

Scottish and Southern Electricity Networks Transmission

Kinardochy to Errochty Underground Cable – Compound, Junction and Track Works

Environmental Appraisal

April 2026

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1 INTRODUCTION

1.1 Overview of the Proposed Development

This Environmental Appraisal (EA) has been prepared by Ramboll ('the Consultant') on behalf of Scottish Hydro Electric Transmission plc ('the Applicant'). The Applicant, operating and known as Scottish and Southern Electricity Networks Transmission (SSEN Transmission), owns, operates and develops the high voltage electricity transmission system in the north of Scotland and remote islands. In this EA, 'the Applicant' and 'SSEN Transmission' are used interchangeably unless the context requires otherwise. This EA has been prepared to accompany an application for planning permission under the Town and Country Planning (Scotland) Act 1997 ('the 1997 Act').

The application seeks planning permission under the 1997 Act to construct approximately 1.7 km of permanent access track, two associated temporary laydown/compound areas, two temporary junction bellmouths, widen two sections of existing access track, approximately 868 m in total, and construct two sections of temporary access track approximately 243 m in total between the existing Errochty substation and the new Kinardochoy substation ('the Proposed Development'). The Proposed Development is to facilitate the installation of a double circuit 132 kilovolt (kV) underground cable (UGC) between the existing Errochty and Kinardochoy substations. Installation of the proposed UGC is considered by the Applicant to benefit from permitted development rights under Class 40 1(a) of The Town and Country Planning (General Permitted Development) (Scotland) Order 1992 (TCP GPDDO) and will not be assessed further within this EA.

This EA describes and appraises the potential environmental effects of the Proposed Development. Where required, the report also identifies the proposed measures that would be implemented during the construction and operation phases of the Proposed Development to manage and/or mitigate adverse environmental effects and ensure all legislative requirements are met.

This EA has therefore been produced as a non-statutory document to allow appropriate environmental management and mitigation measures to be identified.

1.2 Project Need

National Significance

The Proposed Development is considered a 'Major' development under The Town and Country Planning (Hierarchy of Developments) (Scotland) Regulations 2009. The Proposed Development is required to facilitate the installation of an UGC between Errochty and Kinardochoy substations, under the wider Beauly – Denny Second Circuit 400 kV Upgrade Project, which is considered to be a 'National Development' under National Planning Framework (NPF) 4¹. This chapter gives an overview of, and explains the need for the Proposed Development, as well as sets out the needs case in the context of materially relevant policies within NPF 4, the Electricity System Operator's (ESO) Pathway to 2030 Holistic Network Design (HND)², the British Energy Security Strategy³ and the Accelerated Strategic Transmission Investment (ASTI) framework⁴.

Pathway to 2030 HND was published by National Grid Energy System Operator (NESO)⁵ in July 2022, setting out the blueprint for the onshore and offshore electricity transmission network infrastructure required to enable the forecasted growth in renewable electricity across the UK, including the UK and Scottish Government's 2030 offshore wind targets of 50 gigawatts (GW) and 11 GW, respectively. This confirms the need for a significant and strategic increase in the capacity of onshore electricity transmission infrastructure to deliver 2030 targets and a pathway to net zero. The need for these reinforcements is underlined within the British Energy Security Strategy (April 2022), which recognises the significant impact on the cost of living from rising gas prices, and sets out a

¹ Scottish Government (2024). Available at: <https://www.gov.scot/publications/national-planning-framework-4/> [Accessed March 2026]

² NESO (2022). Available at: <https://www.neso.energy/publications/beyond-2030> [Accessed March 2026]

³ UK Government (2022). Available at: <https://www.gov.uk/government/publications/british-energy-security-strategy> [Accessed March 2026]

⁴ Ofgem (2022). Available at: <https://www.ofgem.gov.uk/decision/decision-accelerating-onshore-electricity-transmission-investment> [Accessed March 2026]

⁵ NESO (2022). Available at: <https://www.neso.energy/publications/beyond-2030>

plan to increase the supply of electricity from zero-carbon British sources to deliver affordable, clean and secure power in the long term.

SSEN Transmission holds a licence under the Electricity Act 1989 ('the 1989 Act') for the transmission of electricity in the north of Scotland and has a statutory duty under section 9 of the 1989 Act to develop and maintain an efficient, co-ordinated, and economical electrical transmission system in its licence area. Where there is a requirement to extend, upgrade or reinforce its transmission network, SSEN Transmission's aim is to provide an environmentally aware, technically feasible and economically viable solution which would cause the least disturbance to the environment and to people who use it.

SSEN Transmission is proposing to uprate the existing Beaulay-Denny 275 kV circuit to operate at 400 kV to mirror the ratings of the existing 400 kV circuit. This uprating does not require any works to be done to the existing overhead line (OHL) infrastructure, other than new tie-ins to proposed new substations, and alterations to existing substations at Beaulay, Fasnakyle, Fort Augustus, Tummel, Errochty, Kinardochoy and Braco West. Works are required at each of the substations with differing scopes and requirements and therefore consenting types and timescales.

The Proposed Development would be operational in perpetuity to support the ongoing operation of the associated UGC. The Proposed Development will be subject to periodic inspections and maintenance. As the Proposed Development is permanent, environmental effects arising from decommissioning are not considered in this EA.

Statement of Need

The Proposed Development would facilitate the development and installation of the Errochty to Kinardochoy UGC. The ESO's Pathway to 2030 HND identifies the requirement to uprate the 275 kV Beaulay-Denny circuit to 400 kV. It outlines that this, along with other reinforcements in the north and east of Scotland would provide the capacity required to transport power from large-scale onshore and offshore renewable energy generation (mainly wind farms) to demand centres throughout the UK. The Proposed Development is required to facilitate this reinforcement.

In December 2022, the independent energy regulator for Great Britain, the Office of Gas and Electricity Markets (Ofgem), approved the need for the uprating of the existing Beaulay-Denny 275 kV circuit as part of the ASTI framework. Ofgem's decision approved all of SSEN Transmission's Pathway to 2030 projects, which includes the Errochty to Kinardochoy UGC. It also set out the regulatory framework under which these projects will be taken forward.

The Errochty to Kinardochoy UGC, alongside several other major network upgrades planned in the north of Scotland, is therefore part of a UK wide programme of works that are required to meet UK and Scottish Government energy targets. There is a clear expectation from both Governments and Ofgem that these projects will be delivered by 2030. More specifically, these projects are needed to deliver the 2030 renewable energy targets set out in the British Energy Security Strategy³.

1.3 Structure of the Report

The remainder of this report is structured as follows:

- Chapter 2: Proposed Development
- Chapter 3: Appraisal Scope and Methodology
- Chapter 4: Ecology and Nature Conservation
- Chapter 5: Ornithology
- Chapter 6: Hydrology, Hydrogeology and Geology
- Chapter 7: Landscape and Visual
- Chapter 8: Cultural Heritage
- Chapter 9: Forestry
- Chapter 10: Summary of Residual Effects

- Chapter 11: Commitments Register

The appendices which support this report are set out in the following.

- Appendix 2.1 SSEN General Environmental Management Plans and Species Protection Plans
- Appendix 2.2: Outline Construction Traffic Management Plan
- Appendix 4.1 Ecology Methodology and Results
- Appendix 4.2 Habitat Regulations Appraisal and Appropriate Assessment
- Appendix 5.1 Ornithology Methodology and Results
- Appendix 6.1 Hydrology Assessment Methodology
- Appendix 7.1 Landscape and Visual Appraisal Methodology
- Appendix 8.1 Gazetteer
- Appendix 8.2 Assessment Scope and Criteria
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2 PROPOSED DEVELOPMENT

2.1 Proposed Development Components

The Proposed Development is required to facilitate the installation of an UGC between Errochty and Kinardochoy substations, which is considered by the Applicant to be subject to permitted development rights under Class 40 1(a) of the TCP GPDO, and so does not form part of the Proposed Development.

As shown on **Figure 1.1 Site Location**, the Site is located between approximately 95 m southwest of the Errochty 132 kV substation at the north and 230 m west of the Kinardochoy 400 kV substation at the south, south of Tummel Bridge, Perth and Kinross.

The Proposed Development components are illustrated on **Figure 2.1 Proposed Development** and will comprise approximately:

- 1.7 km of permanent stone access track;
- 136 m of temporary access track (north);
- 107 m of temporary access track (south),
- 432 m of existing track temporary widening (north);
- 406 m of existing track temporary widening (south);
- Two temporary bellmouth junctions off the B846 public road;
- A temporary laydown/construction compound (north) approximately 80 m x 50 m;
- A temporary laydown/construction compound (south) approximately 89 m x 54 m, and
- Reinstatement of temporary elements.

2.2 Access

Permanent stone access tracks are required to facilitate the installation of the UGC and allow access to UGC joint bays for operation and maintenance purposes.

A section of temporary stone access track (north) will be required between the temporary bellmouth leaving the B846 and the northern temporary construction compound to provide construction access.

A section of temporary stone access track (south) is required to facilitate the temporary diversion of an existing access to a residential property during construction. All temporary access tracks will be removed on completion of the works and the area reinstated to its previous condition.

Two sections of existing track will require temporary upgrades in the form of widening to facilitate the installation of the UGC. Temporary widening to the tracks will be removed on completion of the works and the area reinstated to its previous condition.

2.3 Bellmouth Junction

Two temporary bellmouth junctions are required to facilitate construction traffic access off the adjacent B846 public road.

2.4 Laydown/Construction Compounds

Two temporary laydown/construction compounds will be required during construction, as illustrated on **Figure 1.2 Proposed Development**. These would provide office and welfare facilities for site staff, parking, laydown areas, and holding and servicing space for construction plant. It is anticipated these compounds would cover an area of approximately 80 m x 50 m and 89 m x 54 m respectively.

2.5 Construction Traffic

A Construction Traffic Management Plan (CTMP) shall be prepared by the Principal Contractor prior to any works commencing, in consultation with Perth and Kinross Council (PKC) and Transport Scotland, as required. The CTMP would describe all mitigation and signage measures that are proposed on the public road network. An

Outline CTMP (**Appendix 2.2**) has been submitted as part of the planning application and would be developed into the CTMP to be prepared by the Principal Contractor.

2.6 Reinstatement

Following commissioning of the Proposed Development, all temporary construction areas would be reinstated. Reinstatement would form part of the contract obligations for the Principal Contractor and shall include the removal of all temporary site works.

Minor landscaping shall take place as part of the restoration works, in the form of a grass centre strip and reseeding the edges of the permanent track. Additionally, a BNG Assessment will be submitted to support the application.

2.7 Land Use

With respect to existing land use, the Proposed Development is in an area with existing above-ground electrical infrastructure. The existing land use comprises open moorland used primarily for rough grazing, commercial forestry plantation, native woodland planting and agricultural ground. There are no core paths within the Site Boundary.

2.8 Construction Process

The construction process for the works would be expected to comprise the following key stages, as set out below:

- Phase 1 Enabling works: Site preparation including vegetation clearance and installation of temporary compounds.
- Phase 2 Construction works: Installation of temporary and permanent access tracks.
- Phase 3 Restoration: Removal of temporary access tracks and infrastructure and site reinstatement/restoration.

2.9 Construction Programme and Hours of Working

It is anticipated that construction of the Proposed Development would take place between 2027 and early 2029, followed by a period of demobilisation and remobilisation in 2030, with full demobilisation scheduled for 2032. Detailed programming of the works would be the responsibility of the Principal Contractor in agreement with SSEN Transmission.

Construction activities would in general be undertaken during daytime periods. Working hours are proposed between 07.00 to 19.00 Monday to Friday and 08.00 to 13.00 on Saturdays year-round. Any working required out of these hours would be agreed in writing with PKC.

2.10 Construction Good Practice

Construction Good Practice includes tried and tested mitigation measures which it is reasonable to assume are being implemented. It specifically includes:

- SSEN Transmission's set of General Environmental Management Plans (GEMPs) and
- Species Protection Plans (SPPs) that are applied as a standard requirement to all construction sites and practices (applicable GEMPs and SPPs are provided in **Appendix 2.1**).
- Other standard construction practices or legislative requirements including recommended published guidance from statutory bodies.

2.11 Construction Environmental Management

The requirement to produce a detailed CEMP will form part of the contract for the construction works for the Proposed Development. Management measures, mitigation requirements, method statements and referenced good practice guidance and legislation would form the basis of the CEMP.

The CEMP would include mitigation commitments made in this EA (see **Chapter 11: Commitments Register**).

An appropriate Environment Team will be employed by the Principal Contractor with the responsibility of monitoring and reporting on CEMP compliance (and updating in consultation with relevant authorities as appropriate). The CEMP would confirm the roles, responsibilities and communication routes for environmental management during the works. The plan would refer to or incorporate communication protocols for use during an environmental emergency or incident.

3 APPRAISAL SCOPE AND METHODOLOGY

3.1 Approach to EA

The Proposed Development does not fall within either Schedule 1 or Schedule 2 of the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended) (The EIA Regulations), and therefore a formal Screening Opinion has not been sought. Instead, a voluntary EA has been undertaken to identify and assess potential environmental effects and to inform the planning process.

The EA has been undertaken in accordance with relevant environmental legislation, national and local planning policy, and topic-specific technical guidance. While this appraisal does not constitute a formal Environmental Impact Assessment (EIA) under the EIA Regulations, it adopts a proportionate and robust methodology informed by EIA principles, where appropriate.

3.2 Scope of Appraisal

The scope of the appraisal for each environmental topic, along with the relevant legislation and guidance considered, is set out in **Table 3.1**. Detail on the justification for matters scoped out is provided in each technical chapter.

Table 3.1 Appraisal Scope

Topic	Relevant Legislation and Guidance	Scope of Appraisal
Ecology and Nature Conservation	<ul style="list-style-type: none"> EC Directive on the Conservation of Natural Habitats and Wild Flora and Fauna, 92/43/EEC 1992⁶; Conservation of Habitats and Species (Amendment) (EU Exit) Regulation 2019⁷; Conservation (Natural Habitats Etc.) Regulations 1994⁸; Wildlife and Countryside Act 1981⁹; Nature Conservation (Scotland) Act 2004¹⁰; UK Biodiversity Framework 2024¹¹; Electricity Act 1989¹²; and The 1997 Act¹³. 	<p>Included in scope:</p> <ul style="list-style-type: none"> Designated sites; Habitat modification/loss (particular attention to Annex I and sensitive habitat types such as groundwater dependent terrestrial ecosystems (GWDTEs); Vegetation clearance/felling; Disturbance and displacement (particular attention to protected species); and Pollution (particular attention to watercourses and associated protected species). <p>Not included in scope:</p> <ul style="list-style-type: none"> Habitats (other wetlands, other upland acid grassland, bracken, willow scrub, urban habitats and coniferous woodland).
Ornithology		<p>Included in scope:</p> <ul style="list-style-type: none"> Disturbance and displacement; and

⁶ The Habitats Directive - Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. Available at: https://environment.ec.europa.eu/topics/nature-and-biodiversity/habitats-directive_en. [Accessed March 2026]

⁷ The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations (2019), Available at: [The Conservation of Habitats and Species \(Amendment\) \(EU Exit\) Regulations 2019](https://www.legislation.gov.uk/ukpga/2019/16/contents) [Accessed March 2026]

⁸ The Conservation (Natural Habitats Etc.) Regulations (as amended) (1994), Available at: <https://www.legislation.gov.uk/uksi/1994/2716/contents>. [Accessed March 2026]

⁹ The Wildlife and Countryside Act (as amended) (1981), Available at: <http://www.legislation.gov.uk/ukpga/1981/69>. [Accessed March 2026]

¹⁰ Nature Conservation (Scotland) Act (as amended) (2004), Available at: <http://www.legislation.gov.uk/asp/2004/6/contents>. [Accessed March 2026]

¹¹ JNCC on behalf of the Four Countries' Biodiversity Group (4CBG) (2024). UK Biodiversity Framework. URL: <https://data.jncc.gov.uk/data/19a729f6-440e-4ac6-8894-cc72e84cc3bb/uk-biodiversity-framework.pdf> [Accessed March 2026]

¹² Electricity Act (1989), Available at: <https://www.legislation.gov.uk/ukpga/1989/29/contents>. [Accessed March 2026]

¹³ Town and Country Planning (Scotland) Act 1997. [Online] Available at: <https://www.legislation.gov.uk/ukpga/1997/8/section/46> [Accessed March 2026]

Topic	Relevant Legislation and Guidance	Scope of Appraisal
		<ul style="list-style-type: none"> Nest destruction. <p>Not included in scope:</p> <ul style="list-style-type: none"> Habitat loss.
Landscape and Visual Effects	<p>National Planning Framework 4 (2023)¹⁴, Perth and Kinross Local Development Plan 2 (2019)¹⁵</p> <p>Landscape Institute and Institute of Environmental Management and Assessment's 'Guidance for Landscape and Visual Impact Assessment – Third Edition' (GLVIA3) (2013)¹⁶;</p> <p>Landscape Institute (2024) GLVIA Statement of Clarification LITGN-2024-014¹⁷;</p> <p>Landscape Institute (2021), Technical Guidance Note 02/21 'Assessing landscape value outside national designations'¹⁸; and</p> <p>Landscape Institute's 'Technical Guidance Note 06/2019: Visual Representation of Development Proposals' (2019)¹⁹.</p>	<p>Included in Scope:</p> <ul style="list-style-type: none"> Landscape Character Type (LCT) 375: Lower Upland Glens with Lochs; LCT 376: Summits and Plateau – Tayside; National Scenic Area (NSA) Loch Tummel; NSA Loch Rannoch and Glen Lyon; and Viewpoints 1, 5, 6, 7 and 8. <p>Not included in Scope:</p> <ul style="list-style-type: none"> Landscape Fabric/Context; LCT 171: Mid Upland Glens; Strath Tay Local Landscape Area (LLA); and Viewpoints 2, 3, 4, 9 and 10.

¹⁴ Scottish Government (2023) National Planning Framework, available at:

<https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2023/02/national-planning-framework-4/documents/national-planning-framework-4-revised-draft/national-planning-framework-4-revised-draft/govscot%3Adocument/national-planning-framework-4.pdf>. [Accessed March 2026]

¹⁵ Perth & Kinross Council (2019) Perth and Kinross Local Development Plan 2, available at: https://www.pkc.gov.uk/media/45242/Adopted-Local-Development-Plan-2019/pdf/LDP_2_2019_Adopted_Interactive.pdf?m=1576667143577 [Accessed March 2026]

¹⁶ Landscape Institute. and IEMA, 2013. Guidelines for Landscape and Environmental Impact Assessment. Hoboken: Taylor and Francis

¹⁷ The Landscape Institute LITGN-2024-01 (2024) GLVIA – Statement of Clarification. Available online at: <https://www.landscapeinstitute.org/technical-resource/notes-and-clarifications-on-aspects-of-the-3rd-edition-guidelines-on-landscape-and-visual-impact-assessment-glvia3-litgn-2024-01/> [Accessed September 2026]

¹⁸ Landscape Institute (2021), Technical Guidance Note 02/21 Assessing Value Outside National Designations'. Available online at: <https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2021/05/tgn-02-21-assessing-landscape-value-outside-national-designations.pdf> [Accessed March 2026]

¹⁹ Landscape Institute, 2019. Visual Representation of Development Proposals. 1st ed.

Topic	Relevant Legislation and Guidance	Scope of Appraisal
Cultural Heritage	<ul style="list-style-type: none"> • Ancient Monument and Archaeological Areas Act²⁰ (1979) as modified by the Historic Environment (Amendment) (Scotland) Act 2011; • The 1997 Act²¹, and as further amended in the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997²² and as modified by the Historic Environment (Amendment) (Scotland) Act (2011)²³; and • Historic Environment Scotland Act (2014)²³; • Planning etc. (Scotland) Act (2006)²⁴: 2006 asp 17; and • TCP GPDO²¹. 	<p>Included in scope:</p> <ul style="list-style-type: none"> • All designated and non-designated heritage assets within the 500 m Cultural Heritage Study Area. <p>Not included in scope:</p> <ul style="list-style-type: none"> • Direct impacts on cultural heritage assets outwith the Site and setting impacts on designated and non-designated cultural heritage assets and features beyond 500 m.
Hydrology, Hydrogeology and Geology	<ul style="list-style-type: none"> • Water Environment and Water Services (Scotland) Act 2003²⁵; • Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR)²⁶; • The Water Environment (Miscellaneous) (Scotland) Regulations 2017²⁷; • Flood Risk Management (Scotland) Act 2009²⁸; • The Water Intended for Human Consumption (Private Supplies) (Scotland) Regulations 2017²⁹; 	<p>Included in scope:</p> <ul style="list-style-type: none"> • Geology, soils and peat; • Hydrology; • Public and private water supplies (PWS); • Groundwater and surface water quality; and • Watercourse crossings. <p>Not included in scope:</p> <ul style="list-style-type: none"> • Flood risk; • Designated sites; and

²⁰ Ancient Monuments and Archaeological Areas Act, 1979 (c46). [Online]. London. The Stationery Office. Available at: http://www.legislation.gov.uk/ukpga/1979/46/pdfs/ukpga_19790046_en.pdf [Accessed March 2026]

²¹ Town and Country Planning (Scotland) Act 1997, (c8). [Online]. London. The Stationery Office. Available at: https://www.legislation.gov.uk/ukpga/1997/8/pdfs/ukpga_19970008_en.pdf [Accessed March 2026]

²² Planning (Listed Buildings and Conservation Areas (Scotland) Act 1997, (c9). [Online]. London. The Stationery Office. Available at: https://www.legislation.gov.uk/ukpga/1997/9/pdfs/ukpga_19970009_en.pdf [Accessed March 2026]

²³ Historic Environment (Amendment) (Scotland) Act, 2011 (Full) [Online]. London. The Stationery Office. Available at: http://www.legislation.gov.uk/asp/2011/3/pdfs/asp_20110003_en.pdf [Accessed March 2026]

²⁴ Planning etc. (Scotland) Act 2006, Available at: <https://www.legislation.gov.uk/asp/2006/17/contents> [Accessed March 2026]

²⁵ Scottish Government (2003). Water Environment and Water Services (Scotland) Act 2003. Available at: <http://www.legislation.gov.uk/asp/2003/3/contents> [Accessed March 2026]

²⁶ Scottish Government (2011, 2013, 2017) Water Environment (Controlled Activities) (Regulations) Scotland 2011 (CAR) and their further amendments of 2013 and 2017 and 2021 Available at: <https://www.sepa.org.uk/regulations/water/> [Accessed March 2026]

²⁷ Scottish Government (2017) The Water Environment (Miscellaneous) (Scotland) Regulations 2017. Available at: <http://www.legislation.gov.uk/ssi/2017/389/contents/made> [Accessed March 2026]

²⁸ Scottish Government (2009) Flood Risk Management (Scotland) Act 2009. Available at: <http://www.legislation.gov.uk/asp/2009/6/contents> [Accessed March 2026]

²⁹ Scottish Government (2017) the Water Intended for Human Consumption (Private Supplies) (Scotland) Regulations 2017 Available at: <https://www.legislation.gov.uk/ssi/2017/282/note/made> [Accessed March 2026]

Topic	Relevant Legislation and Guidance	Scope of Appraisal
	<ul style="list-style-type: none"> • The Public and Private Water Supplies (Miscellaneous Amendments) (Scotland) Regulations 2015³⁰; • The Water Environment (Drinking Water Protected Areas) (Scotland) Order 2013³¹ • Scottish Government (2012) River Crossings and Migratory Fish³². • GPP 1 Understanding your environmental responsibilities – good environmental practices (June 2021)³³; • GPP 5: Works and maintenance in or near water (January 2017); • GPP 6: Working on construction and demolition sites (April 2023); • GPP 21: Pollution incident response planning (July 2017) • GPP 22: Dealing with spills (October 2018) • PAN 79: Water and Drainage (September 2006); • LUPS-DP-GU2a: Development Plan Guidance on Flood Risk (2018); • LUPS-GU31: Guidance on Assessing the Impacts of Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems, Version 3 (September 2017); • WAT-SG-25: Good Practice Guide - River Crossings (November 2010)³⁴; • WAT-SG-26: Good Practice Guide - Sediment Management (September 2010); • WAT-SG-29: Good Practice Guide - Temporary Construction Methods (March 2009); • SEPA, Guidance on Assessing the Impacts of Developments on Groundwater Dependent Terrestrial Ecosystems (August 2024)³⁵ 	<ul style="list-style-type: none"> • Groundwater aquifers and related Groundwater Dependent Terrestrial Ecosystems (GWDTEs).

30 Scottish Government (2015) the Private and Public Water Supplies (Miscellaneous Amendments) (Scotland) Regulations 2015. Available at: <https://www.legislation.gov.uk/ssi/2015/346/contents> [Accessed March 2026]

31 Scottish Government (2013) The Water Environment (Drinking Water Protected Areas) (Scotland) Order 2013 [Online] Available at: <http://www.legislation.gov.uk/ssi/2013/29/introduction/made> [Accessed March 2026]

32 Scottish Government (2012) River Crossings and Migratory Fish: Design Guidance

https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwebarchive.nrscotland.gov.uk%2F20200116025412mp_%2Fhttps%3A%2F%2Fwww2.gov.scot%2FResource%2F00388163.doc&wdOrigin=BROWSELINK [Accessed March 2026]

33 Guidance for Pollution Prevention documents (including GPP 1, 5, 6, 21 and 22 are published by SEPA online. Available at: <https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/> [Accessed March 2026]

34 SEPA Engineering Guidance. Available at: <https://beta.sepa.scot/regulation/authorisations-and-compliance/easr-authorisations/water-activities/engineering/>

35 SEPA (2024) Guidance on Assessing the Impacts of Developments on Groundwater Dependent Terrestrial Ecosystems. Available online: <https://www.sepa.org.uk/media/a1yh0blq/guidance-on-assessing-the-impacts-of-developments-on-groundwater-dependent-terrestrial-ecosystems.docx> [Accessed March 2026]

Topic	Relevant Legislation and Guidance	Scope of Appraisal
	<ul style="list-style-type: none"> SEPA, Guidance on Assessing the Impacts of Developments on Groundwater Abstractions (August 2024)³⁶. 	
Forestry	<ul style="list-style-type: none"> The Scottish Government's Policy on Control of Woodland Removal (2009); Scottish Government's policy on control of woodland removal: implementation guidance (2019); NPF 4 (NPF4) (2023) (see below); and UK Forestry Standard 5th Edition (2023). 	<p>Included in Scope:</p> <ul style="list-style-type: none"> Likely effects with respect to forestry associated with the construction and operation of the Proposed Development. <p>Not included in scope:</p> <ul style="list-style-type: none"> Survey of plants including fungi, lichens and bryophytes (considered within Chapter 4: Ecology and Nature Conservation); and Forest landscape (considered within Chapter 7: Landscape and Visual).

³⁶ SEPA (2024) Guidance on Assessing the Impacts of Developments on Groundwater Abstractions. Available online:

<https://www.sepa.org.uk/media/mfzpnjwb/guidance-on-assessing-the-impacts-of-developments-on-groundwater-abstractions.docx> [Accessed March2025]

4 ECOLOGY AND NATURE CONSERVATION

4.1 Introduction

This chapter reports on the likely effects with respect to ecology and nature conservation associated with construction and operation of the Proposed Development, as described in **Chapter 2: Proposed Development**. Where required, it also provides details of control measures. This chapter (and its associated figures and appendices) is not intended to be read as a standalone assessment, and reference should be made to the introductory chapters of this EA. Impacts on ornithological features are considered separately in **Chapter 5: Ornithology**.

The specific objectives of the assessment are to:

- Describe the ecological baseline;
- Describe the assessment methodology used;
- Describe the potential effects, including construction and operational effects;
- Describe the mitigation measures proposed to address likely effects; and
- Assess the residual effects remaining following the implementation of mitigation.

This chapter is also supported by the following figures:

- **Figure 4.1: Designated Sites for Ecology**
- **Figure 4.2: Ancient Woodland**
- **Figure 4.3: Habitat Type**
- **Figure 4.4: Target Notes**
- **Figure 4.5: Potential Groundwater Dependency**
- **Figure 4.6: Assessed Groundwater Dependency**

This chapter is supported by the following technical appendices:

- **Appendix 4.1 Ecology Methodology and Results**
- **Appendix 4.2 Habitats Regulations Appraisal (HRA) and Appropriate Assessment (AA)**

4.2 Methodology

The methodologies used for the desk study, field surveys and the appraisal are described in **Appendix 4.1 Ecology Methodology and Results**.

4.2.1 Study Area

The ecological desk study area is defined as a 2 km buffer around the Proposed Development, as described in **Appendix 4.1 Ecology Methodology and Results**. The ecological desk study area is shown on **Figure 4.1: Designated Sites for Ecology**. The ecological field survey area is defined as a buffer up to 250 m, around the Proposed Development, as described in **Appendix 4.1 Ecology Methodology and Results** and shown on **Figure 4.3: Habitat Type**.

4.3 Consultation to Date

4.3.1 Consultation undertaken to inform the Ecology and Nature Conservation assessment is included in **Table 4.1**.

Table 4.1 Consultation Responses

Consultee	Date	Response
PKC	15/05/2025	<p>Relevant planning policies and guidance considered in PKC's assessment includes the National Planning Framework 4 (NPF4)³⁷ and the PKC Local Development Plan³⁸. These informed the below consultation response with regard to Ecology and Nature Conservation:</p> <ul style="list-style-type: none"> • Development proposals should contribute to the enhancement of biodiversity. Proposals should integrate nature-based solutions, where possible; • Impact assessments are required for habitats, species, and existing trees on-site; • Submissions must include evidence of the application of the mitigation hierarchy of avoid, reduce, compensate for losses, and enhance. All developments should aim to avoid adverse impacts in the first instance; • Development proposals will only be supported where it can be demonstrated that significant biodiversity enhancements are provided, in addition to any proposed mitigation; and • Development proposals will not be supported where they will result in: any loss of ancient woodlands/trees or adverse impacts on native woodlands, hedgerows and individual trees of high biodiversity value. Submission must include a clear impact assessment of the Proposed Development on trees, woodland and hedgerows. Compensatory tree planting is required on a ratio of 1:3 for every tree lost: <ul style="list-style-type: none"> ○ PKC noted that the Proposed Development is within one area of Ancient Woodland – impacts should be avoided where possible; and ○ PKC noted that two areas of woodland registered on the Native Woodland Survey of Scotland³⁹ (upland birchwood and upland mixed ashwood) are present, both of which are UK Biodiversity Action Plan⁴⁰ priority habitats and should be protected.

4.4 Baseline

4.4.1 Designated Sites

Figure 4.1: Designated Sites for Ecology shows the designated sites of ecological importance within the ecological desk study area. Statutory sites are detailed within **Table 4.2**. Where there is no potential for the qualifying interest species or habitats of the designated sites to be impacted by the Proposed Development, this is identified and the designated sites are not considered any further in the assessment.

