



LORG WIND FARM GRID CONNECTION

Environmental Impact Assessment Report

Non-Technical Summary

November 2025

SP Energy Networks

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Contents

Page

| | |
|---|------|
| LIST OF ABBREVIATIONS | i |
| 1 INTRODUCTION | 1-1 |
| 1.1 Background..... | 1-1 |
| 1.2 The Need for the Development..... | 1-1 |
| 1.3 Environmental Impact Assessment Process | 1-1 |
| 1.4 Scoping | 1-2 |
| 1.5 Consultation | 1-2 |
| 2 DESCRIPTION OF THE PROPOSED DEVELOPMENT | 2-4 |
| 2.1 Description of Overhead Line Infrastructure | 2-4 |
| 2.2 Infrastructure Location Allowance (ILA)..... | 2-5 |
| 2.3 Construction Programme | 2-5 |
| 2.4 Operation, Maintenance and Decommissioning | 2-6 |
| 3 CONSIDERATION OF ALTERNATIVES..... | 3-7 |
| 3.2 “Do-Nothing Scenario” | 3-7 |
| 3.3 Alternative Technical Options to Overhead Line | 3-7 |
| 3.4 Alternative Routes for the Proposed Development | 3-7 |
| 4 ENVIRONMENTAL EFFECTS AND MITIGATION | 4-12 |
| 4.1 EIA Methodology | 4-12 |
| 4.1 Cultural Heritage and Archaeology | 4-12 |
| 4.2 Ecology and Ornithology..... | 4-12 |
| 4.3 Forestry..... | 4-13 |
| 4.4 Hydrology, Hydrogeology, Geology and Soils | 4-14 |
| 4.5 Landscape and Visual | 4-14 |
| 4.6 Cumulative Effects | 4-15 |
| 4.7 Summary of Environmental Effects | 4-16 |
| 4.8 Next Steps | 4-16 |

LIST OF ABBREVIATIONS

| | |
|-------|--|
| CEMP | Construction Environmental Management Plan |
| CTMP | Construction Traffic Management Plan |
| ECoW | Environmental Clerk of Works |
| ECU | Energy Consents Unit |
| EIA | Environmental Impact Assessment |
| EIAR | Environmental Impact Assessment Report |
| EMP | Environmental Management Plan |
| GWDTE | Groundwater Dependent Terrestrial Ecosystems |
| HES | Historic Environment Scotland |
| LCT | Landscape Character Types |
| LVIA | Landscape and Visual Impact Assessment |
| NTS | Non-Technical Summary |
| OC | Operational Corridor |
| OHL | Overhead Line |
| PWS | Private Water Supply |
| SEC | Sealing End Compound |
| SEPA | Scottish Environment Protection Agency |
| SM | Scheduled Monument |
| SPEN | Scottish Power Energy Networks |
| SPT | Scottish Power Transmission |
| SPMP | Soil and Peat Management Plan |
| ZoI | Zone of Influence |



1 INTRODUCTION

1.1 Background

- 1.1.1 This Non-Technical Summary forms part of the Environmental Impact Assessment Report (EIAR) prepared on behalf of Scottish Power Transmission (SPT) (The Applicant), who owns, operates and develops the electricity transmission and distribution network in central and southern Scotland, Merseyside, Cheshire, North Wales and North Shropshire.
- 1.1.2 The EIAR has been prepared to accompany an application for consent under Section 37 of the Electricity Act 1989¹ (as amended). The application seeks consent to construct and operate a new 17.5 km 132 kV trident wood pole Overhead Line (OHL) between Lorg Wind Farm (currently in planning) and the proposed Holm Hill Substation (which is being consented separately by Scottish Power Energy Networks). The proposed Lorg Wind Farm Connection (hereafter referred to as the 'Proposed Development') is located near Carsphairn in Dumfries and Galloway, approximately 16 km south-east of Dalmellington.
- 1.1.3 The aim of this Non-Technical Summary is to summarise the content and the main findings of the EIAR in a clear and consistent manner to assist the public in understanding what the environmental effects of the Proposed Development are likely to be.
- **Section 2:** provides a description of the Proposed Development;
 - **Section 3:** describes the alternatives that were considered when developing the design of the Proposed Development; and
 - **Section 4:** gives an overview of the EIAR chapters and the potential effects that have been predicted to occur as a result of the construction or operation of the Proposed Development.
- 1.1.4 The full EIAR provides a more detailed description of the Proposed Development and the findings of the environmental assessments undertaken.
- 1.1.5 **Figure 1** appended to this Non-Technical Summary shows the location of the Proposed Development, including indicative pole locations and the Infrastructure Location Allowance (ILA).

1.2 The Need for the Development

- 1.2.1 The Applicant has a legal duty under the Electricity Act 1989 to provide grid connections to new electricity generating developments and has been approached by the developer for Lorg Wind Farm to provide a grid connection to the wider electricity transmission network.
- 1.2.2 As the licence holder, The Applicant is required under the Electricity Act 1989 "*to develop and maintain an efficient, co-ordinated and economical system of electricity transmission*"¹.

1.3 Environmental Impact Assessment Process

- 1.3.1 The primary purpose of the Environmental Impact Assessment (EIA) process is to inform the decision maker of the likely environmental implications of a Proposed Development. Through this process, information is collected about the possible environmental impacts of the development. These findings are evaluated and presented in a fully transparent manner to assist consultation and to enable the decision makers to take account of impacts when determining whether to provide consent for the development. The EIA also helps to identify controls over the construction or operation of the Proposed Development that are required to manage and mitigate (lessen / reduce) impacts.
- 1.3.2 The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017² require that an EIA must be undertaken before permission is granted for certain types of development, including overhead lines with a voltage of 132 kV or more. An EIAR has therefore been prepared to accompany the application

¹ UK Government (1989). Electricity Act 1989 (as amended). Available online at: <https://www.legislation.gov.uk/ukpga/1989/29/introduction?view=extent>.

² Scottish Government (2017). The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017. Available at: <https://www.legislation.gov.uk/ssi/2017/101/contents>

for Section 37 consent. The EIA has been undertaken in accordance with the EIA Regulations, and the scope of the assessments was agreed with the Scottish Government Energy Consents Unit (ECU).

1.4 Scoping

- 1.4.1 An EIA Scoping Report³ was submitted to the ECU in February 2019 to accompany a request to Scottish Ministers to adopt a Scoping Opinion under Regulation 12 of the EIA Regulations.
- 1.4.2 A Scoping Opinion was received from the ECU on 26 April 2019⁴. It was agreed that the following topics would be considered in the EIA:
- Landscape and Visual;
 - Ecology and Ornithology;
 - Cultural Heritage and Archaeology;
 - Hydrology, Hydrogeology, Geology and Soils; and
 - Cumulative Effects.
- 1.4.3 Due to some minor changes to the Proposed Development, an updated EIA Scope was submitted to the ECU in May 2022. No new sensitive receptors were identified with the potential for likely significant effects, nor did the design or construction methods materially change from the 2019 Scoping Report. Therefore, it was proposed that the EIA Scope as set out in the EIA Scoping Report in February 2019 would remain generally unchanged, although the addition of a standalone Forestry chapter was proposed and some updates to relevant legislation and planning policy were noted.
- 1.4.4 Further consultation was undertaken in July 2024 due to the length of time which had elapsed since the previous scoping consultation with the ECU was undertaken. The letter summarised the validity of the Environmental Baseline for each of the technical topics. It concluded that, as there had been no substantive change to the Proposed Development or the associated environmental baseline, the Scoping Opinion obtained in 2019 and updated in 2022 was still valid. Following consultation, the ECU confirmed that they were content with this approach.

1.5 Consultation

Meetings with Statutory Consultees

- 1.5.1 Prior to the selection of the Preferred Route for the Proposed Development, meetings were offered to statutory consultees to discuss the proposals. Meetings were held in March 2017 with the ECU, Dumfries and Galloway Council, Scottish Natural Heritage (now NatureScot) and the Scottish Environment Protection Agency (SEPA). Email correspondence was undertaken with Historic Environment Scotland (HES).

Wider Consultation

- 1.5.2 Following consultation with the statutory consultees, a wider consultation was undertaken, which ran from 12 April 2017 to 7 July 2017. Information was sent to statutory and non-statutory consultees, local community councils and landowners, comprising a covering letter and a copy of the Routeing Consultation Report⁵ and consultation leaflet.

Public Exhibitions

- 1.5.3 Advertisements providing notice of the consultation, availability of further information and dates of the Public Exhibitions were placed in local newspapers.

³ Lorg and Longburn Wind Farms Grid Connection Scoping Report, February 2019 available at: <https://www.energyconsents.scot/ApplicationDetails.aspx?cr=ECU00001789>

⁴ Available to view on the Energy Consents Unit website under ECU Reference ECU00003283

⁵ Lorg_Longburn_Routeing_Consultation_Pt1.pdf Available at: (spenergynetworks.co.uk)

- 1.5.4 Public Exhibitions were held on 25 April 2017 and 26 April 2017 at Lagwyne Village Hall, Carsphairn, from 14:00 – 20:00.
- 1.5.5 A further in-person event was held at Lagwyne Hall, Carsphairn, on 24 April 2024 from 14:00 - 19:00, to update local residents on changes to the Proposed Development since the initial consultation and associated public exhibitions.
- 1.5.6 All stakeholders were also offered the opportunity to attend an online presentation on the 17 of May 2024 from 12:00 -13:00. This online presentation was advertised on The Applicant's website, as well as in the Galloway Gazette. Stakeholders were also emailed the details of the virtual online presentation. The presentation was recorded and sent to those who had registered.

