019). Biodiversity Toolkit V3.0. SSEN, Perth.

was then used to identify recommendations for habitat enhancement and creation, with the aim of achieving a no net loss (NNL).

## 1.2 Biodiversity Net Gain

- 1.2.1 The Scottish Government has not yet made firm statements in support of BNG, however the Scottish Planning Policy (SPP)<sup>8</sup> states that *'The planning system should...seek benefits for biodiversity from new development where possible, including the restoration of degraded habitats and the avoidance of further fragmentation or isolation of habitats'*.
- 1.2.2 All councils have a duty under the Nature Conservation (Scotland) Act 2004 to further the conservation of biodiversity and to report back on their biodiversity targets. The Planning (Scotland) Act 2019 requires the forthcoming National Planning Framework 4 (NPF4) (passing through Parliament in autumn 2022) to seek positive effects for biodiversity from development.
- 1.2.3 Despite not yet being a mandatory requirement across the whole UK, there has been increased interest in the voluntary application of BNG principles and assessments over the last few years. In addition, BNG is expected to be a valid method to demonstrate positive effects for biodiversity via the new NPF4. The BNG approach has included interest from a range of developers, including SSEN Transmission.
- 1.2.4 The Highland Nature Biodiversity Action Plan<sup>9</sup> outlines actions for nature and the following commitments relevant to BNG are included within *Action 1: Planning and development decisions provide biodiversity protection*:
- *'Ensure planning and development policies protect biodiversity and reduce climate change impact' and in doing so Highland Council will 'move towards implementation of a biodiversity net gain system for new development when the Environment Bill becomes law'*<sup>10</sup>.

## 1.3 SSEN Transmission's Biodiversity Ambition

- 1.3.1 SSEN Transmission is committed to protecting and enhancing the environment by minimising the potential impacts from their construction and operational activities. As part of this approach, SSEN Transmission have made commitments within its Sustainability Strategy (2018)<sup>11</sup> for new infrastructure projects to:
- *'Ensure natural environment considerations are included in decision making at each stage of a project's development;*
  - *Utilise the mitigation hierarchy to avoid impacts by consideration of biodiversity in project design;*
  - *Positively contribute to the United Nations and Scottish Government biodiversity strategies by achieving an overall 'No Net Loss' on new infrastructure projects gaining consent in 2020 onwards and achieving Net Gain on projects gaining consent in 2025 onwards; and*
  - *Work with their supply chain to gain the maximum benefit during asset replacement and upgrades'.*

## 1.4 Scope of Report

- 1.4.1 The purpose of this report is to present the BNG assessment for the Site. This will include:
- Quantifying the potential biodiversity impacts resulting from the Proposed Development;

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<sup>8</sup> Scottish Planning Policy (2014). Available: <http://www.gov.scot/Resource/0045/00453827.pdf> [accessed June 2022]

<sup>9</sup> Highland Environment Forum (2021). Highland Nature Biodiversity Action Plan 2021-2026. Available online: [https://www.highlandenvironmentforum.info/wp-content/uploads/2022/01/Highland-Nature-Biodiversity-Action-Plan-2021-2026-\\_compressed-.pdf](https://www.highlandenvironmentforum.info/wp-content/uploads/2022/01/Highland-Nature-Biodiversity-Action-Plan-2021-2026-_compressed-.pdf) [accessed June 2022]

<sup>10</sup> It should be noted that the Environment Act 2021 applies only to developments in England.

<sup>11</sup> Delivering a smart, sustainable energy future: The Scottish Hydro Electric Transmission Sustainability Strategy (2018), <https://www.ssen-transmission.co.uk/media/2701/sustainability-strategy.pdf> [accessed June 2022]

- Assessing the predicted change in biodiversity value as a result of the Proposed Development; and
- Providing recommendations for habitat enhancements and creation with the aim of the Proposed Development achieving a No Net Loss (NNL).