³⁷ Scottish Government (2023). National Planning Framework 4 (NPF4). Last updated 9 October 2024. Available at: <https://www.gov.scot/publications/national-planning-framework-4/>. [Accessed 20/03/2026]

³⁸ Perth and Kinross Council (2019). Local Development Plan. Available at: <https://www.pkc.gov.uk/developmentplan> [Accessed 20/03/2026]

³⁹ Scottish Forestry (NoDate). Native Woodland Survey of Scotland (NWSS). Available at: <https://www.forestry.gov.scot/native-woodland-survey-scotland-data-explorer> [Accessed 20/03/2026]

⁴⁰ JNCC (NoDate) UK Biodiversity Action Plan. Available at: <https://jncc.gov.uk/our-work/uk-bap/> [Accessed 20/03/2026]

Table 4.2 Designated Sites of Ecological Importance

Site Name	Qualifying Features	Proximity	Potential for Impacts
River Tay Special Area of Conservation (SAC)	<ul style="list-style-type: none"> • River lamprey <i>Lampetra fluviatilis</i>; • Brook lamprey <i>L. planeri</i>; • Sea lamprey <i>Petromyzon marinus</i>; • Atlantic salmon <i>Salmo salar</i>; • Otter <i>Lutra lutra</i>; and • Clear-water lakes/lochs. 	The Proposed Development lies within 75 m of the River Tummel, which forms part of the River Tay SAC.	Potential indirect impacts are possible where the Proposed Development occurs in proximity to the SAC.
Dalcroy Promontory Site of Special Scientific Interest (SSSI)	<ul style="list-style-type: none"> • Pillwort <i>Piluria globulifera</i>. 	The Proposed Development lies within 770 m of the SSSI.	No direct impacts are predicted as the SSSI is separated from the Proposed Development by the River Tay. Indirect impacts may be possible from pollution incidents due to hydrological connectivity.
Schiehallion SSSI	<ul style="list-style-type: none"> • Upland habitats: Montane assemblage • Non-montane rock habitats: Limestone pavement 	The Proposed Development lies within 1,650 m of the SSSI.	No direct or indirect impacts are predicted on the SSSI from the Proposed Development, further elaborated in Table 4.7 .

4.4.2 Ancient Woodland

The Proposed Development lies adjacent to remnant Ancient Woodland listed on the Ancient Woodland Inventory (AWI) in several locations, with a slight area of overlap with the red line boundary (RLB), as shown in **Figure 4.2: Ancient Woodland**, however no works will take place within the area designated as Ancient Woodland.

Native and Ancient Woodlands are important for biodiversity and nature conservation, providing habitat for species such as badger *Meles meles*, red squirrel *Sciurus vulgaris*, pine marten *Martes martes* and bat species. Ancient Woodland is defined as land that has been continually wooded since 1750 (1a) or 1860 (2a), and there is a strong presumption in Scottish planning policy against the removal of woodland on Ancient Woodland sites⁴¹.

4.4.3 Local Biodiversity Action Plan

The Proposed Development is covered by the Tayside Local Biodiversity Action Plan (LBAP)⁴². Priority habitats and species relevant to the Proposed Development are set out in **Table 4.3**. The priority habitats and species noted within the LBAP are also included in the UKBAP⁴⁰, with the exception of badger. Bird species are not included here, as impacts on ornithology are assessed separately in **Chapter 5: Ornithology**.

⁴¹NatureScot (2023). Planning and development: trees and woodland. Available at: <https://www.nature.scot/professional-advice/planning-and-development/planning-and-development-advice/habitats/planning-and-development-trees-and-woodland#:~:text=Woodland%20Strategies&text=Where%20appropriate%2C%20planning%20authorities%20should,or%20create%20new%20green%20on%20works.> [Accessed 20/03/2026]

⁴² Tayside Biodiversity Action Plan 2016-26 <https://www.taysidebiodiversity.co.uk/action-plan/action-plan-new-lbap-2015/> [Accessed 20/03/2026]

Table 4.3 Priority Habitats and Species Included in the LBAP

Priority Habitats
<ul style="list-style-type: none"> • Montane, upland heath, montane scrub, blanket bog.
<ul style="list-style-type: none"> • Lowland meadows, upland hay meadows, calcareous and base-rich grassland (inc. limestone pavement), hedgerows.
<ul style="list-style-type: none"> • Native conifers: Scot's Pine, Yew and Juniper, upland birchwood, wet woodland, upland oakwood, upland mixed ashwood, lowland mixed broadleaf, aspen, traditional orchards.
<ul style="list-style-type: none"> • Saltmarsh, intertidal mudflats and estuarine reedbeds, marine, maritime cliffs, sand dunes.
<ul style="list-style-type: none"> • Riparian corridors, open mosaic habitat, designed landscapes.
<ul style="list-style-type: none"> • Rivers and burns, lochs and standing water, ponds and pools, wetlands, lowland and raised bogs, transition fen.
Priority Species
Mammals
<ul style="list-style-type: none"> • Common seal <i>Phoca vitalina</i>; • Otter <i>Lutra lutra</i>; • Brown long-eared bat <i>Plecotus auritus</i>; • Water vole <i>Arvicola terrestris</i>; • Mountain hare <i>Lepus timidus</i>; • Scottish wildcat <i>Felis sylvestris grampia</i>; • Badger; • Red squirrel; and • Pine marten.
Fish
<ul style="list-style-type: none"> • Atlantic salmon <i>Salmo salar</i>; • River lamprey <i>Lampetra fluviatilis</i>; • Smelt (sparring) <i>Osmerus eperlanus</i>; • Twaite shad <i>Alosa fallax</i>; • Brown trout <i>Salmo trutta</i>; • Allis shad <i>Alosa alosa</i>; • Arctic charr <i>Salvelinus alpinus</i>; • River lamprey <i>Lampetra fluviatilis</i>; and • Sea lamprey <i>Petromyzon marinus</i>.
Reptiles and Amphibians
<ul style="list-style-type: none"> • Slow worm <i>Anguis fragilis</i>; • Common toad <i>Bufo bufo</i>; and • Great crested newt <i>Triturus cristatus</i>.
Invertebrates
<ul style="list-style-type: none"> • Northern osmia ruby-tailed wasp <i>Chrysura hirsute</i>; • Small blue butterfly <i>Cupido minimus</i>; • Small pearl-bordered fritillary <i>Boloria selene</i>; • Sword Grass moth <i>Xylena exsoleta</i>; • Northern brown argus <i>Aricia Artaxerxes</i>; • Wall mason bee <i>Osmia parietina</i>; • Mountain ringlet <i>Erebia epiphron</i>;

Priority Habitats

- Mason bee sp. *Osmia inermis*;
- Pearl-bordered fritillary *Boloria Euphrosyne*;
- Broom-tip moth *Chesias rufata*;
- Small dark yellow underwing *Anarta cordigera*;
- Large heath Coenonympha tullia;
- Narrow-headed wood ant *Formica exsecta*;
- Northern February Red *Brachyptera putata*;
- Oxbow diving beetle *Hydroporus rufifrons*;
- Freshwater pearl mussel *Margaritifera margaritifera*; and
- Shining guest ant *Formicoxenus nitidulus*.

Plants

- Small cow-wheat *Melampyrum sylvaticum*;
- Juniper *Juniperus communis*;
- Twinflower *Linnaea borealis*;
- Woolly willow *Salix lanata*;
- Alpine blue sow-thistle *Cicerbita alpina*;
- Mountain scurvy-grass *Cochlearia micacea*;
- Alpine fleabane *Erigeron borealis*;
- Oblong woodsia *Woodsia ilvensis*; and
- Slender naiad *Najas flexilis*.

Field Survey

4.4.4 Habitats

This following section should be read in conjunction with **Figure 4.3: Habitat Type**, as well as **Appendix 4.1 Ecology Methodology and Results**. This section provides a summary of habitats identified during the extended UK Habitat (UKHab) survey in August 2023. As described in **Appendix 4.1 Ecology Methodology and Results**, the extended UKHab survey involved a walkover of the Site, which included an assessment of key habitats and their condition, land use and ecological features of natural interest, with focus on potentially sensitive habitats, as well as a survey for field signs of protected species.

General Site Description

The field survey area is dominated by upland wet heath, bracken, neutral grassland, blanket bog, and coniferous woodland. The Proposed Development lies within proximity to/crosses sensitive and/or priority habitats including upland birchwood, blanket bog, upland wet heath, and Scot's Pine woodland. These habitats are listed as Annex 1⁴³ habitats or included in the Scottish Biodiversity List (SBL)⁴⁴, UK BAP⁴⁰, or LBAP⁴². A full description of habitats recorded is provided in **Appendix 1 Ecology Methodology and Results**. Details of target notes such as signs of protected species are described in the Target Notes section of **Appendix 4.1 Ecological Methodology and Results** and shown in **Figure 4.4: Target Notes**. **Table 4.4** provides a list of habitats recorded within the Site.

Table 4.4 Habitat Types Recorded during the Baseline Habitat Survey

UKHab Code	Habitat Type
f1a5	Blanket bog
f2f	Other wetland

⁴³ The Habitats Directive (92/43/EEC) 1992 (as amended). Available at: <https://www.legislation.gov.uk/eudr/1992/43/contents>. [Accessed 20/03/2026]

⁴⁴ Scottish Biodiversity List (2020). Available at: <https://www.nature.scot/doc/scottish-biodiversity-list>. [Accessed 20/03/2026]

UKHab Code	Habitat Type
g1b6	Other upland acid grassland
g1c	Bracken
g3c	Other neutral grassland
h1b6	Upland wet heathland with cross-leaved heath
h3	Dense scrub
r2b	Other rivers and streams
u1	Built-up areas and gardens
u1b	Developed land, sealed surface
u1b6	Other developed land
w1e	Upland birchwoods
w1g	Other broadleaved woodland
w2	Coniferous woodland
w2b	Other Scot's Pine woodland
w2c	Other coniferous woodland

Groundwater Dependent Terrestrial Ecosystems

Three potential Groundwater Dependent Terrestrial Ecosystem (GWDTE)⁴⁵ areas were identified within the field survey area, as shown in **Figure 4.5: Potential Groundwater Dependency**. **Table 4.5** details the community types identified and their potential groundwater dependency. GWDTEs are sensitive to changes in hydrology and hydrogeology and are a priority under the EU Water Framework Directive⁴⁶. An area of permanent access track to be upgraded as part of the Proposed Development crosses one potential GWDTE: M15.

Table 4.5 Potential GWDTE Community Types

Potential Groundwater Dependency	Vegetation Community	Reference Number on Figure 4.5
Moderate	M15 <i>Scirpus cespitosus</i> – <i>Erica tetralix</i> wet heath	1, 3
	M25 <i>Molinia caerulea</i> - <i>Potentilla erecta</i> mire	2

The assessment of groundwater dependency is detailed in **Chapter 6: Hydrology, Hydrogeology and Geology**. The assessment involved discussions between the ecology and hydrology teams to determine which areas of potential groundwater dependency were considered to be groundwater dependent, as well as a hydrological assessment of the Site's setting. Areas of assessed groundwater dependency are detailed in **Table 4.6**. The Proposed Development is within approximately 100 m of one area assessed to be of moderate groundwater

⁴⁵ SEPA (2024). Guidance on Assessing the Impacts of Developments on Groundwater Dependent Terrestrial Ecosystems. Available at: [https://www.sepa.org.uk/environment/land/planning/guidance-and-advice-notes/#:~:text=Guidance%20on%20Assessing%20the%20Impacts%20of%20Development%20on,groundwater%20abstractions%2C%20both%20public%20and%20private%20water%20supplies](https://www.sepa.org.uk/environment/land/planning/guidance-and-advice-notes/#:~:text=Guidance%20on%20Assessing%20the%20Impacts%20of%20Development%20on,groundwater%20abstractions%2C%20both%20public%20and%20private%20water%20supplies.). [Accessed 20/03/2026]

⁴⁶ Water Framework Directive (2000/60/EC) 2000 (as amended). Available at: https://environment.ec.europa.eu/topics/water/water-framework-directive_en. [Accessed 20/03/2026]

dependency (Reference no. 3 on **Figure 4.5: Potential Groundwater Dependency**). **Table 4.6** below and **Figure 4.6: Assessed Groundwater Dependency** highlight assessed groundwater dependency.

Table 4.6 Assessed Groundwater Dependent Communities

Reference Number of Figure 4.5	Potential Groundwater Dependency ⁴⁷	Comment	Assessed Groundwater Dependency
1	Moderate	Low productivity aquifer. Not characterised by topographic features associated with groundwater emergence. Associated with an uneven 'hummocky' area of ground underlain by glacial deposits.	No GWDTE
2	Moderate	Low productivity aquifer. Geometry defined by land use and is not characterised by changes in topography of flush/spring features. Rain fed wet heath.	No GWDTE
3	Moderate	Low productivity aquifer. Associated with a surface water flow path from north to south, which flows to a tributary of Loch Kinardochoy. Characterised by a break in slope and concave decrease in gradient.	Moderate

4.4.5 Species

This following section should be read in conjunction with **Figure 4.4: Target Notes**, as well as **Appendix 4.1 Ecology Methodology and Results**. This section provides a summary of field signs of protected or notable species recorded during the extended UKHab survey.

Protected or Notable Species

Otter

Two otter spraints were recorded within an area of upland birchwood along Allt Kynachan (see **TN01 and TN02, Figure 4.4: Target Notes**).

Water vole

A probable water vole burrow was recorded near a tributary of Allt Kynachan in an area of blanket bog (see **TN03, Figure 4.4: Target Notes**). Locals further informed surveyors that water vole had previously been seen in the area. The habitat is considered to be suitable for water vole, with burrows and droppings recorded.

Other

No notable species or signs of other protected species were identified within the field survey area during the extended UKHab survey.

Invasive Species

No signs of invasive species subject to legal controls were identified as part of the habitat survey.

⁴⁷ Badger, A., Pritchett, C., Schutten, J., Authorised, K. and Farquhar, A. (2014). *Land Use Planning System SEPA Guidance Note 31 Guidance on Assessing the Impacts of Windfarm Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems Originator*. [online] Available at: https://www.sepa.org.uk/media/143868/lupsgu31_planning_guidance_on_groundwater_abstractions.pdf. [Accessed 20/03/2026]

Future Baseline

It is considered the future baseline of the field survey area under the 'do nothing' scenario is unlikely to change significantly in the absence of the Proposed Development.

The blanket bog and upland wet heath habitats within the field survey area are of moderate to good condition. This is considered unlikely to change in the absence of the Proposed Development.

The neutral grassland is of good condition. This is likely to remain in this condition in the absence of the Proposed Development.

The upland birchwood within the field survey area is likely to remain in its current condition (poor) regardless of whether the Proposed Development proceeds or not.

The broadleaved woodland is of moderate condition. This is unlikely to change in the absence of the Proposed Development.

The Scot's Pine woodland within the field survey area is likely to remain in its current condition (poor) regardless of whether the Proposed Development is to proceed or not.

As such, the distribution of species present within the field survey area and the surrounding habitat is unlikely to change significantly in the future. Climate change may have an adverse effect on species distribution and this could be significant dependent on the severity of the effect.

Impact and Features Scoped Out

A summary of the ecological features that have been 'scoped-out' are provided in **Table 4.7**, together with justification for their exclusion.

Table 4.7 Summary of Features Scoped Out of Assessment

Feature	Justification
Schiehallion SSSI	No direct impacts are predicted as the SSSI is separated from the Proposed Development by large areas of plantation woodland and farmland. Hydrological connectivity exists between the SSSI and the Proposed Development, but no indirect impacts are predicted due to the Proposed Development lying downstream from the SSSI. As such, this designated site is not considered further in this assessment.
Other wetlands	This habitat type is not included under legislative or conservation lists as a priority habitat. This habitat contributes to the biodiversity value of the Site, however it is considered that similar habitat in the form of peatlands and grassland are available for protected or priority species within the field survey area. As such, this habitat type is not considered further in this assessment.
Other upland acid grassland	Upland acid grasslands is not included under legislative or conservation lists as a priority habitat. While this habitat type contributes to the biodiversity value of the Site, similar habitat is available for protected or priority species within the field survey area. As such, this habitat type is not considered further in this assessment.
Bracken	This habitat type is dominant within the north of the field survey area. Bracken is not included under legislative or conservation lists as a priority habitat. This habitat type may support local populations of invertebrates but is not considered to significantly contribute to the biodiversity value of the Site and as such, is not considered further in this assessment.

Feature	Justification
Dense scrub	Dense scrub provides habitat suitable for a range of species including nesting birds. However, only a small area of this is present within the field survey area and it is therefore not considered to contribute significantly to the biodiversity value of the Site. This habitat type is not considered further in this assessment.
Urban <ul style="list-style-type: none"> • Built-up areas and gardens; • Developed land; sealed surface; and • Other developed land. 	These habitat types are species-poor and are not included under legislative or conservation lists as priority habitats. These habitats do not provide significant supporting habitat or contribute to the biodiversity value of the Site and are therefore not considered further in this assessment.
Woodland <ul style="list-style-type: none"> • Coniferous woodland; and • Other coniferous woodland. 	The areas of coniferous woodland within the field survey area are plantation or felled plantation with forest brash. The coniferous woodlands are of poor condition and provide limited biodiversity value to the Site. As such, this habitat type is not considered further in this assessment.

4.5 Embedded Mitigation

4.5.1 Construction Environmental Management Plan

A CEMP would be developed to provide a framework for the management of environmental impacts, including those on ecological features such as protected species and the River Tay SAC. The CEMP would be finalised by the Applicant, the contractor and a suitably qualified Ecological or Environmental Clerk of Works (ECoW) in consultation with the relevant authorities as the detailed design for the Proposed Development is established prior to the commencement of construction. Relevant SPPs would be included in the CEMP.

Standard mitigation and pollution prevention measures and good practice^{48,49}, as described in the CEMP, would be implemented during the construction work to ensure that the pollution or siltation risk of watercourses would be appropriately managed, particularly in regard to the integrity of the River Tay SAC and its tributaries, so as to not be affected by pollution or siltation. As a minimum, these would follow Scottish Environment Protection Agency (SEPA) Water Use Guidance: Construction Regulatory Guide⁵⁰.

Methods of working outlined in the CEMP would include:

- Preventing pollution of the water environment. This would be achieved through the implementation of a detailed Pollution Prevention Plan (PPP) in compliance with the Controlled Activity Regulations (CAR) and consultation with SEPA;
- Fuel deliveries and refuelling to take place by trained staff in a designated area with an impermeable base, taking place more than 50 m away from any watercourse;

⁴⁸ SEPA (2021). Engineering in the Water Environment Good Practice Guidance: Temporary Construction Methods. 1st edition, March 2009. Available by request from SEPA: <https://beta.sepa.scot/about-sepa/access-to-information/>

⁴⁹ Guidance for Pollution Prevention (GPP) documents. Available at: <https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/>. [Accessed 23/03/2026]

⁵⁰ SEPA (2021). *Water Use Guidance: Construction Regulatory Guide*. v1.1. Available at: <https://www.sepa.org.uk/media/535245/construction-regulatory-guide-ver-11-sept-2021-final.pdf>

- Spill kits would be available for all plant on the site, as well as at any pollution sources or sensitive features; and
- Lined concrete wash-out facilities would be provided at least 50 m away from any watercourse.

4.5.2 Pollution Prevention Plan

The PPP will include:

- Detailed site plans showing the location of pollution sources, potential pollution pathways and the receptors;
- Drawings showing the location of silt fences, cut-off drains, silt traps and other mitigation measures as deemed necessary to avoid pollution;
- Details of rapid response actions that will be taken in the event of a pollution event and the maintenance and inspection programme proposed to ensure that the plan will be effective; and
- Measures to avoid cement and concrete pollution⁵¹:
 - Siting concrete and cement mixing and washing areas on an impermeable designated area;
 - Siting concrete and cement mixing and washing areas 10 m from any watercourse or surface water drain to minimise the risk of run off entering a watercourse;
 - Having settlement and re-circulation systems for water reuse, to minimise the risk of pollution and reduce water usage;
 - Having a contained area for washing out and cleaning of concrete batching plant or ready mix lorries; and
 - Collecting wash waters and, where necessary, discharge to the foul sewer (with relevant permission from the local sewerage undertaker for this), or contain wash water for authorised disposal off-site.

4.5.3 Reinstatement

Following commissioning of the Proposed Development, all temporary construction areas would be reinstated. Reinstatement would form part of the contract obligations for the Principal Contractor and shall include the removal of all temporary site works.

Minor landscaping shall take place as part of the restoration works, in the form of a grass centre strip and reseeding the edges of the permanent track. Additionally, a BNG Assessment will be submitted to support the application.

4.5.4 Appraisal and Mitigation

Construction Phase

Potential impacts during construction are detailed in **Table 4.8**. Mitigation or good practice measures are detailed where appropriate. As described in **Section 1.2**, it is anticipated that the permanent track within the Proposed Development would be operational in perpetuity to support the ongoing operation of the associated UGC. The impacts associated with the construction phase should also be considered to be representative of worst-case decommissioning impacts and, therefore, no separate assessment of decommissioning has been completed.

Table 4.8 Potential Impacts on Ecology during Construction

Potential Impact	Feature	Mitigation / Good Practice Control Measures Proposed
Vegetation clearance/felling	Designated sites (River Tay SAC) and habitats: <ul style="list-style-type: none"> • Blanket bog; • Upland wet heath; • Other neutral grassland; • Other broadleaved woodland; 	<ul style="list-style-type: none"> • Existing, or temporary, access tracks would be used as much as possible. Preference would be given to lower impact access solutions including the use of low pressure tracked personnel vehicles and floating tracks (e.g. bog mats) in areas of soft ground to reduce any damage to, and compaction of, the

⁵¹Natural Resources Wales (NRW), the Northern Ireland Environment Agency (NIEA) and SEPA (2017), *Guidance for Pollution Prevention: Works and maintenance in or near water: GPP 5*. Available at: <https://www.netregs.org.uk/media/1303/gpp-5-works-and-maintenance-in-or-near-water.pdf>.

[Accessed 23/03/2026]

Potential Impact	Feature	Mitigation / Good Practice Control Measures Proposed
	<ul style="list-style-type: none"> • Upland birch woodland; and • Other Scot's pine woodland. 	<p>ground. Temporary tracks would be restored as closely as possible to their pre-existing condition using natural regeneration techniques on completion of the works;</p> <ul style="list-style-type: none"> • Immediate reinstatement of habitats following construction activities would occur, particularly in areas of temporary access tracks, bellmouths and construction compounds; • Construction for ancillary elements including temporary bellmouths and upgrades to permanent access tracks would take place within proximity of River Tummel (River Tay SAC) and tributaries thereof. Good practice guidance^{48,49} would be followed when working close to or crossing watercourses; <p>Woodland listed on the AWI is present within proximity of the Proposed Development with areas of slight overlap with the RLB (see Figure 4.2: Ancient Woodland). This is an irreplaceable habitat. There is a strong presumption against the removal of Ancient Woodland. The overlapping areas of the RLB with woodlands listed on the AWI are small. Based on guidance and consultation with PKC, it is confirmed that the Proposed Development would avoid areas of Ancient Woodland;</p> <ul style="list-style-type: none"> • Where tree felling is required for the Proposed Development, the area removed should be replaced to ensure no net loss, and ideally, a net gain through additional planting of native tree species, to facilitate connectivity with woodland within the wider area, acting as an ecological corridor, to the benefit of protected species. This would be undertaken in consultation with NatureScot and Scottish Forestry; and • Engagement with SEPA would occur regarding any excavated peat reuse and disposal, where required. However, it is not anticipated that there would be a need for peat disposal as all excavated material would be backfilled.
Disturbance/loss of Annex 1 habitats ⁴³	<ul style="list-style-type: none"> • Blanket bog; and • Upland wet heath. 	<ul style="list-style-type: none"> • The Proposed Development will cross through areas of peatland. Where peat is encountered during excavations, the excavated peat materials would be temporarily stored prior to being reinstated. The temporary storage of such excavated peat shall seek to minimise disturbance of deposits by

Potential Impact	Feature	Mitigation / Good Practice Control Measures Proposed
		<p>minimising haul distance between temporary peat storage sites and re-use areas. In general, it shall be a priority to avoid a single site dedicated to a temporary peat storage area. Excavated peat would be stored on geo-textile matting, which acts as a protective barrier to the underlying soils and vegetation. The geo-textile shall be designed to prevent ingress of groundwater and erosion and de-stabilisation of the base of the stored peat. Peat shall be stored to a maximum depth of 1 m with the peat turves stored separately from underlying peat. The peat turves or vegetation layer shall be stored in a single layer and a system of watering the stored peat and turves/vegetation shall be in place to ensure that the peat remains damp;</p> <ul style="list-style-type: none"> • Immediate reinstatement of blanket bog following construction activities, particularly in areas of temporary access; and • It is not anticipated that there would be a need for peat disposal as all excavated material would be backfilled.
Disturbance (e.g. noise and lighting).	Protected species (otter and water vole).	<ul style="list-style-type: none"> • No otter resting places were identified within the field survey area. However, spraints were recorded along Allt Kynachan, a tributary of the River Tummel. While no works will occur in the River Tummel, otters using the Allt Kynachan have the potential to be disturbed from construction works; • Otter and water vole field signs were recorded along/within proximity of the Allt Kynachan, a tributary of River Tummel/River Spey SAC. Pre-construction protected species surveys should be undertaken as close to the construction phase as possible, and no more than three months prior to construction⁵². If the surveys were to indicate the presence of protected species additional to those recorded to date, an assessment of the mitigation on the species would be completed and appropriate mitigation measures identified (if required), such as micro-

⁵² NatureScot (2024). Standing Advice for Planning Consultations – Otters. Available at: <https://www.nature.scot/doc/standing-advice-planning-consultations-otters#:~:text=Pre-construction%20surveys%20should%20be%20completed%20as%20close%20to,than%203%20months%20before%20the%20start%20of%20works..>
[Accessed 23/03/2026]

Potential Impact	Feature	Mitigation / Good Practice Control Measures Proposed
		<p>siting of access roads. SPPs would be included in the CEMP;</p> <ul style="list-style-type: none"> A suitably qualified ECoW would input into the CEMP to ensure appropriate mitigation measures are in place, and to reduce any disturbance impacts.
Pollution (e.g. oil spill, siltation of watercourses or dust)	<p>Designated sites (River Tay SAC and Dalcroy and Promontory SSSI) and habitats:</p> <ul style="list-style-type: none"> Blanket bog; Upland wet heath; Other neutral grassland; Other broadleaved woodland; Upland birch woodland; and Other Scot's pine woodland. 	<ul style="list-style-type: none"> Construction works will take place within proximity of the River Tummel (River Tay SAC) and its tributaries (notably, Allt Kynachan). Dalcroy Promontory is hydrologically linked to the River Tummel. In the event of a pollution incident, these statutory sites and their qualifying features have the potential to be impacted. Good practice guidance^{48,49} would be followed when working close to or crossing watercourses; and The CEMP would include standard pollution prevention guidelines, such as silt fencing and traps, during the construction phase to ensure that no water or air borne pollutants reach ecological features.

Operation Phase

Potential impacts during operation are detailed in **Table 4.9**, which also details the relevant ecological feature and mitigation or good practice control measures, where appropriate.

Table 4.9 Potential Impacts on Ecology during Operation

Potential Impact	Feature	Mitigation / Good Practice Control Measures Proposed
Disturbance and displacement due to maintenance activities and presence of site personnel.	<ul style="list-style-type: none"> Ancient Woodland habitats; Otter (qualifying feature of the River Tay SAC); and Water vole. 	Unlikely to be required as vehicles would access the site utilising existing access roads. Following commissioning of the Proposed Development, all temporary construction areas would be reinstated.
Pollution (e.g. oil spill from vehicles accessing the Site for maintenance activities).	<ul style="list-style-type: none"> Designated sites (River Tay SAC and Dalcroy Promontory SSSI); and Ancient Woodland habitats. 	Operations staff will have their own RAMS (Risk Assessment and Method Statement) that they would follow in order to manage environmental risks from their work, such as oil spills.

Habitats Regulation Appraisal

The Proposed Development has potential connectivity with the River Tay SAC. As a result, there is a requirement for the completion of an HRA. This is provided in **Appendix 4.2 HRA and AA** and considers the potential impacts in further detail, with regards to the conservation objectives, supporting habitats, site integrity and any likely significant effects on the SAC.

The HRA screening stage identified that the Proposed Development has the potential to impact the River Tay SAC through Likely Significant Effects (LSEs) related to pollution of the water environment resulting in habitat

degradation for River, Brook and Sea lamprey and Atlantic salmon and potential indirect effects through impacts to prey species of otter. Pollution prevention measures detailed in the site-specific CEMP would avoid pollution from entering River Tummel and its tributaries. The key mitigation will be implemented in compliance with CAR⁵³, subject to regulation by SEPA. On this basis, the mitigation measures are considered to be robust and known to work.

This assessment provides the best available scientific information so as to enable the Competent Authority to undertake an AA. Having regard to the LSEs of the project, individually and in combination with other plans and projects, it is concluded that the Proposed Development would not adversely affect the integrity of the relevant designated sites concerned (the River Tay SAC), in view of the site conservation objectives, subject to the mitigation measures outlined in **Appendix 4.2 HRA and AA**.

4.6 Residual Effects

Implementation of the proposed CEMP would avoid likely adverse effects from pollution events and disturbance on designated sites and habitats (including GWDTEs), with no residual effects.

The majority of habitats would be reinstated following commissioning of the Proposed Development, resulting in an adverse effect for the short to medium term, approximately three to five years for grassland habitats and five to ten years for other habitats, until the habitats have re-established. As a result, no substantial long-term residual effects are predicted.

Where any tree felling is required for the installation of the Proposed Development, compensatory planting is proposed to mitigate for the loss of woodland areas. Tree species planted would be a mix of native broadleaved and conifer species, resembling the composition of woodland around the Proposed Development. Compensatory planting would take up to five years to establish, however once it does, no substantial long-term residual effects are predicted.

Following the implementation of mitigation such as a pre-construction protected species survey and measures imbedded into the CEMP such as SPPs, no residual effects are predicted on otter or water vole.

4.7 Conclusion

The appraisal of the Proposed Development has identified potential impacts on the River Tay SAC and Dalcroy Promontory SSSI, Ancient Woodland, habitats (particularly blanket bog, upland wet heath and woodlands), GWDTE, otter, and water vole.

Proposed mitigation includes habitat reinstatement, compensatory planting, the presumed avoidance/retention of sensitive habitats and protected species, a CEMP to include measures to protect ecological features and a suitably qualified ECoW to input into the CEMP to ensure appropriate mitigation measures are in place. Proposed mitigation also includes a pre-construction protected species survey.

Following the implementation of mitigation, no long-term residual effects are predicted.

⁵³ Water Environment (Controlled Activities) (Scotland) Regulations 2011 as amended (CAR). URL: <https://www.legislation.gov.uk/ssi/2011/209/contents>.
[Accessed 23/03/2026]

5 ORNITHOLOGY

5.1 Introduction

This chapter reports on the likely effects with respect to ornithology associated with the construction and operation of the Proposed Development, as described in **Chapter 2: Proposed Development**. Where appropriate, it also provides details of control measures. This chapter (and its associated figures and appendices) is not intended to be read as a standalone assessment and reference should be made to the introductory chapters of this EA. Impacts on ecological features are considered separately in **Chapter 4: Ecology and Nature Conservation**.

The specific objectives of the chapter are to:

- Describe the ornithological baseline;
- Describe the assessment methodology used;
- Describe the potential effects, including construction and operational effects;
- Describe the mitigation measures proposed to address likely effects; and
- Assess the residual effects remaining following the implementation of mitigation.

This chapter is supported by the following figures:

- **Figure 5.1: Designated Sites for Ornithology**
- **Figure 5.2: Breeding Bird Survey Results**

This chapter is supported by the following appendix:

- **Appendix 5.1 Ornithology Methodology and Results**

5.2 Methodology

The methodologies used for the desk study, field surveys and the appraisal are described in **Appendix 5.1 Ornithology Methodology and Results**.

5.2.1 Study Area

The ornithological desk study area is defined as a 10 km buffer around the Proposed Development, as shown on **Figure 5.1: Designated Sites for Ornithology**. The ornithological field study area is defined as a buffer up to 500 m, where relevant, around the Proposed Development, as described in **Appendix 5.1 Ornithology Methodology and Results** and shown on **Figure 5.2: Breeding Bird Survey Results**.

5.3 Consultation to Date

No consultation has been undertaken to inform the Ornithology Assessment.

5.4 Baseline

5.4.1 Designated Sites

Figure 5.1: Designated Sites for Ornithology shows the designated sites of ornithological importance within the ornithological desk study area. Only one statutory site has been identified, as set out in **Table 5.1**. No non-statutory designations for ornithological interest were identified within the desk study area. Where there is no potential for impacts, defined as the potential for qualifying interest species of the designated site to be impacted by the Proposed Development, this is detailed, and the designated sites are not considered any further in the assessment.