What will the Proposed Route look like?

The proposal is for a 132 kV Trident wood pole overhead line which would use 'H' poles for the majority of the route due to altitude.

These have an average height of 13 metres and maximum height of 15.1 metres with a span between poles ranging from 60m to 155 metres



Trident Single Pole



Trident 'H' Pole



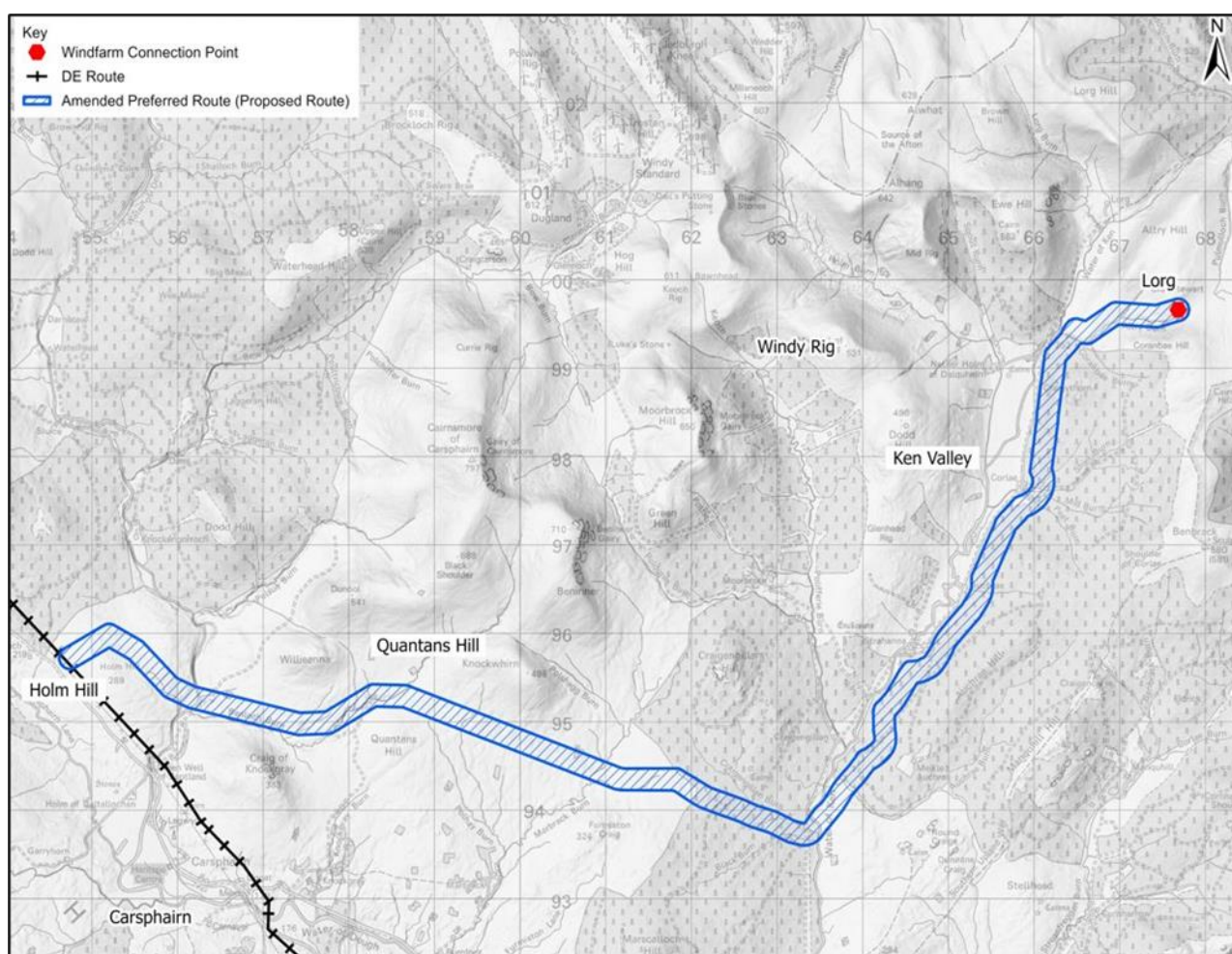
Terminal 'H' Pole

2 DESCRIPTION OF THE PROPOSED DEVELOPMENT

2.1 Description of Overhead Line Infrastructure

- 2.1.1 The OHL route starts at the proposed Holm Hill substation, located north of Carsphairn, off the A713. From here, it is routed in an easterly direction past Quantans Hill for approximately 9 km. The route enters the Water of Ken Valley at the confluence with Craigengillan Burn and then follows the Valley in a north-easterly direction for approximately 8.5 km, past the settlements of Strahanna, Euchrae, Corlae and Craigythorn until it reaches the connection point with the proposed Lorg Wind Farm as shown on **Plate 2.1** below. The proposed OHL comprises 201 poles, reaching a maximum height of 15.1 m.

Plate 2.1 Proposed Route



- 2.1.2 The proposed OHL would be constructed using trident wood poles of an 'H' pole design (two uprights), as they can withstand greater ice and wind loadings and are more suited to the altitudes at this Site.
- 2.1.3 In addition to the permanent overhead line infrastructure, the EIA has also considered the following temporary features of the Proposed Development:
- laydown areas;
 - working areas;
 - access tracks; and
 - scaffolding to protect road, track and watercourse crossings during construction.

2.2 Infrastructure Location Allowance (ILA)

- 2.2.1 The OHL alignment and pole positions have been determined based on technical design work, engineering analysis of ground conditions and suitability, and the environmental assessments undertaken as part of the EIAR. However, it is anticipated that during the construction process, there may be a requirement to microsite elements of the Proposed Development infrastructure within a 25 m radius. This is known as the Infrastructure Location Allowance (ILA) and has been considered in the technical assessments that inform the EIAR.
- 2.2.2 Implementation of the ILA would be controlled through the process detailed in the Outline Construction Environmental Management Plan (CEMP) (submitted as part of the Section 37 Application), whereby any micro-siting within the ILA would be subject to approval of the Environmental Clerk of Works (ECow) in consideration of other known constraints.

2.3 Construction Programme

- 2.3.1 It is anticipated that construction would commence in September 2026 (subject to consents and approvals being granted). A provisional construction period of 16 months is anticipated, with energisation of the project scheduled for 2028. Construction working hours would typically be between 08:00 to 18:00 Monday to Friday and 08:00 to 13:00 on Saturdays. An indicative construction programme for the Proposed Development is provided in **Table 2.1** below.

Table 2.1: Indicative Programme

| | 2026 | | | | 2027 | | | | | | | | | | | | 2028 | | | |
|---|-----------|---------|----------|----------|---------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|---------|----------|-------|-------|
| | September | October | November | December | January | February | March | April | May | June | July | August | September | October | November | December | January | February | March | April |
| Site Mobilisation and Access Works (felling, access installation, construction compound, laydown areas) | | | | | | | | | | | | | | | | | | | | |
| Main Construction (wood pole erection, conductor pulling) | | | | | | | | | | | | | | | | | | | | |
| Commissioning of New 132 kV OHL and reinstatement of temporary access tracks, laydown areas and working areas | | | | | | | | | | | | | | | | | | | | |

2.3.2 Construction Environmental Management Plan

- 2.3.3 A CEMP would be produced by the Principal Contractor and implemented during construction of the Proposed Development, which would include measures to manage risks associated with nuisance and pollution and the potential risks posed to water, soils, air, human health and ecological receptors. It would be prepared in consultation with appropriate stakeholders and would include embedded construction good practice measures and additional mitigation. The CEMP would be submitted in advance of commencement of construction activities to Dumfries and Galloway Council for approval, in consultation with SEPA. The CEMP would be based on the Outline CEMP that is included as part of the Section 37 application.

2.3.4 Construction Traffic

- 2.3.5 A Construction Traffic Management Plan (CTMP) would be prepared by the Principal Contractor prior to any works commencing, in consultation with Dumfries and Galloway Council, Ayrshire Roads Alliance and Transport Scotland, as required. The CTMP would describe the anticipated traffic movements associated with construction of the Proposed Development, and all mitigation and signage measures that are proposed on the public road network. The CTMP would be based on the Framework CTMP that is included as **Appendix 3.1** of the EIAR.

2.4 Operation, Maintenance and Decommissioning

Operation and Maintenance

- 2.4.1 The Proposed Development would be designed to have a minimum operational design life of 40 years. The Applicant would have ownership of and responsibility for maintenance activities for all elements of the Proposed Development. Whilst most OHL components are maintenance free, exposed elements which suffer from corrosion, wear, deterioration, and fatigue may require inspection and periodic maintenance.

Decommissioning

- 2.4.2 When the operational life of the Proposed Development comes to an end, it is possible that the proposed OHL may be reequipped with new conductors and insulators and the wood poles replaced. Alternatively, the OHL may be decommissioned fully. Due to this uncertainty and the long timescale over which the Proposed Development would operate, an assessment of the decommissioning of the Proposed Development is outside the scope of the EIA.



