Offshore Wind Power Limited

West of Orkney Windfarm Onshore EIA Report

Volume 1, Chapter 12 - Land Use and Other Users, including Forestry

WO1-WOW-CON-EV-RP-0092: Approved by S.Kerr
Document Control 25/10/2023

ASSIGNMENT L100632-S06

DOCUMENT L-100632-S06-A-ESIA-012

XODUS

West of Orkney Windfarm

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REV	DATE	DESCRIPTION	ISSUED	CHECKED	APPROVED	CLIENT
A01	16/10/2023	Issued for Use	JO'N	AF	LS	OWPL
R01	23/05/2023	Issued for Review	JO'N/JG	AF	LS	OWPL

CONTENTS

12 LAND USE AND OTHER USERS, INCLUDING FORESTRY

Chapter summary

This chapter of the Onshore Environmental Impact Assessment (EIA) Report assesses the potential effects from the onshore Project on land use and other users, including forestry. This includes direct, indirect, whole project assessment, cumulative, inter-related effects, inter-relationships and transboundary effects.

The primary focus of the assessment is impacts on other users of the land within the onshore Project area, including agriculture, forestry, recreation and tourism assets, third-party infrastructure and residents and the community. Baseline surveys have been undertaken to support the assessment chapter including a walk-over, forestry, deer and peatland surveys.

The following impacts were identified as requiring assessment:

- Construction and decommissioning:
  - Temporary loss of agricultural land and soils (including peatland);
  - Temporary loss of forestry due to felling;
  - Temporary impacts upon tourism and recreation assets; and
  - Temporary interference with infrastructure.
- Operation and maintenance:
  - Long term loss of agricultural land and soils (including peatland); and
  - Long term loss of forestry.

The assessment has taken account of embedded mitigation measures for the assessment of potential effects.

The onshore Project has been designed to, where possible, avoid key sensitive areas such as agricultural land and forestry. Where this has not been possible, construction activities will be undertaken with the agreement of landowners and any areas of disturbance will be reinstated quickly to ensure that impacts are temporary and localised. In terms of felling, the onshore Project area avoids designated woodlands such as the ancient woodland present at Forss and as such no felling in highly sensitive areas will occur. Any felling required within the onshore Project area will be replaced with compensatory planting in accordance with Scottish Government policy and as such these impacts are temporary and localised.

Construction impacts on all other receptors assessed, such as the recreation and tourism receptors (e.g., the North Coast 500, deer stalking and angling, core walking paths) and third party infrastructure will be extremely localised as they will only occur during activities at specific locations within the onshore Project area for relatively short durations. No impacts on these receptors will occur during the operation and maintenance stage of the onshore Project.

During operation and maintenance, permanent loss of agricultural land will be associated with the maximum footprint of the onshore substation search area, but this will be highly localised and undertaken in agreement with landowners. It is not considered that long term loss of woodland or forestry will result in significant effects due to the localised nature of any removal and commitments to compensatory planting measures.

Overall, no significant effects to land use and other users receptors, including forestry are predicted, either for the onshore Project or cumulatively with other plans or developments. In addition, there is no potential for transboundary impacts on land use and other users, including forestry of the onshore Project.

12.1 Introduction

This chapter of the Onshore Environmental Impact Assessment (EIA) Report presents the land use and other user receptors, including forestry, of relevance to the onshore Project and assesses the potential impacts from the construction, operation and maintenance and decommissioning of the onshore Project on these receptors. Where required, mitigation is proposed, and the residual impacts and their significance are assessed. Potential cumulative and transboundary impacts are also considered.

Table 12-1 below provides a list of all the supporting studies which relate to and should be read in conjunction with the land use and other users, including forestry impact assessment. All supporting studies are appended to this Onshore EIA Report and issued on the accompanying Universal Serial Bus (USB).

Table 12-1 Supporting studies

DETAILS OF STUDY	LOCATIONS OF SUPPORTING STUDY
West of Orkney Windfarm EIA, Forestry and Woodland Survey and Report	Onshore EIA Report, Supporting Study (SS) 10: Forestry and Woodland Survey and Report.
West of Orkney Windfarm EIA, Groundwater-Dependent Terrestrial Ecosystems (GWDTE) Assessment	Onshore EIA Report, SS2: Groundwater-Dependant Terrestrial Ecosystems (GWDTE) Assessment.
West of Orkney Windfarm EIA, Deer Survey Report	Onshore EIA Report, SS7: Deer survey report.
West of Orkney Windfarm EIA, Terrestrial Archaeology and Cultural Heritage Gazetteer of Sites	Onshore EIA Report, SS11: Terrestrial Archaeology and Cultural Heritage Gazetteer of Sites.

The impact assessment presented herein draws upon information presented within other impact assessments within this Onshore EIA Report. Equally, the land use and other users, including forestry impact assessment also informs other impact assessments. This interaction between the impacts assessed within different topic-specific chapters on a receptor is defined as an 'inter-relationship'. The chapters and impacts related to the assessment of potential effects on land use and other users, including forestry are provided in Table 12-2.

Impacts relating to socio-economics are discussed in the Offshore EIA Report; chapter 19: Socio-economics, and are not considered within this chapter. Additionally, the impacts on trees, woodland, and habitats from an ecological and ornithological perspective are assessed within chapter 10: Terrestrial non-avian ecology and chapter 11: Terrestrial ornithology, respectively. Impacts upon residential properties and community within the scope of an EIA are largely related to amenity, that is impacts from air quality, noise, traffic and visibility. These technical impacts are considered within the following chapters, respectively, and are not considered further in this chapter: chapter 14: Air quality, chapter 15: Noise and vibration, chapter 16: Access, traffic and transport chapter and chapter 17: Landscape and visual.

An assessment of the loss of carbon storage as a result of felling and peatland disturbance is provided, in the context of climate change and carbon balance of the Project as a whole, within SS1: Climate and carbon assessment.

Table 12-2 Land use and other user inter-relationships

CHAPTER	IMPACT	DESCRIPTION
Geology and hydrology (chapter 8, Onshore EIA Report)	Impacts on loss of agricultural land and soils.	Impacts on agricultural land, surface water, soils (including GWDTEs) and peatland could impact soil quality, compaction, and erosion and impact on private water supplies.
Terrestrial non-avian ecology (chapter 10, Onshore EIA Report)	Impacts on loss of agricultural land and soils, and forestry.	Impacts on agricultural land and soils, and loss of forestry could damage or impact protected habitats (including GWDTEs), species or communities of interest.
Terrestrial ornithology (chapter 11, Onshore EIA Report)	Impacts on loss of agricultural soils, and forestry.	Impacts on agricultural land and soils, and loss of forestry could damage or impact habitats, species or communities of interest.
Terrestrial archaeology and cultural heritage (chapter 13, Onshore EIA Report)	Temporary impacts upon heritage specific tourism and recreation assets.	Direct or indirect (setting) impacts on heritage assets could impact the tourism and recreation resource.
Access, traffic and transport (chapter 16, Onshore EIA Report)	Temporary impacts upon infrastructure.	Impacts on the local transport network, such as delays from construction traffic, may impact infrastructure such as the North Coast 500 (NC500) and have impacts upon tourism and recreation receptors.
Landscape and visual (chapter 17, Onshore EIA Report)	Visual impacts upon land use receptors.	Visual impacts upon land use receptors may further impact the tourism and recreation use of the onshore Project area.

The following specialists have contributed to the assessment:

- Xodus Group Limited (Xodus): undertook the baseline description, impact assessment and Onshore EIA Report chapter write up;
- RSK: survey design and implementation of a Phase 1 peat depth survey and GWDTE assessment, including report;
- Practical Land Management Ltd: survey design and implementation of the deer survey, reporting and provision of information to support the assessment of deer impacts; and
- Fountains Forest: survey design and implementation of a forestry and woodland survey, reporting and provision of information to support the assessment of forestry and woodland impacts.

12.2 Legislation, policy and guidance

Over and above the legislation presented in chapter 3: Planning policy and legislative context, the following legislation, policy and guidance are relevant to the assessment from the onshore Project on land use and other users, including forestry:

- Legislation:
  - The Land Reform (Scotland) Act (2003): establishes a statutory framework of public access rights to most land across Scotland, for recreational and other purposes. The rights apply to any non-motorised activities including walking, cycling, camping and horse-riding, and mean that recreational access to land is not restricted to formally recognised or promoted routes;
  - Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997: allows listing of buildings of special architectural or historic interest and advises on changes affecting listed buildings through listed building consent; and
  - Woodland removal associated with consented development is legislated under the planning system and relevant EIA Regulations via implementation of the Scottish Government policy on the control of woodland removal (see below).
- Policy:
  - National Planning Framework 4 (NPF4) (Scottish Government, 2023): sets out key national planning policies that form part of the statutory development plan. It also outlines key policy links with regards to land use and development of land in the north of Scotland and rural areas. Specific policies related to this chapter include: Policy 2 Climate mitigation and adaption, Policy 3 Biodiversity, Policy 4 Natural places, Policy 6 Forestry, woodland and trees, Policy 7 Historic assets and places, and Policy 29 Rural development;
  - The Highland-wide Local Development Plan (HwLDP) (The Highland Council (THC), 2012): sets out a strategy to support the growth of all communities across THC region. It seeks to enable sustainable Highland communities, safeguard the environment, support a competitive, sustainable and adaptable Highland. Specific policies related to this chapter include: Policy 34 Settlement development areas, Policy 36 Development in the wider countryside, Policy 42 Previously used land, Policy 51 Trees and development, Policy 52 Principle of development in woodland, Policy 55 Peat and soils, Policy 56 Travel, Policy 57 Natural, built and cultural heritage, Policy 61 Landscape, Policy 74 Green network, Policy 77 Public access, and Policy 78 Long distance routes;
  - The Caithness and Sutherland Local Development Plan (CaSPlan) (THC, 2018a): guides future development in Highland, particularly in the Caithness and Sutherland area. Specific policies related to this chapter include: Environment and heritage, Caithness settlements – Halkirk, and Forss Business and Energy Park;
  - A Future Strategy for Scottish Agriculture (Scottish Government, 2018): outlines the Scottish Government's strategy for ensuring agriculture across the country is kept as a priority as a key part of the Scottish landscape and economy, recognising agricultural policy as being inter-linked with economic development and tourism;
  - The Scottish Government's Policy on Control of Woodland Removal (Scottish Government, 2009a): aims to minimise and mitigate the effects of woodland removal. Woodland removal should only be allowed where it achieves significant and clearly defined additional public benefits. In appropriate cases woodland removal may be permitted on condition that compensatory planting is carried out;
  - The Scottish Soil Framework (Scottish Government, 2009b): outlines recommended steps for sustainable soil management and protection of soils;
  - Scotland's Third Land Use Strategy 2021-2026 (Scottish Government, 2021): sets out the Scottish Government's vision, objectives and policies to achieve sustainable land use and is key to understanding the land use baseline;
  - The Scottish Outdoor Access Code (Outdoor Access Scotland, 2022): supports the Land Reform (Scotland) Act (2003) and provides policy and guidance on responsible access to land for recreational purposes; and
  - Highland Forest and Woodland Strategy (HFWS) (THC, 2018b): is one of a series of Supplementary Guidance documents prepared by THC to support its HwLDP (2012).

- Guidance:
  - Department for Environment, Food and Rural Affairs (DEFRA, 2018), Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (2018): outlines guidance on the sustainable use of soils on construction sites, and provides relevant advice on the use of soils in construction projects;
  - Good practice guidance during Windfarm construction (Scottish Natural Heritage (SNH) (now NatureScot), 2019): details good practice guidance for the sustainable development of an onshore windfarm, aspects of which will also be applicable to the onshore Project;
  - Highland Historic Environment Strategy (THC, 2013a): establishes comprehensive principles for the protection of the regions heritage assets and provides a statement of the Council's strategic aims for the protection and management of the historic environment;
  - NatureScot Environmental Impact Assessment Handbook (NatureScot, 2018) – Appendix 6: Outdoor access impact assessment: provides guidance on impact assessment in relation to outdoor access and recreational activities;
  - Trees, Woodlands and Development (THC, 2013b): supplements Policy 51 of the HwLDP and ensures applicants seeking planning permission on development in areas of woodland effectively consider and manage existing woodland;
  - United Kingdom (UK) Forestry Standard (UKFS) (Forestry Commission, 2017): is the reference standard for sustainable forest management in the UK providing a basis for regulation and monitoring. The UKFS is supported by a series of guidelines covering biodiversity, climate change, historic environment, landscape, people, soils and water;
  - Scottish Government's Policy on Control of Woodland Removal: Implementation Guidance (Scottish Government, 2019). Guidance on the implementation of the Scottish Government policy, including requirements for and approval of compensatory planting; and
  - Forestry Commission Scotland Woodland Creation Application Guidance (Forestry Commission Scotland, 2017). Guidance if you are seeking Scottish Forestry (previously Forestry Commission Scotland) approval for a woodland compensatory planting scheme required as a condition of a planning permission.

12.3 Scoping and consultation

Stakeholder consultation has been ongoing throughout the EIA and has played an important part in ensuring the scope of the baseline characterisation and impact assessment are appropriate with respect to the onshore Project and the requirements of the regulators and their advisors.

The Scoping Report was submitted to Scottish Ministers (via Marine Scotland - Licensing Operations Team (MS-LOT[1])) and THC on 1st March 2022, who then circulated the report to relevant consultees[2]. A Scoping Opinion was received from THC on 9th May 2022. Relevant comments from the Scoping Opinion specific to land use and other users, including forestry are provided in Table 12-4 below, which provides a response on how these comments have been

[1] *MS-LOT have since been renamed Marine Directorate - Licensing Operations Team (MD-LOT).*

[2] *The Scoping Report was also submitted to Orkney Islands Council (OIC), as the scoping exercise included consideration of power export to the Flotta Hydrogen Hub, however, this scope is not covered in this Onshore EIA Report and will be subject to a separate Planning Application to OIC.*

addressed within the Onshore EIA Report. The Scoping Opinion supersedes any pre-application advice provided by THC which was received on the 10th February 2021.

Further consultation has been undertaken throughout the pre-application stage. Table 12-3 summarises the consultation activities carried out relevant to land use and other users, including forestry.

Table 12-3 Consultation activities for land use and other users, including forestry

CONSULTEE AND TYPE OF CONSULTATION	DATE	SUMMARY
Network Rail Scotland - meeting	26th April 2023	An introduction to the Project was provided, including the need to undertake Horizontal Directional Drilling (HDD) under the railway line. The implications of such works at the railway line was discussed and it was agreed that disruption would be minimal due to the extent of use in the area and the fact it is single-track. Network Rail Scotland outlined the requirements for and prior to construction, including Network Rail Scotland standards that should be followed. The onshore Project will ensure to adhere to Network Rail Scotland requirements.
Scottish Forestry - letter	7th June 2023	Scottish Forestry indicated that the first consideration for all woodland removal decisions should be whether the proposals can reasonably be met without woodland removal. If woodland removal cannot be avoided, then there will be a need for compensatory planting. Reference was given to the Scottish Government's Policy on the Control of Woodland Removal for protecting Scotland's woodland resources and NPF4: Policy 6. The onshore Project has undertaken a full assessment of the forestry and woodland in the onshore Project area and will avoid the removal of areas with high forestry value. Where woodland removal is required, this will be compensated appropriately. Impacts and assessment in relation to woodland removal and compensatory planting is provided in section 12.6.1.2 and 12.6.2.2.

Table 12-4 Comments from the Scoping Opinion relevant to land use and other users, including forestry

CONSULTEE	COMMENT	RESPONSE
THC	The description of development for an EIAR is often much more than would be set out in any Planning Application. An EIAR must include: • A description of the physical characteristics of the whole development and the full land-use requirements during the operational, construction and decommissioning phases. These might include requirements for borrow pits, construction compounds local road improvements, infrastructural connections, off site conservation measures, etc. A plan with eight figure OS Grid co-ordinates for all main elements of the proposal should be supplied; • A description of the main characteristics of the construction processes, for instance, nature and quantity of the materials used; • The risk of accidents, having regard in particular to substances or technologies used; • An estimate, by type and quantity, of expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation, etc.) resulting from the operation of the development; • Cumulative impacts of the proposed development with any and all related projects (i.e. the offshore windfarm and the existing and proposed infrastructure in the area. For the avoidance of doubt this should include infrastructure associated with the Dounreay Tri and Pentland Offshore developments as well as the offshore elements of the Pentland offshore windfarm); • The estimated cumulative impact of the project with other consented or operation development; and • A detailed schedule of mitigation.	Chapter 5: Project description describes the full design details of the onshore Project for all onshore Project stages from development to decommissioning. The land use baseline is provided in section 12.4.4 and the assessment provided in section 12.6 outlines the predicted impacts on the land use resource of the onshore Project.

CONSULTEE	COMMENT	RESPONSE
THC	The EIAR should recognise the existing land uses affected by the development having particular regard for THC's Development Plan inclusive of all statutorily adopted Supplementary Guidance (SG). Particular attention should be paid to the provisions of the Onshore Wind Energy SG (OWESG) inclusive of any Landscape Sensitivity Appraisal. This is not instead of but in addition to the expectation of receiving a Planning Statement in support of the Application itself which, in addition to exploring compliance with the Development Plan, should look at Scottish Planning Policy and Planning Advice Notes which identify the issues that should be taken into account when considering significant development. The purpose of this chapter is to highlight relevant policies not to assess the compatibility of the proposal with policy.	The compiled baseline, presented in section 12.4, identifies all existing land uses and land use receptors. Compilation of the baseline has been developed in consideration of the HwLDP and relevant supplementary guidance documents as stated in section 12.2 above. A separate Onshore Planning Statement has been submitted alongside the Planning Permission in Principle (PPP) Application, which sets out detailed assessment of the planning policy considered as part of this Project.
THC	There may be impacts on woodland. Any felling required will be taken into account in calculating the carbon balance of the Proposed Development, and consideration will be given to any required replanting under the Scottish Government's Policy on Control of Woodland Removal.	Woodland is considered as a receptor within the land use baseline and is assessed in the impact assessment. Felling has been considered in the carbon balance calculations provided within SS1: Climate and carbon assessment. Any woodland removal will have compensatory planting associated with it to satisfy the requirements of the Control of Woodland Removal Policy.
THC	The EIAR should estimate who may be affected by the development, in all or in part, which may required individual households to be identified, local communities or a wider socio economic groupings such as tourists and tourist related businesses, recreational groups, economically active, etc. The Application should include relevant economic information connected with the project, including the potential number of jobs, and economic activity associated with the procurement, construction, operation and decommissioning of the development.	Landowners have been involved in discussion early when surveys began to be conducted in March 2022 and have since been involved throughout the EIA process, particularly those involved landowners. Where individual households may be impacted, such as from noise and visual impacts these are identified and assessed in the associated chapters (chapter 15: Noise and vibration and chapter 17: Landscape and visual).