1.4.2 Recommendations are provided in line with the Construction Industry Research and Information Association (CIRIA), Chartered Institute of Ecology and Environmental Management (CIEEM) and Institute of Environmental Management and Assessment (IEMA) BNG Good Practice Principles<sup>12</sup> (hereafter referred to as 'Good Practice Principles') and the published UK guidance<sup>13</sup>.

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<sup>12</sup> CIEEM, CIRIA, IEMA (2016) Biodiversity Net Gain – Good practice principles for development. Available: <https://cieem.net/resource/biodiversity-net-gain-good-practice-principles-for-development/> [accessed June 2022]

<sup>13</sup> CIEEM, CIRIA, IEMA (2019) Biodiversity Net Gain – Good practice principles for development. A Practical Guide. Available: <http://cieem.net/resource/biodiversity-net-gain-good-practice-principles-for-development-a-practical-guide/> [accessed June 2022]



## 2. METHODOLOGY

2.1.1 This section provides a summary of the assessment methodology, the specific data sources for the Proposed Development, and assessment limitations and assumptions.

### 2.2 Biodiversity Assessment Area and Surveys

2.2.1 A UKHab survey and HCA of all habitats within the Site was undertaken in March 2022 by a pair of WSP UK Ltd Consultant Ecologists who are capable<sup>14</sup> in surveying sites containing similar habitat types and species. The HCA followed the SSEN Transmission Assessment Methodology & Associated Guidance<sup>4</sup>, which requires habitat condition to be assessed using the system presented in Natural England's Farm Environment Plan (FEP) manual<sup>15</sup>.

### 2.3 Irreplaceable Habitats

2.3.1 SSEN Transmission Assessment Methodology & Associated Guidance<sup>4</sup> advises that irreplaceable habitats should not be quantified in terms of Biodiversity Units (BU). In these situations, the guidance dictates that any compensation offered to address impacts on irreplaceable habitats should be agreed directly with NatureScot.

2.3.2 Unavoidable impacts on irreplaceable habitats should not undermine the BNG process for the other habitats. Projects in this situation should aim to achieve NNL in non-irreplaceable habitats.

### 2.4 Biodiversity Calculations

2.4.1 The calculations for the Proposed Development were completed using SSEN's Toolkit (V3.1) (hereafter the 'toolkit'), following guidance from SSEN Transmission's Biodiversity Net Gain Toolkit Guide<sup>3</sup> and Assessment Methodology & Associated Guidance<sup>4</sup>.

2.4.2 The biodiversity of the habitats within the Proposed Development were quantified in terms of Biodiversity Units (BU). No linear habitats were recorded and as such there were no Linear Units (LU). This included the assessment of the area/length of habitat, distinctiveness, condition, connectivity and strategic significance. This data was then inputted into the toolkit to calculate BU.

2.4.3 As part of the Habitat and Protected Species Baseline Report<sup>5</sup>, a review of statutory and non-statutory designated sites for nature conservation was undertaken up to 2 km from the Site to assess strategic significance and used expert opinion to determine a strategic significance score.

2.4.4 Connectivity followed Natural England's Biodiversity Metric 2.0 User Guide<sup>16</sup> meaning all habitats of high distinctiveness were assumed to be of moderate connectivity; and all others assumed to be low.

### 2.5 Post-Development Biodiversity

2.5.1 A high-level estimate of the compensation required to achieve a NNL is provided. This assumes all habitat within the Proposed Development will be lost where it is highlighted as temporary or permanent loss. Appropriate compensation for this loss is based on creating those habitat types lost.

2.5.2 As detailed design information is not known at this stage, the likely split between onsite and offsite habitat enhancement is not known. Should the area of habitat creation / enhancement identified for the Proposed Development not achieve at minimum NNL, there will be a requirement for offsite habitat enhancement.