3 CONSIDERATION OF ALTERNATIVES

- 3.1.1 Regulation 5(2)(d) of the EIA Regulations requires The Applicant to report upon the reasonable alternatives that were studied and the main reasons for the choice of the development, taking into account the environmental effects.
- 3.1.2 Various alternatives have been considered during project development including:
- the “Do Nothing” Scenario;
 - alternative technical options; and
 - alternative routes.

3.2 “Do-Nothing Scenario”

- 3.2.1 The Applicant has a legal duty under the Electricity Act to provide grid connections to new electricity generating developments.
- 3.2.2 The “do-nothing” scenario would result in The Applicant being non-compliant with its duties under the Electricity Act and is therefore not a viable alternative.

3.3 Alternative Technical Options to Overhead Line

- 3.3.1 SPT is required to meet the requirements of the 1989 Electricity Act to develop and maintain an efficient, system of electricity transmission. SPT’s approach seeks to find an OHL solution for all connections, and only where there are exceptional constraints would underground cables be considered as a design alternative. Such constraints can be found in urban areas and in rural areas of the highest scenic and amenity value. Where an OHL solution is not achievable for technical reasons, SPT looks to an underground cable solution as an alternative. However, this must balance the economic, technical and environmental considerations. With underground cable, the cost is the biggest consideration.
- 3.3.2 The main environmental advantage of underground cable when compared to OHL is often the reduction in visual and landscape effects. Such environmental benefits must also be balanced against the substantial additional costs when compared to the equivalent OHL solution, environmental disadvantages and technical considerations.
- 3.3.3 The main environmental disadvantages of underground cable when compared to OHL often relate to greater effects on habitats and natural heritage interests; unknown archaeology; drainage and land use for construction/development. The disadvantages often arise from the invasive nature of excavation of trenches to lay the cable, the extent of the area disturbed, the equipment required, and the volume of materials involved.
- 3.3.4 In consideration of the above factors, SPT remains of the opinion that the proposed OHL solution and alignment meet its objectives.
- 3.3.5 There are two types of Trident wood poles which could be considered for the Proposed Development – ‘single’ poles and ‘H poles’. ‘H’ poles are used for ‘extreme environments’ (above 200 m) as they are subject to greater ice and wind loadings, whereas ‘single’ poles are typically used at lower altitudes. Given the area and likely weather conditions within which the OHL would be located, it was considered that Trident wood poles in the ‘H’ configuration would be more suitable for the Proposed Development than a ‘single’ pole design.

3.4 Alternative Routes for the Proposed Development

- 3.4.1 In 2020, The Applicant published a summary document outlining the approach taken to routing transmission infrastructure (Approach to Routing and Environmental Impact Assessment, SPEN 2020⁶).

⁶ SPEN_Approach_to_Routeing_Document_2nd_version.pdf. Available at:
https://www.spenergynetworks.co.uk/userfiles/file/SPEN_Approach_to_Routeing_Document_2nd_version.pdf

The routing of the Proposed Development has been undertaken in accordance with the process outlined in this document.

- 3.4.2 An initial Study Area was used as a starting point for the identification of route options, which covered a broad corridor from the Lorg and Longburn Wind Farm Substations to the existing electrical infrastructure (known as “the DE Route”), and regions to the north and south, taking into account topographical constraints.
- 3.4.3 A number of route options were identified within the Study Area shown in **Plate 3.1** below. These route options were considered in terms of potential impacts on landscape, visual amenity, cultural heritage, ecology and ornithology, land use, forestry, flooding and peat. Further details of the route options appraisal and how this informed the selection of the Preferred Route are presented in the Routing Consultation Report². The Preferred Route is shown in **Plate 3.2** below.

Plate 3.1 Initial Route Options

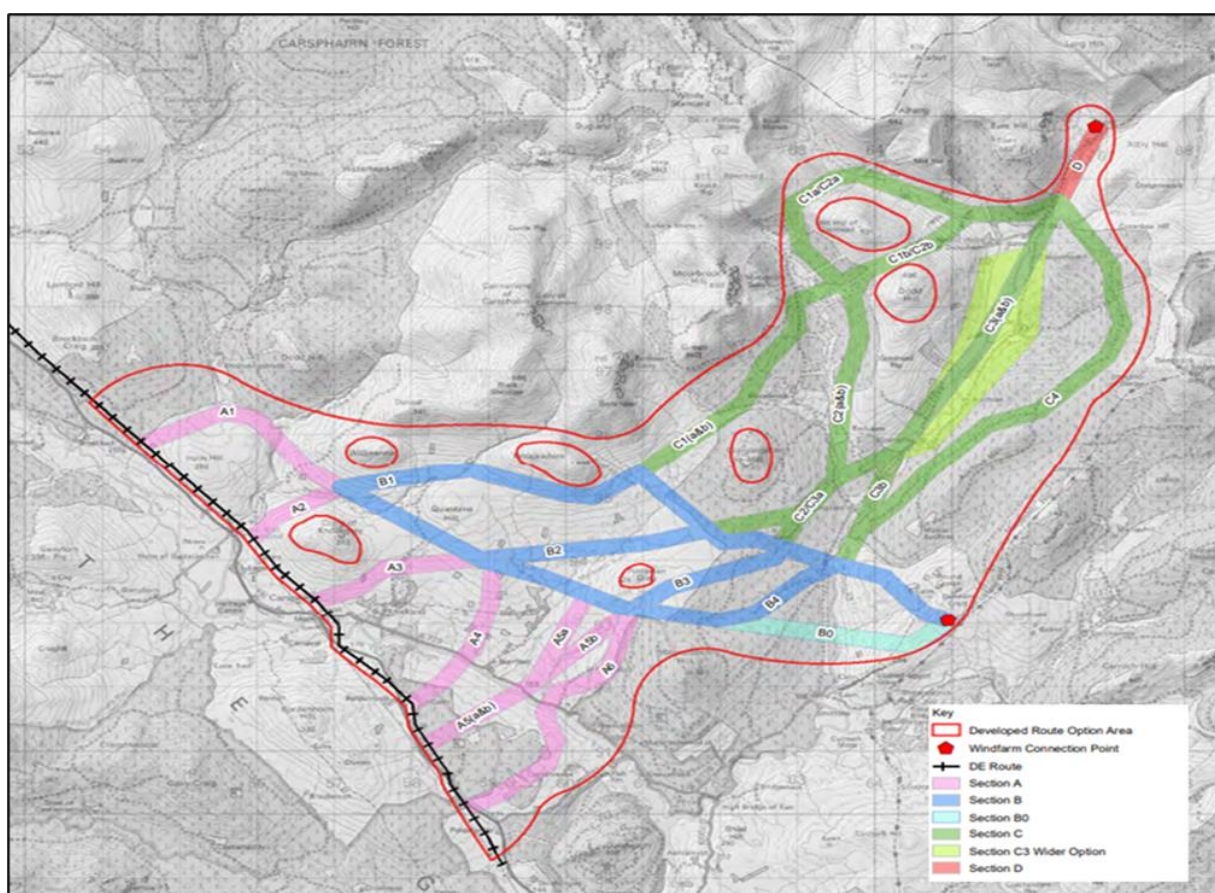
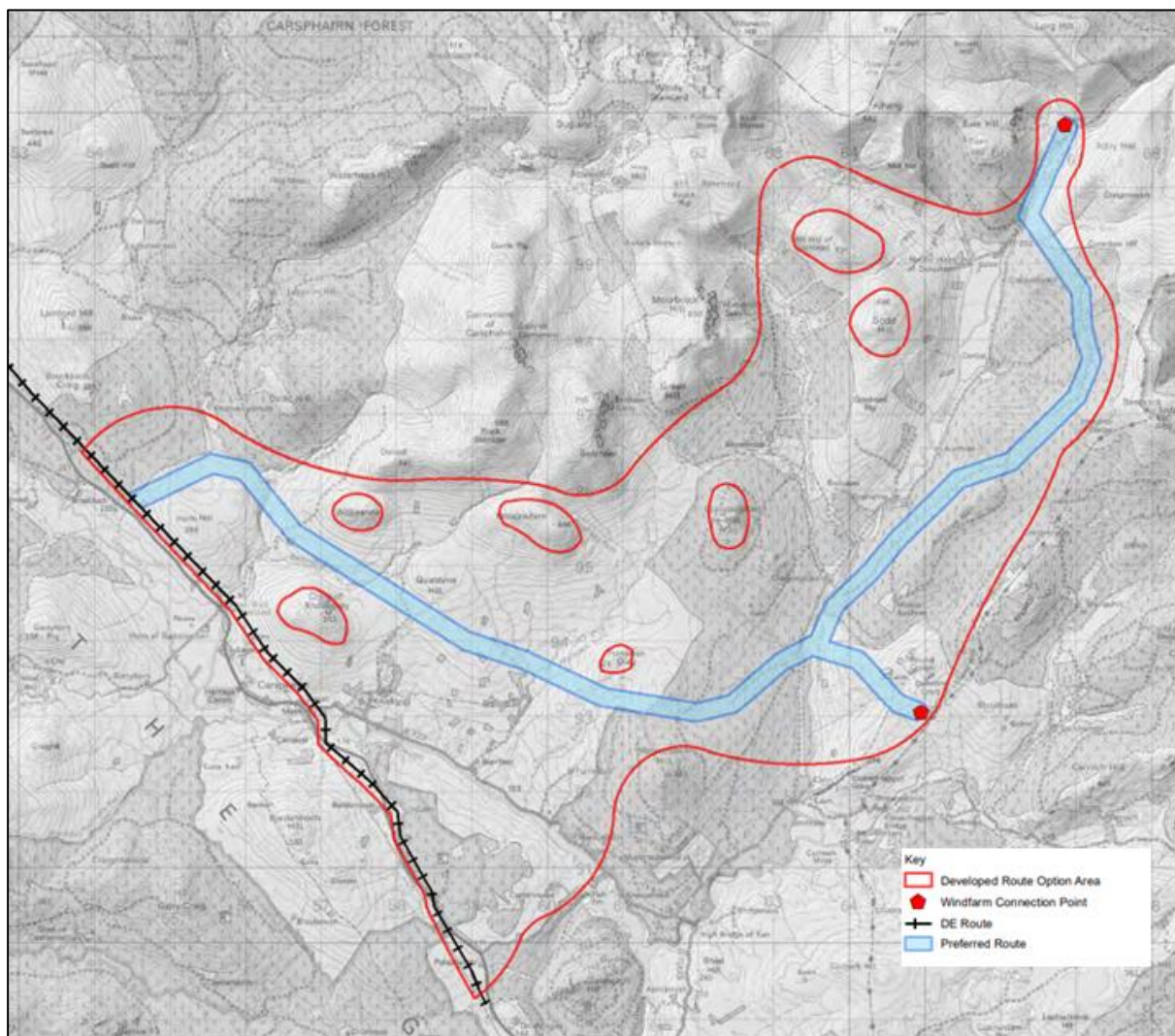