CONSULTEE	COMMENT	RESPONSE
		Impacts relating to socio-economics (covering the entire Project onshore and offshore)[3] are discussed in the Offshore EIA Report; chapter 19: Socio-economics and are not considered within this chapter, although conclusions from the socio-economic assessment are drawn on where appropriate. Impacts on tourism, tourist groups and recreational groups are assessed within this chapter within section 12.6.1.3, in the context of tourism and recreation being a prominent land use within the area.
THC	Estimations of who may be affected by the development, in all or in part, which may required individual households to be identified local communities or a wider socio economic groupings such as tourists and tourist related businesses, recreational groups, economically active, etc should be included. The Application should include relevant economic information connected with the project, including the potential number of jobs, and economic activity associated with the procurement, construction, operation and decommissioning of the development. In this regard windfarm and transmission network development experience in this location should be used to help set the basis of likely impact. This should set out the impact on the regional and local economy, not just the national economy. Any mitigation proposed should also address impacts on the regional and local economy.	Landowners have been involved in discussion early when surveys began to be conducted in March 2022 and have since been involved throughout the EIA process, particularly those involved landowners. Where individual households may be impacted, such as from noise and visual impacts these are identified and assessed in the associated chapters (chapter 15: Noise and vibration and chapter 17: Landscape and visual). Impacts relating to socio-economics are discussed in the Offshore EIA report, chapter 19: Socioeconomics which includes specific details on employment opportunities, support change opportunities, and economic impacts, and are not considered within this chapter, although conclusions from the socio-economic assessment are drawn on where appropriate. Impacts on tourism, tourist groups and recreational groups are assessed within this chapter within section 12.6.1.3, in the context of tourism and recreation being a prominent land use within the area.

[3] From a socio-economic perspective it's difficult to split the assessment between the onshore and offshore aspects of the Project. Therefore, a single assessment has been undertaken.

CONSULTEE	COMMENT	RESPONSE
THC	The site is on land with access rights provided by the Land Reform Scotland Act. The potential impact on and mitigation for public access should be assessed incorporating core paths, public rights of way, long distance routes, other paths and wider access rights across the site. There are core paths and public rights of way in this area which are likely to be affected during construction and operational phases.	Formally recognised routes such as core paths, public rights of way and long distances routes are recognised as receptors, as detailed in section 12.4.4.3.4 and are assessed in section 12.6.1.3.4. Impacts on public access outwith these formally recognised routes, e.g. under the Land Reform (Scotland) Act 2003 are also assessed.
THC	An Access Management Plan is required to be submitted with the Application. A developments impact on public access is habitually included in this section. Guidance on assessing that impact as part of an EIA in Appendix 6 of NatureScot's Environmental Impact Assessment Handbook (2018).	A Design and Access Statement has been submitted along with the PPP Application to provide an overview of measures to maintain access to paths throughout construction. Where necessary, appropriate diversions will be in place and the paths will be re-instated after construction. An Access Management Plan (AMP) will be developed post-consent to finalise these measures.
THC	While the Scoping Report and an eventual EIA may include impacts on elements of outdoor access assessed under other headings it is considered that all the impacts on outdoor access should all be brought together here in a comprehensive assessment of the proposals visual and physical impacts on outdoor access during the preparatory, construction, operational and post-operational phases. Those impacts, along with the mitigation measures, will inform an Outdoor or Access Management Plan which should be submitted with an Application as per the requirements of HwLDP Policy 77 Outdoor Access. If not, it the Council will ask for a suspensive condition requiring that one be submitted to and approved in writing by the Planning Authority prior to any work starting on site. The gate at the site entrance and any other access gates, must accommodate public access to the side with pass gates and with an internal width of 1.5 m on a surfaced pass.	A Design and Access Statement has been submitted along with the PPP Application to provide an overview of measures to maintain access to paths throughout construction. Where necessary, appropriate diversions will be in place and the paths will be re-instated after construction. An AMP will be developed post-consent to finalise these measures. Visual impacts on tourism and recreation receptors are provided within chapter 17: Landscape and visual. Impacts on outdoor access from a tourism and recreation perspective are assessed within section 12.6.1.3. Where relevant, this chapter draws on conclusions from chapter 17 to inform the impact assessment.

CONSULTEE	COMMENT	RESPONSE
THC	When assessing the impact on tourist and recreational routes please ensure that all core paths, the national cycle network, long distance trails are assessed. It should be noted that these routes are used by a range of receptors. Further a route assessment should be included to consider the impact of the substation on users of the road network. This should be focussed on the A9, B870 and the road between Westerdale and Halkirk. This should be supported by wirelines, and viewpoint assessments should be provided from these routes in the main body of the LVIA.	All formally recognised routes that fall within the land use onshore study area (as defined in section 12.4.1) are assessed for potential impacts. Chapter 17: Landscape and visual assesses the visual impact on these receptors. Where relevant, this chapter draws on conclusions from chapter 17 to inform the impact assessment. Within chapter 17: Landscape and visual, Viewpoint and Visualisations 1 illustrate a representative view, wireline and photomontage from the road between Westerdale and Halkirk (C1018). Viewpoints and Visualisations 3, 4 and 5 illustrate sequential views, with wirelines and photomontages, from the A9(T). The ZTV and field work demonstrate that landform screens views of the onshore substation from the B870 and this has therefore been scoped out of further assessment
THC	Considering the potential for this proposal to have significant negative visual and physical impacts on many forms of outdoor access across all phases of the development it is recommend a similarly significant range of mitigation measures.	Chapter 17: Landscape and visual assesses the visual impact on these receptors. Where relevant, this chapter draws on conclusions from chapter 17 to inform the impact assessment and mitigation.
THC	Other forms of mitigation will include the accommodation and management of public access across the site in order to minimise any potential negative impacts and maximise benefits to outdoor access. For example all existing paths like core paths, public rights of way Long Distance Routes and trails like the Far North Trail and Cape Wrath Trail should be accommodated before, during and after construction and any damage done to their surfaces be protected and/or repaired at regular intervals throughout an extended construction period and reinstated on or by completion of the project to the satisfaction of those managing those routes.	Assessment of impacts on public access is provided in section 12.6.1.3.4. The Design and Access Statement provided alongside this PPP Application acts to mitigate the predicted impacts and design potential enhancements to public access rights. Such measures outlined within the Design and Access Statement include those to maintain access to paths throughout construction. An AMP will be developed post-consent to finalise these measures.

CONSULTEE	COMMENT	RESPONSE
THC	It is advised that a specific chapter on forestry is included in the EIAR only where there is likely to be an adverse impact on woodland. The EIAR should provide a baseline survey of the plants (including fungi, lichens and bryophytes) and trees present on the site to determine the presence of any rare or threatened species. The EIAR should indicate areas of woodland / forestry plantation which may by felled to accommodate new development (including the access), including any off site works / mitigation. Compensatory woodland is a clear expectation of any proposals for felling, and thereby such mitigation needs to be considered within any assessment.	A baseline forestry and woodland survey was undertaken in February 2023 and the associated SS10: Forestry and Woodland Survey and Report is provided alongside the application. Potential impacts on forestry are assessed in section 12.6.1.2 and 12.6.2.2. This chapter outlines the required tree removal extent to accommodate the onshore Project and indicates the intention for proposed compensatory planting (if required). Due to the limited nature of potential impacts on forestry and woodland, a standalone chapter wasn't deemed appropriate. A baseline for non-avian ecology is provided in chapter 10: Terrestrial non-avian ecology. The baseline details the sensitive plants and trees present within the onshore Project area.
THC	If trees are to be removed, compliance with the Scottish Government's Control of Woodland Removal Policy must be demonstrated. Areas of retained forestry or tree groups should be clearly indicated and methods for their protection during construction clearly described. Consideration must be given to the full area required for the construction access road through trees / woodlands and the impacts on these identified. Any areas of woodland listed in the Ancient Woodland Inventory should be safeguarded from adverse impacts. Further as part of habitat management proposals and to offset the carbon of the construction process, it is considered that areas of woodland should be planted.	As construction best practice, areas of woodland that have to be retained will be cordoned off to ensure no plant or machinery enter these areas in compliance with the Control of Woodland Removal Policy. This will prevent any damage to standing trees which are to be retained and also prevent any damage to the soils through compaction. The only designated Ancient Woodland Inventory within the onshore Project area is that immediately around the Forss House Hotel. This receptor will not be impacted, directly or indirectly, by the onshore Project. If woodland removal is required, it is not considered that access roads will be required to assist with the removal of trees due to the age of the trees concerned The trees would most likely be mulched on site, so there would be no requirement to remove the timber. Machines required for mulching would be low ground pressure or tracked, and therefore no requirement for additional access roads. Felling has been considered in the carbon balance calculations provided within SS1: Climate and carbon assessment. Any woodland removal will have compensatory planting associated with it to satisfy the requirements of the Scottish Government Control of Woodland Removal Policy.

CONSULTEE	COMMENT	RESPONSE
Royal Society for the Protection of Birds (RSPB) Scotland	If any felling and compensatory planting of trees is planned, early consultation should be sought as further surveys and assessment may be required. It is essential to recognise that woodland creation needs to be directed to appropriate locations. Any compensatory planting scheme should be planned for a suitable area with regards to habitats and species, for example avoiding deep peat and wader hotspots.	A baseline forestry and woodland survey was undertaken in February 2023 and the associated SS10: Forestry and Woodland Survey and Report is provided alongside the Application. The need for any further surveys will be agreed once the final onshore cable route is confirmed, prior to any forestry felling. The extent and methodology of these surveys (including consideration of surveying of forestry and woodland) will be agreed with Scottish Forestry, RSPB Scotland and THC. Location, design, planting timescales and maintenance of the compensatory planting will be agreed with Scottish Forestry and Forestry and Land Scotland (FLS).

12.4 Baseline characterisation

This section outlines the current baseline for land use and other users, including forestry within the land use and other users, including forestry onshore study area.

To characterise the baseline conditions, an initial Desk-Based Assessment (DBA) was undertaken to identify priority land use receptors identified through scoping. This included those associated with the following categories:

- Agriculture and peatland;
- Forestry and woodlands;
- Tourism and recreation;
- Infrastructure; and
- Residential and community.

Results from the DBA and scoping exercise were confirmed by a walkover survey, as detailed in section 12.4.3.

12.4.1 Study area

The land use and other users, including forestry onshore study area (hereafter referred to as the land use onshore study area) is defined by the onshore Project area, within which the landfall options, onshore export cable corridor and onshore substation are to be located, as shown in Figure 12-1. Effects on land use and other users, including forestry will be highly localised around the works, and therefore it is considered that only the area that exists directly within the footprint of the onshore Project area will have the potential to be affected.

Where prominent land users and other users, including forestry are outwith the land use onshore study area but are located in close proximity, these have been identified to support the overview. Furthermore, effects on tourism and recreation assets may be affected at a distance beyond the onshore Project area in relation to landscape and visual impacts. The assessment of these effects are covered in chapter 17: Landscape and visual, the results of which have been drawn on as appropriate within this chapter.

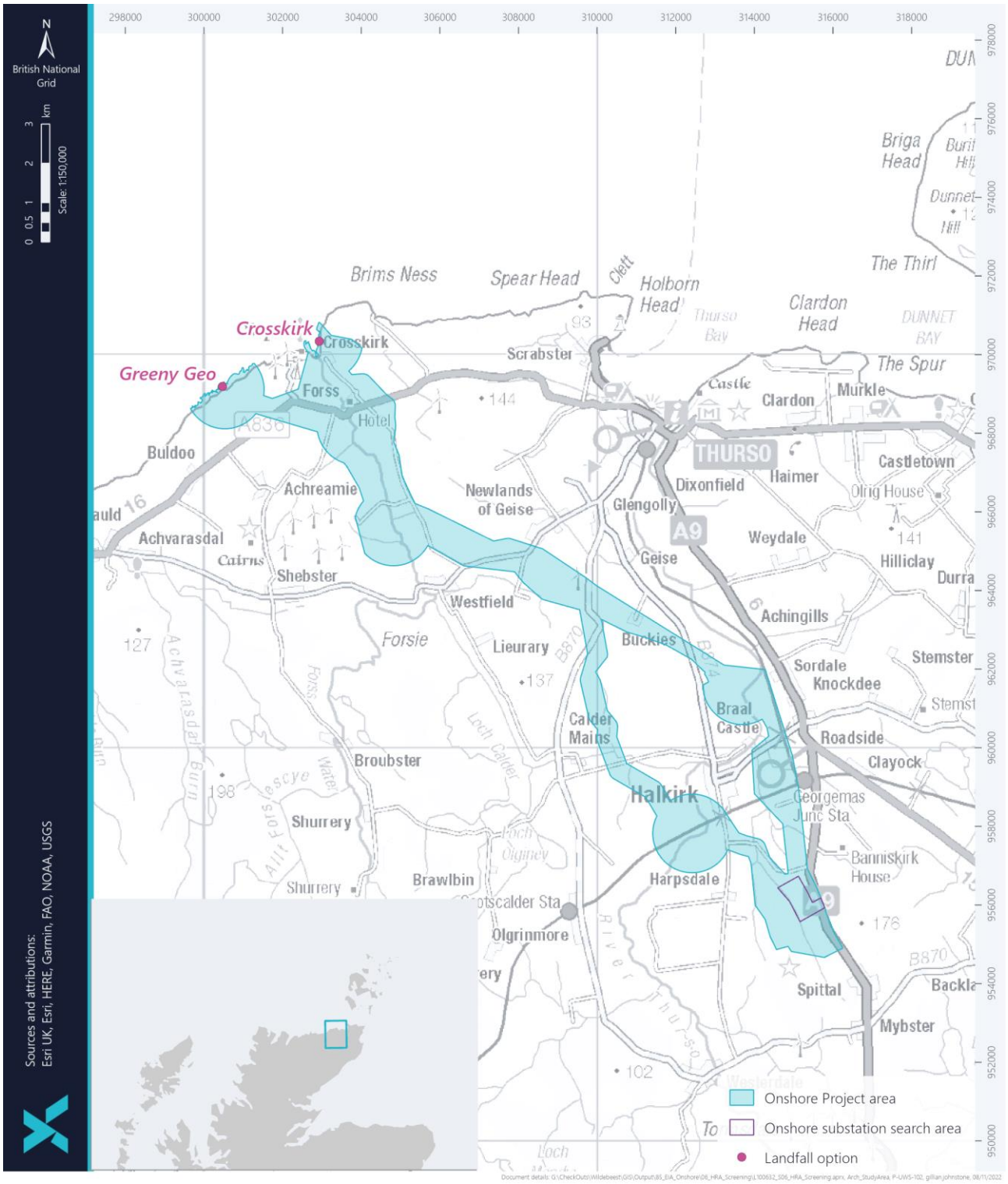

Figure 12-1 Land use onshore study area

12.4.2 Data sources

A review was undertaken of the key literature and data relevant to this assessment relating to the onshore land users and was used to give an overview of the existing baseline. The main data sources used in the preparation of this chapter are listed below in Table 12-5. Any other sources used are referenced in the text.

Table 12-5 Summary of key datasets and reports

TITLE	SOURCE	YEAR	AUTHOR
HwLDP	https://www.highland.gov.uk/info/178/local_and_statutory_development_plans/199/highland-wide_local_development_plan	2012	THC
CaSPlan	https://www.highland.gov.uk/info/178/local_and_statutory_development_plans/283/caithness_and_sutherland_local_development_plan	2018	THC
Landscape Character Assessment: Caithness and Sutherland – Landscape Evolution and Influences	https://www.nature.scot/doc/landscape-character-assessment-caithness-and-sutherland-landscape-evolution-and-influences#INTRODUCTION).	2019	NatureScot
The Forss House Fishings Timeshare	https://www.fishforss.co.uk/	2022	Fish Forss
Google Earth	https://www.google.co.uk/intl/en_uk/earth/	2022	Google
Historic Land Use Assessment	https://hlamap.org.uk/	2022a	Historic Environment Scotland (HES)
St Marys Chapel – Crosskirk	https://www.historicenvironment.scot/visit-a-place/places/st-marys-chapel-crosskirk/	2022b	HES
Site Link	https://sitelink.nature.scot/map	2022	NatureScot
River Thurso	https://riverthurso.com/	2022	River Thurso Ltd
Scotland Environmental and interactive web map – Scotland's Environment	https://map.environment.gov.scot/Soil_maps/?layer=5	2022	Scotland's Environment

TITLE	SOURCE	YEAR	AUTHOR
Heritage Paths	http://www.heritagepaths.co.uk/	2022a	Scottish Rights of Way and Access Society (ScotWays)
Catalogue of Rights of Way	https://scotways.com/	2022b	ScotWays
THC Renewable energy – Wind turbine map	https://www.highland.gov.uk/info/198/planning_-_long_term_and_area_policies/152/renewable_energy/4https://www.highland.gov.uk/info/198/planning_-_long_term_and_area_policies/152/renewable_energy/4	2022a	THC
VisitScotland	https://www.visitscotland.com/	2022	VisitScotland
Woodland Trust	https://www.woodlandtrust.org.uk/	2022	Woodland Trust
Forest Research Decision Support Tools Portal	http://www.forestdss.org.uk/geoforestdss/	2023	Forest Research
Past Maps	https://pastmap.org.uk/map	2023	HES and Scottish Historic Environment Records Forum

12.4.3 Project site-specific surveys

A land use walkover survey, encompassing the land use onshore study area, was undertaken in August 2022 to ground-truth baseline data gathered from the DBA and through the scoping exercise.

Whilst it was not possible to do a full walkover of the land use onshore study area by foot, several vantage points provided a good general overview of the land use onshore study area. Where access by car was not permitted, vehicles were safely parked on public roads and areas of interest were investigated by foot. In areas where public access was not permitted, access was sought from landowners, where possible.

Points of interest were mapped using the ArcGIS (Geographical Information System) collector, a mobile software used to capture and edit geospatial data in the field. The software allows for point, polygons or line data to be mapped and for photos, videos or audio recordings to be documented alongside any mapped data.

A forestry and woodland survey was undertaken in April 2023, which comprised a walkover survey of all woodlands within the land use onshore study area. The aim of the survey was to ground-truth the extent of forestry and woodland known from the desk based review. Survey work was recorded with a Global Positioning System (GPS) device, recording sheets and georeferenced photography. The survey was entirely non-intrusive, and any equipment used was removed upon departure from the site. Full survey methodology is provided in SS10: Forestry and Woodland Survey and Report.

The following baseline surveys undertaken for topic-specific chapters have also been used to augment this baseline:

- Chapter 8: Geology and hydrology – baseline peat surveys; and
- Chapter 10: Terrestrial non-avian ecology – deer survey.

12.4.4 Existing baseline

A review of literature and available data sources, augmented by consultation and Project site-specific surveys has been undertaken to describe the current baseline environment for land use and other users, including forestry.

The land use onshore study area, as shown in Figure 12-1, is rural in nature, with a limited number of small settlements, including Forss, Westfield and Harpsdale. Whilst not directly within the land use onshore study area, Halkirk is located close by, approximately 2 kilometres (km) north-west of the Caithness onshore substation search area and approximately 300 metres (m) from the onshore export cable corridor.

The predominant land use is agriculture, including both arable and grazing farmland. There are also some areas of traditional peat cuttings. There are formal deer stalking opportunities associated with some of the agricultural sporting estates (primarily Thurso Estate, however also Sinclair and Ulbster Estates) within the land use onshore study area.

Other prominent features include infrastructure such as electrical overhead lines, road networks and the single-track Network Rail Scotland railway line between Gorgemas junction and Scotscalder. There is also the existing Scottish Hydro Electric Transmission plc (SHET-L) Spittal substation, located adjacent to the onshore substation search area. Infrastructure as shown on Figure 12-11.

The River Thurso and Forss Water both run through the land use onshore study area on a north-south traverse. Both rivers offer angling opportunities.

Other land uses include other recreational features, such as core paths and the Sibster Forest, tourism receptors, including the Forss House Hotel and the aforementioned angling at the River Thurso and Forss Water.

