March 2023

BIDWELLS

COIRE GLAS GRID CONNECTION PROJECT: 400KV OHL WOODLAND REPORT ABERCHALDER ESTATE

Table of Contents

1.0 Woodland Characteristics

Aberchalder Estate is privately owned. The woodland is accessed from the A87 approximately 2 miles west of Invergarry, and the main estate entrance at the Bridge of Oich (Please refer to Location plan in Appendix 1). This woodland has native broadleaves as its principal species. The proposed Over Head Line (OHL) alignment impacts significantly between towers 16-17, 30-31, 36-37 and the Fort Augustus and Fort William diversion (FAFW).

The forest is managed as per the Long Term Forest Plan (LTFP) case no. 16FGS10935.

The extent of open ground and minimal commercial value of the trees negates the possibility of timber harvesting. Low ground pressure is recommended.

Towers 16-17

Scattered open habitat of native upland birch woodland (W4). Classed as 2a within the Ancient Woodland Inventory (AWI). Site is heavily grazed by sheep. Due to the open habitat, no additional felling will be required out with the OC.

Towers 30-31

Scattered open habitat of native upland birch woodland (W4). Due to the open habitat, no additional felling will be required out with the OC.

Towers 36-37

Scattered open habitat of native upland birch woodland (W4) and oak woodland (W11). Classed as 2a within the Ancient Woodland Inventory (AWI).

Mature oak classed as Ancient Woodland. Potential to crown reduce the majority of the stand to the north of the private road. Several trees will be removed at the site of tower 37.

2.0 Development Requirements

The standard tower dimensions for the project have a width of 17.1 m at the widest part of the Tower (from one conductor to the other) in addition to this the vicinity zone from each conductor is 5 m on each side. The infrastructure and minimum clearance distance is therefore 27 m (13.5m either side of the centre line) and this has been utilised to calculate the area of the corridor occupied by infrastructure. In some cases, such as angle towers the requirement will be in excess of this distance however the average minimum distance has been used in this assessment.

A resilient Operational Corridor has been reduced to 25m in width either side of the line within the AWI areas.

The forest is served by a well-constructed Class A forest road running through the woodlands, accessed from the A87.

These roads can serve as the main arterial construction route. Tree felling and timber extraction will be able to utilise existing tracks, prior to any construction activity.

Stump removal and residue mulching will be required for the installation of tracks within the operational corridor and at each pole structure construction compound for the formation of a temporary crane pad.

3.0 Wind Blow Risk

There is a low wind blow risk across much of the woodland (wind throw hazard class assessed at 10). In areas where the trees are smaller due to age or exposure then the wind blow risk is reduced along with the requirement for additional felling to wind firm boundaries.

4.0 Woodland Management Impact

The line route will create additional challenges for the future management of the forest as it dissects existing management units and introduces an electrical hazard. The constraint associated with the electrical hazard will be reduced by regular maintenance of the Operational Corridor which will avoid the incidences of “Red Zone” trees (reference FISA 804 “Electricity at Work: Forestry”). As part of construction works, dedicated crossing points will be discussed once the overhead line has been constructed, thus ensuring safe future working within the woodland.

The total loss of Native Broadleaved woodland resulting from the proposed alignment is 1.57 hectares.

5.0 Mitigation Opportunities

The chosen alignment has gone a long way to mitigating impact on this forest. The significant reduction in the operational corridor within the AWI and broadleaved areas will reduce the impact on the nationally important native woodland within this area. The nativeupland birch and oak woodland is likely to regenerate into the OC in vicinity of the tower post construction and present an opportunity to replace some of the woodland loss from tower/ line construction.

a. Restructuring

There is currently no active management plan for the woodland area. The proposed felling will have no impact on future works.

b. Restocking

It is anticipated that native broadleaved regeneration is likely to occur within the Operational Corridor from towers 16-17, 30-31 and FAFW diversion due to the presence of mature birch woodlands. Any opportunity to restock within the Operational Corridor will be discussed with FLS following felling to link in with adjacent planned felling coupes where appropriate.

Refer to appendix 3 for plan showing on site restocking.