Plate 3.2 Preferred Route



- 3.4.4 Prior to the selection of the Preferred Route, meetings were offered to statutory consultees to discuss the proposals and to identify constraints. Meetings were held in March 2017 with The Scottish Government ECU, Dumfries and Galloway Council, Scottish Natural Heritage (now NatureScot) and SEPA. Email correspondence was also undertaken with HES. Following the consultation with the Statutory Consultees, a wider consultation was undertaken between April and July 2017.
- 3.4.5 In response to feedback gathered through the consultation, several amendments were made to the Preferred Route. A summary of the modifications made is presented in **Table 3.1** below, and further details are presented in the Amendments to the Preferred Route Report.⁷

Table 3.1 Amendments to the Preferred Route

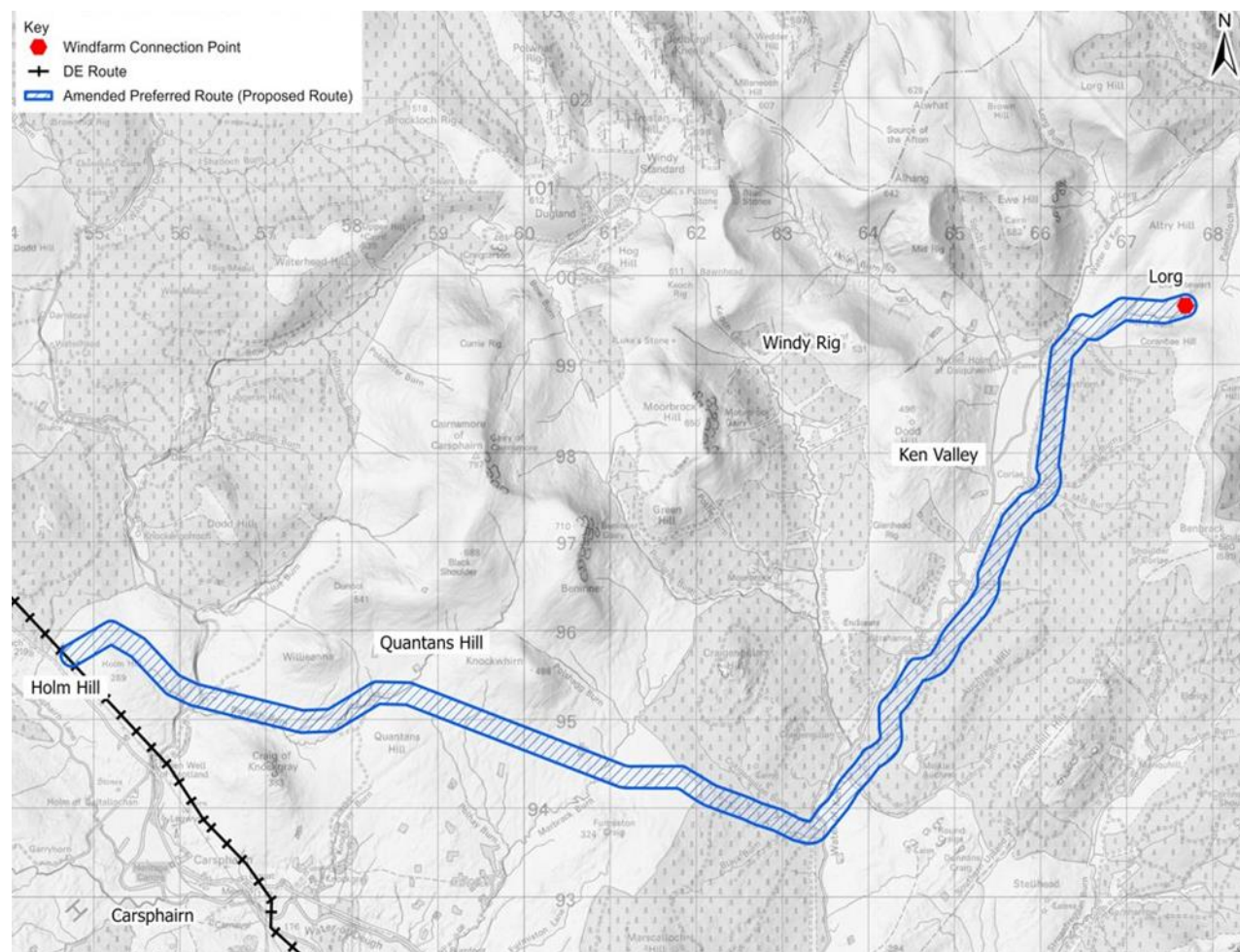
| Amendment | Reasons for amendment |
|--|--|
| Route around Holm Hill altered so the OHL is located further from the Knockengoroch Festival Site. | Potential for visual impacts on tourists attending Knockengoroch annual festival |

⁷ Amendments to the Preferred Route Report, SPEN, November 2017 Available at:
https://www.spenergynetworks.co.uk/userfiles/file/Lorg_LongburnGrid%20RouteingPreferredRouteAmendments_Issue_fig_LR.pdf

| Amendment | Reasons for amendment |
|--|---|
| Route moved from the south of Quantans Hill to the north | Curlews, black grouse and red grouse use the south facing slopes of Quantans Hill |
| Route from Quantans Hill to the Lorg-Longburn Junction moved further north | <p>The change around Quantans Hill moved the route further north.</p> <p>The route through forestry was moved north due to concerns regarding the potential impact on forestry relating to the use of forestry plant in the vicinity of overhead lines; potential sterilisation of areas of forestry; and area of forestry impacted.</p> <p>As the application for Quantans Hill Wind Farm was not being progressed a more direct route to join Quantans Hill to the area of forestry could be followed.</p> |
| Route up the Ken Valley moved further down the slope | <p>The preferred route passed through the centre of two commercial forestry blocks. An 11 kV overhead line already passes through these forestry blocks, lower on the hillside, close to the valley floor. Moving the line to run roughly parallel to the existing overhead line (within the forestry to the east of the existing line, slightly further from the valley floor) would minimise the potential impact on forestry both relating to the use of forestry plant in the vicinity of overhead lines and potential sterilisation of areas of forestry, without encroaching on the glen.</p> |

- 3.4.6 In addition to these amendments, the spur to Longburn Wind Farm was no longer required and was therefore removed. The western end of the Preferred Route was also extended by approximately 150 m to accommodate a revised Holm Hill substation location.
- 3.4.7 These modifications resulted in the development of the Proposed Route, which is being applied for, as shown in **Plate 3.3** below. The amendments listed in **Table 3.1** resulted in a reduction of the overall route length to 17.5 km.