12.4.4.1 Agriculture and peatland

Agriculture, as one of the main activities and employers in Caithness and Sutherland (NatureScot, 2019) is the most common land use in the land use onshore study area, which is evident by the numerous agricultural fields and buildings. Agricultural practices are prevalent and include a mixture of arable fields (grassland and arable crops) and livestock farming (cattle and sheep), as well as crofting. The agricultural activity is evident by both planned rectilinear fields, and small holdings. At the time of the walkover survey in August 2022, grasslands were widespread, some with hay bales present, and arable fields were mainly sewn with cereals.

The land use onshore study area is comprised of a range of Class 3.2 to Class 5.3 agricultural land which is defined as moderately productive ('capable of average production though high yields of barley, oats and grass can be obtained') to low productivity ('capable of use as improved grasslands') (Scotland's Environment, 2022). This coverage is shown on Figure 12-2. Classes 1 to 3.1 are known as prime agricultural land, of which none is present within the land use onshore study area.

Livestock farming is also common throughout the land use onshore study area, mainly for sheep and to a lesser extent cattle. The extent of livestock farming is indicative from the widespread grasslands noted during the walkover survey.

Crofting activities co-exist with large sporting estates (discussed further in section 12.4.4.3) and are identifiable by smaller units of land holds.

There are small areas of peatland and related extraction activities within the land use onshore study area. This is exclusively traditional peat cutting rather than commercial extraction. This historic activity of peat cutting has resulted in areas of dried peat bogs and exposed faces of cut. The extent of peatlands is largely restricted to the southern extent of the onshore export cable corridor route, around Halkirk and Achlachan (Scotland's Environment, 2022). Peat and ground conditions are discussed further in chapter 8: Geology and hydrology and in the outline Peat Management Plan (PMP) (Outline Management Plan (OMP) 3: Outline Peat Management Plan) which accompanies this PPP Application. In summary, the peat survey recorded a total of 1,154 measurements; the majority of depths recorded were <0.5 m with a most common depth of 0.1 m. The deepest value recorded (4 m) was found in the largest area of peat which is located to the east of Harpsdale. North of this and south of Houstry, another area of deep peat was recorded with a maximum depth of 3.1 m. In addition, there were other areas of deeper peat recorded at Yellow Moss and Moss of Halkirk, with peat depths up to 2.4 m. Peat depth mapping is provided in chapter 8: Geology and hydrology.

12.4.4.2 Forestry and woodland

As detailed in SS10: Forestry and Woodland Survey and Report, the majority of the land in the land use onshore study area is not forested, however there are sporadic areas of woodland and forest throughout. The forestry and woodland present are a combination of commercial plantation, policy type woodland, native woodlands and private woodland around properties and estates, as detailed in Figure 12-3 and Figure 12-4, and Table 12-6.

A baseline woodland survey was undertaken in February 2023 which identified no rare or threated tree species within the land use onshore study area.

The commercial conifer plantations are identifiable by densely planted, single species single age blocks with straight edged boundaries, such as those around the ancient policy type woodlands at Forss. Two shelterbelt conifer woodlands in the onshore study area at Achanarras (between the existing SHET-L Spittal substation and the proposed onshore substation) have been felled during 2023 and are awaiting restocking, as shown on Figure 12-4. The only designated Ancient Woodland Inventory within the land use onshore study area is that immediately around the Forss House Hotel (see Figure 12-4 and Figure 12-5).

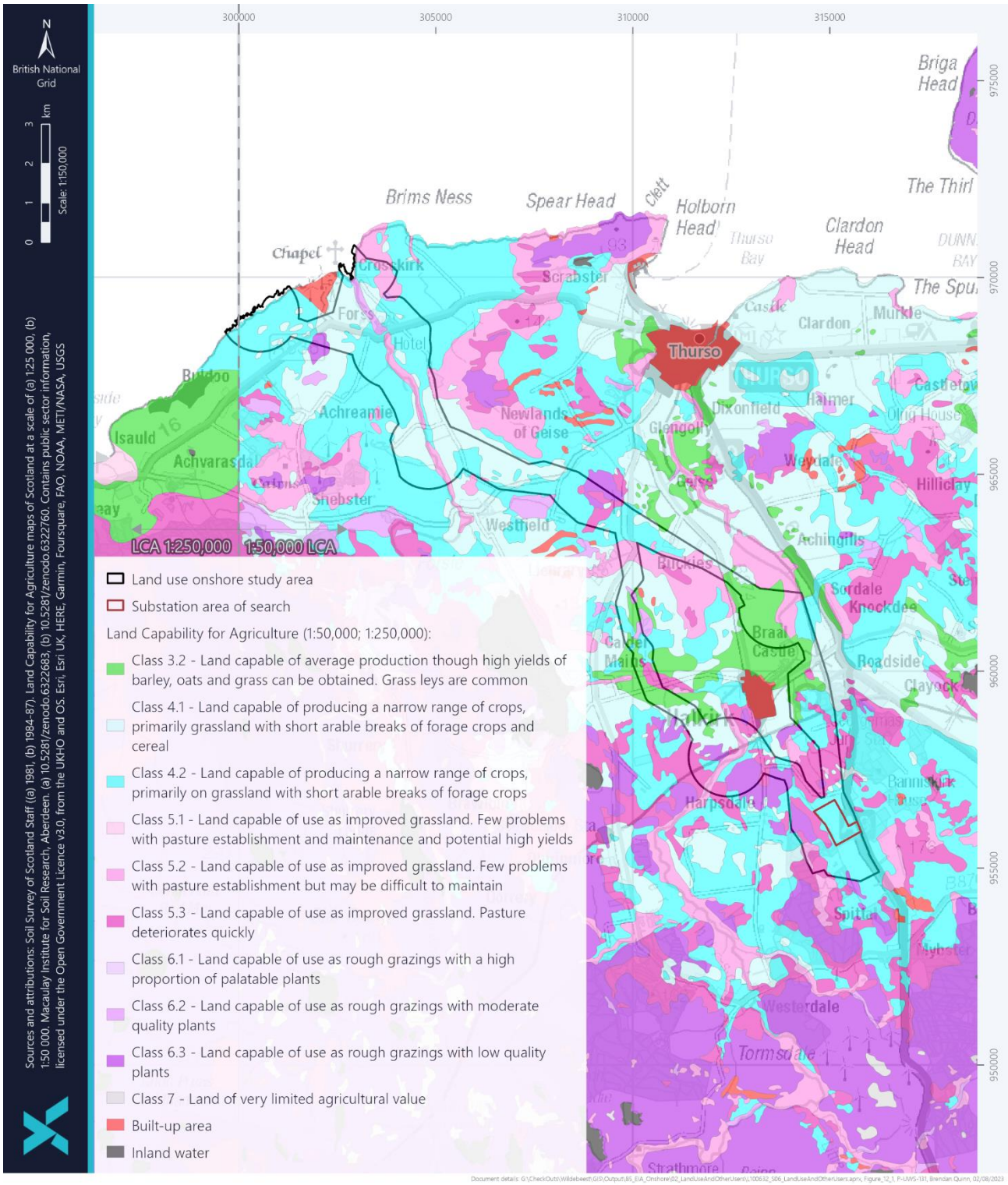

Figure 12-2 Land capability of agriculture in the land use onshore land use onshore study area

The land use onshore study area is dominated by Class F6 for capability of forestry (defined as 'land with very limited flexibility for the growth and management of tree crops'), with some of the area around Halkirk and along Forss Water being covered by Class F5, (defined as 'Land with limited flexibility for the growth and management of tree crops') and the landfall options at Greeny Geo and Crosskirk are covered by Class F7 (defined as 'Land unsuitable for producing tree crops'). The capability of forestry and woodland across the land use onshore study area is shown on Figure 12-3 and Figure 12-4.

The commercial forest and woodlands in the land use onshore study area are not particularly high yielding, and growth rates are slow. This is mostly due to exposure and the soils moisture regime. The same issues affect the current native and non-commercial woodlands within the land use onshore study area.

The majority of the woodlands have significant herbivore damage which has had an impact on the woodlands and their growth. Browsing by deer has inhibited a lot of growth and fraying of the stems of trees has damaged and killed them in places. This has left a lot of the woodlands in a less than favourable state. The forestry survey undertaken, as detailed in SS10: Forestry and Woodland Survey and Report, provides details of the herbivore damage noted during the survey.

In general, there has been a lack of management and maintenance associated with the native woodlands that have been established within the land use onshore study area. This has led to them having a very low stocking density in places (trees per hectare), and slow establishment and growth due to weed and grass competition. The lack of boundary fence maintenance has also impacted on the establishment of the trees which will have allowed domestic herbivores and wild herbivores into the woodlands causing damage and establishment issues. There is less of an issue with this in the coniferous woodlands within the land use onshore study area.

The is only one actively managed area of woodland in the onshore Project area are at Sibster. This area is part of the FLS Caithness Land Management Plan (FLS, 2023) and covers an area of 356.95 hectares (ha). There has been relatively recent planting at Sibster (between 2011 and 2013), primarily of broadleaved species. Productive coupes of sessile oak, wild cherry, ash, beech and sycamore were planted within a framework of protective shelterbelts comprising downy birch, rowan, hawthorn, hazel, goat willow, wych elm and holly. Limited areas of sitka spruce and Norway spruce were also planted where the soils were poorer. At the northern edge of Sibster, Forest Research established 4.4 ha of willow species hybrids to study the potential for biomass production. The ash components of Sibster have been badly affected by chalara infection and will be replaced over the next ten years. The rationale for establishing broadleaves on the scale that they are at Sibster is that in general they are less susceptible to wind throw in the fairly shallow soils and leaf litter will help to develop a carbon rich forest soil more effectively than conifer monocultures. Facilities at Sibster provide recreation and education opportunities for local residents and visitors.

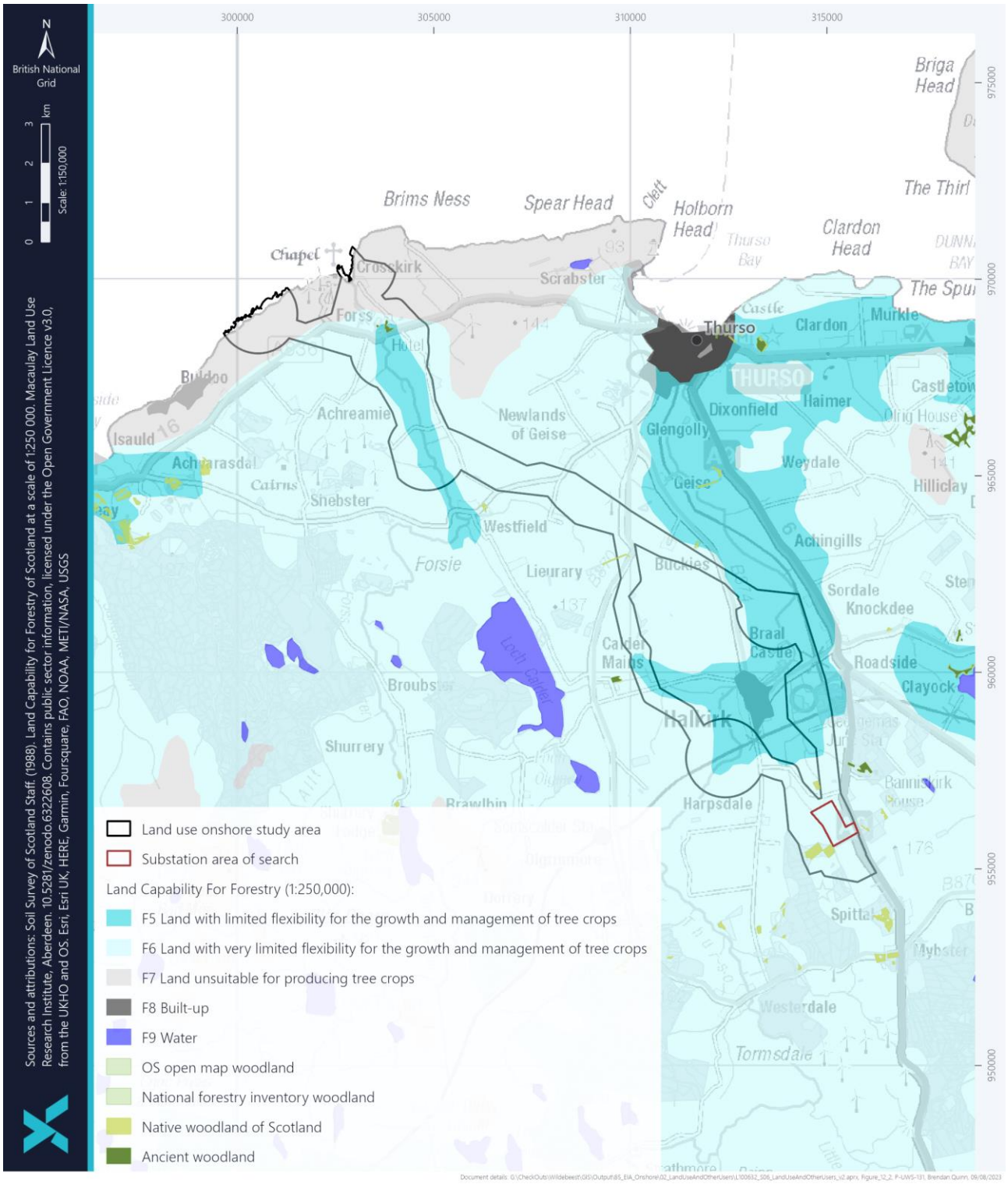

Figure 12-3 Land capability for forestry areas in the land use onshore study area

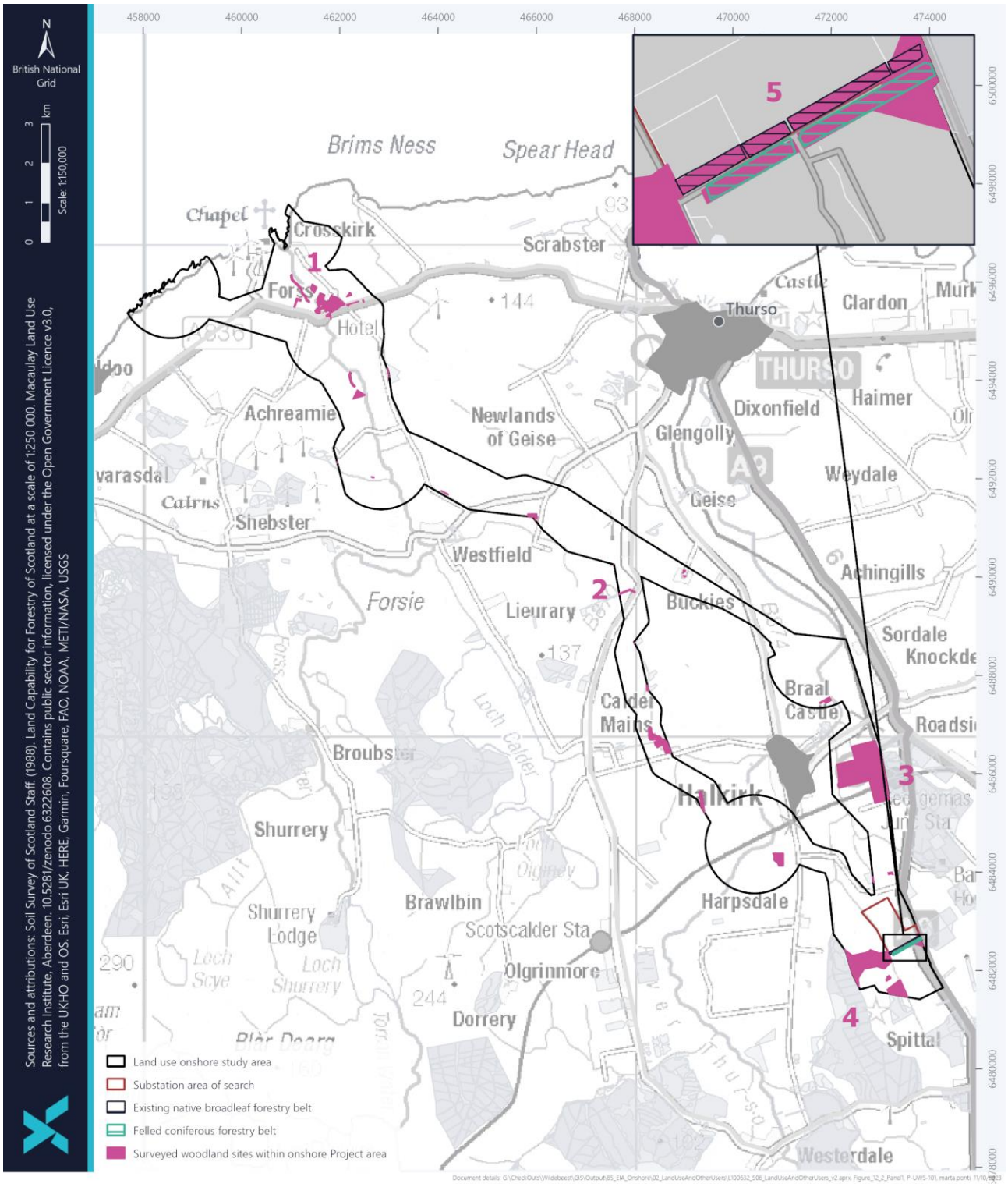

Figure 12-4 Land capability of woodland areas in the land use onshore study area (numbers denote key forestry areas 1: Forss House, 2: Hill of Howe plantation, 3: Sibster Forest, 4: Spittal Woods and Achanarras Farm Woods and 5: Achanarras (adjacent to existing Spittal substation))

Table 12-6 Details of key forestry and woodland within land use onshore study area

FORESTRY / WOODLAND AREA	AREA WITHIN LAND USE STUDY AREA (HECTARE (HA))	LOCATION	TYPE	ADDITIONAL FEATURES
1. Forss House Hotel (privately owned)	19	1.3 km south of Crosskirk Landfall option.	Mixed broadleaf trees with mixed conifers trees. Small conifer plantations also present.	Ancient woodland inventory. Walking trails and access for hotel guests.
2. Hill of Howe plantation (privately owned)	0.941	3.8 km north-west of Halkirk.	Lodgepole pine and common alder woodland and broadleaf woodland.	None.
3. Sibster Forest (owned and managed by FLS)	60.97 of tree cover, 75.97 including open ground.	2 km east of Halkirk and 3.4 km north of the onshore substation search area.	Varied woodland types present; mixed conifer, mixed broadleaves, mixed broadleaf and conifers as well as native scrub / shrubs. Broadleaf woodland including rowan, oak, birch, ash, beech and alder.	Walking trails and access for horseback riding.
4. Spittal Woods and Achanarras Farm Woods (privately owned)	21.58 of woodland and 4.83 of open ground.	Adjacent to the onshore substation search area.	Mixed conifer and mixed broadleaf woodland.	Informal access for walking and cycling. Privately owned but open to public.
5. Achanarras (adjacent to existing Spittal substation) (owned by SHET-L)	2.29 of tree cover and 2.44 of clear-felled conifer.	Adjacent to the onshore substation search area.	Mixed conifer and mixed broadleaf woodlands plantation.	Planted as a landscape screen. Informal access for walking and cycling.

12.4.4.3 Tourism and recreation

The land use onshore study area is located in a relatively remote setting with limited formal recreation opportunity. Tourism and recreation is largely based around the natural environment and cultural heritage, with only a few formally recognised tourist attractions and activities which are noted in the sections below. Figure 12-5 illustrates the tourism and recreation receptors across the land use onshore study area. Cultural heritage receptors specifically are illustrated in Figure 12-10.

