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CLIFFHOPE WIND FARM ENVIRONMENTAL IMPACT ASSESSMENT SCOPING REPORT

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CLIFFHOPE WIND FARM
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GLOSSARY AND ABBREVIATIONS

Abbreviation/ Terminology	Expanded Term
the Applicant	Client/developer (Invenergy Development UK Ltd)
the Proposed Development	The Cliffhope Wind Farm, including the wind turbines, BESS and associated site infrastructure
the Site	The area within the Red Line Boundary
the EIA regulations	The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017, as amended
scoped in	Included in the proposed scope of the EIA
scoped out	Excluded in the proposed scope of the EIA
Grade I listed buildings (England)	Buildings of 'exceptional' interest
Grade II* listed buildings (England)	Buildings of 'particular importance' and of more than special interest
Category A listed buildings (Scotland)	Buildings of special architectural or historical interest which are outstanding examples of a particular period, style or building type
Shadow Flicker	Moving shadows cast through windows of a building
Shadow Throw	Moving shadows cast over the ground
ADR	Air Defence Radars
AESLQ	Assessment of Effects on Special Landscape Qualities
AIL	Abnormal Indivisible Load
AM	Amplitude Modulation
AOD	Above Ordnance Datum
ATC	Automatic Traffic Count
ATC	Air Traffic Control
A-weighting	A frequency weighting designed to correlate measured sound levels with subjective human response. The human ear is frequency selective and our ears are most sensitive between 500 Hz to 6 kHz, particularly when compared with lower and higher frequencies. The A-weighting applies a frequency correction which reduces the effect of these low and high frequencies on the overall measured level in order to account for the subjective human response at these frequencies.
AWI	Ancient Woodland Inventory
BAP	Biodiversity Action Plan
BBPP	Breeding Bird Protection Plan
BEIS	Department of Business, Energy & Industrial Strategy (now Department for Energy Security and Net Zero)
BEMP	Biodiversity Enhancement and Management Plan
BESS	Battery Energy Storage System
BGS	British Geological Survey
BoCC	Birds of Conservation Concern
BS	British Standard
c.	Circa

CAA	Civil Aviation Authority
CAR	Controlled Activities Regulations
CEMP	Construction Environmental Management Plan
CIA	Cumulative Impact Assessment
CIEEM	Chartered Institute of Ecological and Environmental Management
CIfA	Chartered Institute for Archaeologists
CLVIA	Cumulative Landscape and Visual Impact Assessment
CNS	Communications, Navigation and Surveillance
COWRP	Control of Woodland Removal Policy
CRM	Collision Risk Model
CTA	Borders Control Area
CTMP	Construction Traffic Management Plan
dB	decibel
DEFRA	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
DIO	Defence Infrastructure Organisation
DTI	Department of Trade and Industry
DTM	Digital Terrain Modelling
EAM	Enhanced AM
EC	European Commission
ECU	Energy Consents Unit
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EHO	Environmental Health Officer
ERIC	Environmental Records Information Centre
EU	European Union
FIA	Forestry Impact Assessment
FRA	Flood Risk Assessment
GDL	Gardens and Designed Landscapes
GLVIA	Guidance for Landscape and Visual Impact Assessment
GPG	Good Practice Guide
GPP	Guidance for Pollution Prevention
GWDTE	Groundwater Dependant Terrestrial Ecosystems
Ha	Hectare
HE	Historic England
HEPS	Historic Environment Policy for Scotland
HER	Historic Environment Record
HES	Historic Environment Scotland
HGV	Heavy Goods Vehicle
HLAMap	Historic Land-Use Assessment Data for Scotland
HMP	Habitat Management Plan

HRA	Habitat Regulations Appraisal
HLA	Historic Land-use Assessment
Hz	Hertz
IEA	Institute of Environmental Assessment
IEF	Important Ecological Features
IEMA	Institute of Environmental Management and Assessment
IFP	Instrumental Flight Procedure
IOA	Institute of Acoustics
IOF	Important Ornithological Features
km	Kilometres
L_{A90}	The A-weighted noise level exceeded for 90% of the time, often used to describe background or wind turbine noise as it excludes transient noises that affect the LAeq.
LCT	Landscape Character Type
LDP	Local Development Plan
LFA	Low Flying Area
LLA	Local Landscape Area
LVIA	Landscape and Visual Impact Assessment
m	Metres
MBBS	Moorland Breeding Bird Survey
MoD	Ministry of Defence
MW	Megawatts
m/s	Meters per Second
NCA	National Character Area
NCAP	National Collection of Aerial Photography
NCN	National Cycle Network
NE	North-East
NERL	NATS En Route
NHZ	Natural Heritage Zones
NNR	National Nature Reserve
NPF4	National Planning Policy Framework 4
NLS	National Library of Scotland
NO_2	Nitrogen Dioxide
NRHE	National Record for the Historic Environment
NRTF	National Road Traffic Forecasts
NSA	National Scenic Area
NSR	Noise Sensitive Receptors
NWSS	Native Woodland Survey of Scotland
NVC	National Vegetation Classification
OAM	Other AM
OS	Ordnance Survey
OWC	Offshore Wind Consultants

PAN	Planning Advice Note
PCA	Peatland Condition Assessment
PLHRA	Peat Landslide Hazard and Risk Assessment
PMP	Peat Management Plan
PM_{10}	Particulate Matter with a diameter of 10 micrometres or less
PPG	Pollution Prevention Guidelines
PRoW	Public Right of Way
PSR	Primary Surveillance Radar
PWS	Private Water Supply
RAF	Royal Air Force
RSG	Raptor Study Group
RSPB	Royal Society for the Protection of Birds
RVAA	Residential Visual Amenity Assessment
SAC	Special Area of Conservation
SBC	Scottish Borders Council
SBCAS	Scottish Borders Council Archaeology Service
SBL	Scottish Biodiversity List
SDP	Statutory Development Plan
SEPA	Scottish Environment Protection Agency
SFCC	Scottish Fisheries Co-ordination Centre
SIL	Seismic Impact Limit
SLA	Special Landscape Area
SMC	Scheduled Monument Consent
SNH	Scottish Natural Heritage (now NatureScot)
SPA	Special Protection Area
SPG	Supplementary Planning Guidance
SSGEP	South of Scotland Golden Eagle Project
SSSI	Site of Special Scientific Interest
SuDS	Sustainable Drainage System
SUP	Southern Uplands Partnership
s36	Section 36 (of the Electricity Act 1989)
TA	Technical Appendix
TA	Transport Assessment
TMA	Terminal Control Area
TMA	Terminal Manoeuvring Area
TWIC	The Wildlife Information Centre for Lothian and Borders
UK	United Kingdom
UKFS	UK Forestry Standard
VFR	Visual Flight Rules
WCA	Wildlife and Countryside Act
WEWSA	Water Environment and Water Services (Scotland) Act 2003

WFAS	Wind Farm Aviation Safeguarding
WFD	Water Framework Directive
WLA	Wild Land Area
WLIA	Wild Land Impact Assessments
WSI	Written Scheme of Investigation
VP	Vantage Point
ZTV	Zone of Theoretical Visibility
>	Greater Than
<	Less Than

1. INTRODUCTION

1.1 Overview

1.1.1 This Scoping Report is provided in support of a request to the Scottish Ministers for a Scoping Opinion under the terms of Regulation 12 of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017, as amended ('the EIA regulations').

1.1.2 Scoping is a statutory procedure by which an Applicant may ask a competent authority for its formal opinion on the information to be supplied within an EIA Report (EIAR). This provision allows the Applicant to be clear about what the authority considers the main effects of the proposal are likely to be, and therefore the topics on which the EIAR should focus.

1.2 The Applicant

1.2.1 Invenergy Development UK Ltd ('the Applicant') is the UK Development company for Invenergy. As the world's leading privately held developer and operator of clean energy solutions, Invenergy works with leading utilities, global brands and public sector partners to develop energy infrastructure projects. Invenergy's 2,500+ employees are united by a vision to be innovators building a sustainable world. Headquartered in Chicago, Illinois, the Company has successfully developed over 32 gigawatts of power projects across the Americas, Europe and Asia.

1.3 Background

1.3.1 The Applicant is investigating the potential to construct and operate Cliffhope Wind Farm ('the Proposed Development') on land ('the Site') located approximately 13 km south east of Hawick, Scotland. The Site is entirely within the administrative boundary of Scottish Borders Council (SBC) and the Site location is presented on **Figure 1.1** (**Appendix 1**).

1.3.2 The scoping layout for the Proposed Development is presented on **Figure 1.2** (**Appendix 1**) and shows the Site has the potential to accommodate up to 47 wind turbine generators with a maximum tip height of 200 m, with a generation capacity of >50 Megawatts (MW). This layout is currently considered a maximum in terms of turbine dimensions, numbers and extent and will be subject to change once further site surveys and impact assessment are undertaken.

1.3.3 Following on from the development of the turbine layout, a battery energy storage system (BESS) and ancillary infrastructure will be developed. Ancillary infrastructure will include a crane hardstanding at the base of each turbine, a substation compound including a control building, internal turbine transformers, development access tracks and site entrances (where required), temporary construction compounds and laydown areas, borrow pits and equipment for wind measurement.

1.3.4 This report has been prepared by EIA experts at Ramboll UK Limited, with a select team of technical specialists providing inputs covering all the relevant environmental disciplines as set out in **Table 1.1**.

Table 1.1: EIA Team

Discipline	Organisation
Lead EIA Consultant	Ramboll
Planning and Policy	Invenergy
Landscape and Visual Amenity	Ramboll
Cultural Heritage	AOC Archaeology

Discipline	Organisation
Ecology and Ornithology	Avian Ecology
Hydrology, Hydrogeology, Geology and Soils	Ramand Environmental/ Fluid Environmental/ Offshore Wind Consultants (OWC)
Traffic and Transport	Pell Frischmann
Noise	Metrica
Aviation	Wind Farm Aviation Safeguarding (WFAS)
Socio-Economics	Ramboll
Telecommunications	Ramboll
Shadow Flicker	Ramboll
Carbon Balance	Ramboll

1.4 Consenting Regime

1.4.1 It is anticipated that the Proposed Development would have an installed capacity of >50 MW. Therefore, an application for consent would be made to the Scottish Ministers under section 36 of the Electricity Act 1989. The Applicant would also seek deemed planning permission under section 57 of the Town and Country Planning (Scotland) Act 1997.

1.4.2 The Proposed Development is of a type listed in Schedule 2 of the EIA regulations (item (1) "a generating station"); on the basis that "*the development is likely to have significant effects on the environment by virtue of factors such as its nature, size or location*" an EIA is required. An official request for a Screening Opinion was not made to the Scottish Ministers. However, considering the potential for likely significant effects on the environment by virtue of factors such as its nature, size, or location, a voluntary EIAR will be prepared in support of the s36 application.

1.5 Policy Considerations

1.5.1 The Proposed Development relates to electricity generation from renewable energy sources and is a direct response to national planning and energy policy objectives.

1.5.2 The Proposed Development would make a significant contribution to the attainment of renewable energy generation and greenhouse gas reduction targets both at the Scottish and UK levels and the extent of this contribution will be described in the EIAR.

1.5.3 The EIAR will set out the relevant policies that have been considered as part of the assessments undertaken throughout the EIA. A separate Planning Statement will provide a detailed appraisal of the Proposed Development against the relevant Development Plan policies, national planning and energy policy and other material considerations.

1.6 Objectives and Purpose of the Scoping Report

1.6.1 The specific objectives of this report are to:

- seek agreement on the potential likely significant effects associated with the Proposed Development, and confirm that all potential likely significant effects have been correctly included in the proposed scope of the EIA ('scoped in');
- seek agreement where non-significant effects have been excluded ('scoped out');

- invite comment on the proposed approach to baseline data collection, prediction of environmental effects and the assessment of significance; and
- invite feedback on the design of the Proposed Development.

1.6.2 Unless consultees specifically request otherwise, all responses will be collated and presented as a Technical Appendix to the EIAR, as a record of the results of the scoping exercise.

1.7 Public Consultation

1.7.1 The Applicant is committed to conducting community consultation and engagement throughout the development process. Online communication such as a project website and email updates will strengthen traditional methods such as newsletters and printed advertisements.

1.7.2 In accordance with established good practice, the Applicant is planning to host two rounds of public consultation events. Written public comments will be documented and analysed, with any adjustments incorporated to the Proposed Development design noted in the application materials.

1.8 Structure of this Report

1.8.1 The remainder of this report is structured as follows:

- **Chapter 2: Description of the Proposed Development** provides a brief description of the nature and purpose of the development, typical construction activities and decommissioning proposals.
- **Chapter 3: Scope of the EIA** provides a summary of the topics to be scoped in and scoped out of the EIAR, provides an outline of the consultation process and summarises the approach to the EIA.
- **Chapters 4-** Error! Reference source not found.**3:** Scoped in environmental topics with potential for significant effects. Each Chapter outlines the baseline conditions and overall assessment scope and methodology for the EIA.
- **Chapter 14: Other Considerations** provides a summary of other environmental issues which will be considered in relation to the Proposed Development, including reference to how they will be assessed or if they are to be scoped out.
- **Chapter 15: Invitation to Comment** outlines the procedure for providing comment on the Scoping Report.

2. DESCRIPTION OF THE PROPOSED DEVELOPMENT

2.1 Site Selection

2.1.1 Invenergy has been actively prospecting for potential sites throughout Scotland starting in 2020, with sites being evaluated against key criteria, including: Indicative wind speeds in excess of 8 m/s; Environmental sensitivity; Feasibility of grid connection; Local plan and structure plan policy; Area topography, including gradients, exposure, watercourses and land use; Landscape character; Distance from dwellings; Access feasibility; Cumulative impact of other windfarm developments; and consideration of proximity to civil and military airspace, including MOD test facilities. This process leads to a short-list of potential sites. In selecting the short-list, a number of sites were assessed and rejected on the basis of desk study findings and/or physical inspection. From the short-list, a sifting process involving more detailed work on each site was used to rank the sites. The Cliffhope site was identified as a potential site for development. In addition, the landowners responded favourably to the idea of development. On this basis the Applicant agreed on a suitable area with the potential to site the Cliffhope Wind Farm.

2.2 Site Description and Context

2.2.1 The Site (**Figure 1.1**) covers a total area of approximately 2,629 hectares (Ha), located between the settlements of Hyndlee and Saughtree. Residential properties within 500 m of the Site are generally scattered dwellings and farmsteads.

2.2.2 The Site is located in an upland area, consisting of rolling hills intersected by small valleys. The topography of the Site ranges from approximately 200 m Above Ordnance Datum (AOD) to 514 m AOD. A valley bisects the Site, running from south to north, with several hills rising on either side including Fanna Hill (514 m AOD), Lamblar Hill (498 m AOD), Coomb Edge (442 m AOD) and Wheelrig Head (447 m AOD). A number of watercourses flow through the Site, including Laidlehope Burn, Alison Sike, Cliffhope Burn, Dawston Burn and Singdean Burn. The aforementioned watercourses all feed into the Liddel Water, which is a tributary of the River Esk.

2.2.3 The Site comprises a combination of forestry and moorland, which is used for rough grazing. The majority of the Site is located within an area identified in high-level mapping[1] as Class 5[2] peat soil, with areas of Class 2[3] peatland where the slopes are slightly steeper. There are also significant areas of Class 1[4] peatland in the west and south west of the Site, where no forestry is present.

2.2.4 The Kielderhead Moors: Carter Fell to Peel Fell Site of Special Scientific Interest (SSSI) is located approximately 900 m east of the Site.

2.2.5 One Scheduled Monument (Wheel Village, deserted settlement 1400m NE of Wormscleugh) is located within the Site, along with a number of known heritage assets including cairns, medieval settlements, and post medieval farmsteads, historic causeways and associated agricultural features.

2.3 Proposed Development

2.3.1 Details of the Proposed Development will not be finalised until later in the EIA process. The turbine layout will evolve in response to site survey information, environmental and technical constraints, stakeholder feedback, including scoping opinions, and feedback gathered through public

1 NatureScot (2016) Carbon and Peatland 2016 map. Available at: https://opendata.nature.scot/datasets/171df29c8c5b45a9b93438a3bc5700c6_0/explore [Accessed January 2025]
2 Class 5 peat is defined as 'peat soil' that is absent of peatland vegetation.
3 Class 2 peat is defined as 'nationally important carbon-rich soils, deep peat and priority peatland habitat' and 'potentially high conservation value and restoration potential'.
4 Class 1 peat is defined as ''nationally important carbon-rich soils, deep peat and priority peatland habitat', and 'likely to be of high conservation value'.

engagement. To allow early engagement, the description of the Proposed Development provided herein is based on cautious maximum parameters, especially in relation to the number and height of the wind turbines.

2.3.2 The main elements of the Proposed Development would be as follows:

- up to 47 wind turbines with a maximum tip height of 200 m and a combined generation capacity of >50 MW;
- permanent foundations supporting each wind turbine, and associated crane hardstanding at each wind turbine base;
- a series of new temporary and permanent on-site access tracks with associated watercourse crossings (where the final layout dictates);
- underground power cables, generally laid in trenches alongside access tracks;
- an on-site substation and control building;
- temporary construction compounds and laydown areas; and
- a BESS with a footprint of up to 3 acres, including ancillary equipment and co-located with the on-site substation.

2.3.3 In addition ancillary works may be necessary such as:

- extraction of rock from borrow pits;
- temporary on-site concrete batching plant;
- off-site works to facilitate the delivery of abnormal loads (e.g. construction of over-run areas and temporary modification to street furniture etc); and
- permanent meteorological mast to or hardstanding to accommodate remote sensing equipment for measuring wind conditions.

2.3.4 For the purposes of Scoping, an indicative turbine layout is presented in **Figure 1.2**, and the coordinates of the turbine locations are presented in **Table 2.1.**

Table 2.1: Indicative Turbine Layout Coordinates

Turbine Reference	X Coordinate	Y Coordinate
1	357585	603741
2	356993	603068
3	356628	602579
4	356023	601990
5	355454	601325
6	355143	600597
7	355122	600045
8	355062	599527
9	355105	598947
10	355182	598266
11	355485	598799
12	356049	599043

Turbine Reference	X Coordinate	Y Coordinate
13	355586	599459
14	355605	600261
15	355806	600953
16	356340	601669
17	356757	602227
18	357309	602627
19	357841	603305
20	358273	603033
21	357530	602270
22	356942	601881
23	356456	601145
24	356171	600574
25	356984	600976
26	357290	601590
27	357373	600773
28	357685	600486
29	359230	602634
30	359843	602279
31	360161	601941
32	360590	601779
33	360957	601605
34	361439	601501
35	360965	600947
36	360453	601062
37	359876	601260
38	359521	601526
39	359276	602149
40	360401	600497
41	359204	600790
42	358596	600648
43	358596	600197
44	357827	599657
45	357657	599096
46	357944	598696

Turbine Reference	X Coordinate	Y Coordinate
47	357362	598496

2.3.5 The Applicant has applied for a grid connection. The route of cabling has not yet been determined and assessment of the route is outwith the remit of this Scoping Report as it would be applied for via a separate section 37 planning application.

2.3.6 Energy storage such as the use of batteries is being considered for inclusion as part of the Proposed Development. The BESS would comprise a number of storage units with ancillary equipment such as inverters. The BESS would have the ability to release power to the grid when the output of the proposed development falls due to decreased wind speed.

2.3.7 Biodiversity enhancement measures for the Site may include, but is not limited to, options such as peatland restoration. An Outline Biodiversity Management Plan (BEMP) would be developed for the operational phase of the Proposed Development and agreed with consultees.

Site Access

2.3.8 Access to the Proposed Development is would likely be from the north of the Site from the A6088.

2.3.9 Prior to submission of the application for consent, potential construction traffic routes will be fully assessed, considering both vehicle numbers and the delivery of Abnormal Indivisible Loads (AIL) to the Site to ensure the most appropriate solution is developed.

2.3.10 The proposed access route for general construction traffic and AIL will be clearly identified in the application submission.

Construction

2.3.11 Typical construction activities and work methods will be set out in the EIAR. Information will also be provided on an indicative construction programme, construction traffic generation and construction phasing.

2.3.12 An Outline Construction Environmental Management Plan (CEMP) will also be submitted as part of the EIAR which will contain details of appropriate environmental management measures, including pollution prevention (in line with the Scottish Environment Protection Agency (SEPA) Pollution Prevention Guidelines (PPGs) and Guidance for Pollution Prevention (GPPs)), and waste minimisation and management measures.

Wind Farm Lifecycle and Decommissioning

2.3.13 Once constructed it is anticipated that the Proposed Development would have an operational lifetime of 40 years.

2.3.14 A wind farm is typically visited up to four times a month by a maintenance crew, and the BESS would require maintenance at a similar frequency. There would also be a requirement for maintenance of the access tracks and other ancillary infrastructure during the operational period.

2.3.15 Following the operational phase of the project, the Proposed Development would either be decommissioned or repowered. Where decommissioning is required, this is anticipated to involve:

- dismantling and removal of the turbines, met masts, site substation, BESS facility, and any other above ground infrastructure; and
- removal to at least 1 m below ground level of the turbine and met mast foundations.

2.3.16 Detailed decommissioning proposals would be established and agreed with relevant authorities prior to commencement of decommissioning activities. This would take cognisance of guidance available at the time.

2.3.17 With this in mind, an assessment of the decommissioning of the Proposed Development will not be undertaken as part of the EIA, as at this stage the future baseline conditions cannot be predicted accurately and both the proposals for refurbishment/decommissioning and the future regulatory context are unknown. Decommissioning is, therefore, scoped out for all environmental topics and is not discussed further, but is likely to be addressed by a condition on the consent requiring a decommissioning plan to be submitted for approval towards the end of life of the Proposed Development.

Community Benefit

2.3.18 It is currently expected that Invenergy will commit to a £5,000/MW annual payment to the community throughout the life of the project. This will be index linked.

2.4 Project Design and Alternatives

2.4.1 The Proposed Development design process take account of NatureScot's current design guidance on Siting and Designing Windfarms in the Landscape[5] and will seek to establish a layout and turbine typology which is sufficiently coherent with neighbouring development, particularly neighbouring wind farm developments.

2.4.2 The design iteration process will take account of other environmental and technical factors to establish the final layout for the Proposed Development. Key sensitivities which are likely to influence the design process include:

- key views from surrounding settlements, landmark hills and transport corridors;
- the settings of designated cultural heritage assets both within the site and in the surrounding area;
- sensitive ecological habitats, including blanket bog;
- groundwater dependant ecological habitats;
- watercourses and associated fisheries, riverine mammals and invertebrates; and
- breeding birds (disturbance and collision risk).

2.4.3 The design of the Proposed Development will be optimised in relation to site survey information, environmental and technical constraints, scoping responses, community consultation, and other stakeholder engagement. This will be reported upon within the EIAR.

3. SCOPE OF THE EIA

3.1 Summary of Scope of EIA

Introduction

3.1.1 The EIA Regulations (regulation 4(3)) require consideration of the potential likely significant effects on the following factors:

- population and human health;

5 SNH (August 2017) version 3a Siting and Designing windfarms in the landscape. [pdf]. Available at: https://www.nature.scot/doc/siting-and-designing-wind-farms-landscape-version-3a [Accessed February 2025].

- biodiversity, and in particular species and habitats protected under Council Directive 92/43/EEC on the conservation of natural habitats and wild flora and Directive 2009/147/EC of the European Parliament and of the Council on the conservation of wild birds;
- land, soil, water, air and climate; and
- material assets, cultural heritage and the landscape.

3.1.2 For renewable energy projects in the UK, identification of potential impacts and assessment of those impacts to determine whether or not significant effects are likely on the above-mentioned factors is usually provided under the following specialist topic categories:

- landscape and visual amenity;
- cultural heritage;
- ecology;
- ornithology;
- hydrology, hydrogeology and geology;
- traffic and transport;
- noise;
- aviation and telecommunications;
- socio-economics;
- shadow flicker;
- climate change.

3.1.3 The inclusion of an individual specialist topic category in an EIA process, and reporting of that assessment in the EIAR, will depend on identification of a likelihood of a significant effect occurring. This is usually confirmed by the EIA scoping process. The EIAR will set out the baseline, then assess and report on the likely significant effects, including, where applicable, direct, indirect, cumulative, short, medium- and long-term, permanent and temporary, beneficial and adverse effects.

3.1.4 It is noted that a Scoping Report, produced by Community Wind Power, was previous submitted to the ECU of the Scottish Government for the Cliffhope Community Wind Farm in September 2017 (reference: 17/01333/SCO). A Scoping Opinion was received from SBC in January 2018, which has been reviewed to inform this Scoping Report.

Cumulative Effects

3.1.5 The EIA Regulations require that, in assessing the effects of a particular development proposal, consideration is also given to the cumulative effects which might arise from the proposal in conjunction with other existing, approved and/or in planning development proposals in the vicinity.

3.1.6 Cumulative effects are defined as those effects arising from the addition or combination of the Proposed Development to other existing proposed developments, or those arising from synergistic[6] effects between factors.

3.1.7 The assessment of cumulative effects from the Proposed Development in combination with existing developments will be addressed during the assessment of effects of the Proposed Development, as pre-existing developments are part of the baseline environment. Cumulative effects will be addressed under each topic Chapter.

6 A synergistic effect is the result of two or more processes interacting together to produce an effect that is greater than the cumulative effect that those processes produce when used individually.

3.1.8 Characteristics and thresholds of cumulative schemes to be considered as part of the assessment are set out in **Table 3.1.** Proposed Developments at the scoping or pre-application stage will not be included in the assessment, as such proposals are not fully formed and may be subject to changes that cannot be foreseen. Any differences to this approach will be detailed in each technical assessment Chapter.

Table 3.1: Cumulative planning application search characteristics and thresholds

Cumulative scheme characteristics	Thresholds
Cumulative schemes to be considered include: - those within 45 km of the Site; - onshore wind developments where a turbine or turbines are greater than 50 m to tip height; - schemes under construction; - schemes which have a valid consent; or - schemes which have been submitted to the relevant authorities but not yet determined (subject to a cut-off point to allow assessment to be undertaken) - schemes which have been submitted for scoping where they have a known timescale to planning submission and where they have potential to play an important part in the cumulative effects of wind energy development.	All considered schemes will need to: A) comprise a construction and/or operational phase that is concurrent with the Proposed Development; B) share common sensitive receptors/resources which are assessed and described in the supporting environmental documentation, and have the potential to be significantly affected by the combination of the approved (committed) development and the Proposed Development; and C) have sufficient environmental assessment information freely and publicly available to inform a cumulative effects assessment.

3.1.9 It should be noted that not all cumulative developments would necessarily have a cumulative effect in respect of any particular environmental topics and therefore each technical assessment will provide a full justification for the list of schemes considered in their respective assessments.

3.1.10 As the cumulative baseline is constantly evolving, the schedule of cumulative schemes to be included in the assessment will be finalised following consultation with the relevant consultees and at the point a finalised design is reached (approximately four months prior to submission).

Topics to be Scoped Out

3.1.11 No significant effects are considered likely in respect to the following technical disciplines and accordingly these would be scoped out of the EIA (see **Chapter 14**):

- Socio-economics;
- Climate Change;
- Air Quality;
- Population and Human Health;
- Ice Throw; and
- Risk of Major Accidents and/or Disasters.

3.2 Consultation

3.2.1 Consultation alongside the EIA process is critical to the development of a comprehensive and proportionate EIAR. The views of statutory and non-statutory consultees are important to ensure

that the EIA from the outset focuses on specific issues where significant environmental effects are likely, and where further investigation is required.

3.2.2 The consultation, as an ongoing process, enables embedded and additional mitigation measures to be incorporated into the Proposed Development to limit adverse environmental effects and optimise environmental benefits. Early and ongoing engagement with consultees will be important to influence the design process of the Proposed Development by seeking an appropriate level of feedback from consultees, to ensure that comments are considered in the evolving design.

3.2.3 Some limited consultation has been undertaken with statutory and non-statutory consultees prior to the submission of this Scoping report, e.g. informal consultation with NatureScot regarding the scope of the ornithology surveys. Following submission of this Scoping Report and as part of the EIA process, consultation will be undertaken with a range of statutory and non-statutory consultees.

4. LANDSCAPE AND VISUAL AMENITY

4.1 Overview

4.1.1 This Chapter summarises the potential environmental impacts and likely significant effects upon Landscape and Visual receptors that are anticipated to arise in connection with the construction and operation of the Proposed Development. This Chapter outlines the baseline landscape and visual conditions within the Site and Study Areas, and outlines the methodology that will be used for the identification and assessment of direct and settings effects within the EIAR.

4.1.2 This Chapter is supported by the following figures and appendices:

- Figure 4.1: Landscape Character;
- Figure 4.2: Landscape Designations and Classifications;
- Figure 4.3: Visual Receptors;
- Figure 4.4: Preliminary Zone of Theoretical Visibility (ZTV) and Preliminary Assessment Viewpoints; and
- Figure 4.5: Preliminary Cumulative Plan.
- Appendix 4.1: Landscape and Visual Baseline

4.2 Baseline Conditions

4.2.1 Baseline conditions within a Study Area of 45 km from the outermost turbines of the Proposed Development are described below. The baseline covers both English and Scottish areas within the Study Area.

Landscape Fabric

Topography and Hydrological Features

4.2.2 The Site itself is located in an elevated upland area, consisting of rolling hills intersected by small valleys. Topography ranges from 200 m AOD and 514 m AOD. A small valley bisects the Site, running from south to north, with several hills rising on either side including Fanna Hill (514 m AOD), Lamblar Hill (498 m AOD), Coomb Edge (442 m AOD) and Wheelrig Head (447 m AOD). Within the Study Area, undulating topography ascends from the narrow river valleys, with elevations up to 643 m AOD in the north, near Peebles, and up to 777 m AOD in the south in Northumberland National Park.

4.2.3 Several burns and smaller tributaries run through the Site, eventually feeding into the Liddel Water which runs along the southern boundary of the Site. Within the Study Area the key watercourses include the River Tweed and River Teviot flowing towards the north east, the River Esk and Liddel Water towards the south west, and River North Tyne towards the south east. Waterbodies in the Study Area include the Bakethin Reservoir, the Kielder Water Reservoir in the southern areas and the Catcleugh Reservoir, St Mary's Loch and Megget Reservoir to the north.

Land use and Landcover

4.2.4 The Site currently comprises of a combination of forestry plantations and moorland which is used for rough grazing. Residential properties surrounding the Site are primarily scattered dwellings and farmsteads. The B6357 follows the small valley which bisects the Site.

4.2.5 The immediate surrounding area to the Site consists of similar landcover and landuse to that present in the Site. Elsewhere, the higher uplands and summits of the Study Area are rugged and typified by a mosaic of coarse grassland and heather.

4.2.6 The Study Area is largely unsettled, scattered dwellings and key transport routes being concentrated on the floor of valleys and lowlands. The valley floors and lowlands also comprise improved grasslands and riparian woodlands.

4.2.7 Hill walking and hiking as well as water sports are also a key landuse within the Study Area. **Figure 4.3** shows the location of recreational receptors.

Landscape Character

4.2.8 **Figure 4.1** shows the location and extents of landscape character types (LCTs) in the Study Area, both in Scotland and England.

SCOTLAND

4.2.9 According to NatureScot's online landscape character assessment database[7] the Site is mainly situated within LCT 96 Southern Uplands with Forest Borders. However, the southernmost extent of the Site extends into LCT 113 Upland Valley with Pastoral Floor. These are the 'host' LCTs with the potential for direct and significant landscape effects.

4.2.10 Characteristics and experiential qualities of the host LCT 96 – Southern Uplands with Forest Borders include:

- "Large scale rolling landform with higher dome or cone-shaped summits
- Dominant coniferous forest cover characterised by Sitka spruce plantations with occasional areas of pine and larch
- Dispersed settlement pattern of farmsteads and forestry buildings, mainly within sheltered valleys
- Simple, uniform character
- Strong sense of enclosure, quietness and tranquillity"[8]

4.2.11 Characteristics and experiential qualities of the host LCT 113 – Upland Valley with Pastoral Floor include:

- "Glaciated valleys with moderately to strongly sloping sides and flat floor modified by river bluffs and glacial moraine
- Improved pastures with occasional small woodlands and tree lines on valley floors
- Rough unimproved grazing, heather moorland or coniferous forest on valley sides
- Scattered stone-built villages with farmsteads and dwellings dispersed along river terraces, lower valley sides and tributary valleys
- A simple, distinctive landscape strongly enclosed by uplands with intermittent long views along valley corridors."[9]

7 NatureScot (2019). *Landscape Character Types Map and Descriptions*. Available at https://www.nature.scot/professional-advice/landscape/landscape-character-assessment/scottish-landscape-character-types-map-and-descriptions [Accessed February 2025].
8 NatureScot (2019*). Landscape Character Type 96: Southern Uplands with Forest Borders*. Available at: https://www.nature.scot/sites/default/files/LCA/LCT%20096%20-%20Southern%20Uplands%20with%20Forest%20-%20Borders%20-%20Final%20pdf.pdf [Accessed February 2025].
9 NatureScot (2019*). Landscape Character Type 113: Upland Valley with Pastoral Floor*. Available at: https://www.nature.scot/sites/default/files/LCA/LCT%20113%20-%20Upland%20Valley%20with%20Pastoral%20Floor%20-%20Final%20pdf.pdf [Accessed February 2025].

4.2.12 In addition to the host LCTs, there are 29 LCTs within the Scottish section of the Study Area that are subject to theoretical views of the Proposed Development, see **Figure 4.1** and **Appendix 4.1: Table 1**.

4.2.13 A description of each of these LCTs is provided in NatureScot's online landscape character database[7].

ENGLAND

4.2.14 There are nine National Character Areas (NCAs) located within the 45 km Study Area that are subject to theoretical views of the Proposed Development, see **Figure 4.1** and **Appendix 4.1: Table 2**.

4.2.15 A description of each of these NCAs is provided in Natural England's online national character area database[10].

Landscape Designations and Classifications

4.2.16 **Figure 4.2** shows the location and extents of landscape designations and classifications in the Study Area, both in Scotland and England.

4.2.17 The Site itself is not subject to landscape designation or classification. There are 27 Scottish landscape designations and classifications within the 45 km Study Area that are subject to theoretical views of the Proposed Development, including Local Landscape Areas, Gardens and Designed Landscapes, National Scenic Areas and a Wild Land Area, see **Figure 4.2** and **Appendix 4.1: Table 3**. There are eight landscape designations in England that are located within the 45 km Study Area that are subject to theoretical views of the Proposed Development, including National Parks, Registered Parks and Gardens and Areas of Outstanding Beauty, see **Figure 4.2** and **Appendix 4.1: Table 3**.

Visual Amenity

4.2.18 **Figure 4.3** shows the location and extents of visual receptors in the Study Area, both in Scotland and England.

4.2.19 There are a number of key visual receptor locations of relevance to the LVIA, including:

- Settlements and individual properties;
- Transportation routes; and
- Recreational routes, sites and vantage points.

Settlements and Residential Properties

4.2.20 Settlements in the Study Area are typically within the valleys off the main transportation routes. There are additional farmsteads scattered across the landscape, in particular within the shallow, flat plains. There are approximately 44 settlements that are located within the 45 km Study Area that are subject to theoretical views of the Proposed Development, including towns, villages, hamlets and isolated properties, see **Figure 4.3** and **Appendix 4.1: Table 4**.

4.2.21 Initial desk based analysis suggests that there are a total of 13 individual residential properties within 2 km of the Site, these are concentrated to the south of the site, predominantly in Saughtree.

10 Natural England (2014). *National Character Area Map.* Available at: Natural England - National Character Area Profiles - National Character Area Profiles [Accessed February 2025].

Transportation Routes

4.2.22 The majority of transportation routes within the Study Area are located within valleys. The key routes within the Study Area that are subject to theoretical views of the Proposed Development are identified and illustrated in **Figure 4.3** and **Appendix 4.1: Table 5**.

Recreational Routes, Sites and Vantage Points

4.2.23 There are a number of long-distance routes, vantage points, summits, and sites that are important to the experience of visual receptors within 45 km of the Proposed Development. Furthermore, there are numerous core paths and public rights of ways that are important to the experience of visual receptors within 10 km of the Proposed Development, see **Figure 4.3** and **Appendix 4.1: Table 6**.

4.3 Assessment Scope and Methodology

Legislation, Policy and Guidance

4.3.1 The LVIA will be prepared in accordance with the following legislation, policy, guidance and professional standards:

- Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017;
- National Planning Policy Framework (NPF) 4[11];
- Handbook on Environmental Impact Assessment, Appendix 2: Landscape and Visual Impact Assessment[12];
- Guidance for Landscape and Visual Impact Assessment (GLVIA) Third Edition, and subsequent technical notes and clarifications[13];
- Landscape Character Assessment[14];
- Special Landscape Qualities - Guidance on Assessing Effects (AESLQ)[15];
- Technical Guidance Note 06/19 Visual Representation of development proposals[16];
- Technical Guidance Note 02/19 Residential Visual Amenity Assessment[17];
- Guidance - Assessing the cumulative landscape and visual impact of onshore wind energy developments[18];

11 Scottish Government (2024). *National Planning Framework 4*. Available at https://www.gov.scot/publications/national-planning-framework-4/ [Accessed February 2025].
12 SNH & HES (2018) Environmental Impact Assessment Handbook. Available at https://web.archive.org/web/20220901050635/https://www.nature.scot/sites/default/files/2018-05/Publication%202018%20-%20Environmental%20Impact%20Assessment%20Handbook%20V5.pdf [Accessed February 2025].
13 Landscape Institute and Institute of Environmental Management and Assessment (2013). *Guidance for Landscape* and Visual *Impact Assessment (GLVIA)*. Available at https://www.landscapeinstitute.org/technical/glvia3-panel/ [Accessed February 2025].
14 The Countryside Agency and SNH (2002). *Landscape Character Assessment: Guidance for England and Scotland.* Available at https://www.nature.scot/doc/archive/landscape-character-assessment-guidance-england-and-scotland [Accessed February 2025].
15 NatureScot (2025). *Guidance for Assessment of Effects on Special Landscape Qualities.* Available at https://www.nature.scot/doc/guidance-assessment-effects-special-landscape-qualities-aeslq [Accessed February 2025].
16 Landscape Institute (2019). *Technical Guidance Note 06/19 Visual Representation of development proposals.* Available at https://www.landscapeinstitute.org/news/new-visual-representation-guidance-2019/ [Accessed February 2025].
17 Landscape Institute (2019). *Technical Guidance Note 02/19 Residential Visual Amenity Assessment* Available at https://www.landscapeinstitute.org/news/new-rvaa-guidance-2019/ [Accessed February 2025].
18 NatureScot (2021). *Guidance – Assessing the Cumulative Landscape and Visual Impact of Onshore Wind Energy Developments*. Available at https://www.nature.scot/doc/guidance-assessing-cumulative-landscape-and-visual-impact-onshore-wind-energy-developments [Accessed February 2025].

- Landscape Sensitivity Assessment Guidance[19];
- Siting and Design Wind Farms in the Landscape Guidance - version 3a[20];
- Assessing impacts on Wild Land Areas – technical guidance[21];
- Visual Representation of Windfarms Guidance, Version 2.2[22];
- Pre-application Guidance for Onshore Wind Farms[23]; and
- Guidance on Aviation Lighting Impact Assessment[24].

Study Area

In order to ensure that all significant impacts are assessed, the Study Area for the LVIA is taken to be 45 km from the outermost turbine, in accordance with current NatureScot guidance regarding the visual representation of wind farms. However, on the basis of other similar studies for developments in the vicinity, significant landscape and visual effects are considered unlikely to extend this far. It is therefore proposed that the detailed assessment of effects will concentrate on a 30 km radius area as this is considered appropriate and proportionate, and to address key sensitive landscape and visual receptors.

4.3.2 A 10 km radius will be used for Core Paths and local recreational trails and 2 km radius for the Residential Visual Amenity Assessment (RVAA). A 2 km study area for residential visual amenity assessments is in accordance with the Landscape Institutes Technical Note on such studies.

Data and Information

4.3.3 The following reference sources will be used to establish the baseline for the LVIA:

- Ordnance Survey mapping;
- Google Earth;
- Computer generated ZTV;
- NatureScot Landscape Character Types[7];
- Natural England National Character Area Profiles[10];
- Scottish Borders Council Local Landscape Designations[25];
- Dumfries and Galloway Council Regional Scenic Areas Technical Paper[26]; and
- Natural England NNR[27].