6.0 Nett Effect/Summary

Tower Span	Operational Requirements
16-17	Gross area of Operational Corridor felling approved via the Section 37 and undertaken bySSEN - • Native woodland – fell to windfirm edge.1.02ha
30-31	Gross area of Operational Corridor felling approved via the Section 37 and undertaken bySSEN - • Native woodland – fell to windfirm edge. 0.16ha
36-37	Gross area of Operational Corridor felling approved via the Section 37 and undertaken by SSEN - •Native woodland – Crown reduction. 0.255ha
Fort Augustus to Fort William Diversion	Gross area of Operational Corridor felling approved via the Section 37 and undertaken by SSEN - •Native woodland – fell to windfirm edge. 0.39ha
Compensatory Planting Options	
Potential onsite replacement planting/ regeneration within OC	1.57 ha
Nett effect (Loss of Woodland)	0 ha
Operational Works	
	Total Area (ha)
Clear fell harvesting/mulch	1.57
Crown Reduction	0.255
TOTAL	**1.825**

APPENDIX 1
LOCATION PLAN

APPENDIX 2
PLAN SHOWING OPERATIONAL CORRIDOR AND FELLING

APPENDIX 3
PLAN SHOWING RESTOCKING

Appendix V4 14.1
App1 Woodland Location Plan

Legend

- Proposed_Steel_Lattice_Tower
- Proposed OHL Alignment (Steel Lattice Towers)

Existing 132 kV Invergarry Tee OHL (Steel Lattice Towers)

- New Permanent Trident Steel Pole Location
- to be retained
- to be Diverted
- to be dismantled

Existing 132 kV Fort Augustus to Fort William OHL (Steel Lattice Towers)

- temporary Trident wood pole locations
- temporary OHL diversion
- New permanent Steel Lattice Tower Locations
- To Be Retained
- To be diverted into the proposed Loch Lundie Substation
- to be dismantled
- Proposed Loch Lundie Substation Platform
- Proposed Coire Glas Switching Station Platform

FLS

- AUCHTERAWE FARM
- GLENGARRY II
- GLENGARY DEER FOREST
- DRYNACHAN
- Aberchalder Estate
- Kilfinnan and Munerigie

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TRANSMISSION

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29 Mar 2023

SSEN Coire Glas Connection Project - 400kV OHL EIA Report

Bidwells
Elm House
Cradlehall Business Park
Inverness
IV2 5GH

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Appendix V4 14.1
Aberchalder Estate Woodlands
App 2 OC Felling Requirements
Towers 16-17

Legend

Aberchalder Operational requirements Towers 16-17

- OC Felling 1.02ha
- Proposed Steel Lattice Tower
- Proposed OHL Alignment (Steel Lattice Towers)
- 50m OC
- 90m OC
- Existing Track No Upgrades
- New Track Temporary
- Existing Track To Be Upgraded

Ancient Woodland Inventory

- 1a
- 2a
- 2b
- 3
- Aberchalder Estate

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TRANSMISSION

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Achadh-nan-darach

Doire nan Duilleag

16

17

119m

118m

148m

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Appendix 2
Aberchalder Estate Woodlands
OC Felling Requirements
towers 30-31

Legend

Aberchalder Operational Requirements Towers 30-31

OC Felling 0.47ha

Proposed Steel Lattice Tower Locations

Proposed OHL Alignment (steel Lattice Towers)

Existing 132 kV Fort Augustus to Fort William OHL (Steel Lattice Towers)