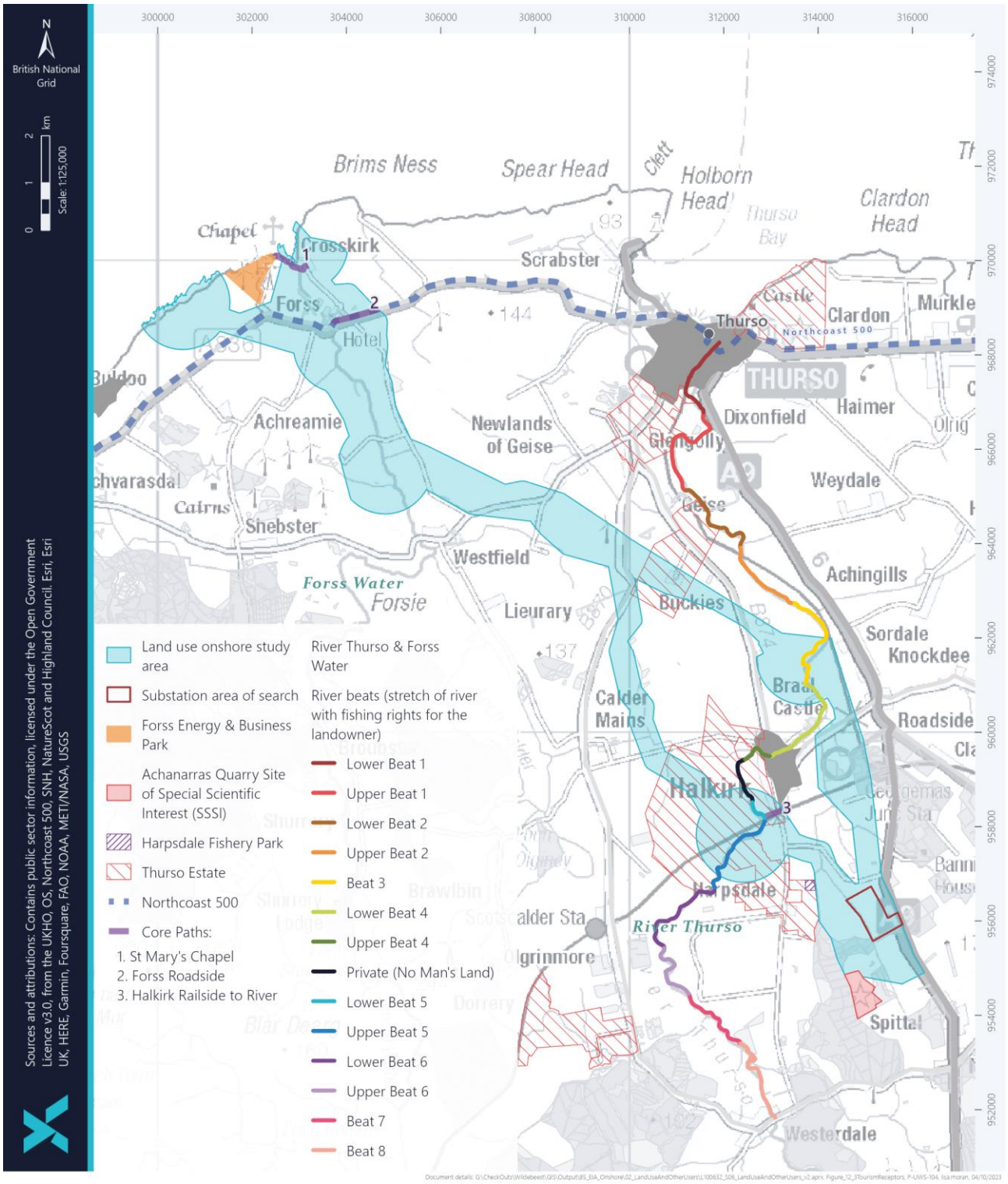

Figure 12-5 Tourism and recreation receptors within the land use onshore study area

12.4.4.3.1 North Coast 500

The NC500 crosses the onshore export cable corridor within the land use onshore study area at Forss, as it follows the A836 road from Thurso to Reay. The scenic NC500 route is utilised as a popular tourist road. It is described as a world-renowned Scottish tourist attraction consisting of approximately 500 miles of scenic route around the north coast of Scotland, starting and finishing in Inverness (VisitScotland, 2022). The route was established as an advertised tourist attraction in 2015 and has helped to improve visitor numbers by attracting 29,000 more visitors to the north Highlands within its first year of operation (2015 to 2016) (Highland and Islands Enterprise, 2017). Between 2015 and 2016, four VisitScotland information centres (Durness, Lochinver, Thurso, and Ullapool) experienced an average 26% increase in use, compared to a 6% average increase across other Highland VisitScotland information centres (Highland and Islands Enterprise, 2017).

12.4.4.3.2 Land's End to John O' Groats

The popular route from Land's End to John O' Groats (LEJOG) is within proximity to the onshore Project area. The traditional distance by road is 874 miles but there are countless alternative routes to be taken. The Far North Way: Inverness to John O' Groats cyclist route, which aligns with Route 1 of the National Cycle Network and the NC500, overlaps the land use onshore study area on the A836 at Forss. Additionally, there are alternative routes between Inverness and John O' Groats, such as the John O' Groats walking trail, nonetheless, these are situated outwith the land use onshore study area.

12.4.4.3.3 Stalking and angling

The agricultural and sporting use of land in the land use onshore study area is largely linked to its tourism and recreation resource, including deer stalking and shooting activities ongoing across estates.

Deer stalking activities are related to the Thurso estate which partly extends across the land use onshore study area and are managed privately by the landowner. A deer survey was undertaken in March 2023, with the findings presented in SS7: Deer survey report, which recorded observations of deer and deer activity across the land use onshore study area. Overall, it was established that deer are abundant across the land use onshore study area, with a significant number of deer (mostly roe deer, but some red deer in the Sibster / Halkirk vicinity) identified from survey sightings of deer and other signs signifying deer presence, such as markings and droppings.

The Forss Water is located in the north-west of the land use onshore study area and flows into Crosskirk Bay. The Forss Water is a timeshared rod fishery between Crosskirk Bay and Stemster Bridge, which is managed by the Forss House Fishing Association.

The River Thurso is located in the southern extent of the land use onshore study area, crossing through the onshore export cable corridor at two sections; east of Carsgoe and south-west of Halkirk. The River Thurso is a designated Special Area of Conservation (SAC), designated for Atlantic salmon (*Salmo salar)*, and is a major tourist and recreational attraction, as discussed in further detail in chapter 9: Freshwater ecology. Fly fishing is the only permitted form of fishing on the river. The river itself produces around 1,700 salmon per year. Competitions and fishing events

are often held during the salmon fishing season[4] which makes it a popular destination for enthusiastic anglers (River Thurso Ltd, 2022).

Linked to the River Thurso is the Harpsdale Fishery Park, which is a local stocked trout fishery, located outwith but immediately abutting the onshore export cable corridor, 2 km south of Halkirk, as shown on Figure 12-5.

The land use onshore study area overlaps with beats 3, 4 and 5 of the River Thurso and Forss Water, as shown on Figure 12-5. An image of the River Thurso at beat 3, including the fishing hut, is provided in Figure 12-6.

The North Point Distillery (located within the Forss Energy and Business Park) is not located within the land use onshore study area but lies in between the two landfall options. The North Point Distillery offers tours and is a noted stop for the NC500 route. The Kaithness Clays skeet shooting range is also listed as being located at the Forss Energy and Business Park.

Figure 12-6 River Thurso fishing hut at beat 3

12.4.4.3.4 Core paths and walking

There are three core paths, as detailed in Table 12-7 and shown in Figure 12-5, which cross the land use onshore study area (THC, 2022b).

[4] *From January to October, with the main 'spring run' beginning in March and continuing to June (River Thurso Ltd, 2022).*

Table 12-7 Core paths within the land use onshore study area

PATH NAME	PATH REFERENCE	LENGTH (KM)	LOCATION
St Mary's chapel	CA13.25	0.91	Within land use onshore study area, at Crosskirk landfall.
Forss roadside	CA13.16	1	Within land use onshore study area, at Forss.
Halkirk railside to river link	CA13.27	1.85	Within land use onshore study area, approximately 300 m south of Halkirk.

The core path at St Mary's chapel runs from a small parking area at Crosskirk to St Mary's chapel (Figure 12-7), a scheduled monument (discussed further in section 12.4.4.3.5). The path is on grass / earth track and includes a bridge across the Forss Water and covers a small length of approximately 1 km.

Figure 12-7 Start of the St Mary's Chapel core path

The Forss roadside core path is a roadside footway, located between the Forss House Hotel and School place within the onshore export cable corridor.

The Halkirk railside to river link is located on the south-west of Halkirk. The path is relatively short gravel track, running between Bridge Street up to the railway ridge over the River Thurso. The sign at the start of the core path can be seen in Figure 12-8 and the railway bridge over the River Thurso, where the path terminates, is shown in Figure 12-9.

Figure 12-8 Start of the Halkirk railside to river link core path

Figure 12-9 Railway bridge over the River Thurso where the Halkirk railside to river link core path ends

Beyond the above core paths, the land use onshore study area is accessible for public recreation and walking via the Land Reform (Scotland) Act 2003 and it is acknowledged that public access may not be limited to such formally recognised routes.

As mentioned in section 12.4.4.2 above, the Sibster Forest is a new mixed conifer and mixed broadleaf woodland located to the east of Halkirk covering an area of 356.95 ha. The woodland contains two main walking trails on type 1 gravel paths, the Rowan Trail and the longer Bee Trail. The Bee Trail leads to a bumblebee conservation area being used to protect habitat for the great yellow bumblebee (*Bombus distinguendus*). The paths located within the woodland area, are waymarked and maintained to varying levels. Recent works have been carried out to upgrade and maintain the trails and remove the encroaching ground vegetation. There is a car park at the eastern edge of the woodland adjacent to the A9 trunk road where the trails start from. The walking trails and Sibster Forest can also be accessed from the village of Halkirk.

12.4.4.3.5 Cultural heritage

A full list of archaeological and cultural heritage assets within the onshore Project area is provided in chapter 13: Terrestrial archaeology and cultural heritage and in SS11: Terrestrial Archaeology and Cultural Heritage Gazetteer of Sites. There are seven designated scheduled monuments and eight listed buildings within the land use onshore study area, as shown in Figure 12-10 and detailed in Table 12-8[5], which may be used by the public for tourism and recreation purposes. For example, the path which runs through the land use onshore study area to St Mary's chapel (a scheduled monument (SM90086) adjacent to the land use onshore study area) located at Crosskirk. The monument comprises the roofless remains of St Mary's chapel within a square burial ground from the 1100s and is therefore one of the oldest religious buildings in Caithness (Historic Environment Scotland, 2022b), making it a popular heritage attraction for tourists. The Category-B Listed Building Forss House (LB14923) is currently operational as a hotel (see section 12.4.4.3.6 below), which also hosts four other Category-B and one Category-C listed buildings in its grounds. Additional non-designated cultural heritage assets are located within the land use onshore study area, as outlined in chapter 13: Terrestrial archaeology and cultural heritage. However, as these are non-designated they are considered to be of a lower recreational and tourism value.

Direct and indirect effects on these cultural heritage sites (in addition to non-designated sites) with regard to cultural heritage is assessed in chapter 13: Terrestrial archaeology and cultural heritage; this chapter assesses effects with relation to tourism and recreation only.

As outlined in chapter 13: Terrestrial archaeology and cultural heritage, the Project have committed to avoiding carrying out construction activity at all of the scheduled monuments and listed buildings and several non-designated assets which may be of medium or high value (as identified through the Orkney Research Centre for Archaeology (ORCA) archaeological surveys) listed in Table 12-8.

[5] *Please note that some scheduled monuments and listed buildings have been grouped into a single row in Table 12-8.*

Table 12-8 Key cultural heritage receptors within the land use onshore study area

ORCA ID NO.	DESIGNATION	REFERENCE	DESCRIPTION
7	Scheduled monument	SM554	Green Tullochs: Iron Age / early medieval cairn and cist
8	Scheduled monument	SM554	Green Tullochs: Iron Age broch and inhumation
9	Non-designated	N/A	Tulloch of Lybster: Iron Age broch
27	Listed building – Category B	LB14991	Lybster Farm steading
38	Listed building – Category B	LB14923	Forss House: country house
39	Listed building - Category B	LB14990	West Mill, Forss: watermill
40	Listed building - Category B	LB14925	East Mill, Forss: mill
41	Listed building - Category B	LB14925	Miller's House, East Mill, Forss
42	Listed building- Category B	LB14926	Bridge of Forss
43	Listed building – Category C	LB14924	Tollhouse, Forss
53	Listed building- Category B	LB44721	Old Bridge of Forss
67	Scheduled monument	SM2658	Skinnet Chapel
89	Scheduled monument	SM2400	Benachie: prehistoric cairn and stone circle
90	Scheduled monument	SM2402	Achanarras Hill North: Bronze Age hut circle
94	Scheduled monument	SM475	The Shean, Achanarras: prehistoric / medieval cairn
95	Non-designated	N/A	Achanarras Hill: Bronze Age hut circles
97	Non-designated	N/A	Achanarras Farm: Iron Age broch
101	Scheduled monument	SM5413	St Magnus Hospital and chapel, Spittal
172	Non-designated	N/A	Oust Farm: possible prehistoric hut circle identified during walkover survey
175	Non-designated	N/A	Houstry: possible prehistoric hut circle identified during walkover survey
247	Non-designated	N/A	Stemster Hill: Iron Age broch
251	Scheduled monument	SM2401	Achanarras: Neolithic cairn
265	Non-designated	N/A	Achanarras: possible prehistoric hut circle identified during walkover survey

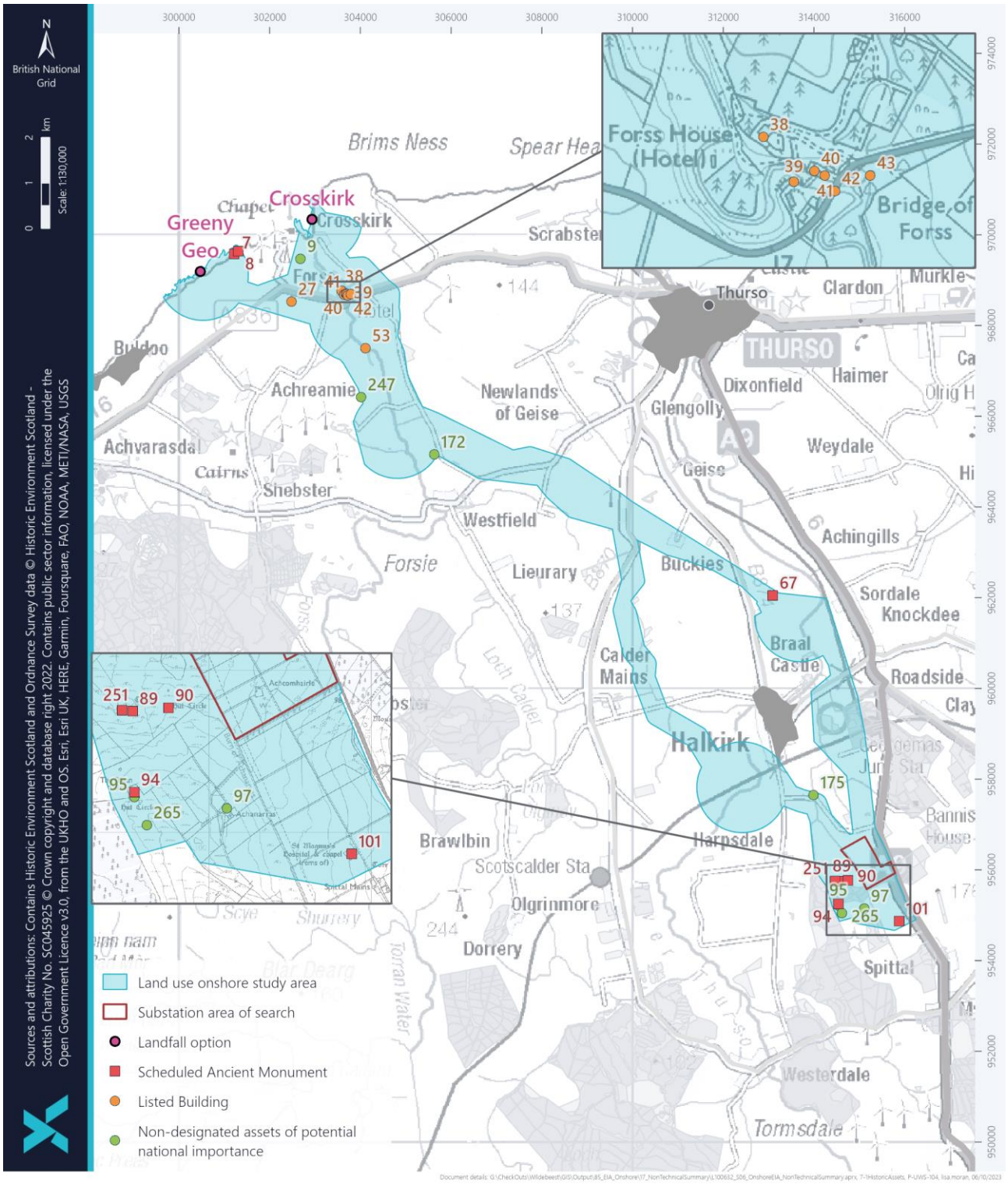

Figure 12-10 Cultural heritage receptors within the land use onshore study

12.4.4.3.6 Local accommodation

Local accommodation is a key aspect of tourism in any area. Local accommodation, including those clustered around residential areas will draw tourists to the area to visit while using the tourism and recreation receptors outlined above. Whilst there are numerous hotels, hostels, and bed and breakfasts within the nearby settlements of Thurso, Reay and Halkirk, there are few within the land use onshore study area specifically.

From a desk-based search, the Forss House Hotel is the only local accommodation option located within the land use onshore study area. This is a country house hotel within a woodland area, as described in section 12.4.4.2. The hotel contains 14 bedrooms and can also be used as a wedding venue.

There are no formal camping or caravan services located within the land use onshore study area. However, it is acknowledged that wild camping is permitted via the Land Reform (Scotland) Act 2003, and therefore that camping may not be limited to such formally recognised sites.

It is acknowledged that there are likely to be 'informal' accommodation providers present within the land use onshore study area beyond those identified here, such as Airbnb's. Whilst these are not listed as specific receptors, it is considered that the impact assessment undertaken on the accommodation receptors identified is an appropriate proxy for these more informal accommodation options.

12.4.4.4 Infrastructure

There are several existing infrastructure services in the area including utilities and electrical apparatus around the land use onshore study area. These are largely related to the extent of energy and industrial developments, including onshore wind development and the Dounreay and Vulcan nuclear sites. The key infrastructure receptors within the land use onshore study area are detailed in Table 12-9 below.

Table 12-9 Infrastructure located within the land use onshore study area

NAME	STATUS	LOCATION	DESCRIPTION
Overhead lines	Operational	Overlaps the onshore export cable corridor, from Crosskirk to Thurso, then traverses north-west to south-east to Spittal.	N/A.
Hoy pumping station	Operational	Halkirk.	Water collection, treatment and supply station operated by Scottish Water.
Railway line	Operational	Overlaps the onshore export cable corridor, between Georgemas junction and Scotscalder.	Single-track Network Rail Scotland railway line.

NAME	STATUS	LOCATION	DESCRIPTION
SHET-L Spittal substation	Operational	Adjacent to the onshore substation search area.	Scottish and Southern Electricity Networks (SSEN) operated High Voltage Direct Current (HVDC) substation.