Table 5.1 Designated Sites of Ornithological Interest

Site Name	Relevant Qualifying Species / Features	Distance to Proposed Development	Connectivity with Proposed Development
Dunalastair Reservoir	Breeding bird assemblage:	The Proposed Development	The qualifying species of Dunalastair Reservoir have foraging ranges shorter

Site Name	Relevant Qualifying Species / Features	Distance to Proposed Development	Connectivity with Proposed Development
Site of Special Scientific Interest (SSSI)	<ul style="list-style-type: none"> • Wigeon <i>Anas penelope</i>; • Mallard <i>Anas platyrhynchos</i>; • Tufted duck <i>Aythya fuligula</i>; • Teal <i>Anas crecca</i>; and • Goosander <i>Mergus merganser</i>. 	lies 6 km east of the SSSI.	than 1km. Therefore, no impacts are predicted due to the distance of the SSSI from the Proposed Development and limited preferred habitat for these species (lochs and rivers) present within the Site Boundary. It is therefore not considered further in this assessment.

5.4.2 Local Biodiversity Action Plan

The Proposed Development is covered by the Tayside Local Biodiversity Action Plan (LBAP)⁴². Priority bird species relevant to the proposed development are detailed in **Table 5.2** below. The priority species noted within the LBAP are also included in the UKBAP⁴⁰.

Table 5.2 Relevant Priority Habitats and Species Identified within the LBAP

Priority Species	
Birds	
<ul style="list-style-type: none"> • Black grouse <i>Tetrao tetrix</i>; • Red grouse <i>Lagopus lagopus</i>; • Ring ouzel <i>Turdus torquatus</i>; • Twite <i>Carduelis flavirostris</i>; • Curlew <i>Numenius Arquata</i>; • Song Thrush <i>Turdus phelomelos</i>; • House Sparrow <i>Passer domesticus</i>; • Capercaillie <i>Tetrao urogallus</i>; • Yellowhammer <i>Emberiza citronella</i>; • Common scoter <i>Melanitta nigra</i>; 	<ul style="list-style-type: none"> • Black-throated diver <i>Gavia arctica</i>; • Reed bunting <i>Emberiza scheonicius</i>; • Herring gull <i>Larus argentatus</i>; • Grey partridge <i>Perdix perdix</i>; • Tree sparrow <i>Passer montanus</i>; • Lapwing <i>Vanellus vanellus</i>; • Skylark <i>Alauda arvensis</i>; • Scottish crossbill <i>Loxia scotica</i>; and • Spotted flycatcher <i>Muscicapa striata</i>.

Field Survey

5.4.3 Breeding Bird Survey

The results of a breeding bird survey are shown in **Figure 5.2: Breeding Bird Survey Results**. The 27 total species recorded as possibly, probably or definitely breeding within the survey consisted of:

- Five red-listed species of high conservation concern (as listed in Birds of Conservation Concern (BoCC) ⁵⁴);
- Seven amber-listed species of medium conservation concern; and
- 15 green-listed species, not currently at risk of significant decline.

The most numerous breeding bird species recorded (red-, amber- or green-listed) were chaffinch *Fringilla coelebs*, willow warbler *Phylloscopus trochilus*, wren *Troglodytes troglodytes*, and meadow pipit *Anthus pratensis*. The species recorded during the breeding bird survey are typical of agricultural and woodland habitats and are common in the surrounding area.

⁵⁴ Stanbury et al. (2021). *The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain*. British Birds 114: pp. 723 - 747. Available at: <https://britishbirds.co.uk/content/status-our-bird-populations>. [Accessed 23/03/2026]

Table 5.3 sets out the red- and amber-listed species recorded as possibly, probably or definitely breeding within the field study. Full survey results including green-listed species and non-breeding red- and amber-listed species are detailed in **Technical Appendix 5.1 Ornithology Methodology and Results**.

Table 5.3 Breeding Bird Survey Results

BTO Code	Species	Breeding Territories			Birds of Conservation Concern (BoCC) Status ⁵⁴
		Possible	Probable	Confirmed	
HM	House martin <i>Delichon urbicum</i>	3	0	0	Red
LR	Redpoll (lesser) <i>Acanthis cabaret</i>	8	4	0	Red
TP	Tree pipit <i>Anthus trivialis</i>	4	0	0	Red
WC	Whinchat <i>Saxicola rubetra</i>	2	0	1	Red
M.	Mistle thrush <i>Turdus viscivorus</i>	0	1	0	Red
K.	Kestrel <i>Falco tinnunculus</i>	1	0	0	Amber
MP	Meadow pipit <i>Anthus pratensis</i>	15	2	0	Amber
RB	Reed bunting <i>Emberiza schoeniclus</i>	1	0	0	Amber
RT	Redstart <i>Phoenicurus phoenicurus</i>	1	0	0	Amber
ST	Song thrush <i>Turdus philomelos</i>	1	0	0	Amber
WP	Woodpigeon <i>Columba palumbus</i>	2	0	0	Amber
WW	Willow warbler <i>Phylloscopus trochilus</i>	27	12	3	Amber

Red-listed species of high conservation concern recorded showing no breeding activity were cuckoo *Cuculus canorus*, curlew, grasshopper warbler *Locustella naevia*, spotted flycatcher and skylark, and common gull *Larus canus*⁵⁵.

Amber-listed species of medium conservation concern recorded showing no breeding activity were duncock *Prunella modularis*, snipe *Gallinago gallinago* and grey wagtail *Motacilla cinerea*.

Future Baseline

The future baseline in the field survey area in the absence of the Proposed Development is likely to remain consistent, as it is considered the land use will remain consistent. In the northern half of the Site, north of Allt Kynachan, is a large open area used for low intensity cattle grazing. South of Allt Kynachan is more intensely sheep grazed area of grassland. It is considered these would continue in the absence of the Proposed Development resulting in the habitats, and subsequently the suite of bird species present, remaining consistent.

⁵⁵ Stanbury et al. (2024). *The status of the UK's breeding seabirds: an addendum to the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain*. Available at: <https://britishbirds.co.uk/seabird-bocc5a>.

Impact and Features Scoped Out

5.4.4 Habitat Loss

Impacts on ornithology from habitat loss would be limited to within the footprint of the proposed works (low magnitude) and would be temporary for the duration of the construction period (short term and reversible). The potential for these impacts has been scoped out of this assessment.

5.4.5 Designated sites

One designated site was identified within the ornithological desk study area. This site, Dunalastair Reservoir SSSI, has been scoped out of this assessment due to the justifications given in **Table 5.1**.

5.5 Embedded Mitigation

5.5.1 Construction Environmental Management Plan

All wild birds are protected whilst nesting, with disturbance and destruction of active nests constituting an offence under the Wildlife and Countryside Act 1981 (as amended). A CEMP would be developed to provide a framework for the management of environmental impacts, including those on ornithological features. The CEMP would be finalised by the Applicant, the contractor and with input from a suitably qualified ECoW, in consultation with the relevant authorities as the detailed design for the Proposed Development is established prior to the commencement of construction. SPPs would be included in the CEMP. Mitigation measures to avoid impacts on breeding birds would be detailed within the CEMP, including:

- Vegetation (e.g. scrub, grassland or woodland) or ground clearance should only occur outwith the breeding bird season (March – September inclusive). If this is not possible, then pre-works surveys may be required. This would involve a suitably qualified ECoW undertaking a nesting bird check. An ECoW would be required to supervise clearance following nest inspections. If nests are identified, an exclusion zone would be set up and no works would occur within this zone until such a time as young have fledged or the nest is no longer in use.

5.6 Appraisal

Construction Phase

Potential impacts during construction are detailed in **Table 5.4**. Mitigation or good practice measures are detailed where appropriate. As described in **Section 1.2**, it is anticipated that the permanent track within the Proposed Development would be operational in perpetuity to support the ongoing operation of the associated UGC. The impacts associated with the construction phase should also be considered to be representative of worst-case decommissioning impacts and, therefore, no separate assessment of decommissioning has been completed.

Table 5.4 Potential Impacts on Ornithological Features during Construction

Potential Impact	Feature	Mitigation / Good Practice Control Measures Proposed
Disturbance/Nest Destruction	Breeding birds.	<ul style="list-style-type: none"> • Ground or vegetation clearance works should be undertaken outwith the main breeding bird season (March – September, inclusive); • If this is not possible, a pre-construction nesting bird check would be required to be undertaken by a suitably qualified ECoW to determine if nesting birds are present. If nesting birds are found, a suitable buffer zone would be implemented around the nest, with no works until a time in which the young have fledged or the nest is no longer in use; and • A bespoke SPP should be prepared and followed throughout the construction process.

Operation Phase

Potential impacts during operation are detailed in **Table 5.5**, which also details the relevant ornithological feature and mitigation or good practice control measures, where appropriate.

Table 5.5 Potential Impacts on Ornithological Features during Operation

Potential Impact	Feature	Mitigation / Good Practice Control Measures Proposed
Disturbance/Displacement due to maintenance activities and presence of site personnel	Breeding birds	Unlikely to be required as disturbance would be considered to be at a very low level. Vehicles would access the site utilising existing access roads. Following commissioning of the Proposed Development, all temporary construction areas would be reinstated.

5.7 Residual Effects

Following the implementation of mitigation such as a CEMP, ground or vegetation clearance works undertaken outwith the breeding bird season (March – September inclusive), and a pre-construction nesting bird check by a suitably qualified ECoW, no residual effects are predicted for breeding birds.

5.8 Conclusion

The appraisal of the Proposed Development has identified potential impacts on breeding birds.

Proposed mitigation includes a CEMP to include measures to protect ornithological features, a pre-construction nesting bird check if work during the breeding bird season cannot be avoided, and habitat reinstatement/landscape planting which could provide alternative habitat to use by nesting birds.

Following the implementation of mitigation, no long-term residual effects are predicted.

6 HYDROLOGY, HYDROGEOLOGY AND GEOLOGY

6.1 Introduction

This chapter reports on the likely effects with respect to hydrology, hydrogeology and geology associated with the construction and operation of the Proposed Development, as described in **Chapter 2: Proposed Development**. Where required, it also provides details of proposed control measures. This chapter (and its associated figures and appendices) is not intended to be read as a standalone assessment, and reference should be made to the introductory chapters of this EA.

The specific objectives of the assessment are to:

- Describe the hydrology, hydrogeology and geology baseline;
- Describe the assessment methodology used;
- Describe the potential effects, including construction and operational effects;
- Describe the mitigation measures proposed to address likely effects; and
- Assess the residual effects remaining following the implementation of mitigation.

This chapter is supported by the following figures:

- **Figure 6.1 Surface Water Features**
- **Figure 6.2 Drinking Water Protected Areas and Private Water Supply Locations**
- **Figure 6.3 SEPA Flood Risk Mapping**
- **Figure 6.4 BGS Superficial Geology**
- **Figure 6.5 BGS Bedrock Geology**
- **Figure 6.6 Carbon and Peatland Map**
- **Figure 4.5 Potential Groundwater Dependency**
- **Figure 4.6 Assessed Groundwater Dependency**

This chapter is supported by the following appendices:

- **Appendix 6.1 Hydrology Assessment Methodology**

6.2 Methodology

Information Sources

Based on the limited scale of the Proposed Development, and the limited interaction with hydrological receptors, a site walkover has not been carried out. The assessment provided in this chapter is based on a desktop review of baseline data as set out in **Table 6.1** and is supported by separate ecological survey results in **Chapter 4: Ecology and Nature Conservation**).

Table 6.1: Baseline Information Sources

Topic	Sources of Information
Topography	<ul style="list-style-type: none"> • Aerial Photography⁵⁶ • 5 m contour data derived from Ordnance Survey (OS) Digital Terrain Model (DTM) data⁵⁷ • 1:25,000 OS Raster Data⁵⁷
Designated Nature Conservation Sites	<ul style="list-style-type: none"> • NatureScot Sitelink website⁵⁸
Solid and Superficial Geology	<ul style="list-style-type: none"> • British Geological Survey (BGS) Digital Data provided at BGS online viewer⁵⁹ • BGS Borehole Records⁵⁹

⁵⁶ Google Earth Imagery, Bing Maps

⁵⁷ Under license acquired from Ordnance Survey

⁵⁸ SNHi Sitelink. Available online: <https://sitelink.nature.scot/map> [Accessed June 2025]

⁵⁹ BGS Onshore GeoIndex. Available online: <https://www.bgs.ac.uk/map-viewers/geoindex-onshore/> [Accessed June 2025]

Topic	Sources of Information
Soils and Peat	<ul style="list-style-type: none"> The NatureScot Carbon and Peatland Map (2016)⁶⁰ BGS 1:50,000 and 1:625,000 geological maps (superficial and bedrock)⁵⁹
Surface Water Hydrology	<ul style="list-style-type: none"> 1:10,000 OS Raster Data⁵⁷ 1:25,000 OS Raster Data⁵⁷ OS Open Rivers⁶¹
Flooding	<ul style="list-style-type: none"> Indicative River and Coastal Flood Map (SEPA)⁶²
Water Quality	<ul style="list-style-type: none"> SEPA, Water Classification Hub⁶³
Water Resources	<ul style="list-style-type: none"> PWS information provided by PKC Environmental Health Department Drinking Water Protected Areas (DWPAs) in the Scotland River Basin District (RBD) maps⁶⁴. 1:10,000 OS Raster Data⁵⁷ 1:25,000 OS Raster Data⁵⁷
Hydrogeology	<ul style="list-style-type: none"> BGS 1:50,000 and 1:625,000 geological maps (superficial and bedrock)⁵⁹ BGS Groundwater Vulnerability Maps⁵⁹ BGS 1:625,000 hydrogeological map of the UK⁵⁹ The River Basin Management Plan For Scotland 2021 – 2027⁶⁵

Limitations and Assumptions

This assessment is based upon data obtained from publicly accessible archives as described in **Table 6.1**.

The identified limitations and assumptions are not considered to undermine the validity of the assessment.

Study Area

In the absence of published guidance, the Study Area has been defined based on professional judgement. The study envelopes a 2 km radius from the Site Boundary as it is considered unlikely that hydrological and hydrogeological effects would extend beyond this. However, surface water and groundwater quality is often assessed at a river catchment level. Therefore, the potential for impacts on downstream water quality has been considered at a river catchment level.

Legislation, Planning Policy and Guidance

The following policies, legislation and guidance have been considered in assessing potential impacts of the Proposed Development on hydrology, hydrogeology and geology.

- Water Environment and Water Services (Scotland) Act 2003⁶⁶;
- Environmental Authorisations (Scotland) Regulations 2018 (EASR)⁶⁷;
- The Water Environment (Miscellaneous) (Scotland) Regulations 2017⁶⁸;
- Flood Risk Management (Scotland) Act 2009⁶⁹;

⁶⁰ Scottish Government, *Carbon and peatland 2016 map*. Available online: <https://soils.environment.gov.scot/maps/thematic-maps/carbon-and-peatland-2016-map/> [Accessed March 2026]

⁶¹ OS Open Rivers. Available online: <https://www.ordnancesurvey.co.uk/products/os-open-rivers>[Accessed June 2025]

⁶² SEPA Flood Maps. Available online: <https://map.sepa.org.uk/floodmaps>[Accessed March 2026]

⁶³ SEPA, Water Classification Hub. Available online: <https://informatics.sepa.org.uk/WaterClassificationHub/> [Accessed March 2026]

⁶⁴ Drinking Water Protected Areas (DWPAs) in the Scotland River Basin District (RBD) maps. Available online: <https://www.gov.scot/publications/drinking-water-protected-areas-scotland-river-basin-district-maps/> [Accessed June 2025].

⁶⁵ SEPA, River basin management planning. Available online: <https://www.sepa.org.uk/environment/water/river-basin-management-planning/>. [Accessed March 2026]

⁶⁶ Scottish Government (2003). Water Environment and Water Services (Scotland) Act 2003. Available at: <http://www.legislation.gov.uk/asp/2003/3/contents>

⁶⁷ Scottish Government Environmental Authorisations (Scotland) Regulations 2018 (EASR) Available at: <https://beta.sepa.scot/regulation/authorisations-and-compliance/easr-authorisations/water-activities/> [Accessed March 2026]

⁶⁸ Scottish Government (2017) The Water Environment (Miscellaneous) (Scotland) Regulations 2017. Available at: <http://www.legislation.gov.uk/ssi/2017/389/contents/made> [Accessed March 2026]

⁶⁹ Scottish Government (2009) Flood Risk Management (Scotland) Act 2009. Available at: <http://www.legislation.gov.uk/asp/2009/6/contents> [Accessed March 2026]

- The Water Intended for Human Consumption (Private Supplies) (Scotland) Regulations 2017⁷⁰;
- The Public and Private Water Supplies (Miscellaneous Amendments) (Scotland) Regulations 2015⁷¹;
- The Water Environment (Drinking Water Protected Areas) (Scotland) Order 2013⁷²
- Scottish Government (2012) River Crossings and Migratory Fish⁷³.
- Guidance for Pollution Prevention (GPP) 1 Understanding your environmental responsibilities – good environmental practices (June 2021))⁷⁴;
- GPP 5: Works and maintenance in or near water (January 2017);
- GPP 6: Working on construction and demolition sites (April 2023);
- GPP 21: Pollution incident response planning (July 2017)
- GPP 22: Dealing with spills (October 2018)
- PAN 79: Water and Drainage (September 2006);
- LUPS-DP-GU2a: Development Plan Guidance on Flood Risk (2018);
- LUPS-GU31: Guidance on Assessing the Impacts of Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems, Version 3 (September 2017);
- WAT-G-025 EASR Guidance: Engineering: Activity Guide: Instream and In-loch structures (August 2025)⁷⁵;
- WAT-G-030 EASR Guidance: Engineering: Meeting Good Practice (August 2025)
- WAT-G-034 EASR Guidance: Construction works and silt/pollution mitigation (August 2025)
- WAT-SG-29: Good Practice Guide - Temporary Construction Methods (March 2009);
- SEPA, Guidance on Assessing the Impacts of Developments on Groundwater Dependent Terrestrial Ecosystems (August 2024)⁷⁶
- SEPA, Guidance on Assessing the Impacts of Developments on Groundwater Abstractions (August 2024)⁷⁷

Assessment Methodology

The methodology for the assessment includes the following steps:

- Establish a hydrological, hydrogeological and geological baseline. This baseline was used as the reference against which all impacts have been assessed. This has also included identification of any future anticipated changes.
- Define hydrological links between the Site and the Study Area to establish linkages between the hydrological character of the Site (in terms of runoff quality and quantity) and the identified receptors.
- Based on each linkage, quantify the potential impacts (changes) to the existing baseline and associated effects, based on the following criteria:
 - Magnitude – the size or intensity of the impact;
 - Nature (beneficial, neutral or adverse) – whether the change would result in net loss or degradation of an important hydrological feature or whether it would enhance or improve it;
 - Extent – the spatial area over which the effect is likely to occur;
 - Duration – the length of time over which the effect is likely to occur;
 - Reversibility – the extent to which effects are reversible; and
 - Timing and frequency – consideration of the timing of events.

⁷⁰ Scottish Government Environmental Authorisations (Scotland) Regulations 2018 (EASR) Available at: <https://beta.sepa.scot/regulation/authorisations-and-compliance/easr-authorisations/water-activities/> [Accessed March 2026]

⁷¹ Scottish Government (2015) the Private and Public Water Supplies (Miscellaneous Amendments) (Scotland) Regulations 2015. Available at: <https://www.legislation.gov.uk/ssi/2015/346/contents> [Accessed March 2026]

⁷² Scottish Government (2013) The Water Environment (Drinking Water Protected Areas) (Scotland) Order 2013 [Online] Available at: <http://www.legislation.gov.uk/ssi/2013/29/introduction/made> [Accessed March 2026]

⁷³ Scottish Government (2012) River Crossings and Migratory Fish: Design Guidance https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwebarchive.nrscotland.gov.uk%2F20200116025412mp_%2Fhttps%3A%2F%2Fwww2.gov.scot%2FResource%2F0038%2F00388163.doc&wdOrigin=BROWSELINK [Accessed March 2026]

⁷⁴ Guidance for Pollution Prevention documents (including GPP 1, 5, 6, 21 and 22 are published by SEPA online. Available at: <https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/> [Accessed June 2025]

⁷⁵ SEPA Engineering Guidance. Available at: <https://beta.sepa.scot/regulation/authorisations-and-compliance/easr-authorisations/water-activities/engineering/><https://www.sepa.org.uk/regulations/water/engineering/engineering-guidance/#position>

⁷⁶ SEPA (2024) Guidance on Assessing the Impacts of Developments on Groundwater Dependent Terrestrial Ecosystems. Available online: <https://www.sepa.org.uk/media/a1yh0blq/guidance-on-assessing-the-impacts-of-developments-on-groundwater-dependent-terrestrial-ecosystems.docx> [Accessed August 2025]

⁷⁷ SEPA (2024) Guidance on Assessing the Impacts of Developments on Groundwater Abstractions. Available online: <https://www.sepa.org.uk/media/mfzpnjwb/guidance-on-assessing-the-impacts-of-developments-on-groundwater-abstractions.docx> [Accessed August 2025]

The assessment methodology, including criteria for assessing sensitivity of receptors, magnitude of change, as well as overall significance criteria, is detailed in **Appendix 6.1 Hydrology Assessment Methodology**.

6.3 Consultation to Date

Table 6.2 Consultation Responses

Consultee	Date	Response
PKC Regarding records of PWSs	27/05/2025	Received on 24 June 2025. Confirming water supply locations and details within 1 km of the Site.

6.4 Baseline

6.4.1 Surface Water Features

The Site lies within the River Tay Catchment of the Scotland River Basin District.

Surface water features in relation to the Site and Study Area are shown in **Figure 6.1 Surface Water Features**.

The main channel of the River Tummel (comprising the stretch from Dunalastair Water to Loch Tummel) is located approximately 150 m northwest of the Site at its nearest point. The main stem is approximately 7.4 km in length flowing in an easterly direction. To the south of the main channel, a man-made (heavily modified) branch of the River Tummel flows in parallel and extends to 600 m west of the Site before entering a weir which diverts the flow directly north via pipelines to rejoin the main river channel.

Approximately two thirds of the way south, the Site is crossed from west to east by a small unnamed tributary of Allt Kynachan and the Allt Kynachan 350 m further south, another tributary of Loch Tummel. Additionally, a smaller tributary of the Allt Kynachan flows northwards to meet the Allt Kynachan 140 m westward of the southern extent of the Site. A minor agricultural drain is present 20 m north of the proposed temporary access track (south).

6.4.2 Water Resources

According to the SEPA Classification Hub, the River Tummel is classified as being in Good overall condition, with High water quality and Moderate ecological condition under the 2023 Water Framework Directive (WFD) Assessment. The River Tummel has also been designated as a heavily modified water body on account of physical alterations that cannot be addressed without a significant impact on water storage for hydro-electricity generation.

Allt Kynachan has been classified under the WFD as having a High overall condition respectively. The smaller watercourses and land drains within the Study Area are not included in the WFD assessments due to their limited catchment size.

According to DWPA mapping held by the Scottish Government, the northern end of the Site is located within a surface water DWPA associated with the River Tummel. **Figure 6.2 Drinking Water Protected Areas and Private Water Supply Locations** presents the extent of this DWPA in relation to the Proposed Development. The only element of the Proposed Development within the DWPA is the proposed bellmouth at the northern extent of the Site.

Both the Rannoch groundwater body (underlying the northmost part of the Site) and the Lillin, Aberfeldy and Angus Glens groundwater body (underlying the remainder of the Site) are classified under the WFD of having a Good overall groundwater condition.

Ramboll requested information from PKC regarding records for PWSs within the Study Area, for which a response was received on 24 June 2025. **Figure 6.2 Drinking Water Protected Areas and Private Water Supply Locations** presents the location of PWSs in relation to the Site.

SEPA guidelines⁷⁷ require the assessment of potential effects on PWSs within up to 250 m from a development. There is one PWS (Tummel Valley Holiday Park supply) within 250 m of the Proposed Development. This utilises a regulated borehole extraction located 222 m northwest of the proposed northern bellmouth junction. However,

this is on the opposite side of the River Tummel from the Proposed Development. Due to this separation, this PWS is not considered to be hydrologically connected to the Site.

According to the County level dataset, PWS locations within 500 m of the Site, as well as their sources and classifications, are summarised in **Table 6.3**.

Table 6.3 Private Water Supplies

PWS No.	Supply Name	Location relative to Proposed Development	Regulatory Classification	Source Type
3	Tummel Valley Holiday Park Supply	222 m north-west of northern bellmouth junction.	Regulated	Borehole
5	Kynachan Beag Supply	312 m northeast of northern bellmouth junction.	B	Borehole
6	Tombreck Foss Supply	300 m east of central temporary access track.	B	Spring
20	Kynachan Lodge Supply	403 m north-east of northern bellmouth junction.	Regulated	Borehole

6.4.3 Flood Risk

Flood risk to the Site and Study Area is shown in **Figure 6.3 SEPA Flood Risk Mapping**.

SEPA categorises coastal, fluvial and surface water flood risks as high, medium, low and very low likelihoods as follows:

- High Likelihood: Each year this area has a 10 % chance of flooding.
- Medium Likelihood: Each year this area has a 0.5 % chance of flooding.
- Low Likelihood: Each year this area has a 0.1 % chance of flooding.
- Very Low Likelihood: Each year this area has less than a 0.1 % chance of flooding.

According to SEPA flood maps, no areas of the Site are at risk of flooding from coastal sources. Areas identified as being at a fluvial flood risk are limited to the in-channel extent of the Allt Kynachan and land approximately 140 m east of the northern-most part of the Site. This area of land is shown to have a low to medium risk of fluvial flooding associated with the River Tummel exceeding channel capacity.

Additionally, a number of minor surface water flow paths identified as being at a low, medium and high probability of surface water pooling are located within the local topographic low points traversing the Site from west to east.

The Proposed Development is to be set outside of the area identified to be at a fluvial or tidal flood risk.

6.4.4 Designated Sites

The Site lies within 110 m of the River Tummel which forms part of the River Tay SAC, and within 500 m of the Dalcroy Promontory SSSI. However, the SSSI is separated from the Site by the River Tay and would therefore not be in hydraulic connectivity to the Proposed Development.

6.4.5 Geology and Soils

According to the BGS 1:625,000 geological maps⁵⁹, the superficial geology underlying the Site is predominantly comprised of hummocky glacial deposits. These deposits are composed of rock debris, clayey till and poorly-to well-stratified sand and gravel. There are small areas of alluvium deposits and peat, as well as larger areas with no mapped superficial deposits. This is shown in **Figure 6.4 BGS Superficial Geology**.

The underlying bedrock across the Site is predominantly Kynachan Psammite Formation. The underlying bedrock located in the northern part of the Site comprises Tummel Psammite (psammite and semipelite) and Kynachan Quartzite Formations. In the south of the Site, small bands of various tullochroisk semipelite formations exist (comprising combinations of pelite, semipelite and metalimestone). A small portion of the south of Site comprises

Blair Atholl Dark Limestone and Dark Schist Formation. A vein of North Britain Siluro-Devonian Calc-alkaline Dyke Suite is also located in the south of the Site. This is shown in **Figure 6.5 BGS Bedrock Geology**.

A review of the Carbon and Peatland 2016 map⁶⁰ (**Figure 6.6 Carbon Peatland Map**) confirms that the Site is predominantly overlain by non-peat soils. A small area of Class 3 peat is present towards the north of the permanent access track route and the access track crosses this area over a length of approximately 310 m.

Class 3 peat is defined as areas where the dominant vegetation cover is not priority peatland habitat but is associated with wet and acidic type. Occasional peatland habitats can be found. Most soils are carbon-rich soils, with some areas of deep peat. Peat surveying of the proposed cable route shows that probed peat depths in the area of Class 3 peat are no deeper than 0.3 m.

A small area of Class 1 peat runs adjacent to the proposed access track to be upgraded (south) for approximately 200 m. Class 1 peat is defined as nationally important carbon-rich soils, deep peat and priority peatland habitat, and likely to be of high conservation value.

The area of Class 1 peat identified on the NatureScot mapping, largely extends to the east of the existing access track. While the upgrade works are located within the extent of the Class 1 NatureScot Mapping, ecological surveys (**Chapter 4: Ecology and Nature Conservation**), review of aerial imagery and topography confirm that while Blanket Bog habitat (f1a5) is present to the east of the access track, the access track upgrade works (south) would not interact with the blanket bog habitat.

Ecological surveys confirm that the proposed upgrade to existing track (south), overlies an area classified as Wet Heathland with cross-leaved heath (h1b6) and Other Upland Acid Grassland (g1b6), which is in line with the wider area of non-peat soils identified in NatureScot mapping that underlie the majority of the surrounding land to the west.

Therefore, while regulatory mapping suggests the upgrade to existing access track (south) could partially overlie an area of Class 1 peat, there does not appear to be continuity of habitats underlain by peat onto the location of the Proposed Development, such that it is likely that Class 1 Peat remains to the east of the access track.

6.4.6 Hydrogeology and Groundwater Dependent Terrestrial Ecosystems

According to BGS 1:625,000 hydrogeological mapping, the Site is underlain by a Low productivity aquifer comprising the Grampian Group, which yields small amounts of groundwater.

Three areas of potential GWDTEs have been identified within the ecology field survey area (**Figure 4.5 Potential Groundwater Dependency**).

Table 6.4 Potential GWDTE Community Types

Potential Groundwater Dependency	Vegetation Community	Reference Number on Figure 4.5
Moderate	M15 <i>Scirpus cespitosus</i> – <i>Erica tetralix</i> wet heath	1, 3
	M25 <i>Molinia caerulea</i> - <i>Potentilla erecta</i> mire	2

According to SEPA guidance⁷⁶, GWDTEs are specifically protected under the WFD as transposed into Scottish legislation and are considered sensitive receptors. SEPA specifically states that, “Assessment is required to determine whether the potential GWDTE features identified are likely to be dependent on groundwater, either year around or seasonally.” Assessment of both ecological and hydrogeological conditions should take into account:

- Botanical communities present;
- Local ground conditions;
- Topography; and
- Surface drainage.

The interpretation should include assessment of the likely rooting depths relative to the water table, including potential seasonal variations. Guidance states that groundwater dependence should be assumed for target National Vegetation Classification (NVC) communities listed by SEPA, unless there is clear evidence to the contrary.

Features that are indicative of groundwater dependency include:

- Habitats associated with springs;
- Where soils are persistently waterlogged on otherwise well drained steep to moderate slopes, in the absence of surface water sources;
- Upper edge of any GWDTE is aligned with concave breaks in slope;
- Diffuse groundwater emergence is often focused along linear geological features (fractures, faults etc.);
- Persistent flow even during dry weather;
- Limited variation in temperature; and
- May be base enriched.

Based on the hydrogeological setting (a low productivity aquifer), and observations made during the ecological surveys, potential GWDTE 1, which interacts with the south of the access track route, is characterised by underlying soils of humus-iron podzols with peaty gleys⁶⁰), further underlain by low productivity bedrock. Therefore, the underlying geology is not indicative of groundwater emergence at this location. The area is not associated with a break or fault in the underlying geology. There are no concave features or breaks in slope at this location which are indicative of groundwater emergence. This area is associated with an uneven 'hummocky' area of ground underlain by glacial deposits and is not associated with a flush, spring or change in slope indicative of groundwater emergence. This area is therefore assessed not to be groundwater dependent.

Potential GWDTE 2 is on a raised area of ground in close proximity to the existing Kinardochy substation. The geometry of this area is strongly defined by land use and is not characterised by changes in topography of flush/spring features. The vegetation community in this area (wet heath) therefore appears to be rain fed and not groundwater dependent.