temporary Trident Wood Pole Locations

Temporary OHL Diversion

New Permanent Steel Lattice Tower Locations

To be diverted into the proposed Loch Lundie Substation

To be dismantled

50m OC

Tracks

New Track Temporary

New Track To Be Retained

Existing Track No Upgrades

Existing Track To Be Upgraded

Aberchalder Estate

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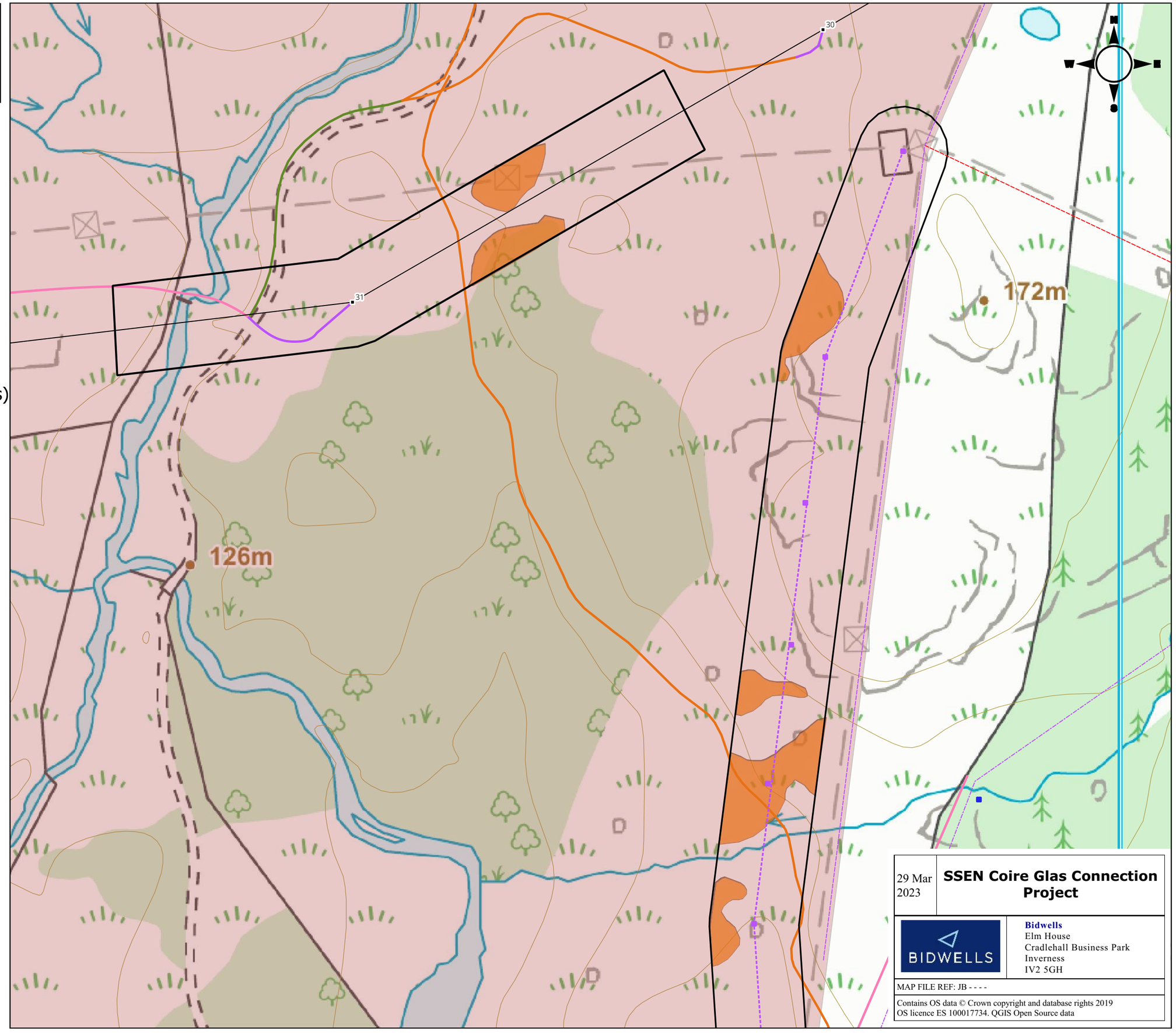

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Appendix 2
Aberchalder Estate Woodlands
OC felling Requirements
Towers 36-37

Legend

Aberchalder Operational Requirements Towers 36-37

- OC Felling 0.255ha (Potential Crown Reduction)
- Proposed Steel Lattice Tower Locations
- Proposed OHL Alignment (steel Lattice Towers)
- 50m OC
- 90m OC
- Existing Track No Upgrades
- New Track Temporary