19 NatureScot (2022). *Landscape Sensitivity Assessment Guidance*. Available at Landscape Sensitivity Assessment Guidance (Methodology) | NatureScot [Accessed February 2025].
20 NatureScot (2017). *Siting and Designing Wind Farms in the Landscape Guidance - version 3a.* Available at https://www.nature.scot/doc/siting-and-designing-wind-farms-landscape-version-3a [Accessed February 2025].
21 NatureScot (2020). *Assessing impacts on Wild Land Areas.* Available at https://www.nature.scot/doc/assessing-impacts-wild-land-areas-technical-guidance [Accessed February 2025].
22 NatureScot (2017). *Visual Representation of Windfarms Guidance, Version 2.2*. Available at https://www.nature.scot/sites/default/files/2019-09/Guidance%20-%20Visual%20representation%20of%20wind%20farms%20-%20Feb%202017.pdf [Accessed February 2025].
23 NatureScot (2024). *Pre-application Guidance for Onshore Wind Farms*. Available at https://www.nature.scot/doc/naturescot-pre-application-guidance-onshore-wind-farms [Accessed February 2025].
24 NatureScot (2024). *Guidance on aviation lighting-impact-assessment*. Available at https://www.nature.scot/doc/guidance-aviation-lighting-impact-assessment [Accessed February 2025].
25 Scottish Borders Council (2012). *Local Landscape Designations Supplementary Guidance. Available at*: https://www.scotborders.gov.uk/downloads/file/1124/local-landscape-designations [Accessed February 2025].
26 Dumfries and Galloway Council (2018*). Regional Scenic Areas Technical Paper*. Available at: Regional_Scenic_Areas_Technical_Paper.pdf [Accessed February 2025].
27 Natural England (2025*). National Nature Reserves in England*. Available at: https://www.gov.uk/government/collections/national-nature-reserves-in-england [Accessed February 2025].

4.3.4 Site visits will be undertaken to 'ground-truth' and verify the findings of the preliminary desk based study. ZTV mapping represents theoretical visibility and is therefore an over-estimation of visibility. Actual visibility will be confirmed or refined by site visits and in some cases, viewpoints will be micro-sited or scoped out from further analysis.

4.4 Likely Significant Effects

4.4.1 The LVIA will considers effects on:

- landscape fabric, caused by changes to the physical form of the landscape and its elements;
- landscape character, caused by changes in the key characteristics of the landscape as a result of the Proposed Development;
- the special qualities and integrity of designated and classified landscapes; and
- visual amenity, caused by changes in the composition and scenic qualities of views on visual amenity as a result of the Proposed Development.

4.4.2 The LVIA will assess both in-addition and in-combination effects arising from two different scenarios:

- the Proposed Development in conjunction with the baseline context of operational and consented developments only (but will provide a commentary on the effect of the inclusion of possible future application schemes where they have potential to play an important part in the cumulative effect of wind energy development); and
- the Proposed Development in conjunction with the cumulative baseline and Proposed Developments subject to a valid planning application.

4.4.3 The cumulative context will be finalised approximately 3 months prior to the completion of the LVIA. A preliminary cumulative developments plan for the purposes of Scoping is shown on **Figure 4.5.**

Potential Impacts Scoped In

4.4.4 **Table 4.1** and **Table 4.2** identify to the key matters to be addressed in the LVIA in order to identify significant landscape and visual effect.

Table 4.1: Potential Construction Effects

Receptor and Potential Effect	Reason
Landscape Effects	
Construction effects on the Landscape Fabric	Any potential significant effects are, however, likely to be highly localised and of short duration.
Construction effects on the Landscape Character and National Character	Any potential significant effects are most likely to occur within the 'host' landscapes (LCT 96 Southern Uplands with Forest Borders and LCT 113 – Upland Valley with Pastoral Floor) and the landscapes located in close proximity to the Proposed Development. These include: - Border Moors and Forests NCA - Southern Uplands with Scattered Forest – Borders LCT - Wooded Upland Fringe with Prominent Hills LCT - Rocky Upland Fringe LCT

Receptor and Potential Effect	Reason
	- Rolling Foothills LCT - Southern Uplands -Dumfries and Galloway LCT - Pastoral Upland Fringe Valley LCT - Lowland Valley with Farmland LCT Note: Daytime and nighttime lighting effects, in respect to construction effects, on these LCTs will be considered.
Construction effects on Landscape Designations and Classifications	Any potential significant effects are most likely to occur in neighbouring designated/classified landscapes but are likely to be of short duration and reversible. These include: - Teviot Valleys LLA - Cheviot Foothills LLA - Northumberland National Park - Langholm Hills LLA Note: Daytime and nighttime lighting effects, in respect to construction effects, on these LCTs will be considered.
Visual Effects	
Construction effects on visual amenity of roads and ferry routes	Construction effects on neighbouring roads are likely to be localised and of limited duration. These include: - B6357 - B6399 - A6088 - A68 - Kielder Water (Reservoir) Ferry Routes Note: Daytime and nighttime lighting effects, in respect to construction effects, on these locations of visual amenity will be considered.
Construction effects on the visual amenity of recreational routes, sites and vantage points	Construction effects on users of nearby recreational routes are likely to be localised and of limited duration. These include: **Recreational Routes:** - River Tyne Trail - NCN Route 10 - Lakeside Way **Core Paths and PRoWs**: - Wheel Causeway - Core Path No.NEWC/114/1 - Core Path No.HOBK/81P/2R - Core Path No.DENH/203/3 - PRoW 529/005 - PRoW 529/001 - PRoW 529/002

Receptor and Potential Effect	Reason
	Vantage Points: - Kielder Observatory - Kielder Skyspace - Southdean Fort and Settlement - Kirkton Fort and Settlement **Summits**: - Pike Fell - Grey Mares Knowe - Maiden Paps - Limestone Knowe - Larriston Fells Summit - Greatmoor Hill - Pile of Stone - Penchrise Pen - Cauldcleuch Head (Graham) - Wether Lair Summit - Roan Fell Caird **Recreational Sites**: - Lower and Upper Cheviot Car Parks - Kielder Deadwaters Mountain Bike Trails - Hermitage Castle - Kielder Campsite - Rue Du Chateau Campsite - Kielder Castle - Recreational water-based receptors in Bakethin Reservoir - Recreational water-based receptors in Kielder Water (Reservoir) - Hawick Golf Club Note: Daytime and nighttime lighting effects, in respect to construction effects, on these locations of visual amenity will be considered.
Construction effects on the settlements and residential properties	It is anticipated that the construction stage will affect residents of properties in close proximity to the Site for a limited duration. These include: - Singdean - Wormscleuch - Cliffhope House (Saughtree Grain) - Saughtree - Deadwater - Larriston - Hyndlee - Kielder - Wolfelee

Receptor and Potential Effect	Reason
	- Hermitage - Cleauch Head - Dinlabyre - Butteryhaugh - Newlands - Dinley - Hobkirk - Southdean - Bonchester Bridge - Chesters - Old Castleton - Abbotrule - Newcastleton - Hallrule - Egderston The LVIA will also consider individual residential properties within 2 km of the Site. Note: Daytime and nighttime lighting effects, in respect to construction effects, on these locations of visual amenity will be considered.

Table 4.2: Potential Operational Effects

Receptor and Potential Effect	Reason
Landscape Effects	
Operational effects on the Landscape Fabric	Significant effects are, however, likely to be highly localised due to the existing and continued commercial forestry use of the Site.
Operational effects on the Landscape Character and National Character	Any potential significant effects are most likely to occur within the 'host' landscapes (LCT 96 Southern Uplands with Forest Borders and LCT 113 – Upland Valley with Pastoral Floor) and the landscapes located nearest to the Site. These include: - Border Moors and Forests NCA - Southern Uplands with Scattered Forest – Borders LCT - Wooded Upland Fringe with Prominent Hills LCT - Rocky Upland Fringe LCT - Rolling Foothills LCT - Southern Uplands -Dumfries and Galloway LCT - Pastoral Upland Fringe Valley LCT - Lowland Valley with Farmland LCT The assessment will also consider the effects on the LCTs and NCAs within 30 km of the Site that would have visibility of the Proposed Development, as indicated in **Figure 4.4**. Refer to **Appendix 4.1: Table 1 and 2** for list of relevant LCTs and NCAs.

	Note: Daytime and nighttime lighting effects on these LCTs will be considered.
Operational effects on the Landscape Designations and Classifications	Any potential significant effects are most likely to occur within designations located nearest to the Site and those with open views towards the Site. Designation to be addressed in the LVIA include: - Teviot Valleys LLA - Cheviot Foothills LLA - Northumberland National Park - Langholm Hills LLA The assessment will also consider the effects on the Designations and Classifications within 30 km of the Site that would have visibility of the Proposed Development, as indicated in **Figure 4.4**. Refer to **Appendix 4.1: Table 3** for list of relevant Landscape Designations and Classifications. Note: Daytime and nighttime lighting effects on these Designations will be considered.
Visual Effects	
Operational effects on visual amenity of roads and ferry routes	Effects will be based on tourist and visitor experience rather than the commuters in the LVIA. Effects that will be assessed include the visual effects, including lighting effects, and potential for cumulative (combined and sequential) effects with other similar developments. Transport routes that are to be address include: - B6357 - B6399 - A6088 - A68 - Kielder Water (Reservoir) Ferry Routes The assessment will also consider the effects on the Transport Routes within 30 km of the Site that would have visibility of the Proposed Development, as indicated in **Figure 4.4**. Refer to **Appendix 4.1: Table 5** for list of relevant Transport Routes. Note: Daytime and nighttime lighting effects on these locations of visual amenity will be considered.
Operational effects on recreational routes, sites and vantage points	Effects, including visual effects, lighting effects, and potential for cumulative (combined and sequential) effects with other similar developments on the following recreational routes, sites and vantage points will be addressed in the LVIA: **Recreational Routes:** Long Distance Routes: - River Tyne Trail - NCN Route 10 - Lakeside Way **Core Paths and PRoWs:** - Wheel Causeway - Core Path No.NEWC/114/1 - Core Path No.HOBK/81P/2R - Core Path No.DENH/203/3

	- PRoW 529/005 - PRoW 529/001 - PRoW 529/002 **Vantage Points**: - Kielder Observatory - Kielder Skyspace - Southdean Fort and Settlement - Kirkton Fort and Settlement **Summits**: - Pike Fell - Grey Mares Knowe - Maiden Paps - Limestone Knowe - Larriston Fells Summit - Greatmoor Hill - Pile of Stone - Penchrise Pen - Cauldcleuch Head (Graham) - Wether Lair Summit - Roan Fell Caird **Recreational Sites**: - Lower and Upper Cheviot Car Parks - Kielder Deadwaters Mountain Bike Trails - Hermitage Castle - Kielder Campsite - Rue Du Chateau Campsite - Kielder Castle - Recreational water-based receptors in Bakethin Reservoir - Recreational water-based receptors in Kielder Water (Reservoir) - Hawick Golf Club The assessment will also consider the effects on the Long-Distance Routes, Vantage Points, Summits and Recreational Sites within 30 km of the Site that would have visibility of the Proposed Development, as indicated in **Figure 4.4**. Refer to **Appendix 4.1: Table 6** for list of relevant Transport Routes. Note: Daytime and nighttime lighting effects on these locations of visual amenity will be considered.
Operational effects on settlements and residential properties	The LVIA will address visual effects, including lighting effects, and potential for cumulative (combined and sequential) effects with other similar developments, on the following settlements: - Singdean - Wormscleuch - Cliffhope House (Saughtree Grain) - Saughtree - Deadwater

	- Larriston - Hyndlee - Kielder - Wolfelee - Hermitage - Cleauch Head - Dinlabyre - Butteryhaugh - Newlands - Dinley - Hobkirk - Southdean - Bonchester Bridge - Chesters - Old Castleton - AbbotruleNewcastleton - Hallrule - Egderston The LVIA will also consider individual residential properties within 2 km of the Site. The assessment will also consider the effects on Settlements within 30 km of the Site that would have visibility of the Proposed Development, as indicated in **Figure 4.4**. Refer to **Appendix 4.1: Table 4** for a list of relevant Settlements. Note: Daytime and nighttime lighting effects on these locations of visual amenity will be considered.

Assessment Viewpoints

4.4.5 Initial desk based analysis of potential visibility of the Site from the wider landscape, alongside identification of locations of potentially sensitive visual receptors, has been undertaken and 20 representative viewpoints have been identified as shown in **Figure 4.4**. The preliminary viewpoints proposed are presented in **Table 4.3**.

Table 4.3: Proposed Viewpoints

Viewpoint No.	Name	Coordinates (X,Y)	Landscape Receptors at the Viewpoint	Visual Receptors at the Viewpoint
1	B6357, Saughtree, Scottish Borders	356101, 596517	Upland Valley with Pastoral Floor (LCT 113)	Residential receptors, and road users
2	Greatmoor Hill	348992, 600683	Southern Uplands with Scattered Forest – Borders (LCT 93)	Hill walkers
3	Great Mares Knowe	366801, 600497	Border Moors and Forests (NCA 5) Kielderhead National Nature Reserve	Recreational receptors and hill walkers

Viewpoint No.	Name	Coordinates (X,Y)	Landscape Receptors at the Viewpoint	Visual Receptors at the Viewpoint
4	Kielder Castle Visitor Centre, Kielder, Northumberland	363172, 593450	Border Moors and Forests (NCA 5)	Recreational receptors
5	Larriston Fells Summit, Scottish Borders	356972, 592423	Border Moors and Forests (NCA 5)	Hill Walkers
6	Minor road near Taylors Cleuch	353508, 593823	Upland Valley with Pastoral Floor (LCT113)	Recreational receptors and road users
7	Roan Fell Hill	345193, 593316	Boundary of: Southern Uplands with Scattered Forest - Borders (LCT93) Southern Uplands – Dumfries & Galloway (LCT177)	Hill walkers
8	Lakeside Way Trail (long distance trail) & Otterstone Lookout (Vantage Point)	367502, 587262	Border Moors and Forests (NCA 5)	Recreational receptors on trail and visitors to vantage point
9	A6088	367417, 607471	Southern Uplands with Forest -Borders (LCT96) Cheviot Foothills LLA	Road users
10	Core Path (No.HOBK/81P/2R)	357932, 609975	Wooded Upland Fringe Valley (LCT119)	Residential receptors of nearby properties, recreational users of both the trail and nearby Rue Du Chateau Camping Site
11	North Hermitage Street, Castleton Settlement	348566, 587974	Upland Valley with Pastoral Floor (LCT113)	Residential receptors and road users
12	Borders Abbeys Way (Great Trail, long distance trail)	361629, 617972	Upland Fringe with Prominent Hills (LCT102)	Recreational receptor
13	Burnt Tom Crags Summit	359826, 581848	Border Moors and Forests (NCA 5)	Hill walkers

Viewpoint No.	Name	Coordinates (X,Y)	Landscape Receptors at the Viewpoint	Visual Receptors at the Viewpoint
14	B6357, just south of Upper Cheviot Carpark	358869, 602906	Southern Upland with Forest – Borders (LCT 96)	Recreational receptors and Road users
15	St Cuthbert's Way (Great Trail, long distance trail)	379485, 623981	Rugged Uplands - Borders (LCT97) Cheviot Foothills LLA	Recreational receptors and nearby residential receptors
16	National Cycle Network No.68	382119, 582270	Border Moors and Forests (NCA 5) Northumberland National Park	Residential receptors
17	Windy Gyle Summit and Pennine Way National Trail	385540, 615218	Boundary of: Cheviots (NCA 4) Rugged Uplands – Borders (LCT97) Boundary of: Northumberland National Park. Cheviot Foothills LLA	Recreational receptors
18	Padon Hill Summit and Pennine Way National Trail	381985, 592844	Border Moors and Forests (NCA 5) Northumberland National Park	Recreational Receptors & Hill Walkers
19	High Seat Summit and Romans and Reivers Route (Great Trail, long distance trail)	340205, 609171	Rolling Moorland (LCT 94)	Recreational Receptors & Hill Walkers
20	Hermitage Castle	349699, 596054	Upland Valley with Pastoral Floor (LCT113)	Recreational Receptors

Issues Scoped Out

4.4.6 No Wild Land Impact Assessments (WLIA) are proposed as the Proposed Development is not located within a Wild Land Area (WLA). This is considered consistent with the provisions of Policy 4 (g) of Scotland's National Policy Framework (NPF) 4 which states that "*buffer zones around wild land will not be applied, and effects of development outwith wild land areas will not be a significant consideration*."

4.5 Questions to Consultees

Table 4.4: Questions to Consultees

Q4.1: Is the methodological approach and scope of receptors identified for inclusion in the LVIA appropriate, sufficient and proportionate?
Q4.2: Are the assessment viewpoints considered adequate and appropriate for the purpose of verifying an illustrating landscape and visual effects at given locations? If not, what additional or alternative viewpoints are suggested and why?

5. CULTURAL HERITAGE

5.1 Overview

5.1.1 This Chapter summarises the potential environmental impacts and likely significant effects upon Cultural Heritage receptors that are anticipated to arise in connection with the construction and operation of the Proposed Development. This Chapter outlines the baseline archaeological and cultural heritage conditions within the Site and Study Areas and outlines the methodology that will be used for the identification and assessment of direct and settings effects within the EIAR.

5.1.2 This Chapter is supported by the following figures and appendices:

- Figure 5.1: Nationally Important Heritage Assets within 10 km of the Site and Zone of Theoretical Visibility (ZTV);
- Figure 5.2: Designated Heritage Assets within 5 km of the Site and Zone of Theoretical Visibility (ZTV);
- Figure 5.3: Non-designated Heritage Assets within 1 km of the Site;
- Figure 5.4: Nationally Important Heritage Assets beyond 10 km of the Site Scoped into the Assessment; and
- Appendix 5.1: Gazetteer of Heritage Assets.

5.2 Baseline Conditions

5.2.1 The scoping baseline has been informed by a review of HES's National Record of the Historic Environment[28] (NRHE), georeferenced 1st and 2nd edition Ordnance Survey (OS) Mapping as held by the National Library of Scotland[29] (NLS), and HES's Historic Land-use Assessment (HLA) map[30]. Historic Environment Record (HER) data from SBCAS has not been consulted for the purposes of this Chapter, but would be for the EIAR. A more detailed historic map regression would also form part of the EIAR, including an assessment of all available OS and pre-OS historic mapping.

5.2.2 Each heritage asset has been given an Asset Number unique to this Chapter. A gazetteer of heritage assets (**Appendix 5.1**) includes information regarding the type, period, location, reference number, designation, and any other relevant descriptions, as derived from the consulted sources.

5.2.3 The British Geological Survey[31] (BGS) does not hold data for the superficial geology for much of the Site, however several pockets of peat are recorded across the Site. . Peatlands are regarded as important archaeological landscapes, having formed largely in Britain during the period of continuous occupation since the end of the Last Ice Age (c.11,700 years ago). Anoxic conditions within peatlands allow for the preservation of organic material, and as such are considered invaluable, but severely depleted, archaeological and paleoenvironmental records[32].

5.2.4 The HLAmap[30] records that the majority of the Site is made up of (modern) 'Plantation', with small, interspersed areas of pre-20th century 'Plantation Enclosure', 19th and 20th century 'Smallholdings', and 'Opencast' quarrying sites.

5.2.5 1st and 2nd edition OS mapping[29] shows that the Site in the second half of the 19th century was comprised mainly of unenclosed upland moor. Several smallholding farms and associated enclosures (Assets 110, 185, 198, and 211) are depicted along lowland waterways throughout the Site, whilst

28 HES (2025). *Downloads*. Available at: https://portal.historicenvironment.scot/downloads [Accessed February 2025]
29 NLS (2025). *National Library of Scotland – Maps*. Available at: https://maps.nls.uk/ [Accessed February 2025]
30 HES (2025). *HLAmap – Scotland's Historic Land Use*. Available at: https://hlamap.org.uk/ [Accessed February 2025]
31 British Geological Survey (2025). *BGS Geology Viewer*. Available at: https://www.bgs.ac.uk/ [Accessed February 2025]
32 Historic England (HE) (2024). *Peatlands and the Historic Environment*. Available at: https://historicengland.org.uk/images-books/publications/peatlands-and-historic-environment/heag300a-v2-peatlands/ [Accessed February 2025].

the prevalence of sheepfolds (43 of which are depicted in the Site - Assets 131, 142-149, 154-156, 159, 161-169, 193, 195, 199, 200, 202, 204-208, 210, 212, 213, 216, 217, 219, 221-223, and 225) across the Site indicates that the primary economic activity was sheep husbandry. A road (now the B6357) is shown bisecting the centre of the Site in a broadly north-south orientation. A further road or track (Assets 183, 184, and 191) is shown at the eastern most end of the Site, which is labelled 'Wheel Rig or Roman Road'. Sections of The Wheel Rig (alternatively known as the 'Wheel Causeway') has since in parts been planted over by forestry, however parts have been repurposed as fire breaks. The 'Border Counties Branch' of the 'North British Railway' (Asset 132) railway line is shown at the southernmost end of the Site in a broadly east-west orientation. This railway line is now defunct; however, a small stretch of the former line survives immediately north of the former Saughtree Station (Asset 133), which is now a B&B. An enclosed plantation is visible immediately south of Singdean farmstead (Asset 198) at the centre of the Site.

Designated Heritage Assets

5.2.6 There is one designated heritage asset within the Site, the Medieval Wheel Village (Asset 6), which is designated as a Scheduled Monument, and which appears to only survive as buried remains.

5.2.7 There are no additional designated heritage assets within 1 km of the Site.

5.2.8 There are 17 designated heritage assets located between 1 km and 5 km of the Site, which include 13 Scheduled Monuments (Assets 1-3, 7, 16, 17, 37, 42, 47, 54, 67, 72, and 74), two Category B Listed Buildings (Assets 85 and 86), one Category C Listed Building (Asset 87), and one Grade II Listed Building (Asset 88).

5.2.9 There are 62 additional nationally important designated heritage assets located between 5 km and 10 km from the Site, all of which are Scheduled Monuments (Assets 4, 5, 8-15, 18-36, 38-41, 43-46, 48-53, 55-66, 68-71, 73, 75, and 76).

Non-designated Heritage Assets

5.2.10 The NRHE and 1st and 2nd edition OS maps record the presence of 102 non-designated heritage assets in the Site (Assets 89-92, 94, 95, 97-100, 102-108, 110-113, 116, 118, 121, 123-129, 131-133, 135-137, 140-149, 154-156, 159-175, 178-179, 184, 185, 189, 192-196, 198-201, 204-209, 211-223, and 224-227). The majority of these assets date to the post-medieval period, and are comprised of features indicative of a 'standard' rural agricultural landscape of the period such as farmsteads, sheepfolds, and quarries (amongst others). Fairly extensive medieval evidence is also present in the Site, whilst prehistoric, early medieval, and modern evidence is more limited.

5.2.11 A further 35 non-designated heritage assets are recorded within 1 km of the Site, and include evidence from the prehistoric, medieval, post-medieval, and modern periods (Assets 93, 96, 101, 109, 114, 115, 117, 120, 122, 130, 134, 138, 139, 150-153, 157, 158, 176, 177, 180-182, 186, 187, 197, 202, 203, 210, 223, and 235-237).

5.3 Assessment Scope and Methodology

Legislation, Policy and Guidance

5.3.1 The following guidance documents will be consulted during the assessment to assist in the determination of potential effects on heritage assets:

- Planning Advice Note 2/2011: Planning and Archaeology[33];

33 Scottish Government (n.d.). *Planning Advice Notes (PAN)*. Available at: https://www.gov.scot/collections/planning-advice-notes-pans/ [Accessed February 2025]

- Managing Change in the Historic Environment: Setting[34];
- Environmental Impact Assessment Handbook v5[35];
- Planning Practice Guidance[36] (PPG);
- The Setting of Heritage Assets Historic Environment Good Practice Advice in Planning 2017[37] (Historic England (HE));
- Chartered Institute for Archaeologists' (CIfA) Code of Conduct[38];
- CIfA Regulations for Professional Conduct[39];
- CIfA Standard and Guidance for Historic Environment Desk Based Assessment[40]; and
- CIfA Standard and guidance for commissioning work on, or providing consultancy advice on, archaeology and the historic environment[41].

Study Area

5.3.2 In order to assess the potential for effects on cultural heritage assets resulting from the Proposed Development, the following Study Areas have been identified:

- A Core Study Area (the Site) (**Figure 5.3**), which includes all land within the Site, which will be subject to assessment for potential direct and setting effects. This Study Area will be subject to a detailed walkover survey, and cultural heritage assets which may be directly impacted by the Proposed Development will be identified. Setting impacts will also be considered;
- A 1 km Study Area (**Figure 5.3**) for the identification of all known heritage assets and previous archaeological interventions in order to help predict whether any similar hitherto unknown archaeological remains are likely to survive within the Site and thus be impacted by the Proposed Development;
- A 5 km Study Area (**Figure 5.2**) for the assessment of potential impacts on the settings of all designated heritage assets; and
- A 10 km Study Area (**Figure 5.1**) for the assessment of potential impacts on the settings of all nationally important heritage assets, which in Scotland includes World Heritage Sites, Scheduled Monuments, Category A Listed Buildings, Inventory Gardens and Designed Landscapes, and Inventory Battlefields. Where the Study Area extends into England this

34 Historic Environment Scotland (2016). *Managing change in the Historic Environment: Setting* (Revised 2020). Available at: https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=80b7c0a0-584b-4625-b1fd-a60b009c2549 [Accessed February 2025]

35 SNH and HES (2018). *Environmental Impact Assessment Handbook*. Available at: https://web.archive.org/web/20220901050635/https://www.nature.scot/sites/default/files/2018-05/Publication%202018%20-%20Environmental%20Impact%20Assessment%20Handbook%20V5.pdf [Accessed February 2025]

36 Department for Levelling Up, Housing and Communities (DLUHC) & MHCLG (2024). *Planning Practice Guidance (PPG) Historic environment Section*. Available at: https://www.gov.uk/government/collections/planning-practice-guidance [Accessed February 2025]

37 Historic England (HE) (2017). *The Setting of Heritage Assets Historic Environment Good Practice Advice in Planning: 3* (2nd Edition) https://historicengland.org.uk/images-books/publications/gpa3-setting-of-heritage-assets/heag180-gpa3-setting-heritage-assets/ [Accessed February 2025]

38 The Chartered Institute for Archaeologists (CIfA) (2014). *Code of Conduct; professional ethics in archaeology*. (Revised 2017, 2019, 2020, 2021 & 2022). Available at: https://archaeologists.net/sites/default/files/2023-11/CIfA-Code-of-Conduct-2022.pdf [Accessed February 2025].

39 CIfA (2019). *Regulations for professional conduct. (Revised 2021 & 2024).* Available at: https://archaeologists.net/sites/default/files/2024-11/CIfA-Regulations-for-Professional-Conduct-2024.pdf [Accessed February 2025]

40 CIfA (2014). *Standard and guidance for historic environment desk-based assessment*. (Revised 2020). Available at: https://archaeologists.net/sites/default/files/2023-11/CIfA-SandG-DBA-2020.pdf [Accessed February 2025]

41 CIfA (2014). *Standard and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment*. (Revised 2020). Available at: https://archaeologists.net/sites/default/files/2023-11/CIfA-SandG-Archaeological-Consultancy-2020.pdf [Accessed February 2025]

additionally includes Grade I and II* Listed Buildings, Registered Parks and Gardens, and Registered Battlefields.

5.3.3 There are no World Heritage Sites, Category A Listed Buildings, Grade I or II* Listed Buildings, Inventory Gardens and Designed Landscapes, Registered Parks and Gardens Inventory Battlefields, Registered Battlefields or Conservation Areas within 10 km of the Site.

5.3.4 Consideration has also been given to the potential for setting impacts upon assets beyond 10 km, which has been conducted with reference to the scoping ZTV (**Figure 5.4**). All nationally important designated heritage assets within 45 km of the Site (the extent of the scoping ZTV) have been considered. Due to the distances involved, only nationally important assets with a high potential level of intervisibility with the Proposed Development and a high sensitivity to a change in their settings were considered for scoping into the assessment. In this context an asset's sensitivity to a change in its setting refers to its capacity to retain its ability to contribute to an understanding and appreciation of the past in the face of changes to its setting. The ability of an asset's setting to contribute to an understanding, appreciation and experience of it and its significance also has a bearing on the sensitivity of that asset to changes to its setting. While heritage assets of High or Very High importance are likely to be sensitive to direct impacts, not all will have a similar sensitivity to impacts on their setting; this would be true where setting does not appreciably contribute to their significance. HES's guidance on setting makes clear that the level of effect may relate to "*the ability of the setting* [of an asset] *to absorb new development without eroding its key characteristics*"[42]. A total of 37 assets fell into these categories. However, further examination of the individual assets has resulted in the proposal that eight Scheduled Monuments should be brought forward for consideration in the assessment (Assets 77-84) (**Figure 5.4**). The reasoning for this is discussed in **Section 5.4.**

Baseline Characterisation

5.3.5 The archaeological and historical baseline will be established with reference to the following information sources:

- Historic Environment Scotland (HES) and Historic England (HE) for designated heritage asset data;
- National Record of the Historic Environment (NRHE) data for information on non-designated assets and previous archaeological events;
- The Scottish Borders Council Historic Environment Record (HER) for information on non-designated assets and previous archaeological events;
- The National Library of Scotland (NLS) for online old Ordnance Survey (1st and 2nd edition, small- and large-scale) and pre-Ordnance Survey historical maps;
- British Geological Survey (BGS) for bedrock and superficial deposit data and historic boreholes information;
- HLA maps (HES) for historic landscape characterisation and modern landscape information;
- The National Collection of Aerial Photography (NCAP) (HES) for historic aerial photographs;
- The Scottish Remote Sensing Portal (Scottish Government) for raw LiDAR data;
- Available client supplied data about the Site; and

[42] Historic Environment Scotland (2016). *Managing change in the Historic Environment: Setting*. Revised 2020. Available at: https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=80b7c0a0-584b-4625-b1fd-a60b009c2549 [Accessed March 2025].

- Any other relevant published works, such as previous archaeological reports and assessments.

5.3.6 Following the completion of desk based research, an archaeological walkover survey of the Site will be undertaken. The walkover survey will aim to identify previously unknown remains and establish the survival, extent, significance, and relationships of known heritage assets within the Site and the Study Areas. Weather conditions, ground cover, and any other conditions affecting the visibility during the survey will also be recorded. All heritage assets encountered will be photographed and recorded using the ArcGIS Field Maps app on a mobile device. The walkover survey will also help to identify areas within the Site that may require further archaeological works and/or mitigation in advance of any future development.

5.3.7 Setting assessment visits to designated assets potentially impacted by the Proposed Development will be undertaken. A ZTV will be used to initially identify designated heritage assets which require detailed assessment. A review of designated heritage assets outwith the ZTV will also be undertaken prior to site visits to identify any designated heritage assets with key views which would include the Proposed Development, and where appropriate these assets will also be subject to detailed setting assessment. Designated heritage assets outwith these criteria will be scoped out as they are unlikely to be significantly affected.

5.4 Likely Significant Effects

5.4.1 The assessment will distinguish between the terms 'impact' and 'effect'. An impact is defined as a physical change to a heritage asset or its setting, whereas an effect refers to the significance of this impact.

5.4.2 Assessment of direct effects resulting from the construction phase will relate to whether the construction of the Proposed Development would remove, in part or whole, elements of the asset. The level of direct effect will be a result of the importance of the assets and the magnitude of impact predicted.

5.4.3 The setting assessment will be undertaken with reference to HES' Managing Change Guidance on setting[43] and HE's The Setting of Heritage Assets Historic Environment Good Practice Advice in Planning 2017[44] and will aim to establish the current setting of the identified heritage assets, how that setting contributes to the understanding, appreciation and experience of those assets and how the Proposed Development could impact upon this.

5.4.4 Cumulative effects will also be considered. The assessment of cumulative effects on heritage assets will be based upon consideration of the effects of the Proposed Development on the settings of heritage assets, in addition to the likely effects of other operational/under construction, consented and proposed (at the application stage) wind farm schemes. Cumulative effects will be considered for designated assets as identified in the 5 km and 10 km Study Areas. The assessment will take into account the relative scale (i.e. size and number of turbines) of the identified developments, their distance from the affected assets, and the potential degree of visibility of the various developments from the assets. Cumulative wirelines from those assets most likely to experience significant cumulative impacts on their settings will be provided, if appropriate. The schemes to be included in the cumulative impact assessment will be those agreed with the relevant consultees via consultation and will be undertaken according to the guidance in NatureScot's Assessing the

[43] Historic Environment Scotland (2016). *Managing change in the Historic Environment: Setting*. Revised 2020. Available at: https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=80b7c0a0-584b-4625-b1fd-a60b009c2549 [Accessed February 2025].

44 Historic England (HE) (2017). *The Setting of Heritage Assets Historic Environment Good Practice Advice in Planning: 3*. 2nd Edition. Available at: https://historicengland.org.uk/images-books/publications/gpa3-setting-of-heritage-assets/heag180-gpa3-setting-heritage-assets/ [Accessed February 2025].

Cumulative Impact of Onshore Wind Energy Developments[45] and Historic Environment Scotland's Environmental Impact Assessment Handbook[46].

5.4.5 NPF4 indicates that development proposals affecting Scheduled Monuments will only be supported where '*significant adverse impacts on the integrity of setting of a scheduled monument are avoided'* or where '*exceptional circumstances have been demonstrated to justify the impact on a scheduled monument and its setting and impacts on the monument or its setting have been minimised'* (NPF4, Policy 7h). Significant adverse impacts on integrity of setting are judged here to relate to whether a change would adversely affect the asset's key attributes or elements of setting which contribute to an asset's significance. It is considered that a significant impact upon the integrity of the setting of an asset will only occur where the degree of change that will be represented by the Proposed Development would adversely alter those factors of the monument's setting that contribute to cultural significance such that the understanding, appreciation and experience of an asset is not adequately retained.

5.4.6 In terms of effects upon the setting of heritage assets, it is considered that only those effects identified as 'significant' in EIA terms will have the potential to significantly adversely impact upon integrity of setting. Where no significant effect is found it is considered that there would be no significant impact upon the integrity of an asset's setting. Where significant effects are found, a detailed assessment of adverse impacts upon integrity of setting will be made. Whilst non-significant effects are unlikely to significantly impact integrity of setting, the reverse is not always true. That is, the assessment of an effect as being 'significant' in EIA terms does not necessarily mean that the adverse effect to the asset's setting will significantly impact its integrity. The assessment of adverse impact upon the integrity of an asset's setting, where required, is a qualitative one, and largely depends upon whether the impact predicted would result in a major impediment to the ability to understand or appreciate the heritage asset.

Potential Impacts Scoped In

Direct Impacts

5.4.7 Direct physical impacts to assets occur when the fabric of known or undiscovered assets is removed or damaged. Such impacts are permanent and generally occur during construction.

5.4.8 Indirect physical impacts occur as an associated consequence of development such as increased/decreased erosion, changes in the local groundwater, or damage from vibration of piling. Such impacts are likely permanent.

5.4.9 Due to the presence of a range of archaeological assets in the Site, there is the potential for direct impacts. The design of the Proposed Development will consider the potential for direct impacts to heritage assets in the Site and aim to avoid these. Where this is not possible appropriate mitigation measures will be outlined within the EIAR.

5.4.10 One designated asset is located in the Site, the Scheduled Monument Wheel Village (Asset 6), which dates to the medieval period. It should be noted that any works in a Scheduled Area require Scheduled Monument Consent (SMC) from HES. The Scheduled Area for Asset 6 should be avoided by design, and consequently any direct impacts and the requirement for SMC can be prevented in this case. The cultural heritage assessment will further outline appropriate measures to prevent any damage from activities associated with the Proposed Development, and is likely to include the

45 NatureScot (2025). *Guidance – Assessing the cumulative landscape and visual impact of onshore wind energy developments*. Available at: https://www.nature.scot/doc/guidance-assessing-cumulative-landscape-and-visual-impact-onshore-wind-energy-developments [Accessed February 2025]

46 SNH and HES (2018). *Environmental Impact Assessment Handbook*. Available at: https://web.archive.org/web/20220901050635/https://www.nature.scot/sites/default/files/2018-05/Publication%202018%20-%20Environmental%20Impact%20Assessment%20Handbook%20V5.pdf [Accessed February 2025].

provision of a toolbox talk, and the physical demarcation of the Scheduled Area. An additional buffer area around the Scheduled Area could also be demarcated to mitigate against indirect physical impacts. Available information and modern satellite imagery indicates that the Wheel Village does not survive as visually clear upstanding remains, and as such extra care will be required to ensure its protection.

5.4.11 One-hundred and two non-designated heritage assets have been identified in the Site. This is not an exhaustive list , and it is expected that more would be identified following the receipt of a HER extract from SBCAS and as a result of the walkover survey. The extent and survival of the assets in the Site will be subject to examination in more detailed desk based research and a walkover survey. The majority of the assets relate to 'standard' features of the rural/agricultural post-medieval use of the Site, and consequently are likely to be of a lower archaeological importance. A number of the identified assets however are potentially of a higher level of archaeological importance, including a potential cairn (Asset 217), the medieval settlement of Singdean (Asset 105), the sites of two medieval tower houses (Assets 178 and 179), the possibly medieval Wheel Causeway road/track (Assets 183, 184, and 191), and the possible site of the early medieval Battle of Dexastan (Asset 91). A linear earthwork (Asset 124) at the southernmost part of the Site is also potentially of importance, with some suggesting that it is the southernmost surviving remnant of 'the Catrail', an extensive ditch and bank earthwork thought to date to the early medieval period, and which in other sections is protected as a Scheduled Monument (see Assets 15-18). There is also the possibility of direct impacts to the prehistoric fort/settlement at Caddrounburn Culvert (Asset 120), which is located just outside of the Site, and parts of which may extend into the Site.

5.4.12 There is the potential for hitherto unknown archaeological and paleoenvironmental deposits and remains to survive in the Site, especially given that peat deposits are located in the Site. Research undertaken to date indicates that there is the potential primarily for remains relating to the medieval and post-medieval periods, however evidence located within 1 km of the Site indicates that there is also a potential for prehistoric, Romano-British, and early medieval remains. Much of the Site is, or has previously been, modern forestry plantation, the deep ploughing for which is known to damage and/or destroy archaeological remains. Nevertheless, there are areas in the Site with higher levels of archaeological potential, and they are provisionally (but not exhaustively) identified below:

- In the vicinity of the medieval Wheel village (Asset 6) and Singdean settlement/farmstead (Asset 111);
- In the vicinity of the Wheel Causeway road/track (Assets 183, 184, and 191);
- In the vicinity of the prehistoric settlement at Caddrounburn Culvert (Asset 120) and the potential section of the Catrail (Asset 124) immediately north of the settlement; and
- In any areas of the Site which has not formed part of the modern forestry plantation, or which has not otherwise been disturbed by other significant groundworks (i.e. opencast mining, road and railway construction etc.).

5.4.13 The Proposed Development has the potential to directly impact known heritage assets and hitherto unknown archaeological remains. The potential constraints that this may have upon the Proposed Development will be dependent upon its design and the range of groundworks that are to be included. The location of known heritage assets (especially those of a higher archaeological importance) and the archaeological potential of the Site will be considered during the design process and mitigation will aim to avoid and/or minimise direct impacts. Where this is not possible these impacts may be offset by archaeological works facilitating preservation by record. Any such works would require a suitable Written Scheme of Investigation (WSI) to be agreed in consultation with SBCAS, and where relevant HES.

Setting Impacts

5.4.14 The Proposed Development has the potential to impact upon the settings of heritage assets with which it is intervisible and/or where it can be seen in key views towards assets across the landscape. There is also a potential for cumulative impacts on the settings of heritage assets. The assessment will consider the identified heritage assets in the outlined Study Areas which could be subject to potential impacts upon setting. The EIAR will be supported by detailed ZTV mapping which will be used to identify assets intervisible with the Proposed Development. A ZTV based upon the current 47 turbine layout is included in **Figure 5.1**, **Figure 5.2**, and **Figure 5.4**.

5.4.15 Detailed consideration will be given to the potential for significant effects upon the setting of assets within the 10 km Study Area that fall within the ZTV, and which have a high sensitivity to changes to their settings. The Proposed Development will seek to minimise impacts through avoiding placing turbines in locations which would result in impacts upon the key characteristics of setting. Consideration will also be given to enhancement measures which could compensate for impacts upon the settings of assets if appropriate. Any such measures would seek to enhance the understanding, appreciation and experience of the asset and maximise public benefit.

5.4.16 Preliminary consideration has been given to the potential for impacts to the setting of Nationally Important heritage assets located beyond the 10 km Study Area. An additional Study Area of 45 km was selected for this purpose, which is the extent of the scoping ZTV. Assets were identified which are both sensitive to a change in setting and which would, based on the Scoping ZTV, have a 'high' level of intervisibility with the Proposed Development. A total of 35 assets were found to fall into this category, all of which are prehistoric Scheduled forts and/or burial cairns. The majority of these assets have been scoped out of the assessment for a variety of reasons, including long distances from the Site, and the identification of settings which are unlikely to be affected by the Proposed Development (SM1692, SM1695, SM1704, SM1705, SM1725, SM2107, SM2125, SM2150, SM2159, SM2165, SM2166, SM2167, SM2191, SM2191, SM2227, SM2227, SM2299, SM2762, SM4440, SM4451, SM4460, SM4463, SM4668, SM5741, SM10734, SM10735, and SM1015319). Many forts and cairns in the Borders have been located on hilltops above the valleys of rivers and streams, in many cases at confluences. It is these valley systems that form the key setting of these assets along with the interrelationships between certain assets. For those assets which are proposed for scoping out, it is considered that, whilst there is potential for the proposed development to be visible, the proposed turbines would be seen at a considerable distance, would clearly be beyond the key settings of the assets and would be unlikely to affect the intervisibility of the assets. Thus, significant effects are deemed unlikely.