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<sup>14</sup> CIEEM (2021). Competency Framework. Available at: <https://cieem.net/wp-content/uploads/2022/01/Competency-Framework-2022-Web.pdf> [accessed June 2022]

<sup>15</sup> Natural England (2010). Higher Level Stewardship, Farm Environment Plan (FEP) Manual, 3<sup>rd</sup> Edition.

<sup>16</sup> Natural England (2019). Biodiversity metric 2.0 User Guide – Beta Version. Available online at: <http://publications.naturalengland.org.uk/publication/5850908674228224> [accessed June 2022]

2.5.3 The two risk factors (difficulty risk and time to target condition) scores were calculated using the methodology within the SSEN Transmission Assessment Methodology & Associated Guidance<sup>4</sup>, Natural England’s Biodiversity Metric 3.1<sup>17</sup> and expert opinion.

2.5.4 The upland heathland underlying the track associated with the construction of the UGC is a temporary loss and given the working methods (track to be formed of stone), the time to target condition has been reduced to five years (plus an additional year to account for the construction period).

## 2.6 Limitations and Assumptions

### BASELINE (PRE-DEVELOPMENT) BIODIVERSITY

2.6.1 The following assumptions have been made for the baseline BU calculations for the Proposed Development.

- The Proposed Development, and area of assessment, includes the areas to be affected by works. This comprises permanent access for the OHL, wooden poles to facilitate the OHL, UGC and a temporary access track for the UGC, as well as any LOD (Limit of Deviation) for the OHL. The parameters are:
  - OHL – LOD of 50 m (i.e. 25 m to either side of the OHL alignment) for micrositing of poles.
  - Proposed UGC – micrositing area of 30 m (i.e. 15 m to either side of the UGC alignment) for cable micrositing.
- Where it is reasonable to assume habitats will return to their current type and condition within two years of the impact, these areas are considered as “retained” and thus not included within the calculations. Following methodology as detailed in Defra’s Biodiversity Metric 3.1<sup>18</sup>. This includes the UGC as it is assumed a short working window can be achieved and any areas of open trench will be closed within four weeks and subject to reinstatement. To achieve this, working methods would involve the excavated material being sorted into appropriate layers and stored prior to backfilling, whilst maintaining the original soil horizons. Additionally, where there is peat habitat, it will also include preservation and care (e.g. wetting) of peat turves whilst construction is ongoing. Based on this proposed working method, it is assumed that habitats would recover to their current condition within two years of the point of impact.
- The wood poles and proposed permanent access track have been included as permanent habitat loss.
- The proposed temporary access track is assumed to be comprised of stone. Limited detail is known regarding construction methods and duration for the Proposed Development at this stage and as such a precautionary approach has been taken for this assessment. It is assumed that habitats affected along the proposed access track and around the pole LOD footprints would be subject to temporary habitat loss, i.e. the habitats present will not have returned and recovered to their current condition within two years post construction.
- The Site was assumed to be of low strategic significance based on it not being considered important for the qualifying features of nearby designated sites. Therefore, all habitats are of low strategic significance in the toolkit.

### POST-DEVELOPMENT BIODIVERSITY

2.6.2 Recommendations for post-development biodiversity have been provided. This is based on integration of the data to review the number of BUs likely to be lost to the development and identification of the most

<sup>17</sup> Natural England (2022). The Biodiversity Metric 3.1 (JP039). Available online at: <http://publications.naturalengland.org.uk/publication/6049804846366720> [accessed June 2022]

<sup>18</sup> Natural England (2022). Biodiversity Metric 3.1 - User Guide. Available online at: <http://publications.naturalengland.org.uk/publication/6049804846366720> [accessed June 2022]

appropriate habitats to propose appropriate compensation for this loss. Additionally, details on the level of habitat creation required to achieve NNL for biodiversity are included.