Ancient Woodland Inventory

- 1a
- 2a
- 2b
- 3

Native Woodland Survey Scotland

- PAWS
- Aberchalder Estate Boundary

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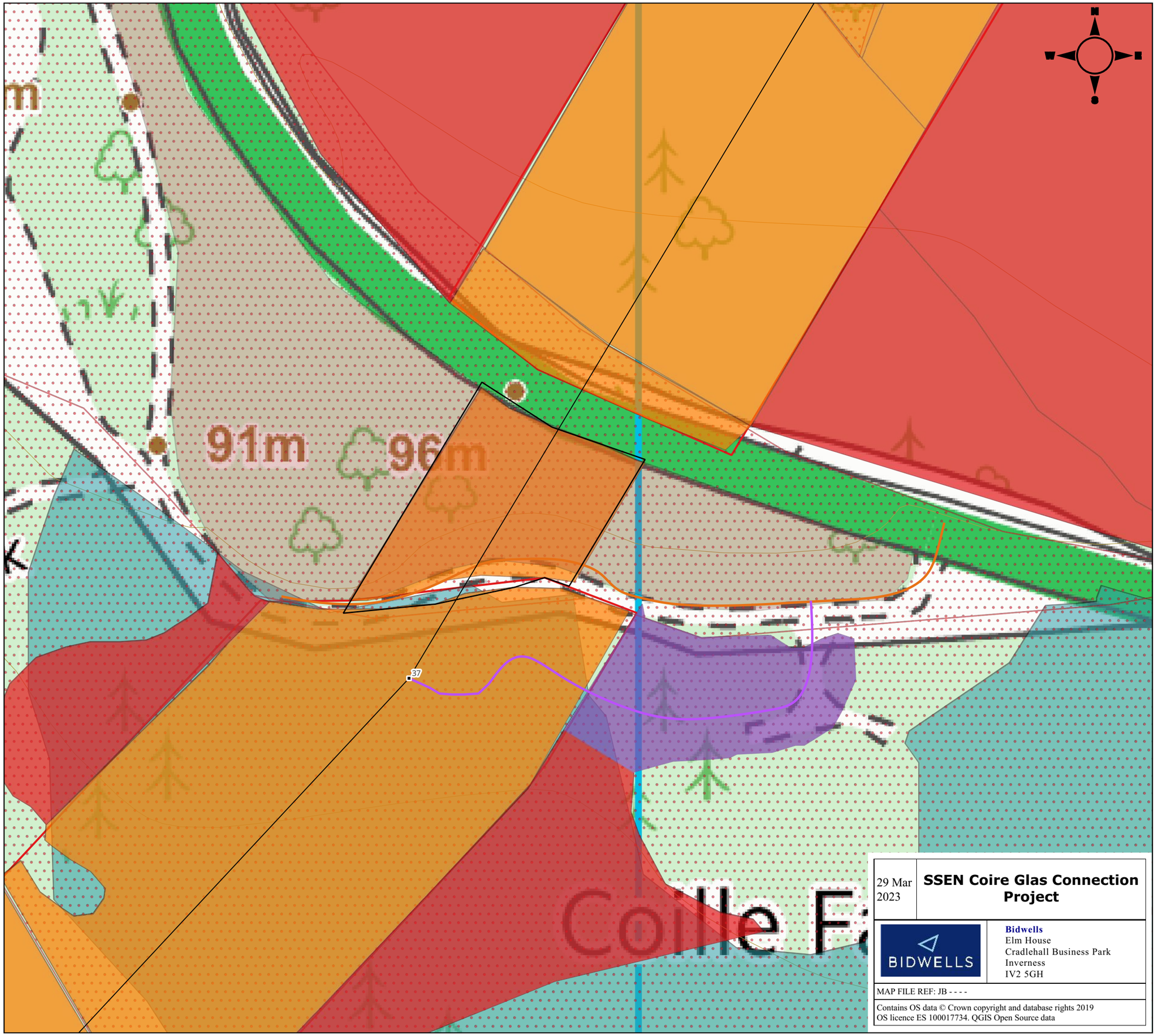

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Appendix V4 14.1
Aberchalder Estate Woodlands
App 3 Restocking Plan Towers 16-17

Legend

Aberchalder Estate Restocking Towers 16-17

- Natural Regeneration
- Proposed Steel Lattice Tower Locations
- Proposed OHL Alignment (Steel Lattice Towers)
- 50m OC
- 90m OC