It is recommended here that eight assets beyond the 10 km Study Area are scoped into the assessment (see **Figure 5.4)**:

- Rubers Law, fort and Roman signal station (SM2128; Asset 77; c.11.6 km north of the Site) - it is recommended that this is scoped in due to its distance to the Site (<12 km), the probability of panoramic views from the asset, and the potential relationship of the fort with the Rule Water, which is potentially located within the same viewshed as the Site (to the south).
- Peniel Heugh, fort (SM1703; Asset 78; c.23.6 km north of the Site) – it is recommended that this is scoped in due to the potential importance of panoramic views from the fort, as well as the potential relationship of the fort with the Jed Water, River Teviot, and the land located between them, which are all potentially located within the same viewshed as the Site (to the south west).
- The Law, fort (Asset 79; SM1699; c.18 km north-east of the Site); Cunzierton, fort (Asset 80; SM2170; c.21 km north-east of the Site); Thowliestane Hill, fort (Asset 81; SM1705;

c.23.8 km north-east of the Site); and Hownam Law, fort and cairn (Asset 82; SM298; c.27.9km north-east of the Site) – these four forts are located at the summits along a line of hills running in a south-west to north-east orientation. Based upon their type, orientation, and the consistency of the distances between each fort (between 2.8 km and 4.1 km from each fort to its nearest neighbour), it appears that there is an important relationship between these assets, and that views towards the Site to the south west from Assets 80-82 are potentially of significance.

- The prehistoric settlement sites at Carby Hill (Asset 82; SM1690; c.14.7km south-west of the Site), and Kirk Hill (Asset 83; SM2149; c.14.4 km south-west of the Site) – it is recommended that these sites are scoped in as they are located either side of the Lidell Water, the valley of which is in a broadly north/north-east to south/south-west orientation. The Proposed Development has the potential to sit in the background of a potentially significant view (to the north and north-east) from these two sites.

5.4.17 It is envisaged that visualisations (either wirelines or photomontages) will be produced for some assets to aid in the assessment of setting impacts. A provisional list of proposed visualisations are included below in **Table 5.1**.

Table 5.1: Proposed Cultural Heritage Visualisations

Asset No	Listing No	Designation	Name	Direction and Distance from the Site	Visualisation
Assets in the Site					
6	SM3424	Scheduled Monument	Wheel Village	NA – Within the Site	Wirelines (to allow for worst case impact to be understood given current forestry cover)
Assets within 5 km of the Site					
3	SM1688	Scheduled Monument	Nine Stones Stone Circle, Ninestone Rig	c.3.1km south-west	Photomontage
5	SM90161	Scheduled Monument	Hermitage Castle	c.4.92km south-west	Photomontage
42	SM2319	Scheduled Monument	Black Hill, Settlement	c.3.2 km north	Wirelines (as outward views are likely restricted by forestry)
67	1009668	Scheduled Monument	Midfell Round Cairn	c.3.3 km east	Photomontage
Assets within 10 km of the Site					
19; 28	SM3386; SM2255	Scheduled Monument	White Knowe, settlement 180m W of Newton Hill; Newton Hill, fort	c.8.7 km north-west; c.8.5 km north-west	Photomontage from Newton Hill covering both SM3386 and SM2255. Wirelines proposed from each asset.

21; 23; 25	SM3364; SM3412; SM2297	Scheduled Monument	Blakebillend, cairn 335m E of Williams Rig; Pleaknowe, fort & homestead 430m NW of; Blakebillend, fort	c.6.1 km north-west; c.6.1 km north-west; c.6 km north-west	Photomontage from SM2297 also covering both SM3364 and SM2297. Wirelines proposed from each asset
24	SM1700	Scheduled Monument	Kirkton Hill, fort	c.9.2 km north/north-west	Photomontage
26; 27	SM3372; SM3373	Scheduled Monument	Denholm Hill, forts 600m NE of Stobs Castle; Mid Hill, fort & settlement 700m NW of Adderstonshiels	c.8.2 km north-west; c.8.4 km north-west	Photomontage from SM3373 also covering SM3372. Wirelines from each asset
31	SM2296	Scheduled Monument	Penchrise Pen, fort 635m SW of Penchrise Farm Cottage	c. 7.8 km north-west	Photomontage
35	SM2173	Scheduled Monument	Bonchester Hill, earthworks	c.7.9 km north	Photomontage
38	SM2152	Scheduled Monument	Fort and earthworks, Shaw Craigs	c.9.7 north/north-east	Photomontage
40	SM10605	Scheduled Monument	Tamshiel Rig, fort, settlement and field system	c.5.4 north/north-east	Wirelines (as outward views are likely restricted by forestry)
41	SM2211	Scheduled Monument	Southdean Law, fort & settlement	c.7.8 north/north-east	Photomontage
58	SM3459	Scheduled Monument	Gray Coat, settlement 540m NE of Priesthaugh	c.8.9 west/north-west	Photomontage
66	1009666	Scheduled Monument	Devil's Lapful Long Cairn, 1km east of Butteryhaugh Bridge	c.6.9 south-east	Wirelines (as outward views are likely restricted by forestry)

Issues Scoped Out

5.4.18 Based on the baseline conditions, current theoretical visibility, and distance from Site it is proposed that the following are scoped out:

- Physical direct impacts to the heritage assets located outside of the Site, except for the prehistoric fort/settlement at Caddrounburn Culvert (Asset 120), which is located just outside of the Site, and parts of which may extend into the Site.

- Impacts on the setting of non-designated cultural heritage assets and features, excepting any that might be identified in consultation with SBCAS. These assets are generally considered to be less sensitive to changes in their setting, and as such are deemed unlikely to be subject to significant settings effects.
- Impacts on the settings of designated heritage assets outwith the ZTV and not considered to have the potential for the Proposed Development to be seen in key views towards them across the landscape will be scoped out of the assessment.
- Impacts on the setting of all heritage assets located outside the 10 km Study Area aside from Assets 77-84.

5.5 Questions to Consultees

Table 5.2: Questions to Consultees

Q5.1: Is the proposed assessment methodology, including proposed Study Areas, accepted?
Q5.2: Are the receptors and impacts scoped out of the assessment accepted?
Q5.3: Are the consultees satisfied with the methodology adopted to scope out setting impacts to the majority of heritage assets further than 10 km from the Site? Additionally, are the consultees content with the proposed list of assets further than 10 km of the Site proposed to be scoped into the assessment, or do they envisage the requirement for further assessment?
Q5.4: Are the consultees content that the proposed visualisations will provide enough information to inform the assessment, or do they foresee the requirement for additional visualisations?

6. ECOLOGY

6.1 Overview

6.1.1 This Chapter summarises the potential effects of construction and operation of the Proposed Development on ecological features. This Chapter outlines the baseline ecological conditions within the Site and Study Areas, outlines the methodology that will be used for the identification and assessment of effect within the EIAR.

6.1.2 This Chapter is supported by the following figure:

- Figure 6.1: Statutory Sites with Ecological Interests.

6.2 Baseline Conditions

6.2.1 The desk study information gathered to date has identified designated areas in the vicinity of the Site. Habitat surveys have determined the vegetation communities present.

Designated Sites

6.2.2 Statutory sites with ecological features (habitats and non-avian species) as qualifying interests have been identified using NatureScot sitelink[47] and the Department for the Environment, Food and Rural Affairs (DEFRA)'s MAGIC map[48], using a search area of 5 km around the Site, extended to 10 km for any sites with bats as qualifying features. The identified statutory sites are illustrated on **Figure 6.1**.

6.2.3 The Border Mires, Kielder-Butterburn Special Area of Conservation (SAC) is located approximately 1.3 km to the east of the Site at its nearest point and covers open ground to the east of Wauchope Forest, located within England. The SAC is designated for its habitats, including wet heath, dry heath, blanket bog, mire and springs. The part of the SAC lying closest to the Site is also designated as a SSSI: Kielderhead & Emblehope Moors SSSI. Contiguous with Kielderhead & Emblehope Moors SSSI is the Kielderhead Moors: Carter Fell to Peel Fell SSSI, which lies on the Scottish side of the border. The Kielderhead Moors: Carter Fell to Peel Fell SSSI is 850 m to the east of the Site at its nearest point. Both SSSIs are designated for their habitats and rare plant species (as well as ornithological features). Parts of the SAC are also designated as National Nature Reserves (NNR): Kielderhead NNR and Whitelee Moor NNR. The SAC and SSSIs are separated from the Site by the valley of the Peel Burn, which prevents hydrological connectivity. For this reason, the Site is considered not to have connectivity with the Border Mires, Kielder-Butterburn SAC nor with the ecological (non-avian) qualifying features listed for Kielderhead & Emblehope Moors SSSI or Kielderhead Moors: Carter Fell to Peel Fell SSSI.

6.2.4 The River Tweed SAC is located 2.8 km to the north of the Site. This nearest point refers to the Catlee Burn, one of the many tributaries to the Tweed that are included within the designation. The qualifying features of the River Tweed SAC comprise four fish species Atlantic salmon *Salmo salar*, brook lamprey *Lampetra planeri*, river lamprey *Lampetra fluviatillis* and sea lamprey *Petromyzon marinus),* one mammal species (otter *Lutra lutra*) and one freshwater habitat ('rivers with floating vegetation dominated by water crow-foot *Ranunculus aquatilis'*). The northern edge of the Site marks a watershed boundary, in reference to Ordnance Survey 1:50,000 mapping, with the watercourses on Site flowing south into the Liddel Water and not north into the River Tweed catchment. Therefore, otter is the only qualifying feature of the River Tweed SAC with potential connectivity to the Site.

47 NautreScot (2025). *Sitelink.* Available at*:* https://sitelink.nature.scot/map [Accessed February 2025]
48 Defra (2025). *MAGIC map*. Available at: https://magic.defra.gov.uk/MagicMap.html [Accessed February 2025]

6.2.5 A woodland located 3.2 km to the north of the Site is a component part of the Border Woods SAC. The qualifying feature of this SAC is 'mixed woodland on base-rich soils associated with rocky slopes'. This woodland is also a component part of the Cragbank and Wolfehopelee SSSI which has two qualifying features, namely its beetle assemblage and upland mixed ash woodland. There is considered to be no connectivity between the Site and this SAC and SSSI woodland, given the separation distance, lack of hydrological connectivity and the nature of the qualifying interests.

6.2.6 There are no additional statutory sites within a 10 km search area and which have bat species as a qualifying feature.

6.2.7 It is understood that there are no non-statutory designated areas (local wildlife sites or similar) located within a 2 km search area of the Site, but this will be confirmed through desk study.

6.2.8 Use of NatureScot's Ancient Woodland Inventory[49] has confirmed that there are no ancient, long-established or semi-natural woodlands within the Site.

Habitats on Site

6.2.9 The results of the habitat survey (UKHab survey) undertaken on Site confirm that the majority of the Site is coniferous plantation, including felled areas.

6.2.10 Blanket bog habitat has been identified in open summit areas in the west and southwest of the Site, although much of the peatland was noted as being degraded. The blanket bog does, however, include some areas mapped as M19 *Calluna vulgaris – Eriophorum vaginatum* blanket mire (and therefore of potential national interest, in accordance with NatureScot peatland guidance).

6.2.11 The majority of the open ground in the Site that lies to the south of the forest comprises the lower value habitats of upland acid grassland, purple moor grass *Molinia caerulea* & rush *Juncus* sp. pasture and bracken *Pteridium* sp.

6.2.12 There is some potential for Groundwater Dependent Terrestrial Ecosystems (GWDTE), for example at small upland flushes, which will be investigated further and impact assessed, where required, within the EIAR.

6.2.13 Full results of the habitat surveys will be presented in the EIAR.

6.3 Assessment Scope and Methodology

Legislation, Policy and Guidance

6.3.1 Baseline survey methods will follow relevant guidance and advice. The following legislation, polices and guidance documents will be consulted during the assessment.

Legislation

- Conservation (Natural Habitats, &c.) Regulations 1994, as amended in Scotland by the Conservation (Natural Habitats, &c.) (EU Exit) (Scotland) (Amendment) Regulations 2019 (collectively 'the Habitats Regulations');
- the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (the EIA Regulations);
- Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive);
- the Wildlife and Countryside Act 1981 (as amended in Scotland);

49 NatureScot (2025). *Ancient Woodland Inventory Map.* Available at: https://opendata.nature.scot/datasets/snh::ancient-woodland-inventory/explore?location=55.292745%2C-2.645906%2C12.28 [Accessed February 2025].

- the Wildlife and Natural Environment (Scotland) Act 2011;
- the Nature Conservation (Scotland) Act 2004; and
- the Salmon and Freshwater Fisheries (Consolidation) (Scotland) Act 2003.

Policy

- NPF4[11];
- Scottish Government Onshore Wind Policy Statement[50];
- The Scottish Biodiversity Strategy to 2045[51];
- Scottish Government Planning Advice Note 60: Planning for Natural Heritage 2008[52]; and
- The Scottish Borders Council's Supplementary Planning Guidance for Biodiversity[53].

Guidance

- Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Ecological Impact Assessment (CIEEM, 2024)[54];
- NatureScot pre-application guidance for onshore wind farms[23];
- Good practice during wind farm construction[55];
- Advising on peatlands, carbon-rich soils and priority habitats in development management[56];
- Standard Advice for Planning Consultants: Protected Species[57];
- Bats and Onshore Wind Turbines: Survey, Assessment and Mitigation[58];
- Planning for development: What to consider and include in Habitat Management Plans[59];
- Assessing the Cumulative Impact of Onshore Wind Energy Developments[60];
- Chanin, P. (2003) Monitoring the Otter[61];
- Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines[62];

50 Scottish Government (2022). *Onshore wind: policy statement 2022.* Available at: Onshore wind: policy statement 2022 - gov.scot [Accessed February 2025].
51 Scottish Government (2024). *Scottish Biodiversity Strategy to 2045.* Available at: Scottish Biodiversity Strategy to 2045 - gov.scot [Accessed February 2025].
52 Scottish Government (2008). *Planning Advice Note 60: Planning for Natural Heritage 2008.* Available at: Planning+Advice+Note+60+Planning+for+Natural+Heritage.pdf [Accessed February 2025].
53 Scottish Borders Council (2006). *Supplementary Planning Guidance for Biodiversity*. Available at: https://www.scotborders.gov.uk/downloads/file/931/biodiversity [Accessed February 2025].
54 CIEEM (2024) *Guidelines for Ecological Impact Assessment in the UK and Ireland. Terrestrial, Freshwater, Coastal and Marine* (Version 1.3 updated 2024). Chartered Institute of Ecology and Environmental Management, Winchester.
55 NatureScot (2024). *Good practice during wind farm construction*. Available at: https://www.nature.scot/doc/good-practice-during-wind-farm-construction [Accessed February 2025].
56 NatureScot (2023). *Advising on peatlands, carbon-rich soils and priority habitats in development management*. Available at: https://www.nature.scot/doc/advising-peatland-carbon-rich-soils-and-priority-peatland-habitats-development-management [Accessed February 2025].
57 NatureScot (2023). *Standard Advice for Planning Consultants: Protected Species.* Available at: https://www.nature.scot/professional-advice/planning-and-development/planning-and-development-advice/planning-and-development-protected-species [Accessed February 2025].
58 NatureScot (2021). *Bats and Onshore Wind Turbines: Survey, Assessment and Mitigation.* Prepared jointly by Scottish Natural Heritage, Natural England, Natural Resources Wales, RenewableUK, ScottishPower Renewables, Ecotricity Ltd, the University of Exeter and the Bat Conservation Trust (BCT) with input from other key stakeholders.
59 NatureScot (2016). *Planning for development: What to consider and include in Habitat Management Plans* Available at: https://www.nature.scot/sites/default/files/2023-12/160324%20-%20HMP%20guidance.pdf [Accessed February 2025].
60 SNH (2012). *Assessing the Cumulative Impact of Onshore Wind Energy Developments*. Scottish Natural Heritage (SNH), now NatureScot, Inverness.
61 Chanin, P. (2003). Monitoring the Otter Lutra lutra. Conserving Natura 2000 Rivers Monitoring Series No 10. English Nature, Peterborough.
62 Collins, J. (ed.) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edition). The Bat Conservation Trust, London.

- Cresswell *et al.* (2012) UK BAP Mammals Interim Guidance for Survey Methodologies, Impact Assessment and Mitigations[63];
- UK Habitat (UKHab) Classification documents[64];
- Rodwell, J.S. (2006) National Vegetation Classification: Users' Handbook[65]
- Rodwell, J. S. (1991, 1992, 1998, 2000) British Plant Communities (Vols 1-5)[66];
- Guidance on Assessing the Impacts of Windfarm Developments on Groundwater Dependent Terrestrial Ecosystems[67];
- SFCC Habitat Surveys Training Course Manual[68];
- The Scottish Biodiversity List (SBL)[69]; and
- Scottish Borders Local Biodiversity Action Plan (2018-2028)[70].

Study Area

6.3.2 The habitat surveys (UKHab and National Vegetation Classification (NVC) surveys) covered the full Site. The surveys did not extend outside the Site boundary; however, where proposed turbines are located close to the edge of the Site, the adjoining habitat is generally conifer plantation forestry of low ecological interest.

6.3.3 Study areas for the other ecology surveys will cover infrastructure of the Proposed Development plus an appropriate additional surrounding buffer (as set out below). Should layout changes post-survey result in gaps in survey coverage that are considered important to the assessment, further data collection would be undertaken ahead of the impact assessment.

Baseline Characterisation

6.3.4 Baseline conditions will be established following a comprehensive programme of field surveys, some of which have been completed and others which shall be carried out ahead of impact assessment. All surveys will be undertaken by suitably competent and qualified ecologists in accordance with industry standard guidance. Additionally, a desk study will aim to obtain supplementary data to inform the impact assessment. Full details of data gathering methods and results will be presented within the EIAR and associated Technical Appendices.

Field Surveys

HABITAT SURVEYS

6.3.5 A habitat survey, using the UKHab classification system[64], was carried out in August 2024. The broad habitats within the Site were recorded and mapped. Target notes recorded additional information and points of interest.

63 Cresswell, W. J., Birks, J. D. S., Dean, M., Pacheco, M., Trewhella, W. J., Wells, D. and Wray, S. (2012). *UK BAP Mammals Interim Guidance for Survey Methodologies, Impact Assessment and Mitigations*. The Mammal Society, Southampton.
64 UK Habitat (UKHab) Classification documents https://www.ukhab.org/ [Aaccessed February 2025].
65 Rodwell, J.S. (2006). National Vegetation Classification: Users' Handbook. Joint Nature Conservation Committee (JNCC), Peterborough.
66 Rodwell, J. S. (1991, 1992, 1998, 2000). British Plant Communities. Vol 1-5. Joint Nature Conservation Committee (JNCC), Peterborough.
67 SEPA (2024). Guidance on Assessing the Impacts of Windfarm Developments on Groundwater Dependent Terrestrial Ecosytems. Scottish Environment Protection Agency.
68 SFCC (2007). *Habitat Surveys Training Course Manual*. Scottish Fisheries Co-ordination Centre, Pitlochry.
69 NatureScot (2020). *The Scottish Biodiversity List (SBL).* Available at: https://www.nature.scot/doc/scottish-biodiversity-list [Accessed February 2025]
70 Scottish Borders Council (2018). *Scottish Borders Local Biodiversity Action Plan (2018-2028).* Available at: https://www.scotborders.gov.uk/downloads/file/5132/local-biodiversity-action-plan-spg-2024 [Accessed February 2025].

6.3.6 In conjunction with the UKHab survey, an NVC survey was also completed in August 2024. This survey aimed to identify any vegetation communities of notable importance, such as Annex I listed habitats or priority habitats listed on the SBL.

BAT ACTIVITY SURVEYS

6.3.7 Bat activity surveys were undertaken in spring (April), summer (June) and autumn (September) 2024, based on the proposed turbine layout (available at that time) and in accordance with NatureScot guidance (2021)[58].

6.3.8 The surveys involved the deployment of 21 full spectrum static detectors, at ground level. These were placed across the Site in representative habitats and informed by turbine layout, including rides, clearings, forest edge and open ground. The number and locations of detectors is considered more than sufficient to determine baseline conditions on Site, given the majority of the Site is upland conifer plantation that typically offers relatively low suitability to bats.

6.3.9 The detectors were deployed for a minimum of 10 nights per deployment. A weather station was also placed on Site at the same time, to record weather conditions during the deployments.

6.3.10 The bat activity data will be analysed through Titley Scientific Analook Insight software (or similar) and manually checked by an experienced ecologist. The data will further be assessed in the 'Ecobat' website tool to determine relative activity when compared to other locations in this region. This assumes that current glitches with Ecobat have been repaired at the time of assessment, or where glitches with Ecobat are identified, the analysis will be undertaken but caveated as to possible errors with the output.

6.3.11 Full details of survey methods and results for the bat activity surveys would be provided within a Technical Appendix to accompany the Ecology chapter of the EIAR.

PRELIMINARY BAT ROOST ASSESSMENT

6.3.12 The preliminary bat roost assessment undertaken in 2024 involved a day-time walkover covering proposed turbine locations (at the time of survey) plus 200 m buffer, to locate and identify any features with potential for supporting roosting bats. Within the forest, the survey focused on tracks, rides and watercourses, especially where mature broadleaved trees were present. Where potential features were found, the suitability for supporting a roost was recorded. The interior of dense conifer stands were not included in the survey due to their low suitability for supporting potential roost sites. Full details of survey methods and the results of the assessment will be presented within a Technical Appendix to accompany the Ecology chapter of the EIAR.

PROTECTED MAMMAL SURVEYS

6.3.13 Walkover surveys for protected mammals are scheduled for spring/summer 2025 (one visit). The surveys will aim to identify the presence of, and distribution of field signs for, otter, water vole, *Arvicola amphibius*, badger *Meles meles* and pine marten *Martes martes*. Incidental sightings of other mammals, such as red squirrel *Sciurus vulgaris*, would be noted during survey. Surveys would be carried out by experienced ecologists, in accordance with standard guidance.

6.3.14 A Study Area comprising proposed infrastructure plus a surrounding buffer area of up to 250 m (and 100 m for existing tracks) would be covered, with this to be updated dependent on changes or additions made to project design ahead of impact assessment, to ensure sufficient data collection in accordance with guidance[57].

6.3.15 Full details of survey methods and results for the protected mammal surveys will be provided within a Technical Appendix to accompany the Ecology chapter of the EIAR.

FISH HABITAT SURVEYS

6.3.16 A fish habitat survey is scheduled for spring/summer 2025 to identify any potentially important areas of fish habitat (i.e., habitats favourable for spawning, nursery areas and juvenile and adult holding areas). In conjunction with the fish habitat survey, any potential suitable habitat for freshwater pearl mussel *Margaritifera margaritifera* would also be recorded during the survey (if encountered).

6.3.17 The survey will be undertaken by suitably qualified ecologists, in typical flow conditions, and following standard industry guidance, as set out by the Scottish Fisheries Co-ordination Centre (SFCC, 2007)[68].

6.3.18 Due to the very long combined length of watercourses lying within the Site, and the expected low suitability of these watercourses to support important fish populations, the survey would focus on watercourses close to proposed infrastructure (using a maximum surrounding buffer of 250 m), rather than covering the full Site.

6.3.19 Alongside the field survey, desk study sources would also be consulted to identify available information regarding the status of watercourses within the Site, any known barriers to fish migration and fish distribution within the relevant catchment area.

6.3.20 The above data gathering methods are considered sufficient to inform the impact assessment, on the basis that embedded mitigation during construction would prevent significant effects on aquatic ecological features. Therefore, baseline abundance and distribution surveys in the form of electrofishing surveys, are not proposed.

SPECIES SURVEYS NOT BEING UNDERTAKEN

6.3.21 In accordance with NatureScot guidance[57], there are some species groups which, following the implementation of suitable mitigation measures, are unlikely to be subject to significant effects as a result of wind farm developments. As such, they do not require surveys to inform an EIA. This includes invertebrates, reptiles and amphibians. Surveys for these species groups are therefore not proposed.

Desk Study

6.3.22 Supplementary ecological data relevant to the Proposed Development would be sought from the appropriate local biological records centres: The Wildlife Information Centre for Lothian and Borders (TWIC) and the Environmental Records Information Centre (ERIC) North East (covering Northumberland). Records would be requested covering the last 10 years for the Site plus a surrounding 2 km search area, extended to 10 km for records of bats. Identification of any local wildlife sites within the search area would also be requested.

6.4 Assessment of Significant Effects

Construction Phase

6.4.1 Following the application of standard embedded mitigation and good practice measures (which would be carried out irrespective of the ecological features recorded on Site), potential impacts on ecological features during the construction phase of the Proposed Development are considered to relate to:

- direct land take (habitat loss) to accommodate the Proposed Development;
- temporary land take for laydown areas and construction compounds;

- disturbance to, fragmentation, or severance of connecting habitat or potential commuting routes within, and adjacent to, the Proposed Development;
- disturbance and displacement resulting from site clearance and construction, plant and vehicle movements and workers' activities; and
- possible direct mortality of protected species via vehicle collision.

Operational Phase

6.4.2 For most species, operational impacts generally relate to disturbance in the vicinity of on-site activities, which are most likely to occur on a temporary basis whilst human activity is taking place. However, there may also be displacement from areas close to infrastructure throughout the operational period. Some impacts may reduce over time with habituation.

6.4.3 For bats, the operational phase presents a collision risk with the potential for foraging bats to collide with rotating turbine blades. The likelihood of collision depends on several factors, including the positioning of turbines, the behaviour of a particular bat species and weather conditions.

6.4.4 During the operational phase, with the application of good practice measures relating to wind farm operation and maintenance activities, it is considered that potential adverse impacts are restricted to the risk of collision mortality for bats. Significant adverse effects on other sensitive ecological features (such as from disturbance impacts) are not anticipated to occur during the operational period.

6.4.5 Additional adverse impacts on sensitive habitats are not anticipated during the operational phase (i.e., following any temporary or permanent losses during the construction phase).

Methodology for Assessing Impacts on Ecological Features

6.4.6 The assessment will consider the potential that the above impacts may have on relevant ecological features. The impact assessment would follow the guidelines recommended by CIEEM (2024)[54].

6.4.7 Standard measures to avoid and minimise adverse effects on ecological features will be implemented during the design process and during construction and operation; with these measures being an important part of the Proposed Development irrespective of the ecological features identified.

6.4.8 The assessment process will include the following stages:

- identification and characterisation of impacts: taking into consideration factors such as extent, magnitude, duration, timing and frequency of impact;
- determination and evaluation of Important Ecological Features (IEFs): taking into account factors such as conservation status, importance and extent/abundance on Site;
- assessment as to whether the relevant impacts identified for each IEF will result in a significant effect, based on professional judgement of the information presented (note that this would not use a matrix approach (in accordance with CIEEM guidance[54]));
- where a significant effect is concluded, additional mitigation measures to avoid and/or reduce impacts will be presented (if required);
- identification of opportunities for enhancement; and
- assessment of significance of any residual effects after the application of additional mitigation and enhancement measures.

6.4.9 Note that an Outline Biodiversity Enhancement and Management Plan (BEMP) (or similar) would accompany the EIAR.

6.4.10 In accordance with NPF4 and Policy 3, proposals must protect, conserve, restore and enhance biodiversity, whilst Policy 5 states proposals must protect carbon-rich soils, restore peatlands and minimise disturbance to soils. NatureScot guidance (2023)[56] has classified 'priority peatland' and this includes peatland communities that should be completely avoided, and other peatland communities that if affected should be compensated for the loss of the resource. The current recommendation in guidance is that restoration to achieve offsetting would be in the order of 1:10 (lost: restored). Any loss of such priority peatlands would be fully considered in the appropriate chapters of the EIAR, with mitigation, compensation and enhancement proposals provided in the Outline BEMP, as appropriate.

6.4.11 In accordance with NatureScot guidance[60], the Ecology chapter of the EIAR will include a Cumulative Impact Assessment (CIA), concerning the Proposed Development and other relevant projects.

6.4.12 In accordance with NatureScot guidance, a CIA will only be undertaken where it is considered that a project could result in significant cumulative impacts. As such, cumulative effects will only be considered for ecological features with residual impacts above negligible magnitude, as it is considered that negligible residual impacts will not add measurably to cumulative effects.

6.4.13 The CIA will include consideration of developments located within the same hydrological catchment, or within the regular range of mobile species (e.g., bats), as appropriate, out to a maximum of 10 km from the Site.

6.4.14 The cumulative assessment will, where sufficient information exists, include consideration of:

- existing wind farm developments, either built or under construction;
- approved wind farm developments, awaiting implementation; and
- wind farm proposals awaiting determination within the planning process with design information in the public domain.

6.4.15 Developments in scoping are unlikely to have sufficient information available to inform the CIA, especially given changes to project plans are still likely, and so would be excluded. Developments which have been withdrawn and/or refused would also not be considered, unless an appeal is in progress and information available.

6.4.16 Whilst single or small-scale wind turbine developments (less than three turbines) may contribute to cumulative effects, these projects would also be excluded from the assessment, as information is generally not readily available for such development, or impacts upon ecological features are not covered in sufficient detail.

6.4.17 The inclusion of non-windfarm proposals would only be considered upon request from NatureScot and other primary interest bodies, provided appropriate information to inform the assessment is available.

Ecological Features Scoped In

6.4.18 The ecological features identified for scoping into the impact assessment are listed below. However, the list will depend on the final design of the Proposed Development; as well as any additional data that might be obtained prior to the impact assessment being undertaken:

- River Tweed SAC – otter only (but only if baseline surveys indicate that otters regularly use the Site);
- habitats which are/may be:
  - Listed on Annex I of the Habitats Directive;
  - Listed on the SBL or Local BAP; and
  - Potential for GWDTE;

- bats; and
- protected mammal species (except where surveys indicate absence or very low usage of the Site).

Ecological Features Scoped Out

6.4.19 It is not necessary to carry out a detailed assessment of impacts upon ecological features that are sufficiently widespread, unthreatened and/or resilient to the impacts of a development proposal such that they are unlikely to experience a significant effect (CIEEM, 2024)[54]. This includes species that do not require surveys to inform the EIA, but which may still require appropriate mitigation measures to ensure legislative compliance.

6.4.20 As such, the assessment within the EIAR will be restricted to consideration of the effects upon ecological features which are considered 'important' on the basis of relevant guidance and professional judgement.

6.4.21 Where ecological features are unlikely to be so important in the context of the Proposed Development as to warrant a detailed assessment or where they would be unlikely to be significantly affected on the basis of baseline information, it is proposed that these are 'scoped out' of the impact assessment process. Mitigation and/or enhancement measures for such features may, however, still be outlined as appropriate within the EIA Report.

6.4.22 Those ecological features for which the evidence indicates there is no need to progress to EIA, are listed below. However, only those features identified as IEFs within the EIAR chapter shall undergo full ecological impact assessment. Justification for the determination of IEFs will be provided in the EIAR.

Designated Sites

6.4.23 The identified statutory sites mostly have ecological (non-avian) qualifying features that are immobile (e.g. habitat and floral interests), have a qualifying interest that is highly unlikely to have connectivity with the Site (beetle assemblage) or qualifying features that are physically separated from the Site (fish). Additionally, these designated areas do not have spatial or hydrological connectivity with the Site. Therefore, there is considered to be no route to impact for these designated sites. On this basis, the following sites are scoped out from assessment in the EIA Report:

- Border Mires, Kielder-Butterburn SAC;
- River Tweed SAC (in regard to fish and habitat qualifying features);
- Border Woods SAC;
- Kielderhead & Emblehope Moors SSSI;
- Kielderhead Moors: Carter Fell to Peel Fell SSSI; and
- Cragbank and Wolfehopelee SSSI.

Habitats

6.4.24 Common and widespread habitats and those of low sensitivity and/or conservation interest (e.g. conifer plantation, acid grassland, improved grassland) are proposed for scoping out for inclusion in the impact assessment.

6.4.25 Although not assessed for impacts, full results of the habitat surveys, including habitat loss calculations for all habitats on Site, will be presented in the Ecology Chapter and associated Technical Appendix.

Protected Species

6.4.26 Any protected mammal species that are found to be absent from the Site, or likely to be present only occasionally or in very low numbers, will not warrant impact assessment in the EIA Report.

6.4.27 However, due to their conservation protections these species will still be considered in respect to these legal implications, and they may also be discussed in regard to mitigation and enhancement measures, where appropriate.

Fish

6.4.28 Unless data gathering indicates that fish (and freshwater pearl-mussel) should be treated as IEFs and require impact assessment, it is expected that these ecological features can be scoped out. Embedded mitigation measures listed in the CEMP would include a Water Quality and Fish Monitoring Plan as well as measures to avoid/minimise the potential for pollution incidents, and mitigation by design would ensure free passage of fish within all watercourses on Site. Due to these protections to aquatic features on Site there is considered no need to include these features in the impact assessment of the EIAR.

6.4.29 Nevertheless, the fish habitat surveys would be fully reported upon in a Technical Appendix to accompany the Ecology Chapter.

Other Taxa

6.4.30 Reptiles, amphibians, invertebrates and other ecological features where not listed elsewhere in this chapter, would not be included in the impact assessment of the EIAR. However, they may be discussed in regard to habitat enhancement measures, where appropriate.

Table 6.1: Questions to Consultees

Q6.1: Do consultees agree that the scope of ecological field surveys and desk study undertaken is sufficient and appropriate to inform the assessment?
Q6.2: Do consultees consider there to be any other key information sources that require consultation, in respect to data gathering and assessment for ecological features?
Q6.3: Do consultees agree with the proposed scope of the impact assessment and the ecological features to be considered?
Q6.4: Do consultees agree that it is reasonable to consider embedded mitigation at the outset of assessment, and scope those ecological features for which embedded mitigation will be sufficient to prevent significant effects out of detailed impact assessment?

7. ORNITHOLOGY

7.1 Overview

7.1.1 This Chapter summarises the potential effects of the construction and operation phases of the Proposed Development on ornithological features. This Chapter outlines the baseline ornithological conditions within the Site and Study Area, outlines the methodology that will be used for the identification and assessment of effect within the EIAR.

7.1.2 This Chapter is supported by the following figures:

- Figure 7.1: Statutory Sites with Ornithological Interests;
- Figure 7.2: Vantage Point locations (Year 1); and
- Figure 7.3: Vantage Point locations (Year 2).

7.2 Baseline Conditions

7.2.1 The results of a comprehensive programme of field surveys and desk study undertaken to date has allowed the baseline conditions on Site to be determined in relation to ornithological features.

Designated Sites

7.2.2 Statutory sites with avian species as qualifying interests have been identified using NatureScot sitelink[47] and the Department for the Environment, Food and Rural Affairs (DEFRA)'s MAGIC map[48], using a search area of 10 km around the Site (extended to 20 km for wintering geese). The identified statutory sites are shown on **Figure 7.1**.

7.2.3 Kielderhead Moors: Carter Fell to Peel Fell Site of Special Scientific Interest (SSSI) is located on open ground approximately 850 m to the east of the Site, at its nearest point. The SSSI is designated for its breeding bird assemblage (as well as its heathland and bog habitats). Breeding birds include golden plover *Pluvialis apricaria* and dunlin *Calidris alpina* on the higher moors, four Schedule 1 raptor species associated with extensive open moorland and one that utilises forest edge, ring ouzel *Turdus torquatus*, wheatear *Oenanthe oenanthe* and whinchat *Saxicola rubetra* in the cleuchs, as well as snipe *Gallinago gallinago*, curlew *Numenius arquata*, redshank *Tringa tetanus* and teal *Anas crecca*. These are therefore mostly open ground species that would generally avoid conifer plantation habitat. However, there is potential for limited connectivity with the Site for some of the qualifying features.

7.2.4 Kielderhead Moors: Carter Fell to Peel Fell SSSI is contiguous with Kielderhead & Emblehope Moors SSSI, which is located on the English side of the border and is approximately 1.3 km to the east of the Site at it nearest point. Ornithological features listed in the citation are similar to those of the adjoining SSSI and comprise a breeding bird assemblage that includes golden plover and dunlin, birds of prey that forage on the moor, typical moorland species such as dipper *Cinclus cinclus*, common sandpiper *Actitis hypoleucos*, ring ouzel, wheatear and whinchat, and moorland fringe species such as lapwing *Vanellus vanellus*, oystercatcher *Haematopus ostralegus* and curlew on the lower moors and grasslands. Parts of Kielderhead & Emblehope Moors SSSI are also designated as the Kielderhead National Nature Reserve (NNR) and Whitelee Moor NNR.

7.2.5 There is one internationally designated site with ornithological interests that lies within 10 km of the Site: the Langholm – Newcastleton Hills Special Protection Area (SPA) which is designated for breeding hen harrier *Circus cyaneus*. The SPA is located approximately 7.5 km to the south west of

the Site at its nearest point. Hen harrier has a core foraging range in the breeding season of 2 km[71], and so there is considered to be no connectivity between the Site and the SPA.

7.2.6 The Langholm - Newcastleton Hills Site of Special Scientific Interest (SSSI), which mostly covers the same area as the SPA, includes in its citation a breeding bird assemblage that includes 'six raptor species', 'nine wader species' and black grouse *Lyrurus tetrix*. The SSSI is also considered to have no connectivity with the Site given the large separation distance.

Flight Activity

7.2.7 **Table 7.1** summarises the results of the Vantage Point (VP) flight activity surveys undertaken. Overall, flight activity across the Site is low. Noting that the majority of goose flight activity shown in **Table 7.1** reflects migrating flocks passing high over the Site, above collision risk height.

7.2.8 It should also be noted that not all of those species recorded in **Table 7.1** will be 'at collision risk' flights; i.e. they have not been filtered at this stage for location (within/without rotor swept area) or height (below/at/above collision risk height) given turbine specifications and the Proposed Development layout are yet to be finalised.

Table 7.1: Target Species Recorded During Baseline Vantage Point Surveys (March 2023 to February 2025)

Species	Number of Flights	Number of Individuals
Barnacle goose *Branta leucopsis*	1	40
Barn owl *Tyto alba*	2	2
Curlew	1	1
Golden plover	2	8
Goosander *Mergus merganser*	1	1
Goshawk *Accipiter gentilis*	15	16
Greylag goose *Anser anser*	9	241
Lapwing	1	4
Merlin *Falco columbarius*	2	2
Peregrine *Falco peregrinus*	2	2
Pink-footed goose *Anser brachyrhynchus*	10	798
Red kite *Milvus milvus*	5	6
Shelduck *Tadorna tadorna*	2	6
Teal	1	5

Breeding Schedule 1 Species

7.2.9 Field surveys have identified an occupied goshawk territory within the southeastern part of the Site. Desk study records have highlighted two further goshawk territories close to the Site, but known nesting areas are more than 750 m from the Site.

71 SNH (2016). *Assessing connectivity with Special Protection Areas (SPAs).* Scottish Natural Heritage Guidance: Version 3 - June 2016. Scottish Natural Heritage, now NatureScot, Inverness.

7.2.10 Desk study records have highlighted two peregrine territories, one more than 1 km from the Site and the other more than 7 km from the Site. Neither territory is occupied every year, with the territory closest to the Site last occupied in 2019.

7.2.11 A potential barn owl nest site and merlin territory was identified during field surveys, within the 2 km buffer of the Site.

7.2.12 Red kite has been recorded irregularly during surveys and no evidence of breeding behaviour has been recorded in the vicinity of the Site.

7.3 Assessment Scope and Methodology

Legislation, Policy and Guidance

7.3.1 Baseline ornithology surveys have been carried out in reference to NatureScot guidance, and using additional sources of information as set out in:

- Recommended bird survey methods to inform impact assessment of onshore wind farms[72].

7.3.2 Species of interest during survey and assessment have been informed by:

- Annex 1 'Priority bird species for assessment when considering the development of onshore wind farms in Scotland'[73];
- The Wildlife and Countryside Act (WCA) 1981 – Schedule 1 species;
- European Council Directive 2009/147/EC on the conservation of wild birds (Birds Directive) – Annex I species;
- Scottish Biodiversity List (SBL)[69];
- 'Fifth Birds of Conservation Concern' (BoCC) (Stanbury *et al*., 2021)[74]; and
- Scottish Borders Local Biodiversity Action Plan (2018-2028)[70].

7.3.3 The impact assessment for ornithological features will follow the guidance and information provided by:

- Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Ecological Impact Assessment[75];
- Pre-application guidance for onshore wind farms[23];
- Assessing connectivity with Special Protection Areas (SPAs)[71];
- Assessing significance of impact from onshore windfarms on birds outwith designated areas[73];
- Assessing the cumulative impact of onshore wind farms on birds[76];
- Disturbance distances in selected Scottish bird species (Goodship & Furness, 2022)[77];

72 SNH (2017). Recommended bird survey methods to inform impact assessment of onshore wind farms (Version 2, March 2017). Scottish Natural Heritage (SNH), now NatureScot, Inverness.