2.6.3 The post-development recommendations are based on the following limitations and assumptions:

- In the post-development calculations, strategic significance and connectivity scores were assumed to be the same as the baseline scores due to the same spatial context.
- The difficulty to create habitats (delivery risk) and the time (in years) to reach their target condition (temporal risk) is based on the on the 2019 SSEN guidance, Biodiversity Metric 3.1, best available evidence and expert opinion.
- For Spatial risk it was assumed that any compensation measures would be within 1 km of the area of loss.
- The time to target condition for created area habitats, where a habitat will be lost during construction, had one additional year added; this is to account for a time lag in the creation / restoration of habitats following construction. It is assumed that the construction programme will take no longer than one year.
- It is assumed that habitats subject to temporary habitat loss will be restored to their previous condition or better following construction.
- Habitats around the Site in general were considered to be high distinctiveness habitats in good condition, so opportunities for habitat enhancement / creation within the Site is limited. Therefore, habitat creation / enhancement outside the Site has been selected within the toolkit.
- For the purposes of habitat enhancement estimates, the baseline habitat has been assumed to comprise upland heathland of moderate condition.

## LIMITATIONS

2.6.4 Area calculations are based on areas being rounded to two decimal places before being entered into the toolkit. **This can result in slight discrepancies in area and BU totals due to rounding, but these are no greater than 0.01.**

### 3. RESULTS

#### 3.1 Biodiversity Baseline

- 3.1.1 The results of the UKHab survey are detailed in Habitat and Protected Species Baseline Report<sup>5</sup>. In summary the Survey Area (Proposed Development plus additional 250m survey buffer) consists of *f1a* Blanket bog, *g1b6* Other upland acid grassland, *h1b6* Wet heathland with cross-leaved heath; upland (H4010), *r2a* Rivers, *u1b5* Buildings, *u1b6* Other developed land and *u1e* Built linear features.
- 3.1.2 The biodiversity baseline for the Proposed Development is based upon the habitat types, their distinctiveness and condition scores, the area of the habitats, and the number of BU each type of habitat contributes (**Table 1**). The Baseline Biodiversity Map showing the habitats (recorded in UKHab) across the Survey Area is shown on **Figure 1 (Appendix A)**.
- 3.1.3 The total area of habitat within the Proposed Development (i.e., permanent access track and associated earthworks, temporary access track, OHL pole locations and UGC) is **2.87 ha**. This area is comprised of *g1b6* Other upland acid grassland, *h1b6* Wet heathland with cross-leaved heath; upland and *u1e* Built linear features, providing a total of **40.52 BU**.
- 3.1.4 No irreplaceable habitats were identified within proximity to the Proposed Development during the extended UKHab survey. Blanket bog was recorded to the north beyond the existing substation (c.162 m) and south beyond the river (c.91 m). Given the distance from the Proposed Development, irreplaceable habitats are not considered further within this report.
- 3.1.5 The average BU per one hectare (BU/ha) of habitat can range between 2 BU/ha (low biodiversity) and 18 BU/ha (very high biodiversity). The baseline biodiversity has an average of **14.12 BU/ha** of habitat across the Site which is considered to be of high value to biodiversity.

**Table 1: The baseline area habitats for the Proposed Development, along with distinctiveness, condition, area and BU**

UK Habitat Classification	Distinctiveness Score	Condition Score	Area of Habitat (ha)	Biodiversity Units (BU)
g1b6 Other upland acid grassland	High	Poor	0.84	5.54
h1b6 Wet heathland with cross-leaved heath; upland (H4010)	High	Good	1.68	33.27
h1b6 Wet heathland with cross-leaved heath; upland (H4010)	High	Moderate	0.13	1.72
u1e Built linear feature	Very Low	N/A	0.21	0.00
<b>Totals</b>			<b>2.87</b>	<b>40.52</b>

- 3.1.6 Areas equal to 0 when rounded to two decimal places were excluded from the Toolkit.