Plate 3.3 Amended Preferred Route (Proposed Route)





4 ENVIRONMENTAL EFFECTS AND MITIGATION

4.1 EIA Methodology

- 4.1.1 The EIA has examined potential effects of the Proposed Development on the following factors:
- Cultural Heritage and Archaeology;
 - Ecology and Ornithology;
 - Forestry;
 - Hydrology, Hydrogeology, Geology and Soils;
 - Landscape and Visual; and
 - Cumulative Effects.
- 4.1.2 The assessments were informed by desk studies, field surveys and consultation.
- 4.1.3 Terms that are commonly used within the assessment include:
- **Effect:** Refers to the change in the existing environmental conditions that would result from the Proposed Development during construction and operation. Significant effects must be reported in the EIAR. Effects can be **adverse** or **beneficial**.
 - **Cumulative effects:** Effects which may arise as a result of i) interaction between, and combination of effects from, the Proposed Development (e.g. the effect of changes to water quality on animal species nearby), as well as ii) effects of the Proposed Development in combination with other future developments nearby.
 - **Mitigation:** Refers to measures that would be taken to avoid or reduce any adverse effects identified. Residual effects are those that remain following the application of mitigation.
 - **Receptor:** Refers to elements of the natural and built environment and also people and communities that may experience effects – **adverse** or **beneficial** – as a result of the Proposed Development. Examples of receptors include people, historic features, animal and plant species, watercourses, etc.
- 4.1.4 To assist with interpretation of the assessment and identification of likely significant effects, potential effects are identified as '**major**', '**moderate**', '**minor**' or '**none**'. '**major**' and '**moderate**' effects are considered to be significant in the context of the EIA Regulations.
- 4.1.5 The key findings of the EIA with respect to each topic are set out below.

4.1 Cultural Heritage and Archaeology

- 4.1.1 The cultural heritage and archaeology assessment considers the likely significant effects of the Proposed Development on identified and potential archaeological and cultural heritage resources in and around the Proposed Development.
- 4.1.2 **No significant effects** are anticipated on known heritage assets during construction or operation. However, there is potential for effects on currently unknown archaeological remains, which may be discovered during construction. In order to mitigate this risk, consultation with stakeholders would be undertaken in the event of remains being discovered, and the ILA would be used to microsite the Proposed Development to minimise impacts. As a result, **no significant effects** are anticipated in relation to cultural heritage and archaeology for the construction or operation phase.

4.2 Ecology and Ornithology

- 4.2.1 The ecology and ornithology assessment considers the likely significant effects of the Proposed Development in relation to designated sites and protected species and habitats.
- 4.2.2 Baseline ecological desk studies and field surveys were undertaken to understand the sensitive species and habitats present within the Proposed Development and surrounding area.



- 4.2.3 The desk study included a review of existing information as well as observed evidence regarding species presence within the wider surroundings and designated sites. Habitat surveys, protected species surveys, and bird surveys were completed.
- 4.2.4 The Ecological Zone of Influence (Zoi) is the area over which ecological features may be subject to significant effects because of the Proposed Development. Important ecological features that were identified within the Ecological Zoi were:
- Badger;
 - Barn owl;
 - Bat;
 - Black grouse;
 - Fish;
 - Goshawk;
 - Habitats;
 - Long-eared owl;
 - Merlin;
 - Otter;
 - Pine marten;
 - Red kite; and
 - Red squirrel.
- 4.2.5 Through the successful application of embedded and additional mitigation, it was concluded that the Proposed Development **would not result in residual significant effects** during construction or operation on any sensitive ecology or nature conservation receptors.

4.3 Forestry

- 4.3.1 The Forestry assessment considers the likely significant effects of the Proposed Development on the local forestry resource in and around the Proposed Development.
- 4.3.2 The Proposed Development is predicted to result in the direct loss of 52.19 ha of commercial forestry due to the requirement to create an Operational Corridor (OC) for the construction and safe operation of the proposed OHL. The OC is defined with reference to the distance at which a tree could fall and cause damage to the OHL, resulting in a supply outage.

- 4.3.3 Given the limited forestry removal of a small number of coupes, and having regard to the quality of forestry, no significant impacts on forestry are anticipated during construction or operation of the Proposed Development.
- 4.3.4 It is recommended that coordination with forest managers is undertaken prior to construction and throughout the operational phase of the development to minimise any impacts, coordinate efforts of forestry removal and integrate project activities with ongoing forest management plans.

4.4 Hydrology, Hydrogeology, Geology and Soils

- 4.4.1 The potential for construction effects on hydrology, hydrogeology, geology and soils have been assessed for the Proposed Development. Baseline conditions for the Proposed Development and surrounding area were established through desk study, Site visits and surveys. Operational effects were excluded from the assessment on the basis that **no adverse** impacts on existing surface water quality were expected.
- 4.4.2 The following sensitive hydrology, hydrogeology, geology and soils receptors within 1 km of the Proposed Development have been identified:
- fisheries;
 - flood risk;
 - groundwater bodies (Galloway Groundwater body and Kirkcolm, Portpatrick and Glenwhargen Formations);
 - Groundwater Dependent Terrestrial Ecosystems (GWDTE);
 - peat, peatland and soils;
 - surface water bodies (watercourses); and
 - water abstractions, including Private Water Supply (PWS).
- 4.4.3 The assessment considered how the Proposed Development would affect the sensitive receptors listed above through the impacts of pollution of surface watercourses, groundwater and water supplies; changes to resource availability; loss and compaction of peat, peatland and soils; modification of groundwater levels and flows, surface water drainage patterns, and short-term flood risk increase during the construction of the Proposed Development.
- 4.4.4 Following the application of mitigation measures to protect water supplies and peat, including measures to be implemented through embedded design, good practice mitigation methods, micro-siting, CEMP and Soil and Peat Management Plan (SPMP), **no significant effects** are predicted during construction .

4.5 Landscape and Visual

- 4.5.1 The landscape assessment describes the likely significant effects of the Proposed Development on landscape character and resources and visual amenity during construction and operation.

Construction

- 4.5.2 The Proposed Development is expected to result in **temporary significant** effects (**moderate adverse**) upon landscape receptors during the construction phase. Significant landscape effects are considered likely within the Narrow Wooded Landscape Character Type (LCT) in addition to the Southern Uplands LCT, which forms a part of the Dumfries and Galloway Regional Scenic Area.
- 4.5.3 The Proposed Development is also expected to result in **temporary significant** (**moderate adverse**) visual effects during the construction phase, resulting from the increased movement of construction plant, addition of temporary access routes, laydown areas and working areas introduced by construction activity within the landscape. These are likely to be experienced by the following recreational receptors:
- road users of Galloway Tourist Route A713;
 - users of Core Path Cairnsmore of Carsphairn by Green Well (CARS/487/2);
 - recreational users with elevated views;

- users of Core Path Cairnsmore of Carsphairn by Craig of Knockgray (CARS/182/1);
- users of Core Path Corlae (CARS/188/1);
- users of Lorg Road; and
- users of Core Path Lorg Trail (CARS/215/4).

4.5.4 The following residential receptors are also likely to experience **significant** visual effects:

- residents at Brockloch Tower;
- residents at Furmiston;
- residents and visitors to River Ken Cottage B&B (Strahanna);
- residents at Corlae;
- residents at Nether Holm; and
- residents at Auchrae.

4.5.5 **Moderate-major adverse** residual effects are anticipated upon visual impacts on Residents at Craigengillan during construction phase.

Operation

4.5.6 At the operational phase, all construction activity would have ceased within the landscape.

4.5.7 Landscape effects are considered to reduce to **non-significant** as construction activity ceases, with only **minor** changes to the landscape likely to be experienced resulting from the removal of forestry to support the operational corridors.

4.5.8 In terms of visual effects, whilst views towards the Proposed Development would likely remain visible, the proposed alignment would be set low with the landscape or set back from residents, obscured by topography and/or existing forestry and landforms in most cases.

4.5.9 The Proposed Development would not appear visually prominent within views, and **no significant** visual impact is anticipated, with the exception of views from residents at Craigengillan. These residents would likely experience a **moderate adverse (significant)** effect on views outwards across the Water of Ken Valley. This is due to the limited vegetation evident on the eastern valley slope and the potential for the OHL to be visible against the skyline.

4.5.10 Mitigation measures to reduce the landscape impact have also been identified. Outside of the identified Operational Corridor, replacement planting is to be undertaken where existing vegetation was removed for temporary features during the Construction Phase.

4.6 Cumulative Effects

4.6.1 The following types of cumulative effects have been considered in accordance with the EIA Regulations and best practice guidance:

- in-combination effects – the combined effects of the Proposed Development and other projects on a receptor; and
- effect interactions – the interaction and combination of different environmental effects from within the Proposed Development affecting a receptor.

4.6.1 The in-combination effects assessment identified **significant in-combination effects** on Landscape Character and Visual Amenity receptors during both construction and operation phases, from the Proposed Development in-combination with Other Committed Developments. These in-combination effects are largely driven by the **significant** impacts of the Other Committed Developments considered; as such, no additional practicable mitigation measures over and above those considered in the respective chapter (**Chapter 7: Landscape and Visual**) are recommended.

4.6.2 No other **significant** in-combination effects are anticipated during construction and operation.

- 4.6.3 The effect interactions assessment identified the following Common Receptors;
- residential receptors at Brockloch Tower, Auchrea and Corlea considered as visual receptors and private water supply receptors.
 - peat habitats, considered as biodiversity/habitat receptors and hydrogeology receptors.
- 4.6.4 Impacts on private water supplies during construction and operation are expected to be mitigated and managed via the implementation of best practice measures. As such, residential receptors are not expected to experience any impacts to their private water supply, and there is therefore no potential for effect interaction between visual effects and private water supply effects.
- 4.6.5 The assessment of effects on peat habitat as a biodiversity receptor has been considered and presented in **Chapter 8: Ecology and Ornithology**, and as such, the effect interactions have already been reported.
- 4.6.6 There are no other Common Receptors with the potential to experience effect interactions. Therefore, no significant cumulative effect interactions are anticipated during construction and operation.