73 SNH (2018). Assessing significance of impacts from onshore wind farm outwith designated areas. Guidance. Version 2 - February 2018. Scottish Natural Heritage (SNH), now NatureScot, Inverness.

74 Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D. and Win, I. (2021). The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. British Birds, 114: 23–747.

75 CIEEM (2024) *Guidelines for Ecological Impact Assessment in the UK and Ireland. Terrestrial, Freshwater, Coastal and Marine* (Version 1.3 updated 2024). Chartered Institute of Ecology and Environmental Management, Winchester.

76 SNH (2018), *Assessing the cumulative impacts of onshore wind farms on birds*. Scottish Natural Heritage Guidance Note. Scottish Natural Heritage, now NatureScot, Inverness.

77 Goodship, N.M. and Furness, R.W. (MacArthur Green) (2022). Disturbance Distances Review: an updated literature review of disturbance distances of selected bird species. NatureScot Research Report 1283.

- Natural Heritage Zones (NHZ) bird population estimates (Wilson *et al*., 2015)[78];
- Guidance on using an updated collision risk model to assess bird collision risk at onshore wind farms[79]; and
- Use of avoidance rates in the NatureScot Wind Farm Collision Risk Model[80].

Study Area

7.3.4 Baseline ornithology surveys commenced ahead of a turbine layout being available; hence, Study Areas based on the Site were used for the Breeding Schedule 1 Raptor Searches, Black Grouse Searches and Breeding Nightjar Surveys, rather than Study Areas based around the proposed layout.

Baseline Characterisation

7.3.5 Baseline conditions have been established following a comprehensive programme of field surveys. A summary of the survey types undertaken to inform the assessment is provided below.

Field Surveys

VP Flight Activity Surveys

7.3.6 VP flight activity surveys have been undertaken in reference to NatureScot survey guidance (SNH, 2017)[72]. Surveys commenced in March 2023 from four VP locations and continued until February 2024, to provide one year of surveys. Following evolution of the proposed turbine layout, a second year of flight activity surveys was undertaken using a new combination of VP locations (March 2024 to February 2025). Three of the VP locations remained the same between survey years. VP locations are illustrated on **Figure 7.2** and **Figure 7.3**.

7.3.7 Although changing VP locations partway through the baseline survey programme is best avoided, if possible, the Collision Risk Model (CRM) analysis will take this into account by incorporating spatial and temporal survey effort per VP.

7.3.8 The majority of the proposed turbine locations have received two full years of baseline flight activity surveys, although turbines in the southwest and northern edges of the Site have only received one year of coverage. Given the low bird activity across the Site and the low variation recorded between the survey years, survey effort is considered sufficient to determine baseline conditions, in accordance with NatureScot guidance[72].

7.3.9 Providing full coverage of all proposed turbine locations is difficult due to the extensive forestry on Site, the hill-and-valley topography and surveyor access only being permitted within the Site. Coverage is considered to be good in this context. However, it is acknowledged that proposed turbines on the eastern edge of the Site are located outside the viewsheds of the VPs used during baseline surveys. Coverage of this area was investigated but found not to be possible due to restricted views. This is not considered to be a substantive constraint as the CRM analysis is not spatially explicit, but rather it takes average flight activity rates within each viewshed and applies these across the full collision risk area (turbine locations and specified buffer area). As the plantation habitats on Site are well represented from the surveyed viewsheds, applying activity rates to the

78 Wilson, M. W., Austin, G. E., Gillings S. and Wernham, C. V. (2015). Natural Heritage Zone Bird Population Estimates. SWBSG Commissioned report.

79 NatureScot (2024). *Guidance on using an updated collision risk model to assess bird collision risk at onshore wind farms.* Available at: https://www.nature.scot/doc/guidance-using-updated-collision-risk-model-assess-bird-collision-risk-onshore-wind-farms [Accessed February 2025]

80 SNH (2018). *Avoidance rates for the NatureScot Wind Farm Collision Risk Model*. Scottish Natural Heritage Guidance: Version 2 - September 2018. Scottish Natural Heritage, now NatureScot, Inverness

gap in coverage for this part of the Site is considered an appropriate approach. Limitations in coverage will be addressed in the EIAR.

7.3.10 During the VP flight activity surveys 'target' species were recorded in detail (including recording into height bands) and these comprised all Annex 1 and Schedule 1 listed raptors and owls, all waders, all waterfowl (excluding feral species and mallard) and black grouse, as observed during survey.

7.3.11 'Secondary' species, which were summarised during VP flight activity surveys but not mapped (in accordance with NatureScot guidance[72]), comprised widespread and common raptor species (such as common buzzard and sparrowhawk), raven, cormorant, mallard, feral waterfowl, grey heron, all gulls and any notable aggregations of passerine species.

7.3.12 Survey effort is summarised in **Table 7.2**. This confirms that the minimum survey effort recommended in guidance of 36 hours per VP per season was achieved (where the 'breeding season' is taken to be March to August and the 'non-breeding season' is taken to be September to February).

Table 7.2: Vantage Point Survey Effort (hours)

VP	Year 1 (2023/24)													
	Mar	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Total**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Total**
1	0	12	6	6	6	6	**36**	6	6	6	6	6	6	**36**
2a	0	6	12	6	6	6	**36**	6	6	6	6	6	6	**36**
3b	6	0	12	6	6	6	**36**	6	6	6	6	6	6	**36**
4	0	12	6	6	6	6	**36**	6	6	6	6	6	6	**36**
	Year 2 (2024/25)													
VP	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Total**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Total**
1	6	6	6	6	6	6	**36**	6	6	6	6	6	6	**36**
2c	6	6	6	6	6	6	**36**	6	6	6	6	6	6	**36**
3b	6	6	6	6	6	6	**36**	6	6	6	6	6	6	**36**
4	6	6	6	6	6	6	**36**	6	6	6	6	6	6	**36**
5	6	6	6	6	6	6	**36**	6	6	6	6	6	6	**36**
6	6	6	6	6	6	6	**36**	6	6	6	6	6	6	**36**

BREEDING SCHEDULE 1 RAPTOR SEARCHES

7.3.13 Dedicated surveys were conducted for Schedule 1 and Annex 1 listed raptor and owl species, and were informed by species-specific survey recommendations in Hardey *et al*. (2013)[81] and in accordance with NatureScot guidance[72].

7.3.14 Searches consisted of a combination of walkovers and ad-hoc VP watches of suitable habitat features, in order to determine territory occupancy and any evidence of breeding behaviour. The surveys covered the Site plus a surrounding 2 km buffer. Coverage outside the Site was achieved

81 Hardey, J., Crick, H., Wernham, C., Riley, H., Etheridge, B. and Thompson, D. (2013) Raptors: a field guide to survey and monitoring. (Third edition). The Stationary Office, Edinburgh.

by scanning from suitable locations within the Site and the use of appropriate public highways, where available.

7.3.15 Raptor searches were undertaken during two breeding seasons (2023 and 2024). Survey effort for the Breeding Schedule 1 Raptor Searches is summarised in **Table 7.3**. Duplicate time/dates in the table represent two surveyors out at the same time covering different parts of the Site.

Table 7.3: Survey Effort for the Breeding Schedule 1 Raptor Searches

2023			2024		
Date	**Start Time**	**End Time**	**Date**	**Start Time**	**End Time**
26th April	08:20	14:20	19th February	11:00 11:00	17:00 17:00
4th May	07:30	13:30	17th March	06:30	12:30
28th June	05:10 16:00	08:10 19:00	26th March	09:35 13:00	12:35 16:00
18th July	04:45	10:45	2nd April	09:10	15:10
20th July	09:30	15:30	19th May	08:00 08:00	14:10 14:10
			22nd June	07:30	13:15
			25th June	07:30	13:45
			20th July	06:30	13:45

BLACK GROUSE SEARCHES

7.3.16 Dedicated searches for black grouse lekking sites were undertaken in reference to species-specific guidance provided in Gilbert *et al*. (1998)[82], and in accordance with NatureScot guidance[72].

7.3.17 The survey area comprised suitable habitats within the Site plus a surrounding 1.5 km buffer. Coverage outside the Site was achieved by scanning from suitable locations within the Site (including listening for displaying birds) and the use of public highways, where available. Habitat considered suitable for lekking black grouse, including open ground and clearfelled areas, had previously been identified during a reconnaissance visit.

7.3.18 Black grouse searches were undertaken in baseline survey year 1 (2023) with two visits made, one in each of April and May (**Table 7.4**). Surveys were undertaken in favourable weather conditions. As no black grouse were recorded in 2023, the searches were not repeated in 2024.

Table 7.4: Survey Effort for the Black Grouse Searches

Visit	Date	Start Time	End Time	Sunrise (Hawick)
1	25th April 2023	05:30	08:30	05:43
2	3rd May 2023	05:40	08:40	05:25

82 Gilbert, G., Gibbons, D.W. and Evans, J. (1998) *Bird Monitoring Methods*. RSPB, Sandy.

Breeding Nightjar Surveys

7.3.19 In year 2 of the baseline surveys (2024), a dedicated survey for breeding nightjars was undertaken. Survey methods were based on those set out in Gilbert *et al*. (1998)[82]. Suitable habitat (clearfelled and young-age plantation coupes) within the Site was visited at dusk with surveyors looking and listening for churring (singing) nightjars.

7.3.20 Two survey visits were made, one in each of June and July (**Table 7.5**), with surveys undertaken in favourable weather conditions. No nightjars were recorded.

Table 7.5: Survey Effort for the Nightjar Surveys

Visit	Date	Start Time	End Time	Sunset (Hawick)
1	20th June 2024	21:00	00:00	21:57
2	6th July 2024	21:00	00:00	21:52

Moorland Breeding Bird Survey (MBBS)

7.3.21 A walkover breeding bird survey was not carried out based on initial project design, as such surveys are not normally required in plantation forestry habitats (SNH, 2017)[72]. Although, evolution of the Site has led to the placing of some proposed turbines on to open ground to the south of the forest, these turbine locations are close to the plantation edge, and so unlikely to be an important area for breeding waders (the main focus of MBBS). Research has shown that waders generally avoid nesting close to forest edges, possibly due to predation risk (e.g. golden plover show a strong effect within 700 m (Wilson *et al*, 2013[83]) and curlew are less likely to be present within 500 m (McGrory et al., 2024[84])). Based on wader ecology and the relative paucity of records of open-ground dwelling species during VP surveys, no MBBS surveys are proposed for informing the impact assessment.

Desk Study

Raptor Study Group

7.3.22 Lothian and Borders Raptor Study Group (RSG) was contacted in June 2023 to request any records held of scarce breeding or roosting raptors within 2 km of the Site (extended to 10 km for any eagle records). These are presented in the baseline section above.

RSPB

7.3.23 In June 2023, the Royal Society for the Protection of Birds (RSPB) was contacted with a request for any records held of bird species within 2 km of the Site (extended to 10 km for any eagle records) from 2012 onwards. In their response, RSPB confirmed that they do not hold any records for this search area.

Southern Uplands Partnership

7.3.24 The Southern Uplands Partnership (SUP) was contacted in June 2023 to request any data held for black grouse within the vicinity of the Site. The data returned showed that the most recent record

[83] Wilson, J.D., Anderson, R., Bailey, S., Chetcuti, J., Cowie, N.R., Hancock, M.H., Quine, C.P., Russell, N., Stephen, L. & Thompson, D.B.A. (2013) Modelling edge effects on mature forest plantations on peatland waders informs landscape-scale conservation. *Journal of Applied Ecology* 51(1), p204-213.

[84] McGrory, R.E., Briers, R.A., Tomlin, C., Findlay, M.A., Kerslake, L.J., Riddle, N. & White, P.J.C. (2024) Impacts of forest extent, configuration and landscape context on presence of declining breeding Eurasian curlew *Numenius arquata* and implications for planning new woodland. *Forest Ecology and Management* 572.

they hold for a lek within 5 km of the Site comes from 2012, and for leks within 10 km the most recent record was in 2018 (both single birds).

7.3.25 In the request to SUP, an enquiry was also made regarding any golden eagle data held from within 10 km of the Site. It was confirmed that there is a historic breeding site for golden eagle close to the Site (used within last 15 years). To date no further data (e.g. golden eagle tagging data) has been requested from SUP, based on the Site comprising mostly extensive conifer plantation forestry that is unfavourable habitat and the expectation that golden eagles would therefore avoid this area.

EIA Reports of Other Relevant Projects

7.3.26 The proposed Liddesdale Wind Farm (Energy Consents Unit (ECU) reference: ECU00004833) site adjoins that of the Proposed Development. A preliminary review of the Scoping Report[85] for this project, was undertaken to inform the baseline surveys. This informed the decision to undertake breeding nightjar surveys in 2024.

7.3.27 The publicly available information for this, and other wind farm projects in the vicinity of the Proposed Development, shall be used in the subsequent EIAR and to inform the cumulative impact assessment (CIA), where relevant.

Other Data Sources

7.3.28 Further information to be requested to inform the impact assessment will include a data request to Northumbria Ringing Group, who may hold relevant species records (e.g. breeding raptors) from the English side of the border, but which may occur within potential ranging distance of the Site.

Informal Consultation

7.3.29 In August 2023, consultation was undertaken with NatureScot to seek comment as to the approach and scope of baseline ornithology surveys for the Proposed Development. In their response email dated 15th September 2023, NatureScot provided agreement that the survey approach and key species identified were appropriate.

7.3.30 In their recommendations, NatureScot suggested that the South of Scotland Golden Eagle Project (SSGEP) be contacted for information. Contact has been made with SSGEP (through the SUP data request), but no tagging data has been requested. It is not anticipated that this data will be sought to inform the impact assessment. Plantation forestry, such as that found across the Site, is little used by golden eagles. If historic ranges were to become re-occupied in the wider area around the Site, it would be safe to conclude that the Site itself would not be an important part of such a range, as it is the availability of sufficient open hill ground that is required. Re-establishment of a golden eagle territory within the Kielder Moors area would not be prevented by works taking place within areas of existing mature plantation that would already be avoided. In addition, it is loss of suitable habitat, rather than collision risk, that is generally regarded as being the main impact on golden eagles as a result of wind farms. No golden eagles were recorded during the VP flight activity surveys.

<u>Cumulative Effects</u>

7.3.31 In accordance with NatureScot guidance (SNH, 2018)[76] the Ornithology chapter of the EIAR will include a Cumulative Impact Assessment (CIA), concerning cumulative collision and displacement impacts from the Proposed Development and other relevant projects.

[85] EDF (2023). *Liddesdale Wind Farm Scoping Report.* Available at: https://www.edf-re.uk/wp-content/uploads/2023/06/Liddesdale-wind-farm-Scoping-Report-June-2023.pdf [Accessed February 2025].

7.3.32 a CIA will only be undertaken where it is considered that a project could result in significant cumulative impacts. As such, cumulative effects will only be considered for ornithological features with residual impacts above negligible magnitude, as it is considered that negligible residual impacts will not add measurably to cumulative effects.

7.3.33 The CIA will consider the potential for cumulative effects at the regional scale, using Natural Heritage Zones (NHZ) where appropriate, in accordance with NatureScot guidance[76], and where information for the relevant NHZ (NHZ 20: Border Hills) is available. Should such information not be made available at the time the impact assessment is carried out, then cumulative impacts will be assessed in relation to a 20 km buffer of the Site.

7.3.34 The cumulative assessment will, where sufficient information exists, include consideration of:

- existing wind farm developments, either built or under construction;
- approved wind farm developments, awaiting implementation; and
- wind farm proposals awaiting determination within the planning process with design information in the public domain.

7.3.35 Developments in scoping are unlikely to have sufficient information available to inform the CIA, especially given changes to project plans are still likely, and so would be excluded. Developments which have been withdrawn and/ or refused would also not be considered, unless an appeal is in progress and information available.

7.3.36 Whilst single or small-scale wind turbine developments (less than three turbines) may contribute to cumulative effects, these would also be excluded from the assessment (in line with guidance[76]) as information is generally not readily available for such development, or impacts upon ecological features are not covered in sufficient detail.

7.3.37 The inclusion of non-windfarm proposals would only be considered upon request from NatureScot and other primary interest bodies, provided appropriate information to inform the assessment is available.

7.4 Assessment of Significant Effects

Construction Phase

7.4.1 The construction of turbine bases, access tracks and associated infrastructure would lead to direct and permanent habitat loss. The impact of habitat loss upon ornithological features would depend on the extent of the land-take, the type of habitat affected, the bird species identified as using these areas and the way in which these birds are using the habitat (e.g. for breeding or foraging). Where a development is constructed on habitats that are prevalent in the Site and the wider area, the area of direct habitat loss would be proportionately low compared to the available habitat in the surrounding area. This is the case for the Proposed Development and therefore habitat loss is unlikely to have a significant adverse effect on ornithological features.

7.4.2 During construction, and in the absence of specific mitigation, there is potential for impacts upon ornithological features arising from disturbance to, and direct loss of, nest sites, eggs and/or dependent young where these are present in the vicinity of construction works.

7.4.3 In addition, construction activities may be predicted to result in a temporary increase in noise, vibration and human presence within construction areas and this has the potential to displace birds from the vicinity of construction areas for the duration of works, which could prevent access to nesting, roosting or foraging areas (indirect habitat loss). Impacts would likely be greatest during the breeding season (generally between March and August, depending upon the species), but the impacts are variable between sites and species. The potential for disturbance to occur will be

assessed on the basis of current species guidance and available literature, and which will be referred to within the EIAR.

7.4.4 Overall construction disturbance and displacement impacts would be considered temporary and would occur only when construction activities are taking place. Furthermore, construction would not be expected to take place over the whole project area, but within defined working areas that would be phased across the construction period.

Operational Phase

7.4.5 The level of human activity on Site during the operational phase of the Proposed Development would be considerably lower than during the construction phase but is assumed to be higher than during the baseline. The increase in human presence, both generally and during routine maintenance works, has the potential to cause temporary disturbance and to displace birds from around the area of activity.

7.4.6 In addition, there may be displacement from around infrastructure, particularly turbines, throughout the operational period.

7.4.7 The area in which birds may be affected by disturbance and displacement impacts depends on the sensitivity of the bird species in question. The potential for disturbance to occur to relevant species, will be assessed on the basis of current species guidance and available literature, which will be referred to within the EIAR.

7.4.8 Tall structures, especially those with moving parts, could result in flying birds colliding with these structures. Collision with turbines (rotors or towers) is almost certain to result in the death of the bird. The likelihood of a collision occurring depends on a number of factors, including aspects of the size and behaviour of the bird species, the nature of the surrounding environment, and the design and layout of the structures. Collision risk is perceived as being highest for birds that spend much of the time in the air (such as large raptors) or which have low manoeuvrability (such as geese).

7.4.9 CRM would be undertaken to estimate the potential mortality risk to relevant species, as a result of the Proposed Development. In accordance with the principles of proportionate EIA, CRM would only be undertaken for target species with sufficient flight activity that there is potential for a significant effect. On this basis, only target species with three or more flights (or 10 or more individuals) considered to be 'at collision risk' would be subjected to CRM analysis; where the identification of at collision risk flights would be set out in the EIAR. As the Site does not have connectivity with any designated sites with pink-footed goose as a qualifying feature, CRM analysis would not be undertaken for this species, in accordance with NatureScot guidance.

7.4.10 The presence of turbines may create a barrier to movement, if birds avoid passing through the structures. For birds that have to regularly fly over or around obstacles this may lead to greater energy expenditure, which could potentially lead to reduced breeding success or survival. Birds susceptible to this potential impact are those associated with daily movements between roosting and foraging sites, or for birds moving between nest sites and favoured feeding areas along regularly used flightpaths. Based on the data gathered, there are no ornithological features in the vicinity of the Site that make such regular movements across the Site and therefore barrier effects would not be included in the impact assessment for the Proposed Development.

<u>Methodology for Assessing Impacts on Ornithological Features</u>

7.4.11 The impact assessment would consider the potential that the above impacts may have on relevant ornithological features. The impact assessment would follow the guidelines recommended by CIEEM (2024)[75].

7.4.12 Standard measures to avoid and minimise adverse effects on ornithological features would be implemented during the design process and during construction and operation; with these measures being an important part of the Proposed Development irrespective of the ornithological features identified (e.g., pre-felling nest checks and the production of a Breeding Bird Protection Plan (BBPP) or similar document, to ensure compliance with conservation legislation). These embedded mitigation measures would be considered from the outset when undertaking the impact assessment.

7.4.13 The assessment process would include the following stages:

- identification and characterisation of impacts: taking into consideration factors such as extent, magnitude, duration, timing and frequency of impact;
- determination and evaluation of Important Ornithological Features (IOFs): taking into account factors such as conservation status, importance and frequency/abundance on Site;
- assessment as to whether the relevant impacts identified for each IOF would result in a significant effect, based on professional judgement of the information presented (note that this would not use a matrix approach (in accordance with CIEEM guidance[75]));
- where a significant effect is concluded, additional mitigation measures to avoid and/or reduce impacts would be presented (if required);
- identification of opportunities for enhancement; and
- assessment of significance of any residual effects after the application of additional mitigation and enhancement measures.

Ornithological Features and Impacts Scoped In

7.4.14 The ornithological features identified for scoping into the impact assessment are listed below. However, the list will depend on the final design of the Proposed Development and the level of flight activity determined as being at collision risk; as well as any additional data that might be obtained prior to the impact assessment being undertaken. However, the following ornithological features are currently identified for inclusion in the impact assessment:

- goshawk (disturbance/ displacement and collision impacts);
- barnacle goose, greylag goose and red kite (collision impacts) but only if it is determined that these species qualify for CRM (three or more flights (or 10 more individuals) at collision risk);
- Schedule 1 raptors recorded regularly or known to be breeding/ suspected of breeding within 2 km of the Site, namely peregrine, merlin and barn owl (disturbance/ displacement impacts only);
- Kielderhead Moors: Carter Fell to Peel Fell SSSI; and
- Kielderhead & Emblehope Moors SSSI.

Ornithological Features and Impacts Scoped Out

7.4.15 It is not necessary to carry out a detailed assessment of impacts upon ornithological features that are sufficiently widespread, unthreatened and/or resilient to the impacts of a development proposal such that are unlikely to experience a significant effect (CIEEM, 2024)[75]. This includes species that do not require surveys to inform the EIA, but which may still require appropriate mitigation measures to ensure legislative compliance (e.g. those with nests).

7.4.16 As such, the assessment within the EIA Report will be restricted to consideration of the effects upon ornithological features which are considered 'important' on the basis of relevant guidance and professional judgement.

7.4.17 Where ornithological features are unlikely to be so important in the context of the Proposed Development as to warrant a detailed assessment or where they would be unlikely to be significantly affected on the basis of baseline information, it is proposed that these are 'scoped out' of the impact assessment process. Mitigation and/or enhancement measures for such features may, however, still be outlined as appropriate within the EIAR.

7.4.18 Those ornithological features for which the evidence indicates there is no need to progress to EIA, are listed below. However, only those species identified as IOFs within the EIAR chapter shall undergo full ecological impact assessment. Justification for the determination of IOFs will be provided in the EIA Report.

Designated Sites

7.4.19 Langholm – Newcastleton Hills SPA and SSSI based on the separation distance from the Site (more than 7 km) and the core foraging range of hen harrier and other raptor and wader species (SNH, 2018[73]).

Target Species Recorded Occasionally

7.4.20 Target species during VP flight activity surveys which were only occasionally recorded can be concluded as having a negligible collision risk, which would have no significant effect at any population scale. Most species recorded during the VP surveys fall into this category due to the low level of activity recorded. This reflects the habitats present on Site which are mostly unsuitable for species such as waders and waterfowl.

Species Not Recorded During Baseline Surveys

7.4.21 Where the desk study and baseline survey results have concluded that a species is not present in the vicinity of the Site, these species are scoped out of the assessment. This includes species that have been identified as historically present but not so in recent years and which cannot be considered as part of the baseline. Golden eagle, black grouse, nightjar and other species not recorded during surveys are therefore scoped out.

Secondary Species

7.4.22 Secondary species during VP flight activity surveys comprise widespread species that are mostly of low conservation status or do not have additional protections (e.g. not listed on Schedule 1/ Annex I). No significant effect on the populations of these species would result from the Proposed Development.

Passerine Species

7.4.23 NatureScot guidance (SNH, 2017)[72] states that passerine species (small perching birds) do not generally require survey (or assessment) as these species are not significantly impacted by wind farm developments. The exception are Schedule 1 listed passerines. One such species is likely to be found on Site, and that is common crossbill. NatureScot guidance states that crossbills may need to be taken into account in species protection plans for proposals in commercial forestry. Therefore, it is proposed that common crossbill be named within a BBPP (or similar document) but that crossbill does not require inclusion in the impact assessment. Therefore, all passerine species are scoped out for all impacts.

Impacts Scoped Out

7.4.24 Direct habitat loss: The construction of the Proposed Development will result in relatively small permanent and temporary losses to mostly conifer plantation habitats; habitats which are subject

to rotational felling and planting as part of standard forestry management. The habitat lost will be very localised and abundant alternative habitat is present both locally and regionally. Direct habitat losses are therefore highly unlikely to be significant at a population level for any ornithological feature and will be scoped out of detailed assessment within the EIAR.

7.4.25 Barrier effects: Daily passage across the Site for birds going to regularly used breeding, foraging or roosting areas were not recorded for any ornithological features. For birds on longer migrations passing over the area, any avoidance of the Proposed Development would add a negligible diversion to such flights negotiating the hills of the Southern Uplands. Barrier effects are scoped out from the EIAR.

7.4.26 Turbine lighting: As outlined in NatureScot guidance[86], there is little evidence to suggest that lights on turbines are likely to present an existential risk to the viability of species populations attributable to the Site. Raptors and migrating waterfowl, the species most susceptible to collision with turbines, are not considered susceptible to light attraction. Although migrating passerines have been shown to be at risk from light attraction, any migrants passing over the Site would pass over innumerable other sources of artificial light during migration and so apportioning risk to the Proposed Development is not considered appropriate. The impact of turbine lighting on all ornithological features is therefore scoped out.

Table 7.6: Questions to Consultees

Q7.1: Do consultees agree that the scope of ornithological field surveys undertaken and proposed is sufficient and appropriate to inform the assessment, including in respect to VP coverage and effort?
Q7.2: Do consultees consider there to be any other key information sources that require consultation, in respect to data gathering and assessment for ornithological features?
Q7.3: Are consultees able to provide a specific list of projects that should be considered for the cumulative impact assessment and quantitative information on impacts (e.g. collision risk) for these projects, to be used in the assessment?
Q7.4: Do consultees agree with the list of ornithological features and impacts recommended for scoping out of detailed assessment within the EIA Report?

86 NatureScot (2020) *The effect of aviation obstruction lighting on birds at wind turbines, communication towers and other structures.* NatureScot Information Note September 2020 v1.1. NatureScot, Inverness.

8. HYDROLOGY, HYDROGEOLOGY, GEOLOGY AND SOILS

8.1 Overview

8.1.1 This Chapter summarises the potential effects of the Proposed Development on Hydrological, Hydrogeological, Geological and Soils (including Peat) features during the construction and operation phases of the Proposed Development. This Chapter outlines the baseline hydrological, hydrogeological, geological and soil conditions within the Site and Study Area and outlines the methodology that will be used for the identification and assessment of effect within the EIAR.

8.1.2 This Chapter is supported by the following figures:

- Figure 8.1: Watercourses;
- Figure 8.2: SNH Carbon and Peatland Map 2016; and
- Figure 8.3: National Soils Map of Scotland.

8.2 Baseline Conditions

8.2.1 There are a number of watercourses which flow through the Site, including Laidlehope Burn, Alison Sike, Cliffhope Burn, Dawston Burn and Singdean Burn (**Figure 8.1**). These all feed into the Liddel Water which is a tributary of the River Esk. SEPA characterised the Liddel Water with an overall status of Good in 2022[87].

8.2.2 Designated sites including SACs, NNRs and SSSIs are illustrated on **Figure 6.1**.

8.2.3 The SNH Carbon and Peatland 2016 map[1] shows the majority of the Site to have Class 5 peat soil (carbon-rich soils and deep peat, no peatland vegetation), with areas of Class 2 peatland across the Site where slopes are slightly steeper (**Figure 8.2**). There are also significant areas of Class 1 peatland (carbon-rich soils and deep peat, priority peatland vegetation) in the west and south west of the Site where it is not forested. The steepest slopes and the areas surrounding the B6357 public road have mineral soils. The National Soil Map of Scotland[88] shows peat, peaty gleys and peaty podzols across most of the Site (**Figure 8.3**). Mineral gleys and brown earths are shown in the vicinity of the B6357 public road.

8.2.4 The above mapping indicates that 'deep peat' is almost certainly present and possibly more widespread than indicated by these map classes. From a peat mass and carbon perspective, peat is likely to be present in discrete areas rather than continuously deep over the whole Site, and therefore sympathetic layout design avoiding the deep peat should be possible.

8.3 Assessment Scope and Methodology

Legislation, Policy and Guidance

8.3.1 Regulation of activities relating to the water environment in Scotland is the responsibility of SEPA and the relevant local authorities.

8.3.2 The European Union (EU) Water Framework Directive (WFD)[89] has been implemented in Scotland through the Water Environment and Water Services (Scotland) Act 2003 (WEWSA)[90]. This Act introduced a regulatory system for the water environment with SEPA as the lead authority working

87 SEPA (2025). *Water classification Hub*. Available at: RBMP3 [Accessed February 2025].
88 Soil Survey of Scotland Staff (1981). Soil maps of Scotland at a scale of 1:250 000. Available at: Scotland's Soils - soil maps [Accessed February 2025].
89 European Union (2000). *Water Framework Directive*. Directive 2000/60/EC of the European Parliament. Available at: https://environment.ec.europa.eu/topics/water/water-framework-directive_en [Accessed February 2025].
1. 90 Scottish Government (2003). *Water Environment and Water Services (Scotland) Act 2003.* Available at: https://www.legislation.gov.uk/asp/2003/3/contents/enacted [Accessed February 2025]

alongside the public, private and voluntary sectors. The Act ensures that all human activities with the potential to cause an adverse effect on the water environment can be controlled by establishing a framework for co-ordinated controls on water abstraction and impoundment, engineering works affecting watercourses, and discharges to the water environment.

8.3.3 The European Commission (EC) Groundwater Directive[91] provides specific measures to protect groundwater against pollution and deterioration. This Directive is implemented through the Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR)[92] (as amended), introduced under WEWSA to provide the main regulatory controls for protecting the water environment from harm. CAR introduced specific controls for activities affecting watercourses and waterbodies.

8.3.4 SEPA maintains water monitoring and classification systems that provide the data to support the aim of the WFD, namely that all waterbodies would have good ecological status, or similar objective, by 2015. The River Basin Management Plan for the Scotland River Basin District: 2021-2027[93] provide updated improvement objectives for water bodies and protected areas for the period 2021 to 2027. The classification system covers all rivers, lochs, transitional, coastal and groundwater bodies.

8.3.5 Private Water Supplies (Scotland) Regulations (2006)[94] are the main Regulations governing the quality of water supplied by private water supplies in Scotland. These Regulations supplement the Water (Scotland) Act 1980[95] and transpose the requirements of the European Council Directive 98/83/EC[96] on the quality of water intended for human consumption.

8.3.6 Of relevance to the hydrological, hydrogeological and geological scope presented within this Chapter, regard has been had to the following policies:

- NPF4[11];
- PAN 33 Development of Contaminated Land[97];
- PAN 51 Planning, Environmental Protection and Regulation 2006[98]; and
- PAN 79 Water and Drainage[99].

8.3.7 The following guidance documents will inform the assessment of effects on Hydrology, Hydrogeology, Geology and Peat.

- Scottish Renewables & SEPA (2012) Developments on Peatland: Guidance on the assessment of peat volumes, reuse of excavated peat and the minimisation of waste[100];

91 European Union (2006). European Commission Groundwater Directive. Directive 2006/118/EC of the European Parliament and of the Council. Available at: https://www.legislation.gov.uk/eudr/2006/118/contents [Accessed February 2025].
92 Scottish Government (2011). The Water Environment (Controlled Activities) (Scotland) Regulations 2011 Available at: https://www.legislation.gov.uk/ssi/2011/209/contents/made [Accessed February 2025].
93 SEPA (2021). *The River Basin Management Plan for the Scotland River Basin District: 2021-2027*. Available at: https://www.sepa.org.uk/environment/water/river-basin-management-planning/publications/ [Accessed February 2025].
94 Scottish Government (2006). *The Private Water Supplies (Scotland) Regulations 2006.* Available at: https://www.legislation.gov.uk/ssi/2006/209/contents [Accessed February 2025].
95 Scottish Government (1980). Water (Scotland) Act 1980. Available at: https://www.legislation.gov.uk/ukpga/1980/45/contents [Accessed February 2025].
96 European Union (1998). *Council Directive 98/83/EC on the quality of water intended for human consumption.* Available at: https://leap.unep.org/countries/eu/national-legislation/council-directive-9883ec-quality-water-intended-human-consumption#:~:text=This%20Directive%20concerns%20the%20quality%20of%20water%20intended,by%20ensuring%20that%20it%20is%20wholesome%20and%20clean [Accessed February 2025].
97 Scottish Government (2017). *PAN 33 Development of Contaminated Land*. Available at: https://www.gov.scot/publications/pan-33-development-of-contaminated-land/ [Accessed February 2025].
98 Scottish Government (2006). PAN 51 Planning, Environmental Protection and Regulation. Available at: https://www.gov.scot/publications/planning-advice-note-pan-51-revised-2006-planning-environmental-protection/ [Accessed February 2025].
99 Scottish Government (2006). *PAN 79 Water and Drainage*. Available at: https://www.gov.scot/publications/planning-advice-note-pan-51-revised-2006-planning-environmental-protection/ [Accessed February 2025].
100 https://www.gov.scot/publications/assessment-of-peat-volumes-reuse-of-excavated-peat-and-minimisation-of-waste-guidance/

- Scottish Government (2017) Proposed electricity generation developments: peat landslide hazard best practice guide[101];
- SEPA Supporting Guidance (SAT-SG-75) – Sector Specific Guidance: Construction Sites[102];
- SEPA Guidance for Pollution Prevention (GPP) 1: Understanding your environmental responsibilities - good environmental practices[103];
- Special Requirements for Civil Engineering Contracts for the Prevention of Pollution v2[104];
- SEPA GPP 5: Works and maintenance in or near water[105];
- SEPA Policy 19: Groundwater Protection Policy for Scotland[106];
- SEPA Policy 41: A Planning Authority Protocol Development at Risk of Flooding: Advice and Consultation[107];
- Good practice during wind farm construction, 4th edition[108];
- CIRIA C532: Control of Water Pollution from Construction Sites - Guidance for Consultants and Contractors[109];
- SEPA Guidance Note 4: Planning advice on wind farm developments, LUPS-GU4[110]; and
- SEPA Guidance Note 31: Guidance on assessing the impacts of development proposals on groundwater abstractions and Groundwater Dependent Terrestrial Ecosystems, LUPS-GU31[111].

Study Area

8.3.8 The Study Area will include all surface watercourses with hydraulic connectivity to the Site within a 1 km buffer. It will also include all Private Water Supplies (PWS) within 2 km of the Site. Peat and GWDTE assessment will focus on development areas within the Site.

101 Scottish Government (2017). Proposed electricity generation developments: peat landslide hazard best practice guide. Available at: https://www.gov.scot/publications/peat-landslide-hazard-risk-assessments-best-practice-guide-proposed-electricity/ [Accessed February 2025].
102 SEPA (2021). *SEPA Supporting Guidance (SAT-SG-75) – Sector Specific Guidance: Construction Sites*. Available at: https://www.sepa.org.uk/regulations/water/pollution-control/pollution-control-guidance/ [Accessed February 2025].
103 SEPA (2021). *SEPA Guidance for Pollution Prevention (GPP) 1: Understanding your environmental responsibilities - good environmental practices.* Available at: https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/gpp-1-understanding-your-environmental-responsibilities-good-environmental-practices/
104 SEPA (2006). *Special Requirements for Civil Engineering Contracts for the Prevention of Pollution v2.* Available at: https://www.sepa.org.uk/media/152233/wat_sg_32.pdf [Accessed February 2025].
105 SEPA (2018). *SEPA GPP 5: Works and maintenance in or near water.* Available at: https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/gpp-5-works-and-maintenance-in-or-near-water/ [Accessed February 2025].
106 SEPA (2009). SEPA *Policy 19: Groundwater Protection Policy for Scotland*. Available at: https://www.sepa.org.uk/media/34371/groundwater-protection-policy-for-scotland-v3-november-2009.pdf [Accessed February 2025].
107 SEPA (n.d.). *SEPA Policy 41: A Planning Authority Protocol Development at Risk of Flooding: Advice and Consultation*. Available at: https://www.sepa.org.uk/regulations/how-we-regulate/policies/ [Accessed February 2025].
108 Scottish Renewables, Scottish Natural Heritage, SEPA, Forestry Commission Scotland and Historic Scotland (2019). *Good practice during wind farm construction*. 4th edition. Available at: https://www.scottishrenewables.com/publications/498-guidance-good-practice-during-wind-farm-construction [Accessed February 2025].
109 CIRIA (2001). CIRIA *C532: Control of Water Pollution from Construction Sites - Guidance for Consultants and Contractors*. Available at: https://www.ciria.org/CIRIA/CIRIA/Item_Detail.aspx?iProductCode=C532&Category=BOOK [Accessed February 2025].
110 SEPA (2017). *SEPA Guidance Note 4: Planning advice on wind farm developments, LUPS-GU4*. Available at: https://www.dpea.scotland.gov.uk/Document.aspx?id=954215 [Accessed February 2025].
111 SEPA (2017). *SEPA Guidance Note 31: Guidance on assessing the impacts of development proposals on groundwater abstractions and Groundwater Dependent Terrestrial Ecosystems, LUPS-GU31.* Available at: https://www.sepa.org.uk/media/143868/lupsgu31_planning_guidance_on_groundwater_abstractions.pdf [Accessed February 2025].

Baseline Characterisation

Peat Probing – 100 m grid and coring

8.3.9 A 100 m grid has been developed for the Site to undertake initial peat probing to establish peat depths on Site.

8.3.10 In addition, the peat depth will be confirmed at approximately 15 locations using a peat auger to verify the actual peat depth, the thickness of the acrotelm, determine the mineral soil characteristics and allow for Von Post tests to be undertaken on the catotelm. This information is very valuable to verify the probing accuracy, for inputs to the peat slide risk assessment and also for the generation of the hydrogeological data inputs to the carbon calculator.

Peat Probing Report

8.3.11 The data obtained from the site investigations will be used to produce a depth of penetration probing map and an interpreted peat depth contour figure across the whole of the Site. A shaded contour interval of 0-0.5 m, >0.5-1 m, >1 – 1.5 m, >1.5-2 m, >2-3 m, >3-4 m etc will be used on the figures.

8.3.12 A peat survey report will be produced to detail the probing undertaken for inclusion as a Technical Appendix of the EIAR. The report will include tabulated results of the probing and coring as well as photographs and a table of peat conditions including Von Post measurements. Core logs of each cored location will be presented alongside the photographic record of each.

Peat Probing – Detailed Grid

8.3.13 The level of peat probing post design freeze is uncertain as it will be based on the number of turbines, other infrastructure and the length of the access tracks, as well as the required density of probing. Probing will be undertaken in accordance with the peatland survey guidance document '*Guidance on Developments on Peatland: Peatland Survey*'[112].

Peat Volume Calculations and Outline Peat Management Plan (PMP) and Desk Based Peatland Condition Assessment

8.3.14 A peat depth model will be prepared using the peat depth data collected. Peat excavation and re-use volumes will then be calculated by comparing infrastructure layout with the peat depth model.

8.3.15 To calculate the peat balance for input to the carbon calculator, the specific impacts on peat must be calculated. The peat probing campaign will allow a peat depth surface across the whole of the Site to be created. This would then be used with the ArcGIS Spatial Analysis tool to calculate the volume of peat associated with each type of infrastructure across the Site.

8.3.16 A Peat Management Plan will be included as a Technical Appendix to the EIAR. This will use the peat data obtained as well as the spatial analysis described above to develop the plan. This would present the volumes of different peat types that would be excavated and a plan for their reuse and management. The latest guidance from NPF4 and the most recent comments on this that have been issued by SEPA and NatureScot will all be used to develop a restoration plan that may include peat reprofiling, peat hag infilling, reuse of excavated peat in eroded peat areas, forest-to-bog restoration, restoration of cut peat, drain blocking, etc.

8.3.17 A desk based Peatland Condition Assessment (PCA) will also be produced.

112 Scottish Government, SNH, SEPA (2017). *Guidance on Developments on Peatland: Peatland Survey.* Available at: Guidance+on+developments+on+peatland+-+peatland+survey+-+2017.pdf [Accessed February 2025].