Infrastructure not located directly within the land use onshore study area but located in close proximity and considered as prominent within the baseline include the Forss Windfarms 1 and 2, and Forss Business and Energy Park which is located between the Crosskirk Landfall and the Greeny Geo landfall. Baillie Windfarm is an operational onshore windfarm located 400 m to the west of the onshore export cable corridor. The Vulcan Naval Reactor Test Establishment (NRTE) and Dounreay nuclear sites are located approximately 1.5 km west of the Greeny Geo landfall, both of which are in active decommissioning and will continue to be for a prolonged period of time. Due to security risk, there is a high police / armed forces presence at both locations and there is a 5 mile (8 km) security cordon around these sites. Both landfall options are located within the security cordon. Locations of these infrastructure identified within and at proximity to the land use onshore study area are illustrated in Figure 12-11 below.

Other relevant infrastructure within close proximity of the land use onshore study area includes the port of Scrabster, approximately 5.5 km from the land use onshore study area, which services a range of users including cargo vessels, ferries, fishing vessels, oil and gas developments and renewables. For existing utilities, the onshore Project area overlaps with underground cables and water and sewerage distribution networks. The exact locations of any crossing points with these utilities are currently unknown and these will be identified at a later stage prior to construction and following further route refinement. However, as there are no extensive or dense settlements within the land use onshore study area, the density of these utilities within the onshore Project area is considered to be relatively low.

12.4.4.5 Residential and community

Owing to the rural nature of the area, there are no extensive or dense settlements within the land use onshore study area. Thurso, the largest town in the vicinity, is located approximately 3 km east of the land use onshore study area at the nearest point. Halkirk is a small village located on the River Thurso, located adjacent to, but outwith the land use onshore study area.

Outwith Thurso and Halkirk, residential properties are scattered along the local road network and generally have associated agricultural land. There are smaller hamlets within the land use onshore study area, including Forss, Westfield and Harpsdale which comprise smaller clusters of residential properties. There are no religious grounds, allotments, village halls, hospitals, schools or other community features identified within the land use onshore study area.

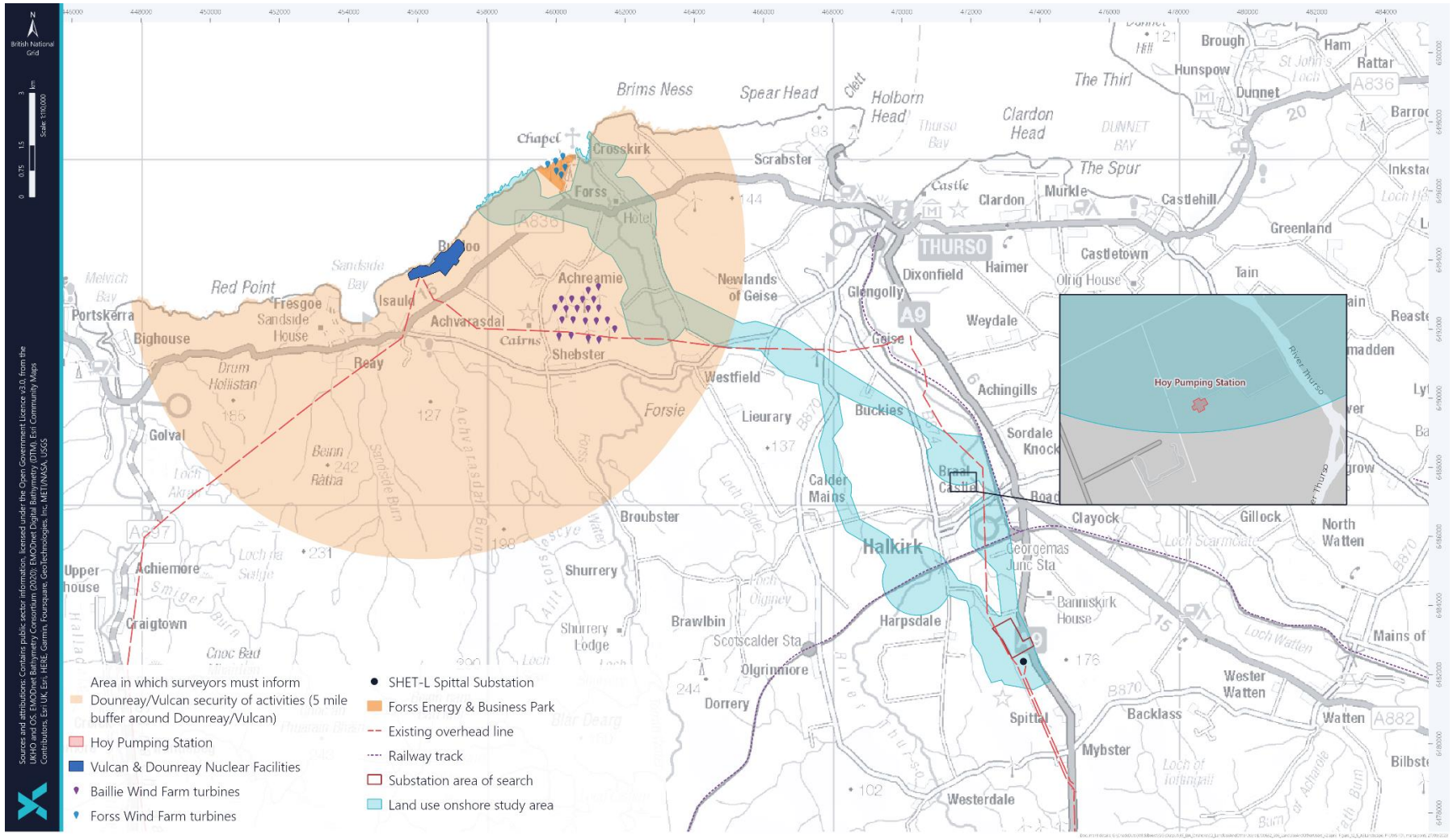

Figure 12-11 Infrastructure within and at proximity to the land use onshore study area

12.4.5 Future baseline

It is important to note that the future baseline is a projection, with a range of possible future conditions, and it is subject to uncertainty associated with the available projections. Across the lifetime of the Project, it is considered highly likely that the future baseline will be broadly comparable to the existing baseline described above. Predominant changes that may be expected to occur include:

- Changes to agricultural capacity and peatland quality as a result of climate change (ClimatexChange, 2020);
- Changes to the forestry and woodland baseline as a result of commercial felling or further replanting. This is in the context of the drive to increase Scotland's woodland cover as discussed in chapter 10: Terrestrial non-avian ecology; and
- Development or decommissioning of infrastructure, particularly relating to onshore wind developments, nuclear test establishments and the associated electrical infrastructure such as the new SHET-L Spittal 2 substation and HVDC converter station. The new SHET-L Spittal 2 substation and HVDC converter station is a proposed 400kV substation that is part of wider upgrades and reinforcement for new future onshore and offshore renewables generation and is part of the associated upgrades from Spittal to Loch Buidhe, Beauly reinforcement project (SSEN, 2023).

The FLS Caithness Land Management Plan (LMP) was approved in February 2023 and will be active for ten years, with a mid-term review in 2027. The plan proposes to improve the young broadleaf crops at Sibster by identifying a programme of maintenance and formative pruning and replacement of diseased ash. FLS will continue to support and encourage public access across the national forests and land and specifically at Sibster and the plan includes a request from the community in Halkirk for a pedestrian link between the western edge of Sibster Forest and Halkirk. FLS has indicated it will work with local landowners and groups to achieve this over the plan period (FLS, 2023). Offshore Wind Power Limited (OWPL) will continue to engage with FLS regarding the future activities at the Sibster Forest.

It is considered that there would be no significant changes to the tourism and recreation resource.

12.4.6 Summary and key issues

The key sensitive receptors and key issues for the land use onshore study area are provided below in Table 12-10.

Table 12-10 Summary and key issues for land use and other users, including forestry

KEY AND SUMMARY ISSUES	ONSHORE STUDY AREA
	• Overlap with agricultural land of grades Class 3.2 to Class 5.3, and peatland; • Overlap with forestry and woodland (both private and commercial), including Sibster Forest managed by Forestry and Land Scotland; • Proximity to tourism and recreational receptors, particularly the NC500 and the Forss House Hotel; • Proximity to the operation of key infrastructure (e.g. overhead lines, Hoy pumping station, SHET-L Spittal substation, railway network, existing utilities); and • Proximity to residential receptors and settlements (e.g. Forss and Halkirk).

12.4.7 Data limitations and uncertainties

The baseline has been collated from publicly available data sources and a number of Project-specific surveys. As stated in section 12.4.3, it was not possible to access the full land use onshore study area within the walkover survey window due to land accessibility. To minimise survey gaps, vantage points were used to gain a wider overview of the land use onshore study area during the walkover survey. Woodlands in the Burn of Baillie area were unable to be surveyed due to access restrictions, and no vantage point could be found.

The walkover survey was supported by a thorough DBA, both prior to the survey being undertaken and on authoring of the baseline. Whilst efforts have been made to ensure that the key receptors in the land use survey area have been captured, it is possible that there are a small number of receptors that will not have been identified through the data collection process. It is considered that these will most likely relate to specific local accommodation and residential receptors. However, it is considered that the receptors that have been identified may act as a proxy for the assessment of effects on other receptors that may have been unaccounted for.

The deer and forestry surveys had no limitations. Overall, the baseline data are considered appropriate to support a robust impact assessment.

12.5 Impact assessment methodology

12.5.1 Impacts requiring assessment

The impacts identified as requiring consideration for land use and other users, including forestry are listed in Table 12-11. Information on the nature of impact (i.e. direct or indirect) is also described.

Table 12-11 Impacts requiring assessment for land use and other users, including forestry

POTENTIAL IMPACT	NATURE OF IMPACT
Construction and decommissioning*	
Temporary loss of agricultural land and soils (including peatland)	Direct
Temporary loss of forestry due to felling	Direct
Temporary impacts upon tourism and recreational assets	Direct and indirect
Temporary interference with infrastructure	Direct

POTENTIAL IMPACT	NATURE OF IMPACT
Operation and maintenance	
Long term loss of agricultural land and soils (including peatland)	Direct
Long term loss of forestry	Direct

**** In the absence of detailed information regarding decommissioning works, and unless otherwise stated, the impacts during the decommissioning of the onshore Project considered analogous with, or likely less than, those of the construction stage as detailed in section 12.6.3.***

12.5.2 Impacts scoped out of the assessment

The impacts scoped out of the assessment during EIA scoping, and the justification for this, are listed in Table 12-12.

Table 12-12 Impacts scoped out for land use and other users, including forestry

IMPACT SCOPED OUT	JUSTIFICATION
Operation and maintenance	
Long term interference upon tourism and recreational assets	Operation and maintenance activities are considered to be minor. The onshore export cables will be buried and therefore there is no potential to interfere with these receptors. The receptors in Table 12-8 will not be directly (physically) impacted by the onshore Project, and setting impacts on the assets in the vicinity of the onshore substation are assessed in chapter 13: Terrestrial archaeology and cultural heritage. In order to reduce the visual impact of the onshore substation within the landscape, bunding and planting has been proposed as embedded (designed in) mitigation. This has been discussed and agreed in consultation with THC and HES (see section 13.3 of chapter 13: Terrestrial archaeology and cultural heritage).
Long term impacts on third-party infrastructure	Operation and maintenance activities are considered to be minor. The onshore export cables will be buried and therefore there is no potential to interfere with these receptors.

12.5.3 Assessment methodology

An assessment of potential impacts is provided separately for the construction, operation and maintenance and decommissioning stages.

The assessment for land use and other users, including forestry is undertaken following the principles set out in chapter 7: EIA methodology. The sensitivity of the receptor is combined with the magnitude to determine the impact significance. Topic-specific sensitivity and magnitude criteria are assigned based on professional judgement, as described in Table 12-13 and Table 12-14.

Table 12-13 Sensitivity criteria

SENSITIVITY OF RECEPTOR	DEFINITION
High	• Receptor with little or no capacity to accommodate a particular effect and no ability to recover or adapt; and/or • Receptor of high land use / tourism / recreation / forestry value, that is internationally or nationally important, e.g. it is a destination in its own right (for attractions), with a substantial proportion of visitors on a national / international level such as the NC500, or nationally important infrastructure (such as the railway).
Medium	• Receptor with low capacity to accommodate a particular effect with low ability to recover or adapt; and/or • Receptor of moderate land use / tourism / recreation / forestry value to an extent that is regionally important, e.g. such as agricultural land or infrastructure with importance to the Highlands.
Low	• Receptor has some tolerance to accommodate a particular effect or will be able to recover or adapt; and/or • Receptor is of low land use / tourism / recreation / forestry value to an extent that is locally important, e.g. it is an incidental destination for current visitors (for attractions) and/or possesses priority/weight in local policy, such as local core paths.
Negligible	• Receptor is generally tolerant and can accommodate a particular effect without the need to recover or adapt; and/or • Receptor is widespread / common and is of insignificant land use / tourism / recreation / forestry value, e.g. an incidental destination for low numbers of current visitors (for attractions) and/or possesses no weight in authority policy.

Table 12-14 Magnitude criteria

MAGNITUDE CRITERIA	DEFINITION
High	• Total change or major alteration to key elements / features of the baseline land use or major change in tourism and/or recreational use; • Impact occurs over a large scale or spatial geographical extent and/or is long-term or permanent in nature; and/or • High frequency (occurring repeatedly or continuously for a long period of time) and/or high intensity.
Medium	• Partial change or alteration to one or more key elements / features of the baseline land use or moderate change in tourism and/or recreational use; • Impact occurs over a medium scale / spatial extent and/or has a medium-term duration; and/or

MAGNITUDE CRITERIA	DEFINITION
	• Medium to high frequency (occurring repeatedly or continuously for a moderate length of time) and/or at moderate intensity or occurring occasionally / intermittently for short periods of time, but at a moderate to high intensity.
Low	• Minor shift away from the baseline land use and/or recreational use; • Impact occurs over a local to medium scale / spatial extent and/or has a short to medium-term duration; and/or • Impact is unlikely to occur or at a low frequency (occurring occasionally / intermittently for short periods of time at a low intensity).
Negligible	• Very slight change from baseline land use and/or recreational use; • Impact is highly localised and short term with full rapid recovery expected to result in very slightly or imperceptible changes to baseline conditions or receptor population; and/or • The impact is very unlikely to occur and if it does will occur at very low frequency or intensity.

The consequence and significance of effect is then determined using the matrix provided in chapter 7: EIA methodology.

12.5.4 Embedded mitigation

As described in chapter 7: EIA methodology, certain measures have been adopted as part of the onshore Project development process in order to reduce the potential for impacts to the environment, as presented in Table 12-15. These have been accounted for in the assessment presented below. The requirement for additional mitigation measures (secondary mitigation) will be dependent on the significance of the effects on land use and other user receptors, including forestry.

In accordance with the onshore PPP Application, the embedded mitigations listed below have been attributed to particular Development Zones within the onshore Project area. These are detailed in Table 12-15 and the Development Zones are shown in Figure 12-12.

12.5.5 Worst case scenario

As detailed in chapter 7: EIA methodology, this assessment considers the worst case scenario for the onshore Project parameters which are predicted to result in the greatest environmental impact, known as the 'worst case scenario'. The worst case scenario represents, for any given receptor and potential impact, the design option (or combination of options) that would result in the greatest potential for change.

Given that the worst case scenario is based on the design option (or combination of options) that represents the greatest potential for change, the development of any alternative options within the design parameters will give rise to no worse effects than those assessed in this impact assessment. Table 12-16 presents the worst case scenario for potential impacts on land use and other users, including forestry during construction, operation and maintenance, and decommissioning.

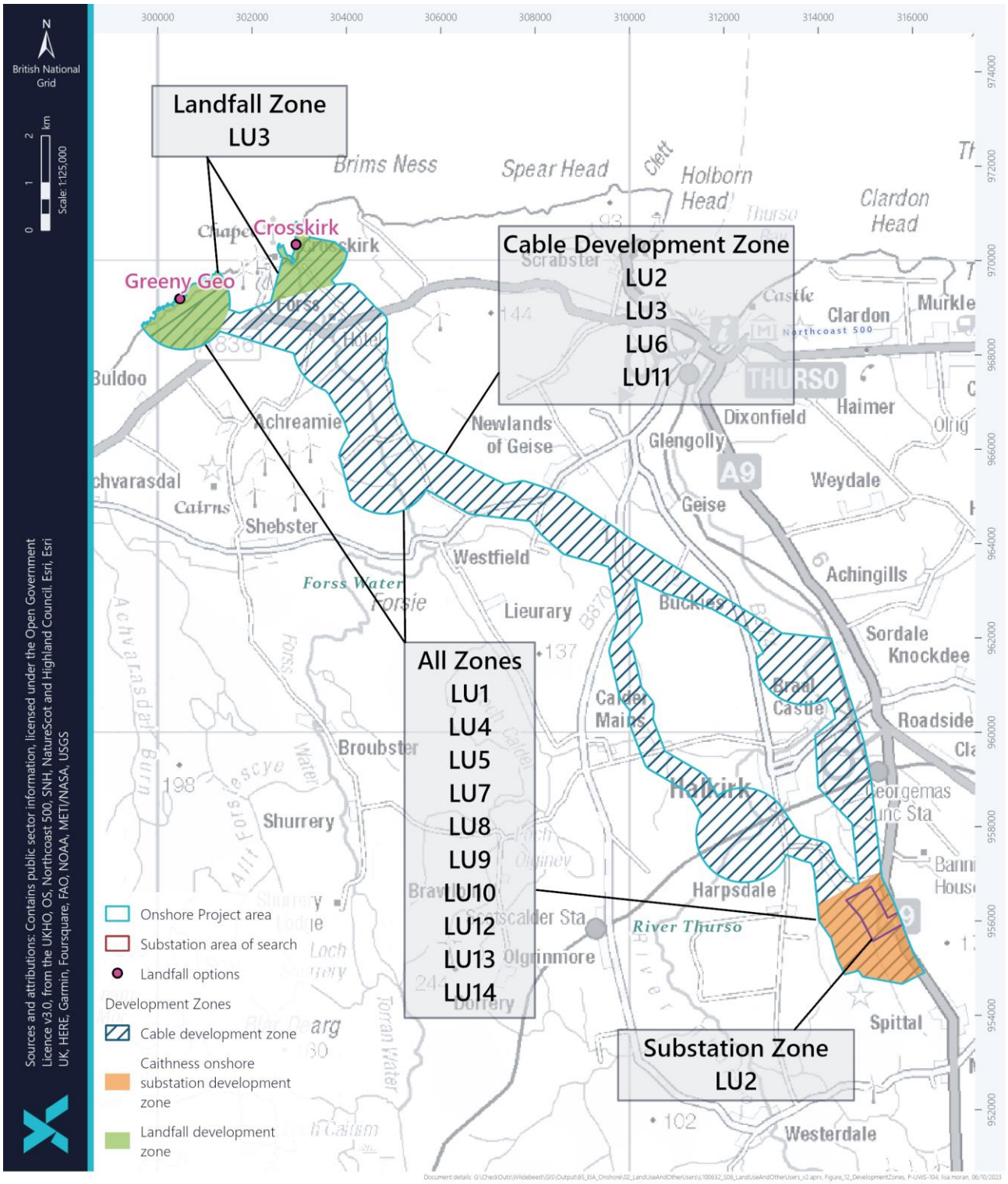

Figure 12-12 Development Zones for the onshore PPP Application

Table 12-15 Embedded mitigation measures relevant to land use and other users, including forestry

ID	MITIGATION MEASURE	TYPE	DESCRIPTION	HOW MITIGATION WILL BE SECURED	DEVELOPMENT ZONE
LU1	Avoidance of third-party infrastructure, including residents and commercial properties	Primary	All onshore export cables are to be buried in trenches with no overhead power cables. Onshore export cable corridor route options have avoided third party infrastructure where practicable. Where crossings are required, consultation with asset operators will be undertaken and suitable crossing or proximity agreements will be entered into.	Established within the design principles (secured through the Construction Method Statement (CMSs)).	All zones.
LU2	Avoidance of high agricultural and forestry value	Primary	The onshore export cable corridor avoids areas of high agricultural and forestry value. Consideration of land use and other user sensitivities as part of the constraints mapping exercise to inform final cable routes and associated construction infrastructure.	Established within the design principles (secured through the CMSs).	Cable development zone and substation zone.
LU3	Return location to pre-construction state	Primary	Once land is no longer required for cable installation (e.g., once installation of a given area is complete) the land will be reinstated to ensure it can return to its original use, where possible, for the remainder of the construction stage and for the operation and maintenance stage.	Established through design principles (secured through CMSs). These measures will also be established within the Habitat Management Plan (HMP). This plan will be secured through a condition attached to the PPP. Landowner agreements.	Landfall zone and cable development zone.