4.7 Summary of Environmental Effects

- 4.7.1 The EIAR includes a chapter which sets out the report's significant residual effects summarised as below:
- Post implementation of additional design, mitigation and enhancement measures, likely **significant** residual effects have been predicted in Landscape and Visual and Cumulative Effects due to the Proposed Development.

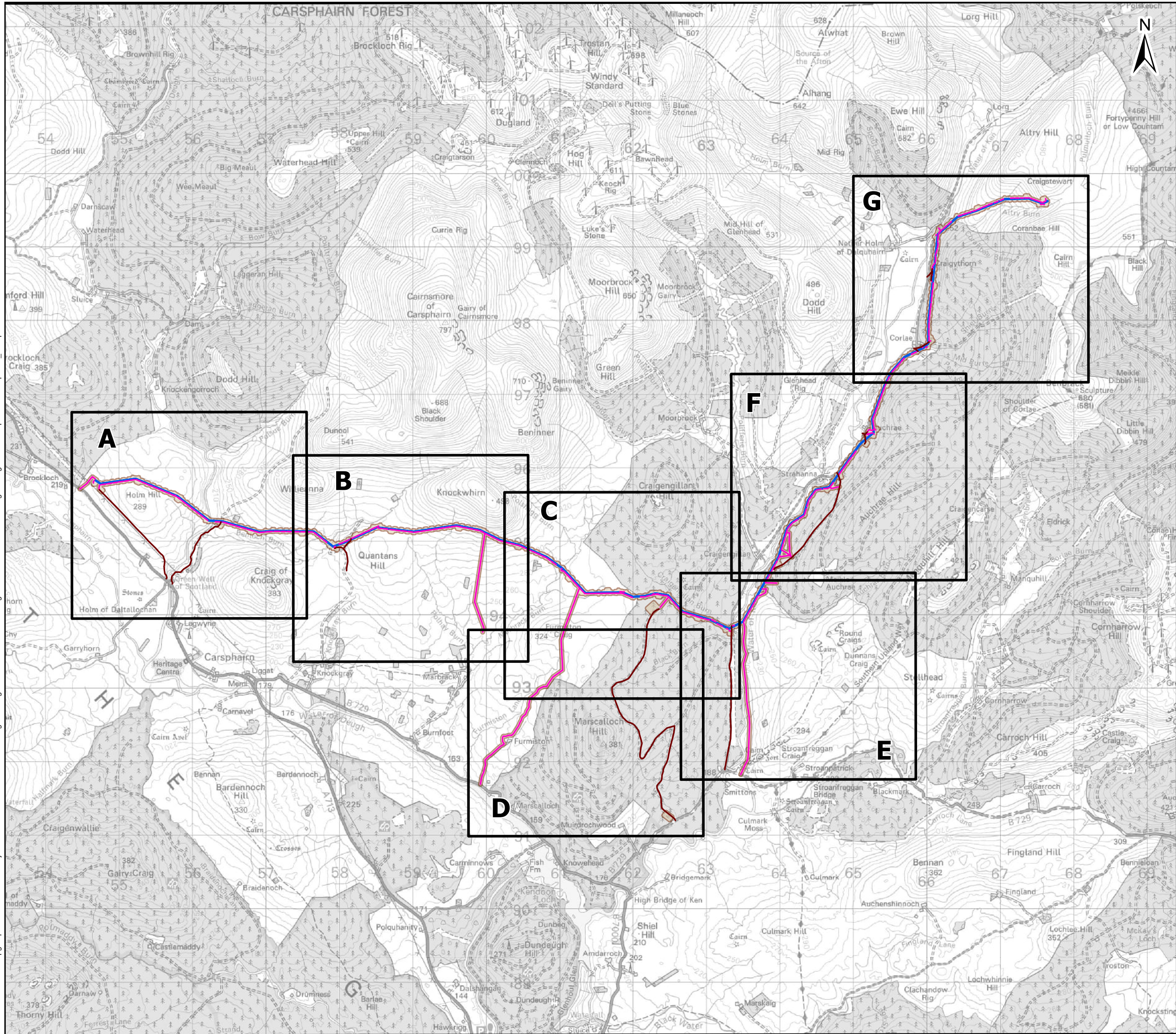
4.8 Next Steps

- 4.8.1 In accordance with the EIA Regulations Regulation 18, copies of the EIAR will be available for inspection by the public, location will be published in accordance with Regulation 14 of the EIA Regulations on The Applicant's website noted below, in the Edinburgh Gazette, and in a relevant newspaper in the locality of the Proposed Development.
- 4.8.2 Electronic copies of the EIAR can be accessed at <http://www.energyconsents.scot/> and The Applicant's application website: http://www.spenergynetworks.co.uk/pages/lorg_wind_farm.aspx.
- 4.8.3 Hard copies of this Non-Technical Summary are available free of charge from The Applicant. An electronic copy (via USB) of the EIA Report documents can be obtained free of charge, and hard copies of the EIA Report Volumes 1-3 may be purchased for £1,000.

To obtain a copy, please contact lorg-connections@spenergynetworks.co.uk or write to:

Lorg Wind Farm Grid Connection
Land and Planning
SP Energy Networks
55 Fullarton Drive
Glasgow
G32 8FA

Document Path: \\uk.wspgroup.com\Central Data\Projects\70025617 - SPEN Longburn Lorg OHLE Models and Drawings\99 GIS\GIS\ArcGIS Pro\Log\IEIA\Figure 3.1 - Proposed Development_AS.aprx



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Esri UK, Esri, TomTom, Garmin, FAO, METI/NASA, USGS

Key

- Proposed 132 kV Trident OHL
- Existing Access
- Proposed Access
- Infrastructure Location Allowance

0 1 3 km

Client:

Project:

Lorg Wind Farm Grid Connection

Title:

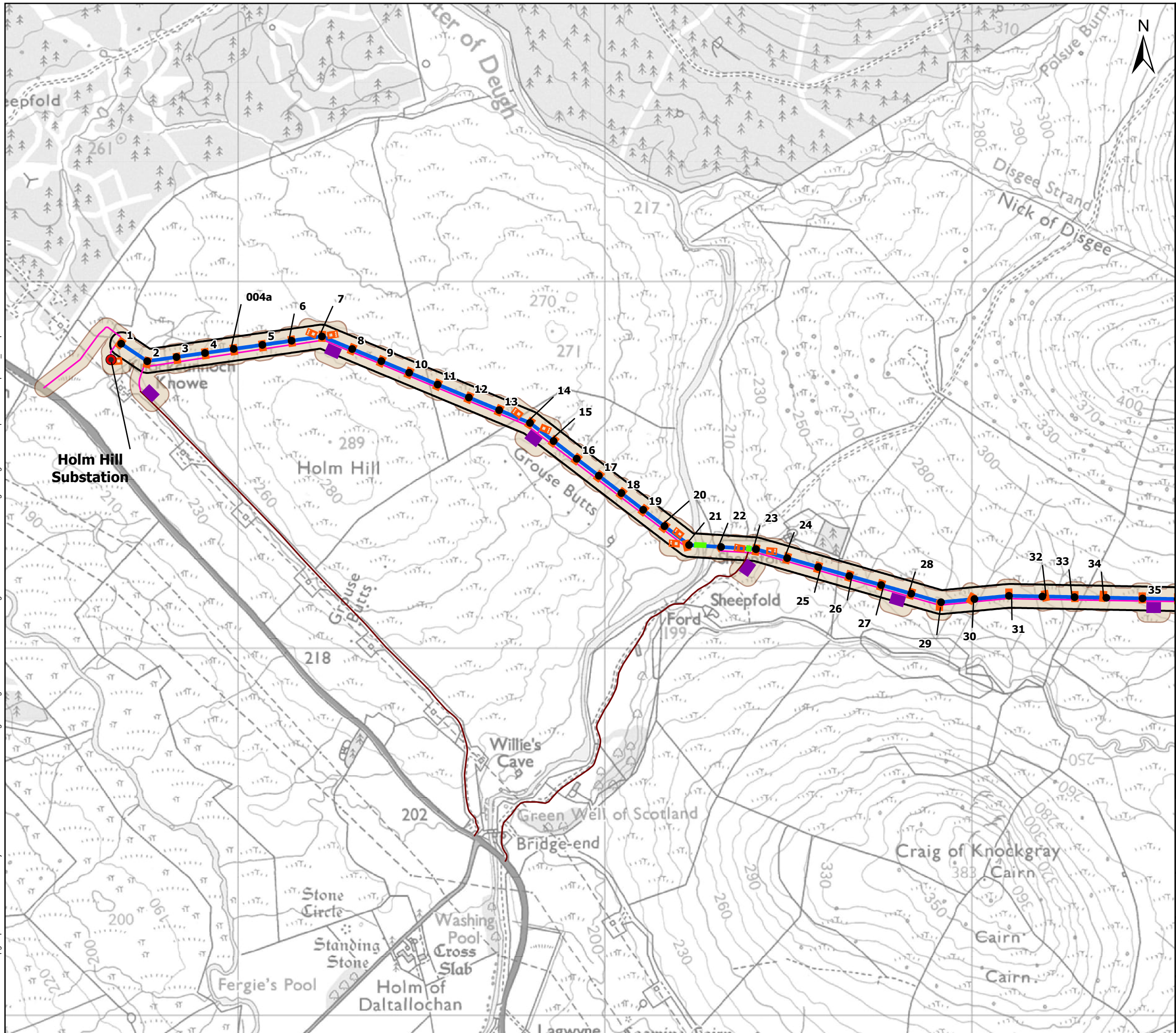
Figure 1 - Proposed Development Key Plan