Potential GWDTE 3 is associated with a surface water flow path from north to south, which flows to a tributary of Loch Kinardochy. Habitat in this area is therefore likely to be supported by the accumulation of surface water runoff from slopes to the east. The linear potential GWDTE is characterised by a break in slope as the gradient in slope to the east falls towards a less steeply sloping area (on which surface water flow paths are evident). There is therefore the potential that shallow groundwater flows from the upslope soils could contribute towards supporting habitats in this area. While the presence of surface water flow paths is indicative that this area may not be a GWDTE, the emergence of shallow groundwater has not been ruled out and could contribute to water supply to these habitats. Therefore, this area is assessed to be Moderately groundwater dependent.

Table 6.5 Assessed Groundwater Dependent Communities

Potential Groundwater Dependency (Figure 4.5)	Potential Groundwater Dependency ⁷⁸	Comment	Assessed Groundwater Dependency (Figure 4.6)
1	Moderate	Low productivity aquifer. Not characterised by topographic features associated with groundwater emergence. Associated with an uneven 'hummocky' area of ground underlain by glacial deposits.	No GWTDE
2	Moderate	Low productivity aquifer.	No GWTDE

⁷⁸ Badger, A., Pritchett, C., Schutten, J., Authorised, K. and Farquhar, A. (2014b). *Land Use Planning System SEPA Guidance Note 31 Guidance on Assessing the Impacts of Windfarm Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems Originator*. [online] Available at: https://www.sepa.org.uk/media/143868/lupsgu31_planning_guidance_on_groundwater_abstractions.pdf. [Accessed March 2026]

		Geometry defined by land use and is not characterised by changes in topography of flush/spring features. Rain fed wet heath.	
3	Moderate	Low productivity aquifer Associated with a surface water flow path from north to south, which flows to a tributary of Loch Kinardochoy. Characterised by a break in slope and concave decrease in gradient.	Moderate

Therefore, an assessment of groundwater dependency indicates that potential GWDTE areas 1 and 2 are not truly groundwater dependent (**Figure 4.6 Assessed Groundwater Dependency**), while potential GWDTE 3 is assessed to be moderately groundwater dependent; this area is within 250 m of the Proposed Development.

Future Baseline

The future baseline of the field survey area under the ‘do nothing’ scenario is unlikely to change significantly in the absence of the Proposed Development.

There is potential for climate change to impact on future baseline conditions including flood risk and PWS dependency. Climate change studies predict a decrease in summer precipitation and an increase in winter precipitation alongside slightly higher average temperatures. This suggests that there may be greater pressures on PWS in summer months in the future. However, summer storms are predicted to be of greater intensity. Therefore, peak fluvial flows associated with extreme storm events may also increase in volume and velocity. These climate change factors have been taken into account when considering the potential for effects in the future.

Impacts and Features Scoped Out

A summary of the hydrological, hydrogeological and geological features/impacts that have been ‘scoped out’ are provided in **Table 6.6**, together with justification for their exclusion.

Table 6.6 Issues Scoped Out of Assessment

Feature / Effect	Justification
Fluvial and Coastal Flood Risk	The siting of the permanent above ground features within the Site would be directed away from areas assessed to be at risk of flooding identified on SEPA regulatory mapping. The Proposed Development is to be set outside of the area identified by SEPA flood maps to be at a fluvial or tidal flood risk. At the one location where the proposed track would cross a watercourse, crossings would be designed to accommodate the 1 in 200 (0.5 %) annual probability flood event in line with SEPA guidance.
Surface Water Flood Risk	The Proposed Development would result in an increase in impermeable area, however, surface water flood risk would be accounted for during detailed drainage design, in consultation with SEPA. Sustainable drainage systems (SuDS) would ensure that runoff rates would not be increased for events up to the 1 in 100 (1%) annual probability storm. For permanent track additional allowance would be provided for climate change. Details of SuDS would be prepared by the appointed contractor at detailed design stage.
Private Water Supplies	Records obtained by Ramboll in 2025 from PKC indicate that there is one PWS within 250 m of the Proposed Development. However, it is not considered to be within hydrological connection to the Site as the borehole is located north of the River Tummel, while the Proposed Development would be located to the south. Three further PWSs have been identified within 250 m and 500 m of the Proposed Development (beyond SEPA buffer zone requirements for assessment). The Proposed Development is not considered likely to require large excavations that would have a high magnitude impact on the groundwater

environment beyond 250 m. Additionally, no significant de-watering activities are anticipated. Therefore, an assessment of potential impacts on PWS is not anticipated to be required.

6.5 Embedded Mitigation

6.5.1 Construction Environmental Management Plan

A CEMP would be developed to provide a framework for the management of environmental impacts, including those on hydrological and geological features such as water quality and Major Accident or Pollution Prevention. The CEMP would be prepared by the Applicant, the contractor and a suitably qualified ECoW in consultation with the relevant authorities as the detailed design for the Proposed Development is established prior to the commencement of construction.

Standard mitigation and pollution prevention measures and good practice^{79,74}, as described in the CEMP, would be implemented during the construction work to ensure that the pollution or siltation risk of watercourses would be appropriately managed, particularly in regard to the integrity of the River Tay SAC and its tributaries, so as to not be affected by pollution or siltation. As a minimum, these would follow SEPA Good Practice Guidelines for Water Pollution Prevention^{80,81}.

Methods of working outlined in the CEMP would include:

- Preventing pollution of the water environment. This would be achieved through the implementation of a detailed Pollution Prevention Plan (PPP) to be agreed with SEPA as a condition of a Construction Site Licence⁸²;
- Fuel deliveries and refuelling to take place by trained staff in a designated area with an impermeable base, taking place more than 50 m away from any watercourse;
- Spill kits would be available on all plants on the Site, as well as at any pollution sources or sensitive features; and
- Lined concrete wash-out facilities would be provided at least 50 m away from any watercourse.

6.5.2 Pollution Prevention Plan

The PPP would include detailed site plans showing the location of pollution sources, potential pollution pathways and the receptors. The PPP would include drawings showing the location of silt fences, cut-off drains, silt traps and other mitigation measures as deemed necessary to avoid pollution. The PPP would also include details of rapid response actions that would be taken in the event of a pollution event and the maintenance and inspection programme proposed to ensure that the plan would be effective, including the provision of spill kits with all plant. Whenever any construction vehicles are stationary, absorbent 'nappies' would be positioned underneath them to catch any dripping oils or other liquids. Cement and concrete pollution would be avoided by positioning concrete and cement mixing and washing areas⁸³:

- On an impermeable designated area;
- 10 m from any watercourse or surface water drain to minimise the risk of run off entering a watercourse;
- With settlement and re-circulation systems for water reuse, to minimise the risk of pollution and reduce water usage;
- In a contained area for washing out and cleaning of concrete batching plant or ready-mix lorries; and

⁷⁹ SEPA (2025). WAT-G-030 EASR Guidance: Engineering: Meeting Good Practice Available at: https://beta.sepa.scot/media/npyb3xct/wat-g-030_engineering_meeting_good_practice.docx.

⁸⁰ SEPA (2006). *Guidance for Pollution Prevention (GPP) 1 Understanding your environmental responsibilities – good environmental practices*. Available at: <https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/> [Accessed June 2025].

⁸¹ SEPA (2006). *Prevention of Pollution from Civil Engineering Contracts: Special Requirements*. Available at: https://www.sepa.org.uk/media/152220/wat_sg_31.pdf.

⁸² As required by the Water Environment (Controlled Activities) (Scotland) Regulations 2011, as amended (CAR)

⁸³ Natural Resources Wales (NRW), the Northern Ireland Environment Agency (NIEA) and SEPA (2017). *Guidance for Pollution Prevention: Works and maintenance in or near water: GPP 5*. Available at: <https://www.netregs.org.uk/media/1303/gpp-5-works-and-maintenance-in-or-near-water.pdf>. [Accessed March 2026]

- To allow collection of wash waters and, where necessary, discharge to the foul sewer (with appropriate permission from the local sewerage undertaker), or containment of wash water for authorised disposal off site.

Pollution control measures would be implemented in line with SSEN Transmission's General Environmental Management Plans (GEMPs) Oil Storage and Refuelling, Working with Concrete and Working in or Near Water. See **Appendix 2.1 General Environmental Management Plans** for details.

The potential for such impacts would be managed through the implementation of a CEMP and regulation of the Site under CAR. In the unlikely event that chemical storage or stockpiling of materials would be carried out in close proximity to sensitive hydrological receptors, mitigation measures to avoid impacts to water quality would be provided in the CEMP. Suitable sites and precautions for such activities would be identified in advance to avoid co-location with sensitive hydrological receptors.

6.5.3 Watercourse Crossings

The proposed UGC route, and therefore access track alignment, has been selected to minimise the number of watercourse crossings that would be required. There is only one location at which the Proposed Development crosses a watercourse. The proposed permanent access track would cross a tributary of Allt Kynachan at Grid Reference (GR) 277218, 757318). It is anticipated that the crossing at this location would comprise an open-bottomed culvert or simple bridge, which would be sized to accommodate the 1 in 200 (0.5 %) + climate change allowance flow. The watercourse is a small tributary with a catchment of approximately 0.5 km⁸⁴ and aerial imagery indicates a small flow path with limited riparian features.

The crossing design and construction would be carried out in line with the SSEN GEMP for Watercourse Crossings. Similarly, where crossings of smaller surface water flow paths or minor drains not recorded on OS mapping are required, suitably sized circular culverts would be installed to allow cross drainage in line with the GEMP.

6.5.4 Hydrogeology and GWDTEs

There is the potential to impact upon receiving soils, groundwater and watercourse quality through the release of contaminated water and stored chemicals used onsite during construction works, with resulting direct effects on water quality and indirect effects on aquatic ecology. There is one location at which the proposed track route interacts with a potential GWDTE, and two further GWDTE locations within the hydrology Study Area. However, ecological and hydrological assessment of potential GWDTEs (detailed in **Section 6.4.6**) has identified that two of these areas are not GWDTE (potential GWDTE areas 1 and 2, **Figures 4.5 Potential Groundwater Dependency and 4.6 Assessed Groundwater Dependency**) and in line with SEPA guidance, no further assessment is required for these areas in respect of impacts on groundwater supplies and there would be no direct impacts on GWDTEs.

The potential for shallow groundwater to contribute to the support of one area of habitat (potential GWDTE area 3, **Figure 4.5 Potential Groundwater Dependency** has not been ruled out due to insufficient information available regarding the potential for water supply from upslope soils to the east of the area. This area has therefore been conservatively assessed to be of moderate groundwater dependency (**Figure 4.6 Assessed Groundwater Dependency**).

Potential GWDTE 3 is located approximately 140 m southwest of the Site. As the GWDTE is within 250 m of the Site, a qualitative assessment has been carried out to confirm the potential for groundwater supplies to this area to be impacted.

According to topographic data, GWDTE 3 is elevated above the Proposed Development and a lower-lying area of non-GWDTE blanket bog separates the Proposed Development and GWDTE 3. Additionally, the Proposed Development would be located to the west of the GWDTE, such that it would not make up the area with potential groundwater supplies located upslope and to the east of the GWDTE. Therefore, based on review of topography

⁸⁴ UK CEH Flood estimation handbook service: <https://fehweb.ceh.ac.uk/Map> [Accessed March 2026]

and ecological survey results, the Proposed Development would not be in potential hydraulic connection with this GWDTE, and would not affect the groundwater that supplies it.

6.6 Appraisal

Construction Phase

Potential impacts during construction are detailed in **Table 6.7**. Embedded mitigation or good practice measures are detailed where appropriate. The impacts associated with the construction phase should also be considered to be representative of worst-case decommissioning impacts and, therefore, no separate assessment of decommissioning has been completed.

Table 6.7 Potential Impacts on Hydrology, Hydrogeology and Geology during Construction

Potential Impact	Embedded Mitigation	Residual Impact
Hydrology and physical characteristics of watercourses.	<p>The Proposed Development crosses one watercourse and there are no other watercourses recorded on 1:50,000 OS mapping within a 50 m buffer.</p> <p>Watercourse crossings would be sized to accommodate the 1 in 200 (0.5 %) + climate change allowance flow.</p> <p>The crossing design and construction would be carried out in line with the SSEN GEMP for Watercourse Crossings.</p> <p>Details of SuDS measures to be implemented at the Site during the construction phase would be set out in the CEMP. These would ensure runoff rates would be controlled and that the Proposed Development would not result in increased peak flows up to a suitable design event, inclusive of climate change.</p> <p>Where crossings of smaller surface water flow paths or minor drains not recorded on OS mapping are required, suitably sized circular culverts would be installed to allow cross drainage.</p>	None.
Water quality.	<p>Methods of working outlined in the CEMP would include a PPP.</p> <p>Standard mitigation and pollution prevention measures and good practice would be set out in the CEMP and would be implemented during the construction work to ensure that the risk of pollution or siltation of watercourses would be appropriately managed.</p> <p>Pollution control measures would be implemented in line with applicable SSEN Transmission GEMPs.</p>	None.
Water resources.	<p>The northern extent of the Site is located within a surface water DWPA associated with the River Tummel. The only element of the Proposed Development within the DWPA is the proposed bellmouth junction at the northern extent of the Site. There would be no potential for the quantity of water supply within this DWPA catchment to be affected.</p>	None.

Potential Impact	Embedded Mitigation	Residual Impact
	Potential impacts on water quality would be managed through the implementation of a CEMP and a PPP.	
GWDTEs.	<p>Two of the three potential GWDTE identified through ecological surveying are shown not to be groundwater dependent and therefore no further risk assessment is required at these locations.</p> <p>At one location (GWDTE 3) the potential for shallow groundwater supplies to support the vegetation community has not been ruled out. However, hydrogeological and topographic assessment shows that the Proposed Development would not impact shallow groundwater supplies to this area.</p>	None.
Geology.	<p>A small area of Class 3 peat is crossed by the permanent access track over a length of approximately 320 m.</p> <p>NatureScot mapping suggests the presence of Class 1 peat running adjacent to the proposed access track to be upgraded (south). Initial review of habitats and land use in this area suggests that the Site is in continuity with a wider area of non-peat soils to the west of the Site.</p> <p>Excavations on areas where the presence of peat is confirmed would be minimised and it is anticipated that any site-won peat resulting from the construction of the track would be reinstated within the Site.</p> <p>Potential impacts on the underlying geology would be managed through the implementation of a CEMP.</p>	None.

Based on the implementation of embedded mitigation, no residual impacts to hydrology, hydrogeology or geology are anticipated during the construction phase.

Operation Phase

Potential impacts during operation are detailed in **Table 6.8**. Embedded mitigation or good practice measures are detailed where appropriate.

Table 6.8 Potential Impacts on Hydrology, Hydrogeology and Geology during Operation

Potential Impact	Embedded Mitigation	Residual Impact
Increase in surface water runoff rates.	Details of SuDS measures to be implemented for permanent elements of the Proposed Development can be controlled by way of planning condition and would be submitted at detailed design stage, in consultation with SEPA and the Local Authority. SuDS measures would ensure the appropriate attenuation of rainfall, including allowance for climate change, during the operation phase.	None.

6.7 Mitigation

As no residual impacts are anticipated, following the implementation of embedded mitigation or good practice measures, no additional mitigation is required.

6.8 Residual Effects

No residual effects are anticipated, following the implementation of embedded mitigation and good practice measures.

6.9 Conclusion

This chapter reports on the likely effects with respect to hydrology, hydrogeology and geology associated with the construction and operation of the Proposed Development and provides details of control measures where appropriate.

The chapter assesses the potential for the Proposed Development to impact the hydrology and physical characteristics of watercourses, water quality, water resources, GWDTEs and geology. The assessment has identified that the proposed routing of the access track and location of the proposed construction compounds and bellmouths would require only one watercourse crossing (of a watercourse recorded by OS 1:50,000 scale mapping). The Proposed Development intersects with only one area of potential GWDTE identified through NVC surveying. This area has been assessed not to be groundwater dependent, based on topographical and hydrogeological characteristics of the GWDTE.

A small area of Class 3 peat is crossed by the proposed permanent access track over a length of approximately 320 m. A small area of Class 1 peat is mapped by NatureScot running adjacent to the proposed access track to be upgraded (south). While this area is in connection with a wider area of blanket bog (underlain by peat) which is offsite to the east, habitats mapped onsite are consistent with non-peatland areas that underlie the majority of the land to the west.

Based on the implementation of a CEMP and the employment of good construction working practice, no residual adverse effects are anticipated with regards to hydrology, hydrogeology and geology.

7 LANDSCAPE AND VISUAL

7.1 Introduction

This chapter reports on the likely effects with respect to landscape and visual receptors associated with the construction and operation of the Proposed Development, as described in **Chapter 2: Proposed Development**. Where appropriate, it also provides details of control measures. This chapter (and its associated Figures and Appendices) is not intended to be read as a standalone assessment, and reference should be made to the introductory chapters of this EA.

The specific objectives of the chapter are to:

- Describe the landscape and visual baseline;
- Identify the likely direct and indirect impacts on landscape and visual receptors;
- Describe any mitigation or control measures proposed to address those likely impacts; and
- Assess the residual effects remaining following the implementation of mitigation.

The chapter is supported by the following figures:

- **Figure 7.1: Landscape Study Area**
- **Figure 7.2: Zone of Theoretical Visibility**
- **Figure 7.3: Topography**
- **Figure 7.4: Landscape Character Types**
- **Figure 7.5: Landscape Designations and Classifications**
- **Figure 7.6: Viewpoint Locations and Visual Receptors**
- **Figure 7.7: Viewpoint Photography**

The chapter is supported by the following appendix:

- **Appendix 7.1: Landscape and Visual Appraisal Methodology**

7.2 Methodology

Information Sources

The appraisal has been informed and illustrated by a range of tools. The following information sources and data sets have been utilised during preliminary desktop research, and to inform field work:

- Ordnance Survey (OS) mapping (1:50,000).
- Details of NatureScot Landscape Character Types⁸⁵.
- Details of Landscape Designations and Classifications⁸⁶.
- Commercially available aerial photography.
- Computer generated Zone of Theoretical Visibility mapping (ZTV) using OS Terrain 5 DTM on a 5 m grid model.
- Available photography of the Site and adjoining Study Area captured during field reconnaissance.

The ZTV mapping was prepared to assist in the identification of areas where there is potential for visibility of the Proposed Development, refer to **Figure 7.2: Zone of Theoretical Visibility**. As they are based on OS digital terrain data supplied as gridded height data at 5 m interval resolution, the resulting outputs are indicative and have to be confirmed or refined by field work. This data also does not reflect in this case the screening effect of vegetation or built structures and as such the geographical spread of potential visibility represents a 'worst case'

⁸⁵ NatureScot Scottish Landscape Character Types. Available online: <https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/scottish-landscape-character-types-map-and-descriptions>. [Accessed March 2025]

⁸⁶ NatureScot Landscape Designations and Classifications. Available online: <https://www.nature.scot/search?query=Landscape+Designations+and+Designations> [Accessed March 2025]

scenario' and is more extensive than would be experienced on the ground. It should also be noted that the ZTV identifies theoretical visibility and does not reflect the influence of weather or varying light conditions, or distance.

Guidance

The following Landscape and Visual Appraisal (LVA) has been prepared with cognisance of the following guidance:

- Landscape Institute and Institute of Environmental Management and Assessment's 'Guidance for Landscape and Visual Impact Assessment – Third Edition' (GLVIA3) (2013)⁸⁷;
- Landscape Institute (2024) GLVIA Statement of Clarification LITGN-2024-01⁸⁸;
- Landscape Institute (2021), Technical Guidance Note 02/21 'Assessing landscape value outside national designations'⁸⁹; and
- Landscape Institute's 'Technical Guidance Note 06/2019: Visual Representation of Development Proposals' (2019)⁹⁰.

Limitations and Assumptions

Commercially obtained data used in the preparation of the LVA has a number of inherent tolerances and limitations. Where this is relevant to the findings of the assessment it is stated.

Study Area

The Study Area for the LVA comprises an area equivalent to 6 km radius from the boundary of the Proposed Development as shown in **Figure 7.1: Site Location and 6 km Radius Study Area**. This Study Area is considered proportionate and adequate to identify all non-negligible effects on landscape and visual receptors and was established based upon desktop research.

Site Visits

The Site and Study Area (including assessment viewpoint locations) were visited in May and June 2025 to verify the baseline conditions and the potential visibility of the Proposed Development. Both site visits were conducted during periods of very good to excellent visibility.

Legislation and Planning Policy and Guidance

The scope and approach adopted considers national and regional planning policies and legislation relevant to landscape and visual matters. A more detailed assessment of policy is provided in the Planning Statement that accompanies the planning application for the Proposed Development.

National Planning Framework 4 (2023)⁹¹, Adopted Policy.

This includes elements such as the energy policy stating that *“development proposals for all forms of renewable, low-carbon and zero emissions technologies will be supported. Which includes enabling works, such as grid transmission and distribution infrastructure and proposals including co-location of these technologies.”*

In addition, *“project design and mitigation will demonstrate how the following impacts address significant landscape and visual impacts, recognising that such impacts are to be expected for some forms of renewable energy. Where impacts are localised and/or appropriate design mitigation has been applied, they will generally*

⁸⁷ Landscape Institute. and IEMA, 2013. Guidelines for Landscape and Environmental Impact Assessment. Hoboken: Taylor and Francis.

⁸⁸ The Landscape Institute LITGN-2024-01 (2024) GLVIA – Statement of Clarification. Available online at: <https://www.landscapeinstitute.org/technical-resource/notes-and-clarifications-on-aspects-of-the-3rd-edition-guidelines-on-landscape-and-visual-impact-assessment-glvia3-litgn-2024-01/> [Accessed September 2025]

⁸⁹ Landscape Institute (2021), Technical Guidance Note 02/21 Assessing Value Outside National Designations'. Available online at: <https://landscapewpstorage01.blob.core.windows.net/www-landscapeinstitute-org/2021/05/tgn-02-21-assessing-landscape-value-outside-national-designations.pdf> [Accessed September 2025]

⁹⁰ Landscape Institute, 2019. Visual Representation of Development Proposals. 1st ed.

⁹¹ Scottish Government (2023) National Planning Framework, available at: <https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2023/02/national-planning-framework-4/documents/national-planning-framework-4-revised-draft/national-planning-framework-4-revised-draft/govscot%3Adocument/national-planning-framework-4.pdf>. [Accessed March 2025]

be considered to be acceptable.” Also “impacts on road traffic and on adjacent trunk roads, including during construction, proposals for the decommissioning of developments, including ancillary infrastructure, and site restoration.”

Also, in regard to Natural Places *“development proposals which by virtue of type, location or scale will have an unacceptable impact on the natural environment, will not be supported.”*

Alongside this, the Infrastructure First Policy 18 Plans which state *“development proposals which provide (or contribute to) infrastructure in line with that identified as necessary in LDPs and their delivery programmes will be supported.”*

Perth and Kinross Local Development Plan 2 (2019)⁹², Adopted Policy.

According to the Low Carbon Places, Energy Heat and Electricity Policy *“increasing the amount of energy from renewable and low carbon technologies will help to make sure that Scotland has a secure energy supply, reduce greenhouse gas emissions to slow down the effects of climate change, help improve air quality and stimulate investment in new jobs and businesses.”*

Some of the key objectives include:

- *“Protect and enhance the character, diversity and special qualities of the area’s landscapes to ensure that new development does not exceed the capacity of the landscape in which it lies.” and*
- *“Promote the sustainable development of electricity generation from a diverse range of renewable and low-carbon energy technologies, including the expansion/repowering of renewable and low-carbon energy generation capacity and heat networks, in accordance with national objectives and targets.”*

Policy 33a: Renewable and Low-Carbon Energy Includes *“following factors being taken into account: The individual or cumulative effects of developments and associated transport/electricity infrastructure on:*

- *biodiversity and natural heritage;*
- *woodland and forestry;*
- *landscape character, Local Landscape Areas, Wild Land Areas and National Scenic Areas;*
- *visual amenity;*
- *the historic environment and cultural heritage;*
- *hydrology, the water environment and flood risk;*
- *air quality, including any effects on greenhouse gas emissions and impacts from construction;*
- *aviation, defence and seismological recording;*
- *telecommunications and broadcasting infrastructure;*
- *residential amenity of the surrounding area (including noise and shadow flicker); and*
- *hazardous installations (including pipelines).”*

“The contribution of the proposed development towards meeting carbon reduction and renewable energy generation targets.”

“The transport implications, and in particular the scale and nature of traffic likely to be generated, and its implications for site access, road capacity, road safety, and the environment generally. (Applications with impacts on the Strategic Trunk Road Network will be subject to discussion and agreement with Transport Scotland).”

Also, according to Policy 33B: *“As a result of the potential to make the best use of existing sites and through the continued use of established infrastructure such as grid connections, proposals for the repowering (including life extensions) of existing renewable and low-carbon energy facilities will be encouraged, subject to detailed*

⁹² Perth & Kinross Council (2019) Perth and Kinross Local Development Plan 2, available at: https://www.pkc.gov.uk/media/45242/Adopted-Local-Development-Plan-2019/pdf/LDP_2_2019_Adopted_Interactive.pdf?m=1576667143577 [Accessed March 2025]

assessment against the same factors and material considerations as apply to proposals for new facilities. The current use of the site will be a material consideration in any such proposals.”

Assessment Methodology

The assessment approach used in this appraisal broadly follows the principles established in GLVIA3⁹³ for standard EIA methodology. An Environmental Appraisal was deemed appropriate to the scale of landscape and visual effects predicted for the Proposed Development, as it was noted that the Proposed Development is unlikely to have long-term notable effects. Refer to **Appendix 7.1: Landscape and Visual Appraisal Methodology**.

Effects Scoped In/Out

Based on the desk-based study and subsequent site visit, a series of receptors and issues were scoped in or out of further assessment. These receptors are summarised in **Table 7.1** below, along with justification for their inclusion or omission.

Table 7.1 Receptors Scoped In or Out of the LVA

Receptor/Issue	Scoped In or Out	Justification for Inclusion or Omission
Landscape Receptors		
Landscape Fabric/Context	Scoped Out	There would be limited potential for the landscape fabric or context to be meaningfully changed by the Proposed Development due to its temporary and reversible nature. Reinstatement works would be undertaken to restore the Site to a similar status to the baseline following the removal of all temporary elements.
Landscape Character Type (LCT) 371 Mid Upland Glens	Scoped Out	The LCT has minimal visibility of the Site and the Proposed Development has limited potential to influence or have indirect effects on its key characteristics.
LCT 377 Transitional Moorland and Forest	Scoped Out	The LCT has minimal visibility of the Site and the Proposed Development has limited potential to influence or have indirect effects on its key characteristics.
LCT 129 Broad Glen with Estates	Scoped Out	The LCT has minimal visibility of the Site and the Proposed Development has limited potential to influence or have indirect effects on its key characteristics.
LCT 375: Lower Upland Glens with Lochs	Scoped In	This is the main 'host' LCT for the Proposed Development and has potential for direct and indirect effects.
LCT 376: Summits and Plateau - Tayside	Scoped In	The Proposed Development extends into this LCT, which adjoins the main host LCT and therefore has potential for both direct and indirect effects.
National Scenic Area (NSA) – Loch Tummel	Scoped Out	The NSA Loch Tummel adjoins the B846 to the east of the Proposed Development, however there is limited potential for its Special Landscape Qualities to be influenced by construction or operational activities. Viewpoints 3: Summit of Meall Tairneachan (4.1 km, northwest) and 10: Tressait by Loch Tummel to Loch Bhac and Glen Garry are both located within this NSA and no residual effects have been identified on either the landscape or visual receptors at the viewpoint locations due to intervening landform and/or vegetation.

⁹³ Landscape Institute and Institute of Environmental Management and Assessment's 'Guidance for Landscape and Visual Impact Assessment – Third Edition' (GLVIA3) (2013)

Receptor/Issue	Scoped In or Out	Justification for Inclusion or Omission
		Some limited effects have been identified at viewpoint 1: Shiehallion Summit (5.1 km, northeast) within NSA: Loch Rannoch and Glen Lyon. The viewpoint assessment demonstrates that effects at this viewpoint are likely to be temporary and short term and primarily relate to the construction phase with Minor adverse residual effects on landscape character and Moderate/Minor adverse residual effects on visual receptors reducing to no residual effects after reinstatement works during the operational phase. Any effects would be localised in extent and would have limited potential to influence the Special Landscape Qualities of the NSA due to the low impact, and temporary nature of the works.
NSA Loch Rannoch and Glen Lyon	Scoped Out	The NSA adjoins the Proposed Development however has limited potential for the special landscape qualities to be influenced by construction or operational activities.
Strath Tay Local Landscape Area (LLA)	Scoped Out	Limited potential for an influence to be exerted due to distance (approximately 3.5 km southeast from the closest point of the Site boundary) and shows limited inter-visibility.
Visual Receptors		
Viewpoint 1, 4, 5, 6, 7 and 8	Scoped In	It was confirmed during fieldwork that there would be potential for landscape and visual residual effects at these viewpoint locations.
Viewpoints 2, 3, 9 and 10	Scoped Out Photography and viewpoint description included for landscape and visual context only.	Upon review, it was determined that there was limited visibility of the Site from these viewpoints and no potential for residual effects on the baseline landscape and visual context.

Consultation

Agreement of the location of the proposed viewpoint (VP) selection (VPs 1 to 8) was sought with the PKC planning department by letter on 04 December 2023. A response was not received. Two additional viewpoints (VPs 9 and 10) were added to the appraisal following further desktop research.

7.3 Baseline

7.3.1 Landscape Baseline

Landscape Context

The landscape comprises of the narrow Loch Tummel to the north surrounded by semi-deciduous woodland, Tummel village and a holiday park to the west and two water powered power stations located on both the northwest and southwest sides of the Loch. The Loch is traversed by roads: the northern side is flanked by the B8019, the western edge by the B846 and the smaller unclassified C452 extends along the southern side which reveal long-distance views along and across the Loch to the surrounding countryside.

The wide valley bottom is enclosed by steep topography to the north and south. The area to the south and west of the Loch is particularly mountainous with a series of exposed rocky summits. The summit of Schiehallion (1083 m AOD) dominates views.

The main bodies of water are Loch Tummel to the north and Loch Kinardochy to the south. There are a series of burns and rivers which connect with these water bodies. Both Lochs are a source of tourism interest within the landscape.

Existing powerlines from the substations near both Lochs are a noticeable component of the landscape, passing over the lower ground of the mountains from north to south.

Landscape Character Types

LCTs are identified in **Figure 7.4: Landscape Character Types within 6 km Radius Study Area**. The following LCTs are host to the Proposed Development and have potential for direct effects.

LCT 375 - Lower Upland Glens with Lochs⁹⁴

This character area is confined to Loch Tummel in Tayside. This is the main 'host' LCT for the Proposed Development.

Key characteristics include the following:

- The geological and physical structure has a large loch in a level floodplain, within a broad valley. The valley sides are shallower than those in the Mid Upland Glens.
- There is a combination of lowland and upland attributes. Rich woodland cover, comprising of semi-natural ancient woodland, conifer forests, farm woodland and field boundary trees, and estate woodland, enclose the loch and provide a transition to upper slopes. Rough moorland and rocky crags are visible on upper valley slopes.
- There are narrow bands of farmsteads, pastures and hedgerow trees on the lower valley slopes, above the loch.
- The B8019 road extends north of Loch Tummel, and the B846 is situated to the west and joins the B8019 at Tummel Bridge. These routes are busy in summer, with more minor roads to the south. The area is well settled with isolated houses, villages and large estates. There are recreation and tourism facilities, such as Queen's View visitor centre car parks for forest walks, log cabins and caravan parks.
- Existing overhead power lines run along the northern shore of Loch Tummel, back clothed by rising valley slopes. These are most visible when passing through woodland due to cleared vegetation beneath.
- There are cultural and historic associations, including the Queen's View viewing platform on the northern side of Loch Tummel. There are long distance views along the loch to the mountains in the west from Queen's View viewing platform. This was a favourite spot of Queen Victoria on her journey to Balmoral.