ID	MITIGATION MEASURE	TYPE	DESCRIPTION	HOW MITIGATION WILL BE SECURED	DEVELOPMENT ZONE
LU4	Minimisation of land-take	Primary	The land-take for the onshore Project will be kept to the minimum necessary for safe construction and operation for the works. The onshore Project area has been established based on identifying the shortest and most economical route from landfall to grid location.	Established within the design principles (secured through the CMSs).	All zones.
LU5	Livestock water supplies	Primary	Water supplies for livestock will be protected at all times and alternative supplies will be provided where access could be compromised by any works.	Established through design principles (secured through the CMSs).	All zones
LU6	Compensatory planting	Primary	All felled woodland will be compensated for by an appropriately designed new compensatory planting scheme, produced post-consent. Planting undertaken in a specified timeline and as agreed in consultation with Scottish Forestry and FLS (if appropriate). Areas of compensatory planting will be undertaken within suitable area(s), at a time which takes account of the needs of the landowner, the progress of the works and the suitability of the time for establishing new planting.	Established within the design principles (secured through the CMSs) and within the Compensatory Planting Scheme. The compensatory planting will also be monitored through the HMP. The Compensatory Planting Scheme and HMP will be secured through conditions attached to the PPP.	Cable development zone.
LU7	Construction Environment Management Plan (CEMP)	Tertiary	The CEMP will outline how the onshore Project will ensure the suitable implementation and control of the mitigation measures during construction. An outline CEMP (OMP1: Outline CEMP) is provided alongside the Application for PPP.	As per OMP1: Outline CEMP, the final CEMP will be provided at post-consent. The CEMP will be secured through a condition attached to the PPP.	All zones.

ID	MITIGATION MEASURE	TYPE	DESCRIPTION	HOW MITIGATION WILL BE SECURED	DEVELOPMENT ZONE
LU8	Peat Management Plan (PMP)	Tertiary	An outline PMP is provided as part of the onshore application and details the proposed mitigations for the management of peat within the onshore Project area, see OMP3: Outline PMP. The outline PMP will be updated once the onshore Project design is finalised post-consent.	As per OMP1: Outline CEMP, these measures will be established within the final PMP which will be appended to the final CEMP. The CEMP will be secured through a condition attached to the PPP.	All zones.
LU9	Engagement with affected landowners, asset owners and members of the public	Tertiary	Close liaison with affected landowners, asset owners and members of the public will be maintained during planning, and construction stages to ensure they are fully aware of proposals and sequence of construction activities and how these may interact with planned land use activities (including agreement on a programme of restricted stalking activities).	External communication with the community, landowners and asset owners will be undertaken by the Community Liaison Officer (CLO). The requirement for a CLO will be secured through a condition attached to the PPP.	All zones.
LU10	Prevention of soil borne pests and disease	Tertiary	All reasonable precautions will be taken during construction to avoid as far as is possible the spreading of soil borne pests and diseases, and animal and crop diseases. Precautions as recommended by the Scotland's Environment and Rural Services will be observed.	As per OMP1: Outline CEMP, these measures will be established within the Soil Resource Management Plan (SRMP) which will be appended to the final CEMP. The CEMP will be secured through a condition attached to the PPP.	All zones.

ID	MITIGATION MEASURE	TYPE	DESCRIPTION	HOW MITIGATION WILL BE SECURED	DEVELOPMENT ZONE
LU11	Planned tree felling	Tertiary	Whilst avoidance of forestry is inherent in routeing design, the extent of tree felling will be planned to reduce the risk of windthrow[6]. Felling works will be supervised by a qualified forester and consulted on with Scottish Forestry and FLS (if appropriate). All trees within the proposed felling areas are currently not of a height that would pose a risk of windthrow.	Established within the design principles (secured through the CMSs).	Cable development zone.
LU12	Fencing areas for site restoration and reinstatement	Tertiary	Fencing of areas for site restoration and reinstatement at the end of the construction period to promote fast re-establishment of vegetation and prevent livestock from damaging newly reinstated areas.	Established within the design principles (secured through the CMSs).	All zones.
LU13	Access Management Plan	Tertiary	A Design and Access Statement has been submitted along with the PPP Application to provide an overview of measures to maintain access to paths throughout construction. Where necessary, appropriate diversions will be in place and the paths will be re-instated after construction. An AMP will be developed post-consent to finalise these measures.	These measures will be established within the AMP. The AMP will be secured through a condition attached to the PPP.	All zones.
LU14	Decommissioning, Restoration and Aftercare Plan.	Tertiary	A Decommissioning, Restoration and Aftercare Plan will be prepared for the onshore Project and agreed with THC prior to decommissioning works being undertaken. The plan will include any measures required to protect land use and other users during decommissioning which are likely to be similar to those proposed within the CEMP.	Established within the design principles and the Decommissioning, Restoration and Aftercare Plan which will be secured through a condition attached to the PPP.	All zones.

[6] *In forestry, windthrow refers to trees uprooted by wind.*

Table 12-16 Worst case scenario specific to land use and other users, including forestry receptor impact assessment

POTENTIAL IMPACT	WORST CASE SCENARIO	JUSTIFICATION
Construction and decommissioning		
Temporary loss of agricultural land and soils (including peatland)	• Use of Open Cut Trenching (OCT) as the installation methodology to bury onshore export cables; • Cable working corridor: maximum of 3,300,000 m^2, inclusive of: – Maximum footprint for HDD: 7,500 m^2; – Five Transition Joint Bays (TJBs), up to 30 m long x 6 m wide x 5 m deep; – 288 Cable Joint Bays (CJBs), up to 30 m long x 3 m wide x 2.5 m deep; – Approximately 5 km in length of permanent access tracks. 24% (1.2 km) are existing tracks, 44% (2.21 km) are existing tracks that require improvements and 33% (1.67 km) will be newly installed tracks; – Temporary access tracks (not including haul roads) up to 3,300 m in length at the landfall, the entry and exit points of the HDD points and the onshore substation. Lengths are indicative only; and – Where possible, local infrastructure including road networks, farmer tracks and utility access roads will be utilised to minimise the construction of new infrastructure. Temporary bridges/spanning structure will be considered for appropriate locations for haul roads. • Cable combined temporary working area: maximum of 215,000 m^2; • Excavated trench material: 162,525 m^3 per cable, 975,150 m^3 for all onshore export cables; • The full size of development area (including substation screening and bunding) is approximately 239,200 m^2 (23.9 ha); • Onshore substation construction compound (including site offices and carpark): approximately 62,500 m^2 (6 ha);	The worst case scenario for loss of agricultural land and soils is the largest footprint and extent of excavation required for the construction period (e.g. the area that would result in the largest loss of agricultural land and soils).

POTENTIAL IMPACT	WORST CASE SCENARIO	JUSTIFICATION
	• Maximum excavated material for the onshore substation: 1,207,000 m^3; and • Four year construction period.	
Temporary loss of forestry due to felling	• Up to 9.58 ha of forestry / woodland may need to be cleared from two sites at Sibster Forest and Hill of Howe (9.30 ha and 0.28 ha respectively).	Reflects the maximum area of felling that might be required for the construction of the onshore Project.
Temporary impacts upon tourism and recreation assets	• Use of OCT as the installation methodology to bury onshore export cables; • Cable working corridor: maximum of 3,300,000 m^2, inclusive of: – Onshore substation construction compound (including site offices and carpark): approximately 62,500 m^2 (6 ha); – Maximum footprint for HDD: 7,500 m^2; – Five TJBs, up to 30 m long x 6 m wide x 5 m deep; – 288 CJBs, up to 30 m long x 3 m wide x 2.5 m deep; – Approximately 5 km in length of permanent access tracks. 24% (1.2 km) are existing tracks, 44% (2.21 km) are existing tracks that require improvements and 33% (1.67 km) will be newly installed tracks; – Temporary access tracks (not including haul roads) up to 3,300 m in length at the landfall, the entry and exit points of the HDD points and the onshore substation. Lengths are indicative only; and – Where possible, local infrastructure including road networks, farmer tracks and utility access roads will be utilised to minimise the construction of new infrastructure. Temporary bridges/spanning structure will be considered for appropriate locations for haul roads; • Cable combined temporary working area: maximum of 215,000 m^2;	Reflects the maximum footprint required for the construction period, and the longest period for construction, that has the potential to interfere with and restrict access to recreational routes.

POTENTIAL IMPACT	WORST CASE SCENARIO	JUSTIFICATION
	• The full size of development area (including substation screening and bunding) is approximately 239,200 m^2 (23.9 ha); • The excavation rate for HDD crossings is < 10 m per day; • Up to 9.30 ha of forest may need to be felled from within Sibster Forest which is the only woodland with recreation amenities; and • Four year construction period.	
Temporary interference with infrastructure	• Cable working corridor: maximum of 3,300,000 m^2, inclusive of: – Maximum footprint for HDD: 7,500 m^2; – Five TJBs, up to 30 m long x 6 m wide x 5 m deep; – 288 CJBs, up to 30 m long x 3 m wide x 2.5 m deep; – Approximately 5 km in length of permanent access tracks. 24% (1.2 km) are existing tracks, 44% (2.21 km) are existing tracks that require improvements and 33% (1.67 km) will be newly installed tracks; – Temporary access tracks (not including haul roads) up to 3,300 m in length at the landfall, the entry and exit points of the HDD points and the onshore substation. Lengths are indicative only; and – Where possible, local infrastructure including road networks, farmer tracks and utility access roads will be utilised to minimise the construction of new infrastructure. Temporary bridges/spanning structure will be considered for appropriate locations for haul roads. • Cable combined temporary working area: maximum of 215,000 m^2; • The full size of development area (including substation screening and bunding) is approximately 239,200 m^2 (23.9 ha); and • Four year construction period.	Reflects the maximum footprint required for the construction period, and the longest period for construction, that has the potential to interfere with any third party infrastructure.

POTENTIAL IMPACT	WORST CASE SCENARIO	JUSTIFICATION
Operation and maintenance		
Long term loss of agricultural land and soils (including peatland)	• The full size of development area (including substation screening and bunding) is approximately 239,200 m^2 (23.9 ha); • Approximately 5 km in length of permanent access tracks. 24% (1.2 km) are existing tracks, 44% (2.21 km) are existing tracks that require improvements and 33% (1.67 km) will be newly installed tracks. – Five TJBs, up to 30 m long x 6 m wide x 5 m deep; and – 288 CJBs, up to 30 m long x 3 m wide x 2.5 m deep.	Maximum footprint of substation which is the only 'above ground' element of the onshore Project that will result in long term loss of agricultural land and soils.
Long term loss of forestry	• A maximum of up to 9.58 ha of woodland removal locally may be required over two sites at Sibster Forest and Hill of Howe (9.30 ha and 0.28 ha respectively); and • A minimum area of 9.58 ha of forestry / woodland will be re-established a maximum of 5 years after clearance.	Reflects the maximum area of felling required for the operation of the onshore Project.

12.6 Assessment of potential effects

12.6.1 Potential effects during construction

12.6.1.1 Temporary loss of agricultural land and soils (including peatland)

During construction there will be a direct and temporary loss of agricultural land and soils as a result of the land-take required for construction activities. Please note the long term impact from this effect during the operation and maintenance stage is discussed in section 12.6.2.1. The footprint for the temporary loss of agricultural land and soils (including peat) during construction is outlined in section 12.5.5.

Consultation with affected landowners and farmers is ongoing and will be maintained during construction to minimise disruption as far as possible and to ensure they are fully aware of proposals and sequences of construction activities. Design of the onshore Project and locating of the onshore export cable corridor and onshore substation has aimed to avoid areas of land with high agricultural value and during detailed design land-take for the onshore Project will be kept to a minimum.

As detailed in section 12.4.4.1, the agricultural land across the onshore land use study area ranges from Class 3.2 to Class 5.3 which is classed as moderate to low productivity but not prime agricultural land. The receptor (agricultural land and soils) is therefore considered to be of medium sensitivity due to its moderate value to the region and its ability to absorb change without significantly altering its present character.

As detailed in section 12.4.4.1, areas of peat are present across the land use onshore study area which may be lost or disturbed as a result of the construction activities. A PMP will be implemented to ensure peat resources are managed in accordance with best practice and disturbance to peat will be minimised, and precautions will be taken to reduce the spreading of soil borne pests and diseases to ensure land can be restored and reinstated effectively. An outline PMP has been submitted with the PPP Application (OMP3: Outline PMP).

As detailed in Table 12-16, construction works will occur over a period of four years, and in stages, therefore the land loss would be staggered across the full construction period. Although construction works are not fully defined, it is assumed that the onshore export cables will progress in sections (from one CJB to the next) with the order of trenching, installation of duct and reinstatement. Therefore, the loss of land at any one time would be limited. This temporary land loss during construction is not considered to be extensive in the wider context of the overall land still available for agricultural purposes. Excavated soil would be used in site restoration and reinstatement at the end of the construction period in order to promote fast re-establishment of vegetation, and soils would be stored for as short a time as practicable, in order to minimise degradation through erosion and desiccation. Furthermore, fencing of these areas will be undertaken to prevent any livestock from damaging newly reinstated areas to further reduce impacts on agricultural land use. The impact is considered to be of low intensity and reversible, therefore the magnitude of impact is anticipated to be low.

Evaluation of significance

Taking the medium sensitivity of the agricultural land and soils and the low magnitude of the impact, the overall effect of temporary loss of agricultural land and soils during construction is considered to be **minor** and **not significant** in EIA terms.

SENSITIVITY	MAGNITUDE OF IMPACT	CONSEQUENCE
Medium	Low	Minor
Impact significance – NOT SIGNIFICANT		

12.6.1.2 Temporary loss of forestry due to felling

Whilst efforts have been made during onshore design considerations to date to avoid forestry and woodland areas, there still remains the potential for up to 9.58 ha of woodland over two distinct and separate areas within the land use onshore study area (up to 9.30 ha from Sibster Forest and up to 0.28 ha from Hill of Howe), which may need to be felled ahead of construction. It is extremely unlikely this entire area will need cleared. Micro siting during detailed design will be utilised where possible to avoid these areas however there are instances where woodland avoidance may not be possible.

As detailed in section 12.4.4.2, the forestry and woodland across the onshore land use study area ranges from Class F5 to Class F7 which is classed between land with limited flexibility for the growth and management of trees to land which is unsuitable for producing a tree crop, not prime forestry land. The receptor (forestry and woodland) is therefore considered to be of **low sensitivity** due to its low to moderate value to the region and its ability to accommodate change without significantly altering its present character.

The felling and removal of trees within Sibster Forest will have a very limited impact on the overall forest. The areas which will require felling or removal do not have a high commercial value due to species type and lower productivity / yield of the crop. The trees at Sibster Forest are planted as amenity woodlands (rather than for commercial or ecological reasons), and due to the small area which requires clearing / felling compared to the overall forest (9.3 ha represents only 2.6% of the entire 356.95 ha forest area), the spatial impact on the overall area is considered to be limited. Consultation will be ongoing with FLS and the land manager as walking trails may need to be temporarily closed while the woodland is felled and compensatory planting will be required for any felled trees. Impacts from access restrictions to these paths is assessed within 12.6.1.3.4.

The other woodland area requires only a smaller area to be felled (if required). 0.28 ha at Hill of Howe is anticipated to have a limited impact on the integrity of the woodland and ecology due to the narrow nature compared to much larger woodlands in the landscape. Further details are outlined in SS10: Forestry and Woodland Survey and Report.

The construction works will take place over a four year period therefore woodland areas felled / cleared in year one is expected to be replaced by compensatory planting by year four of the Project, and so on, on a rolling scale. Therefore, the overall impact is thought to be lessened as there will be a lesser extent of felling / clearance at any one point. In line with the Control of Woodland Removal Policy, during felling, areas of retained forestry or tree groups will be clearly indicated and methods for their protection during construction clearly described. Timelines for

felling required over the construction stage may be affected by seasonal restrictions and permission from Scottish Forestry, once planning consent for the Project has been agreed.

All felled woodland (potentially up to 9.58 ha between two sites) will be replaced by an appropriately designed compensatory planting scheme on a substitute site to satisfy the requirements of the Control of Woodland Removal Policy. For technical reasons it will not be possible to replant trees along the cable route. The location of the planting site is yet to be proposed / agreed and will to some extent be influenced by the amount of felling required. However, it would be chosen in line with the Control of Woodland Removal Policy and the location, design, planting timescales and maintenance agreed with Scottish Forestry and FLS (as appropriate). Whilst there will be no net loss of forestry and woodland in the area, there will be a loss of forestry within the land use onshore study area as it is felled for construction of the onshore Project. The magnitude of impact is considered to be low.

The long term impact from this effect during the operation and maintenance stage is discussed in section 12.6.2.2.

Evaluation of significance

Taking the low sensitivity of the woodland and forestry, and the low magnitude of the impact, the overall effect of temporary loss of forestry during construction is considered to be negligible and not significant in EIA terms.

SENSITIVITY	MAGNITUDE OF IMPACT	CONSEQUENCE
Low	Low	Negligible

Impact significance - NOT SIGNIFICANT

12.6.1.3 Temporary impacts upon tourism and recreational assets

Whilst the majority of the land use onshore study area is not specifically promoted for recreation, there are a number of identified receptors (Figure 12-5) and it is acknowledged that recreational use of the area is not limited to use of these assets, not least due to the Land Reform (Scotland) Act 2003 which establishes public rights of access to land for recreational purposes. The construction of the onshore Project will result in temporary loss of land used for recreational activities and also interference with recreational activities.

Access to areas across the land use onshore study area where there are construction related activities will be restricted for recreational purposes, both formal and informal, due to health and safety purposes in line with the Construction (Design and Management) Regulations 2015 (UK Government Legislation, 2015).

The baseline has identified various recreational receptors across the land use onshore study area, and it is acknowledged that each of these will have varying levels of sensitivity to the effect, and the effect will have varying magnitudes on each receptor depending on aspects such as location, therefore each receptor has been assessed individually in the sections below.

12.6.1.3.1 North Coast 500 and LEJOG route

As detailed in section 12.4.4.3.1 and 12.4.4.3.2 the NC500 and LEJOG route, respectively, utilise the A836 road, and cross the onshore export cable corridor between Thurso and Reay and therefore will only be impacted by the installation of the onshore export cables in this area.