Peat Landslide Hazard Risk Assessment

8.3.18 For the peat landslide hazard and risk assessment (PLHRA), the initial desk study and Phase 1 peat depth probing will inform qualitative and quantitative assessments of peat landslide likelihood. These early results will be used to inform site layout decisions. Following Phase 2 peat depth probing, these assessments will be updated and areas of moderate or higher likelihood that overlap with proposed infrastructure will be subject to runout assessment. Runout assessment will determine the size and likely runout distance of a landslide should it occur. Runout distances will be compared with receptors to determine the level of risk to terrestrial and aquatic habitats, existing infrastructure and wind farm infrastructure. Mitigation measures, including micrositing, will be recommended to reduce risks to no greater than "Low" if possible. The peat landslide risk assessment will be documented in a concise Technical Appendix, with summary findings carried into the Hydrology, Hydrogeology, Geology and Peat chapter of the EIAR.

8.3.19 The following will be completed as part of the Peat Landslide Hazard Risk Assessment:

- Desk Study;
- Review of existing data and reports;
- Review of available historical imagery;
- Preparation of a site wide geomorphological map as an input layer to the qualitative risk assessment methodology; and
- Field Survey.

Hydrology

8.3.20 The Hydrology and Hydrogeology assessment will include;

- Review of GWDTE information through liaison with the ecological consultant;
- Consultation with SBC, SEPA and NatureScot;
- Review of OS mapping, aerial photography and SEPA Flood Risk and Hydrological mapping to identify watercourses on and near the Site, supplemented by a Site walkover to ground-truth these observations and to understand the scale, nature and characteristics of any watercourses;
- Identification of any Private Water Supplies (PWS) in or within 2 km of the Site;
- Site visit to identify and record all watercourse crossings and review of all Controlled Activities Regulations (CAR) requirements to input into the Watercourse Crossing Schedule. The site visit will also cover a visual survey of all areas identified by the NVC survey as being potentially groundwater dependent. If possible, a site walkover of any PWS sources within 2 km of the Site will be undertaken;
- Preparation of a Watercourse Crossing Schedule; and
- Preparation of Technical Appendices including a GWDTE Report, a Watercourse Crossing Schedule and, if required, a PWS Assessment.

8.4 Likely Significant Effects

Potential Impacts Scoped In

8.4.1 The following hazard and risk calculations will be undertaken to inform the design of the Proposed Development:

- Generation of input layers for qualitative landslide susceptibility (likelihood) assessment including geology, slope, soil, geomorphology, hydrology, land use and forestry.
- Calculation of landslide susceptibility layer showing relative likelihood of failure across the site – an early iteration will be provided to enable input to planning infrastructure locations.
- Generation of input layers for quantitative assessment (factor-of-safety); two iterations would be provided – one at an early stage in the project to enable early results to be incorporated in planning infrastructure locations, and a second for the design freeze.
- Calculation of relative likelihood of failure using infinite slope approach with best estimate parameters and sensitivity analysis.
- Comparison of qualitative and quantitative approaches to present a single 'best estimate' map of landslide likelihood (negligible to high).
- Identification of receptors (environmental, infrastructure and other) and calculation of consequences for areas of moderate or higher landslide likelihood.
- Generation of risk map based on landslide likelihood and consequence.

8.4.2 Given the scale of the Site and its proximity/connectivity in the north to the Catlee Burn and Wauchope Burn, siltation and organic loading of these watercourses by both peat landslides and poor construction management must be demonstrably prevented by robust assessment and design.

8.4.3 The potential effects on peat soils (and embedded carbon) will be evaluated through preparation of a peat management plan (PMP) in line with Scottish Renewables & SEPA (2012) guidance, supplemented with additional information as requested following scoping. Peat and soil excavation volumes will be calculated for all permanent infrastructure and temporary infrastructure, separated by acrotelm and catotelm and reuse opportunities will be identified across the Site. Where there are opportunities to offset or compensate for peat impacts by restoration of already degraded peatland, these opportunities will be prioritised and presented as part of the habitat management plan (HMP).

8.4.4 The potential effects on within-site peatlands, adjoining terrestrial and aquatic habitats, infrastructure and adjacent areas from peat landslides will be assessed through preparation of a PLHRA undertaken in accordance with Scottish Government (2017) Best Practice Guidance. Baseline peat landslide likelihood will be assessed using both qualitative and quantitative methods, with early results used to inform infrastructure placement. Following design freeze, relevant on- and off-site receptors will be identified and a consequence analysis will be undertaken to support calculation of risk. Where calculated risks are Medium or greater, location-specific risk mitigation measures will be specified.

8.4.5 The potential effects of the Proposed Development on peat soil will be assessed alongside effects on other non-peat soils and on geology informed by the PCA, PMP and PLHRA and their supporting surveys. This assessment will include consideration of sensitivity of the peat resource, magnitude of change and significance of effects.

8.4.6 The cumulative assessment will, where sufficient information exists, include consideration of:

- existing wind farm developments, either built or under construction;
- approved wind farm developments, awaiting implementation; and
- wind farm proposals awaiting determination within the planning process with design information in the public domain.

8.4.7 Developments in scoping are unlikely to have sufficient information available to inform the assessment, especially given changes to project plans are still likely, and so would be excluded.

8.4.8 The inclusion of non-windfarm proposals would only be considered upon request from regulatory bodies, provided appropriate information to inform the assessment is available.

Issues Scoped Out

8.4.9 From a Hydrological, Hydrogeological or Geological perspective, none of the topics described above have been scoped out of the EIA.

8.5 Questions to Consultees

Table 8.1: Questions to Consultees

Q8.1: Is Scottish Borders Council, NatureScot and SEPA content with the methodology for surveys and assessment?
Q8.2: Can Scottish Borders Council provide detailed information regarding Private Water Supplies within a 2 km buffer of the Site?

9. NOISE AND VIBRATION

9.1 Overview

9.1.1 This Chapter summarises the potential environmental impacts and likely significant effects upon Noise and Vibration receptors that are anticipated to arise in connection with the construction and operation of the Proposed Development.

9.2 Baseline Conditions

9.2.1 No information on the existing baseline noise conditions is currently available. It is proposed that this information will be determined using data collected during a background noise survey. It is anticipated that baseline noise levels around the Proposed Development are generally low due to the rural setting, however the presence of a number of watercourses in the area may influence background noise levels to some extent.

9.2.2 The majority of dwellings in the local area are concentrated toward the south of the Proposed Development, along with a small number of isolated dwellings distributed in and around the Site boundary. Based upon the current wind turbine layout, no turbines are located within 1 km of any noise-sensitive receptors (NSRS) (typically residential dwellings).

9.2.3 ETSU-R-97[113] and the Institute of Acoustics (IOA) Good Practice Guide[114] (GPG) state that the noise limits apply to the cumulative effect of noise from all wind turbines that may affect a particular location. An initial cumulative search has been undertaken to identify any other wind energy developments in the local area which are either operational, consented or subject to a current planning application.

9.2.4 This search identified two other wind energy developments considered to have the potential for cumulative effects:

- Millmoor Rig Wind Farm (In Planning, 4 km north east of the Proposed Development); and
- Pines Burn Wind Farm (Operational, 3.5 km north west).

9.2.5 It is of note that a proposal for a wind farm development (Liddesdale Wind Farm) adjacent to the Proposed Development is currently at the scoping stage. As stated by Bowdler et al. (2016)[115] developments at the scoping stage are not typically considered, due the lack of information and high degree of uncertainly in their design at such an early stage in the development's design. Should a validated application for Liddesdale Wind Farm be submitted during the EIA process for the Proposed Development, this will be included in the assessment of cumulative effects.

9.2.6 As part of the EIA process, a full updated cumulative search will also be undertaken to ensure that any further developments with the potential for cumulative noise effects are identified and assessed accordingly.

9.3 Assessment Scope and Methodology

Legislation, Policy and Guidance

9.3.1 ETSU-R-97 provides a framework for the assessment and rating of noise from wind turbine installations. It is the de facto standard for wind farm developments in the UK, and the methodology will therefore be adopted for the EIA assessment.

113 ETSU (1996). *ETSU-R-97 The Assessment and Rating of Noise from Wind Farms. Energy Technology Support Unit (ETSU) for the Department of Trade and Industry (DTI).*
114 Institute of Acoustics (2013). *A Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise.*
115 Bowdler *et al* (2016). *Wind farms cumulative impact assessment.* Acoustic Bulletin, Institute of Acoustics

9.3.2 The specific methodologies detailed in ETSU-R-97 will be detailed in full in the EIA Report but in summary, these provide recommendations for noise limits relating to the existing levels of background noise for quiet day-time and night-time periods.

9.3.3 The Scottish Government's Online Renewables Planning Advice[116] states that ETSU-R-97 should be used to assess and rate operational noise from wind energy developments, together with the GPG.

Study Areas

Construction Noise

9.3.4 Construction noise will be assessed for any NSRs located within 500 m of any infrastructure elements where construction activities are likely to occur. In the event that no receptors are located within this distance, the assessment of construction noise will be scoped out. In the event that a specific construction noise assessment is not required, the EIAR will provide a summary of relevant guidance and best practice construction methods, along with a commitment to adhere to best practice means of controlling noise from construction activities, as advocated by BS 5228[117].

Operational Noise

9.3.5 The Study Area for the assessment of operational noise from the Proposed Development will be the area within which noise levels are predicted to be at least 35 decibels (dB), $L_{A90,10min}$, in accordance with ETSU R 97. This typically comprises a radius of up to 2 km from the proposed turbine locations.

9.3.6 The Cumulative Noise Study Area will be defined as described in the GPG. This states that cumulative noise should be considered for all receptors in areas where the predicted cumulative noise levels from the Proposed Development together with any other wind energy developments that are operational, under construction, consented or the subject of a current valid planning application is at least 35dB $L_{A90,10min}$ and the difference between the predicted noise level for the Proposed Development and those for the other turbines is less than 10 dB. This typically comprises an area within approximately 5 km of the proposed turbine locations.

Baseline Characterisation

9.3.7 Baseline (background) noise levels, and therefore ETSU-R-97 noise limits, will be determined using data collected during a background noise survey, in line with the requirements of the GPG. Suitable monitoring locations will be selected by identifying those properties that are likely to be subject to noise levels in excess of the most stringent limit specified in ETSU-R-97 of 35dB, $LA_{90,10min}$, and in consultation with the Scottish Borders Council's (SBC) Environmental Health Officer (EHO).

9.3.8 As stated in the GPG, ETSU-R-97 background noise levels should not include any existing noise from other operational wind turbines. Given the proximity of the operational Pines Burn Wind Farm, there is potential for noise from the existing turbines to contribute to the measured background noise levels. Therefore, the resulting data will be analysed and corrected to remove the influence of these wind farms where necessary, through the use of suitable proxy monitoring locations, directional filtering, and/or modelling of existing wind turbine noise levels.

9.3.9 The Proposed Development layout and turbine selection will be subject to on-going assessment, and if necessary, modified during the design process to ensure the Proposed Development will comply with the requirements of ETSU-R-97.

116 Scottish Government (2014) *Onshore Wind Turbines* [Online] Available at: https://www.gov.scot/publications/onshore-wind-turbines-planning-advice/ [Accessed February 2025].

117 BSI (2014). *BS 5228:2009+A1:2014 Code of Practice for noise and vibration control on construction and open sites.*

9.4 Likely Significant Effects

9.4.1 Sources of noise during operation of a wind turbine are both mechanical (from machinery housed within the turbine nacelle) and aerodynamic (from the movement of the blades through the air). Modern turbines are designed to minimise mechanical noise emissions from the nacelle through isolation of mechanical components and acoustic insulation of the nacelle. Aerodynamic noise is controlled through the design of the blade tips and edges. In most modern wind turbines, aerodynamic noise is also restricted by control systems which actively regulate the pitch of the blades.

9.4.2 Whilst noise from the wind turbines increases with wind speed, at the same time ambient background noise (for example wind in trees) usually increases at a greater rate. Planning conditions are used to enforce compliance with specified noise level limits.

9.4.3 The effects of noise from the construction (where necessary) and operation of the Proposed Development will be assessed in consultation with the EHO of SBC.

Potential Impacts Scoped In

Construction Noise

9.4.4 Due to the large separation distances typically required from wind turbines to the nearest NSRs, it is anticipated that the large majority of working areas will be sufficiently remote that a detailed assessment of construction noise effects will not be required. However, this will be investigated as the Proposed Development design progresses, and any receptors which are identified within the construction noise Study Area (see **Section 9.3**) will be assessed accordingly.

Operational Noise

9.4.5 The assessment is limited to the effects on human receptors at residential properties or other NSRs, such as schools, hospitals or places of worship. Each of these receptor types are considered to be of equal value. Noise effects are assessed on the basis of the level of noise produced by the Proposed Development relative to established limits.

9.4.6 As discussed previously, an updated search will be undertaken as part of the EIA process to identify any additional wind energy developments either operational, consented or in planning which may require consideration in the assessment process. A screening exercise will then be carried out to identify which (if any) of these require inclusion in the cumulative assessment, based on consideration of the '10 dB difference' rule described in the GPG.

9.4.7 A detailed cumulative assessment will then be undertaken for each wind energy development identified by the initial screening exercise, taking account of any relevant planning conditions, installed turbine types, available headroom, and controlling properties as described in the GPG.

Issues Scoped Out

Low-Frequency Noise and Infrasound

9.4.8 A study[118], published in 2006 by acoustic consultants Hayes McKenzie on behalf of the Department of Trade and Industry (DTI), investigated low frequency noise from wind farms. This study concluded that there is no evidence of health effects arising from infrasound or low frequency noise generated by wind turbines, but that complaints attributed to low frequency noise were possibly due to a phenomenon known as Amplitude Modulation (AM) (see following section for details). In February 2013, the Environmental Protection Authority of South Australia published the results of

118 Hayes McKenzie (2006). *The measurement of low frequency noise at three UK wind farms*.

a study into infrasound levels near windfarms[119]. This study measured infrasound levels at urban locations and rural locations with wind turbines close by, and rural locations with no wind turbines in the vicinity. It found that infrasound levels near windfarms are comparable to levels away from windfarms in both urban and rural locations. Infrasound levels were also measured during organised shutdowns of the wind farms; the results showed that there was no noticeable difference in infrasound levels whether the turbines were active or inactive.

9.4.9 Bowdler et al. (2009)[120] concluded that:

"...there is no robust evidence that low frequency noise (including 'infrasound') or ground-borne vibration from windfarms generally has adverse effects on windfarm neighbours".

9.4.10 It is therefore not considered necessary to carry out specific assessments of low-frequency noise or infrasound. However, supporting information on these subjects will be provided in the EIA Report.

Amplitude Modulation

9.4.11 In its simplest form, AM, by definition, is the regular variation in noise level of a given noise source. This variation (the modulation) occurs at a specific frequency, which, in the case of wind turbines, is defined by the rotational speed of the blades, i.e., it occurs at the rate at which the blades pass a fixed point (e.g., the tower), known as Blade Passing Frequency.

9.4.12 There is a distinction between 'normal AM' of wind turbine noise, characterised as blade swish and Enhanced AM (EAM) or Other AM (OAM), sometimes characterised onomatopoeically as 'thump'. It should be noted that ETSU-R-97 describes and makes allowance for normal AM or blade swish. A study[121] was carried out in 2007 on behalf of the Department for Business, Enterprise and Regulatory Reform (BERR) by the University of Salford, which investigated the incidence of noise complaints associated with windfarms and whether these were associated with AM. The study defined AM as aerodynamic noise from wind turbines with a greater degree of fluctuation than normal at blade passing frequency. Its aims were to ascertain the prevalence of AM on UK wind farm sites, to try to gain a better understanding of the likely causes, and to establish whether further research into AM is required.

9.4.13 The study concluded that AM had occurred at only a small number (4 of 133) of wind farms in the UK, and only for between 7% and 15% of the time. It also stated that the causes of AM are not well understood and that prediction of the effect was not currently possible.

9.4.14 The 2007 study was updated in 2013 by an in-depth study undertaken by RenewableUK[122], which has identified that many of the previously suggested causes of OAM have little or no association to the occurrence of OAM in practice. The generation of OAM is based upon the interaction of a number of factors, the combination and contributions of which are unique to each site. With the current state of knowledge, it is not possible to predict whether any particular site is more or less likely to give rise to OAM, and the incidence of OAM occurring at any particular site remains low, as identified in the University of Salford study. The report includes a sample planning condition to address AM, however it has not yet been validated or endorsed by UK Government.

9.4.15 In 2016, the IOA proposed a measurement technique[123] to quantify the level of AM present in any particular sample of wind farm noise. This technique is supported by the Department of Business,

119 Environment Protection authority (2013). *Infrasound levels near wind farms and in other environments* [online] Available at: https://www.e-education.psu.edu/earth104/sites/www.e-education.psu.edu.earth104/files/Unit3/Mod11/477912_infrasound%20%282%29.pdf [Access February 2025].

120 Bowdler et al. (2009). *Prediction and Assessment of Wind Turbine Noise: Agreement about relevant factors for noise assessment from wind energy projects*. Acoustic Bulletin, Vol 34 No2 March/April 2009, Institute of Acoustics

121 University of Salford (2007). *Research into aerodynamic modulation of wind turbine noise.* URN 07/1235.

122 RenewableUK (2013). *Wind Turbine Amplitude Modulation: Research to improve understanding as to its Cause and effects*.

123 Institute of Acoustics (2016). *A Method for Rating Amplitude Modulation in Wind Turbine Noise*

Energy & Industrial Strategy (BEIS) (now the Department for Energy Security and Net Zero), who published guidance[124] which follows on from the conclusions of the IOA study in order to define an appropriate assessment method for AM, including a penalty scheme and an outline planning condition. Notwithstanding this, the suggested outline planning condition is as yet invalidated, remains in a draft form and will require site-specific legal advice on its appropriateness to a specific development. Section 7.2.1 of the GPG therefore remains current, stating:

"The evidence in relation to 'Excess' or 'Other' Amplitude Modulation (AM) is still developing. At the time of writing, current practice is not to assign a planning condition to deal with AM".

9.4.16 It is therefore not considered necessary to carry out specific assessments of AM. However, supporting information on this subject will be provided in the EIA Report.

Ground-Borne Vibration

9.4.17 Research undertaken by Snow[125] found that levels of ground-borne vibration 100 m from the nearest wind turbine were significantly below criteria for 'critical working areas' given by British Standard BS 6472:1992 'Evaluation of human exposure to vibration in buildings' (1 Hz to 80 Hz), and were lower than limits specified for residential premises by an even greater margin.

9.4.18 Ground-borne vibration from wind turbines can be detected using sophisticated instruments several kilometres from a wind farm site as reported by Keele University[126]. This report clearly shows that, although detectable using highly sensitive instruments, the magnitude of the vibration is orders of magnitude below the human level of perception and does not pose any risk to human health.

Battery Energy Storage System (BESS)

9.4.19 The proposed BESS is likely to be located over 500 m from the nearest noise-sensitive receptor. The noise sources associated with this facility (e.g., fans, transformers, inverters) would be unlikely to generate significant levels of noise at such a distance. It is therefore proposed to scope out the assessment of operational noise from the BESS for any/all receptors located more than 500 m from the final BESS location.

9.5 Questions to Consultees

Table 9.1: Questions to Consultees

Q9.1: Do SBC and consultees agree with the proposed methodology and scope of the assessment?
Q9.2: Does SBC have details of any further cumulative developments in the locality which they consider may raise significant issues within the EIA process for the proposed Development?
Q9.3: Are there any other relevant consultees who should be contacted with respect to the noise assessment?

124 BEIS (2016). *Review of the evidence on the response to amplitude modulation from wind turbines.*
125 ETSU (1997). *Low Frequency Noise and Vibrations Measurement at a Modern Wind Farm*, prepared by D J Snow.
126 Keele University (2005). *Recommendations on the siting of wind farms in the vicinity of Eskdalemuir, Scotland*.

10. TRAFFIC, TRANSPORT AND ACCESS

10.1 Overview

10.1.1 This Chapter sets out the proposed approach to the assessment of potential effects of the Proposed Development on access, traffic and transport during construction and operation of the Scheme.

10.1.2 A Transport Assessment (TA) will be provided to review the impact of transport related matters associated with the Proposed Development. This will be appended to the EIAR and will be summarised into a Traffic and Transport Chapter within the EIA.

10.2 Baseline Conditions

10.2.1 The principal road adjacent to the Site is the A68, a trunk road operated by Transport Scotland and National Highways, providing strategic connection from Northumberland to Midlothian. Local roads in proximity to the Site are operated by Scottish Borders Council (SBC) and include the A6088 and the B6357, which bisects the Site.

10.3 Assessment Scope and Methodology

Legislation, Policy and Guidance

10.3.1 The following policy and guidance documents will be used to inform the Traffic & Transport Chapter:

- Transport Assessment Guidance[127]; and
- The Environmental Assessment of Traffic and Movement[128].

10.3.2 The Environmental Assessment of Traffic and Movement sets out a methodology for assessing potentially significant environmental effects. In accordance with this guidance, the scope of assessment will focus on:

- Potential impacts (of changes in traffic flows) on local roads and the users of those roads; and
- Potential impacts (of changes in traffic flows) on land uses and environmental resources fronting these roads, including the relevant occupiers and users.

10.3.3 The main transport impacts would be associated with the movement of general HGV traffic travelling to and from the Site during the construction phase of the development.

10.3.4 The following rules taken from the guidance will be used as a screening process to define the scale and extent of the assessment:

- Rule 1: Include highway links where traffic flows are predicted to increase by more than 30% (or where the number of HGVs is predicted to increase by more than 30%); and
- Rule 2: Include any other specifically sensitive areas where traffic flows are predicted to increase by 10% or more.

10.3.5 Increases below these thresholds are generally considered to be insignificant given that daily variations in background traffic flow may fluctuate by this amount. Changes in traffic flow below this level predicted as a consequence of the Proposed Development will therefore be assumed to result in no discernible environmental impact and as such no further consideration will be given to the associated environment effects.

127 Transport Scotland (2012). *Transport Assessment Guidance.*
128 Institute of Environmental Management and Assessment (IEMA) (2023). *The Environmental Assessment of Traffic and Movement*.

10.3.6 The estimated traffic generation of the Proposed Development will be compared with baseline traffic flows, obtained from new and existing traffic survey data, in order to determine the percentage increase in traffic.

10.3.7 A cumulative assessment will take place where a development has planning consent and would have a significant impact on the study network (i.e. over 10% increase in traffic flows). These traffic flows would be included into the baseline flows used within the assessment.

10.3.8 Planning proposals that are in scoping but not have planning consent are not considered committed developments and as such would not be included in the assessment.

10.3.9 Potentially significant environmental effects will then be assessed where the thresholds as defined above are exceeded. Suitable mitigation measures will be proposed, where appropriate.

10.3.10 Standard mitigation measures that are likely to be included in the assessment are:

- Production of a Construction Traffic Management Plan;
- The design of suitable access arrangements with full consideration given to the road safety of all road users;
- A Staff Sustainable Access Plan; and
- A Framework Abnormal Load Transport Management Plan (CTMP).

10.3.11 It is not anticipated that a formal TA will be required as these are not generally considered necessary for temporary construction works. Instead, a reduced scope TA would be provided. This will include a Route Survey Report for AIL.

10.3.12 Detailed swept path analysis will be undertaken for the main constraint points on the route from the port of entry (likely to be King George V Docks, Glasgow) through to the site access junction to demonstrate that the turbine components can be delivered to site and to identify any temporary road works which may be necessary.

10.3.13 Each turbine is likely to require between 11 and 13 abnormal loads to deliver the components to site. The components will be delivered on extendable trailers which will then be retracted to the size of a standard HGV for the return journey.

Study Area and Potential Access Options

10.3.14 The traffic, transport and access Study Area will be defined by the preferred abnormal load and general construction traffic routes to Site.

10.3.15 The exact locations for the proposed Site access junctions (for construction and abnormal load traffic) have yet to be finalised and as such, the proposed Study Area covers all potential access options.

10.3.16 General construction traffic would likely access the Site from the B6357, with access junctions provided at a yet to be determined location to provide access to the western and eastern Site extents. Access to and from the access junctions would be from the north via the A6088.

10.3.17 The A6088 between its junction with the A68 and Bonchester Bridge will be included in the Study Area, along with the A68 between Rochester and Jedburgh. This will cover the routes used to access the Site for all likely bulk goods deliveries.

10.3.18 AIL access would likely be from the north of the Site, with access from the A68, A6088 and a private access track leading from the A6088 directly to the eastern development area.

10.3.19 All road links within the study area would be considered, along with active travel routes and core path routes directly affected by construction traffic movements.

Baseline Characterisation

10.3.20 The baseline traffic conditions for the assessment will be detailed in full in the EIAR. A review of existing and future road traffic conditions will be developed for the basis of the impact assessment.

10.3.21 The baseline review will cover road traffic, road accident statistics for the Study Area and Core Paths and other active travel links within the Study Area.

10.3.22 Traffic survey data for use in the assessment will be obtained from historic data sources that will include the UK Department of Transport (DfT) traffic survey database, Traffic Scotland database and other public datasets that are available.

10.3.23 Data for the A68 and A6088 will be obtained from the Transport Scotland database, whilst new Automatic Traffic Count (ATC) survey data from the B6357 would be obtained.

10.3.24 Future traffic flows will be factored from surveyed data using Low Growth factors estimated from National Road Traffic Forecasts.

10.3.25 Further traffic data will be obtained from Crashmap UK for the A6088 and B6357 to inform the accident review for the immediate road study area for a five year period.

10.4 Likely Significant Effects

10.4.1 Potential impacts that may arise during the assessment may include the following for users of the road and those residents along the delivery routes:

- Severance
- Driver Delay
- Pedestrian Delay
- Non-motorised User Amenity
- Fear & Intimidation; and
- Road Safety

10.4.2 The impacts on receptors within the Study Area will be reviewed during the construction phase, with a peak construction period assessment undertaken. This will review the maximum impact and presents a robust assessment of the effects of construction traffic on the local and trunk road networks.

10.4.3 The effects that will be considered will be based upon percentage increases in traffic flow and reviewed against the impacts noted above.

Potential Impacts Scoped In

10.4.4 The construction phase represents the phase with the greatest impact on the road network, as elements such as access tracks and junctions can be retained for agricultural and leisure uses following the dismantling of the turbine equipment.

Issues Scoped Out

10.4.5 Once operational, it is envisaged that the level of traffic associated with the proposed wind farm would be minimal. Regular monthly or weekly visits would be made to the wind farm for maintenance checks. The vehicles used for these visits are likely to be 4x4 vehicles and there may also be the occasional need for an HGV to access the wind farm for specific maintenance and/or repairs. It is considered that the effects of operational traffic would be negligible and therefore no detailed assessment of the operational phase of the development is proposed.

10.5 Questions to Consultees

Table 10.1: Questions to Consultees

Q10.1: Is the proposed methodology considered acceptable?
Q10.2: Are the methods proposed for obtaining traffic flow data acceptable?
Q10.3: Is the use of Low National Road Traffic Forecasts (NRTF) acceptable for the whole of the study?
Q10.4: What cumulative traffic flows from committed development should be included in the assessment?

11. AVIATION AND RADAR

11.1 Overview

11.1.1 This Chapter assesses the potential for the Proposed Development to affect aviation Communications, Navigation and Surveillance (CNS) infrastructure in the vicinity of the Site. The Chapter identifies the potential significant effects that the Proposed Development may have on civilian and military aviation and outlines the methodology that will be used to undertake the aviation and radar assessment, describes the baseline condition, consultation requirements, and potential mitigations to be applied if required.

11.1.2 The following are considered:

- civil aviation interests, including 'En Route' facilities managed and operated by National Air Traffic Services (En Route) Ltd (NERL), airports, licensed and unlicensed aerodromes, light aircraft landing strips, microlight sites, parachute and gliding sites; and
- military facilities including Ministry of Defence (MoD) Airfields and military Air Traffic Control (ATC) facilities, Air Defence Radars (ADR), Danger Areas and Ranges and low flying operations.

11.2 Baseline Conditions

11.2.1 The Site is in Class G (or uncontrolled) airspace under Borders Control Area (CTA) that is the main routing for air traffic to/from the south, into and out of, the Scottish Terminal Manoeuvring Area (TMA) surrounding Edinburgh, Glasgow and Prestwick airports. The Site is also close to the military training areas surrounding, and associated with, RAF Spadeadam.

11.3 Assessment Scope and Methodology

Legislation, Policy and Guidance

11.3.1 Civil Aviation Authority (CAA) Publication (CAP 764), Policy and Guidelines on Wind Turbines, provides criteria for guidance in assessing whether any wind turbine development might have an impact on civil aerodrome and aviation operations.

11.3.2 Taken collectively the reference and guidance sources establish that:

- Officially safeguarded aerodromes and aerodromes with a surveillance radar facility need to be consulted if the proposed wind turbines are within 30 km;
- Within airspace coincidental with any published Instrument Flight Procedure (IFP) to take into account the aerodrome's requirement to protect its IFPs;
- Consultation with the operators of officially safeguarded technical sites is required if the proposed wind turbines are within 10 km;
- Further assessment and/or consultation will be required if turbines are planned within:
  - 17 km of a licensed aerodrome within a runway of 1100 m or more;
  - 5 km of a licensed aerodrome with a runway of less than 1100 m;
  - 4 km of an unlicensed aerodrome with a runway of more than 800 m; and/or
  - 3 km of an unlicensed aerodrome with a runway of less than 800 m.

11.3.3 CAP 764 goes on to state that these distances are for guidance purposes only and do not represent the radar/safeguarding range beyond which all wind turbine developments will be approved or

within which they will always be objected to. These quoted ranges are intended as a prompt for further discussion between developers and aviation stakeholders.

11.3.4 It is also necessary to consider the operations of the Ministry of Defence including:

- MoD Airfields (radar and non-radar equipped);
- MoD Remote Air Traffic Control Radars;
- MoD Air Defence Radars;
- MoD Low Flying; and
- MoD Meteorological Radars.

11.3.5 The MoD does not stipulate consultation distances for their radars.

11.3.6 It will also be necessary to take into account the possible effects of wind turbines upon the NATS radar systems – a network of primary and secondary radars and navigation facilities around the country.

Study Area

11.3.7 The aviation study area and assessment has been determined by, and is dependent on, the maximum operating ranges of each of the radar systems scoped into the assessment. The operational range of the radar system is dependent on the function of the radar, the operational requirement of the radar and on the type of radar used. The ranges of those radars and, subsequently, the topic-specific study area will vary depending on the technical specification of each radar system and, possibly, between different installations of the same system. The same factors apply to other aviation infrastructure (radios/beacons).

Baseline Characterisation

11.3.8 All surveys will be desk based and from an extensive database of aviation infrastructure.

11.3.9 Specialist propagation prediction software, RView Version 5, will be used to identify potential aviation effects of the Proposed Development as its design evolves. The results will then be used as a basis for consultation and liaison with relevant aviation bodies.

11.3.10 Pre-application planning advice on the Proposed Development was received from the MoD in January 2025 (Case Reference: DIO 10035955). A response to this advice was sent in February 2025 and the Applicant is currently engaged in further consultation with the MoD.

11.4 Likely Significant Effects

11.4.1 The development of wind turbines has the potential to cause a variety of adverse effects on aviation during turbine operation. These include (but are not limited to): physical obstructions, the generation of unwanted returns on Primary Surveillance Radar (PSR) and adverse effects on the overall performance of CNS equipment.

11.4.2 There is no agreed definition for assessing significance in an aviation context. This is due to the fact that whilst technical effects on CNS systems are simple to identify and evaluate, operational and flight safety effects can be subjective and are often challenged by third parties. It is enough in this context to identify any technical effects and then, taking into account the statements in CAP 764 regarding the status of aviation stakeholders, in general to accept the judgement of those stakeholders in assessing the significance of the effects.

Potential Impacts Scoped In

11.4.3 There are potential Line of Sight implications for the Spadeadam Dead Water Fell radar. This will be confirmed, along with the nature of the operational effects and possible mitigation, through consultation with Defence Infrastructure Organisation (DIO) and will be reported within the EIAR.

11.4.4 There are potential Line of Sight implications for the Spadeadam threat radars. This will be confirmed, along with the nature of the operational effects through consultation with DIO and will be reported within the EIAR.

11.4.5 DIO will need to be consulted regarding any likely low flying implications, and this will be reported within the EIAR.

11.4.6 There are no MoD Air Defence Radars (ADRs) likely to be affected by the Proposed Development. This will be confirmed with DIO during consultation and reported in the EIAR.

11.4.7 There should be no NATS radars affected by the Proposed Development. This will be confirmed through consultation with NATS and reported within the EIAR.

Issues Scoped Out

11.4.8 There are no non-radar equipped licensed aerodromes within the recommended consultation distance and these can be scoped out from further consideration.

11.4.9 There are no unlicensed aerodromes, hang-gliding sites or glider sites within the stipulated consultation distances and these can be scoped out from further consideration.

Construction

11.4.10 Algorithms within radar systems are established to prevent static objects being detected and to ensure that only moving objects are presented to the controllers' screens. During the construction phases the wind turbine blades will be static and will not be detected. There should be no interference with radar systems.

11.4.11 There is a well-established procedure for the dissemination of information relating to construction and considered essential for the safety of flying operations, both civil and military, to allow such aviation operations to be planned and to continue accordingly. The construction activities, when conducted in accordance with mandated procedure, will not pose a risk to aviation and there should be no effect; the inherent embedded mitigation means that construction activities can be scoped out from further consideration with aviation.

11.5 Questions to Consultees

Table 11.1: Questions to Consultees

Q11.1: Is the extent of envisaged scoping considered appropriate?
Q11.2: Is there any other aviation stakeholder that could/should be consulted?

12. TELECOMMUNICATIONS

12.1 Overview

12.1.1 This Chapter sets out the proposed approach to the assessment of potential effects on telecommunications, during the construction and operation of the Proposed Development.

12.1.2 Wind turbines and other objects placed close to the path of a fixed radiocommunications link can degrade the performance of the link as a result of diffraction and reflection/scattering of the radio waves.

12.2 Baseline Conditions

12.2.1 Interrogation of the Ofcom Spectrum Information Portal[129] indicates that there are no licenced fixed radio links that pass over the Site. A communications tower is located on Wigg Knowe, approximately 115 m north of the north eastern extent of the Site. This communications tower has two fixed links which head in a north west and north east directions. In addition, there are several licenced fixed radio links within 3 km of the Site.

12.3 Assessment Scope and Methodology

Legislation, Policy and Guidance

12.3.1 The paths of any links within the Study Area will be plotted and appropriate safeguarding buffers will be calculated. These buffers will feed into the design process, with the primary aim of preventing effects by siting turbine infrastructure outwith the respective safeguarding areas. Should turbines be proposed to be sited within the identified safeguarding areas, mitigation measures will be agreed with the relevant operator(s).

Study Area

12.3.2 A search will be undertaken to identify all broadcast television and radio transmitters within a 30 km of the Site, and all telecommunication links within 2 km of the Site.

Baseline Characterisation

12.3.3 Telecommunication links with potential to be affected by the Proposed Development will be identified through a desk based study via the Ofcom Spectral Information Portal and in consultation with relevant consultees.

12.4 Likely Significant Effects

12.4.1 Wind turbines can cause electromagnetic interference through physical and electrical interference, which has the potential to be significant if not appropriately mitigated. Physical interference can cut across electromagnetic signals resulting in ghosting effect which largely affects television signals and radar. Electrical interference arises as a result of the operation of the generator within the nacelle of the turbine and can affect communication equipment in proximity to the turbines.

12.4.2 Where possible, any potential effects on radio communication links and television will be mitigated at the turbine layout design stage by the use of exclusion zones around any link paths. Where this is not feasible suitable mitigation measures will be agreed with the system operators.

129 Ofcom (2025). *Spectrum information portal*. Available at: Spectrum information portal - Ofcom [Accessed February 2025].

12.4.3 Cumulative effects will be assessed by reviewing whether any other wind developments have the potential to affect the telecommunications links that may be affected by the Proposed Development.

12.5 Questions to Consultees

Table 12.1: Questions to Consultees

Q12.1: Is the assessment methodology appropriate?
Q12.2: Does the scope of the assessment cover all potentially affected telecommunications facilities?

13. SHADOW FLICKER

13.1 Overview

13.1.1 This Chapter sets out the proposed approach to the assessment of Shadow Flicker associated with the construction and operation of the Proposed Development.

13.2 Baseline Conditions

13.2.1 A desk based analysis confirms that based on the Scoping Layout, there are a number of dwellings potentially within 10 rotor diameters of the Proposed Development.

13.3 Assessment Scope and Methodology

Legislation, Policy and Guidance

13.3.1 There is no standard for the assessment of shadow flicker in Scotland and there are no guidelines with which to quantify what exposure levels would represent a significant versus not significant effect. In the absence of specific guidelines, the assessment will consider the guidance from Northern Ireland[130] which recommends that "shadow flicker at neighbouring offices and dwellings within 500 m should not exceed 30 hours per year or 30 minutes per day". For the purposes of this assessment, all residential properties within 10 rotor diameters of the turbine locations would be considered against this criterion, with properties meeting this criterion considered to be subject to significant effects.

13.3.2 Proprietary software (WindPro) will be used to identify the potential receptors susceptible to shadow flicker based on the turbine dimensions and orientations. The location of buildings will be determined on the basis of a desk study.

13.3.3 A review of cumulative developments will be undertaken during the EIA process to identify any wind energy developments (either operational, consented or subject to a current planning application) with the potential for cumulative shadow flicker effects; any such developments will be assessed accordingly in line with the methodology set out above.

Study Area

13.3.4 Scottish Government Onshore Wind Turbines: Planning Advice[131] states that "where separation is provided between wind turbines and nearby dwellings (as a general rule 10 rotor diameters), 'shadow flicker' should not be a problem". However, recent SBC Supplementary Planning Guidance[132] refers to recent findings which show that shadow flicker can also occur beyond the threshold of 10 rotor diameters. On this basis, a study area of up to 2 km around the proposed turbines will be used.

13.3.5 Once the final turbine layout and parameters have been selected, properties within the study area to be assessed within the EIAR for shadow flicker effects will be identified.

130 Department of the Environment (2009). *Best Practice Guidance to PPS 18 'Renewable Energy'.*

131 Scottish Government (2014). *Web Based Renewables Advice 'Onshore Wind Turbines'*. Available at:

https://www.gov.scot/publications/onshore-wind-turbines-planning-advice/ [Accessed February 2025].

132 Scottish Borders Council (2024). Supplementary Planning Guidance: Renewable Energy. Available at https://www.scotborders.gov.uk/downloads/file/2757/renewable-energy-supplementary-planning-guidance [Accessed March 2025]

13.4 Likely Significant Effects

Potential Impacts Scoped In

13.4.1 There is potential for significant effects of shadow flicker under certain combinations of geographical position, times of day and year, where the sun may pass behind a turbine rotor and cast a shadow over the window(s) of neighbouring buildings, which as the blades rotate causes the shadow to appear to flick on and off.

13.4.2 If shadow flicker cannot be avoided through design, technical mitigation solutions are available and a shadow Flicker Mitigation Protocol would be proposed and agreed if required.

Issues Scoped Out

13.4.3 Where moving shadows are cast over the ground, rather than through the windows of a building, this is known as 'shadow throw'. There are no guidelines to quantify the effect and no requirement to assess 'shadow throw'. Therefore, 'shadow throw' will not be considered in the assessment.

13.5 Questions to Consultees

Table 13.1: Questions to Consultees

Q13.1: Can consultees confirm they are content with the proposed scope of the Shadow Flicker Assessment?

14. OTHER CONSIDERATIONS

14.1 Introduction

14.1.1 A number of other environmental issues will be considered in relation to the Proposed Development, including:

- Forestry
- Socio-economics;
- Climate Change;
- Air Quality;
- Population and human health;
- Ice throw; and
- Major accidents and/or disasters.

14.1.2 These topics, including reference to how they will be assessed or if they are proposed to be scoped out, are discussed in turn in the following text.

14.2 Forestry

14.2.1 The forested area within the Site includes approximately 1,370 ha of mature productive coniferous forest, managed under three separate Forest Plans. These areas are within the forest fell and replant cycle and therefore are being restructured to the UK Forestry Standard (UKFS)[133]. A more recent woodland creation was planted within the Site with support of the Rural Development Contracts funding. The gross area of this section of forest is 641 ha which includes 402 ha of productive conifer. The total area of forestry and woodland within the Site is therefore approximately 2,011 ha.

14.2.2 There are no ancient woodland sites identified in the Ancient Woodland Inventory[134] (AWI) within the Site. Native Woodland Survey of Scotland[135] (NWSS) records some 17.95 ha of various native woodland areas within the Site which includes 4.63 ha of open land habitat, acid grassland. The forestry baseline conditions are shown on **Figure 14.1**.

14.2.3 The permanent infrastructure of the Proposed Development, including all tracks, turbine hardstandings with any environmental stand-off requirements, permanent compounds, and any other permanent features will have an impact on the forest structure during the construction and operation periods through the permanent loss of woodland.

14.2.4 Temporary felling may be required where the felling for the infrastructure would render the remainder of the compartment(s) unstable and likely to suffer windthrow. This felling would be to the nearest appropriate wind firm boundary; this additional felled area would then be replanted in situ.