The value is considered to be high as it is overlapped by the Loch Tummel NSA and possesses landscape quality and condition, with scenic quality and conservational interests, and many recreational activities and the cultural association of the Queen's View. The susceptibility to this type of development is low as similar features are present in the surrounding landscape, and it is partially temporary and fully reversibility. The sensitivity is therefore considered to be **Medium**.

LCT 376 – Summits and Plateau – Tayside⁹⁵

The Proposed Development extends into this LCT but has limited potential to exert an effect. This LCT includes the more remote upland parts of western and northern Perth and Kinross and Angus Council areas. It is an extensive LCT present in 13 different areas. In the section of the LCT within the Study Area it borders the Cairngorms and Loch Lomond and the Trossachs National Parks.

Key characteristics include the following:

⁹⁴ Nature Scot, LCT 375 - Lower Upland Glens with Loch (2019), available at: <https://www.nature.scot/sites/default/files/LCA/LCT%20372%20-%20Lower%20Upland%20Glens%20-%20final%20pdf.pdf> [Accessed March 2026]

⁹⁵ Nature Scot, LCT 376 - Summits and Plateaux – Tayside, (2019), available at: <https://www.nature.scot/sites/default/files/LCA/LCT%20376%20-%20Summits%20and%20Plateaux%20-%20Tayside%20-%20final%20pdf.pdf> [Accessed March 2026]

- There are areas of upland incised by and separating the principal Tayside glens. Western areas comprising distinct summits and ranges, separated by fault line lochs; the hills are sharply defined and often craggy. The Highlands in the east comprise the southern extents of a more extensive area of upland with spurs extending southwards; the hills are more rounded than those to the west and rock outcrops are fewer.
- Large scale vegetation patterns closely reflect altitude and exposure, and include heather, grassland, blanket bog and arctic alpine plant communities. Most of the area is managed as open moorland, with characteristic muirburn patterns. A few patches of semi-natural broadleaf woodland on slopes up to about 600 metres.
- There is little or no settlement, with minor tracks used for sporting, forestry and some recreation access, as well as new more visible tracks for access to wind farms, pylon construction and forestry.
- Remote and wild character.
- Important scenic and dramatic backdrop to lower glens and straths with panoramic views both into and out of adjacent mountainous areas, such as the Cairngorm Massif, and lower lying areas like Strathmore.

The value of the LCT is considered to be high as it is overlapped by both Loch Tummel and Loch Rannoch and Glen Lyon NSAs. The landscape condition is high and has rarity as other than some sections of managed woodland and remote villages the area retains a remote and wild character. This remoteness leads to high recreation value particularly with several hills and mountains in the area. The susceptibility to this type of development is low due to its limited height and lack of visibility, mostly temporary nature and reversibility. Overall, sensitivity is considered to be **Medium**.

Landscape Designations and Classifications

Landscape designations and classifications within the Study Area are presented on **Figure 7.5: Landscape Designations and Classifications**.

National Scenic Areas

There are two National Scenic Areas (NSA) located within the Study Area:

- Loch Tummel NSA (approximately 9,013 ha) adjoins the B846 to the east of the Proposed Development.
- Loch Rannoch and Glen Lyon NSA (approximately 48,625 ha) is situated 1.5 km east to southeast of the Proposed Development.

Due to the Proposed Developments lack of influence on the special qualities of these NSAs they are not considered further within this assessment. There are no other landscape designations or classifications of relevance (i.e., scoped in) to this appraisal within the Study Area.

7.3.2 Visual Baseline

Visual receptor locations are presented in **Figure 7.6: Viewpoint Locations and Visual Receptors**. Visual susceptibility is related to, *“...the occupation or activity of people experiencing the view at a particular location, and the extent to which their attention or interest may therefore be focused on the views and the visual amenity they experience at particular locations”*⁹⁶.

Settlements

There are a series of clusters of residential properties throughout the Study Area primarily associated with farmsteads.

Tummel Bridge is the only village with the potential to be impacted by the Proposed Development and is located approximately 300m, north/northwest of the Site. Tummel Bridge is made up of a series of semi-detached, terraced and detached houses south of the River Tummel and a holiday park to the north.

⁹⁶ Landscape Institute and Institute of Environmental Management and Assessment's 'Guidance for Landscape and Visual Impact Assessment – Third Edition' (GLVIA3) (2013) paragraph 6.32 onwards.

In addition, solitary farmsteads and dwellings are dispersed throughout the Study Area.

The visual amenity of residents is of high susceptibility to change, and they would experience and value the views of their surroundings daily. Residents are therefore assessed of **High** sensitivity.

Transport Routes

Transport routes within the Study Area primarily extend along valleys and between large hills and mountainous terrain.

The main routes include:

- B8019 is located approximately 200 m north of the Proposed Development and extends along the northern edge of Loch Tummel and runs to the Pass of Killiecrankie on the A9.
- B846, is located directly adjacent to the Proposed Development in two locations to the north and northwest. The B846 goes from the Aberfeldy in the southeast to Rannoch train station northwest.
- C452 extends along the southern side of Loch Tummel and joins the A9 near Pitlochry.
- Schiehallion Road is approximately 240 m southwest from the Proposed Development. This is a rural road connecting from the B846 in the east and Bunrannoch Place (south Kinloch Rannoch) to the west, providing access to the Schiehallion Munro.
- B847 is located approximately 4.8 km north of the Proposed Development and extends along the northern edge of the Tummel Forest.

As road users within the Study Area are travelling relatively slowly and their journeys extend through scenic countryside with potential for extensive and panoramic views along the Loch Tummel and to the surrounding mountainous scenery, their visual amenity is assessed of up to high value, and medium susceptibility to change resulting in **High/Medium** sensitivity.

Recreational Routes

There are two core paths and a trail of relevance within the Study Area:

- RANN/108 – Schiehallion route to viewpoint below Boulder Field;
- Trail R157 - Meall Tairneachan; and
- DULL/146/147 – Glengoulangie car park to Schiehallion via the B846 at the White Bridge.

The potential for panoramic views of the landscape, particularly from the ascent or top of a summit is one of the primary attractions of hill walking. As these views are from and/or to designated landscapes recognised for scenic qualities, the visual amenity is of high value and high susceptibility and the views available to hill walkers within the Study Area are assessed of **High** sensitivity.

Recreational Locations

Recreational locations within the Study Area include:

- Tay Forest Park, approximately 700 m east of the Proposed Development.
- Braes Foss, approximately 1.9 km west of the Proposed Development.
- Dùn Coillich Community Land, approximately 270 m southwest of the Proposed Development.
- Tomphuil Lime-Kiln, approximately 1.5 km southeast of the Proposed Development.

As views from a visitor attraction are part of the visitor experience, they are assessed of high value and high susceptibility to change, resulting in **High** sensitivity.

Water and Leisure Activities

The key accessible Lochs within the Study Area are listed below:

- Loch Kinardochy, approximately 350 m southeast. The loch is primarily used for fishing.
- Loch Tummel, approximately 430 m northeast of the Proposed Development within the Loch Tummel NSA.

People undertaking water and leisure activities such as fishing, swimming and sailing value views of their surroundings as part of the experience. The receptor value and susceptibility to change is assessed as high, and they are accordingly assessed of **High** sensitivity.

Summits

Hills and mountains used by walkers within the Study Area include:

- Creag kynachan (412 m AOD), approximately 1 km west.
- Dun Coillich (572 m AOD), approximately 2 km south.
- Craig Chen (654 m AOD), approximately 4.4 km southeast.
- Schiehallion (1083 m AOD), approximately 4.9 km west.

Hill walkers are primarily interested in summit walks to appreciate the scenic and panoramic views available and are assessed of high value and susceptibility to change, resulting in **High** sensitivity.

Representative Viewpoints

Assessment viewpoint (VP) photography locations, distance and view direction to Site are listed below in **Table 7.2**. The accompanying figures are presented in **Figure 7.6: Viewpoint Locations and Visual Receptors**, with the photography illustrated within **Figure 7.7: Viewpoint Photography**. These viewpoint locations present the baseline landscape and visual context within the 6 km Study Area for the main receptors as previously outlined.

Table 7.2 Assessment Viewpoint Locations

Viewpoint Number and Location	Distance and View Direction	Receptors	Justification for Inclusion
VP 1: Schiehallion Summit	5.3 km, northeast	Landscape: <ul style="list-style-type: none"> • LCT 376: Summits and Plateaux – Tayside • NSA: Loch Rannoch and Glen Lyon Visual: <ul style="list-style-type: none"> • Tourist and recreational receptors (RANN/108) 	Representative of the views of tourists and recreational receptors (hill walkers)
VP 2: B846	1.8 km, northwest	Landscape: <ul style="list-style-type: none"> • LCT 376: Summits and Plateaux – Tayside Visual: <ul style="list-style-type: none"> • Road users, residential and recreational receptors (Core Paths DULL/146 and DULL/147) 	Representative of the visual amenity of hill walkers, residential receptors and road users along the B846
VP 3: Summit of Meall Tairneachan	4.1 km, northwest	Landscape: <ul style="list-style-type: none"> • Local Landscape Area (LLA) Strath Tay • LCT 376: Summits and Plateaux – Tayside Visual:	Representative of the visual amenity of tourists and recreational receptors (hill walkers)

Viewpoint Number and Location	Distance and View Direction	Receptors	Justification for Inclusion
		<ul style="list-style-type: none"> Road users and recreational receptors (Trail R157) 	
VP 4: Tomphubil Lime-kiln	1.6 km, northwest	Landscape: <ul style="list-style-type: none"> LCT 376: Summits and Plateaux – Tayside Visual: <ul style="list-style-type: none"> Tourist, residential and recreational receptors 	Representative of the visual amenity of recreational, residential, road and tourist receptors along the B846 and within the grounds of the Tomphubil Lime-Kiln attraction
VP 5: Tombreck	15 m, northeast	Landscape: <ul style="list-style-type: none"> LCT 375: Lower Upland Glens with Lochs Visual: <ul style="list-style-type: none"> Residential and commercial receptors 	Representative of the visual amenity of residential and commercial receptors associated with Tombreck Farmhouse community enterprise
VP 6: Tummel Bridge	127 m, west	Landscape: <ul style="list-style-type: none"> LCT 375: Lower Upland Glens with Lochs Visual: <ul style="list-style-type: none"> Tourist, residential and recreational receptors 	Representative of the visual amenity of tourists, recreational and residential receptors along the B846 and within the eastern most extent settlement of Tummel Bridge
VP 7: B8019	447 m, southwest	Landscape: <ul style="list-style-type: none"> LCT 375: Lower Upland Glens with Lochs Visual: <ul style="list-style-type: none"> Residents and road users 	Representative of the visual amenity of tourist, residential and road users along the B8019.
VP 8: Creag Kynachan	881 m, northeast	Landscape: <ul style="list-style-type: none"> LCT 371: Mid Upland Glens Visual: <ul style="list-style-type: none"> Hill walkers 	Representative of the visual amenity of tourists and recreational receptors (hill walkers)
VP 9: Tummel Bridge to Aqueduct	560 m, southeast	Landscape: <ul style="list-style-type: none"> LCT 375: Lower Upland Glens with Lochs Visual: <ul style="list-style-type: none"> Residents and road users 	Representative of the visual amenity of tourists, residential receptors and road users

Viewpoint Number and Location	Distance and View Direction	Receptors	Justification for Inclusion
VP 10: Tressait by Loch Tummel to Loch Bhac & Glen Garry	4.4 km, southwest	Landscape: <ul style="list-style-type: none"> NSA Loch Tummel LCT 375: Lower Upland Glens with Lochs Visual: <ul style="list-style-type: none"> Residents and minor road user 	Representative of the visual amenity of hill walkers, residential receptors and road users

7.4 Future Baseline

The Proposed Development would result in temporary and fully reversible change to the landscape and views. The principal changes anticipated in the area relate to the following key considerations:

- Continued promotion and use of the area for recreation and tourism; and
- Continued interest in the development of renewable energy development, including repowering, and extension of existing/ consented energy infrastructure developments, including transmission routes.

The need to provide reliable renewable energy and the drive for 'Net Zero' are strong drivers for change in the landscape. Proposals for renewable energy developments including other transmission routes are highly probable.

7.5 Embedded Mitigation

A number of embedded mitigation/design measures have been identified during the assessment process. As the mitigation of landscape and visual effects has been undertaken through an iterative process of revised route selection, and design modifications to avoid or minimise effects all mitigation is embedded within the final design. As such all effects identified are residual effects.

The Construction and Environmental Management Plan (CEMP) will outline reinstatement measures to remediate any vegetation clearance or disturbance following the construction phase. Refer to **Table 7.4** in **Section 7.7**.

7.6 Appraisal

Construction Phase

The effects associated with the construction phase are mostly temporary, predominantly fully reversible and restricted to the provision of two temporary laydown/construction compounds, temporary and permanent upgrades of access tracks and two bell-mouth turning heads. These elements comprise the facilitation works to complete the separate UGC connection between Errochty substation and Kinardochoy substation.

The most discernible features during the construction phase would be the loss of vegetation to facilitate construction activities and the introduction of the temporary construction compounds. Losses would be minimised and all vegetation to be retained would be protected during construction and operation to BS 5837: Trees in relation to design, demolition and construction.

The construction phase would also result in short term landscape and visual effects from the increased activity associated with construction activities such as the movement of vehicles and plant, and the storage of materials. This would increase the influence of the Proposed Development on both landscape and visual receptors for a brief period.

Operational Phase

Following reinstatement works, the operational effects would be extremely limited. A section of permanent track would remain but vehicular activity would be restricted to intermittent maintenance activity in the operational phase. This would result in a barely noticeable long-term effect as tracks and temporary and short term forestry operations are a baseline feature of the landscape and views.

Viewpoint Assessment

The viewpoint assessment set out in **Table 7.3** below, considers the predicted landscape and visual effects of the construction and operation of the Proposed Development on the baseline context. The scope and methodology used has been informed by published technical guidance.

A total of 10 assessment viewpoints were selected to represent a wide range of landscape and visual receptors within the Study Area. Different distances, direction of view and elevations relative to the proposed Development were chosen to provide an overview 'in the round'. Viewpoint locations include recognised vantage points (summits) within a range of landscape character types and landscape designations, settlement edge locations, and from along popular transport routes.

Viewpoints were chosen at locations where higher visibility was predicted and do not reflect the general visibility of the Proposed Development across the Study Area. This is a low impact development and visibility is anticipated to be limited, and several viewpoints on review had no views to the Proposed Development; these viewpoint descriptions have been included for baseline context only.

Photography was captured and are presented to current best practice guidelines⁹⁷.

⁹⁷ Landscape Institute, (September 2019). Visual Representation of Development Proposals, Technical Guidance Note 06/19, Available at: <https://www.landscapeinstitute.org/> [Accessed May 2025]

Table 7.3 Assessment Viewpoint Appraisal

Viewpoint (Distance and View Direction)	Receptors Present	Assessment
<p>VP 1: Schiehallion Summit (5.3 km, northeast)</p>	<p>Landscape:</p> <ul style="list-style-type: none"> • LCT 376: Summits and Plateaux – Tayside • NSA: Loch Rannoch and Glen Lyon <p>Visual:</p> <p>Tourist and recreational receptors (Core Path RANN/108)</p>	<p>Baseline Description</p> <p>The view is taken from the summit of Schiehallion, looking northeast towards the Site. This view is representative of the visual amenity of Hill walkers summiting Schiehallion.</p> <p>The view is panoramic in scale, and the view is directed across a series of mountain ranges and the Loch Tummel broad valley. Blocks of forestry plantations are visible on the lower slopes with clusters of residential properties along the valley bottom. initially looks out upon the bare rock and heather and grassland atop the path. A line of pylons is discernible and connects with Kinardochoy Substation near Loch Kinardochoy.</p> <p>Due to the nature of the activity, it is likely the view will be experienced from many points along the path, with people stopping and taking in the surrounding scenery before reaching the top.</p> <p>Sensitivity</p> <ul style="list-style-type: none"> • Landscape character: The viewpoint is located within LCT 376, in Loch Rannoch and Glen Lyon NSA, which at this location has high value and a low susceptibility to development of this type. The presence of existing infrastructure and the relatively simple land cover pattern reduce its susceptibility to change of this type. The sensitivity is therefore considered to be Medium. • Visual: The visual amenity of tourists and recreational receptors such as hill walkers at this location is assessed of high value and high susceptibility to change. The sensitivity is therefore considered High. <p>Magnitude of Impact</p> <ul style="list-style-type: none"> • Landscape character: There would be a very limited or imperceptible alteration to one or more key elements/characteristics. The change may be barely discernible, and the magnitude of impact would be Negligible due to partial screening and distance. • Visual: There would be distant and filtered recessive views of construction and fault related maintenance activities through gaps in the intervening landform and woodland. It would represent a barely discernible alteration to key elements of the composition of the view during the construction phase, having a Negligible magnitude of impact upon the view. Overall, during operation there would be minimal activity associated with the Proposed Development, and the magnitude of impact would reduce to None. <p>Residual Effects</p> <ul style="list-style-type: none"> • Landscape character: The Proposed Development would result in up to a Minor adverse temporary and reversible residual effect during the construction phase with No residual effects during operation.

Viewpoint (Distance and View Direction)	Receptors Present	Assessment
<p>VP 2: B846 (1.8 km, northwest)</p>	<ul style="list-style-type: none"> Landscape: LCT 376: Summits and Plateaux – Tayside Visual: Road users, residential and recreational receptors (Core Paths DULL/146 and DULL/147) 	<ul style="list-style-type: none"> Visual: The effects on visual receptors at this viewpoint would be Moderate/Minor adverse temporary and reversible residual effect during the construction phase with No residual effects during operation. <p>Baseline Description</p> <p>The view is directed from the entrance to the Dun Coillich Community Land and the view is representative of the visual amenity of users of the car park, people using the community land or footpaths and road users of the B846. In the foreground of the view is the entrance to Dun Coillich Community Land car park, with deer proof fencing and a 2 m high wooden pedestrian gate to the right. There is scrub growth and occasional groupings of trees located on a ridgeline. To the centre of the view the parking bays can be seen in woodland through the metal entry fence to the carpark. A line of pylons and telegraph poles are dominant vertical features in the view.</p> <p>Sensitivity</p> <ul style="list-style-type: none"> Landscape character: The viewpoint is located within LCT 376 which is overlapped by Loch Tummel and Loch Rannoch and Glen Lyon NSAs and LLA Strath Tay although the viewpoint is located outside of the designation. The wider landscape at the viewpoint location has a high value but a low susceptibility to development of this type as similar features exist in the wider landscape, and the Proposed Development has limited height restricting visibility and is partially short-term and fully reversible. The sensitivity is therefore considered to be Medium. Visual: Residents and people undertaking recreation are assessed of high value and high susceptibility as they have an appreciation of their surroundings. Accordingly, they are assessed of High sensitivity. <p>Magnitude of Impact</p> <ul style="list-style-type: none"> Landscape character: The landform undulations surrounding the car park screen all potential views of the Proposed Development, and there would be no discernible change to the baseline. As the Proposed Development would not be visible from this location, the magnitude of impact on LCT 376 is therefore assessed as None. Visual: As above. <p>Residual Effects</p> <ul style="list-style-type: none"> Landscape character: None – no residual effect. Visual: None – no residual effect.

Viewpoint (Distance and View Direction)	Receptors Present	Assessment
<p>VP 3: Summit of Meall Tairneachan (4.1 km, northwest)</p>	<p>Landscape:</p> <ul style="list-style-type: none"> LCT 376: Summits and Plateaux – Tayside NSA: Loch Tummel Strath Tay LLA. <p>Visual:</p> <ul style="list-style-type: none"> Road users and recreational receptors (Trail R157) 	<p>Baseline Description</p> <p>This view is taken from the summit of Meall Tairneachan and is representative of the visual amenity of hill walkers at this location. The view is directed across a rocky and undulating landform to a backdrop of mountain ranges. Blocks of coniferous forestry are located on the lower slopes with moorland and rocky summits above. The Site is situated along a valley between undulating ridgelines.</p> <p>Sensitivity</p> <ul style="list-style-type: none"> Landscape character: The viewpoint is located within LCT 376 which has a high value as it is located on the edge of the Loch Tummel NSA designation and is located within the Strath Tay LLA. It has a low susceptibility to development of this type as similar features exist in the wider landscape. The Proposed Development has limited height restricting visibility and is partially short-term and fully reversible. The sensitivity is therefore considered to be Medium. Visual: The visual amenity of hill walkers is assessed of high value and high susceptibility as they have an appreciation of their surroundings. Accordingly, they are assessed of High sensitivity. <p>Magnitude of Impact</p> <ul style="list-style-type: none"> Landscape character: The view is mostly screened by intervening landform. The temporary construction compounds and associated features, including temporary and permanent access tracks, would be hard to discern and there is no change to the baseline that includes the Proposed Development. This means the Site would have no or very limited visibility and the magnitude of impact is therefore assessed as None. Visual: As above. <p>Residual Effects</p> <ul style="list-style-type: none"> Landscape character: None – no residual effect. Visual: None – no residual effect.
<p>VP 4: Tomphubil Lime-kiln (1.6 km, northwest)</p>	<p>Landscape:</p> <ul style="list-style-type: none"> LCT 376: Summits and Plateaux – Tayside <p>Visual:</p> <ul style="list-style-type: none"> Tourist, 	<p>Baseline Description</p> <p>The view was taken from Tomphubil Lime-Kiln. This view is representative of the visual amenity of people visiting the heritage asset and lookout point, and users of the car park. The view looks northwest towards the Site across an area of moorland and an area of felled and replanted forestry to a block of coniferous forestry. A line of pylons extends along the edge of forestry and then transects the block rising up a ridgeline undulation to Kinardochoy Substation which is just glimpsed emerging above landform to the right of the forestry. The access to the car park is</p>

Viewpoint (Distance and View Direction)	Receptors Present	Assessment
	<p>residential and recreational receptors</p>	<p>visible extending from the B846 towards Loch Kinardochy. A series of distant mountain ridges form a backdrop to the view.</p> <p>Sensitivity</p> <ul style="list-style-type: none"> Landscape: The viewpoint is located within LCT 376 which is overlapped by Loch Tummel and Loch Rannoch and Glen Lyon NSAs and LLA Strath Tay, although the viewpoint is located outside of the designation. The wider landscape at the viewpoint location has a high value but a low susceptibility to development of this type as similar features exist in the wider landscape, and the Proposed Development has limited height restricting visibility and is partially short-term and fully reversible. The sensitivity is therefore considered to be Medium. Visual: The visual amenity of residents, tourists and hill walkers is assessed of high value and high susceptibility to change as they have an appreciation of their surroundings. Accordingly, they are assessed of High sensitivity. <p>Magnitude of Impact</p> <ul style="list-style-type: none"> Landscape character: There is no discernible change to the baseline due to intervening landform and forestry screening visibility. Some loss of vegetation may be discernible during construction, however, this would represent an expected and small scale change within an area characterised by commercial forestry operations. The magnitude of impact on the LCT during construction is therefore assessed as Negligible reducing to None following reinstatement and during operation. Visual: As above. <p>Residual Effects</p> <ul style="list-style-type: none"> Landscape character: The Proposed Development would result in up to a Minor adverse temporary and reversible residual effect during the construction phase with No residual effects during operation. Visual: The effects on visual receptors at this viewpoint would be Moderate/Minor adverse temporary and reversible residual effect during the construction phase with No residual effects during operation.
<p>VP 5: Tombreck (15 m, northeast)</p>	<p>Landscape:</p> <ul style="list-style-type: none"> LCT 375: Lower Upland Glens with Lochs <p>Visual:</p>	<p>Baseline Description</p> <p>The view is directed from a track leading to Tombreck house. Pylons extend across the view crossing Allt Kynachan and the valley bottom near Tombreck and along the southern edge of Loch Tummel. The landform in the foreground is covered with moorland with some exposed rock emerging above the heather and bracken. Creag Kynachan and Craigna Seithe are visible to the left of the view and Creag nan Caisan, Meall Dubh and Meall Reamhar form a backdrop to the middle and right of the view with large blocks of commercial forestry on the lower slopes.</p>

Viewpoint (Distance and View Direction)	Receptors Present	Assessment
	<ul style="list-style-type: none"> Residential receptors 	<p>Sensitivity</p> <ul style="list-style-type: none"> Landscape character: The viewpoint is located within LCT 375 which is overlapped by Loch Tummel NSA although the viewpoint is located outside of the designation. The wider landscape at the viewpoint location has a high value but a low susceptibility to development of this type as similar features exist in the wider landscape, and the Proposed Development has limited height restricting visibility and is partially short-term and fully reversible. The sensitivity is therefore considered to be Medium. Visual: The visual amenity of residents is assessed of high value and high susceptibility to change as they have an appreciation of their surroundings and are assessed of High sensitivity. <p>Magnitude of Impact</p> <ul style="list-style-type: none"> Landscape character: The Proposed Development would represent a modest alteration to key elements, features or characteristics of the landscape character and/or composition of views of the current baseline that includes the Proposed Development. There would be a Slight magnitude of impact during the construction phase and No magnitude of impact following reinstatement and during operation. Visual: A partially temporary and permanent access track would be visible connecting into the existing track in the foreground. It is likely there would be increased vehicular movement along the track, consisting of lorries, vans and plant machinery during construction. Vehicular movements would reduce during operation and would relate to maintenance visits. Due to the close proximity of the Proposed Development and limited screening of vehicular movement within the foreground, it is considered that the Proposed Development would represent a modest and temporary change to view composition with a Slight magnitude of impact during the construction phase and Negligible magnitude of impact following reinstatement and during operation. <p>Residual Effects</p> <ul style="list-style-type: none"> Landscape character: Up to Moderate/Minor adverse, temporary and reversible residual effect during construction with No residual effects during operation. Visual: Up to Moderate adverse, temporary and reversible residual effect during construction with Moderate/Minor residual effects following reinstatement and during operation.
VP 6: Tummel Bridge (127 m, west)	<p>Landscape:</p> <ul style="list-style-type: none"> LCT 375: Lower Upland Glens with Lochs 	<p>Baseline Description</p> <p>The view is directed from the turn off to Kynachan Hall adjacent to Errochty substation. It is representative of the potential views of residents, and users of the road and village hall. The view looks southwest towards the Site. The view looks over the B846 and through a belt of deciduous trees/hedgerows to the ridgeline of Craig Kynachan with</p>

Viewpoint (Distance and View Direction)	Receptors Present	Assessment
	<p>Visual:</p> <ul style="list-style-type: none"> • Tourist, residential and recreational receptors 	<p>small groupings of trees and regenerating scrub on the slopes. A line of telegraph poles crosses the view in the foreground with two intersecting lines of pylons dominating the view, partially backclothed by landform.</p> <p>Sensitivity</p> <ul style="list-style-type: none"> • Landscape character: The viewpoint is located within LCT 375, which is overlapped by Loch Tummel NSA, although the viewpoint is located outside of the designation. The wider landscape at the viewpoint location has a high value but a low susceptibility to development of this type as similar features exist in the wider landscape, and the Proposed Development has limited height restricting visibility and is partially short-term and fully reversible. The sensitivity is therefore considered to be Medium. • Visual: The visual amenity of residents, tourists and people undertaking recreation is assessed of high value and high susceptibility to change as they have an appreciation of their surroundings, and they are assessed of High sensitivity. <p>Magnitude of Impact</p> <ul style="list-style-type: none"> • Landscape Character: To the left of the view there may be a reduction in woodland where the temporary construction compound is to be erected, any losses would be minimised and trees to be retained would be protected appropriately during construction and operational activities. The Proposed Development would represent a barely discernible alteration to key elements, features or characteristics of the landscape character of the current baseline. The underlying landscape character would be essentially unchanged from the baseline context. The magnitude of impact is considered to be Negligible during the construction phase with No magnitude of change during operation. • Visual: There is some potential for glimpsed and filtered views through gaps in vegetation of the temporary bellmouth entrance, and traffic movement and other construction activities. Greater visibility would be available during the late autumn to winter months, although some filtering would remain. The Proposed Development would represent a barely discernible alteration to key elements, features or characteristics of the composition of views. The underlying landscape character or view composition would be essentially unchanged from the baseline context. The magnitude of impact is considered to be up to Negligible during the construction phase with No magnitude of change during operation. <p>Residual Effects</p> <ul style="list-style-type: none"> • Landscape character: The Proposed Development would result in up to a Minor adverse temporary and reversible residual effect during the construction phase with No residual effects following reinstatement and during operation.

Viewpoint (Distance and View Direction)	Receptors Present	Assessment
		<ul style="list-style-type: none"> Visual: Moderate/Minor adverse, temporary and reversible residual effect during the construction phase with No residual effects following reinstatement and during operation.
VP 7: B8019 (447 m, southwest)	<p>Landscape:</p> <ul style="list-style-type: none"> LCT 375: Lower Upland Glens with Lochs <p>Visual:</p> <ul style="list-style-type: none"> Residents and road users 	<p>Baseline Description</p> <p>The view is directed from near the B8019 across the River Tummel. It is a vegetated setting but there is a view across a lower section of trees to several lines of pylons connecting into the Tummel Bridge Power Station and substations and a backdrop of the Creag Kynachan ridgeline. There are glimpsed views of the Tummel Bridge caravan park and Errochety Substation and power station available through thinner sections of woodland.</p> <p>Sensitivity</p> <ul style="list-style-type: none"> Landscape character: The viewpoint is located within LCT 375 which is overlapped by Loch Tummel NSA although the viewpoint is located outside of the designation. The wider landscape at the viewpoint location has a high value but a low susceptibility to development of this type as similar features exist in the wider landscape, and the Proposed Development has limited height restricting visibility and is partially short-term and fully reversible. The sensitivity is therefore considered to be Medium. Visual: The view is representative of the visual amenity of road users and residential receptors. The visual amenity of residents is assessed of high value and high susceptibility to change as they have an appreciation of their surroundings. Accordingly, this viewpoint is assessed of up to High sensitivity as road users would have slightly lower sensitivity. <p>Magnitude of Impact</p> <ul style="list-style-type: none"> Landscape character: The Proposed Development would represent a barely discernible alteration to key elements, features or characteristics of the landscape character and/or composition of views of the current baseline that includes the Proposed Development. The underlying landscape character or view composition would be essentially unchanged from the baseline context. The magnitude of impact is considered to be Negligible during the construction phase with No magnitude of change during operation. Visual: Glimpses of construction traffic and plant machinery would be possible particularly in autumn/winter although views would be extensively filtered. All other elements will be screened by intervening deciduous and evergreen tree planting. The magnitude of impact is considered Negligible during the construction phase with No magnitude of change during operation. <p>Residual Effects</p> <ul style="list-style-type: none"> Landscape character: Up to Minor adverse, temporary and reversible residual effect during the construction phase with No residual effects following reinstatement activities and during operation.