Date: 04/06/2025
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Checked: IM
Approved: AF

Drawing Number: 70025617-WSP-LORG-002

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Scale: 1:600,000

Esri UK, Esri, TomTom, Garmin, FAO, METI/NASA, USGS

Key

- Proposed 132 kV Trident OHL
- Existing Access
- Proposed Access
- Proposed Pole Locations
- Proposed Laydown Area
- Proposed Working Area
- Proposed Scaffolding
- Holm Hill Substation
- Infrastructure Location Allowance
- Operational Corridor

0 0.3 0.5 km

Client:

Project:

Lorg Wind Farm Grid Connection

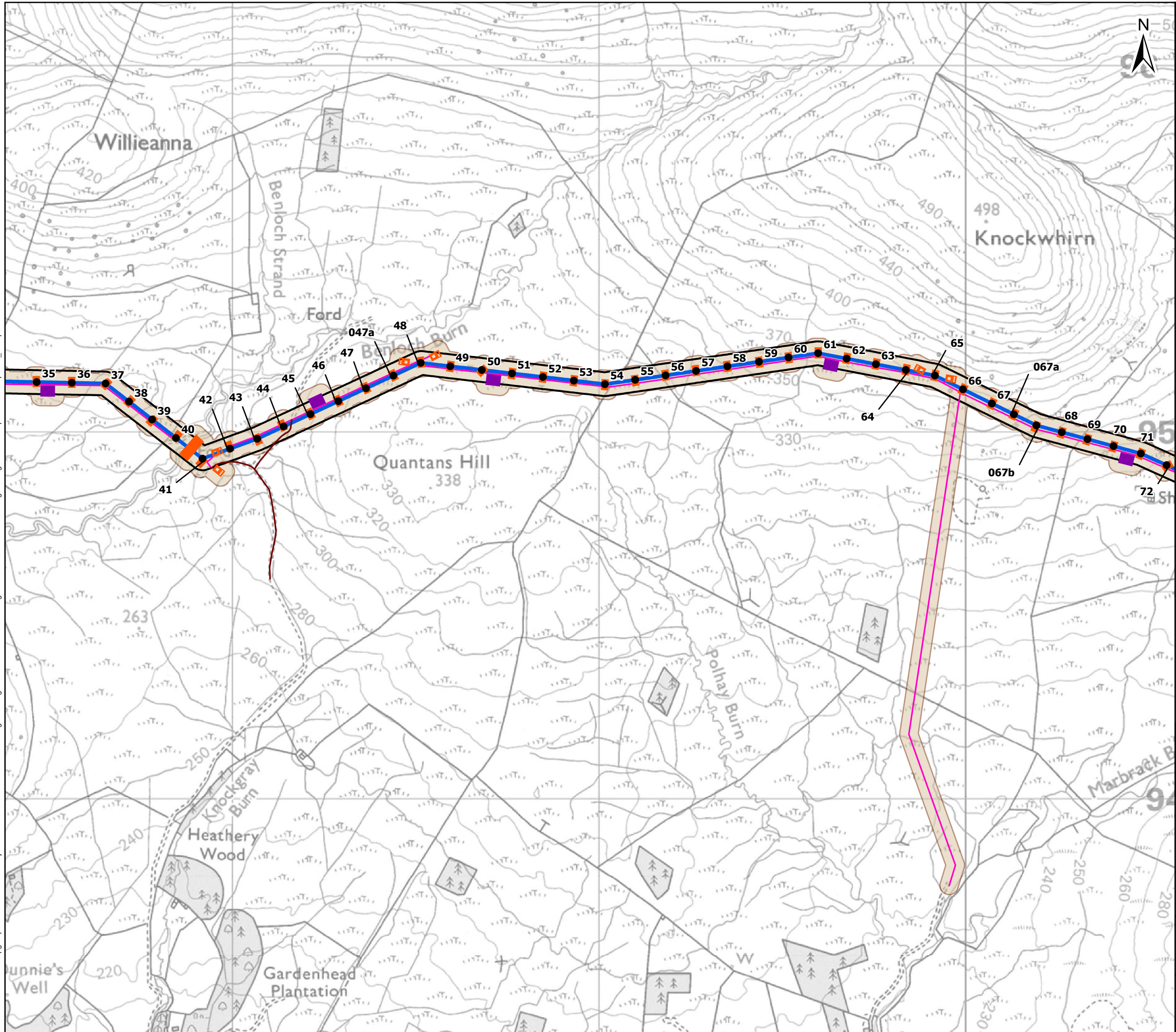
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Figure 1 A - Proposed Development
Page 1 of 7

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- Operational Corridor

0 0.3 0.5 km

Client:

Project:

Lorg Wind Farm Grid Connection

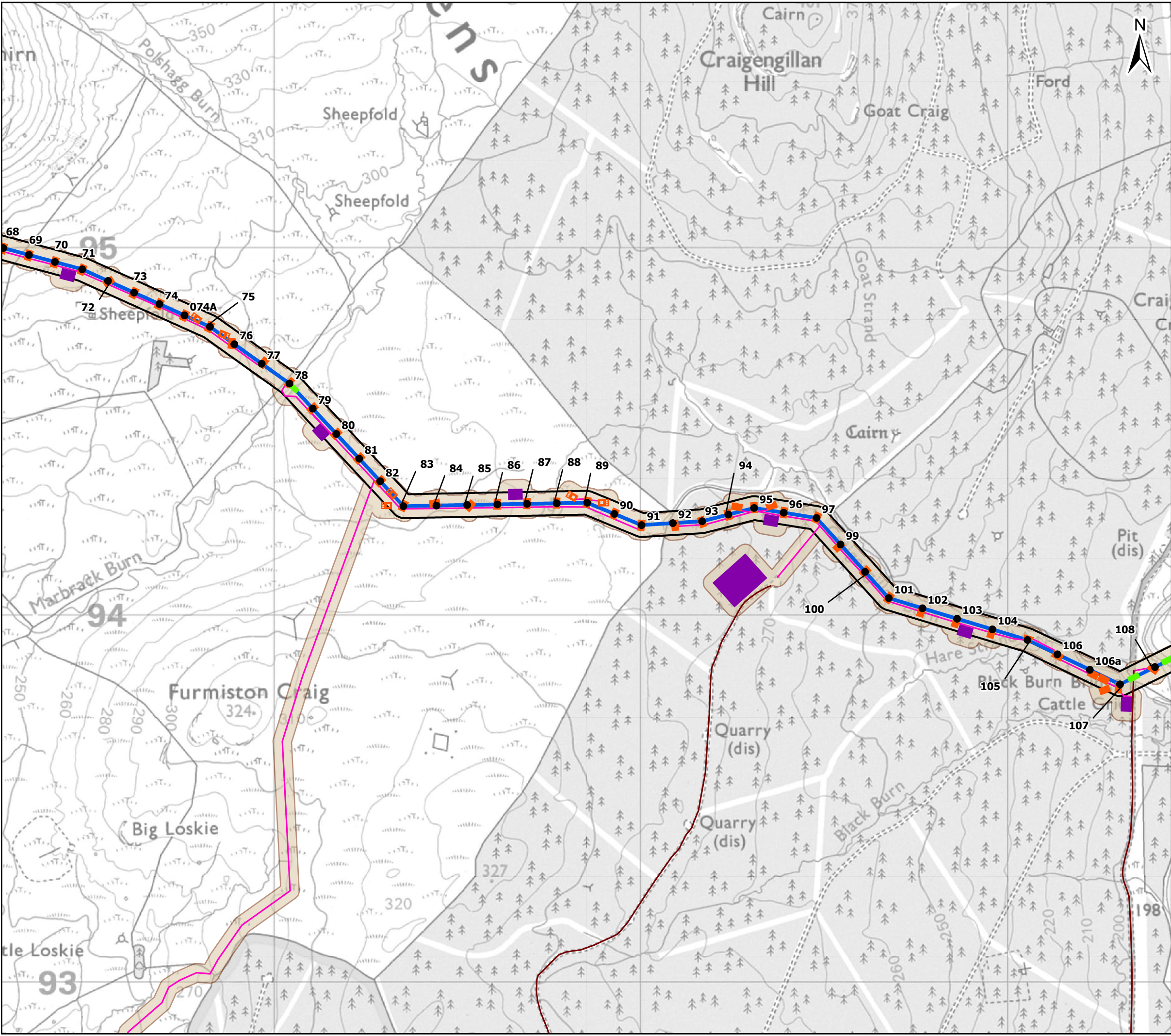
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Figure 1 B - Proposed Development
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Esri UK, Esri, TomTom, Garmin, FAO, METI/NASA, USGS