#### 3.2 Biodiversity During Construction

- 3.2.1 As detailed in Section 2.7 (Limitations and Assumptions), all habitats within the UGC micro-siting area are assumed to be retained. All habitats subject to temporary or permanent loss as part of the Proposed Development are assumed to be lost for the purposes of the BNG calculations. **Table 2** highlights the total habitat area and BU which will be temporarily and permanently removed and the BU which will be retained (i.e., habitats which would not be lost due to construction, i.e. from the UGC). The results highlight a **0.78 ha** in total area loss, which is 27% of the total Proposed Development area, with the majority of habitat loss being upland heathland. This equates to predicted loss in BU of 12.14, which would be a decrease of 30% of the Proposed Development's overall BU value.

**Table 2: Habitat area (ha) and BU retained and removed during construction works**

UK Habitat Type	Condition	Area Retained (ha)	Area of Habitat Removed (ha)	Biodiversity Units Retained (BU)	Biodiversity Units Removed (BU)
g1b6 Other upland acid grassland	Poor	0.67	0.17	4.42	1.12
h1b6 Wet heathland with cross-leaved heath; upland (H4010)	Good	1.19	0.49	23.56	9.71
h1b6 Wet heathland with cross-leaved heath; upland (H4010)	Moderate	0.03	0.10	0.40	1.32
u1e Built linear feature	N/A	0.19	0.02	0.00	0.00
<b>Total</b>		<b>2.08</b>	<b>0.78</b>	<b>28.38</b>	<b>12.14</b>

### 3.3 Post-Development Biodiversity

3.3.1 This section includes recommendations in relation to reinstatement and enhancement of the habitats affected by the Proposed Development and likely BU associated with the approach.

#### *Reinstatement*

3.3.2 Areas of temporary loss during construction will be subject to reinstatement following the construction and should adhere to SSEN Transmission's Working in Sensitive Habitats General Environmental Management Plan (GEMP)<sup>19</sup>. This includes details on approaches to temporary soil storage to maintain horizons. The time to target condition has taken account of this approach, applying professional judgement to determine likely timescales.

3.3.3 By following this approach, it is considered habitat reinstatement in these locations will be successful, and locations will return to their original habitat type. Where temporary habitat loss has been identified, the habitat types currently in these locations will therefore be restored. Within the toolkit these habitat areas are identified in the After Work Actions as habitat creation, and it is assumed that the habitats will return to their current condition, within the time detailed under time to target condition.

#### *Enhancement*

3.3.4 This section also presents the compensation estimate for NNL for the Proposed Development. As detailed in the methodology, it is assumed the options for onsite habitat creation and enhancement will be limited and as such there will be a requirement for offsite habitat creation / enhancement for the Proposed Development to achieve NNL.

3.3.5 **Table 3** shows the net change in BU for each habitat underlying areas identified as temporary loss, which will be reinstated, but are predicted to take over two years to return to their current habitat type and condition. Overall, the Proposed Development will result in a loss of **12.14 BU**, with **5.36 BU** to be replaced on site following construction. This results in a 55.8% loss in BU (**6.78 BU**) as a result of the Proposed Development.

<sup>19</sup> SSEN Transmission (2020). TG-NET-ENV-513 General Environmental Management Plan (GEMP)-Working in Sensitive Habitats (Revision 1).

**Table 3: The post-development action, area (ha), difficulty to create, time to target condition and BU of the habitats to be created post-development.**

UKHab Type	Target Condition	Area of Habitat (ha)	Difficulty to Create	Time to Target Condition (years)	Biodiversity Units (BU)
g1b6 Other upland acid grassland	Poor	0.17	Low	2	1.04
h1b6 Wet heathland with cross-leaved heath; upland (H4010)	Good	0.21	Medium	31	0.92
h1b6 Wet heathland with cross-leaved heath; upland (H4010)	Good	0.32	Medium	6*	3.39
<b>Total</b>		<b>0.70</b>			<b>5.35</b>

\* The Time to Target Condition has been reduced from that in Defra's Biodiversity Metric 3.1 as the seedbank and vegetation will not be removed from beneath the stone tracks and so there is a high confidence that the habitat will return to its current condition in a shorter period of time.