Viewpoint (Distance and View Direction)	Receptors Present	Assessment
		<ul style="list-style-type: none"> Visual: Up to Moderate/Minor adverse, temporary and reversible residual effect during the construction phase with No residual effects following reinstatement activities and during operation.
VP 8: Creag Kynachan (881 m, northeast)	Landscape: <ul style="list-style-type: none"> LCT 371: Mid Upland Glens Visual: <ul style="list-style-type: none"> Hill walkers 	<p>Baseline Description</p> <p>The view was taken from the summit of Creag Kynachan and looks northeast towards the Site. It is a panoramic view directed along and across Loch Tummel to several mountain ranges in the distance. Clusters of houses are visible at the water's edge surrounded by large blocks of coniferous forestry. Two lines of pylons cross the foreground and extend to the Tummel Bridge Power Station and Errochty substation. There are glimpsed views of the Tummel Bridge caravan park and Errochty substation and power station within the woodland. An existing access track is visible ascending the slope.</p> <p>Sensitivity</p> <ul style="list-style-type: none"> Landscape character: The viewpoint located within LCT 371 and the value is considered to be Medium as although the area is undesignated it has some scenic qualities and is located on the edge of the NSA designation. Susceptibility to the type of development proposed is low as similar features are present in the wider landscape, and it is partially short-term and fully reversible. It is therefore considered of Medium/Low sensitivity. Visual: The visual amenity of recreational receptors such as hill walkers at this location is assessed of high value and high susceptibility to change. The sensitivity is therefore considered High. <p>Magnitude of Impact</p> <ul style="list-style-type: none"> Landscape character: To the left of the view a section of vegetation may need to be removed to facilitate the construction of the temporary construction compounds, bell mouth, and access track upgrades. The track would follow a similar alignment to the existing track. The Proposed Development would represent a modest alteration to key elements, features or characteristics of the landscape character of the current baseline. The magnitude of impact is Slight during the construction phase reducing to None following reinstatement and during operation. Visual: The construction compound and all associated activities and material within it would be fully visible from this viewpoint location. The permanent access track would have limited screening from this viewpoint location and would extend along a large section of the view. Construction traffic and activities would be visible where vehicles are not commonly seen. Vehicle movements would reduce during operation and would relate to maintenance visits and fault repairs which would be infrequent in nature. The only permanent change relates to the track which follows a similar alignment to the existing track. The baseline

Viewpoint (Distance and View Direction)	Receptors Present	Assessment
		<p>view composition would be largely unchanged, and the magnitude of impact is considered up to Slight during the construction phase reducing to None during operation.</p> <p>Residual Effects</p> <ul style="list-style-type: none"> Landscape character: Up to Minor adverse, and reversible residual effects during the construction phase with No residual effects following reinstatement activities and during operation. Visual: Up to Moderate adverse and reversible residual effect during the construction phase with No residual effects following reinstatement activities and during operation.
<p>VP 9: Tummel Bridge to Aqueduct (560 m, southeast)</p>	<p>Landscape:</p> <ul style="list-style-type: none"> LCT 375: Lower Upland Glens with Lochs <p>Visual:</p> <ul style="list-style-type: none"> Residents and road users 	<p>Baseline Description</p> <p>The view is taken from the B846 adjacent to Tummel Bridge footpath bridge. It represents the views available to nearby residents, tourists and people undertaking recreation and road users at this location.</p> <p>The view is directed southeast along River Tummel towards the Site. The banks of the river are very wooded, and a pylon tower is visible emerging above the intervening woodland, backclothed by a series of mountains.</p> <p>Sensitivity</p> <ul style="list-style-type: none"> Landscape character: The viewpoint is located within LCT 375, which is overlapped by Loch Tummel NSA, although the viewpoint is located outside of the designation. The wider landscape at the viewpoint location has a high value but a low susceptibility to development of this type as similar features exist in the wider landscape, and the Proposed Development has limited height restricting visibility and is partially short-term and fully reversible. The sensitivity is therefore considered to be Medium. Visual: The view is representative of the visual amenity of road users and residential receptors. The visual amenity of residents is assessed of high value and high susceptibility to change as they have an appreciation of their surroundings. Accordingly, this viewpoint is assessed of up to High sensitivity. <p>Magnitude of Impact</p> <ul style="list-style-type: none"> Landscape character: There would be no discernible change to the baseline as intervening vegetation would screen views to the Proposed Development. Visual: As above. <p>Residual Effects</p> <ul style="list-style-type: none"> Landscape Character: None – no residual effect. Visual: None – no residual effect.

Viewpoint (Distance and View Direction)	Receptors Present	Assessment
<p>VP 10: Tressait by Loch Tummel to Loch Bhac & Glen Garry (4.4 km, southwest)</p>	<p>Landscape:</p> <ul style="list-style-type: none"> • NSA Loch Tummel • LCT 375: Lower Upland Glens with Lochs <p>Visual:</p> <ul style="list-style-type: none"> • Residents and minor road user 	<p>Baseline Description</p> <p>The view is taken from a track near to Tomintianda, looking southwest towards the Site. It is representative of the visual amenity of residents, and walkers within the local area. The view is directed across a linear woodland belt to a series of small fields enclosed by post and wire fencing. A farmstead and its access track are visible in the foreground with a ridge covered by deciduous woodland beyond. A line of telegraph poles ascends the ridgeline. The topography slopes down to the left of the view to Loch Tummel's edge and the summit of Creag Kynachan forms a backdrop to the view.</p> <p>Sensitivity</p> <ul style="list-style-type: none"> • Landscape character: The landscape has a high value as it is located within the Loch Tummel NSA designation and has scenic qualities. It has a low susceptibility to development of this type as similar features exist in the wider landscape, and the Proposed Development is of limited height restricting visibility and is partially short-term and fully reversible. The sensitivity is therefore considered to be Medium. • Visual: The visual amenity of tourists and recreational receptors such as hill walkers at this location is assessed of high value and high susceptibility to change. The sensitivity is therefore considered High. <p>Magnitude of Impact</p> <ul style="list-style-type: none"> • Landscape character: Views to the Proposed Development are largely screened by intervening topography and woodland limiting its influence on landscape character. This means the Proposed Development would result in no discernible change to the baseline and the magnitude of impact is therefore assessed as None. • Visual: As above. Any visibility would be glimpsed and of a recessive nature and there would be no discernible change to the baseline view composition. <p>Residual Effects</p> <ul style="list-style-type: none"> • Landscape character: None – no residual effect. • Visual: None – no residual effect.

7.7 Mitigation

There would be reinstatement of the temporary track and re-seeding works following the removal of the construction compounds and the temporary track. Full reinstatement of grassland and compensatory tree planting (as necessary) would be carried out within the next planting or seeding season following construction works using locally appropriate species, subject to landowner agreement.

All existing vegetation to be retained would be protected during construction and operational activities.

Mitigation measures for all residual Moderate effects have been added to **Table 7.4** below.

Table 7.4 Recommended Mitigation

Reference	Potential Impact	Mitigation Measure
Visual Effects (Viewpoints 5 and 8)	Views into the construction compound and areas of stored materials.	Material storage and temporary stockpiles would be retained for the shortest possible duration and would be sited in accordance with the latest best practice guidance and to avoid visual intrusion to neighbouring visual receptors in accordance with the CEMP.

7.8 Residual Effects

No additional mitigation is proposed as no notable or long-term landscape and visual effects have been identified. As all mitigation measures are incorporated into the final design, and accompanying CEMP all identified effects are considered residual.

7.9 Conclusion

The LVA appraisal has been undertaken in accordance with current best practice professional standards and guidance and considers effects on the following receptors:

- Landscape fabric, caused by changes to the physical form and elements of the landscape;
- Landscape character, caused by changes to key characteristics and qualities of the landscape; and
- Visual amenity caused by changes to the visual composition of views and the wider visual resource.

The Proposed Development described in **Chapter 2** is low impact in terms of height and mostly temporary in nature. The greatest impact generators relate to the construction phase and increased vehicular activity, some limited removal of vegetation to facilitate construction, traffic and plant movement, temporary fencing/hoarding and the storage of materials within the construction compound. These elements are features that exert a temporary effect and are fully reversible. No additional mitigation is proposed as the embedded mitigation in relation to design modifications and reinstatement works are sufficient to remediate effects.

The access track is situated within an undulating landscape that includes areas of forestry and partially follows an existing track alignment with some limited deviation. It is noted that the current land use of coniferous forestry in the wider area is a resource that is subject to ongoing restructuring through felling operations. This is a dynamic and constantly changing land cover that is felled and managed and track creation is not uncharacteristic of normal forestry operations.

There is low inter-visibility with landscape designations or classifications within the study area due to intervening undulating landform and vegetation. The influence of the Proposed Development on landscape receptors would be very localised in scale and would be restricted to the Site and areas in proximity with limited potential for direct or indirect effects on the key characteristics of LCTs or the Special Landscape Qualities of the NSAs. The effects on the landscape character at viewpoint 5 (15 m northeast of the Proposed Development) is assessed as **Moderate/Minor** adverse with an assessment of **Minor** adverse or below for the landscape character at the other

viewpoints. These effects would be temporary and reversible and relate to the construction phase with minimal effects anticipated during operation.

The visual effects are limited with viewpoints 2, 3, 9 and 10 with no magnitude of impact and No residual effect in comparison to the baseline.

Viewpoints 1, 4, 6, and 7, would either have a barely discernible change or the view composition would be largely unchanged from the visual baseline. Viewpoint 5: Tombrek (15 m northeast of the Proposed Development) and viewpoint 8: Creag Kynachan (881 m, southwest of the Proposed Development) have the most potential to experience a change due to proximity and an open aspect. This would result in a Slight magnitude of impact and up to a **Moderate** adverse residual and localised effect. However, these effects would relate to the construction phase with very limited influence post-reinstatement of the landscape.

The only residual effects identified during operation relate to **Moderate/Minor** adverse and intermittent visual effects at viewpoint 5 in proximity to the Proposed Development. These effects would be localised and temporary.

Overall, the Proposed Development would contain features that are not deemed incongruous with other existing features that define the landscape and visual context such as surrounding forestry and farm access tracks. These features are frequently observed in the views of the landscape surrounding the Site. The findings of this appraisal support the conclusion that Site and Study Area have the capacity to accommodate the Proposed Development and would not cause unacceptable harm to the surrounding landscape and visual resource. Moreover, the Proposed Development facilitates the delivery of the wider energy development across the area.

Table 7.5 below summarises the predicted residual effects higher than None upon each of the landscape and visual receptors carried forward to assessment.

Table 7.5 Summary of Residual Effects

Assessment Viewpoint Location	Receptor Sensitivity	Magnitude of Impact	Residual Effects
Viewpoint 1 – Summit of Schiehallion	Landscape character: Medium	Negligible during construction reducing to None during operation	Minor adverse during construction reducing to None during operation
	Visual: Up to High	Negligible during construction reducing to None during operation	Moderate/Minor adverse during construction reducing to None during operation
Viewpoint 4 - Tomphubil Lime-kiln	Landscape: Medium	Negligible during construction reducing to None during operation	Minor adverse during construction reducing to None during operation
	Visual: High	Negligible during construction reducing to None during operation	Moderate/Minor adverse during construction reducing to None during operation
Viewpoint 5 - Tombreck	Landscape character: Medium	Slight during construction reducing to None during operation	Moderate/Minor adverse during construction reducing to None during operation
	Visual: High	Slight during construction reducing to Negligible during operation	Moderate adverse during construction reducing to Moderate/Minor adverse during operation
Viewpoint 6 – Tummel Bridge	Landscape Character: Medium	Negligible during construction reducing to None during operation	Minor adverse during construction reducing to None during operation

Assessment Viewpoint Location	Receptor Sensitivity	Magnitude of Impact	Residual Effects
	Visual: High	Negligible during construction reducing to None during operation	Moderate/Minor adverse during construction reducing to None during operation
Viewpoint 7 – B8019	Landscape Character: Medium/Low	Negligible during construction reducing to None during operation	Minor adverse during construction reducing to None during operation
	Visual: High	Negligible during construction reducing to None during operation	Moderate/Minor adverse during construction reducing to None during operation
Viewpoint 8 – Creag Kynachan	Landscape Character: Medium/Low	Slight during construction reducing to None during operation	Minor adverse during construction reducing to None during operation
	Visual: High	Slight during construction reducing to None during operation	Moderate adverse during construction reducing to None during operation

8 CULTURAL HERITAGE

8.1 Introduction

This chapter reports on the likely effects with respect to cultural heritage associated with the construction and operation of the Proposed Development, as described in **Chapter 2: Proposed Development**. Where required, it also provides details of control measures. This chapter (and its associated figures and appendices) is not intended to be read as a standalone assessment, and reference should be made to the introductory chapters of this EA.

The specific objectives of the assessment are to:

- Describe the cultural heritage and archaeology baseline;
- Describe the assessment methodology used;
- Describe the potential effects, including construction and operational effects;
- Describe the mitigation measures proposed to address likely effects; and
- Assess the residual effects remaining following the implementation of mitigation.

This chapter is supported by the following figures:

- **Figure 8.1 Heritage Assets and Events within the northern part of the Site**
- **Figure 8.2 Heritage Assets and Events within the southern part of the Site**
- **Figure 8.3 Extract from Roy's map of 1747-1755**
- **Figure 8.4 Extract from the OS map surveyed in 1861 and published in 1867**
- **Figure 8.5 Extract from the OS map surveyed in 1898 and published in 1900**

This chapter is also supported by the following appendices:

- **Appendix 8.1 Gazetteer**
- **Appendix 8.2 Assessment Scope and Criteria**
- **Appendix 8.3 Plates:**
 - **Plate 1: South-facing view showing general landscape**
 - **Plate 2: West-facing view showing northern end of the Site**
 - **Plate 3: South-west-facing view along the Site**

8.2 Methodology

Information Source

The National Record for the Historic Environment (NRHE) as held by Historic Environment Scotland (HES) was consulted during the preparation of this impact assessment. **Table 8.1** shows specific data types and data sources accessed.

Table 8.1 Data Types and Sources

Data Type	Data Source
Designated and non-designated heritage asset data.	<ul style="list-style-type: none"> • The NRHE as held by HES.
Historic Environment Record (HER) data.	<ul style="list-style-type: none"> • The Perth and Kinross HER extract received on the 3rd May 2023; update received May 2025.

Data Type	Data Source
Old Ordnance Survey (OS) maps (1st and 2nd edition, small and large scale) and pre-OS historical maps.	<ul style="list-style-type: none"> The National Map Library (National Library of Scotland, Causewayside, Edinburgh).
Aerial photographs.	<ul style="list-style-type: none"> National Collection of Aerial Photography (NCAP) held by HES.
Publicly available LiDAR data.	<ul style="list-style-type: none"> Scottish Remote Sensing Portal.
Other sources consulted.	<ul style="list-style-type: none"> Online aerial satellite imagery, Google Earth, Bing and ESRI aerial mapping. Published bibliographic sources including historical descriptions of the area (such as Statistical Accounts). The Historic Land-use Assessment Data (HLAMap) for Scotland.

Limitations and Assumptions

This assessment is based upon data obtained from publicly accessible archives as described in **Table 8.1**. HER data was received from Perth and Kinross Heritage Trust (PKHT) in May 2023 and July 2025, whilst NRHE data and HES designation data was downloaded in April 2025. This assessment does not include any records added or altered after this date.

These limitations are not considered to undermine the validity of the assessment.

No intrusive archaeological evaluation has been undertaken to inform this assessment, as such there is the potential for hitherto unknown archaeological remains to survive within the Site and to be disturbed by the works associated with the Proposed Development.

This limitation is accounted for in the mitigation measures identified to avoid or minimise any such effects on hitherto unknown remains.

Study Area

The following study areas have been used as part of this assessment:

- A core Study Area, which includes all land within the Site, was subject to assessment for potential direct effects. This Study Area was subject to a detailed walkover survey and cultural heritage assets which may be directly impacted by the Proposed Development were identified.
- A 500 m Study Area around the Site identifying all previously recorded designated and non-designated heritage assets and previous archaeological investigations (events) to allow for assessment of the potential for direct impacts on known heritage assets within the Proposed Development Site and to assess the potential for hitherto unknown buried assets to survive on-site and thus potentially be impacted upon.

Each heritage asset referred to in the text is listed in **Appendix 8.1 Gazetteer**. Each has been assigned an 'Asset No' unique to this assessment, and the Gazetteer includes information regarding the type, period, grid reference, NRHE number, the HER number, statutory protective designation and other descriptive information as derived from the consulted sources.

Site Visits

An archaeological walkover survey was undertaken in June 2023 with the aim of identifying any previously unknown archaeological remains, and confirming the extent, condition and significance of previously recorded

remains. While the full extent of the Site was not surveyed, the initial walkover survey broadly followed the same alignment and is considered sufficient to provide an adequate overview of the surrounding landscape.

All known and accessible heritage assets were assessed in the field to establish their survival, extent, significance and relationship to other assets. The weather was also recorded, along with any other conditions affecting the visibility during the surveys.

All heritage assets encountered were recorded and photographed. The location of the features was marked on plans at a relevant scale, and keyed by means of Grid Reference to the OS mapping, using a GPS enabled device and the Field Maps application.

Legislation, Planning Policy and Guidance

Legislation

Relevant legislation and guidance documents have been reviewed and taken into account as part of this assessment. Of particular relevance are:

- Ancient Monument and Archaeological Areas Act (1979)⁹⁸ as modified by the Historic Environment (Amendment) (Scotland) Act 2011⁹⁹;
- Town and Country Planning (Scotland) Act 1997 (as amended)¹⁰⁰, and as further amended in the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997¹⁰¹ and as modified by the Historic Environment (Amendment) (Scotland) Act (2011)⁹⁹;
- Historic Environment Scotland Act (2014)¹⁰²;
- Planning etc. (Scotland) Act (2006)¹⁰³: 2006 asp 17; and
- Town and Country Planning (General Development Procedure) (Scotland) Order (1992)¹⁰⁴.

Planning Policy

Planning policy relevant to this chapter is contained within:

- National Planning Framework (NPF) 4¹⁰⁵;
- Historic Environment Policy for Scotland (HEPS)¹⁰⁶ and Designation Policy and Selection Guidance¹⁰⁷; and
- Perth and Kinross Council Adopted Local Development Plan (LDP) 2¹⁰⁸

The Act 1997¹⁰⁰ (as amended) (section 24(3)) states that, *“In the event of any incompatibility between a provision of the National Planning Framework and a provision of a local development plan, whichever of them is later in date is to prevail”*.

⁹⁸ Ancient Monuments and Archaeological Areas Act, 1979 (c46). [Online]. London. The Stationery Office. Available at: http://www.legislation.gov.uk/ukpga/1979/46/pdfs/ukpga_19790046_en.pdf [Accessed March 2026]

⁹⁹ Historic Environment (Amendment) (Scotland) Act, 2011 (Full) [Online]. London. The Stationery Office. Available at: http://www.legislation.gov.uk/asp/2011/3/pdfs/asp_20110003_en.pdf [Accessed March 2026]

¹⁰⁰ Town and Country Planning (Scotland) Act 1997, (c8). [Online]. London. The Stationery Office. Available at: https://www.legislation.gov.uk/ukpga/1997/8/pdfs/ukpga_19970008_en.pdf [Accessed March 2026]

¹⁰¹ Planning (Listed Buildings and Conservation Areas (Scotland) Act 1997, (c9). [Online]. London. The Stationery Office. Available at: https://www.legislation.gov.uk/ukpga/1997/9/pdfs/ukpga_19970009_en.pdf [Accessed March 2026]

¹⁰² Historic Environment (Amendment) (Scotland) Act, 2011 (Full) [Online]. London. The Stationery Office. Available at: http://www.legislation.gov.uk/asp/2011/3/pdfs/asp_20110003_en.pdf [Accessed March 2026]

¹⁰³ Planning etc. (Scotland) Act 2006, Available at: <https://www.legislation.gov.uk/asp/2006/17/contents> [Accessed March 2026]

¹⁰⁴ Town and Country Planning (Scotland) Act 1997, (c8). [Online]. London. The Stationery Office. Available at: https://www.legislation.gov.uk/ukpga/1997/8/pdfs/ukpga_19970008_en.pdf [Accessed March 2026]

¹⁰⁵ Scottish Government, 2023. National Planning Framework 4. Available at: <https://www.gov.scot/publications/national-planning-framework-4/> [Accessed March 2026]

¹⁰⁶ HES. 2019. Historic Environment Policy for Scotland. Available at: <https://www.historicenvironment.scot/advice-and-support/planning-and-guidance/historic-environment-policy-for-scotland-heps/> [Accessed March 2026]

¹⁰⁷ Historic Environment Scotland, 2020. Available at: <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=8d8bbaeb-ce5a-46c1-a558-aa2500ff7d3b> [Accessed March 2026]

¹⁰⁸ Perth and Kinross, 2019. Perth and Kinross Local Development Plan 2. https://www.pkc.gov.uk/media/45242/Adopted-Local-Development-Plan-2019/pdf/LDP_2_2019_Adopted_Interactive.pdf?m=1576667143577 [Accessed March 2026]

Therefore, in the case of any conflict between local and national planning policies, NPF4 will take precedence of the policies detailed within the PKC Adopted LDP2 (including associated local planning guidance).

National Policy

The stated intent of NPF4 Policy 7: Historic Assets and Places is, *“To protect and enhance historic environment assets and places, and to enable positive change as a catalyst for the regeneration of places”*.

The following sections of NPF4 Policy 7 are relevant to this assessment:

“a) Development proposals with a potentially significant impact on historic assets or places will be accompanied by an assessment which is based on an understanding of the cultural significance of the historic asset and/or place.

The assessment should identify the likely visual or physical impact of any proposals for change, including cumulative effects and provide a sound basis for managing the impacts of change.

Proposals should also be informed by national policy and guidance on managing change in the historic environment, and information held within Historic Environment Records.

...

c) ... Development proposals affecting the setting of a listed building should preserve its character, and its special architectural or historic interest.

o) ... Non-designated historic environment assets, places and their setting should be protected and preserved in situ wherever feasible.

Where there is potential for non-designated buried archaeological remains to exist below a site, developers will provide an evaluation of the archaeological resource at an early stage so that planning authorities can assess impacts. Historic buildings may also have archaeological significance which is not understood and may require assessment.

Where impacts cannot be avoided they should be minimised. Where it has been demonstrated that avoidance or retention is not possible, excavation, recording, analysis, archiving, publication and activities to provide public benefit may be required through the use of conditions or legal/planning obligations.

When new archaeological discoveries are made during the course of development works, they must be reported to the planning authority to enable agreement on appropriate inspection, recording and mitigation measures.”

HEPS sets out the Scottish Government’s policy for decision making that affects the historic environment. It contains six policies for managing the historic environment, all of which favour protection, understanding and promotion of the historic environment as well as the preservation of the benefits of the historic environment for future generations. Of particular relevance to this assessment, HEP3 and HEP4 both state, *“if detrimental impact on the historic environment is unavoidable, it should be minimised. Steps should be taken to demonstrate that alternatives have been explored, and mitigation measures should be in place”*. The following HEPS policies are relevant to this assessment:

- HEP2 – Decisions affecting the historic environment should ensure that its understanding and enjoyment as well as its benefits are secured for present and future generations.
- HEP3 – Plans, programmes, policies and strategies and the allocation of resources should be approached in a way that protects and promotes the historic environment. If detrimental impact on the historic environment is unavoidable, it should be minimised. Steps should be taken to demonstrate that alternatives have been explored and mitigation measures should be put in place.
- HEP4 – Changes to specific assets and their context should be managed in a way that protects the historic environment. Opportunities for enhancement should be identified where appropriate. If detrimental impact on the historic environment is unavoidable, it should be minimised. Steps should be taken to demonstrate that alternatives have been explored, and mitigation measures should be put in place.

- HEP5 – Decisions affecting the historic environment should contribute to the sustainable development of communities and places.

National Guidance

HES's setting guidance defines setting as, *"the way the surroundings of a historic asset or place contribute to how it is understood, appreciated, and experienced"*¹⁰⁹. The guidance further notes that, *"planning authorities must take into account the setting of historic assets or places when drawing up development plans and guidance, when considering various types of environmental and design assessments/statements, and in determining planning applications"*¹⁰⁹. It advocates a three-stage approach to assessing potential impacts upon setting which is followed by the setting assessment included in this assessment and detailed in **Section 8.9**.

Adopted Local Development Plan 2

The Site is located within the local authority area of PKC. The LDP was adopted in November 2019 and sets out the key priorities for the Council over the following years. The following policies concerns the Historic Environment and are relevant to this assessment:

"Policy 26B: Archaeology

The Council will seek to protect areas or sites of known archaeological interest and their settings. Where development is proposed in such area, there will be a strong presumption in favour of preservation in situ. Where, in exceptional circumstances, preservation of the archaeological features is not feasible, the developer, if necessary through appropriate conditions attached to the granting of planning permission, will be required to make provision for the survey, excavation, recording and analysis of threatened features prior to development commencing.

If discoveries are made during any development, work should be suspended, the local Planning Authority should be informed immediately and mitigation measures should be agreed.

Policy 27A: Listed Buildings

There is a presumption in favour of the retention and sympathetic restoration, correct maintenance and sensitive management of listed buildings to enable them to remain in active use, and any proposed alterations or adaptations to help sustain or enhance a building's beneficial use should not adversely affect its special architectural or historic interest.

Encouragement will be given to proposals to improve the energy efficiency of listed buildings within Perth and Kinross, providing such improvements do not have a significant detrimental impact on the special architectural or historic interest of the building.

Enabling development may be acceptable where it can be shown to be the only means of preventing the loss of listed buildings and securing their long-term future. Any development should be the minimum necessary to achieve these aims. The layout, design, materials, scale, siting and use of any development which will affect a listed building or its setting should be appropriate to the building's character, appearance and setting.

...

Policy 31: Other Historic Environment Assets

*There is also a range of non-designated historic assets and areas of historical interest, including historic landscapes, other gardens and designed landscapes, historical woodlands and routes which do not have statutory protection. These resources are, however, an important part of Scotland's heritage and the Council will seek to protect and preserve significant resources as far as possible, in situ wherever feasible.*¹¹⁰

¹⁰⁹ HES. 2020. Managing Change in the Historic Environment. Available at: <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationid=80b7c0a0-584b-4625-b1fd-a60b009c2549>

¹¹⁰ HES. 2019. Historic Environment Policy for Scotland. Available at: <https://www.historicenvironment.scot/advice-and-support/planning-and-guidance/historic-environment-policy-for-scotland-heps/>, 45-48 [Accessed March 2026]

The New Plan: LDP3

The new LDP will become the main document to influence future built environment in Perth and Kinross. This will follow the changes introduced by the Planning (Scotland) Act 2019. The Development Plan Scheme was updated in October 2024.

Guidance

The following best practice guidelines/guidance have been used in preparing this assessment:

- Chartered Institute for Archaeologists (CifA) Code of Conduct¹¹¹; Professional Conduct¹¹²; Standards and Guidance for commissioning work and providing consultancy advice on archaeology and the historic environment¹¹³; and Standards and Guidance for historic environment desk-based assessment¹¹⁴;
- Planning Advice Note 2/2011¹¹⁵;
- Environmental Impact Assessment Handbook v5¹¹⁶; and
- Our Place in Time: The Historic Environment Strategy for Scotland¹¹⁷.

8.3 Assessment Methodology

Assessment Criteria

The assessment aims to identify the known and likely archaeological potential of the Site and the relative value or importance of such a resource/asset. The criteria for assessing these factors are laid out in detail in **Appendix 8.2 Assessment Scope and Criteria**.

The criteria for assessing archaeological potential are expressed in this report as ranging between the scales of High, Medium, Low and Uncertain criteria for which are also noted in **Appendix 8.2 Assessment Scope and Criteria**.

Levels of importance in the report are expressed as ranging between the scales of Very High, High, Medium, Low, Negligible and Unknown. The importance of heritage assets is determined firstly by reference to existing designations. For example, Scheduled Monuments are already classified as Nationally Important and therefore of High importance. For assets where no designation has previously been assigned, the likely importance of that resource has been based upon the available evidence and professional knowledge and judgement.

The likely magnitude of the impact of the Proposed Development works is determined by identifying the degree of change from the Proposed Development upon the 'baseline' conditions of the Site and the heritage resource identified in the assessment. This impact can be either adverse (negative), beneficial (positive) or neutral and is ranked according to the scale of High, Medium, Low, Negligible or Neutral.

Assessment of Setting Impacts

The setting assessment has been undertaken in line with the requirements of NPF4 and HES¹⁰⁹ setting guidance.

The NPF4 defines setting as:

¹¹¹ CifA. 2019-Updated 2022. Code of Conduct: Professional Ethics in Archaeology. Available at: <https://www.archaeologists.net/sites/default/files/2023-11/CifA-Code-of-Conduct-2022.pdf> [Accessed March 2026]

¹¹² CifA. 2019- Updated 2024. Regulations for professional conduct. Available at: <https://www.archaeologists.net/sites/default/files/2024-11/CifA-Regulations-for-Professional-Conduct-2024.pdf> [Accessed March 2026]

¹¹³ CifA. 2014 (Updated 2020). Standard and guidance for Commissioning Work or Providing Consultancy Advice on the Historic Environment. The Chartered Institute for Archaeologists Available at: <https://www.archaeologists.net/sites/default/files/2023-11/CifA-SandG-Archaeological-Consultancy-2020.pdf> [Accessed March 2026]

¹¹⁴ CifA. 2017 (Updated 2020). Standard and guidance for historic environment desk-based assessment The Chartered Institute for Archaeologists Available at: <https://www.archaeologists.net/sites/default/files/2023-11/CifA-SandG-DBA-2020.pdf> [Accessed March 2026]

¹¹⁵ Scottish Government 2011 PAN2/2011 Planning and Archaeology

¹¹⁶ HES and Scottish Natural Heritage (SNH), 2018. Environmental Assessment Handbook. Available at: <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=6ed33b65-9df1-4a2f-acbb-a8e800a592c0> [Accessed March 2026]

¹¹⁷ HES. 2023. Our Past, Our Future. Available at: <https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=79204155-9eb2-4d29-ab14-aff200ec2801> [Accessed March 2026]

“Setting is more than the immediate surroundings of a site or building, and may be related to the function or use of a place, or how it was intended to fit into the landscape or townscape, the view from it or how it is seen from areas round about, or areas that are important to the protection of the place, site or building.

‘Setting’ is the way the surroundings of a historic asset or place contribute to how it is understood, appreciated and experienced.”

The HES guidance sets out the ways in which setting may contribute to the value of a heritage asset. It advocates a three-stage approach to assessing impacts upon setting which comprises:

- Stage 1: identify the historic assets that might be affected by the Proposed Development.
- Stage 2: define and analyse the setting by establishing how the surroundings contribute to the ways in which the historic asset or place is understood, appreciated and experienced.
- Stage 3: evaluate the potential impact of the proposed changes on the setting, and the extent to which any negative impacts can be mitigated.

The guidance provides a list of potential factors of setting which may contribute to the ability to understand, appreciate or experience the asset in question and its significance. HES acknowledges that the list is non-exhaustive and that not all factors will apply in all cases. The guidance further sets out factors which should be considered in coming to a judgement regarding magnitude of impact upon setting.

The assessment of the impact on setting undertaken for this assessment has followed the staged approach outlined in the HES guidance on setting. It has had regard to the lists therein but, in the interest of being proportionate to the importance of the asset and the potential magnitude of impact, only discusses those attributes which apply to the asset and the potential impacts.

It is noted that, in many cases identified impacts upon setting are ‘neutral’ indeed HES and NatureScot’s EIA Handbook states that:

“When considering setting impacts, visual change should not be equated directly with adverse impact. Rather the impact should be assessed with reference to the degree that the proposal affects those aspects of setting that contribute to the asset’s cultural significance.”

Assessment of Direct Impacts

The assessment of direct impacts has been undertaken in line with the assessment criteria noted above and in **Appendix 8.2 Assessment Scope and Criteria**. This has been done by establishing the historic environment baseline through examination of the data sources outlined in **Section 8.2** and a walkover survey. The Proposed Development has been assessed against the established historic environment baseline, and potential direct impacts on known and unknown heritage assets will be identified.

LiDAR Imagery

The Scottish Public Sector LiDAR (Phase 2) was commissioned in response to the Flood Risk Management Act¹¹⁸ (2009) by the Scottish Government, Scottish Environment Protection Agency (SEPA), SportScotland and 13 Scottish local authorities for the purpose of localised flood management.