Key

- Proposed 132 kV Trident OHL
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- Proposed Access
- Proposed Pole Locations
- Proposed Laydown Area
- Proposed Working Area
- Proposed Scaffolding
- Infrastructure Location Allowance
- Operational Corridor

0 0.3 0.5 km

Client:

Project:

Lorg Wind Farm Grid Connection

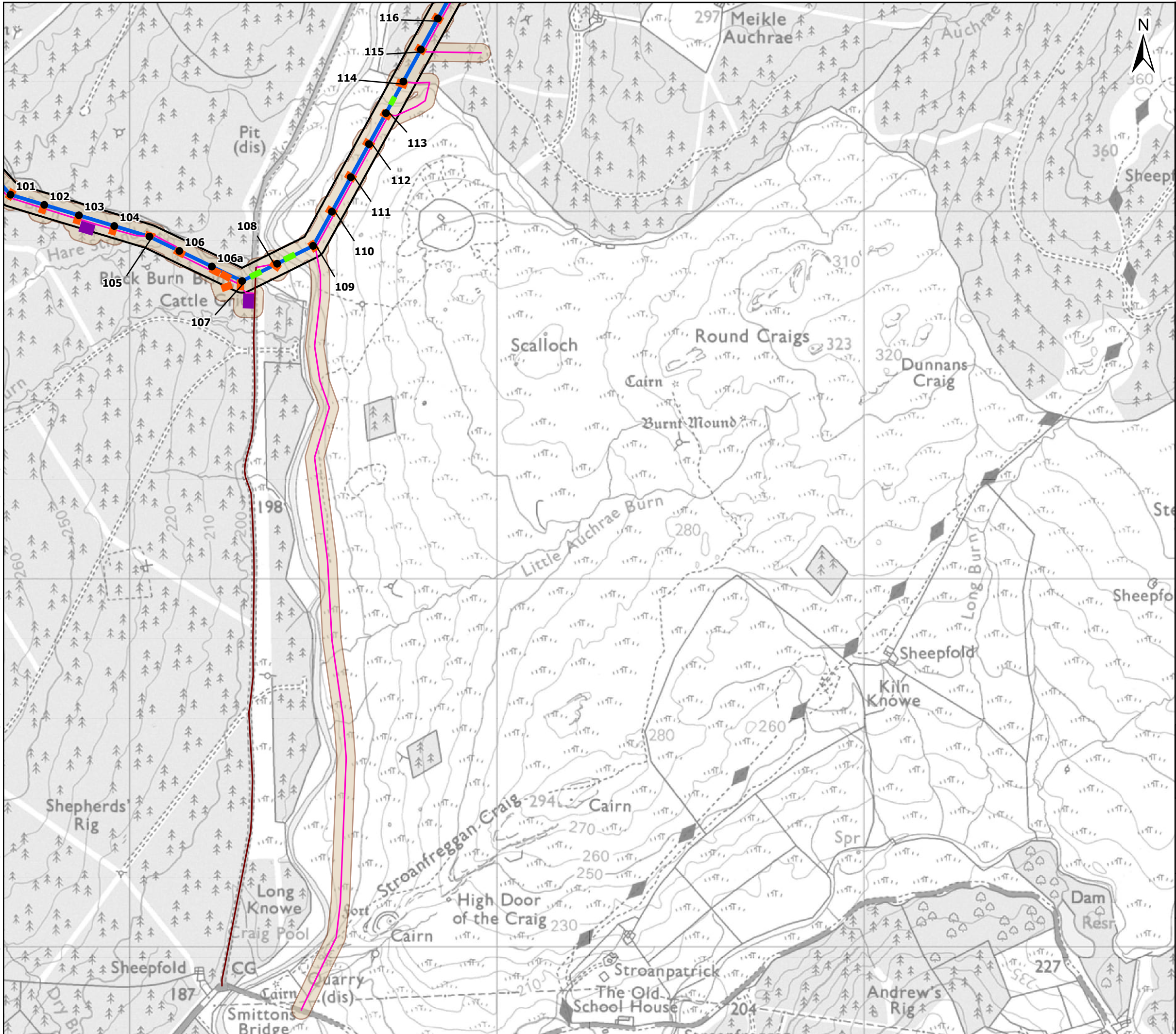
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Figure 1 C - Proposed Development
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Esri UK, Esri, TomTom, Garmin, FAO, METI/NASA, USGS

Key

- Proposed 132 kV Trident OHL
- Existing Access
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- Proposed Pole Locations
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- Proposed Working Area
- Proposed Scaffolding
- Infrastructure Location Allowance
- Operational Corridor

0 0.3 0.5 km

Client:

Project:

Lorg Wind Farm Grid Connection

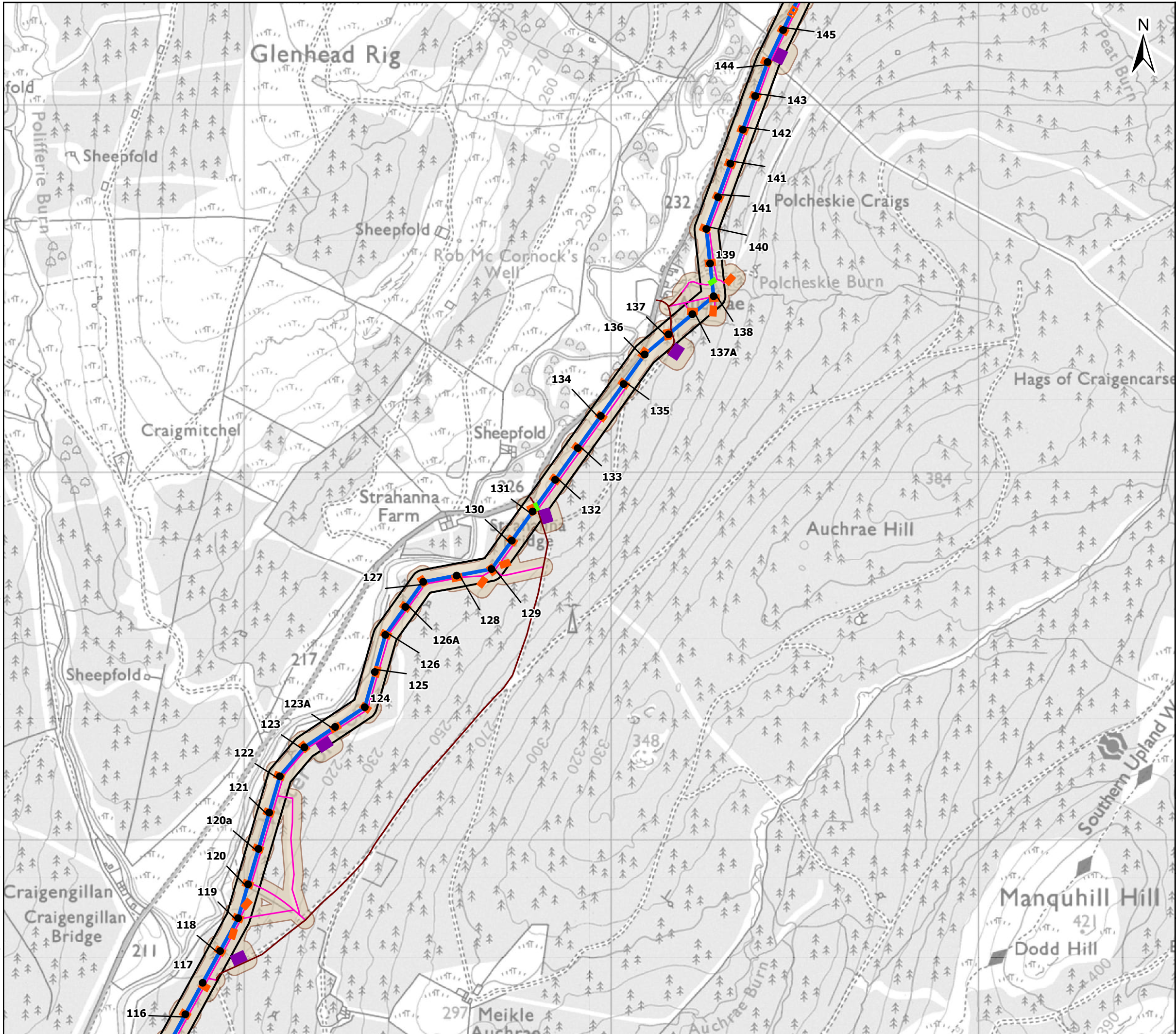
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Figure 1 E - Proposed Development
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Key

- Proposed 132 kV Trident OHL
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- Proposed Access
- Proposed Pole Locations
- Proposed Laydown Area
- Proposed Working Area
- Proposed Scaffolding
- Infrastructure Location Allowance
- Operational Corridor

0 0.3 0.5 km

Client:

Project:

Lorg Wind Farm Grid Connection

Title:

Figure 1 F - Proposed Development
Page 6 of 7

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Key

- Proposed 132 kV Trident OHL
- Existing Access
- Proposed Access
- Proposed Pole Locations
- Proposed Laydown Area
- Proposed Working Area
- Proposed Scaffolding
- Lorg Substation
- Infrastructure Location Allowance
- Operational Corridor

0 0.3 0.5 km

Client:

Project:

Lorg Wind Farm Grid Connection

Title:

Figure 1 G - Proposed Development
Page 7 of 7

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