3.3.6 Based on current Site conditions, the habitat enhancement recommendations in Table 4 represent the most appropriate habitat types to enhance off site as part of the Proposed Development. As the majority of the habitat that will be lost from the Site is upland heath, it is recommended that habitat enhancement targets this habitat type of moderate condition and improving to good condition.

**Table 4: The post-development action, distinctiveness, target condition, area (ha), difficulty to create, time to target condition and BU of the habitats to be created post-development.**

UKHab Type	Action	Distinctiveness	Target Condition	Area/ length of Habitat (ha/km)	Difficulty to Create	Time to Target Condition* (years)	Biodiversity Units
<b>No Net Loss</b>							
Upland Heathland	Enhancement	High	Good	2.19	Medium	10	<b>6.78</b>

\* For the purpose of habitat enhancement, the baseline habitat is assumed to be upland heathland of moderate condition. The time to target condition has been reduced from 20 years within BM3.1 to 10 years. Given the likely enhancement methods including fencing to exclude grazing and planting heathland species, professional judgement has deemed the time to target condition of 10 years to be sufficient.

3.3.7 The minimum area required for habitat enhancement to **achieve NNL is 2.19 ha.**

## 4. DISCUSSION AND RECOMMENDATIONS

4.1.1 In order to achieve a minimum of NNL above, the Good Practice Principles must be applied all together as an approach as outlined in **Table 5**.

**Table 5: Recommendations for achieving Good Practice Principles**

Principle	Discussion/ Recommendation
<b>1. Apply the mitigation hierarchy</b>	The mitigation hierarchy, to avoid / minimise impacts on surrounding biodiversity, has been addressed through recommendations within the Environmental Appraisal undertaken for the Proposed Development <sup>20</sup> .
<b>2. Avoid losing biodiversity that cannot be offset by gains elsewhere</b>	Within the Site, there are no irreplaceable habitats present. Therefore, no further action is required regarding Principle 2 of the BNG Good Practice Principles.
<b>3. Be inclusive and equitable</b>	Stakeholder engagement is recommended when determining suitable locations for offsite habitat enhancement to achieve NNL to ensure that these fit with local biodiversity objectives.
<b>4. Address risks</b>	The assessment incorporates delivery, spatial and difficulty risk when enhancing habitats. Additionally, a delay of one year has been included to account for construction time.  Habitat enhancement should be explored in advance of construction commencing to reduce temporal risk.
<b>5. Make a measurable BNG contribution</b>	SSEN Transmission have published commitments to BNG including the commitment of achieving overall NNL on the new infrastructure projects gaining consent in 2020 onwards and achieving NG on projects gaining consent from 2025 onwards.  Off site habitat enhancement is recommended to ensure the proposed Development reaches NNL as a minimum.
<b>6. Achieve the best outcomes for biodiversity</b>	Achieve the best outcomes for biodiversity by using robust, credible evidence and local knowledge to make clearly justified choices: <ul style="list-style-type: none"> <li>• The recommendations for habitat enhancement have taken account of the distinctiveness and condition of the habitats being lost. If these recommendations are adopted, this would provide habitat of at least the equivalent value as that which is being lost. Habitat creation or enhancement to replace that being lost must be like for like or better quality.</li> <li>• When the habitat creation design is developed, this should look to include species identified within the Highland Nature Biodiversity Action Plan<sup>21</sup> where appropriate.</li> </ul>
<b>7. Be additional</b>	Any mitigation required identified within the EA should be included in habitat enhancement plans to ensure the plans go beyond these mitigation requirements.

<sup>20</sup> WSP (2020). Corriegarh II 132kV Wind Farm Grid Connection, Environmental Appraisal. May 2022. Edinburgh.