LiDAR data for the Site consist of 1 m spatial resolution Digital Surface Model (DSM) and Digital Terrain Model (DTM) which have been produced from the LAS dataset point cloud, and subsequently improved by implementing different visualisation techniques. Analytical Hillshading (x16), Sky View Factor (SVF), Local Dominance (LD), Simple Local Relief model (SLRM), Laplacian Filter and VAT and Analytical Hillshading (x16) have been produced by using the software Relief Visualization Toolbox 2.2.1¹¹⁹. Hill shading is the most common visualisation

¹¹⁸ Flood Risk Management (Scotland) Act 2009, Available at: <https://www.legislation.gov.uk/asp/2009/6/contents> [Accessed March 2026]

¹¹⁹ Kokalj, Ž., K. Zakšek and K. Oštir. 2011. Application of Sky-View Factor for the Visualization of Historic Landscape Features in Lidar-Derived Relief Models. *Antiquity* 85 (327): 263–273 and Kokalj, Ž., & Hesse, R. 2017. Airborne laser scanning raster data visualization: a guide to good practice (Vol. 14). Založba ZRC

technique for archaeological purposes and is effective for identified earthwork features¹²⁰. Challis¹²⁰ and Doneus¹²¹ note that reliance on a single technique can be detrimental and stated that whilst hill shading may be the most common form of visualisation it can be the least likely to identify, in detail, archaeological remains. Simple Local Relief Model (SLRM) (also known as Local Relief Models) greatly enhances the visibility of small scale, shallow topographic features¹²².

8.4 Consultation to Date

The PKHT was contacted in April 2023 and May 2025 for access to the HER data. No other consultation was undertaken.

Table 8.2 Consultation Responses

Consultee	Date	Response
PKHT	April 2023 / May 2025	HER data received.

8.5 Baseline

Historic Landscape Characterisation

Each heritage asset referred to in the baseline is listed in Technical Appendix 8.1 Gazetteer.

Scotland's Historic Land-use Assessment project records the land use across Scotland (HLAMap)¹²³. Although land-use characterisation is not available for the whole of the Site, it covers the northern part to the south of the B846, and a section of the Site to the south surrounding the farmstead at Tombreck (**Asset 37 as shown in Appendix 8.1 Gazetteer**). The northernmost part of the Site is described as plantation which is mostly areas of *“coniferous species and tend to be densely packed within clearly defined boundaries”*. To the south and along the south-facing slopes of the Creag Kynachan, the land is currently in use as rough grazing land and is recorded as an area of medieval and post-medieval settlement and agriculture.

Undated Remains

This assessment has identified one undated asset which extend within the Site. A pre-afforestation survey (**Event 65**) undertaken in 1997 over land on the north-eastern side of the Creag Kynachan, identified several assets including a mound (**Asset 29**) surveyed as approximately 200 m in diameter, though no further information is provided.

A possible cairnfield (**Asset 47**) was recorded by the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS), now part of HES, 70 m to the north-west of the Site. The asset was recorded from an aerial photographic survey; however, a later walkover survey and satellite imagery could not identify any trace of the cairns.

Prehistoric (8000 BC – 400 AD)

There are no known prehistoric assets within the Site.

Although no evidence dated to the Late Upper Palaeolithic period has been identified from Perth and Kinross, such evidence is reported from other parts of Scotland. Early evidence of occupation in the area dates to the Mesolithic period and is found in the form of artefacts at a site 22.5 km to the south-west of the Site, to the north

¹²⁰ Challis, K., Forlin, P. & Kincey, M. 2011 A General Toolkit for the Visualisation of Archaeological Features on Airborne LiDAR Elevation Data. Archaeological Prospection 18, pp.279-289

¹²¹ Doneus, M. 2013. Openness as visualization technique for interpretative mapping of airborne lidar derived digital terrain models. Remote sensing, 5(12), 6427-6442.

¹²² Hesse, R. 2010. LiDAR- derived Local Relief Models- a new tool for archaeological prospection. Available at: https://www.researchgate.net/publication/229880349_LiDAR-derived_Local_Relief_Models_-_a_new_tool_for_archaeological_prospection [Accessed March 2026]

¹²³ Historic Environment Scotland (n.d.). HLA. [online] hlamap.org.uk. Available at: <https://hlamap.org.uk/>. [Accessed March 2026]

of Loch Tay. This evidence suggests that although unusual for Scotland, Mesolithic activity has extended to the upland.

The earliest potential evidence for prehistoric activity within the Study Area dates to the Neolithic to Bronze Age period. A standing stone (**Asset 9**) which stands at the end of a long mound is recorded 340 m to the east of the Site. The standing stone which is dated by the HER as Neolithic to Bronze Age period is incised with an Early Christian cross.

Half a dozen stone clearance cairns (**Asset 8**) dated to the Bronze Age to Iron Age period, were recorded during a visit by the OS team in 1974, approximately 540 m to the south-east of the Site, although a desk-based assessment and walkover survey undertaken in 2019 (**Event 70**) did not record any evidence of the cairns. The assessment (**Event 70**) also recorded the location of a homestead (**Asset 17**) approximately 167 m to the west of the Site boundary. Overall, the site measures 17 m by 16 m, and included the remains of walls and enclosures. No building is visible at this location on historical maps and the homestead may date from the Iron Age to the medieval period.

Although several assets attributed to the prehistoric period are recorded within the Study Area, these appear to be tentative and unconfirmed. It is judged that these assets cannot be used to accurately predict any potential for archaeological remains dating to the prehistoric period to survive within the Site. As such, there is judged to be a **Low** potential for prehistoric remain to survive within the Site.

Early Historic (400 AD – 1100 AD); and Medieval (1100 – 1600 AD)

There are no known early historic and medieval assets within the Site.

As described above, a desk-based assessment and walkover survey undertaken in 2019 (**Event 70**) recorded the fragmentary remains of a homestead (**Asset 17**) approximately 167 m to the west of the Site. No building is visible at this location on historical maps and the homestead may date from the Iron Age to the medieval period. A standing stone (**Asset 9**) which stands at the end of a long mound is recorded 340 m to the east of the Site. The standing stone which is dated by the HER as Neolithic to Bronze Age period is incised with an Early Christian cross and is traditionally the site of a chapel. Later visits have however confirmed that the mound believed to be the location of a chapel is natural, and that there is no evidence of a chapel. A field system including rig and furrow (**Asset 48**) was identified by aerial photographic survey in an area 398 m to the east of the Site.

This assessment has identified that early-historic and medieval remains within the Study Area, although scarce, are located within the southernmost part and in the vicinity of the settlement at Tombreck (**Asset 37**). As such, there is judged to be a **Medium** potential for early-historic and medieval remain to survive within the southern part of the Site near Tombreck (**Asset 37**) and a **Low** potential for remains to survive within the central and northern parts of the Site.

Post medieval (AD1600-1900)

This assessment has identified six non-designated post-medieval heritage assets within the Site. The Crieff to Dalnacardoch Military Road follows the line of the modern B846 road, with two identifiable sections (**Assets 26 and 53**) recorded within the Study Area. The Perth and Kinross HER data indicates that the northern section (**Asset 53**) of the military road, which is located within the Site, diverts slightly from the line of the modern B846 road to the west of Tom Beith and this is visible as a track of low earth and stone banks defined by heather cover. The HER also indicates that a possible road surface is exposed in places. This assessment has also identified the location of three tracks (**Assets 3, 4 and 11**), an 'old kiln' (**Asset 5**) and a field boundary (**Asset 12**) recorded within the Site.

The Site and surrounding area are located within the Parish of Dull, the Presbytery of Weem and the Synod of Perth and Stirling¹²⁴. The author of the New Statistical Analysis written in 1845, describe the difference in

¹²⁴ Gordon, J. ed. 1999. The New Statistical Account of Scotland / by the ministers of the respective parishes, under the superintendence of a committee of the Society for the Benefit of the Sons and Daughters of the Clergy. Dull, Perth, Vol. 10, Edinburgh: Blackwoods and Sons, 1845, p. 752. University of Edinburgh, University of Glasgow. Available at: The Statistical Accounts of Scotland online service: <https://stataccscot.edina.ac.uk:443/link/nsa-vol10-p752-parish-perth-dull> [Accessed March 2026]

agricultural practice in the parish from the time of the Old Statistical Analysis written in 1793¹²⁵ such as, “farms are divided and inclosed; green crops and rotation in cropping are generally introduced; cattle and sheep are improving both in size and symmetry; and the tenants are encourage in draining, liming, and clearing their farms by getting leases, so that almost every district of the parish witnesses a yearly improvement in husbandry”¹²⁴.

Early maps tend to be schematic; however, they provide an indication of the surrounding landscape. Pont’s map of 1583¹²⁶ (Not Illustrated) shows the general area of the Site, to the north of the Tay River and to the south of Loch Tummel in a roughly triangular area. As the map is very schematic and the proportions are not accurate, it is difficult to note the exact location of the Site; however, what can be understood from this map, is that no significant settlements were established within the area. Settlements were concentrated to the south along the Tay River. This however does not indicate that no activity was taking place in the area such as small farms and agriculture.

Gordon’s map of 1636¹²⁷ (Not Illustrated), Blaeu’s map of 1654¹²⁸ (Not Illustrated), Moll’s map of 1745¹²⁹ (Not Illustrated) and Rutherford’s map of 1745¹³⁰ (Not Illustrated) similarly show the location of Loch Tummel and the settlements along its northern side, however the hilly land to the south, annotated as ‘Kainachan forest’, appears to have remained undeveloped.

Roy’s map of 1747-1755 (Figure 8.3), provides a relatively detailed depiction of the area. The B846 which follows the alignment of the Crieff to Dalnacardoch Military Road (**Assets 26 and 53**), is depicted roughly along the same alignment as it is today. It crosses the River Tummel to the north at a location annotated as ‘Kinachan Bridge’, later Tummel Bridge. A cluster of four buildings within an agricultural field is depicted to the west of the Allt Kinardochoy and annotated as ‘Kinarthar’ (Canmore ID: 25045).

The area of the Site is first accurately depicted in detail on the first edition of the OS map surveyed in 1861 and published in 1867¹³¹ (**Figure 8.4**). Several assets recorded within the Site are first depicted on the OS map published in 1867, within the southern part of the Site. The area includes farmsteads interlinked by various tracks and further linked by tracks and larger roads to the wider settled area to the east of the Crieff to Dalnacardoch Military Road. A track (**Asset 3**) is depicted running parallel to the Allt Kyanachan, extending eastward to the Crieff to Dalnacardoch Military Road. A second track (**Asset 11**) is depicted to the north of the settlement at Tombreck (**Asset 37**), extending eastwards to the settlement at Ballantuim (**Asset 33**). A third track (**Asset 4**) is depicted from the settlement at Tombreck (**Asset 37**), extending southwards towards an unnamed road which is still in use. A possible shieling hut (**Asset 31**) is depicted along this road. A boundary wall (**Asset 12**) is depicted within the Site extending from the settlement at Tombreck (**Asset 37**) towards the settlement to the south-west at Druimphae (**Asset 32**). An ‘old kiln’ (**Asset 5**) is annotated between the track (**Asset 4**) and the boundary wall (**Asset 12**). A field boundary (**Asset 74**) recorded during the 2023 walkover survey is visible on the OS map of 1867¹³¹, extending southwards from the settlement at Tombreck (**Asset 37**).

A cultural heritage baseline (**Event 70**) was undertaken in 2019 as part of an application for a proposed Kinardochoy Reactive Compensation Substation which identified 25 known heritage assets mainly of prehistoric or post-medieval dates, amongst these a blacksmith (**Asset 6**), farmstead (**Asset 7**) and boundary bank (**Asset 10**) which are located within the Study Area of this application. A Free Church (**Asset 81**) is recorded to the south of the village at Tummel Bridge (**Asset 80**).

¹²⁵ Sinclair, Sir John. The Statistical Account of Scotland, Dull, Perth, Vol. 6, Edinburgh: William Creech, 1793, p. 149. University of Edinburgh, University of Glasgow. (1999) The Statistical Accounts of Scotland online service: <https://stataccscot.edina.ac.uk:443/link/osa-vol6-p149-parish-perth-dull> [Accessed March 2026]

¹²⁶ Pont, T. 1583. Pont 23 - Garry, Tummel, and Upper Tay; Dunkeld to Blairgowrie. (Ponts Maps).

¹²⁷ Gordon, R. & J. Gordon. 1636. Atholl Rennach wt. all the bordering waists.

¹²⁸ Gordon, R. & J. Blaeu. 1654. Scotiae provinciae mediterraneae inter Taum flumen et Vararis aestuarium : Sunt autem Braid-Allaban, Atholia, Marria Superior, Badenocha, Strath-Spea, Lochabria, cum Chersoneso qui ei ad occasum praetenditur; cum singulis earundem partibus / opera Ro. G. (Blaeu Atlas of Scotland, 1654). Amsterdam.

¹²⁹ Moll, H. 1745. The North P. of Perth Shire containing Athol and Broadalbin. London: Bowles and Bowles.

¹³⁰ Rutherford, A. 1745. An Exact Plan of His Majesty’s Great Roads through the Highlands of Scotland. London.

¹³¹ Perthshire, Sheet XXIX, Survey date: 1861, Publication date: 1867, Six-inch 1st edition, 1843-1882, Available at: <https://maps.nls.uk/view/228779551> [Accessed March 2026] and Perthshire, Sheet XXXVIII, Survey date: 1861, Publication date: 1867, Six-inch 1st edition, 1843-1882. Available at: <https://maps.nls.uk/view/228779578> [Accessed March 2026]

No further detailed OS maps dating to the 19th century are available which cover the Site. Within the Study Area, a further three non-designated post-medieval assets have been identified, the Kynachan Lodge (**Asset 44**) to the south of the River Tummel, a shooting stand (**Asset 30**) identified during a short-notice forestry survey was undertaken in 1997 (**Event 65**) and a potential drain (**Asset 76**) recorded during the walkover survey.

This assessment has identified that several post-medieval assets are recorded within the southern part of the Site where there continues to be a focus of activity surrounding the settlement at Tombreck (**Asset 37**) and as such there is a High potential for remains associated with farming activity and the settlement at Tombreck (**Asset 37**) to survive within the Site.

Modern

There is one modern non-designated asset recorded within the Site. Earthworks (**Asset 85**) were visible to the west of the extent of the ancillary work area on LiDAR data, however no enclosure or settlement was identified at this location on historical maps or aerial photography and satellite imagery taken prior to the processing of this LiDAR data. A site visit and satellite imagery indicate a pylon at this location, and it is therefore likely that the earthworks relate to the construction of the pylon.

The OS map revised in 1898 and published in 1900¹³² (Figure 8.5) does not depict any significant change within the Site and surrounding Study Area, although by this time the settlement at Ballantuim (**Asset 33**) is depicted as deserted. Few OS maps covering the first half of the 20th century are available for the Site boundary and those that are available are at the smaller scale, however it can be determined that these suggest that there has been no change within the Site.

Two Listed Buildings dated to the modern period are recorded within the Study Area. The Category A Listed Tummel Power Station (**Asset 78**) and ancillary buildings Hydroelectric Electricity Generating Station (**Asset 79**), Pipelines (**Asset 82**) and Transformer Station (**Asset 83**) are recorded 390 m to the west of the Site. The Category A Listed Tummel Power Station (**Asset 78**) was built in 1931-33 on the shores of Loch Tummel, utilising water from the Dunalistair dam brought by aqueduct and pipeline to the station. A standing building recording of the power station was undertaken in May 2021 (**Event 14**).

The Category B Listed Errochty Power Station (**Asset 2**) is located 488 m to the north-east of the Site along the northern banks of the River Tummel. The power station was built in 1955 and is a key component of post-war hydro-electric developments by North of Scotland Hydro Electric Board (NoSHEB), expanding the Tummel Garry scheme which was set up to provide power which could be exported via the grid to the central belt. The non-designated Errochty Switching Station (**Asset 46**) is located along the southern banks of the River Tummel.

An OS Fundamental Benchmark (**Asset 84**) located at Tummel Bridge is recorded in the Perth and Kinross HER.

This assessment has identified a paucity of modern assets within the Site, although post-medieval agricultural activity appears to have continued around the settlement at Tombreck (**Asset 37**). As such, there is judged to be a **Low** potential for modern remains to survive within the Site.

Previous Archaeological Works (Events)

The Perth and Kinross HER records that four field surveys (**Events 13, 59, 60 and 61**) have been undertaken within the Study Area, although no further information is provided. Desk based assessment and a walkover survey (**Event 69**) was undertaken along the route of a proposed hydro-electric scheme at the Allt Kynachan burn, however nothing of archaeological or historical significance was noted.

¹³² Perth and Clackmannan Sheet XXIX.SW, Date revised: 1898, Date Published: 1900, Six-inch 2nd and later editions, 1892-1960. Available at: <https://maps.nls.uk/view/75654874> [Accessed March 2026] and Perth and Clackmannan Sheet XXXVIII.NW, Date revised: 1898, Date Published: 1900, Six-inch 2nd and later editions, 1892-1960. Available at: <https://maps.nls.uk/view/75654976> [Accessed March 2026] and Perth and Clackmannan Sheet XXXVIII.NE, Date revised: 1898, Date Published: 1900, Six-inch 2nd and later editions, 1892-1960. Available at: <https://maps.nls.uk/view/75654979> [Accessed March 2026] and Perth and Clackmannan Sheet XXXVIII.SE, Date revised: 1898, Date Published: 1900, Six-inch 2nd and later editions, 1892-1960. Available at: <https://maps.nls.uk/view/75654985> [Accessed March 2026]

Aerial Photography

Aerial photographs held online by the NCAP were consulted via AOC Archaeology Group's NCAP subscription. Photographs were viewed via the online webmap portal.

An oblique photograph taken in 1943 (CAM/040, 14301), shows the area to the north and directly to the south of the B846 as undeveloped. A photograph from 1988 (ASS/61788, 0126) covers the majority of the Study Area. The earthworks (**Asset 85**) as visible on LiDAR is not readily visible. Two lines forming a corner can be seen and may indicate a possible enclosure. Satellite imagery from 2005 shows the area of **Asset 85** prior to the construction of the pylon. No upstanding features are visible at this location. By the satellite imagery of 2015, the tracks along **Asset 85** have been established and the pylon constructed. It is therefore possible that the earthworks, as visible on LiDAR, relate to the construction of the pylon.

No unknown archaeological features were identified within the Site on the aerial photographs or satellite imagery.

Table 8.3 Photography Viewed Online via NCAP's Online Map Viewer

Sortie	Frame	Date	Link
CAM/040	14301	24 June 1943	https://ncap.org.uk/frame/8-1-8-40-9
CAM/040	14297	24 June 1943	https://ncap.org.uk/frame/8-1-8-40-7
106G/Scot/UK/0065	3058	08 May 1946	https://ncap.org.uk/frame/8-1-2-2-46-915
OS Photomaps	Sheet 27_75_NE	01 March 1950	https://ncap.org.uk/frame/8-1-4-2-113
ASS/61788	0125	07 June 1988	https://ncap.org.uk/frame/8-1-3-1-35-51?pos=50
ASS/61788	0126	07 June 1988	https://ncap.org.uk/frame/8-1-3-1-35-52
ASS/50488	0195	14 May 1988	https://ncap.org.uk/frame/8-1-3-1-4-110

LiDAR Imagery

LiDAR data was available for northernmost section of the Site only. Earthworks (**Asset 85**) were visible within the Site to the west of the extent of the ancillary work area. Site visit and satellite imagery indicate a pylon at this location, which is likely to postdate the LiDAR data used for this assessment.

Walkover Survey

A walkover survey was undertaken on 26 and 27 June 2023 in order to inform a final underground cable route layout for the proposed underground cable (see **Chapter 2: Proposed Development** for further details). Although the extent of the Proposed Development which is the subject of this assessment was not surveyed, the initial walkover survey provides an adequate overview of the surrounding landscape (**Plate 1**).

The weather conditions were variable but generally clear on 26 June 2023 which allowed for good visibility across the proposed route options and the surrounding landscape. The weather on 27 June 2023 was rainy and overcast throughout the day, which did not limit visibility, however greater care was taken in accessing the survey area.

The Proposed Development extends from the B846 to the north, heading south-east from Errochty Switching Station (**Plate 2**) and following the contour of the Creag Kynachan (**Plate 3**) across pastoral and moorland. The section of the Proposed Development north of the Allt Kynachan was largely covered in dense and tall vegetation which restricted access to a large part of this section and prevented any visibility of low-lying archaeology. The Proposed Development largely follows the alignment of an overhead line and in sections the alignment of an

existing track and there is the potential for the surrounding grounds to have been disturbed during its construction. To the south of the Allt Kynachan, the Proposed Development extends through pastoral fields to the west of Tombreck before extending south-westward across moorland and forestry parallel to the alignment of an existing track and overhead line.

8.6 Future Baseline

The future baseline, as discussed here, is based upon a future scenario in which the Proposed Development is not implemented. Any alteration to the baseline condition of the heritage assets within the Site would likely relate to a very gradual deterioration of the fabric of heritage assets as a consequence of natural weathering and in some cases stock grazing. As a result, the current baseline is taken as the basis for the assessment presented here.

8.7 Impacts and Features Scoped Out

In terms of cultural heritage impact assessment, impacts are considered in terms of the change to an asset's cultural significance. There are three principal impact types that can affect cultural heritage assets: physical impact, setting change, and cumulative impact. Impacts can be positive or negative, temporary or permanent, avoidable or unavoidable, individual or cumulative.

Direct physical impact on cultural heritage assets outwith the core Study Area, which includes all land within the Site have been scoped out of this assessment as no ground-breaking works or construction traffic is predicted beyond this.

Non-designated heritage assets beyond 500 m of the Site have been scoped out as their distance do not allow for an accurate assessment of whether any similar hitherto unknown archaeological remains are likely to survive within the Site and thus be impacted by the Proposed Development.

Impacts on the settings of designated and non-designated cultural heritage assets and features beyond 500 m has been scoped out due to the low-lying (permanent access track) and temporary (proposed construction compounds) nature of the Proposed Development.

8.8 Embedded Mitigation

An initial assessment of the known designated and non-designated heritage assets within 500 m Study Area was undertaken as part of an assessment which looked at three proposed route options for the UGC between Errochty and Kinardochoy substations. It is considered that there is no embedded mitigation in relation to cultural heritage beyond that inherent to the route selection and design.

8.9 Appraisal

Construction Phase

During construction, direct impacts are likely to occur from vegetation clearance, earth moving operations, track construction and widening of existing tracks and during construction of associated infrastructure. Setting impacts relating to construction would be short term temporary effects and may occur due to the introduction of construction machinery on-site, additional construction traffic and construction of compounds. Given the nature of such impacts, setting impacts are only likely to occur in close proximity to the proposed works and would not exceed the operational effects upon setting and so, are not discussed further under construction effects. A number of known and newly recorded heritage assets have been identified within the Site.

The LiDAR data indicates the location of earthworks (**Asset 85**) within the Site and to the west of the footprint of the Proposed Development, although no above ground remains were noted during the site visit. The surrounding area was overgrown with bracken and a pylon was located roughly within the centre of the earthworks. It must be noted that no enclosure or settlement was identified at this location on historical maps or aerial photography and satellite imagery taken prior to the LiDAR data as described in **Section 8.5**. It is therefore likely that the earthworks as visible on LiDAR relate to the construction of the pylon or as a worst-case scenario, any potential

archaeological remains would have been truncated or removed during the construction of the pylon. As such, no impact is expected.

A section of the General Wade Military Road (**Asset 53**) diverts slightly from the line of the modern B846 road to the west of Tom Beith and is visible as a track of low earth and stone banks defined by heather cover. The proposed temporary bellmouth is located at the intersection of the B846 and the military road. It is therefore likely that any remains of the military road at this location would be removed during any ground-breaking works in this area and if the existing track is used to access the area for the construction of the temporary compound, there is the possibility that the asset would be damaged, truncated or removed by heavy vehicle traffic. This asset is considered to be of Medium importance. As a result of construction, there is predicted to be a High magnitude of impact on this asset.

An 'old kiln' (**Asset 5**) is annotated on the OS map of 1861 and published in 1867, approximately 80 m to the south of the buildings at Tombreck (**Asset 37**). Although within the Site, the asset is located at its nearest 18 m to the north of the proposed temporary access track. This asset is considered to be of Low importance. There is the potential for the remains of the old kiln to be affected by construction works due to its proximity. As a worst case, should any direct impacts occur as a result of construction traffic, there is the potential for a High magnitude of impact on this asset.

A mound (**Asset 29**) was recorded during a pre-afforestation survey (**Event 65**) undertaken in 1997 over land on the north-eastern side of the Creag Kynachan. The surveyed area measured approximately 200 m in diameter, though no further information is provided. This asset is considered to be of Negligible importance. The Proposed Development footprint extends within the recorded extent of the mound and as a result of construction, there is predicted to be a Low magnitude of impact on this asset.

Three tracks have been identified on OS map surveyed in 1861 and published in 1867; these tracks are located within the southern part of the Site, around the settlement at Tombreck (**Asset 37**). These assets are considered to be of Negligible importance. The northernmost of these tracks (**Asset 3**) is located along the northern bank of the Allt Kynachan and continues to be in use. Although the proposed permanent access track is expected to end further north, the overall extent of the Site boundary, extends through a section of the track (**Asset 3**). A second track (**Asset 11**) is located within the Site, however no construction activity has been identified at this location and therefore no impact is expected. A third track (**Asset 4**), which is currently in use as such, is crossed by the Site in two locations, directly to the north of the temporary access track, located south of Tombreck (**Asset 37**) and to the south-east of the southern temporary construction compound. As a result of construction, there is predicted to be a Medium magnitude of impact on this asset.

A field boundary (**Asset 12**) is located within the Site and approximately 30 m to the north of a temporary access track. This asset is considered to be of Negligible importance. Based on the asset's distance, no direct impact is expected.

Direct impacts include the possible disturbance of hitherto unknown heritage assets. It is possible that previously unrecorded buried remains may survive below the current ground level, however the potential is less within those areas previously disturbed by construction works associated with the existing overhead line. This assessment has identified a Low potential for prehistoric and modern remains to survive within the Site; a Medium potential for early-historic and medieval remains to survive within the southern part of the Site near Tombreck (**Asset 37**) and a Low potential for early-historic and medieval remains to survive within the central and northern parts of the Site and a High potential for remains associated with farming activity and the settlement at Tombreck (**Asset 37**) to survive within the Site. Detailed consideration of the potential for further archaeological remains for each period has been outlined in **Section 8.5** above.

Temporary Construction Setting

NPF4 and HES guidance on setting are clear that the setting of an asset can contribute to its significance.

Section 8.3 of this report outlines the planning policy and guidance with regard to the setting of designated assets.

It is expected that any setting impact resulting from the construction of the temporary access track, temporary construction compound and temporary bellmouth would be limited to the construction phase.

This section considers the potential for the works undertaken during the Construction Phase to result in temporary impacts upon the setting of designated heritage assets within 500 m of the Site. This includes consideration of whether any such change would constitute an adverse impact to those attributes of the designated assets which directly contribute to their cultural significance rather than simply being an alteration to, or addition of a new element to the existing setting of the asset. Where a new development may be located within the setting of an asset but does not diminish the cultural significance of the asset or the ability to appreciate that significance, it may have a neutral impact.

Category A Listed Tummel Power Station, Grampian Hydro Electric Scheme (Asset 78)

The Tummel Power Station was built in 1931-33 by the engineer Sir William Halcrow, prominently sited along the southern bank of the River Tummel, opposite the Old Bridge of Tummel and 355 m to the west of the Proposed Development. Sir William Halcrow was one of the foremost engineers of the twentieth century; he was highly experienced in the development of hydroelectricity which can be seen in the highly efficient pioneering nature of the Tummel Garry development.

The power station is part of the Grampian Hydroelectric Scheme which was the first major public supply development which utilised high head reservoir storage technology. The Tummel valley was well suited to the development of a hydroelectric scheme, although the difficulty of the terrain required significant development of road infrastructure for the transportation of material from the nearest rail link at Struan. The placement of the power station was therefore governed by engineering and topographical constraints rather than by visual setting or aesthetics considerations. The power station's primary function was thus to provide electricity, utilising water from the Dunalistair dam which was brought by aqueduct and pipeline to the station some 3 miles from the dam. The asset's significance is also as an outstanding example of the pioneering use of high-head hydropower and the listed elements include the original two turbines, the original control and monitoring systems. The asset is considered to have a Medium sensitivity to changes to its setting.

The power station is located at an altitude of 144 m above ordnance datum (AOD) along the shores of the River Tummel and bordered to the south-east and north-west by bands of woodland. The relatively low-lying nature of the Proposed Development suggests that few elements, if any would be visible beyond their immediate surrounds. Although the temporary construction compounds would be visible from a greater distance in comparison to the temporary and permanent tracks, the southernmost compound is located to the south of Creag Kynachan which reaches a height of 416 m AOD, preventing any views of the compound from the shores of the River Tummel. The construction compound to the north is located 1.1 km to the south-east of the power station beyond a large area of woodland which borders the B846 and as such it is not expected that any visibility would be possible based on the intervening vegetation and distance. It is judged that this would have no temporary construction setting impact upon the asset's setting.

Category B Listed Tummel, Hydro Electric Scheme, Errochty Power Station, Including Boundary Wall (Asset 2)

The Errochty Power Station was built in 1955, by the architect for the North of Scotland Hydro Electric Board architectural panel James Shearer. The power station is a tall single storey building set tightly against the cliff face to its north with steep wooded slope above and overlooking the River Tummel to the south.

The power station is an outstanding example of the development of modernist functionalism by the NoSHEB. These developments were subject to parliamentary approval and objections on the grounds of scenic amenity were common. As such a panel of architectural advisers was set up which influenced the appearance and the style of the designs resulting in vernacular modernism which is a direct product of the strict role which engineers and architects played in the design process and of the increasing desire to harmonise buildings with the landscape.

The placement of the power station was therefore governed by engineering and topographical constraints rather than by visual setting or aesthetics considerations. The power station's primary function was to provide electricity,

which could be exported via the grid to the central belt, the profit from which subsidised the provision of power to remote north Highland communities. The asset is considered to have a Medium sensitivity to changes to its setting.

The power station is located at an altitude of 143 m AOD along the shores of the River Tummel. The relatively low-lying nature of the Proposed Development suggests that few elements, if any would be visible beyond their immediate surrounds. Although the temporary construction compounds would be visible from a greater distance in comparison to the temporary and permanent tracks, the southernmost compound is located to the south of Creag Kynachan which reaches a height of 416 m AOD, preventing any views of the compound from the shores of the River Tummel. The construction compound to the north is located 755 m to the south-south-east of the power station beyond a large area of woodland which borders the B846 and as such it is not expected that any visibility would be possible based on the intervening vegetation and distance. It is judged that this would have No temporary construction setting impact upon the asset's setting.

Operation Phase

NPF4 and HES guidance on setting are clear that the setting of an asset can contribute to its significance. Section 8.3 of this report outlines the planning policy and guidance with regard to the setting of designated assets.

This section considers the potential for the Proposed Development to result in impact upon the setting of designated heritage assets within 500 m of the Site. This includes consideration of whether any such change would constitute an adverse impact to those attributes of the designated assets which directly contribute to their cultural significance rather than simply being an alteration to, or addition of a new element to the existing setting of the asset. Where a new development may be located within the setting of an asset but does not diminish the cultural significance of the asset or the ability to appreciate that significance, it may have a neutral impact.

Setting impacts can also occur away from the development, such as changes in traffic around an asset and changes in sensory factors such as noise, odour or emissions. These types of impact can occur at any stage of development and may be permanent, reversible or temporary.

The Proposed Development includes a section of permanent access road. Given the low-lying nature of this infrastructure, it is not expected to be visible from either of the designated heritage assets within the 500 m Study Area, as detailed above (**Assets 2** and **78**). The slight anticipated increase in traffic along this section of permanent road infrastructure is considered negligible and, overall, it is judged that there would be No Operation Phase impacts upon the setting of these assets.

8.10 Mitigation

National planning policies and planning guidance, NPF4, HEPS and PAN2/2011, as well as the local planning policies for PKC as outlined in this report, require a mitigation response that is designed to take cognisance of the possible impacts upon heritage assets, both known and potential, by a proposed development and avoid, minimise or offset any such impacts as appropriate.