14.2.5 Due to the potential impacts on forestry, a Forestry Impact Assessment (FIA) will be provided as a stand-alone Technical Appendix (TA) to the EIAR.

14.2.6 The FIA will refer to relevant industry guidance including, but not limited to:

133 Forest Research (2023). *The UK Forestry Standard*. Available at https://cdn.forestresearch.gov.uk/2023/10/The-UK-Forestry-Standard.pdf [Accessed February 2025].

134 Scottish Government (2024). *Ancient Woodland Inventory*. Available at: https://www.data.gov.uk/dataset/c2f57ed9-5601-4864-af5f-a6e73e977f54/ancient-woodland-inventory-scotland [Accessed February 2025].

135 Scottish Government (2024). *Native Woodland Inventory of Scotland*. Available at: https://www.data.gov.uk/dataset/da3f8548-a130-4a0d-8ddd-45019adcf1f3/native-woodland-survey-of-scotland-nwss [Accessed February 2025].

- The Scottish Government's Policy on Control of Woodland Removal and Implementation Guidance (February 2019);
- The UK Forestry Standard, The Government's Approach to Sustainable Forestry;
- Forests and Water. UK Forestry Standard Guidelines (and other guidelines in the same series);
- SEPA Guidance on the Management of Forestry Waste[136];
- Scotland's Forestry Strategy - 2019-2029; and
- Scottish Planning Policy NPF4[11] Policy 6 Trees Woodland and Forestry.

14.2.7 Forestry sub compartment databases will be sought from the owners or agents to identify the planting years and species within the Site. A site survey will also be undertaken to confirm data and determine the likelihood of windblow should felling take place.

14.2.8 Felling for the Proposed Development will be to provide a design for the wind turbines which will be mainly determined by environmental offset requirements.

14.2.9 The TA will describe the felling for the Proposed Development in terms of "permanent felling" which will not be replanted throughout the construction and operational phases and "temporary felling" required to avoid predictable windblow and which may be replanted in situ. Temporary felling may also result from the requirements of temporary infrastructure such as temporary compounds.

14.2.10 The TA will identify the mitigation required through the Scottish Government's Control of Woodland Removal Policy[137] (COWRP) and the area of compensatory planting.

14.2.11 The UK Forestry Standards, the UK Governments' Approach to Sustainable Forestry 5th Edition (2023), will be followed and any forest operations required by the Proposed Development will adhere to the commitments made through the forest certification schemes including the UK Woodland Assurance Standard 4.0[138].

14.2.12 The TA will provide tables and figures showing the baseline species and age classes and baseline felling and replanting proposals (where these exist). Permanent and temporary felling will be described in text, tables and figures.

14.2.13 The integration of the Proposed Development into a Wind Farm Forest Plan will be a key part of the design process. A wind farm felling plan will be prepared setting out the forestry felling and management requirements, including any replanting associated with the construction and operation of the Proposed Development. Similarly, a wind farm replanting plan would be provided as part of the Forest Plan which would clearly identify the areas where peatland habitat restoration is the prime objective and therefore would not be replanted.

14.2.14 The TA will clearly identify woodland loss and the requirement for compensatory planting. The Applicant is committed to meeting this mitigation.

14.3 Socio-economics

14.3.1 The Proposed Development would generate temporary employment opportunities during the construction phase, with associated indirect and induced economic effects through additional spending on local services and resulting beneficial impacts on the local economy. Job creation during

136 Scottish Environment Protection Agency (SEPA) (2013). *Guidance on Management of Forestry Waste*. Available at https://www.sepa.org.uk/media/28957/forestry_waste_guidance_note.pdf [Accessed February 2025].
137 Scottish Government (2009). *Control of Woodland Removal Policy*. Available at https://www.forestry.gov.scot/publications/285-the-scottish-government-s-policy-on-control-of-woodland-removal [Accessed February 2025].
138 UKWAS UK (2018) *Woodland Assurance Standard.* Available at: https://ukwas.org.uk/wp-content/uploads/2018/05/UKWAS_Standard_FourthEdition_digital.pdf [Accessed February 2025].

the operational phase would be related to the ongoing operations and maintenance of the wind farm.

14.3.2 The economic effects of the Proposed Development are expected to be beneficial. This is supported by the numerous assessments of socio-economic effects undertaken as part of the EIA process for other wind farm developments in Scotland and elsewhere in the UK. Accordingly, it is proposed to scope out an assessment of socio-economic effects from the EIAR.

14.3.3 A standalone Socio-economic Statement will be submitted as part of the application in order to identify the relevant economic information related to the Proposed Development. This will include information on the direct benefits of the Proposed Development, along with the indirect benefit enabled but not directly controlled by the Applicant. Consideration will also be given to wider contribution to capital stocks that will underpin future benefits.

14.3.4 In respect of tourism and recreation, there are a number of assessments that assess the impacts of wind farms specifically on tourism. Research, such as that by BiGGAR Economics[139], suggests that there is no evidence that the presence of wind farm developments have an adverse effect on the tourism sector in Scotland, and no direct relationship has been found between the development of onshore wind farms and tourism employment at national, regional and local scales. In any case, any effects that may occur would not be expected to be significant in the context of the EIA regulations.

14.3.5 The potential impacts on visual amenity for tourism and recreational locations in proximity to the Site will be assessed in the EIAR as part of the LVIA.

14.4 Climate Change

Carbon Emissions

14.4.1 The Proposed Development itself would contribute positively to climate change mitigation through the production of renewable energy and a corresponding reduction in carbon emissions from other more carbon intensive generation sources.

14.4.2 However, it is acknowledged that the Proposed Development would still give rise to carbon emissions associated with its construction. Accordingly, a Carbon Balance assessment will be prepared and submitted as a Technical Appendix to the EIAR. The report will include a calculation of the expected carbon savings over the lifetime of the Proposed Development and will be presented using the latest version of the Scottish Government's Carbon Calculator Tool[140]. This remains the suitable standardised tool for use in relation to net carbon saving calculations for wind farm developments across the UK.

14.4.3 The assessment will be undertaken in accordance with the Scottish Government's recommended methodology[141] and will present the carbon emissions associated with ground conditions, access preparations, foundation excavations, materials used on-site, the transportation of materials and components to Site, and any other carbon loss (e.g. through the degradation of peat/peaty soils).

139 BiGGAR Economics (2021). Wind Farms and Tourism Trends in Scotland: Evidence from 44 Wind Farms. Available at https://biggareconomics.co.uk/wp-content/uploads/2021/11/BiGGAR-Economics-Wind-Farms-and-Tourism-2021.pdf [Accessed January 2025].
140 Scottish Government Carbon Calculator Tool. Available at https://www.gov.scot/publications/carbon-calculator-for-wind-farms-on-scottish-peatlands-factsheet/ [Accessed January 2025].
141 Nayak *et al*., (2010) Scottish 'Calculating Carbon Savings from Wind Farms on Scottish Peatlands – A New Approach'. Available at: https://www.gov.scot/publications/calculating-carbon-savings-wind-farms-scottish-peat-lands-new-approach/ [Accessed January 2025].

Climate Resilience

14.4.4 The vulnerability of the Proposed Development to climate change will be considered as part of the detailed design process, which will consider the potential consequences of climate change (e.g. increased flood risk potential and more extreme weather conditions).

14.4.5 The Proposed Development's response to climate resilience risks will be provided in the introductory Chapters of the EIAR and description of the Proposed Development. Consideration will be given to appropriate design mitigation measures to ensure the Proposed Development is resilient to a changing climate.

14.4.6 With adoption of a climate resilient design and the assessment of key environmental risks associated with climate change (e.g. flood risk) as an integral part of the 'scoped in' environmental topics, it is proposed to scope out an assessment of climate resilience from the EIAR.

14.5 Air Quality

14.5.1 The Proposed Development is not considered likely to give rise to significant effects on air quality. The main activities that could have potential impacts would be limited to construction works (dust from soil stripping and earthworks, from excavation, potentially including occasional blasting, and from vehicles running over unsurfaced ground) and exhaust emissions from fixed and mobile construction plant and construction vehicles. Construction works would be localised, short term, intermittent and controllable through the application of good construction practice. Fixed and mobile plant would be limited in size and number and would operate for short periods. Measures to manage air quality during construction, such as dust management, will be included in the outline CEMP to be appended to the EIAR.

14.5.2 The contributions of exhaust emissions (NO_2 and PM_{10}) from construction vehicles would likely be low, and orders of magnitude below currently UK Air Quality Strategy Objectives[142].

14.5.3 Once operational, the only source of emissions would be from occasional maintenance vehicles, and accordingly any impacts would be negligible. Therefore, it is proposed that air quality is scoped out of the EIAR.

14.6 Population and Human Health

14.6.1 The EIA will consider "human health" in terms of amenity through the assessment of potential likely significant effects associated with water supplies, air quality, noise, traffic, visual amenity and shadow flicker. Impacts on the amenity of householders, through issues such as noise and visual impacts, will be minimised. No other sources or pathways for effects on human health have been identified.

14.6.2 The potential for likely significant effects on "population" will be considered within the Socio-economic Statement which will accompany the Application (as described above).

14.6.3 Appropriate control measures to ensure that potential construction effects on air, noise and water quality are managed appropriately will be addressed through an outline CEMP which will form a Technical Appendix to the EIAR. A similar decommissioning management plan would be prepared for the decommissioning phase in line with the relevant guidance requirements at that time.

14.6.4 As such, a separate human health impact assessment Chapter and population impacts assessment Chapter will not be presented in the EIAR.

142 UK Air Quality Strategy Objectives. Available at https://uk-air.defra.gov.uk/assets/documents/Air_Quality_Objectives_Update_20230403.pdf [Accessed January 2025].

14.7 Ice Throw

14.7.1 Standard mitigation for the risk of ice throw comprises off-site monitoring to enable the deactivation of turbines on sensing ice accumulation, as well as physical and visual warning for both site personnel and third parties.

14.7.2 In line with current guidance, a permanent warning sign at the Site entrance is proposed to alert the public to this issue.

14.7.3 As such, no detailed assessment is proposed as part of the EIAR.

14.8 Risk of Major Accidents and/or Disasters

14.8.1 An assessment of major accidents and disasters considers the potential impacts of a development on the environment as a result of its vulnerability to, or introduction of, risks of major accidents and/or disasters.

14.8.2 In 2020, the IEMA published a Primer to better define the assessment methodology for major accidents and disasters in EIA[143]. The Primer states that "*major accidents and / or disasters should be considered as part of an assessment where the development has the potential to cause the loss of life,* permanent injury and / or temporary or permanent destruction of an environmental receptor which cannot be restored through minor clean-up and restoration".

14.8.3 Potential major accident risks associated with the Proposed Development include:

- road accidents, including AILs;
- risk of aircraft collisions with turbines and glint / glare risks to aircraft;
- fire risk; and
- flood risk.

14.8.4 The geotechnical design of the Proposed Development's permanent infrastructure and access tracks will take into account geotechnical risks from unstable slopes and peat. A peat slide risk assessment will be completed as part of the Hydrology, Hydrogeology and Geology Chapter of the EIAR (refer to **Chapter 8**).

14.8.5 Flood risk will be limited for the majority of the Site and the Proposed Development will be designed to avoid areas at significant risk of fluvial and surface water flooding.

14.8.6 Due to the nature of the Proposed Development, the risk of a major accident or disaster is considered to be extremely low. A risk assessment process will be followed by the Principal Designer during the design stage as part of the Construction (Design and Management) Regulations 2015. This will ensure that all potential risks are identified at an early stage and appropriate mitigation is implemented.

14.8.7 During the operational stage of the Proposed Development, routine maintenance inspections would be completed in order to ensure compliant operation of the Proposed Development.

14.8.8 Accordingly, it is proposed to scope out an assessment of major accidents and/or disasters from the EIAR.

14.9 Eskdalemuir Seismic Array

14.9.1 The Proposed Development is located within the 50 km consultation zone for the Eskdalemuir Seismic Array. A finite seismic noise budget is available for the 50 km radius surrounding the array. At this time, the MoD report that there is no seismic noise budget available. The Scottish

143 IEMA (2020). *Major Accidents and Disasters in EIA: A Primer*. Available at: j27374_iema_major_accidents__disasters_final-1.pdf [February 2025].

Government's Eskdalemuir Working Group are currently working to resolve issues for wind farm developments within the consultation zone and are currently drafting guidance on how the seismic noise budget could be managed in the future.

14.9.2 The Applicant will consult with the MoD throughout the EIA in regards to this issue.

15. INVITATION TO COMMENT

15.1.1 You are invited to provide comment on this Scoping Report. Please send all Scoping responses to ECU at:

Energy Consents Unit
5 Atlantic Quay
150 Broomielaw
Glasgow
G2 8LU

Email: Econsents_Admin@gov.scot

15.1.2 The applicant will welcome such input and undertake further consultation as needs be with each consultee as the EIA progresses.

APPENDIX 1
FIGURES

APPENDIX 4.1
LANDSCAPE AND VISUAL BASELINE

Table 1: Scottish Landscape Character Types (LCT) within 45 km Study Area with Theoretical Views of the Proposed Development

LCT	Name	Approximate Distance and Direction from the Site
93	Southern Uplands with Scattered Forest – Borders	2 km east
119	Wooded Upland Fringe Valley	4 km north
102	Upland Fringe with Prominent Hills	5 km north west
101	Rocky Upland Fringe	8 km north west
98	Rolling Foothills	8 km north east
177	Southern Uplands – Dumfries and Galloway	11km south west
117	Pastoral Upland Fringe Valley	12 km north west
120	Lowland Valley with Farmland	12 km north
99	Rolling Farmland - Borders	14 km north east
97	Rugged Upland - Borders	14 km north east
94	Rolling Moorland	16 km north west
176	Foothills with Forest – Dumfries & Galloway	18 km south west
178	Southern Uplands with Forest – Dumfries & Galloway	19 km west
172	Upland Fringe – Dumfries & Galloway	19 km south west
160	Narrow Wooded River Valley – Dumfries & Galloway	20 km south west
171	Flow Plateau	26 km south west
118	Settled Upland Fringe Valley	26 km north west
107	Rolling Lowland Margin	29 km north east
109	Lowland Margin with Hills	29 km north
103	Undulating Upland Fringe	32 km north
106	Lowland with Drumlins	32 km north east
158	Coastal Flats – Dumfries & Galloway	33 km south west
95	Southern Uplands – Borders	34 km north west
114	Pastoral Upland Valley	35 km north west
91	Plateau Grassland – Borders	37 km north west
90	Dissected Plateau Moorland	38 km north west
108	Lowland Margin	38 km north east
170	Coastal Plateau - Dumfries & Galloway	40 km south west
115	Upland Valley with Mixed Farmland	43 km north

Table 2: English National Character Areas (NCA) within 45 km Study Area with Theoretical Views of the Proposed Development

NCA	Name	Approximate Distance and Direction from the Site
5	Border Moors and Forests	900 m east
4	Cheviots	18 km north east
6	Solway Basin	23 km south west
2	Northumberland Sandstone Hills	28 km east
11	Tyne Gap and Hadian's Wall	30 km south
3	Cheviot Fringe	31 km east
10	North Pennines	32 km south
9	Eden Valley	34 km south
12	Mid Northumberland	36 km south

Table 3: Landscape Designations and Classifications within 45 km Study Area with Theoretical Views of the Proposed Development

Designation/ Classification	Name	Approximate Distance and Direction from the Site
Scotland		
Local Landscape Area (LLA)	Teviot Valleys	7 km north
LLA	Cheviot Foothills	8 km north east
LLA	Langholm Hills	11 km south west
Gardens and Designed Landscape (GDL)	Monteviot	20 km north
LLA	Tweed Lowlands	23 km north
GDL	The Haining	25 km north west
LLA	Tweed, Ettrick and Yarrow Confluences	26 km north west
National Scenic Area	Eildon and Leaderfoot	26 km north
GDL	Bowhill	26 km north west
GDL	Mertoun	27 km north
GDL	Dryburgh Abbey	27 km north
GDL	Bemersyde	28 km north
LLA	Tweedsmuir Uplands	32 km north west
GDL	Floors Castle	31 km north east
GDL	Mellerstain	34 km north
GDL	Newton Don	34 km north east
GDL	Carolside And Leadervale	35 km north

Designation/ Classification	Name	Approximate Distance and Direction from the Site
GDL	Hendersyde Park	35 km north east
LLA	Tweed Valley	35 km north west
LLA	Moffats Hills	37 km north west
Wild Land Area	Talla-Hartfell	38 km north west
GDL	The Hirsel	43 km north east
GDL	Fairnilee	31 km north west
GLD	Bowland	38 km north west
GDL	The Glen	40 km north west
GDL	Thirlestane Castle	43 km north
LLA	Lammermuir Hills	44 km north
England		
National Park	Northumberland National Park	10 km north east
Registered Parks and Garden (RPG)	Hesleyside	25 km south east
RPG	Nunwick	37 km south east
Area of Outstanding Natural Beauty (AONB)	North Pennines	38 km south
AONB	Solway Coast	39 km south west
RPG	Rickerby Park, Carlisle	43 km south west
RPG	Corby Castle	44 km south west
RPG	Cragside	45 km east

Table 4: Settlements and Residential Properties within 45 km Study Area with Theoretical Views of the Proposed Development

Name	Approximate Distance and Direction from the Site
Singdean	Within the Site
Wormscleuch	Within the Site
Cliffhope House (Saughtree Grain)	Within the Site
Saughtree	<1 km south
Deadwater	2 km south west
Larriston	3 km south west
Hyndlee	3 km north
Kielder	5 km south east
Wolfelee	5 km north

Name	Approximate Distance and Direction from the Site
Hermitage	5 km south west
Cleauch Head	6 km north
Dinlabyre	6 km south west
Butteryhaugh	6 km south east
Newlands	6 km south west
Dinley	7 km south west
Hobkirk	7 km north
Southdean	8 km north east
Bonchester Bridge	8 km north
Chesters	8 km north east
Old Castleton	9 km north east
Abbotrule	9 km north east
Newcastleton	11 km south west
Hallrule	11 km north east
Egderston	12 km north east
Hawick	13 km north west
Ettleton	14 km south west
Camptown	14 km north east
Bedrule	14 km north east
Appletree	15 km north west
Minto	16 km north
Hassendean	16 km north
Keshopefoot	16 km south west
Hassendean	17 km north
Jedburgh	18 km north east
Oxnam	19 k north east
Ancrum	21 km north east
Bonjedward	21 km north east
Crailinghall	22 km north east
Catlowdy	23 km south west
Roadhead	23 km south
Outer Huntly	23 km north west
Longnewton	24 km north
Midlem	24 km north

Name	Approximate Distance and Direction from the Site
Nisbet	24 km north east
Bowden	27 km north
St Boswells	27 km north
Newtown St Boswells	28 km north
Dryburgh	28 km north
Eildon	29 km north
Boltonfellend	29 km south west
Easton	29 km south west
Clintmains	29 km north east
Heiton	30 km north east
Linton	30 km north east
Bemersyde	30 km north east
Kelso	33 km north east
Longton	33 km south west
Walton	33 km south
Smailholm	33 km north east
Earlston	34 km north
Birtley	34 km south east
Brampton	36 km south
Ednam	37 km north east
Stichill	37 km north east
Gretna	38 km south west
Galadean	39 km north
Farlam	39 km south
Townhead	40 km south
Gordon	40 km north east
Kirkhill	40 km south
Warwick	41 km south
Houghton	41 km south west
East Gordon	41 km north east
Birgham	41 km north east
Castle Carrock	42 km south
Eccles	42 km north east
Eastriggs	43 km south west

Name	Approximate Distance and Direction from the Site
Cocklaw	43 km south east
Rumbleton	43 km north east
Wetheral	44 km south west
Carlisle	44 km south west
Greenlaw	44 km north east
Houndslow	44 km north
Makerstoun	30 km north east
Hume	40 km north east
Upper and Nether Huntlywood	39 km north
Bassendean	42 km north

Table 5: Transportation Routes within the 45 km Study Area with Theoretical Views of the Proposed Development

Route	Approximate Distance and Direction from the Site
Roads	
B6357	Bisects the Site
B6399	2 km west of the Site
A6088	8 km north east
A68	9 km north east
B711	14 km north west
A698	13 km north west
A7	14 km north east
B6359	14 km north west
B6405	15 km north
B6358	17 km north east
B6318	21 km south
B6400	21 km north
B6453	24 km north west
A699	27 km north
B6401	27 km north east
B6406	27 km north
B6404	27 km north
B6436	29 km north east
B6350	34 km north east

Route	Approximate Distance and Direction from the Site
B6352	33 km north east
A6089	34 km north east
B6461	35 km north east
B6397	33 km north east
A697	44 km north east
B6396	33 km north east
A6105	35 km north
B6356	29 km north
B6320	29 km south east
B6318	32 km south
A689	37 km south
B6413	37 km south
M6	38 km south west
B7076	38 km south west
A75	38 km south west
B721	40 km south west
B6264	41 km south west
A686	42 km south east
B6305	44 km south east
B6295	44 km south east
B6263	44 km south west
A6071	44 km south west
B6304	45 km south east
Ferry	
Kielder Water (Reservoir) Ferry Routes (Summer Only)	12 km south east

Table 6: Recreational Routes, Sites and Vantage Points within the Study Area with Theoretical Views of the Proposed Development

Name	Approximate Distance and Direction from the Site
Long Distance Routes (within 45 km Study Area)	
River Tyne Trail (217 km long distance route)	1 km south east
National Cycle Network (NCN) Route 10	6 km south east

Name	Approximate Distance and Direction from the Site
(224 km long distance route)	
Lakeside Way (42.5 km long distance circular trail)	7 km south east
Borders Abbeys Way (29 km long distance route)	13 km north
Pennine Way National Trail (435 km long distance route)	15 km east
Roughbank Height to Craighill (13 km long route)	18.0 km south west
Core Paths/Public Rights of Way (PRoW) (within 10 km Study Area)	
Wheel Causeway	Within the Site
Core Path No. NEWC/114/1	4 km south west
Core Path No. HOBK/81P/2R	6 km north
Core Path No. DENH/203/3	9 km north west
PRoW 529/005	830 m south east
PRoW 529/001	5 km south east
PRoW 529/002	6 km east
Vantage Points (within 45 km Study Area)	
Kielder Observatory (382 m AOD)	4 km south
Kielder Skyspace (340 m AOD)	6 km south
Southdean Fort and Settlement (300 m AOD)	8 km north east
Kirkton Fort and Settlement (275 m AOD)	9 km north west
Otterstone Viewpoint (200 m AOD)	13 km south east
Peninsula Viewpoint (190 m AOD)	15 km south east
Elf Kirk Viewpoint (210 m AOD)	16 km south east
William Wallace Statue (165 m AOD)	29 km north
Summits (within 45 km Study Area)	
Pike Fell (400 m AOD)	5 km north west
Grey Mares Knowe (516 m AOD)	5 km east
Maiden Paps (510 m AOD)	5 km west
Larriston Fells Summit (512 m AOD)	5 km south
Limestone Knowe (551 m AOD)	6 km east
Greatmoor Hill (599 m AOD)	7 km north west
Pile of Stone (454 m AOD)	7 km south east
Penchrise Pen (429 m AOD)	8 km north west

Name	Approximate Distance and Direction from the Site
Cauldcleuch Head (Graham) (619 m AOD)	9 km west
Wether Lair Summit (496 m AOD)	10 km south east
Roan Fell Caird (568 m AOD)	11 km south west
Windy Gyle (619 m AOD)	27 km north east
Eildon Mid Hill (422 m AOD)	29 km north west
Ettrick Pen (Corbett) (692 m AOD)	36 km north west
Andrewhinney Hill (Corbett) (677 m AOD)	38 km north west
Capel Fell (Corbett) (678 m AOD)	39 km west
White Coombe (Corbett) (822 m AOD)	42 km north west
Dun Rig (Corbett) (744 m AOD)	42 km north west
Recreational Sites (within 45 km Study Area)	
Lower and Upper Cheviot Campervan Carparks	<1 km north east
Kielder Deadwaters Mountain Bike Trails	2 km south east
Hermitage Castle	4.9 km south west
Kielder Campsite	5 km south east
Rue Du Chateau Campsite	6 km north
Kielder Castle	6 km south east
Water-based receptors in Bakethin Reservoir	7 km south east
Water-based receptors in Kielder Water (Reservoir)	8 km south east
Hawick Golf Club	12 km north west
Minto Golf Course	16 km north
Newcastleton Golf Course	16 km south west
Jedburgh Campsite	20 km north
Water-based receptor in the River Esk	23 km south west
Selkirk Golf Course	26 km north west
Roxburghe Golf Course	29 km north east
Water-based receptors in the River Tweed	33 km north east
Water-based receptors in the River Eden	40 km south west
Eden Golf Club	40 km south west
Carlisle Golf Club	42 km south west

APPENDIX 5.1
GAZETTEER OF HERITAGE ASSETS

Appendix 5.1: Gazetteer of Heritage Assets

Asset/Event Number	1
Asset/Event Name	Scooped settlement, 1025m NW of Roughley
Type of Asset/Event	Scooped Settlement
Date and/or Period	Prehistoric (Iron Age)
Listing No./NRHE Number	SM13775
HER Number	
Status	Scheduled Monument
Easting	351521
Northing	596549
Parish	Castleton
Council	Scottish Borders
Description	The monument comprises the remains of a scooped settlement, likely to date to the Iron Age period (around 800BC to 400AD). It survives as a pair of conjoined oval enclosures with upstanding turf covered stone walls. The northern enclosure has entrances on the east and west sides, while the southern enclosure has entrances on the east and north-northwest sides. The settlement in located in rough pasture on the southern flank of Ninestone Rig at around 235m above sea level. The scooped settlement comprises two contiguous oval enclosures lying on a north-south axis. The walls of both are of boulder-faced rubble but are reduced to mounds no more than 0.6m high and spread to an average thickness of 2.4m. The north enclosure, measures 44m north to south by 36m east to west, has two entrances roughly in the centres of its eastern and western sides. The southern enclosure, which lies at a slightly lower elevation, measures 35m north to south by 31m east to west and has one entrance in the centre of its eastern side and another at the point of a junction with the north enclosure on the north north-western side. Neither enclosure contains any visible evidence of structures, although the interior of the south enclosure has been slightly hollowed out below the natural surface-level. The scheduled area is circular, measuring 115m in diameter. It includes the remains described above and an area around within which evidence relating to the monument's construction, use and abandonment is expected to survive, as shown in red on the accompanying map. Statement of National Importance: Intrinsic characteristics: The monument is a scooped settlement with a hut platform, a small courtyard and a larger yard. It survives as upstanding turf covered stone walls and buried deposits. Scooped settlements were most likely farmsteads wholly or partly scooped into a slope, often with hut platforms providing foundations for roundhouses. This settlement may have accommodated an extended family and at certain times, their livestock. Scooped settlements date to the Iron Age (c.800BC - AD400). Excavations of similar monuments elsewhere for example Boonies (Canmore ID 67818), Long Knowe (scheduled monument SM3819; Canmore ID 67287), Fourmerklandhill (Canmore ID 66774) and Hetha Burn I (Northumberland) demonstrate that such settlements were built and used between around 800 BC and 400 AD. They represent enclosed farmsteads that could have accommodated an extended family. There is good potential for the survival of archaeological deposits, including occupation and abandonment debris, artefacts and environmental remains such as charcoal and pollen within, beneath and around the remains of the settlement. For example, a large stone located on the west side of the enclosure bank with an oval hollow within it may be a knocking stone used to process grains. Such remains and deposits can help us understand more about prehistoric domestic and agricultural practice, and the significance of materials, technology and craft in a domestic-agricultural context. This monument has the potential to add to our understanding of settlement, land-use and environment during later prehistory. It can provide information about the economy, diet and social status of the occupants and the structure of contemporary society. Contextual characteristics: Scooped settlements are primarily found in the uplands of eastern Dumfriesshire and the Scottish Borders, as well as the north of England. They comprise settlements that are wholly or partly scooped into the slope. Around 300 such monuments have been recorded in Scotland. This example is of particular significance because of its good preservation and large size.

It forms part of wider cluster of scooped settlements in the area, including Ewelees (scheduled monument SM4506), Blackhall (Canmore ID 67749), Unthank (Canmore ID 67759), Lady's Knowe (Canmore ID 161972) and Garage Cottage (SM12738; Canmore ID 92446). There is potential to study these sites together to better understand their functions within the local communities, settlement hierarchy and possible chronological development in the area. The monument has the potential to enhance and broaden our understanding of prehistoric society and community as well as social organisation, land division and land use.

Associative characteristics:
There are no known associative characteristics that contribute to this monument's national importance.

Asset/Event Number	2
Asset/Event Name	Buck Stone, standing stone 470m NNE of Hermitage Farm Cottage
Type of Asset/Event	Standing Stone
Date and/or Period	Prehistoric (Late Neolithic; Bronze Age)
Listing No./NRHE Number	SM13778
HER Number	
Status	Scheduled Monument
Easting	350494
Northing	596219
Parish	Castleton
Council	Scottish Borders
Description	The monument comprises a single standing stone likely to date to the late Neolithic or Bronze Age periods (between 3800 and 2500 BC). The limestone, wedge-shaped stone is approximately 1m high by 1.27m wide and 0.7m deep. It is located on east facing pasture above the west bank of the Whitrope Burn at 190m above sea level. The scheduled area is circular, measuring 7m in diameter. It includes the remains described above and an area around within which evidence relating to the monument's construction, use and abandonment is expected to survive, as shown in red on the accompanying map. Assessment of Cultural Significance: Intrinsic characteristics: This small single, wedge-shaped standing stone sits upright and appears to be in its original location. The stone measures approximately 1m high by 1.27m wide and 0.7m deep. Above the ground surface, it is notably wider than it is tall. The stone's upper surface is relatively level and contains a linear groove and several large depressions. These appear more likely as products of natural erosion rather than deliberate attempts at abstract art (such as prehistoric rock art seen on similar standing stones). The substantial nature of these marks suggests that the stone has been upright and exposed to the elements for an extended period of time. The stone and its position in the landscape mark a significant area for prehistoric activity covering the late Neolithic or Bronze Age periods (between 3800 and 2500 BC). There is no evidence that it has been relocated or disturbed and as such, there is good potential for the survival of buried deposits from its erection and use in ceremonial, ritual, burial and commemorative activities. Buried deposits at these monuments can include human skeletal material, pottery vessels, grave goods, the remains of other human activity and, traces of the environmental conditions (such as vegetation cover and land use) at the time of its use. The standing stone can also help us understand how such monuments were erected, for example by the use of sockets and packing stones. Study of this monument when compared to others has the potential to increase our understanding of the distribution and use of prehistoric ritual monuments in the Neolithic period. Non-invasive survey methods can also help us understand more about its function such as for ritual or ceremonial events. Contextual characteristics: Standing stones are a relatively widespread class of prehistoric monument in Scotland. Nationwide, there are over 1200 examples recording in the National Record of the Historic Environment, with over 130 known of in Scottish Borders and Dumfries and Galloway. More locally, there are seven examples within

approximately 14km of The Buck Stone. The closest example is located on Graystone Hill (approximately 1.7km to southwest, CANMORE reference 161985) where the landform indicates potential intervisibility between the two.

Single standing stones are often deliberately located and sighted in association with other contemporary monuments such as other standing stones, stone circles, burial monuments and henges, as part of a wider network. In this case, there is a stone circle (Ninestone Rig) located on higher ground, 1.67km to the northeast (Scheduled Monument reference SM1688, CANMORE reference 67994). While such monuments are present in the wider area of The Cheviot hills and southern Scotland, this example is of interest because of the relative paucity of standing stones in the region when compared with the national distribution. More locally, the stone it is located close to the confluence of the Hermitage Water and the Whitrope Burn and the natural routeways formed along these water courses. Study of this example among the wider distribution of other standing stones and contemporary monuments can help us understand more about the ways in which prehistoric communities understood, valued and exploited the landscape.

Associative characteristics:
The standing stone is depicted on first edition OS mapping as a named feature, 'Buck Stone', however the derivation of its name remains unclear.

Asset/Event Number	3
Asset/Event Name	Nine Stones Stone Circle, Ninestone Rig
Type of Asset/Event	Stone Circle
Date and/or Period	Prehistoric (Neolithic)
Listing No./NRHE Number	SM1688
HER Number	
Status	Scheduled Monument
Easting	351749
Northing	597307
Parish	Castleton
Council	Scottish Borders
Description	The monument comprises a stone circle, a ritual monument dating from the Neolithic period. The monument was originally scheduled in 1958, but the area covered by the designation was not properly defined. The current rescheduling rectifies this. The stone circle lies at around 280m OD on a south-facing hill slope overlooking the valley of the Roughley Burn as it heads towards its confluence with the Hermitage Water. The "circle" is actually slightly oval in shape measuring 7.5m ENE-WSW by 7m. Seven of the nine stones are quite small, standing approximately 0.5m high, but two stones on the SW side are larger. The stone at the southern end of the circle is 1.5m high, and that immediately to the W is 0.5m high, but the next stone to the W is 1.75m tall. It is not clear whether all of the stones are now seen at their original height or if some may have been broken in antiquity. A number of the stones, including the two largest, now lean inwards to varying degrees. A number of smaller earthfast stones cluster around the circle, although again it is not clear whether these are part of the original layout or are later additions. The stone circle also features in local folklore as the backdrop to the grisly demise of Lord Soules, the wicked inhabitant of Hermitage Castle. He was entrapped by a sorcerer, encased in lead and roasted alive in a cauldron set in the centre of the stone circle. No excavation has taken place within the circle, so, unfortunately, the veracity of this story cannot be confirmed. The area to be scheduled is a circle 30m in diameter centred on the circle, as shown in red on the accompanying map. Statement of National Importance: The monument is of national importance for its potential to enhance our understanding of prehistoric ritual and religion. The oval shape of the circle is similar to a number of other such sites in the area, forming a small group of particular interest.

Asset/Event Number	4
Asset/Event Name	Liddel Castle, Newcastleton
Type of Asset/Event	Earthwork; Foritification; Motte and Bailey
Date and/or Period	Medieval
Listing No./NRHE Number	SM1716; NY58NW 2.00
HER Number	
Status	Scheduled Monument
Easting	350966
Northing	589975
Parish	Castleton
Council	Scottish Borders
Description	Only the impressive earthworks remains of Liddel Castle, occupying the summit of a bluff, projecting N and bounded on three sides by the Liddle Water and Kirk Cleuch Burn, a tributary. Two parallel ditches have been dug across the headland from flank to flank, leaving two isolated areas, the S one of which has a broad rampart still rising about 6 ft above the interior. The S ditches broad and flat-bottomed, while the N one is narrower. There are now no signs of structures, but in the N section is an oval in which appear a few fairly big stones, and it is reported locally that lower down there is a circular building, evidently a well (published as such on OS 6" 1916 at NY 5097 8999). Liddel Castle was presumably built by Ranulph de Soules as the caput of the barony granted him by David I (1124-53), whom he accompanied to Scotland. There appear to be no records of it after the early 14th century. RCAHMS 1956, visited 1931. The castle earthworks, constructed to a motte and bailey plan, are generally as described and planned by the RCAHMS. The trapezoidal N section has an occupiable area of approximately 200 square metres, and the oblong and sloping S section is about 160 square metres. The substantial dividing ditch is up to 13.0m wide and 4.5m deep on the S side. The oval feature and stones were not located, but the site of the well survives as a sub-square depression, 0.5m deep. Visited by OS (JRL), 6 August 1979.

Asset/Event Number	5
Asset/Event Name	Hermitage Castle
Type of Asset/Event	Castle; Chapel; Enclosures; Deer Trap; Park Boundary; Farrmstead
Date and/or Period	Medieval; Post-medieval
Listing No./NRHE Number	SM90161
HER Number	
Status	Scheduled Monument
Easting	349851
Northing	596083
Parish	Castleton
Council	Scottish Borders
Description	The monument is the remains of Hermitage Castle and several related features including a chapel and enclosures, a probable deer trap, a park boundary and a farmstead. The castle is an impressive upstanding stone building set within large scale earthworks. The chapel to the west lies within a moated enclosure and the base of its stone walls survive; a further rectangular enclosure defined by smaller banks and ditches lies

immediately adjacent. The deer trap is visible as two banks, each with a ditch, that form a funnel that narrows from the northwest towards a point just west of Hermitage Castle. The park boundary is visible as a bank and ditch on the hillside north of the castle; to the north-northeast, its line is followed by the base of a later stone wall. The farmstead, visible as low rubble walls, lies east of the castle, and there are turf-walled stock enclosures further east, within the park boundary. Together the remains span a period from the 12th to the 19th centuries, though the castle itself was largely built in the 14th and 15th centuries and extensively restored in the 1830s. The castle stands on a level platform 30m north of the Hermitage Water, about 160m above sea level. The park boundary extends some 1.2km to the north, rising up the hillside to about 320m above sea level.

The castle building forms an approximate 'H' shape on plan, with a central hall block, small square towers to the northwest, northeast and southeast corners, and a larger oblong wing on the southwest corner. The plan developed over four main phases of building, the first about 1360, the second before 1388, and the third and fourth in the late 14th and early 15th centuries. The castle is bounded by a large ditch on the west, north and east. Beyond to the north is a rectangular courtyard bounded by ramparts and ditches, measuring about 80m east/west by 43m transversely.

The chapel lies about 330m west of the castle and measures 14m east/west by 5.5m transversely. The plan of the chapel and the remains of a window found when the site was excavated suggest that it dates to the 14th century. It lies within an earlier moated enclosure that is sub-square and measures 33m east/west by 31m transversely, bounded to the west, north and east by two banks and two ditches. Immediately to the west is a rectangular enclosure defined by a bank and ditch to the west, north and east, enclosing an area of 76m east/west by 38m transversely. It is partitioned by a bank and the east and west compartments each contain footings of large stone buildings.

A bank that forms the south side of the probable deer trap begins close to the northwest corner of the rectangular enclosure, initially extending northwards then curving east towards Hermitage Castle. It is paired with a second bank that starts some 600m to the north, just east of the Lady's Sike burn, and curves down across the contours forming a funnel with the narrow end to the southeast just 10m wide. A more extensive bank and ditch encloses Hermitage Castle and a large tract of hillside extending 1.2km to the north. Known as the 'White Dyke', it begins close to the Hermitage Water about 450m southeast of the castle and extends north along the east bank of the Green Sike, initially as a low bank with a ditch on the east, or external, side. Higher up the hill, the line of the White Dyke is taken by a stone wall, up to 1m in height, probably built during works of 1750 and 1752. To the west, the visible remains of the White Dyke peter out on Coldwell Snab. About 200m east of this point, a relatively straight bank and ditch extend southwards downslope towards Hermitage Chapel.

About 80m to the east of Hermitage Castle is a farmstead situated on the edge of a terrace, represented by low stone walls. It comprises three buildings and two enclosures, with the buildings arranged around three sides of a courtyard. Further east are five turfed-walled stock enclosures which may relate to the farmstead. The farmstead is depicted on the 1718 estate plan of Hermitage.

The scheduled area is irregular on plan to include the remains described above and an area around in which evidence for the monument's construction, use and abandonment is expected to survive, as shown in red on the accompanying map. The scheduling specifically excludes: the above-ground elements of all modern buildings, boundary walls, fences and gates, railings, fixtures and fittings; the above-ground elements of the boundary walls surrounding the chapel; the above-ground elements of all signage and services; the top 300mm of all modern paths and paved areas. The scheduling also excludes existing fences that lie at the boundary of the scheduled area.

Statement of National Importance:
Intrinsic Characteristics:
The monument consists of a complex manorial settlement centred on Hermitage castle. The archaeological evidence indicates that the monument had a long and complex development sequence, probably from manor to timber castle to stone castle, with an associated chapel and park. There is particular significance in the potential to trace the changing function of this high status complex over time, and to combine archaeological and documentary evidence.

The site includes an outstanding and unusual 14th to 15th century stone-built castle. The castle's present appearance owes much to its restoration by the 5th Duke of Buccleuch in the 1830s, when rebuilding of much of the north-east tower and probably the north wall was undertaken alongside extensive repairs elsewhere, including the provision of new battlements and wall-walks. The work of the 5th Duke of Buccleuch is in itself of significance demonstrating a growing interest in the 19th century in the medieval past and its remains. However, the structure also retains extensive medieval masonry that informs our knowledge and understanding of the different building phases. This development sequence is complex and demonstrates the changing requirements of the owners of this castle which controlled significant parts of the Anglo-Scottish Border. Other parts of the monument also survive in excellent condition, including the chapel, the large-scale earthworks around the castle itself and those in the vicinity of the chapel. In addition, there is excellent potential for buried archaeological evidence that can support improved

understanding of the use of the site, in particular its origins and early development.