<sup>21</sup> Highland Environment Forum (2021). Highland Nature Biodiversity Action Plan 2021-2026. Available online: [https://www.highlandenvironmentforum.info/wp-content/uploads/2022/01/Highland-Nature-Biodiversity-Action-Plan-2021-2026-\\_compressed-.pdf](https://www.highlandenvironmentforum.info/wp-content/uploads/2022/01/Highland-Nature-Biodiversity-Action-Plan-2021-2026-_compressed-.pdf)



Principle	Discussion/ Recommendation
<p><b>8. Create a BNG Legacy</b></p>	<p>Ensure NNL generates long-term benefits by:</p> <ul style="list-style-type: none"> <li>• Engaging stakeholders and jointly agreeing practical solutions that secure NNL in perpetuity;</li> <li>• Adaptive management should be planned and dedicated funding for long-term management secured using a long-term landscape management plan;</li> <li>• Designing the habitat creation/ enhancement to be resilient to external factors, especially climate change.</li> <li>• Mitigating risks from other land uses;</li> <li>• Avoiding displacing harmful activities from one location to another;</li> <li>• Supporting local-level management of NNL activities.</li> </ul>
<p><b>9. Optimise sustainability</b></p>	<p>As BNG has been included from the start of the Proposed Development and the work has been carried out by working across multiple disciplines this optimises the sustainability of the Proposed Development. This should be explored further during the next stages of the Proposed Development.</p>
<p><b>10. Be transparent</b></p>	<p>As SSEN Transmission have committed to NNL on projects from 2020 and NG on projects from 2025, BNG will be integral in their projects going forward. Anything learned from undertaking the BNG process is likely to be valuable for future projects.</p> <p>BNG activities should be communicated in a transparent and timely manner, sharing the learning with all stakeholders. The Geographical Information Systems shapefiles with the details of the baseline and post-development habitats will be supplied to SSEN Transmission with this report which will go into their central BNG reporting system, to allow this principle to be met.</p>