As outlined in chapter 16: Access, traffic and transport, the A836 road is suitable for two-way traffic. Chapter 16: Access, traffic and transport assesses the potential effects on the A836 in relation to driver delay, accidents and safety, severance, pedestrian delay and amenity and dust and dirt, in relation to the increase in construction traffic associated with the onshore Project. All effects were assessed as not significant, and only a small increase (19%) would be expected in the Average Annual Daily Flow (AADF) of vehicles on the A836 during construction.

As detailed in chapter 5: Project description, trenchless or OCT crossings may be utilised to install the onshore export cable route across the A836. If OCT crossings are utilised, a traffic light system will be implemented to control traffic flows to a single lane of traffic, and this will affect approximately 100 – 300 m of the road per crossing. During this time, the road surface will be removed, and the earth underneath will be dug to form a trench. Once the trench, duct and cables are installed, the road, verge and areas used for CJBs will be reinstated and two-way traffic will resume.

The NC500 and LEJOG route are considered to be of high sensitivity due to their high tourism value and national importance. However, the effect on these receptors is considered to be extremely limited as detailed in chapter 16: Access, traffic and transport. Trenchless and/or OCT crossings will be used as the installation methodologies and full road closures are not expected. Although traffic controls will be in place to reduce traffic to a single lane, this will be highly localised across that stretch of the road, and temporary. The magnitude impact is therefore considered to be negligible.

Evaluation of significance

Taking the high sensitivity of the NC500 and LEJOG route and the negligible magnitude of the impact, the overall effect of temporary construction works of the recreational use of the NC500 and LEJOG route is considered to be negligible and not significant in EIA terms.

SENSITIVITY	MAGNITUDE OF IMPACT	CONSEQUENCE
High	Negligible	Negligible
Impact significance – NOT SIGNIFICANT		

12.6.1.3.2 Angling at River Thurso and Forss Water

The onshore export cable corridor will cross the River Thurso and/or the Forss Water at least once (depending on the final onshore export cable route). These rivers are used for fishing activities and there is potential for access to be temporarily restricted during installation works. These rivers are considered to be receptors of **high sensitivity**, due to their high tourism value and national importance as one of Caithness' valued tourism assets.

The rivers are considered special crossings and therefore HDD will be utilised to install the onshore export cable route. Approximately 40 days will be required in order to complete the river crossing which would include time for the entry and exit points. Additional time may also be required for mobilising and demobilising equipment. Whilst the HDD activity would not have any direct impact on the rivers themselves, access to fisherman and anglers would be restricted on the banks of the rivers where the HDD equipment and activity is located. However, this interference will be highly localised across those specific points of the rivers and highly temporary (e.g. expected only to occur for a timeframe of 40 days at each river crossing, not accounting for the mobilisation and demobilisation of equipment). The **magnitude** of impact is therefore considered to be **low.**

Evaluation of significance

Taking the high sensitivity of the River Thurso and Forss Water and the low magnitude of the impact, the overall effect of interference from temporary construction works of the recreational fishing and angling activities is considered to be **minor** and **not significant** in EIA terms.

SENSITIVITY	MAGNITUDE OF IMPACT	CONSEQUENCE
High	Low	Minor

Impact significance – NOT SIGNIFICANT

12.6.1.3.3 Deer stalking

During the construction period, deer stalking and shooting activities across the land use onshore study area will need to be restricted due to the health and safety risk posed to construction workers. Given the length of the land use onshore study area, complete suspension of stalking activities across the entire area for the full construction period will not be required and it is expected that stalking will be able to continue on a reduced programme as agreed with the contractor. Close liaison with affected landowners will be maintained during planning, and construction stages to ensure they are fully aware of proposals and sequence of construction activities and how these may interact with planned land use activities, including agreement on a programme of restricted and seasonal shooting and stalking activities if necessary.

Shooting and stalking activities are considered to be a **low sensitivity** receptor considering that there is a tolerance to accommodate a level of change, and it is locally important. The effect on this receptor is considered to be limited and a minor shift away from baseline conditions over a short-term period. The **magnitude** of impact is therefore considered to be **low**.

Evaluation of significance

Taking the low sensitivity of the stalking activities and the low magnitude of the impact, the overall effect of interference of construction works of the recreational stalking activities is considered to be **negligible** and **not significant** in EIA terms.

SENSITIVITY	MAGNITUDE OF IMPACT	CONSEQUENCE
Low	Low	Negligible
Impact significance – NOT SIGNIFICANT		

12.6.1.3.4 Core paths and recreational walking

In addition to public rights of way, there are three core paths located across the land use onshore study area that have the potential to be impacted by construction activities depending on the final cable route. These paths are considered to be of **low sensitivity** due to their local importance and ability to recover from an effect such as interference from construction activity. Considering the entirety of the land use onshore study area is accessible to the public by virtue of the Land Reform (Scotland) Act 2003, it is acknowledged that impacts on recreational access is not limited to the formal core paths and other public rights of ways identified. However, for the purposes of this assessment it is assumed that the assessment of impacts on core paths can be used as a proxy for impacts on recreational access as a whole.

A Design and Access Statement has been submitted alongside the PPP Application. An AMP will be developed post-consent prior to construction in conjunction with THC and through consultation with local stakeholders to agree the measures in place to ensure access to paths are maintained, as required; to agree periods and locations where access cannot be granted for health and safety purposes; and to agree protocols for appropriate diversions.

Whilst the final onshore export cable route is not currently known, considering the location of the core paths within the land use onshore study area there is potential for effects on all three. If the Greeny Geo landfall is taken forward it is very unlikely there will be impacts upon the Forss Roadside Core Path and the St Mary's Chapel Core Path due to their location. However, this assessment considers the worst case scenario that all three paths will experience direct impacts as a result of the construction stage with appropriate route diversions in place to ensure access is maintained and re-instatement of paths following construction.

There may be temporary closures, diversions or delays to public access during the construction period at various locations across the land use onshore study area although all efforts will be made to ensure access is maintained. Considering the large extent of the land use onshore study area, the effects at any one point will be extremely localised to short sections, and temporary. Any closures or diversions would be required due to health and safety reasons and would be clearly stated on signage advising of alternative routes to minimise disruption; this will be secured within the AMP, post-consent. The **magnitude** of impact on core paths and recreational access across the land use onshore study area during construction is therefore considered to be **low** as it will be a minor shift from baseline conditions across a local to medium spatial extent, over a short-term period.

Evaluation of significance

Taking the low sensitivity of the core paths and recreational access and the low magnitude of the impact, the overall effect of interference of construction works of the recreational access is considered to be **negligible** and **not significant** in EIA terms.

SENSITIVITY	MAGNITUDE OF IMPACT	CONSEQUENCE
Low	Low	Negligible
Impact significance – NOT SIGNIFICANT		

12.6.1.3.5 Cultural heritage

There are 15 cultural heritage assets of recreational value (i.e. scheduled monuments and listed buildings) within the land use onshore study area with the potential to be impacted by the onshore Project. This section assesses impacts on these assets as recreational receptors only. Direct and indirect effects on these designations with regard to cultural heritage is explored in chapter 13: Terrestrial archaeology and cultural heritage. From the perspective of recreation and tourism amenity, the **sensitivity** of these receptors is considered to be **medium** owing to their regional importance to Caithness' tourism.

As outlined in chapter 13: Terrestrial archaeology and cultural heritage, construction activities at the scheduled monuments and listed buildings within the onshore Project area will be avoided, and therefore, there will be no direct impact from construction activity on these receptors.

There is a possibility that the onshore Project could have temporary changes on the setting of onshore historic assets of recreational value, temporarily affecting the way in which the asset is understood, appreciated, and experienced. Potential temporary changes on the setting of assets could be caused by the presence and movement of construction plant, spoil heaps, site compounds and associated infrastructure, temporary gantries, and construction areas within areas in proximity to scheduled monuments and listed buildings. Where this is the case, there could be temporary visual impacts on these assets as assessed in detail in chapter 13: Terrestrial archaeology and cultural heritage.

There may be restricted public access to the assets during the construction period for health and safety purposes, as per section 12.6.1.3.4 above although all efforts will be made to ensure access is maintained. Regardless of the final onshore export cable route, it is not expected that access will be suspended completely, and any impact would be extremely localised and alternative access points would be appropriately signposted to minimise disruption. Additionally, access restrictions will be managed within the AMP (post-consent) and submitted to THC prior to construction. The **magnitude** of impact on these receptors is therefore considered to be **low** as it will be a minor shift from baseline conditions across a local to medium spatial extent, over a short-term period.

Evaluation of significance

Taking the medium sensitivity of the cultural heritage assets as a recreational receptor and the low magnitude of the impact, the overall effect of interference of construction works is considered to be **minor** and **not significant** in EIA terms.

SENSITIVITY	MAGNITUDE OF IMPACT	CONSEQUENCE
Medium	Low	Minor
Impact significance – NOT SIGNIFICANT		

12.6.1.3.6 Local accommodation

Local accommodation has the potential to be impacted by the construction of the onshore Project through restrictions to access, and amenity from construction activities. The Forss House Hotel is the formal local accommodation option located within the land use onshore study area. Informal accommodation providers (e.g. Airbnb's) are also expected to be present. However, the specific location of these sites is not known, and therefore the assessment of effects on the Forss House Hotel is considered to be an appropriate proxy for these more informal accommodation options.

It is not expected that the construction stage would result in any access restrictions to the Forss House Hotel; depending on the final onshore export corridor route and how it might route around Forss, there may be short-term diversions required from a health and safety perspective. These will be agreed within the AMP (post-consent) and clearly signposted to minimise disruption and interference to those looking to access the Hotel. Whilst the Forss House Hotel is considered a receptor of **medium sensitivity** (due to its regional importance), the **magnitude** of impact is considered to be **negligible**. For all other local formal accommodation providers in the area beyond the land use onshore study area (e.g. the Ulbster arms in Halkirk), the magnitude would not be expected to exceed that which has been assessed for the Forss House Hotel due to the implementation of embedded mitigation measures to manage access on the local road network, as outlined in chapter 16: Access, traffic and transport.

Evaluation of significance

Taking the medium sensitivity of the Forss House Hotel and the negligible magnitude of the impact, the overall effect of interference of construction works is considered to be **negligible** and **not significant** in EIA terms.

SENSITIVITY	MAGNITUDE OF IMPACT	CONSEQUENCE
Medium	Negligible	Negligible
Impact significance – NOT SIGNIFICANT		

12.6.1.4 Temporary interference with infrastructure

There is the potential for the construction of the onshore Project to interfere with the third party infrastructure identified in 12.4.4.4. Effects are considered to impact only receptors within the land use onshore study area that have the potential to have their operations affected during the construction of the onshore Project, which includes:

- Overhead lines;
- Hoy pumping station;
- Existing SHET-L Spittal substation;
- Railway network; and
- Existing utilities (e.g. underground distribution and transmission power circuits, water mains and sewage, telecommunications and oil / gas pipelines).

While the overhead lines are within the land use onshore study area, there is no impact pathway for this to be affected by the onshore Project and therefore is not considered further. Additionally, whilst the Hoy pumping station is located within the land use onshore study area, the final onshore export cable route will ensure there is sufficient separation between the route's construction works and the station ensuring there is no potential for impacts on operations, and therefore impacts are not considered further.

The existing SHET-L Spittal substation, railway network and existing utilities are considered to be of high sensitivity due to their national importance with regards to public infrastructure.

Detailed routing of the onshore export cable corridor will avoid third party infrastructure, such as existing utilities, where practicable. Where crossings are required e.g. the railway network, consultation with asset operators will be undertaken and suitable crossing or proximity agreements will be entered into. Close liaison with affected landowners and operators will be maintained during construction stages to ensure they are fully aware of proposals and sequence of construction activities and how these may interact with planned activities. Therefore, the magnitude of impact is considered to be negligible.

Construction of the onshore substation will take place in an area adjacent to the existing SHET-L Spittal substation. Safe construction practices and standard procedures detailed within the CEMP will be adhered to, to ensure there is no potential for adverse impacts upon the operations of the existing SHET-L Spittal substation. Close liaison with affected operators will be maintained during planning, and construction stages to ensure they are fully aware of proposals and sequence of construction activities and how these may interact with operations. Considering this embedded mitigation, the magnitude of impact is therefore considered to be negligible.

As detailed in Table 12-16, HDD will be the installation method used to cross the railway line and therefore no closures of the railway are expected and there will be no interference with railway operations during the works. Consultation with Network Rail Scotland has been initiated as discussed in Table 12-4 and will continue throughout the Project. The Project will adhere to all necessary processes and procedures ahead of construction. Further details on impacts to railways are discussed in chapter 16: Access, traffic and transport. The magnitude of impact is therefore considered to be negligible.

Evaluation of significance

Taking the high sensitivity of the infrastructure assets and the negligible magnitude of the impact, the overall effect of the construction works on the SHET-L Spittal substation, railway network and existing utilities is considered to be **negligible** and **not significant** in EIA terms.

SENSITIVITY	MAGNITUDE OF IMPACT	CONSEQUENCE
High	Negligible	Negligible
Impact significance – NOT SIGNIFICANT		

12.6.2 Potential effects during operation and maintenance

12.6.2.1 Long term loss of agricultural land and soils (including peatland)

The operation and maintenance stage of the onshore Project will result in a long term direct loss of agricultural land. The loss of land is restricted to the above ground infrastructure only, which includes the footprint of the onshore substation and 5.08 km of new permanent access tracks (comprising 1.67 km of new, permanent access tracks, and 3.41 km of existing and improved tracks), TJBs and CJBs. Following construction, agricultural land (including soils and peatland) not required through the operational stage (e.g., the landfall and the onshore export cable corridor) will be reinstated to promote fast re-establishment of vegetation cover on worked areas and areas of bare soil or peat. Further soil and peat removal or stockpiling during the operational stage will be limited to maintenance works only, however, these operations would be undertaken with agreement from landowners and would be very limited in spatial extent and duration.

As detailed in section 12.6.1.1, the agricultural land across the onshore substation area is Class 4.2 which is classed as land capable of producing a narrow range of crops, primarily on grassland with short arable breaks of forage crops and cereal. The receptor (agricultural land and soils) is therefore considered to be of **low sensitivity** due to its low value to the region and its ability to absorb change without significantly altering its present character.

The total loss of agricultural land during operation is approximately 239,200 m^2 (23.9 ha) (e.g. the footprint of the onshore substation), associated hard standing and the newly installed access tracks (1.67 km in length). Following construction, the temporary works will be removed and the ground re-instated, and there will therefore be no long-term loss of agricultural land associated with the construction activities. Given the wider context of the onshore Project boundary and the availability of other agricultural land within both the onshore Project boundary and wider Caithness region, 23.9 ha is a relatively small parcel of land. Additionally, landowner agreements will be in place for any land taken (including agricultural land) for the onshore Project. Therefore, this impact is assessed as a being of **negligible magnitude**.

Evaluation of significance

Taking the low sensitivity of the agricultural land and soils and the negligible magnitude of the impact, the overall effect of temporary loss of agricultural land and soils during operation and maintenance is considered to be **negligible** and **not significant** in EIA terms.

SENSITIVITY	MAGNITUDE OF IMPACT	CONSEQUENCE
Low	Negligible	Negligible

Impact significance – NOT SIGNIFICANT

12.6.2.2 Long term loss of forestry

A maximum of 9.58 ha of woodland could require felling prior to construction of the onshore Project which will be compensated for on a substitute site (as detailed in Table 12-15).

As detailed in section 12.6.1.2, forestry and woodland are considered to be a receptor of **low sensitivity** due to its low to moderate value to the region and its ability to accommodate change without significantly altering its present character.

It is not anticipated that the operation and maintenance will require any additional felling in addition to the potential maximum of 9.58 ha identified. If there is felling required for maintenance purposes during operation, this will be extremely limited and would not extend beyond the existing footprint of felling. The **magnitude** of impact is therefore considered to be **negligible**.

Evaluation of significance

Taking the low sensitivity of the woodland and forestry and the negligible magnitude of the impact, the overall effect of long term loss of forestry during operation and maintenance is considered to be **negligible** and **not significant** in EIA terms.

SENSITIVITY	MAGNITUDE OF IMPACT	CONSEQUENCE
Low	Negligible	Negligible

Impact significance – NOT SIGNIFICANT

12.6.3 Potential effects during decommissioning

In the absence of detailed information regarding decommissioning works, the impacts during the decommissioning of the onshore Project are considered analogous with, or likely less than, those of the construction stage.

Decommissioning operations will be based on strategies that minimise environmental impacts and maximise efforts to recycle materials where possible and will be developed in consultation with the local authorities. The preference

will be to remove infrastructure where possible, however the impact of removal will be assessed against environmental impacts. Whilst the detail of the decommissioning strategy is yet to be established, this assessment is based on the decommissioning strategy proposed in Table 5-7 of chapter 5: Project description, which is as close to full removal as possible, whilst recognising that this is subject to assessments and consultation closer to the time of decommissioning. It is expected that decommissioning follows a reverse order of the installation activities with some infrastructure potentially left *in situ*, therefore lessening the impact on the land as there is no requirement for intrusive works. As the landscape bunds and proposed planting will be mature at the time of decommissioning, it is expected these will be retained.

For the onshore export cables, the impacts would be localised to the areas where cables are pulled and removed, and all aspects of the onshore substation would be dismantled and removed, both resulting in very localised impacts that are broadly comparable with those identified for the construction stage. Subject to agreements with landowners, there is the potential for Project infrastructure to be left *in situ* if that is the preferred option, e.g. access tracks to be maintained for future recreational access use if that is the preferred option of landowners and THC. Any land used for the operational stage would be reinstated and restored to its original state as far as practicable (noting that the large landscape bunds and proposed planting would be retained). There would be no additional disturbance to soils or agricultural activities beyond the extent of what has been identified for the construction stage.

Any restrictions to public access would be comparable with those detailed for the construction stage, and only for health and safety purposes. These access restrictions would be temporary during decommissioning and localised within the footprint of the land required for decommissioning only.

Throughout the operational and construction stages, new and forthcoming legislation and policies would be acknowledged and adhered to, supporting, and guiding the decommissioning process. A Decommissioning Restoration and Aftercare Plan will be prepared prior to decommissioning which will include a financial guarantee to secure decommissioning and site restoration. Decommissioning will be undertaken in accordance with applicable guidance at the relevant time. As per the embedded mitigation measures the Project will seek to maximise recycling where possible of components which are recovered to ensure sustainable decommissioning. As such, it would be expected that any potential impact would not be significant.

The overall impact on land use and other users, including forestry during decommissioning is therefore considered to be, at worst, minor and not significant, in line with the impacts assessed for the construction stage.

12.6.4 Summary of potential effects

A summary of the outcomes of the assessment of potential effects from the construction, operation and maintenance and decommissioning of the onshore Project is provided in Table 12-17.

No significant effects on land use and other users, including forestry receptors were identified. Therefore, mitigation measures in addition to the embedded mitigation measures listed in section 12.5.4 are not considered necessary.