The earthworks around the castle may represent an early timber castle, perhaps erected in the early 1300s following the abandonment of Liddel Castle. We can expect this castle comprised a group of high status buildings in timber, including hall, chamber block, stables, workshops, stores, servants' accommodation and stock yards. Some at least of these buildings are likely to have stood in the rectangular courtyard bounded by ramparts and ditches that lies to the north of the stone castle, and there is high potential for buried archaeological remains that can contribute to understanding of the castle's early development. Archaeological remains can also provide abundant information for the evolving daily life and economy of the residents of Hermitage. Buried artefacts and plant and animal remains preserved in ditches, pits and structural features can reveal trade and exchange contacts and evidence for agriculture and resource exploitation.

The archaeological interest of the monument includes the potential to compare the enclosures surrounding the chapel and in its immediate vicinity with the earthworks where the stone castle now stands. The dates of these enclosures and earthworks are unknown but are likely to predate the earliest phase of the stone castle. The earthworks around, and in the vicinity of, the chapel are of a form very similar to medieval moated manorial centres, while those at the castle are probably the remains of the early timber castle. This proximity of two possible centres of lordship is of interest and may reflect an extended and complex development sequence. This close proximity of castle with moated homestead is seen elsewhere in southern Scotland such as at Garpol Water where a moated homestead is situated within 200m of a timber castle. There is clear potential that future research may clarify the nature of the early occupation west of the castle and more generally the relationship between moated sites and castles.

The deer trap and park boundary associated with the castle are particularly rare features to survive. The deer trap suggests a landscape arranged to facilitate a formalised hunt in front of the castle, while the park boundary, probably later in date, suggests a change to systematic and intensive agricultural exploitation of the castle's environs. A land rental of 1376 mentions the park, arguably a grazing enclosure for the demesne herd by that time (Oram 2012, 24). Hermitage Park was mentioned again much later in the Braidlie Day Book, which records construction of a wall in 1750 and 1752 (Canmore ID 67913), potentially the wall that appears to re-state the earlier bank and ditch park boundary on the hillside north of the castle. The identification of the land north of the castle as a deer park is not documented until the 1863 first edition OS map, and may reflect confusion based on the local knowledge that large parts of Liddesdale had once been deer forest (Oram 2012, 25, citing NAS RH4/23/178 OS Name Book Roxburghshire, Castleton Parish, Pt 2, 41). Certainly the arc of ditch northeast of the castle is on the outside of the bank, the reverse of the norm for a deer park boundary, suggesting that this was an enclosure for cattle.

After the sixteenth century, documentary sources reviewed by Oram suggest a further change from intensive farming in Liddesdale to the exploitation of large flocks of sheep. The farmstead and enclosures represented by walls and earthworks to the east of the castle were in existence by the 1718 estate plan (SRO RHP 9629) and probably derive from this period of reliance on sheep farming.

This potential to compare the castle itself with structural and archaeological remains in the surrounding landscape gives Hermitage particular significance as a medieval castle site. Alongside this, analysis of the upstanding remains of the stone castle can enhance our knowledge of the chronology and development sequence of the castle, and the cultural and social influences that informed its form and design, as well as how the buildings were used and lived in. Hermitage was one of the main residences of one of the most powerful families in medieval Scotland, the Douglases; beyond its strategic significance it provided a large amount of residential accommodation, helping its owners' to project and display their power across southern Scotland.

Contextual Characteristics:
Hermitage Castle is rare for its level of completeness and distinctive design and has been described as the 'most perfect of the medieval castles on the Scottish Border' (RCAHMS 1956). It also has great historical significance as the powerbase from which significant parts of the borders were controlled firstly by the de Sules family from about 1300 to 1320, then by branches of the Douglas family from 1342 until 1491. Subsequently, it was an important asset for the Hepburn family, and from the 1590s for the Scotts of Buccleuch.

Hermitage was not the centre of the de Sules Liddesdale lordship before about 1300; until that time the estate centre was at Liddel Castle, 6km to the south-southeast (scheduled monument reference SM1716, Canmore ID 67934). The earthworks around and to the north of the stone castle at Hermitage can be compared with the substantial earthworks of the motte and bailey castle visible at Liddel. The earthwork enclosures in the vicinity of the chapel at Hermitage are likely to pre-date the first castle at Hermitage; they can be compared with two moated sites near Jedburgh, at Muirhouselaw (Canmore ID 56968) and Timpendean (Canmore ID 57087).

The stone castle at Hermitage can be compared with other major Scottish Castles held by members of the Douglas family, among them Bothwell Castle (scheduled monument reference SM90038, Canmore ID

44889) and Tantallon Castle (scheduled monument reference SM13326, Canmore ID 56630). On the death of James Douglas in 1388, Hermitage was claimed by Archibald Douglas, who had rebuilt Bothwell in the years following 1362. However he and his supporters were unable to retain control and by 1400, Hermitage was under the control of George Douglas, first of the Red Douglas earls of Angus, who also held Tantallon. Despite these dynastic connections, Bothwell and Tantallon were both essentially curtain wall castles, whereas Hermitage Castle is distinctively unusual in a Scottish context. The earliest phase visible in the standing building comprised a small central court bounded by cross-wings to the east and west and screen-walls to the north and south, a layout with some similarity to contemporary fortified houses in northwest England, perhaps reflecting Hermitage's short-lived possession by the Dacre family after 1358 (RCAHMS 1956, 83). Its subsequent evolution saw the central courtyard incorporated into a single large tower, with further towers added at three corners around 1400. Researchers suggest this arrangement resembles the Northumbrian castles at Haughton, Tarset and Dally more than other Scottish strongholds (RCAHMS 1956, 77). The late works to the castle in the 19th century can be contrasted with the works at Hume Castle, some 50 years earlier, where a more stylised approach was taken in order to create an eye-catcher (scheduled monument reference SM387, Canmore ID 58561).

The monument also provides an extremely rare upstanding example of a Scottish deer trap in close association with a medieval castle, and a relatively rare example of a large enclosure adjacent to a major castle. The deer trap can be compared with a group of deep ditches 2km west of Falkland that were probably used for deer management (Chancefield Wood earthworks, SE of Chancefield, scheduled monument reference SM11013); and also with a pair of complex linear stone dykes on the island of Rum that seem to have acted as deer traps and are likely to be medieval in date (scheduled monument reference SM6431, Canmore ID 21933). Deer Parks, such as the large example at Kincardine, have a different function to the deer trap, but also to the Hermitage Park. Deer Parks are characterised by the placement of the ditch inside the bank, whereas the park at Hermitage is defined by a bank with external ditch. The deer trap can reveal much about the way hunting adjacent to a lodge or castle might be used to enhance and reinforce social status. It probably relates to wider forest land that the de Sules lords enjoyed in Liddesdale from the earlier 12th century. By the late 14th century, the park articulated with the wider estate in a different way, probably supporting demesne herds. This is a rare example where the physical link between a castle and wider, evolving medieval landscape can still be appreciated.

Associative Characteristics:
Hermitage was central to Scotland's history for over three centuries, as noble families, particularly branches of the Douglas Family, the Hepburns and the Scotts sought to develop and retain a power base in the central Borders. It is widely known for the story of Queen Mary's 1566 ride from Jedburgh to Hermitage to meet Bothwell (Oram 2012, 34). Hermitage was probably Sir Walter Scott's favourite castle and formed the background when he was painted by Sir Henry Raeburn. Scott's Minstrelsy of the Scottish Border, a collection of poems and ballads published in 1802, brought the history and traditions of the area to popular attention, and his extended essays and Waverley Novels further developed a popular and Romantic understanding of Scottish and Borders history that would persist for decades. Hermitage featured prominently, and its importance to the reading public was emphasised by the poems of Scott's collaborator John Leyden, Lord Soulis and The Cout o' Keeldar, recalling the dark deeds of Lord Soulis, wizard-lord of Hermitage. The prominence of Hermitage in 19th century history and literature gives it continued importance today, the castle arguably holding a key place in the cultural and historical development of Scotland.

Statment of National Importance:
The monument is of national importance because it has an inherent potential to make a significant contribution to our understanding of medieval castles and the associated structures and features that stood alongside them at an important lordly complex. The upstanding castle building retains its structural characteristics to a marked degree, with substantial survival of medieval masonry. In addition, the castle earthworks, enclosures near the chapel, deer trap, park boundary and farmstead survive as earthworks or walls with excellent field characteristics. There is very high potential for the survival of important buried archaeological remains, including structures, artefacts and environmental evidence that can enhance our understanding of the changing function of Hermitage, adding to knowledge of the daily domestic life of the inhabitants and their society and economy. The monument has particular importance as a lordly complex with a long development sequence, where early earthwork enclosures, a separate chapel, and hunting and agricultural structures exist alongside the stone castle. There is potential to understand how a stone castle might develop from an early manorial site and timber castle, and to appreciate the changing relationship between the castle and its immediate landscape, as reflected by the deer trap, park boundary, farmstead and enclosures. There is evidence for the changing nature of exploitation of the castle's hinterland, showing a changing emphasis from hunting to agricultural production. The association of the site with the de Sules, Douglas, Hepburn and Scott families adds to its significance, as do the castle's later appreciation as a picturesque ruin and its role in tradition and literature. The loss of the monument would greatly diminish our ability to understand the character, chronology and development of medieval castles in Scotland.

Asset/Event Number	6
Asset/Event Name	Wheel Village
Type of Asset/Event	Deserted Settlement; Church
Date and/or Period	Medieval
Listing No./NRHE Number	SM3424; NT60SW 5.00
HER Number	
Status	Scheduled Monument
Easting	360497
Northing	600110
Parish	Castleton
Council	Scottish Borders
Description	Wheel Church presumably took its name from the adjacent medieval village known as Le Whele in 1296. Neither church nor village exists today. The site of the church was explored in 1914 by some members of Hawick Archaeological Society who found that the building had consisted of a nave and chancel, both rectangular and measuring over all 34' by 24' and 23' by 18' respectively. The type of plan, taken in conjunction with a fragment of hood-mould bearing dog-tooth enrichment (now in Hawick Museum) and the rounded head of a window only 5" wide, suggested a building of about 1170. Latterly, if not originally, the church belonged to Jedburgh Abbey; but it does not come on record until 1347, when the hospital or free chapel "del Whele" in Scotland is granted with other benefices by Edward III to William de Emeldon. At some date after the Reformation the church was abandoned, though "The Whele Kirk" still appears on Blaeu's map of 1648; it subsequently fell into decay and became a source of material for stone dykes in the neighbourhood. The tomb-stones in the churchyard had all disappeared by the middle of the 19th C. RCAHMS 1956, visited 1932; G Watson 1914; J P Alison 1917. There is no trace of this church at the site indicated on the OS map of 1925, but about 103m ENE of the NE corner of the sheepfold are the footings of the building described as being the church. It measures 12.0m x 6.0m and is now a turf bank 0.7m high. The enclosure adjoining this building on its NW side (? the graveyard) is 20.0m x 15.0m, and a small structure, 8.0m x 5.0m, formed by a turf bank, adjoins the building on the SW side. No trace of "Wheel Village" remains, but in the area are a number of field enclosures an quarry-pits, probably associated with a farm of which the previously described building may have been the farmstead. In the N half of the modern sheepfold are the remains of a rectangular foundation, 13.0m x 5.0m, with an L-shaped bank extending from its NE corner. Visited by OS(WDJ) 7 October 1960.

Asset/Event Number	7
Asset/Event Name	Riccarton Tower
Type of Asset/Event	Tower House
Date and/or Period	Medieval
Listing No./NRHE Number	SM4007
HER Number	
Status	Scheduled Monument
Easting	354401
Northing	595810
Parish	Castleton
Council	Scottish Borders
Description	The remains of the tower which has had a sheepfold constructed on its south side measures externally 7.5m N-S by 10.5m transversely between a roughly coursed, mortared wall, 1.5m wide and 2.0m wide, where best preserved on the S side. The entrance is not visible due to the grass- covered N, E and W tumbled walls which also cover the interior. c.30m to the N are two rectangular structures measuring

c.15.0m x 6.0m and c.11.0m x 5.0m which were possibly associated with the tower. Name confirmed.

Visited by OS (JLD) 29 September 1960 and (DWR) 23 March 1972

On the E bank of Riccarton Burn, at the foot of a steep and recently afforested hillside are the remains of a small tower or 'pele-house' and its associated buildings. It measures 12.7m from E to W by 9.2m transversely over walls which, with the exception of that on the S, have been reduced to turf-covered mounds of rubble up to 2m high. The S wall is constructed of roughly coursed rubble with some evidence of clay bonding; it is at least 9.3m long externally, 1.4m thick and stands to a height of 2 m; there is a scarcement 1.2m above the present internal ground level. A later sheepfold adjoining the S wall partially overlies what may be an enclosure defined by a low bank.

Situated 15m and 30m N of the tower respectively are two rectangular platforms, each bearing remains of the stone-wall footings of a rectangular building. The first platform has been constructed with its long axis at right angles to the contour and measures 12.2m from E to W by 6.4m transversely, its front scarp is 1.1m high and its rear scarp 0.5m high. The second platform lies parallel to the contour, measures 13.3m from NNW to SSE by 4.2m transversely and has traces of an enclosure on its E side.

A hollow-way which approaches the tower across the hillside from the SSE fades out some 40m distant, and on the slope immediately above the site there are two small quarries.

The remains are probably those of 'O'Riccarton', which is depicted in approximately this position on Ponts Map of Liddesdale (1654), and not 'Rakistonlees' as suggested by Hardy (1889). Nothing appears on Roy's Map at this location (1747-55, sheet 7/1).

Visited by RCAHMS (PC) March 1985.

Asset/Event Number	8
Asset/Event Name	Woodfoot Bridge, Enclosure 430m NE of Pagton Burn
Type of Asset/Event	Unknown
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM3374; NT51SW 17.00
HER Number	
Status	Scheduled Monument
Easting	351069
Northing	610183
Parish	Cavers
Council	Scottish Borders
Description	Enclosure, Pagton Burn. On a flat shelf overlooking Pagton Burn from the S, 500 yds. NW of the fort (RCAHMS 1956 No. 152) and at a height of 700 ft OD, there is a small ditched enclosure measuring internally 130 ft from NE to SW by 92 ft from NW to SE. The ditch, which is rock-cut, varies in width from 10 ft to 18 ft, and at the W angle, where it is best preserved, it is 3 ft 6 in. deep. On the SE side it has been dug along the face of a slope, the tail of which forms a natural mound on the scarp of the ditch; although there is now no trace of an artificial rampart, it may be inferred that the ditch upcast was employed to strengthen this mound and to complete the circuit on the other three sides. An entrance 7 ft 6 in. wide on the NE side leads into a heart-shaped court which has been slightly excavated below ground-level: otherwise the interior is featureless. RCAHMS 1956, visited 1948

Asset/Event Number	9
Asset/Event Name	Berryfell Farm, Earthwork and Linear Earthwork 400m SSE of
Type of Asset/Event	Earthwork; Linear Earthwork

Date and/or Period	Unknown
Listing No./NRHE Number	SM3396; NT50NW 11.00
HER Number	
Status	Scheduled Monument
Easting	352523
Northing	607055
Parish	Cavers
Council	Scottish Borders
Description	This earthwork is situated at a height of 800 ft OD on the S edge of a gently inclined plateau. It has been much damaged by cultivation and drainage, but appears to have consisted of a circular enclosure, about 200 ft in diameter, surrounded by double ramparts of dump construction, and a medial ditch. The defences are best preserved on the NE, where the inner rampart is up to 28 ft thick and stands 8 ft high internally and 4 ft 8 ins above the bottom of the ditch, which is 25 ft wide from lip to lip and 12 ft wide at the bottom. The outer rampart is 17 ft thick and stands 6 ft above the ditch bottom and 1 ft 2 ins above the exterior. A fragment of a third bank on the SE, concentric with and outside the main defences is probably secondary since the ground has been much disturbed at this point by drainage and it does not reappear elsewhere on the perimeter. There are two probable entrances, in the W and SE sides. The latter has been enlarged by later traffic and is partly screened by a crescentic enclosure attached to the outside of the earthwork and defined by a slight bank and ditch; this enclosure is clearly intrusive, as its ditch, at the N end, cuts through the line of the outer rampart of the earthwork. On the W side of the modern dyke within the interior there are vague traces of banks and scooped courts which are too indefinite to plan and whose relationship to the earthwork cannot now be established. Some 30 yds SW of this earthwork, there is another group of scooped courts which have likewise been almost entirely obliterated by cultivation. RCAHMS 1956, visited 1948

Asset/Event Number	10
Asset/Event Name	Hawkhass Linn, Earthwork 520m NE of Hawkhass House
Type of Asset/Event	Earthwork
Date and/or Period	Unknown
Listing No./NRHE Number	SM3496; NT40SE 4.00
HER Number	
Status	Scheduled Monument
Easting	349310
Northing	602842
Parish	Cavers
Council	Scottish Borders
Description	Earthwork, Hawkhass Linn. This earthwork is situated at a height of just over 1000 ft. OD on the top of a narrow elongated promontory formed by the confluence of the Fore and Mid Burns, which unite here to form the Langside Burn. The position is well suited for defence since at this point both burns flow in steep-sided ravines some 50 ft. deep, and the only easy access to the promontory is across level ground from the SSW. This approach has been blocked by double ramparts and ditches, leaving only a narrow entrance at the W end, while a short single rampart has been drawn across the apex where the ground falls gently to the watersmeet. It is probable that the inner rampart was originally continuous, but no trace of it is now visible along either edge of the promontory. Internally the earthwork measures 160 ft. by 70 ft. along the axes. At the SSW end the inner rampart, which still stands to a height of 5 ft., has consisted of a boulder-faced rubble wall 15 ft thick: two courses of stones are visible at one point on the exterior and it is probable that several more courses are buried beneath the debris. The other two surviving ramparts were probably of similar construction, but both are

reduced to a height of 2 ft. and neither shows any sign of stonework at the present time. Both the ditches average 14 ft. in width, the innermost being 3 ft. deep and the outermost not more than 1 ft. deep. Within the interior there are slight traces of a rectangular building with a stone foundation measuring 30 ft. by 15 ft. over all.

RCAHMS 1956, visited 1949

As the situation of this earthwork is comparable with that of Lintalee (RCAHMS 1956, No.438) it may likewise be of mediaeval origin.

(i) MISCELLANEOUS EARTHWORKS In the absence of excavation, over eighty earthworks in the county cannot be classified either because they do not conform to recognised types or because their plans are not sufficiently distinctive. A few of these, occupying commanding positions on hilltops or the crests of ridges, are unlikely to be later than the 11th century; such are Bonchester Hill (No. 278), the group of earthworks on Whitcastle Hill (No. 865), and five roughly D-shaped earthworks lying within a radius of two miles between the River Teviot and the Slitrig Water- Gray Hill 2 (No. 999), Birny Knowe (No. 995), Crom Rig (No. 1000), Dodburn (No. 160, ii), and Pen Sike (No. 168)- which are characterised by ramparts massive in proportion to their size. The majority, however, are situated on hillsides or in the bottoms of valleys, generally below the 800 ft. contour, and are probably mediaeval. Most of these lower-lying structures, of which the outstanding examples are Timpendean (No. 435), Iron Castle (No. 945), and Scraesburgh (No. 466), were evidently designed for habitation and presumably contained wooden buildings; but a few of the simpler earthworks such as Huntly Burn (No. 51) may have been enclosures for stock.

RCAHMS 1956.

The comparison with Lintalee (No.438) is rather fine drawn. The overall width of the Lintalee earthworks is approx. 260ft., of Hawkhass Linn 60 ft. with the reasonable suggestion in the text that..."it is probable that the inner rampart was originally continuous"...

The two sets of earthworks, are quite different, those at Hawkhass Linn being of normal rampart and ditch (boulder faced, rubble cored) construction, as against the widely spaced banks and single outer ditch separated by a wide berm at Lintalee. Although it is not necessarily significant, Lintalee is at 300 ft. OD, Hawkhass Linn is above 1000ft OD.

Information from OS, 27 November 1957.

Asset/Event Number	11
Asset/Event Name	Cairn Sike, earthwork 1220m NE of Hawkhass House
Type of Asset/Event	Earthwork
Date and/or Period	Unknown
Listing No./NRHE Number	SM3497; NT40SE 3.00
HER Number	
Status	Scheduled Monument
Easting	349461
Northing	603536
Parish	Cavers
Council	Scottish Borders
Description	Earthwork, Cairn Sike. This earthwork lies in the angle formed by Cairn Sike and Langside Burn, a mile and a quarter SW of Langsidebrae farm and 730 yds. N of the earthwork at Hawkhass Linn (No. 170). Its elevation is 1100 ft. OD, and 200 ft. above the Langside Burn which runs 170 yds. to the E. Cairn Sike runs through part of the NW arc of the earthwork. The structure is oval on plan and measures 195 ft. from NNE to SSW by 140 ft. transversely. It consists of an inner and an outer bank which differ both in plan and construction. The inner bank is grass-covered and stony, with no visible quarry-ditch; it is spread to a greatest width of 20 ft. and is up to 1 ft. in height on the inner side and 2 ft. 6 in. on the outer. It is complete except for a length of about 110 ft. on the E side, where stone-robbing combined with a tendency to slip downhill have reduced it to a terrace. The outer bank, which is of earthen construction, is 14 ft. distant from the inner bank along a part of the SE. side but

up to 67 ft. at the SW end; a shallow external quarry-ditch, up to 18 ft. in width, can be traced round its S, SW, W, and NW sides. This bank is spread to a greatest width of 22 ft., and is up to 2 ft.6 in.in height on the inner side and 1 ft. 9 in. on the outer side to the bottom of the ditch. The outer bank has been much interrupted by drainage and by the entry and exit of Cairn Sike at the NW end. A length of 200 ft. of the E. side is denuded to a terrace. There are two entrances, respectively on the SW and NE of the earthwork; the former is represented by a gap 20 ft. wide in the inner and 30 ft. wide in the outer bank, and the corresponding dimensions for the NE entrance are 10 ft. and 45 ft. Both the entrances are used by a modern track, traffic along which has worn away the edges of the gaps.

Much of the NE part of the interior of the earthwork is occupied by a disused quarry; a smaller quarry lies between the two banks on the NE side. These quarries probably produced much of the material for the building of a large, walled fold (NT40SE 23) which includes the S end of the earthwork. A stell has been built in the SW part of the interior. The site is covered with fine pasture and bracken, and has no recognisable internal features.

RCAHMS 1956, visited 1949

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RCAHMS 1956

Asset/Event Number	12
Asset/Event Name	Pen Sike, earthwork 300m SW of Penchrise Pen
Type of Asset/Event	Earthwork; Settlement?
Date and/or Period	Unknown
Listing No./NRHE Number	SM3428; NT40NE 8.00
HER Number	
Status	Scheduled Monument
Easting	348828
Northing	605928
Parish	Cavers
Council	Scottish Borders
Description	This earthwork is situated at 1150 ft OD on the SW slope of Penchrise Pen. D-shaped on plan, it measures 165 ft from ESE to WNW by 155 ft transversely. It is formed by a ditch with an earthen bank on each side. The inner bank is complete, and on the NW side is 28 ft wide, rising 5 ft 3 ins above the interior and 7 ft 6 ins above the bottom of the ditch, which is 8 ft wide. Cultivation has reduced much of the outer bank; it is 7 ft 6 ins above the bottom of the ditch on the NW side, but is only a few inches high on the outer side, due to the slope. Indications on the SE side of the entrance, which is in the SW, suggest that originally the two banks returned and united round the ends of the ditch. The ground immediately inside the entrance is depressed. In the interior there are two scooped floors, each about 22 ft in diameter, one in the NW and the other in the SW part. Some disturbance of the ground near the latter may be due to quarrying, possibly for the material for a stell which stands in the N half of the enclosure. RCAHMS 1956, visited 1949 This work is generally as described and planned by the RCAHMS. The non-defensive situation together with the size and construction indicates that it is a settlement.

Asset/Event Number	13
Asset/Event Name	Dodburn Hill, earthworks & homestead
Type of Asset/Event	Earthworks; Homested
Date and/or Period	Unknown
Listing No./NRHE Number	SM3460; NT40NE 7.00
HER Number	
Status	Scheduled Monument
Easting	348257
Northing	607471
Parish	Cavers
Council	Scottish Borders
Description	A succession of hilltop settlements and enclosures on Dodburn Hill includes a large roughly subrectangular earthwork that is evidently fortified, its defences comprising twin ramparts with a medial ditch. The ramparts have been severely reduced, nowhere standing more than 0.6m in height above the interior, but externally the inner uses the natural slope to present a scarp dropping up to 2.5m into the bottom of the surrounding rock-cut ditch, which is generally about 10m in breadth and 1.2m in external depth. The ramparts return and unite around the terminals of the ditch at the entrance on the NE. The interior, which measures about 81m from NE to SW by 64m transversely (0.46ha) is largely occupied by what is probably a late iron age settlement, forming a series of angular enclosures immediately within the entrance, one of which contains the footing of a hut-circle. At the SW end there are traces of two more scooped courts, identified on the plan drawn up in 1933 by RCAHMS investigators (1956, 113, no.160, fig 150) as the NE end of an earlier enclosure, the perimeter of which lies mainly outside the defences to the SE. Subsequent aerial photography reveals that they misinterpreted one side of a scooped court and a possible round-house immediately outside the defences as the remains of the earlier perimeter, which has been severely reduced by the cultivation of rigs along this flank. Oval on plan, this earlier enclosure occupies the SW shoulder of the elongated summit area, following the crest of the slightly steeper slopes on the NW and SW, and measures internally at least 110m in length from NE to SW by 72m transversely (0.75ha) within a bank some 3m in thickness by 0.6m in height, with an external ditch and on the SW possibly a low counterscarp bank; with the later fortified settlement occupying its NE end, however, it may measure as much as 170m in length, in which case its interior may have extended to as much as 1.4ha.

Asset/Event Number	14
Asset/Event Name	Pyat Knowe, enclosure 150m N of
Type of Asset/Event	Enclosure; Settlement
Date and/or Period	Unknown
Listing No./NRHE Number	SM79; NT40NE 21.00
HER Number	
Status	Scheduled Monument
Easting	348165
Northing	605291
Parish	Cavers
Council	Scottish Borders
Description	. A much wasted enclosure is situated on top of Pyat Knowe, just over 1000 ft OD. Oval on plan, it is formed by a bank, now incomplete and spread to 15 ft; this contains a few set boulders which show it to be the ruin of a wall 7 ft thick at base. The entrance, 10 ft wide, is in the W. Much of the NE side cannot be clearly followed in marshy ground. The interior, which measures some 215 ft from NW to SE by 140 ft

transversely, is covered with very rough pasture and bog vegetation and contains no trace of any structural features.

RCAHMS 1956, visited 1948

NT 4822 0517. The scant remains of this probable settlement are generally as described by the RCAHMS. The bank survives to a maximum 0.6m in height on the E side but there is no trace of an external ditch. The course of the bank could not be determined with any certainty around the NW side.

Asset/Event Number	15
Asset/Event Name	The Catrail, linear earthwork, SE slope of Singley Brae to Barry Sike
Type of Asset/Event	Linear Earthwork
Date and/or Period	Unknown
Listing No./NRHE Number	SM3495; NT40SE 21.00
HER Number	
Status	Scheduled Monument
Easting	349307
Northing	604605
Parish	Cavers
Council	Scottish Borders
Description	The Object Name Book of the Ordnance Survey describes the 'Catrail or Picts' Work Ditch' as 'The remains of a trenched fortification which runs through the Counties of Roxburgh and Selkirk. At several places the ditch which has been of considerable depth can still be distinctly ?(seen) on the south side. In some districts the fortification is known as the Picts work ditch, but in this County it is well known as the Catrail a name which is said in British to signify the Dividing Fence. Name Book 1861 From the left bank of the Langside Burn the ground rises steeply for some 650ft to the summit of The Pike, and this slope the Catrail mounts some-what obliquely, it course being now NW by N. On the lower part of the slope there are actually no traces to be seen, as cultivation has obliterated everything up to a height of some 350ft above the valley bottom; but from its point of reappearance it runs strongly up to the shoulder of The Pike, crosses it, swings to WNW, and then descends straight for a third of a mile to within some 70 yds of the Penchrise Burn. In this section the ditch is from 6ft to 9ft wide and up to 2ft 6in deep and the bank up to 10ft thick and 2ft high above ground-level. The work is somewhat broken up in a moss on the summit of the shoulder of The Pike, and on the steepest slopes the bank tends to be slighter than elsewhere. At spot-level 1398 there is a small quarry on the line of the work; it is completely turfed over and may be of considerable age. The remainder of this stretch below the quarry carries a slight spoil-bank on the SW side of the ditch. At the point of disappearance above the Penchrise Burn the work seems to be swinging slightly N; this deviation was evidently intended to connect it with the adjoining section, which is aligned on a point some 40 yds farther downstream. This latter section after rising from the low ground in which the burn runs, swings W and crosses a flattish belt of moorland to the head of Barry Sike (NT 481 049)(** see footnote), a distance of nearly half a mile from the Penchrise Burn. This stretch of the work follows a somewhat uneven course and is interrupted twoards its W end by a moss and by several tracks of an old road. The road from Peelhopebrae to Stobs (Slitrig Water to Hermitage Water) likewise crosses it about its centre. Measurements taken in this section showed the ditch to be from 9ft to 12ft wide and from 2ft to 4ft deep; the main bank, on the N side, was 8ft to 10ft wide and up to 1ft 6in high above ground level; and the spoil bank about 8ft wide and of negligible height. It is clear that Barry Sike is intended to prolong the line of the earthwork for the remaining quarter of a mile to the Dod Burn. West of the Dod Burn there is no sign that the work continued straight over the N shoulder of Gray Coat from the mouth of Barry Sike, but a section of ditch-and-bank earthwork 560 yds in length crosses the spine of this hill 500 yds S of the summit. This work does not begin on the bank of the Dod Burn itself, but at the head of a series of dry linear hollows which descend from the 1000ft contour and die out in the Dod Burn haugh at a point (NT 476 045) 450 yds upstream from Barry Sike. Where best preserved it is up to 18ft wide over all, is somewhat sinuous in layout and shows signs of having been dug in short sections; there

are also traces, at several points, of the spoil-bank that is characteristic of the Catrail, while at least two portions are aligned on the easily visible notch that is made by the Catrail as it crosses the skyline of The Pike. The W end of the work ends abruptly on a bare hillside overlooking the Priesthaugh Burn from a height of about 1200ft (NT4696 0450), and the state of the vegetation shows that the soil beyond has never been disturbed at all. Nor is there any natural feature here by which the line could have been continued. The slope to the Priesthaugh Burn, however, very soon becomes abrupt and has certainly never been cultivated, and it is thus easy to suppose that the place of the earthwork was here taken by the upper edge of a block of valley-side scrub-wood extending to the top of another and quite comparable linear work about 1000 yds to the N (NT 471 054).

**(Smail gives another account of this section of the Catrail, implying that it turned N past the enclosure on Pyat Knowe (NT40NE 21 and NT40NE 22) and followed the course of the isolated length of earthwork (NT40NE 19) marked on the OS map as passing the fort on White Hill (NT40NE 20), Smail 1881). "There is no reason to regard this as forming any part of the Catrail, and evidence to connect it with the fort is likewise lacking" Smail ignores the remains seen at the head of the Barry Sike. (Information from OS WT).

RCAHMS 1956.

Asset/Event Number	16
Asset/Event Name	The Catrail, linear earthwork, Robert's Linn Bridge to Leap Burn
Type of Asset/Event	Linear Earthwork
Date and/or Period	Unknown
Listing No./NRHE Number	SM3466
HER Number	
Status	Scheduled Monument
Easting	353103
Northing	602577
Parish	Cavers
Council	Scottish Borders
Description	The Object Name Book of the Ordnance Survey describes the 'Catrail or Picts' Work Ditch' as 'The remains of a trenched fortification which runs through the Counties of Roxburgh and Selkirk. At several places the ditch which has been of considerable depth can still be distinctly ?(seen) on the south side. In some districts the fortification is known as the Picts work ditch, but in this County it is well known as the Catrail a name which is said in British to signify the Dividing Fence. Name Book 1861 From the left bank of the Langside Burn the ground rises steeply for some 650ft to the summit of The Pike, and this slope the Catrail mounts some-what obliquely, it course being now NW by N. On the lower part of the slope there are actually no traces to be seen, as cultivation has obliterated everything up to a height of some 350ft above the valley bottom; but from its point of reappearance it runs strongly up to the shoulder of The Pike, crosses it, swings to WNW, and then descends straight for a third of a mile to within some 70 yds of the Penchrise Burn. In this section the ditch is from 6ft to 9ft wide and up to 2ft 6in deep and the bank up to 10ft thick and 2ft high above ground-level. The work is somewhat broken up in a moss on the summit of the shoulder of The Pike, and on the steepest slopes the bank tends to be slighter than elsewhere. At spot-level 1398 there is a small quarry on the line of the work; it is completely turfed over and may be of considerable age. The remainder of this stretch below the quarry carries a slight spoil-bank on the SW side of the ditch. At the point of disappearance above the Penchrise Burn the work seems to be swinging slightly N; this deviation was evidently intended to connect it with the adjoining section, which is aligned on a point some 40 yds farther downstream. This latter section after rising from the low ground in which the burn runs, swings W and crosses a flattish belt of moorland to the head of Barry Sike (NT 481 049)(** see footnote), a distance of nearly half a mile from the Penchrise Burn. This stretch of the work follows a somewhat uneven course and is interrupted twoards its W end by a moss and by several tracks of an old road. The road from Peelhopebrae to Stobs (Slitrig Water to Hermitage Water) likewise crosses it about its centre. Measurements taken in this section showed the ditch to be from 9ft to 12ft wide and from 2ft to 4ft deep; the main bank, on the N side, was 8ft to 10ft wide and up to 1ft 6in high above ground level; and the spoil

bank about 8ft wide and of negligible height. It is clear that Barry Sike is intended to prolong the line of the earthwork for the remaining quarter of a mile to the Dod Burn.

West of the Dod Burn there is no sign that the work continued straight over the N shoulder of Gray Coat from the mouth of Barry Sike, but a section of ditch-and-bank earthwork 560 yds in length crosses the spine of this hill 500 yds S of the summit. This work does not begin on the bank of the Dod Burn itself, but at the head of a series of dry linear hollows which descend from the 1000ft contour and die out in the Dod Burn haugh at a point (NT 476 045) 450 yds upstream from Barry Sike. Where best preserved it is up to 18ft wide over all, is somewhat sinuous in layout and shows signs of having been dug in short sections; there are also traces, at several points, of the spoil-bank that is characteristic of the Catrail, while at least two portions are aligned on the easily visible notch that is made by the Catrail as it crosses the skyline of The Pike. The W end of the work ends abruptly on a bare hillside overlooking the Priesthaugh Burn from a height of about 1200ft (NT4696 0450), and the state of the vegetation shows that the soil beyond has never been disturbed at all. Nor is there any natural feature here by which the line could have been continued. The slope to the Priesthaugh Burn, however, very soon becomes abrupt and has certainly never been cultivated, and it is thus easy to suppose that the place of the earthwork was here taken by the upper edge of a block of valley-side scrub-wood extending to the top of another and quite comparable linear work about 1000 yds to the N (NT 471 054).

**(Smail gives another account of this section of the Catrail, implying that it turned N past the enclosure on Pyat Knowe (NT40NE 21 and NT40NE 22) and followed the course of the isolated length of earthwork (NT40NE 19) marked on the OS map as passing the fort on White Hill (NT40NE 20), Smail 1881). "There is no reason to regard this as forming any part of the Catrail, and evidence to connect it with the fort is likewise lacking" Smail ignores the remains seen at the head of the Barry Sike. (Information from OS WT).

RCAHMS 1956.

Asset/Event Number	17
Asset/Event Name	The Catrail, linear earthwork, W of Leap Burn to 100m E of Langside Burn
Type of Asset/Event	Linear Earthwork
Date and/or Period	Unknown
Listing No./NRHE Number	SM3468
HER Number	
Status	Scheduled Monument
Easting	351174
Northing	602778
Parish	Cavers
Council	Scottish Borders
Description	The Object Name Book of the Ordnance Survey describes the 'Catrail or Picts' Work Ditch' as 'The remains of a trenched fortification which runs through the Counties of Roxburgh and Selkirk. At several places the ditch which has been of considerable depth can still be distinctly ?(seen) on the south side. In some districts the fortification is known as the Picts work ditch, but in this County it is well known as the Catrail a name which is said in British to signify the Dividing Fence. Name Book 1861 From the left bank of the Langside Burn the ground rises steeply for some 650ft to the summit of The Pike, and this slope the Catrail mounts some-what obliquely, it course being now NW by N. On the lower part of the slope there are actually no traces to be seen, as cultivation has obliterated everything up to a height of some 350ft above the valley bottom; but from its point of reappearance it runs strongly up to the shoulder of The Pike, crosses it, swings to WNW, and then descends straight for a third of a mile to within some 70 yds of the Penchrise Burn. In this section the ditch is from 6ft to 9ft wide and up to 2ft 6in deep and the bank up to 10ft thick and 2ft high above ground-level. The work is somewhat broken up in a moss on the summit of the shoulder of The Pike, and on the steepest slopes the bank tends to be slighter than elsewhere. At spot-level 1398 there is a small quarry on the line of the work; it is completely turfed over and may be of considerable age. The remainder of this stretch below the quarry carries a slight spoil-bank on the SW side of the ditch.

At the point of disappearance above the Penchrise Burn the work seems to be swinging slightly N; this deviation was evidently intended to connect it with the adjoining section, which is aligned on a point some 40 yds farther downstream. This latter section after rising from the low ground in which the burn runs, swings W and crosses a flattish belt of moorland to the head of Barry Sike (NT 481 049)(** see footnote), a distance of nearly half a mile from the Penchrise Burn. This stretch of the work follows a somewhat uneven course and is interrupted twoards its W end by a moss and by several tracks of an old road. The road from Peelhopebrae to Stobs (Slitrig Water to Hermitage Water) likewise crosses it about its centre. Measurements taken in this section showed the ditch to be from 9ft to 12ft wide and from 2ft to 4ft deep; the main bank, on the N side, was 8ft to 10ft wide and up to 1ft 6in high above ground level; and the spoil bank about 8ft wide and of negligible height. It is clear that Barry Sike is intended to prolong the line of the earthwork for the remaining quarter of a mile to the Dod Burn.

West of the Dod Burn there is no sign that the work continued straight over the N shoulder of Gray Coat from the mouth of Barry Sike, but a section of ditch-and-bank earthwork 560 yds in length crosses the spine of this hill 500 yds S of the summit. This work does not begin on the bank of the Dod Burn itself, but at the head of a series of dry linear hollows which descend from the 1000ft contour and die out in the Dod Burn haugh at a point (NT 476 045) 450 yds upstream from Barry Sike. Where best preserved it is up to 18ft wide over all, is somewhat sinuous in layout and shows signs of having been dug in short sections; there are also traces, at several points, of the spoil-bank that is characteristic of the Catrail, while at least two portions are aligned on the easily visible notch that is made by the Catrail as it crosses the skyline of The Pike. The W end of the work ends abruptly on a bare hillside overlooking the Priesthaugh Burn from a height of about 1200ft (NT4696 0450), and the state of the vegetation shows that the soil beyond has never been disturbed at all. Nor is there any natural feature here by which the line could have been continued. The slope to the Priesthaugh Burn, however, very soon becomes abrupt and has certainly never been cultivated, and it is thus easy to suppose that the place of the earthwork was here taken by the upper edge of a block of valley-side scrub-wood extending to the top of another and quite comparable linear work about 1000 yds to the N (NT 471 054).

**(Smail gives another account of this section of the Catrail, implying that it turned N past the enclosure on Pyat Knowe (NT40NE 21 and NT40NE 22) and followed the course of the isolated length of earthwork (NT40NE 19) marked on the OS map as passing the fort on White Hill (NT40NE 20), Smail 1881). "There is no reason to regard this as forming any part of the Catrail, and evidence to connect it with the fort is likewise lacking" Smail ignores the remains seen at the head of the Barry Sike. (Information from OS WT).

RCAHMS 1956.

Asset/Event Number	18
Asset/Event Name	The Catrail, linear earthwork, 650m long,on SE slope of White Hill
Type of Asset/Event	Linear Earthwork
Date and/or Period	Unknown
Listing No./NRHE Number	SM3457
HER Number	
Status	Scheduled Monument
Easting	347988
Northing	605866
Parish	Cavers
Council	Scottish Borders
Description	The Object Name Book of the Ordnance Survey describes the 'Catrail or Picts' Work Ditch' as 'The remains of a trenched fortification which runs through the Counties of Roxburgh and Selkirk. At several places the ditch which has been of considerable depth can still be distinctly ?(seen) on the south side. In some districts the fortification is known as the Picts work ditch, but in this County it is well known as the Catrail a name which is said in British to signify the Dividing Fence. Name Book 1861 From the left bank of the Langside Burn the ground rises steeply for some 650ft to the summit of The Pike, and this slope the Catrail mounts some-what obliquely, it course being now NW by N. On the lower part of the slope there are actually no traces to be seen, as cultivation has obliterated everything up to a height of

some 350ft above the valley bottom; but from its point of reappearance it runs strongly up to the shoulder of The Pike, crosses it, swings to WNW, and then descends straight for a third of a mile to within some 70 yds of the Penchrise Burn. In this section the ditch is from 6ft to 9ft wide and up to 2ft 6in deep and the bank up to 10ft thick and 2ft high above ground-level. The work is somewhat broken up in a moss on the summit of the shoulder of The Pike, and on the steepest slopes the bank tends to be slighter than elsewhere. At spot-level 1398 there is a small quarry on the line of the work; it is completely turfed over and may be of considerable age. The remainder of this stretch below the quarry carries a slight spoil-bank on the SW side of the ditch.