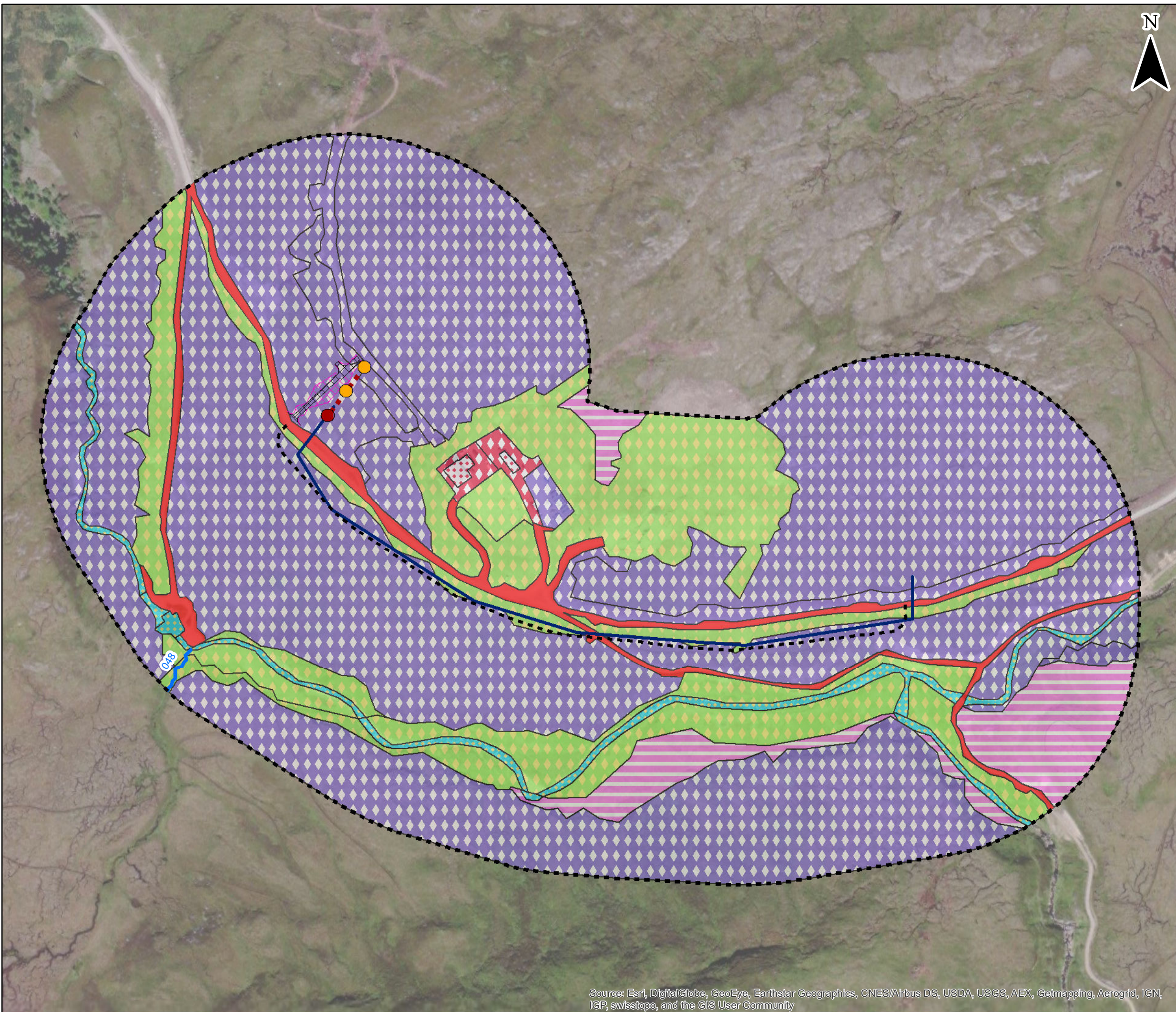


## 5. CONCLUSIONS

- 5.1.1 The Proposed Development will result in a loss of **12.14 BU** and only **5.36 BU** will be replaced on site following construction. Overall, this results in a 55.8% loss in BU (**6.78 BU**) as a result of the Proposed Development.
- 5.1.2 To achieve NNL, habitat enhancement has been explored within this report. For **NNL an area of 2.19 ha** of enhancement would be required.

## APPENDIX A – FIGURE 1



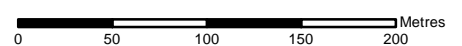


- Key**
- NEW CABLE SEALING END WOOD POLE
  - NEW TRIDENT WOOD POLE
  - ▨ PROPOSED PERMANENT ACCESS TRACK
  - ▨ PROPOSED PERMANENT EARTHWORKS FOR ACCESS TRACK
  - - - PROPOSED TEMPORARY ACCESS TRACK
  - ■ ■ PROPOSED 132KV CONNECTION OHL
  - PROPOSED 132KV CONNECTION BURRIED CABLE
  - ⬡ SURVEY AREA

- UKHAB AREA**
- ▨ F1A5 - BLANKET BOG
  - ▨ G1B6 - OTHER UPLAND ACID GRASSLAND
  - ▨ H1B6 - WET HEATHLAND WITH CROSS-LEAVED HEATH, UPLAND (H4010)
  - ▨ R2A - RIVERS
  - ▨ U1B5 - BUILDINGS
  - ▨ U1B6 - OTHER DEVELOPED LAND
  - ▨ U1E - BUILT LINEAR FEATURES

- UKHAB LINEAR FEATURES**
- R2A - RIVERS

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C			
B			
A	30/06/2022	AG	First Issue
Rev	Date	By	Comment



**Corriegarth 2 Windfarm  
Grid Connection**

Figure 1: UKHab Survey Results

<b>Drg No</b>	CORRIEGARTH-WSP-GIS-XXX
<b>Rev</b>	A
<b>Date</b>	19/07/2022
<b>Scale</b>	1:4,000 @ A3

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community