Table 12-17 Summary of potential effects

POTENTIAL EFFECT	RECEPTOR	SENSITIVITY OF RECEPTOR	MAGNITUDE OF IMPACT	CONSEQUENCE (SIGNIFICANCE OF EFFECT)	SECONDARY MITIGATION REQUIREMENTS	RESIDUAL CONSEQUENCE (SIGNIFICANT OF EFFECT)
Construction and decommissioning						
Temporary loss of agricultural land and soils (including peatlands)	Agricultural land and soils	Medium	Low	Minor (not significant)	None required above embedded mitigation measures.	Minor (not significant)
Temporary loss of forestry due to felling	Forestry	Low	Low	Negligible (not significant)	None required above embedded mitigation measures.	Negligible (not significant)
Temporary impacts upon tourism and recreational assets	NC 500 and LEJOG route	High	Negligible	Negligible (not significant)	None required above embedded mitigation measures.	Negligible (not significant)
	Angling at River Thurso and Forss Water	High	Low	Minor (not significant)	None required above embedded mitigation measures.	Minor (not significant)
	Deer stalking	Low	Low	Negligible (not significant)	None required above embedded mitigation measures.	Negligible (not significant)
	Core paths and recreational walking	Low	Low	Negligible (not significant)	None required above embedded mitigation measures.	Negligible (not significant)

POTENTIAL EFFECT	RECEPTOR	SENSITIVITY OF RECEPTOR	MAGNITUDE OF IMPACT	CONSEQUENCE (SIGNIFICANCE OF EFFECT)	SECONDARY MITIGATION REQUIREMENTS	RESIDUAL CONSEQUENCE (SIGNIFICANT OF EFFECT)
	Cultural heritage assets	Medium	Low	Minor (not significant)	None required above embedded mitigation measures.	Minor (not significant)
	Local accommodation	Medium	Negligible	Negligible (not significant)	None required above embedded mitigation measures.	Negligible (not significant)
Temporary interference with infrastructure	The existing SHET-L Spittal substation, railway lines and existing utilities	High	Negligible	Negligible (not significant)	None required above embedded mitigation measures.	Negligible (not significant)
Operation and maintenance						
Long term loss of agricultural land and soils	Agricultural land and soils	Medium	Negligible	Negligible (not significant)	None required above embedded mitigation measures.	Negligible (not significant
Long term loss of forestry	Forestry	Low	Negligible	Negligible (not significant)	None required above embedded mitigation measures.	Negligible (not significant

**** In the absence of detailed information regarding decommissioning works, and unless otherwise stated, the impacts during the decommissioning of the onshore Project are considered comparable with, or likely less than, those of the construction stage.***

12.7 Assessment of cumulative effects

12.7.1 Introduction

Potential impacts from the onshore Project have the potential to interact with those from other developments, plans and activities, resulting in a cumulative effect on land use and other users, including forestry receptors. The approach to the cumulative effects assessment is detailed in chapter 7: EIA methodology (see Figure 7-4), detailing the developments considered in relation to the onshore Project area. A summary of the approach is provided below.

The list of relevant developments for inclusion within the cumulative effects assessment is outlined in Table 12-18. This has been informed by a screening exercise, undertaken to identify relevant developments for consideration within the cumulative effects assessments for each topic-specific chapter, based on defined Zones of Influence (ZoI).

Developments which are located within 500 m of the land use onshore study area have the potential to result in a cumulative effect for land use and other users, including forestry receptors. Developments which are either operational or in the decommissioning stage are considered to be part of the baseline and are not considered within the assessment.

Table 12-18 List of developments considered for the land use and other users, including forestry cumulative impact assessment

LOCATION	DEVELOPMENT TYPE	DEVELOPMENT NAME	DISTANCE FROM ONSHORE PROJECT AREA (KM)	DISTANCE FROM ONSHORE SUBSTATION SEARCH AREA (KM)	STATUS	CONFIDENCE[7]
Forss, Caithness	Onshore windfarm	Forss Windfarm Extension (20/04455/FUL)	0.51	18.21	Application	Low
Spittal, Caithness	Transmission infrastructure – substation plant	Electricity Supply Board (ESB) Asset Development Synchronous Compensator (20/05118/FUL)	0	0	Application	Low

[7] *Confidence ratings have been applied to each cumulative development where: 'Low' = pre-application or application, 'Medium' = consented and 'High' = under construction or operational.*

LOCATION	DEVELOPMENT TYPE	DEVELOPMENT NAME	DISTANCE FROM ONSHORE PROJECT AREA (KM)	DISTANCE FROM ONSHORE SUBSTATION SEARCH AREA (KM)	STATUS	CONFIDENCE[7]
Spittal, Caithness	Transmission infrastructure - cables	High Voltage underground Spittal Synchronous Compensator Grid Connection (22/00016/FUL)	0	0.24	Consented	Medium

The following impacts have been taken forward for the cumulative assessment:

- Construction and decommissioning stages:
  - Temporary loss of agricultural land and soils (including peatlands);
  - Temporary impacts upon tourism and recreational assets; and
  - Temporary interference with infrastructure.
- Operational and maintenance stage:
  - Long term loss of agricultural land and soils (including peatlands).

Based on the publicly available information, the cumulative developments listed in Table 12-18 are not expected to require any felling of forestry for their construction or operation. Cumulative impacts on felling are therefore not considered further.

12.7.2 Cumulative construction effects

12.7.2.1 Temporary loss of agricultural land and soils (and peatlands)

Potential cumulative impacts on agricultural land, soils and peatland as a land use receptor are expected to be direct loss of agricultural land and soils (including peat).

The construction of the cumulative developments listed in Table 12-18 could create greater loss of agricultural land and soils. The Forss Windfarm Extension is not located in an area currently used for agriculture and therefore there is no potential for contribution to direct cumulative loss of agricultural land and soils.

The land-take required for the two other cumulative developments is extremely limited (measured at approximately 1.6 ha total)[8], and restricted to the land immediately adjacent to the existing SHET-L Spittal substation. The additional

[8] *Measured from the publicly available site plans on THC planning portal.*

1.6 ha required for the cumulative developments is acknowledged to be the footprint for operation, however it is not expected that the additional footprint required for construction would be significantly more. Additionally, this loss of land during construction would be temporary and it is assumed that the land would be reinstated to its previous state following construction. Excavated soil and peatland would be reinstated following the construction stage to promote fast re-establishment of vegetation cover on worked areas and areas of bare soil or peat that are not required for the operational stage.

Whilst agricultural land and soils is considered to be of medium sensitivity due to its moderate value to the region and its ability to absorb change without significantly altering its present character, the cumulative impacts of the onshore Project with the cumulative developments identified in Table 12-18 are considered to be of a low magnitude. This is due to the limited land-take introduced, the temporary nature of the impact, the low intensity and the reversibility of the impact. The resultant impact is therefore assessed to be minor and not significant in EIA terms.

12.7.2.2 Temporary impacts upon tourism and recreational assets

There is the potential for the onshore Project and cumulative developments to create cumulative impacts on access to tourism and recreational assets (as identified in section 12.4.4.3) during construction due to health and safety reasons. The 'worst case scenario' for this potential impact would be if all cumulative developments, including the onshore Project, were to be constructed during the same period which is the assumed scenario in the absence of confirmed construction timescales.

Considering that two of the three cumulative developments are located immediately adjacent to the onshore substation search area, it is expected that access restrictions to public recreation will be extremely localised around this area. It should be noted that there are no specific tourism and recreational interests within this localised area. There may be restrictions around the Forss Onshore Windfarm that, if construction timescales overlapped, could act cumulatively with the landfall installation. In all cases, it is assumed that access restrictions required by all developers and contractors would be kept to a minimum and would only be enforced where required by the Construction (Design and Management) Regulations 2015 (UK Government Legislation, 2015). Public access restrictions associated with the onshore Project will be managed and mitigated within the AMP (post-consent), and it is assumed that the cumulative developments will also submit and abide by similar plans.

Engagement will continue with neighbouring developers and landowners to minimise these impacts. This is considered to be a low magnitude of effect on, at worst case, as defined in section 12.6.1.3, a high sensitivity receptor, which creates an overall minor effect that is not significant in EIA terms.

12.7.2.3 Temporary interference with infrastructure

As detailed in section 12.6.1.4, third party infrastructure is considered to be a high sensitivity receptor, due to its national importance with regards to public infrastructure. Section 12.6.1.4 also identified both primary and tertiary mitigation measures which work to avoid and reduce impacts on these assets, including avoidance by design and the implementation of a CEMP during construction which will detail safe construction practices and standard procedures to be adhered to. As above, it is assumed that the cumulative developments will also adhere to similar management plans and standard procedures to avoid any potential adverse impacts upon the operations of third party infrastructure. Additionally, close liaison with affected operators will be maintained during planning, and

construction stages to ensure they are fully aware of proposals and sequence of construction activities and how these may interact with operations.

The magnitude of impact is therefore considered to be negligible, which constitutes a negligible effect that is not significant in EIA terms.

12.7.3 Cumulative operation and maintenance effects

12.7.3.1 Long term loss of agriculture and soils (and peatlands)

The Forss Windfarm Extension is not located in an area currently used for agriculture and therefore there is no potential for contribution to direct cumulative loss of agricultural land or soils (including peatlands). The land-take required for the two other cumulative developments is extremely limited (measured at approximately 1.6 ha total)[9], and restricted to the land immediately adjacent to the existing SHET-L Spittal substation. Considered cumulatively with the operational land-take required for the onshore Project (26.15 ha) the addition of 1.6 ha lost from agriculture land and soils across the region is not considered to be substantial enough to trigger a cumulative impact.

Whilst agricultural land and soils is considered to be of medium sensitivity, the magnitude of impact is considered to be negligible. The resultant impact is therefore assessed to the negligible and not significant in EIA terms.

12.7.4 Cumulative decommissioning effects

As there is limited information on the decommissioning of the onshore Project and that of other developments, at present, a thorough assessment of decommissioning cumulative effects has not been undertaken. Nonetheless, it is expected that the cumulative effects are likely to be less than or equal to the construction stage, given the decommissioning will be a largely a reverse process to that of construction. Furthermore, decommissioning of multiple other developments are not expected to occur at the same time as the decommissioning stage of the onshore Project.

A Decommissioning, Restoration and Aftercare Programme will be developed and approved pre-construction to address the principal decommissioning measures for the onshore Project and will be written in accordance with applicable guidance. The Decommissioning, Restoration and Aftercare Plan will detail the environmental management, and schedule for decommissioning and will be reviewed and updated throughout the lifetime of the onshore Project to account for changing best practices.

12.7.5 Summary of cumulative effects

A summary of the outcomes of the assessment of cumulative effects for the construction, operation and maintenance and decommissioning stages of the onshore Project is provided in Table 12-19.

[9] *Measured from the publicly available site plans on THC planning portal.*

Table 12-19 Summary of assessment of cumulative effects

POTENTIAL IMPACT	RECEPTOR	SENSITIVITY OF RECEPTOR	MAGNITUDE OF IMPACT	CONSEQUENCE (SIGNIFICANCE OF EFFECT)	SECONDARY MITIGATION REQUIREMENTS	RESIDUAL CONSEQUENCE (SIGNIFICANT OF EFFECT)
Construction and decommissioning						
Temporary loss of agricultural land and soils (including peatlands)	Agricultural land and soils	Medium	Low	Minor (not significant)	None required above embedded mitigation measures.	Minor (not significant)
Temporary impacts upon tourism and recreational assets	Public access	High	Low	Minor (not significant)	None required above embedded mitigation measures.	Minor (not significant)
Temporary interference with infrastructure	Operations of third party infrastructure	High	Negligible	Negligible (not significant)	None required above embedded mitigation measures.	Negligible (not significant)
Operation and maintenance						
Long term loss of agricultural land and soils (including peatlands)	Agricultural land and soils	Medium	Negligible	Negligible (not significant)	None required above embedded mitigation measures.	Negligible (not significant)

**** In the absence of detailed information regarding decommissioning works, and unless otherwise stated, the impacts during the decommissioning of the onshore Project are considered comparable with, or likely less than, those of the construction stage.***

12.8 Inter-related effects

Inter-related effects are the potential effects of multiple impacts, affecting one receptor or a group of receptors. Inter-related effects include interactions between the impacts of the different stages of the onshore Project (i.e. interaction of impacts across construction, operation and maintenance and decommissioning), as well as the interaction between impacts on a receptor within an onshore Project stage. The potential inter-related effects for land use and other users, including forestry receptors are described below.

12.8.1 Inter-related effects between onshore Project stages

An extent of agricultural land and forestry will be lost during the construction stage and while the majority of land will be reinstated, a small extent of loss will be required in the operational stage and has the potential to result in inter-related effects.

With regards to agricultural land and soils, this is only applicable to the land lost to above ground infrastructure (e.g. the footprint of the onshore substation, CJBs and TJBs), as all other land will be reinstated to return to full agricultural use. Following decommissioning, all land would be reinstated and restored to its original state. Therefore, across the Project lifetime, the effects on agricultural land and soils are not anticipated to interact in such a way as to result in combined effects of greater significance than the assessments presented for each individual stage.

With regards to impacts on public access, there will be no restrictions or interference to public access during the operations and maintenance stage: once constructed, the onshore Project will operate with no further requirements for construction above routine maintenance and therefore no further path or route closures are anticipated. Therefore, across the Project lifetime, effects on public access are not anticipated to interact in such a way as to result in combined effects of greater significance than the assessment presented for the construction stage.

Similarly, with regards to impacts upon, and interference to, third party infrastructure, there are not anticipated to be any impacts during the operation and maintenance stage and therefore across the Project lifetime, effects on third party infrastructure are not anticipated to interact in such a way as to result in combined effects of greater significance than the assessment presented for the construction stage.

With regards to forestry, there will be no additional felling required in the operational stage and therefore across the Project lifetime, with the exception of any extremely limited areas that would not extend beyond the existing footprint of felling. Therefore, the effects on forestry and woodland are not anticipated to interact in such a way as to result in combined effects of greater significance than the assessment presented for the construction stage.

12.8.2 Inter-related effects within an onshore Project stage

The assessment has shown that impacts during construction would not result in adverse significant effects on the receptors identified. It is possible that certain receptors may be cumulatively impacted by the range of impacts assessed. These are discussed below for the particular onshore Project stages.

During construction, soils and peatlands may be impacted by forestry removal, in addition to the direct effects associated with the onshore Project as discussed in section 12.6. Nonetheless, as the disturbance of any peatlands

will be minimised (as discussed in detail in chapter 8: Geology and hydrology) and compensatory planting will occur during/following construction, these impacts will be short lived and it is not expected that any significant inter-related effects will occur on this receptor from these impacts. There is also the potential that during construction, impacts on recreational users may be impacted through felling of forestry, in addition to the direct impacts associated with the onshore Project assessed in section 12.6. For example, this could occur at Sibster Forest, if potential walking trails and public paths are temporarily closed. Nonetheless, this impact would be localised to the small extent of forestry removal within the wider forest and short lived occurring throughout construction, and it is anticipated that walking trails would be re-opened following cessation of these activities. As such no significant adverse inter-related effects are anticipated from these impacts during construction.

During operation and maintenance, potential inter-related effects could result from compensatory planting of forestry if this is located within areas currently utilised for agricultural practices. Nonetheless, any compensatory planting will be managed in accordance with best practice such as through the compensatory planting scheme and as such landowner agreements would be sought for siting of compensatory forest. Furthermore, any compensatory planting would not be located in areas of sensitive habitat such as peatlands. As such, it is not anticipated that there will be any adverse significant effects during the operation and maintenance stage.

It is not anticipated that any inter-related effects will be produced which are of greater significance than the assessments presented for each individual onshore Project stage.

12.9 Whole Project assessment

The offshore Project is summarised in chapter 5: Project description and a summary of the effects of the offshore Project is provided in chapter 18: Offshore EIA summary. These offshore aspects of the Project have been considered in relation to the impacts assessed in section 12.6.

Considering the entirely terrestrial and extremely localised nature of impacts upon land use and other users, including forestry, there is no potential for whole project impacts on the receptors identified within this chapter.

12.10 Transboundary effects

There is no potential for transboundary impacts upon land use and other users, including forestry receptors due to construction, operation and maintenance and decommissioning of the onshore Project. The potential impacts are localised and will not affect other European Economic Area (EEA) states. Therefore, transboundary effects for land use and other users, including forestry do not need to be considered further.

12.11 Summary of mitigation and monitoring

No secondary mitigation, over and above the embedded mitigation measures proposed in section 12.5.4 is either required or proposed in relation to the potential effects of the onshore Project on land use and other users, including forestry as no adverse significant impacts are predicted.

Monitoring of other users will be required in order to ensure that local residence are not adversely affected by the onshore Project works. As detailed in the embedded mitigation this monitoring would be undertaken through close liaison with affected landowners, asset owners and members of the public. As per OMP 1: Outline CEMP, these measures will be established within the final CEMP through use of a CLO who will manage the external communications of the project, the CEMP will also include details for any complaint procedures for local residents potentially affected by the onshore Project.

The HMP will be used to monitor any compensatory planting in the event that tree felling is required.

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12.13 Abbreviations

ACRONYM	DEFINITION
AADF	Annual Average Daily Flow
AMP	Access Management Plan
CaSPlan	Caithness and Sutherland Local Development Plan
CEMP	Construction Environment Management Plan
CJB	Cable Joint Bay
CLO	Community Liaison Officer
CMS	Construction Method Statement
DBA	Desk-Based Assessment
DEFRA	Department for Environment, Food and Rural Affairs
EEA	European Economic Area
EIA	Environmental Impact Assessment
ESB	Electricity Supply Board
FLS	Forestry and Land Scotland
GIS	Geographical Information Systems
GPS	Global Positioning System
GWDTE	Groundwater-Dependent Terrestrial Ecosystem
Ha	Hectares
HDD	Horizontal Directional Drilling

ACRONYM	DEFINITION
HES	Historic Environment Scotland
HFWS	Highland Forest and Woodland Strategy
HMP	Habitat Management Plan
HVDC	High Voltage Direct Current
HwLDP	Highland-wide Local Development Plan
km	Kilometre
kV	Kilovolt
LEJOG	Land's End to John O'Groats
LMP	Land Management Plan
m / m^2 / m^3	Metres / Metres squared / Cubic metres
MD-LOT	Marine Directorate - Licensing Operations Team
MS-LOT	Marine Scotland - Licensing Operations Team
NC500	North Coast 500
NPF4	National Planning Framework 4
NRTE	Naval Reactor Test Establishment
OCT	Open Cut Trenching
OIC	Orkney Islands Council
OMP	Outline Management Plan
ORCA	Orkney Research Centre for Archaeology

ACRONYM	DEFINITION
OWPL	Offshore Wind Power Limited
PMP	Peat Management Plan
PPP	Planning Permission in Principle
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
ScotWays	Scottish Rights of Way and Access Society
SHET-L	Scottish Hydro Electric Transmission plc
SNH	Scottish Natural Heritage
SRMP	Soil Resource Management Plan
SS	Supporting Study
SSEN	Scottish and Southern Electricity Networks
THC	The Highland Council
TJB	Transition Joint Bay
UK	United Kingdom
UKFS	UK Forestry Standard
USB	Universal Serial Bus
ZOI	Zones of Influence

12.14 Glossary

TERM	DEFINITION
Beat	River beats are a stretch of the river where fishing rights are owned by the landowner of the land that the river runs adjacent to.
Core path	Paths, waterways or any other means of crossing land identified within the relevant local authority's core paths plan to facilitate, promote and manage the exercise of access rights.
Crofting	A form of land tenure and small-scale food production particular to the Scottish Highlands.
Listed building	A building which is protected owing to its special architectural or historic interests.
Scheduled monument	A monument of national importance that Scottish Ministers have given protection under the Ancient Monuments and Archaeological Areas Act 1979.
Mulching	The clearance of small diameter trees through mechanical mulching machine or excavator mounted mulching head.
Fraying	The damage or tree bark on young trees by deer.
Browsing	Damage to young trees through deer eating unprotected trees.