Direct impacts on the known archaeological remains within the Site could result in a High adverse effect on the archaeological resource. It is advised that a watching brief should be undertaken on all ground-breaking works within the southern part of the Site surrounding Tombreck (**Asset 37**) targeting **Assets 3 and 4** and on any ground-breaking work along the section of the General Wade Military Road (**Asset 53**) which diverts slightly from the line of the modern B846 road to the west of Tom Beith.

There is a potential for a High magnitude of impact on the 'old kiln' (**Asset 5**) resulting for construction traffic due to its proximity to the proposed temporary access track. As such it is advised that a registered archaeological company be contracted to mark out the asset's location to prevent any inadvertent damage as a result of plant movement within the extent of the 'old kiln' (**Asset 5**).

This assessment also considers the possibility that previously unrecorded buried remains may survive below the current ground level, however the potential is less within those areas previously disturbed by construction works associated with the existing overhead line. This assessment has established that based on current evidence,

there is considered to be a Low potential for prehistoric and modern remains to survive within the Site; a Medium potential for early-historic and medieval remains to survive within the southern part of the Site near Tombreck (**Asset 37**) and a Low potential for early-historic and medieval remains to survive within the central and northern parts of the Site and a High potential for remains associated with farming activity and the settlement at Tombreck (**Asset 37**) to survive within the Site. A programme of watching brief is recommended to be undertaken on all ground-breaking works within the southern part of the Site, in particular around the settlement at Tombreck (**Asset 37**). The scope and method of any archaeological mitigation works would require to be agreed with the Perth and Kinross Archaeology Trust as the archaeological advisors to PKC.

The Proposed Development is considered to have no impact on the setting of the designated heritage assets within the 500 m Study Area. As such, no mitigation for settings impacts is considered necessary, however the need for any such mitigation would be a matter for the local planning authority.

NPF4 (Policy 7o) and the Association of Local Government Archaeological Officer (ALGAO) (Mann 2023) have noted the need for public or community engagement in archaeology and Our Past, Our Future: The Strategy for Scotland's Historic Environment states that their mission is to, "*sustain and enhance the benefits of Scotland's historic environment, for people and communities now and into the future*" (HES 2023, 6). While the Site does not present a High potential for as-yet unknown archaeological remains, should significant archaeological findings be uncovered in the course of any required programme of archaeological works, opportunities for community engagement should be explored. The scope and requirement of any programme of public benefit should be agreed in consultation with the local authority, the client and the contractor.

Table 8.4 Recommended Mitigation

Reference	Potential Impact	Mitigation Measure
Enclosure (Asset 85)	No impact.	No mitigation.
General Wade Military Road (Asset 53)	High Magnitude of Direct Impact.	Contract a ClfA Accredited Archaeologist or Registered Organisation to undertake a watching brief on any ground-breaking work along the section of the General Wade Military Road (Asset 53) which diverts slightly from the line of the modern B846 road to the west of Tom Beith.
Old Kiln (Asset 5)	High Magnitude of Impact resulting from construction traffic.	Contract a ClfA Accredited Archaeologist or Registered Organisation to mark out the location of the 'old kiln' (Asset 5) to prevent any inadvertent damage as a result of plant movement within the extent of the asset.
Mound (Asset 29)	Low Magnitude of Direct Impact.	No mitigation. General location provided by the HER for several assets recorded during a pre-afforestation survey in 1997. The mound was not noted during the walkover survey within the extent of the corridor.
Track (Asset 3)	Medium Magnitude of Direct Impact.	Contract a ClfA Accredited Archaeologist or Registered Organisation to undertake a watching brief on ground-breaking work.

Reference	Potential Impact	Mitigation Measure
Track (Asset 4)	Medium Magnitude of Direct Impact.	Contract a ClfA Accredited Archaeologist or Registered Organisation to undertake a watching brief on ground-breaking work.
Track (Asset 11)	No impact.	No mitigation.
Boundary Wall (Asset 12)	No impact.	No mitigation.
Category A Listed Tummel Power Station, Grampian Hydro Electric Scheme (Asset 78)	No impact.	No mitigation.
Category B Listed Tummel, Hydro Electric Scheme, Errochty Power Station, Including Boundary Wall (Asset 2)	No impact.	No mitigation.

8.11 Residual Effects

A High magnitude of direct effect on the General Wade Military Road (**Asset 53**), which has a Medium level of importance, has been identified during this assessment, and mitigation measures have been outlined in **Section 8.10** above which would offset these direct effects through preservation by record.

Direct effect on two non-designated heritage assets of Negligible importance (**Assets 3 and 4**) and on non-designated heritage asset of Low importance (**Asset 5**) has been identified during this assessment and mitigation measures have been outlined in **Section 8.10** above which would offset these direct effects through demarcation and preservation by record.

There are no predicted temporary construction effects on the settings of the Category A Listed Tummel Power Station (**Asset 78**) or the Category B Listed Tummel, Hydro Electric Scheme, Errochty Power Station, Including Boundary Wall (**Asset 2**) and, therefore, no predicted residual setting effects resulting from the Construction Phase.

There are no predicted Operation effects on the settings of the Category A Listed Tummel Power Station (**Asset 78**) or the Category B Listed Tummel, Hydro Electric Scheme, Errochty Power Station, Including Boundary Wall (**Asset 2**) and, therefore, no predicted residual setting effects resulting from the Operation Phase.

8.12 Conclusion

This assessment assessed the potential for direct and setting effects on archaeological features and heritage assets resulting from the construction and operation of the Proposed Development.

The Proposed Development has the potential to impact upon hitherto unknown buried archaeological remains. A number of known assets have been recorded within the footprint of the Proposed Development.

The General Wade Military Road (**Asset 53**), three tracks (**Assets 3, 4 and 29**) and an 'old kiln' (**Asset 5**) has been identified during this assessment and mitigation measures have been outlined in **Section 8.10** above which would offset these direct effects through demarcation and preservation by record. Given the proximity of the Proposed Development to other known assets and the potential for hitherto unrecorded buried archaeological

remains to survive, mitigation measures designed to avoid, minimise or offset impacts, have been outlined in **Section 8.10**.

Potential operational effects on the settings of designated heritage assets within the 500 m Study Area has been considered. The Proposed Development is considered to have no impact on the setting of the designated heritage assets within the 500 m Study Area. As such, no mitigation for settings impacts is considered necessary, however the need for any such mitigation would be a matter for the local planning authority.

Following implementation of mitigation measures, potential direct effects would be offset. All operational effects upon the setting of designated assets would be as per the conclusions presented under Operation Phase in **Section 8.9** of this chapter for the life of the Proposed Development.

9 FORESTRY

9.1 Introduction

This chapter reports on the likely effects with respect to forestry associated with the construction and operation of the Proposed Development, as described in **Chapter 2: Proposed Development**. Where required, it also provides details of control measures. This chapter (and its associated figures and appendices) is not intended to be read as a standalone assessment and reference should be made to the introductory chapters of this EA.

The specific objectives of the chapter are to:

- Describe the baseline forest environment;
- Identify the potential direct and indirect impacts on forest receptors; and
- Describe any mitigation or control measures proposed to address likely impacts.

This chapter is also supported by the following figures:

- **Figure 9.1: Forestry Baseline**
- **Figure 9.2: Forestry Felling**

9.2 Methodology

9.2.1 Information Sources

The woodland assessment desk study has reviewed the following:

- Scottish Forestry (SF) Map Viewer. SF is the Scottish Government agency responsible for forestry policy, support and regulation. The map viewer presents what forest management plans or felling approvals are in place or have now expired.
- Native Woodland Survey of Scotland (NWSS) datasets. These provide a baseline survey of all native woodlands, nearly native woodlands and Plantations on Ancient Woodland Sites (PAWS) in Scotland, showing type, extent and condition of those woods.
- Datasets for Ancient Woodland Inventory (Scotland) (AWI). These categorise ancient woods recorded as being of semi-natural origin on either the 1750 Roy maps, or the 1st Edition Ordnance Survey maps of 1860.
- The Land Information Search (LIS). This is a map-based tool that presents such data as Sites of Special Scientific Interest and Native Woodland, that may fall within the area of interest.
- No forest data has been provided by the woodland owners or agents. For the purpose of this chapter, reference has been made to the open data National Forest Inventory (NFI), and where applicable the National Forest Estate (NFE) sub-compartment datasets.

9.2.2 Limitations and Assumptions

No forestry or woodland information has been provided by any woodland owners or agents.

The open data forestry shapefiles have been used to identify the woodlands within the study area. There are minor differences between these, the Ordnance Survey mapping and aerial imagery.

9.2.3 Study Area

The forestry Study Area is illustrated on **Figure 9.1: Forestry Baseline**.

The forestry Study Area includes woodlands and assumed woodlands as shown in NFI datasets.

9.2.4 Site Visits

A forestry site walkover was undertaken on 13 June 2023 to confirm the woodland mapping, note changes, identify tree species, their current height and approximate age, along with potential stability should felling take place. Updated 2025 habitat surveys confirmed no change in habitats, so it was considered that an updated forestry walkover survey was not required.

9.2.5 Legislation, Planning Policy and Guidance

The key legislation, policy and guidance listed below has been considered in the assessment:

- The Scottish Government's Control of Woodland Removal – Policy (2009)¹³³;
- Scottish Government's policy on control of woodland removal: implementation guidance (2019)¹³⁴;
- National Planning Framework (NPF) 4 (2023)¹³⁵ (see below); and
- UK Forestry Standard 5th Edition (2023)¹³⁶.

NPF4 Policy 6: Forestry, woodland and trees notes that development proposals should not be supported where they would result in:

- Any loss of ancient woodlands, ancient and veteran trees, or adverse impact on their ecological condition;
- Adverse impacts on native woodlands, hedgerows and individual trees of high biodiversity value or identified for protection in the Forestry and Woodland Strategy;
- Fragmenting or severing woodland habitats, unless mitigation measures are identified and implemented; and/or
- Conflict with Restocking Direction, Remedial Notice or Registered Notice to Comply issued by SF.

9.2.6 Assessment Methodology

The forestry assessment methodology is based upon a consideration of the effects of the Proposed Development against the standards and policies set out above, particularly:

- UK Forestry Standard 5th Edition (2023), the Scottish Government's approach to sustainable forestry;
- Control of Woodland Removal – Policy (2009), which includes a strong presumption in favour of protecting Scotland's woodland resource and the criteria for determining the acceptability of woodland removal; and
- NPF4 as above, but in particular the adverse impacts on Ancient Woodlands, ancient and veteran trees.

9.3 Consultation to Date

The pre-application response from Perth and Kinross Council informs the forestry assessment and is summarised in **Table 9.1**.

Table 9.1 Consultation Responses

Consultee	Date	Response
Perth and Kinross Council pre-application response	15 th May 2025	NPF4 Policy 6: Forestry, woodland and trees is recognised in this chapter. The Ancient Woodlands are avoided through design and most woodland is also avoided. Some trees may require removal at the proposed bellmouth. The description of the construction

¹³³ Forestry Commission Scotland (2009). Control of Woodland Removal. [online] Available at: https://www.forestry.gov.scot/sites/default/files/publications/PDF_Policy_Felling_Trees_SG_Policy_on_Control_of_Woodland_Removal_022009.pdf. [Accessed 20/03/2026]

¹³⁴ Scottish Government (2019). Scottish Government's policy on control of woodland removal: implementation guidance. [online] Available at: https://www.forestry.gov.scot/sites/default/files/publications/PDF_Guidance_Scottish_Government%27s_Policy_on_Control_of_Woodland_Removal_Implementation_Guidance_01022019.pdf [Accessed 20/03/2026].

¹³⁵ Scottish Government (2023). National Planning Framework 4. [online] Available at: <https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2023/02/national-planning-framework-4/documents/national-planning-framework-4-revised-draft/national-planning-framework-4-revised-draft/govscot%3Adocument/national-planning-framework-4.pdf>. [Accessed 20/03/2026]

¹³⁶ Forestry Commission (2023). The UK Forestry Standard The governments' approach to sustainable forest management. [online] Available at: https://assets.publishing.service.gov.uk/media/651670336a423b0014f4c5c0/Revised_UK_Forestry_Standard_-_effective_October_2024.pdf. [Accessed 20/03/2026]

Consultee	Date	Response
		<p>requirements is appraised in Section 9.6 and Figure 9.2: Forestry Felling.</p> <p>The requirement for compensatory planting is addressed in Section 9.7 and Table 9.2.</p>

9.4 Baseline

The Proposed Development avoids most areas of woodland. However, the NFI data includes areas of woodland and assumed woodland, whilst the NWSS data includes open land habitat (National Grid Reference (NGR): NN 76804 58974).

The AWI shows a small area of ancient (of semi natural origin) ASNO1860, antiquity 2a outwith the Site at NGR: NN 77252 57317.

Future Baseline

In the absence of the Proposed Development, the mainly broadleaved trees would continue as native woodlands without any planned felling period.

Impact and Features Scoped Out

Based on the baseline characterisation, the following receptors have been scoped out of the subsequent assessment. Survey of plants including fungi, lichens and bryophytes, which are considered in **Chapter 4: Ecology and Nature Conservation**. Forest landscape is covered by **Chapter 7: Landscape and Visual**.

9.5 Embedded Mitigation

Embedded mitigation through design has avoided most woodland and avoids all Ancient Woodland within the Site.

Compensatory planting (CP) is accepted to mitigate any proposed permanent woodland loss.

9.6 Appraisal

Construction Phase

To construct the proposed bellmouth there is a possible felling of 0.13 ha within an area described in NFI as assumed woodland or young trees shown in NFI (see **Figure 9.2: Forestry Felling**). The site visit revealed the area to be mainly scrub bog myrtle (*Myrica gale*) with some willow (*Salix spp.*) and birch (*Betula spp.*). A group of approximately six semi mature birch are present at the western extent of the proposed felling area.

The temporary access track to the temporary compound follows an existing track and avoids the stand of trees, classed as native pinewood in NWSS, immediately to the south.

The permanent access track on the western edge of this stand of trees follows an existing 4x4 track and with detailed design no felling would be required for this upgrade.

Operation Phase

No further felling would be required. Regular maintenance of the track may require cutting back any regrowth which encroaches the access.

9.7 Mitigation

Should detailed design confirm that felling be required at the proposed bellmouth, CP would be provided with an equivalent woodland area, on appropriate site types and with at least the equivalent woodland type, in Scotland.

Table 9.2 Recommended Mitigation

Reference	Potential Impact	Mitigation Measure
Temporary Bellmouth	Removal of up to 0.13 ha of scrub.	Compensatory planting of equivalent woodland area of the same woodland type.

9.8 Residual Effects

Given that compensatory planting would take place, then in a Scotland wide context there would be no loss of woodland and there would be no residual effect.

9.9 Conclusion

The Proposed Development avoids most woodlands within the area. However, there is a possibility that up to 0.13 ha assumed woodland may require felling for the proposed bellmouth.

No Ancient Woodland has been identified for felling.

The Applicant is committed to providing compensatory planting of equivalent woodland area with at least the equivalent woodland-related net public benefits.

10 SUMMARY OF RESIDUAL EFFECTS

This chapter provides a summary of residual effects attributed to each technical topic as described below.

Ecology and Ornithology

Potential impacts are considered possible for designated sites (Dalcroy Promontory Site of Special Scientific Interest (SSSI) and the River Tay Special Area of Conservation (SAC)), ancient woodland, habitats (particularly sensitive and/or priority habitats such as Annex I and Groundwater Dependent Terrestrial Ecosystems (GWDTE)), and protected species including Brook and Sea Lamprey and Atlantic salmon through effects related to pollution in the River Tay SAC as well as otter and water vole.

Implementation of the proposed CEMP, which will be inputted into by a suitably qualified ECoW and include a Pollution Prevention Plan (PPP), would avoid likely adverse effects from pollution events and disturbance on designated sites and habitats, with no residual effects anticipated.

Habitat reinstatement following commissioning of the Proposed Development would result in an adverse effect for the short to medium term, approximately three to five years for grassland habitats and five to ten years for other habitats, until the habitats have re-established. As a result, no significant long-term residual effects are anticipated.

There is a presumption against removal of woodland within the Site, particularly the area of Ancient Woodland which falls within the RLB. No felling within the area designated as Ancient Woodland is proposed. Where tree felling outwith the area of Ancient Woodland is required for the Proposed Development, the area removed should be replaced to ensure no net loss, and ideally, a net gain through additional planting of native tree species, to facilitate connectivity with woodland within the wider area, acting as an ecological corridor, to the benefit of protected species. Compensatory planting would take up to five years to establish, however once it does, no significant long-term residual effects are predicted.

Following the implementation of mitigation such as a pre-construction protected species survey and measures imbedded into the CEMP, such as a PPP and Species Protection Plans (SPPs), no residual effects are predicted on otter or water vole.

Landscape and Visual

The potential effects during construction and operation on landscape and visual receptors are similarly limited in scale.

The most notable effects on the landscape character and views would relate to any loss of vegetation and changes to the landscape fabric. Any tree removal would be minimised and trees to be retained would be protected in accordance with BS 5837: Trees in Relation to Design, Demolition and Construction.

Discernible changes to landscape character or visual amenity are restricted to areas within proximity to the Site (within 1 km) due to intervening landform and vegetation and the recessive nature of longer-distance views of development of limited height. These residual effects relate to traffic and plant machinery movement, temporary fencing / hoarding and the storage of materials within the construction compounds. These elements are features that exert a temporary effect and are fully reversible. No notable effects have been identified, and no additional mitigation is proposed other than the embedded mitigation in relation to route selection, reinstatement of seeding and compensatory tree planting (as necessary) within the next planting or seeding season following construction works, using locally appropriate species, subject to landowner agreement.

Cultural Heritage

This assessment considered the potential for direct and setting effects on archaeological features and heritage assets resulting from the construction and operation of the Proposed Development.

This assessment has considered the possibility that previously unrecorded buried remains may survive below the current ground level, however the potential is less within those areas previously disturbed by construction works

associated with the existing overhead line. This assessment has established that based on current evidence, there is considered to be a Low potential for prehistoric and modern remains to survive within the Site; a Medium potential for early-historic and medieval remains to survive within the southern part of the Site near Tombreck (Asset 37) and a Low potential for early-historic and medieval remains to survive within the central and northern parts of the Site and a High potential for remains associated with farming activity and the settlement at Tombreck (Asset 37) to survive within the Site. A programme of watching briefs is recommended to be undertaken on all ground-breaking works within the southern part of the Site, in particular around the settlement at Tombreck (Asset 37).

A number of known assets have been recorded within the footprint of the Proposed Development. A High magnitude of direct effect on the General Wade Military Road (Asset 53) which has a Medium level of importance has been identified during this assessment and mitigation measures have been outlined in section 8.10 in Chapter 8: Cultural Heritage. which will offset these direct effects through preservation by record. Direct effect on three non-designated heritage assets of Negligible importance (Assets 3 and 4) and on non-designated heritage asset of Low importance (Asset 5) has been identified during this assessment and mitigation measures have been outlined in section 8.10 in Chapter 8, which would offset these direct effects through demarcation and preservation by record.

Potential operational effects on the settings of designated heritage assets within the 500 m Study Area has been considered. The Proposed Development is considered to have no impact on the setting of the designated heritage assets within the 500 m Study Area. As such, no mitigation for settings impacts is considered necessary. The predicted operational residual effects on the settings of the aforementioned heritage assets would be the same as assessed for the potential effects.

Hydrology, Hydrogeology and Geology

Assessment has identified that the proposed routeing of the access track and location of the proposed construction compounds and bellmouths would require only one watercourse crossing (of a watercourse recorded by OS 1:50,000 scale mapping). The Proposed Development intersects with only one area of potential GWDTE identified through NVC surveying. This area has been assessed not to be groundwater dependent, based on topographical and hydrogeological characteristics of the GWDTE area. A small area of Class 3 peat is crossed by the permanent access track over a length of approximately 320 m.

Based on the implementation of a CEMP and the employment of good construction working practice, no residual effects are anticipated with regards to hydrology, hydrogeology and geology.

Forestry

The Proposed Development avoids most woodlands within the area. However, there is a possibility that up to 0.13 ha assumed woodland consisting of scrub bog myrtle, willow, and birch, may require felling for the bellmouth. No Ancient Woodland has been identified for felling. Given that compensatory planting of equivalent woodland area with at least the equivalent woodland-related net public benefits would take place then in a Scotland wide context there would be no loss of woodland and there would be no residual effect.

11 COMMITMENTS REGISTER

Table 11.1 collates the commitments made throughout this EA Report and indicates the project phase that they apply to, and which party is responsible for implementation of the commitment. This commitments register would be incorporated into the CEMP when it is developed by the Principal Contractor and would be updated if required to incorporate any additional mitigation identified as being required.

Table 11.1 Commitments Register

Commitment Reference	EA Reference	Project Phase	Commitment	Responsibility
Project Description				
PD1	Section 2.2	Construction	All temporary access tracks will be removed on completion of the works and the area reinstated to its previous condition.	Principal Contractor
PD2	Section 2.2	Construction	Temporary widening to existing tracks will be removed on completion of the works and the area reinstated to its previous condition.	Principal Contractor
PD3	Section 2.5	Pre-Construction	A Construction Traffic Management Plan (CTMP) would be prepared by the Principal Contractor prior to any works commencing, in consultation with Perth and Kinross Council (PKC) and Transport Scotland, as required. The CTMP would describe all mitigation and signage measures that are proposed on the public road network. An Outline CTMP has been submitted as part of the planning application and would be developed into the CTMP to be prepared by the Principal Contractor.	Principal Contractor
PD4	Section 2.7	Construction	Minor Landscaping shall take place as part of the restoration works, in the form of a grass centre strip and reseeding the edges of the permanent track.	Principal Contractor
PD5	Section 2.7	Construction	A Biodiversity Net Gain Assessment has been completed. The Applicant is committed in all projects to deliver 10 % net gain	Principal Contractor
PD6	Section 2.9	Construction	Construction activities would in general be undertaken during daytime periods. Working hours are proposed between 07.00 to 19.00 Monday to Friday and 08.00 to 13.00 on Saturdays year-round. Any working required out of these hours would be agreed in writing with PKC.	Principal Contractor
PD7	Section 2.10	Pre-Construction	A Construction Environmental Management Plan (CEMP) would be prepared and finalised with detailed information prior to the beginning of construction. This will be prepared in consultation with relevant authorities and consider relevant approved plans and planning conditions. Method statements would be included in the CEMP.	Principal Contractor

Commitment Reference	EA Reference	Project Phase	Commitment	Responsibility
PD8	Section 2.2	Pre-construction	All public road improvement works would be subject to the approval of the relevant planning and roads authority and individual traffic management plans agreed before works commence.	Principal Contractor
PD9	Section 1.2	Construction	Ensure regular maintenance of all equipment used on-site, including maintenance related to noise emissions.	Principal Contractor
Chapter 4: Ecology				
E1	Table 4.8	Construction Operation	Existing, or temporary, access tracks would be used as much as possible. Preference would be given to lower impact access solutions. Temporary tracks would be restored as closely as possible to their pre-existing condition using natural regeneration techniques on completion of the works.	Principal Contractor
E2	Table 4.8	Construction Operation	Immediate reinstatement of habitats following construction activities would occur, particularly in areas of temporary access tracks, bellmouths and construction compounds.	Principal Contractor
E3	Table 4.8	Construction Operation	SEPA and good practice guidance (such as GPPs) would be followed when working close to or crossing watercourses. The CEMP would include standard pollution prevention guidelines, such as silt fencing and traps, during the construction phase to ensure that no water or air borne pollutants reach ecological features.	Principal Contractor
E4	Table 4.8	Construction	Based on guidance and consultation with PKC, it is considered that the Proposed Development would aim to avoid areas of Ancient Woodland. Where tree felling outwith areas of Ancient Woodland is required for the Proposed Development, the area removed should be replaced to ensure no net loss, and ideally, a net gain through additional planting of native tree species, to facilitate connectivity with woodland within the wider area, acting as an ecological corridor, to the benefit of protected species. This would be undertaken in consultation with NatureScot and Scottish Forestry.	Principal Contractor
E5	Table 4.8	Construction	Engagement with SEPA would occur regarding any excavated peat reuse and disposal, where appropriate.	Principal Contractor

Commitment Reference	EA Reference	Project Phase	Commitment	Responsibility
E6	Table 4.8	Construction	Immediate reinstatement of blanket bog would occur following construction activities, particularly in areas of temporary access.	Principal Contractor
E7	Table 4.8	Construction	The Proposed Development will cross through areas of peatland. Where peat is encountered during excavations, the excavated peat materials would be temporarily stored prior to being reinstated. The temporary storage of such excavated peat shall seek to minimise disturbance of deposits by minimising haul distance between temporary peat storage sites and re-use areas. In general, it shall be a priority to avoid a single site dedicated to a temporary peat storage area. Excavated peat would be stored on geo-textile matting, which acts as a protective barrier to the underlying soils and vegetation. The geo-textile shall be designed to prevent ingress of groundwater and erosion and de-stabilisation of the base of the stored peat. Peat shall be stored to a maximum depth of 1 m with the peat turves stored separately from underlying peat. The peat turves or vegetation layer shall be stored in a single layer and a system of watering the stored peat and turves/vegetation shall be in place to ensure that the peat remains damp.	Principal Contractor
E8	Table 4.8	Pre-construction Construction	Pre-construction protected species surveys should be undertaken as close to the construction phase as possible, and ideally no more than three months prior to construction. If the surveys were to indicate the presence of protected species additional to those recorded to date, an assessment of the mitigation on the species would be completed and appropriate mitigation measures identified (if required), such as micro-siting of access roads. SPPs would be included in the CEMP and a suitably qualified ECoW would input into the CEMP to ensure appropriate mitigation measures are in place and reduce any disturbance impacts.	Principal Contractor
E9	Table 4.9	Operation	Operations staff will have their own RAMS (Risk Assessment and Method Statement) that they would follow in order to manage environmental risks from their work, such as oil spills.	SSEN Transmission
Chapter 5: Ornithology				
O1	Table 5.4	Construction	Ground or vegetation clearance works should be undertaken outwith the main breeding bird season (March – September, inclusive). If this is not possible, a	Principal Contractor

Commitment Reference	EA Reference	Project Phase	Commitment	Responsibility
		Pre-Construction	pre-construction nesting bird check would be required to be undertaken by a suitably qualified ECoW to determine if nesting birds are present. If nesting birds are found, a suitable buffer zone would be implemented around the nest, with no works until a time in which the young have fledged or the nest is no longer in use.	
O2	Table 5.4	Construction	SSEN Transmission's Bird SPP would be followed during construction.	Principal Contractor
O3	Table 5.5	Construction	Vehicles would access the site utilising existing access roads. Following commissioning of the Proposed Development.	Principal Contractor
Chapter 6: Hydrology				
H1	Table 6.6	Construction	The siting of the permanent above ground features within the Site would be situated outwith areas assessed to be at risk of flooding identified on SEPA regulatory mapping.	Principal Contractor
H2	Table 6.6	Construction	Watercourse crossings would be designed to accommodate the 1 in 200 (0.5 %) annual probability flood event in line with SEPA guidance and the SSEN GEMP for Watercourse Crossings. Similarly, where crossings of smaller surface water flow paths or minor drains not recorded on OS mapping are required, suitably sized circular culverts would be installed to allow cross drainage in line with the GEMP.	Principal Contractor
H3	Table 6.6	Construction	Surface water flood risk would be accounted for during detailed drainage design, in consultation with SEPA. For permanent tracks additional allowance would be provided for climate change.	Principal Contractor
H4	Table 6.6	Construction	Sustainable drainage (SuDS) measures would ensure that runoff rates would not be increased for events up to the 1 in 100 (1 %) annual probability storm. Details of SuDS would be prepared by the appointed contractor at detailed design stage.	Principal Contractor
H5	Section 6.5	Construction	The CEMP would include a plan for the management of environmental impacts on hydrological and geological features such as water quality and Major Accident or Pollution Prevention. Standard mitigation and pollution prevention measures and good practice would be included in the CEMP and implemented	Principal Contractor

Commitment Reference	EA Reference	Project Phase	Commitment	Responsibility
			during construction to ensure the potential risk of pollution and siltation of watercourses would be appropriately managed, particularly in regard to the integrity of the River Tay SAC and its tributaries. As a minimum, these would follow SEPA Guidelines for Water Pollution Prevention from Civil Engineering Contracts and Special Requirements.	
H6	Section 6.5	Construction	<p>Methods of working outlined in the CEMP would include:</p> <ul style="list-style-type: none"> Fuel deliveries and refuelling to take place by trained staff in a designated area with an impermeable base, taking place more than 50 m away from any watercourse; Spill kits would be available on all plants on the site, as well as at any pollution sources or sensitive features; and Lined concrete wash-out facilities would be provided at least 50 m away from any watercourse, if these are required at the Site. 	Principal Contractor
H7	Table 6.7	Construction	<p>Methods of working outlined in the CEMP would include a PPP.</p> <p>Standard mitigation and pollution prevention measures and good practice would be set out in the CEMP and would be implemented during the construction work to ensure that the risk of pollution or siltation of watercourses would be appropriately managed.</p> <p>Pollution control measures would be implemented in line with applicable SSEN Transmission GEMPs.</p>	Principal Contractor
H8	Table 6.7	Construction	<p>The selected design will, as far as is practical, avoid disturbance of peatland habitats. Excavations on areas where the presence of peat is confirmed will be minimised and it is anticipated that any site-won peat resulting from the construction of the track would be reinstated within the Site area.</p> <p>Potential impacts on the underlying geology would be managed through the implementation of a CEMP.</p>	Principal Contractor
Chapter 7: Landscape and Visual Amenity				
LV1	Section 7.7	Construction Post-Construction	Reinstatement and reseeded of areas disturbed during construction of underground cable and following the removal of the construction compounds and temporary track would be carried out within the next planting or seeding	Principal Contractor

Commitment Reference	EA Reference	Project Phase	Commitment	Responsibility
			<p>season following construction works, using locally appropriate species subject to landowner agreement.</p> <p>Checks of the new planting would be carried out during the aftercare period and any failed planting is to be reinstated the following planting season.</p>	
LV2	Section 7.7	Construction Operation	All existing vegetation to be retained in proximity to the works would be protected during construction and operational activities.	Principal Contractor
LV3	Table 7.4	Construction	Material storage and temporary stockpiles would be retained for the shortest possible duration and would be sited in accordance with the latest best practice guidance to minimise impacts on nearby visual receptors, in accordance with the CEMP.	Principal Contractor
Chapter 8: Cultural Heritage				
CH1	Section 8.10	Construction	Watching briefs should be undertaken on all ground-breaking works within the southern part of the Site surrounding Tombreck (Asset 37) targeting Assets 3 and 4 and on any ground-breaking work along the section of the General Wade Military Road (Asset 53) which diverts slightly from the line of the modern B846 road to the west of Tom Beith.	Principal Contractor
CH2	Section 8.10	Pre-Construction Construction	There is a potential for a High magnitude of impact on the 'old kiln' (Asset 5) resulting from construction traffic due to its proximity to the proposed temporary access track. As such a registered archaeological company should be contracted to mark out and monitor the asset's location to prevent any inadvertent damage as a result of plant movement within the extent of the 'old kiln' (Asset 5).	Principal Contractor
CH3	Section 8.10	Construction Operation	Should significant archaeological findings be uncovered in the course of any required programme of archaeological works, opportunities for community engagement should be explored. The scope and requirement of any programme of public benefit should be agreed in consultation with the local authority.	SSEN Transmission / Principal Contractor
Chapter 9: Forestry				

Commitment Reference	EA Reference	Project Phase	Commitment	Responsibility
F1	Table 9.2	Construction Operation	Removal of up to 0.13 ha of scrub may be required to construct a proposed bellmouth. Compensatory planting of equivalent woodland area of the same woodland type in Scotland would be undertaken to mitigate against this.	Principal Contractor