Ancient Woodland Inventory

- 1a
- 2a
- 2b
- 3
- Aberchalder Estate

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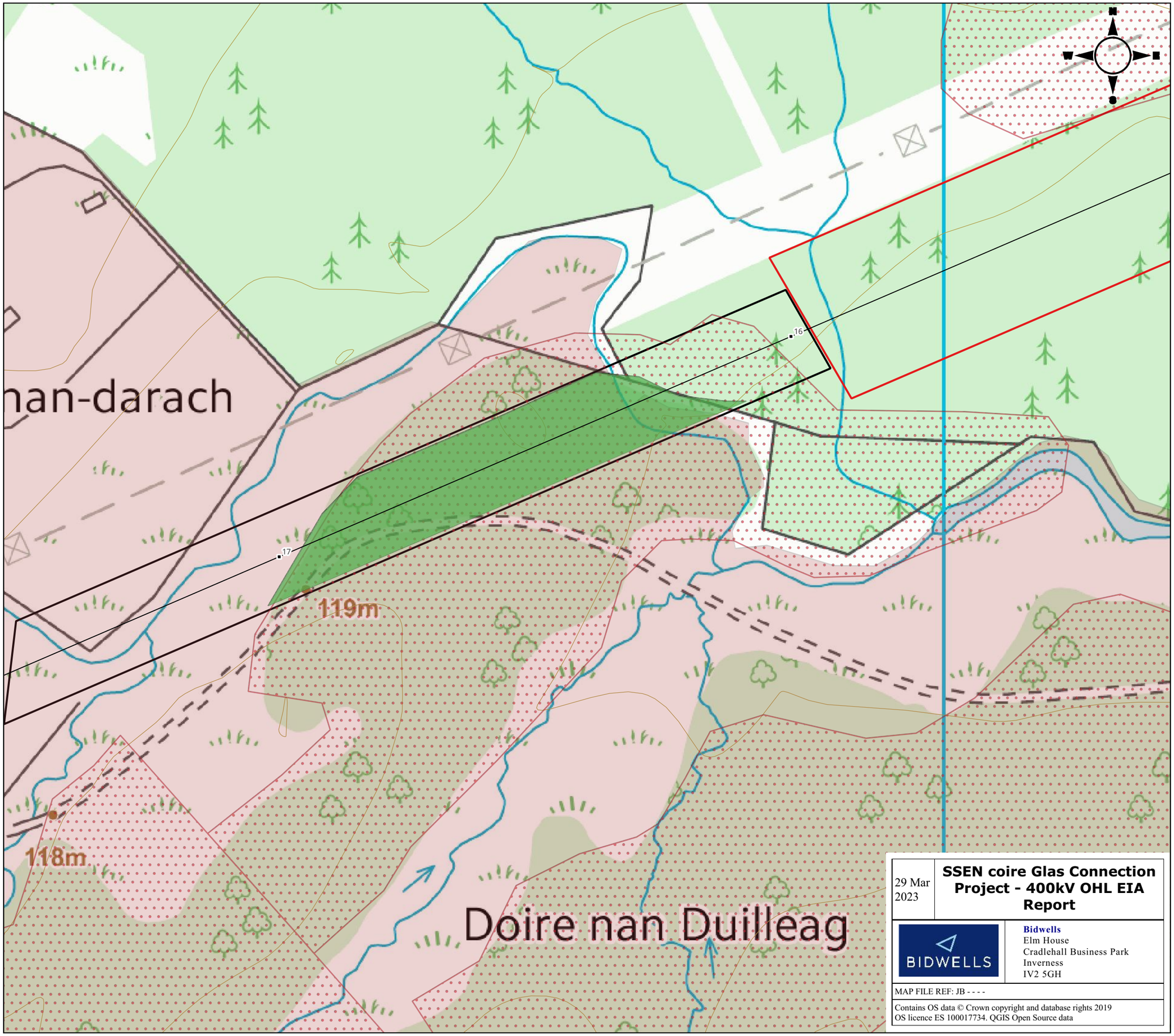

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Appendix V4 14.1
Aberchalder Estate Woodlands
App 3 Restocking Plan Towers
30-31

Legend

Aberchalder Estate Restock Plan

- Natural Regeneration
- Proposed Steel Lattice Tower Locations
- Proposed OHL Alignment (Steel Lattice Towers)
- Fort Augustus to Fort William OHL Temporary Diversion
- Fort Augustus to Fort William temporary Trident Wood Pole Locations
- 50m OC

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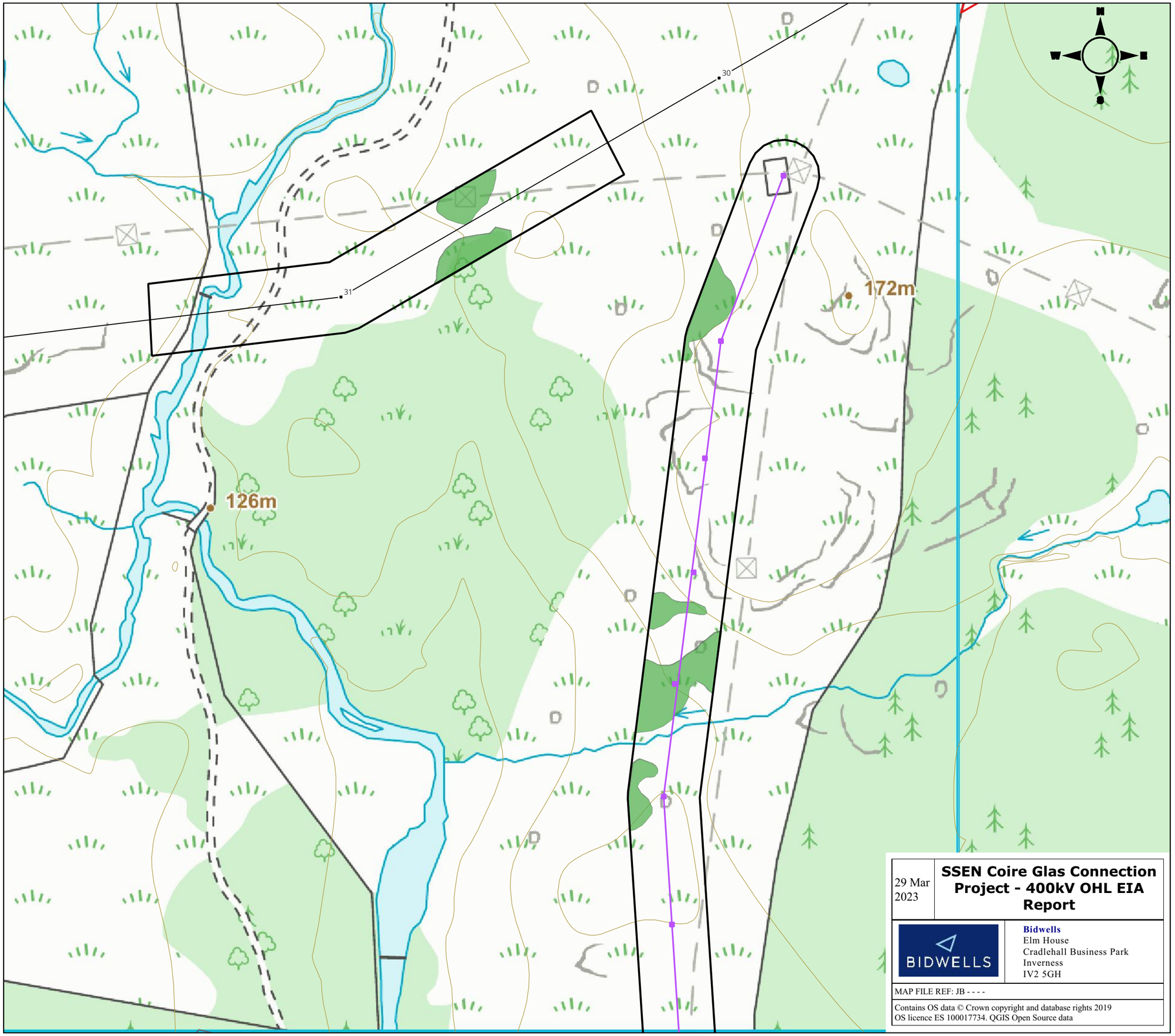

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