At the point of disappearance above the Penchrise Burn the work seems to be swinging slightly N; this deviation was evidently intended to connect it with the adjoining section, which is aligned on a point some 40 yds farther downstream. This latter section after rising from the low ground in which the burn runs, swings W and crosses a flattish belt of moorland to the head of Barry Sike (NT 481 049)(** see footnote), a distance of nearly half a mile from the Penchrise Burn. This stretch of the work follows a somewhat uneven course and is interrupted twoards its W end by a moss and by several tracks of an old road. The road from Peelhopebrae to Stobs (Slitrig Water to Hermitage Water) likewise crosses it about its centre. Measurements taken in this section showed the ditch to be from 9ft to 12ft wide and from 2ft to 4ft deep; the main bank, on the N side, was 8ft to 10ft wide and up to 1ft 6in high above ground level; and the spoil bank about 8ft wide and of negligible height. It is clear that Barry Sike is intended to prolong the line of the earthwork for the remaining quarter of a mile to the Dod Burn.

West of the Dod Burn there is no sign that the work continued straight over the N shoulder of Gray Coat from the mouth of Barry Sike, but a section of ditch-and-bank earthwork 560 yds in length crosses the spine of this hill 500 yds S of the summit. This work does not begin on the bank of the Dod Burn itself, but at the head of a series of dry linear hollows which descend from the 1000ft contour and die out in the Dod Burn haugh at a point (NT 476 045) 450 yds upstream from Barry Sike. Where best preserved it is up to 18ft wide over all, is somewhat sinuous in layout and shows signs of having been dug in short sections; there are also traces, at several points, of the spoil-bank that is characteristic of the Catrail, while at least two portions are aligned on the easily visible notch that is made by the Catrail as it crosses the skyline of The Pike. The W end of the work ends abruptly on a bare hillside overlooking the Priesthaugh Burn from a height of about 1200ft (NT4696 0450), and the state of the vegetation shows that the soil beyond has never been disturbed at all. Nor is there any natural feature here by which the line could have been continued. The slope to the Priesthaugh Burn, however, very soon becomes abrupt and has certainly never been cultivated, and it is thus easy to suppose that the place of the earthwork was here taken by the upper edge of a block of valley-side scrub-wood extending to the top of another and quite comparable linear work about 1000 yds to the N (NT 471 054).

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RCAHMS 1956.

Asset/Event Number	19
Asset/Event Name	White Knowe, settlement 180m W of Newton Hill
Type of Asset/Event	Settlement
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM3386; NT40NE 26.00
HER Number	
Status	Scheduled Monument
Easting	349408
Northing	607934
Parish	Cavers
Council	Scottish Borders
Description	This settlement is situated at 1000 ft OD, on the NE side of White Knowe. The area has been used for military training, and its interior has been disturbed by tanks, though traces of at least eleven ring-groove

timber-framed houses may still be seen, enclosed by the remains of two very slight banks with a medial ditch. Only very slight traces remain of the outer bank, while the inner bank is only visible at the NE and SE ends, where it is up to 20 ins high internally, spread to 20 ft - 25 ft, and showing no stonework. From the lie of the ground it is reasonably certain that the enclosure was sub-oval and measured internally 315 ft from NE to SW by about 160 ft transversely. The fragment of ditch preserved at the E corner is 10 ft wide and 1 ft deep. Two gaps in the bank at the NE apex and at the W corner probably represent original entrances.

This settlement is as described by the previous authorities save that the fragments of ditch and outer bank at the E end are unsurveyable. The farthest E of the hut circles shown on the RCAHMS plan was not located but another, not shown on the plan, was found towards the centre of the settlement.

Asset/Event Number	20
Asset/Event Name	Penchrise Pen, earthwork 420m E of
Type of Asset/Event	Earthwork; Enclosure; Fort
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM3365; NT40NE 5.00
HER Number	
Status	Scheduled Monument
Easting	349455
Northing	606144
Parish	Cavers
Council	Scottish Borders
Description	The conical summit of Penchrise Pen, which is a distinctive and prominent landmark in the locality, is crowned by a fort with up to three ramparts, the outer of which on the W is accompanied by an external ditch set at the foot of the slope. Oval on plan, the interior measures about 100m from NE to SW by 75m transversely (0.55ha) and on the NE rises in two broad shelves up to the summit. Apart from where they run up against a bare and craggy outcrop on the S, the defences have probably been continuous, the ramparts forming low banks in the N sector, though they have been reduced to scarps on the steeper slopes elsewhere. In addition to the ditch below the outermost rampart on the W, another short segment can be seen on the N, not only suggesting that this ditch may have been a more continuous feature, but that the stepped profile of the defences may also hide quarry ditches between the lines elsewhere. While the defences have probably formed a continuous circuit, the number of ramparts varies, the outer on the W dividing into two create a belt of three 20m deep flanking the SW side of the entrance on the NW; on opposite side there are only two, which extend round the relatively accessible N flank to a second entrance on the NE. At the latter the entrance-way approaches obliquely up the slope to expose the visitor's right side, and a terrace to the rear of the inner rampart continues up the slope to the lower shelf in the interior. The approach to the NW entrance is more direct, but again there is a clear route mounting the slope to the lower shelf, passing an isolated length of bank on the N side of the interior. Apart from this bank and traces of internal quarrying to the rear of the inner rampart, the only features visible within the interior are a low ring-bank on the lower terrace and a platform cut into the slope on the SE. While it is not possible to identify any stratigraphic relationships between the ramparts, variations in the composition of the defences around the circuit may reflect several periods of construction and refurbishment. This is certainly the case with the two enclosures attached on the W and NE respectively, both of which ride over the outermost defences, that on the NE also impinging on the entrance way which climbs the slope obliquely on this side. The latter enclosure is oval on plan and measures about 65m from N to S by 49m transversely (0.24ha) within a bank that is accompanied on the NE by an external ditch; its entrance is on the NE. The enclosure on the W springs from the outer rampart on the WSW to cross the ditch at the foot of the slope and take in a triangular area measuring up to 63m from N to S by 45m transversely (0.22ha) within a thick bank accompanied by an external ditch; its entrance is on the NNW and traces of at least three ring-ditch houses can be seen in the interior.

Asset/Event Number	21
Asset/Event Name	Blakebillend, cairn 335m E of Williams Rig

Type of Asset/Event	Cairn
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM3364; NT50NW 12
HER Number	
Status	Scheduled Monument
Easting	351419
Northing	606226
Parish	Cavers
Council	Scottish Borders
Description	This dilapidated, turf-covered round cairn is situated 40 yds SW of the WSW entrance to earthwork NT50NW 1 . It measures 30 ft in diameter by 1 ft 9 ins in maximum height; a flagstaff has been erected on it.

Asset/Event Number	22
Asset/Event Name	Tinlee, standing stone 718m SSE of Peelbraehope
Type of Asset/Event	Standing Stone
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM3458
HER Number	
Status	Scheduled Monument
Easting	348401
Northing	603854
Parish	Cavers
Council	Scottish Borders
Description	Standing Stone, Peelbraehope: The Tinlee Stone" stands on slighly rising ground 675 yds S of Peelbraehope. It is an upright slab, standing with its major axis aligned 10 W of N and E of S. It is 4 ft 5 ins high, 3 ft broad at the base decreasing to 2 ft 9 ins at a height of 2 ft 7 ins and to 1 ft 5 ins at the top, the N shoulder having been trimmed off. The thickness is 1 ft at the base, decreasing upwards to 7 ins. The Tinlee Stone was used as a boundary marker, but this may not have been its original purpose.

Asset/Event Number	23
Asset/Event Name	Pleaknowe, fort & homestead 430m NW of
Type of Asset/Event	Fort; Settlement
Date and/or Period	Prehistoric (Iron Age)
Listing No./NRHE Number	SM3412; NT50NW 14.00
HER Number	
Status	Scheduled Monument
Easting	352058
Northing	606836
Parish	Cavers

Council	Scottish Borders
Description	Fort and Homestead: These structures are situated on a spur which overlooks the right bank of Slitrig Water from a height of 830 ft OD. The fort occupies the nose of the spur and measures about 320 ft from NE to SW by 200 ft transversely. It consists of a single ruinous rampart, the N arc of which has an external rock-cut ditch where it crosses the rocky spine. For the most part the rampart is reduced to a slight mound or has entirely disappeared; the E arc is obliterated by the later homestead. It is best preserved at the crossing of the rocky spine, where it is spread to a thickness of 16 ft and stands to a height of 1 ft 6 ins above the level of the interior and 2 ft 9 ins above the bottom of the ditch, which is 8 ft wide; its counterscarp is 6 ft high. There is an entrance 7 ft wide in the NW arc. Most of the interior of the fort has been interfered with by later structures; in the SW portion, however, there are very faint traces of two hut circles, each about 30 ft in diameter, marked by a shallow trench. The homestead overlies the E arc of the rampart of the fort. It is subrectangular in shape, measuring 120 ft from NE to SW by 70 ft transversely. It is formed by an earthen bank, outside the S, SE and E arcs of which there is a ditch. On the E, the bank stands 1 ft above the interior and 2 ft 3 ins above the bottom of the ditch. The ditch is 5 ft wide and the counterscarp is about 9 ins high. There is an entrance 5 ft wide on the NW. The NE half of the interior is a court, the floor of which is at a level slightly lower than that of the ground outside. The SW half contains three hut circles. The largest, which is centrally placed, measures 28 ft in diameter within a low earthen bank, in the E arc of which an entrance 6 ft wide leads into the court. Immediately to the N there is a hut circle 12 ft in diameter; the N arc of its bank forms the SW side of the main entrance to the homestead. The entrance to this hut also faces the court. The third hut circle lies immediately S of the large one. The entrance is in the NW arc, and beside it there is a gap in the bank which surrounds the homestead. There are other structures in the NW part of the interior of the fort which also appear to belong to the homestead phase. An oval enclosure, measuring 20 ft by 17 ft, formed by a low, grassy mound, lies immediately NE of the entrance in the NW of the fort. Fragmentary enclosures and banks lie in the NW part of the interior, among them another hut circle, 18 ft in diameter with an entrance 4 ft wide on the NW. A low bank 200 ft in length runs SW from a point on the S arc of the homestead bank, crossing the ditch and overlying the line of the fort rampart. The remains of an enclosure, consisting of a length of low bank with an external ditch, lie immediately NE of the homestead. RCAHMS 1956, visited 195 What are probably the remains of a fort overlain by a late Iron Age settlement are situated on a spur that juts out high above the NE bank of the Slitrig Water. Where best preserved on the N, the defences comprise a single rampart with an external ditch, but little trace of it survives elsewhere, particularly where the ground falls away steeply around the nose of the spur on the SW, and where its projected line is overlain by a late Iron Age settlement enclosure on the E. Nevertheless, the position of the rampart on the N and the contours of the spur suggest a relatively large oval enclosure measuring internally about 90m from NE to SW by a maximum of 60m transversely (0.4ha). There is an entrance on the NW and at the SW end of the interior there are traces of two timber round-houses comprising shallow scooped platforms with enclosing grooves. Otherwise all the visible features in the interior probably belong to the late Iron Age settlement, which comprises the footings of two round-houses and the banks of several yards on the N, and a more formal enclosure of a ditch and bank enclosing the footings of three more round-houses and a scooped yard on the E, this latter enclosure probably overlying the earlier rampart. Information from An Atlas of Hillforts of Great Britain and Ireland – 19 October 2016. Atlas of Hillforts SC3281

Asset/Event Number	24
Asset/Event Name	Kirkton Hill, fort
Type of Asset/Event	Fort; Scooped Settlement; Settlement
Date and/or Period	Prehistoric (Iron Age)
Listing No./NRHE Number	SM1700; NT51SW 1.00
HER Number	
Status	Scheduled Monument
Easting	353669

Northing	612379
Parish	Cavers
Council	Scottish Borders
Description	The remains of a fort overlain by a late Iron Age settlement are situated on the S end of the elongated summit of Kirkton Hill. Oval on plan, the fort measures internally about 58m from NE to SW by 52m transversely (0.25ha), but its defences have been obscured by the construction of the later settlement, which not only occupies the interior, but sprawls across the ramparts on the relatively level N flank, while on the E they are overlain by a rectilinear settlement enclosure and elsewhere ploughed-down by rig and furrow cultivation. Nevertheless, a belt of at least two ramparts and ditches, the outer with a counterscarp bank, can be seen stepping down the slope on the SW in a series of scarps and terraces, while on the N the inner forms a scarp beneath the later settlement, and the outer can be traced with an external ditch and a counterscarp bank. From outside the latter another ditch with an external bank extends across to the escarpment forming the W flank of the hill, before turning southwards and petering out on the slope. The fort may have been succeeded by an enclosure following the line of the inner rampart, but this has been incorporated into a series of yards and scooped courts associated with no fewer than thirteen round-houses, most of which are stone-founded and are probably late Iron Age in date; a markedly rectilinear enclosure containing two scooped courts was considered to date from the later Middle Ages by the RCAHMS investigators in 1948, but it is probably another element of the late Iron Age settlement. The position of the entrance into the fort is unknown, though the RCAHMS investigators suggest that it is probably in the obliterated SE sector of the defences. Further information - https://canmore.org.uk/site/55335/kirkton-hill

Asset/Event Number	25
Asset/Event Name	Blakebillend, fort
Type of Asset/Event	Fort; Settlement
Date and/or Period	Prehistoric (Iron Age)
Listing No./NRHE Number	SM2297
HER Number	
Status	Scheduled Monument
Easting	351512
Northing	606298
Parish	Cavers
Council	Scottish Borders
Description	This unusual fortified enclosure lies just off the crest of Blakebillend, dropping down gently eastwards immediately E of the summit of the spur. An irregular polygon on plan, it measures about 150m from NE to SW by 145m transversely (1.6ha) within two ramparts accompanied by external ditches. The inner rampart has been stone-faced, and a run of its outer face is still visible on the S, but large sectors on the NW and NE have apparently been levelled during a later phase of occupation, Nevertheless, where best preserved the inner stands 1m high internally, while the outer is up to 2m high. The ditch between them varies from 4.5m to 7.5m in breadth, contrasting with the relatively minor scale of the outer ditch, which has been virtually obliterated by later cultivation; possibly this ditch was not associated with the construction of the original circuit, but results from additions where it has been incorporated into the lines of a series of later linear earthworks and field boundaries. Later usage has broken through the defences at several places, but there are at least two original entrances, on the NNE and WSW respectively, and at both the ramparts return and unite around the terminals of the ditches. The greater part of the interior is occupied by what is probably a late Iron Age settlement comprising a series of rectilinear and curvilinear yards and at the footings of at least five stone walled round-houses, one of which lies on the line of the inner rampart on the SE. The surrounding area contains extensive traces of earlier fields and boundary works, some of which are evidently associated with post-medieval rig-systems, but these also overlie a system of small rectilinear fields, which is likely to be late Iron Age in date. Further information - https://canmore.org.uk/site/55147/blakebillend

Asset/Event Number	26
Asset/Event Name	Denholm Hill, forts 600m NE of Stobs Castle
Type of Asset/Event	Forts
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM3372; NT50NW 5.00
HER Number	
Status	Scheduled Monument
Easting	351106
Northing	609145
Parish	Cavers
Council	Scottish Borders
Description	The remains of this fort occupy a narrow ridge that forms the summit of Denholm Hill and represent at least two periods of construction. Roughly oval on plan, in the later it measures internally about 95m from ENE to WSW by 40m transversely (0.31ha). The defences probably comprised twin ramparts with a medial ditch, but these have been largely destroyed around the eastern half of the circuit; short fragments of the inner rampart can be seen to either side of an entrance midway along the NNW side, and while the ditch can be traced round the whole of the WSW end, the counterscarp rampart survives only on the NW quarter; the ditch is up to 5.8m in breadth by 1.8m in depth where it has been cut through the spine of the ridge on the WSW. Traces of the earlier phase of construction lie another 38m WSW on the very tip of the ridge, comprising a single rampart with an external ditch; described by Royal Commission investigators in 1948 as a typical ridge fort, it is assumed that this extended to the ENE tip of the ridge, to form a long narrow enclosure taking in an area measuring about about 140m in length 40m in breadth (0.55ha). There is little trace of any contemporary structure within either part of the fort, though satellite imagery suggests the presence of what is either the ploughed-down rim of a house platform or footing of a round-house in the ENE end of the later fort. The rest of this fort is enclosed by a bank that overlies the rampart and which the Royal Commission investigators believed was probably no more than a garth associated with the footings of a rectangular building set immediately within the entrance. Further information - https://canmore.org.uk/site/55177/denholm-hill

Asset/Event Number	27
Asset/Event Name	Mid Hill, fort & settlement 700m NW of Adderstonshiels
Type of Asset/Event	Fort; Settlement
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM3373; NT50NW 4.00
HER Number	
Status	Scheduled Monument
Easting	351407
Northing	609763
Parish	Cavers
Council	Scottish Borders
Description	This fort is situated on the NW shoulder of Mid Hill, occupying a terrace from which the ground rises up beyond a shallow gully towards the summit on the SE. The defences, which have been heavily reduced, partly as a result of a phase of Late Iron Age occupation, and partly through more recent quarrying, comprise two ramparts with external ditches, though their circuits diverge on the NE and SE side. The inner encloses an oval area measuring about 78m from ENE to WSW by 39m transversely (0.25ha), but the greater part of its circuit it has been levelled, and on the S and E only its ditch is visible beneath the earthworks of the late Iron Age settlement occupying the interior; on the WSW there are traces of a shallow internal quarry immediately to the rear of the rampart. The outer forms a much larger enclosure

	and it is unfortunate that later activity on the ENE and WSW has obscured the relationship between them, for it is possible that the outer represents a separate period of construction and was once a free-standing enclosure of about 0.4ha. If so, the two ramparts must follow the same line along the NW, where a single ditch with a counterscarp bank extends along the foot of the slope. By and large, however, the outer rampart is much better preserved than the inner, still standing up to 1.2m high internally, and its ditch is about 5m in breadth. An entrance is visible through the inner rampart at the WSW end, approached by a trackway that mounts the slope obliquely to expose the visitor's right side, and there may have been a second on the ENE, marked by the terminal of the outer rampart on its S side. Most of the features visible within the interior probably belong to the late Iron Age settlement, which is bounded on the W by the grass-grown ruin of a wall cutting across the interior and the inner rampart, and on the S and E probably incorporating the outer rampart into its line. In addition to a possible house platform immediately within the entrance on the ENE, which possibly belongs to the earlier occupation of the fort, the footings of at least two round-houses can be seen within the interior of this enclosure. together with traces of a series of scooped courts and yards. Further information - https://canmore.org.uk/site/55176/mid-hill

Asset/Event Number	28
Asset/Event Name	Newton Hill, fort
Type of Asset/Event	Fort
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM2255; NT40NE 28.00
HER Number	
Status	Scheduled Monument
Easting	349701
Northing	607967
Parish	Cavers
Council	Scottish Borders
Description	This fort, which is situated on the rounded summit of Newton Hill, which forms the NE end of the NE spur of hills dropping down from Penchrise Pen, is oval on plan and measures 60m from ENE to WSW by 42m transversely within twin ramparts with a medial ditch. The inner rampart is a maximum of 1m high internally and uses the topography to create a high external scarp dropping over 3m into the bottom of the rock-cut ditch, which is between 7.5m and 12m in breadth; oblique aerial photography by RCAHMS also hints at the presence of an outer ditch with a counterscarp bank on the WSW. The entrance is on the ENE, where the ramparts return and unite around the terminals of the ditch. The footings of at least three round-houses can be seen within the interior. Further information - https://canmore.org.uk/site/54028/newton-hill

Asset/Event Number	29
Asset/Event Name	White Hill, fort
Type of Asset/Event	Fort; Settlement
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM2294; NT40NE 20.00
HER Number	
Status	Scheduled Monument
Easting	347850
Northing	605760

Parish	Cavers
Council	Scottish Borders
Description	This small fortification is situated towards the tip of the SW spur of White Hill, which drops down gently from its broad summit on the NE, but falls away sharply to the Dod Burn on the NW, lying some 90m below on this flank, and into Pyat Sike on the S. Oval on plan, the conventional interpretation of the defences based on the plan and description drawn up by RCAHMS investigators in 1949 (1956, 112-13, no.158, fig 148) sees the insertion of a homestead into an earlier fort. Oval on plan, this earlier fortification measures about 62m from NE to SW by 45m transversely (0.24ha) within twin ramparts up to 1.2m high and a medial rock-cut ditch from 4.5m to 9m in breadth by up to 2.8m in depth. But while the inner rampart attains these proportions on the NE, elsewhere it is virtually levelled, and on the NW apparently overlain by the bank of the homestead, which is itself oval and measures internally 46m from NE to SW by 33m transversely (0.14ha). At face value the interpretation appears reasonable, but on the SE the bank of the homestead is largely a rib of outcrop, which towers above the supposedly levelled rampart set at its foot, to such an extent that the postulated relationship seems unlikely. Alternatively, this rib of outcrop and the innermost bank attributed to the homestead represent the primary line of defence to which the outer lines have been added; in this case there was no need to erect a rampart around the lower two thirds of the circuit, and the more substantial enhancement of the defences with ramparts to either side of the ditch was largely focussed on the uphill side on the NE, between the entrance on the ESE and the steep escarpment falling away to the NW. On the SW side of the entrance, the low bank visible on the inner lip of the ditch returns and unites with the outer rampart around the terminal of the ditch, and a worn entrance way can be seen extending from the causeway up to the gap into the innermost enclosure; there is also a gap in the latter on the W. The footings of a round-house can be seen in the centre of the interior and a smaller circular scoop on the N. An unusual system of linear earthworks encloses the spur to the NE and SE of the fort. Further information - https://canmore.org.uk/site/54020/white-hill.

Asset/Event Number	30
Asset/Event Name	Barns Burn, fort 680m NW of Newton Hill
Type of Asset/Event	Fort
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM3363
HER Number	
Status	Scheduled Monument
Easting	349369
Northing	608561
Parish	Cavers
Council	Scottish Borders
Description	A heavily ploughed-down fort or fortified settlement is situated on a low elongated hillock on the NW flank of a spur extending NE from the foot of White Knowe. Oval on plan, its interior measures about 90m from NE to SW by 40m transversely (0.3ha). According to the RCAHMS investigators who found it in 1940, the defences comprise two ramparts, though even where best preserved these were reduced to no more than terraces, and the entrance is on the NE. The OS subsequently traced the stony scarp of the inner rampart, by then no more than 0.5m high round most of the circuit, and the outer on the SW, but satellite imagery suggests they are separated by a medial ditch around the NE, SE and SW. The interior is featureless. Further information - https://canmore.org.uk/site/54015/barns-burn.

Asset/Event Number	31
Asset/Event Name	Penchrise Pen, fort 635m SW of Penchrise Farm Cottage
Type of Asset/Event	Fort; Settlement; Military Sentry Box

Date and/or Period	Prehistoric; Modern
Listing No./NRHE Number	SM2296
HER Number	
Status	Scheduled Monument
Easting	349086
Northing	606245
Parish	Cavers
Council	Scottish Borders
Description	The monument is the remains of a hillfort, dating probably to the Iron Age (between about 800 BC and AD 500). Up to three parallel banks and ditches enclose a central area on the hill summit and there is an annex to the W and an enclosure to the NE. The monument is situated on Penchrise Pen at around 440m above sea level. The hill has extensive views in all directions and is a very prominent feature in the local landscape. The central fort measures about 105m ENE-WSW by 82m transversely. On the SE side the ramparts are reduced to terraces and,to the S, the steepness of the rocky slope obviates the need for additional defences. There are entrances to the NW and NE. Beyond the fort, there is an annex to the W and an enclosure to the NE, both formed on naturally level or gently sloping ground below the summit. The annex to the W is roughly triangular on plan and measures 69m N-S by 42m transversely, while the NE enclosure is sub-oval on plan, measuring 62m N-S by 48m transversely, and partly blocks the fort's NE entrance. There are entrances to the N of the W annex and the NE of the E enclosure. There are two potential hut circles within the fort and three clear hut circles in the W annex. An Ordnance Survey trig point and the concrete foundation and building blocks of a military sentry box stand on the fort summit. The scheduled area is irregular on plan, to include the remains described above and an area around them within which evidence relating to the monument's construction, use and abandonment is expected to survive, as shown in red on the accompanying map. The monument was first scheduled in 1963, but the documentation did not meet modern standards: the present amendment rectifies this. Statement of National Importance: The monument is of national importance because of its potential to make a significant addition to our knowledge and understanding of later prehistoric settlement in Scotland, specifically defensive sites. In addition to the visible remains of the banks and ditches, the site has good potential to preserve important buried deposits, features and structures relating to its construction and use, which could enhance our understanding of Iron Age settlement, society and economy. The annex and enclosure enhance the monument's importance as they indicate that the site may have developed and expanded over time. The presence of at least two additional prehistoric enclosures at the base of the hill adds significant potential to study the monument in relation to surrounding settlement, while the elevated position of the fort means that there are site lines to numerous other enclosures and forts in the wider area. Our understanding of the date, distribution and character of later prehistoric settlements in southern Scotland would be diminished if this monument was to be lost or damaged.

Asset/Event Number	32
Asset/Event Name	Blakebillend, tracked target range, 750m WNW and 570m and 740m NW of Penchrise Peel
Type of Asset/Event	Tracked Target Range
Date and/or Period	Modern
Listing No./NRHE Number	SM13769
HER Number	
Status	Scheduled Monument
Easting	351030
Northing	605979
Parish	Cavers
Council	Scottish Borders
Description	The monument comprises the remains of a Second World War firing range, part of the Stobs Camp military training area. The range is a tracked target range for training tank gunnery and survives as a triangular

trackway, a number of buildings and earthwork. The site lies on high ground overlooking the valley of the Slitrig Water to the east, at around 300m above sea level.

The monument consists of a large triangular trackway, measuring around 395m east to west by around 210m north to south at its largest, and set in a cutting around with concrete revetments in places around most of its length. At the eastern end of the circuit is a small secondary loop branching off the main circuit and leading through a brick and concrete maintenance shed. Also located here are the Range Warden's hut and the building housing the power and winding gear for the target track. Around 200m to the northeast of these buildings is another isolated single building, built of brick with a lightweight timber and concrete sheeting roof, while around 270m to the north are a series of earthworks believed to be the firing positions for the range. The scheduled area is irregular and consists of three parts. It includes the remains described above and an area around within which evidence relating to the monument's construction, use and abandonment is expected to survive, as shown in red on the accompanying map.

Statement of National Importance:
Intrinsic characteristics:
The Blakebillend tracked target range was a key element of the substantial military training area known as Stobs Camp during the Second World War. The range was designed around the need during the Second World War for training tank gunners to hit moving targets. The main element of the range is the triangular trackway circuit. This worked using a small cart on which the targets could be mounted, and a winding system was used to send this cart around the circuit, and gunners would practice hitting the moving target. The trackway was set within a cutting around its length, reinforced with concrete in some areas, to protect the cart itself from the practice rounds. Adjoining the eastern end of the trackway circuit is a small secondary loop, around which supporting facilities for the range are grouped, including the range warden's hut, the maintenance and storage shed for the target equipment and the power and winding machinery house.

Around 200m northeast of the range is another building. Its isolated location away from the other elements of the range and the design of the structure, incorporating a lightweight roof which appears to be designed to lift away in the event of a blast, suggests it may have been used for storing training munitions. The final element of the range is a set of earthworks around 270m north of the circuit, and these appear to be the remains of the firing positions for the range.

Contextual charachteristics:

The range lies on a gently sloping terrace partway up the eastern side of Stirkcleuch Height and is aligned facing towards the higher part of the hill, providing a safe backstop for any stray rounds during training. Stobs Camp was one of the largest military training sites within Britain in the first half of the 20th century and it was used by hundreds of thousands of troops over its operational lifetime. The site first began operating in 1903 and it remained owned and used by the military until 1957, when most of the site was sold, with the remainder a few years later.

The Blakebillend range is an important part of the Stobs Camp complex, particularly during its later period of use as a training facility. The continued use of Stobs for military training through the Second World War and beyond is well documented. However, in contrast to the extensive range of documentary information resulting from the First World War use of Stobs, there is very little detailed information on the use of the site during this later period. For example, while Regimental War diaries record certain tank units spending time at Stobs (See Associative Characteristics below), there is very little detail contained within them on the actual training they undertook at the site. As a result, the archaeological remains of the training areas themselves, such as Blakebillend, have the potential to contain valuable evidence and information on the techniques and equipment used in military training during the Second World War.

The development of tank warfare during the 20th century necessitated the development of specific training regimes to prepare crews for active service. In the case of the Blakebillend range, the purpose of the training area was to develop the required skills of accurately targeting and firing upon a mobile enemy unit. The Blakebillend range is the only known example of this type of tank gunnery training range within Scotland, although another partially surviving example of a similar design is located within Dartmoor National Park (Devon & Dartmoor HER Number MDV27370). The function and design of the Blakebillend range also has parallels in tracked target ranges within Scotland used for the purpose of training aerial gunnery skills during the Second World War, including at Tain (SM13653) and Baldoon (SM13739), although the aerial gunnery ranges are significantly smaller in scale in comparison to Blakebillend.

The wider landscape around the Blakebillend range contains extensive further remains of the military training area at Stobs. Other remains still identifiable within the former training area are the remains of the main camp at Barns (SM13767), around 3.5km north of the range, firing ranges at Barnes Moss and Penchrise (SM13755) and areas of First World War training trenches at Acreknowe (SM13768).

Associative characteristics:

The monument is a part of the substantial military training and internment camp complex at Stobs, directly linked to both the First and Second World Wars. The Stobs Camp complex is highly significant as an example of both a military training site for much of the first half of the 20th century, including both world wars, and as a First World War internment site for both civilians and later prisoners of war. The complex has a high potential to inform us about many aspects of military and civilian life during the First and Second World War, and their impact upon Scotland's society, economy and population.

Regimental War diaries now in the Archives of the Bovington Tank Museum give some insight into the tank units that spent time at Stobs, and although they do not include any specific details of the training undertaken, it is likely they would have used the Blakebillend range while at the camp. The units recorded as spending time at Stobs include the 12th Battalion of the Royal Tank Regiment from June – November 1942, the 145th Regiment of the Royal Armoured Corps (R.A.C.) in June and September 1942, the 144th Regiment of the R.A.C. from March – May 1943, the 148th Regiment of the R.A.C. from November 1943 to February 1944 and the 15th/19th King's Royal Hussars of the R.A.C. in May 1944.

Asset/Event Number	33
Asset/Event Name	Stobs Camp rifle ranges, 650m W, 330m WNW and 450m SSE of White Knowe
Type of Asset/Event	Rifle Ranges
Date and/or Period	Modern
Listing No./NRHE Number	SM13755
HER Number	
Status	Scheduled Monument
Easting	349475
Northing	607169
Parish	Cavers
Council	Scottish Borders
Description	The monument comprises the remains of three First World War gunnery training ranges, part of the Stobs Camp military training area. Two of the ranges are located on Barnes Moss, with the third at Penchrise. The first range at Barnes Moss (the western example) is aligned north to south, towards the steeply sloping ground at the base of Penchrise Pen and White Hill. The total length of the range is around 490m, while at its widest it is around 120m west to east. It consists of a targeting position comprising two adjacent large banks, formed of a combination of timber, concrete, steel and earth. A second earthen bank lies to the south of each of them, to provide a backstop for stray rounds, with a deep ditch between. Within the ditch is the stone foundations of the former shelter for the score counters at its western end, and the potential remains of a former tramway running between the scorer's shelter and a pavilion that formerly stood to the west. Stretching north from the target position are five pairs of firing positions formed of earthwork ditches and banks with concrete distance marker posts, evenly spaced at roughly 100-yard intervals (around 91.5 metres). The second range at Barnes Moss (the central example) consists of at least four pairs of concrete trenches, three earthwork firing positions and a former tramway. It is aligned northeast to southwest, towards the steeply sloping ground at the base of Penchrise Pen and White Hill. The total length of the range is around 750m, while at its widest it is around 70m northwest to southeast. The concrete trenches appear to be former targeting positions and are roughly L-shaped, and measure around 10m long by around 2m at their widest, although for most of the length they are only around 0.5m wide. Within some of the upstanding trenches are the remains of a mechanical metal framework and parts of a telephone connection. The remains of a tramway, visible as an embankment and a cutting, runs along the southeast end of the range, between the southeasternmost three pairs of trenches. The northwestern section of the range consists of at least four pairs of earthwork banks and ditches representing the former firing positions, and spaced between 65m to 75m apart, with around 135m between the frontmost firing position and the first targeting positions. The third range, at Penchrise, (the eastern example) consists of a targeting position formed of a pair of parallel large earthwork banks, with a brick and concrete shelter for the score counters at its north corner and some remains of the target mounting frame. Stretching east from the target position are six pairs of firing positions, evenly spaced at roughly 100-yard intervals (around 91.5 metres). It is aligned northeast to southwest, towards the high ground of Penchrise Pen and White Hill. The total length of the range is

around 575m, while at its widest it is around 135m northwest to southeast, where the third of the firing positions have been spaced wider apart than the others to accommodate a stream passing between them.

The scheduled area is irregular and consists of three parts. It includes the remains described above and an area around within which evidence relating to the monument's construction, use and abandonment is expected to survive, as shown in red on the accompanying map.

Statement of National Importance:
Intrinsic characteristics:
The Barnes Moss and Penchrise rifle ranges are a key element of the substantial military training area known as Stobs Camp. Both the western and eastern ranges have largely been created to a standard design, but there are some unusual features present. One end of each range consists of the former target position, two substantial parallel banks aligned perpendicular to the range. They served a dual purpose of acting as a foundation for a timber frame mounted between them, on which the targets themselves were mounted, and as a backstop to catch any stray rounds during firing. There are some surviving remains of the base of the targeting frame visible at both ranges, along with a high amount of ammunition used in training.

The rest of the range extends away from the targeting position and consists of a series of firing positions (ten at Barnes Moss, twelve at Penchrise), arranged in pairs parallel to the targeting bank at intervals of around 91.5m (100 yards) apart. This is a standard layout for a firing range of the period, allowing recruits to practice marksmanship at different distances. Each of the firing positions consists of a shallow earthwork trench around 30m in length, within which trainees would be situated aiming towards the target position. At Penchrise, the positions have slightly variations in alignment and spacing between each other, in contrast to the standard consistent alignment and spacing seen at Barnes Moss, apparently to account for the presence of several small streams running through the Penchrise range on their route to Gibby's Sike at the base of the slope.

On the northeast corner of the targeting earthwork at Penchrise is a small brick and concrete structure, with an earthwork bank against its northeast face, which would have served as a shelter for the personnel undertaking scoring of the training. The position of this shelter is unusual, as the scoring shelters would normally be positioned at one end of the ditch between the two earthworks, as this provided additional protection from stray firing, and this can be seen in the stone foundation of the former shelter at Barnes Moss. The location of the Penchrise shelter is instead on the same side of the earthwork as the firing positions, increasing the risk to the personnel inside and necessitating an additional earthwork bank for their protection.

The central range at Barnes Moss has a very unusual design when compared to the other firing ranges at Stobs or elsewhere. In a standard range of the period like the Barnes Moss and Penchrise examples, a single targeting position is located at one end of a range, with multiple firing positions extending away from it at 100-yard intervals. In this example, there appear to be multiple target positions, in the form of narrow concrete trenches with metal target mounting frames, unlike the single targeting position seen at the ranges above, with the firing positions following the more standard design. It is unclear precisely why the range was designed in this unusual manner, but it may relate to a specific type of training it was intended to provide. It is also unclear if this is the original design for this range, or if it was modified during the First World War, however the 1918 date stamp on part of the connecting telephone system does confirm its existence in this form at that time. The design of the concrete positions, with the shelters facing away from the firing positions and being equipped with telephone connections, suggests that personnel would be stationed within them during firing training, either for scorekeeping or target mounting purposes, with the telephone system allowing communication between constituent parts of the range without having to leave the safety of the shelter.

Contextual characteristics:
The Barnes Moss ranges lie to the east of Dodburn Hill. The western range lies on gently sloping ground on the shoulder of the hill and runs across the base of the narrow valley between Dodburn Hill to the north and Penchrise Pen and White Hill to the south. The central range lies to the south of Barnes Loch and runs along the base of the narrow valley between Dodburn Hill to the west and White Knowe to the east. The Penchrise range lies to the north of Penchrise Farm, on gently sloping ground beside Gibby's Sike. The range runs along the base of the valley formed by White Knowe and Newton Hill to the northwest, Penchrise Pen to the southwest and White Hill to the southeast. In all three cases, the choice of location is typical for ranges of this period, which required an area of relatively level ground for the range itself, while surrounding high ground or large bodies of water were utilised to provide a safe backstop for any rounds missing the targets.

Stobs Camp was one of the largest military training sites within Britain in the first half of the 20th century and it was used by hundreds of thousands of troops over its operational lifetime. The site first began operating in 1903 and it remained owned and used by the military until 1957, when most of the site was sold, with the remainder a few years later.

The Stobs estate was purchased by the War Office in 1902, initially with the intention of providing a permanent training and barracks complex for the British Army 6th Corps. By 1904 changes to structure of the army led to Stobs changing roles from a barracks to a primarily summer training camp, some troops coming from the regular army forces but the majority from the many volunteer units around Britain. (The volunteer units were formally reclassified as the Territorial Force during the Haldane Reforms in 1908, but Stobs continued to be used for their annual summer training camps). With the advent of the First World War, Stobs Camp was changed to operating as a year-round training facility, to accommodate the high numbers of new recruits during the conflict, and at the same time part of the site was turned into an internment camp, initially for civilian detainees and later for prisoners of war. Although most of the visiting troops to the camp both before and during the First World War were accommodated within tents during their time at the camp in the early period, permanent facilities were constructed for the core functions of the camp, including training ranges, and it is likely that the Penchrise range dates to this period of construction at the camp.

A high number of rifle training ranges were constructed in the late 19th and early 20th century, with around 130 examples recorded in the National Record of the Historic Environment. Intended for the purpose of training recruits and volunteers in marksmanship, they were generally designed to a consistent pattern involving a targeting position at one end of the range, and a series of six firing positions spaced at roughly 100-yard intervals from the target. Many examples of these training ranges have now been either partially or wholly removed or lost, while there are some examples that remain in use for training to this day, such as at Castlelaw (Canmore ID 110879).

The wider landscape around the Penchrise range contains extensive further remains of the military training area at Stobs. Other remains still identifiable within the former training area are the remains of the main camp and related remains at Barns (SM13767), around 2km north of the ranges, areas of First World War training trenches at Acreknowe (SM13768), and a Second World War tank training area at Blakebillend to the southwest (SM13769). This concentration of surviving training infrastructure makes Stobs Camp particularly significant for our understanding of military training during the First and Second World Wars.

Associative characteristics:
The monument is a part of the substantial military training and internment camp complex at Stobs, directly linked to both the First and Second World Wars. The Stobs Camp complex is highly significant as an example of both a military training site for much of the first half of the 20th century, including both world wars, and as a First World War internment site for both civilians and later prisoners of war. The site has a high potential to inform us about many aspects of military and civilian life during the First and Second World War, and their impact upon Scotland's society, economy and population.

Asset/Event Number	34
Asset/Event Name	Stobs Camp, prisoner of war camp and cemetery, military training camp and trenches, Stobs
Type of Asset/Event	POW Camp; POW Cemetary; Military Training Camp; Trenches
Date and/or Period	Modern
Listing No./NRHE Number	SM13767
HER Number	
Status	Scheduled Monument
Easting	349958
Northing	609378
Parish	Cavers
Council	Scottish Borders
Description	The monument consists of the extensive remains of a military training camp operational from 1902-1959. During its operational life it was also used as a civilian internment camp, a prisoner of war camp and a resettlement camp for displaced Polish servicemen. The monument covers an area around 1.5km by 1.5km and is located on the slopes of the upland valley around Barnes Burn, around 7km south of Hawick and around 200m above sea level. Stobs Camp was established as a military training camp when the War Office purchased land in 1902 and military training began in 1903. During the First World War it was used to detain civilian internees and captured enemy military personnel. Later was used solely as a prisoner of war camp becoming the headquarters for all prisoner of war camps in Scotland. After the Second World War Stobs was one of many

Army camps used to accommodate Polish ex-servicemen and their families. The camp also continued as a training base in the interwar period, during the Second World War and until the mid-1950s before the camp was closed in 1957. Demolition and removal work began in 1959.

The majority of the plan form of the camp remains visible. It survives as concrete bases for buildings, a network of paths and tracks, some stone and concrete walling, and earthworks. The site also includes several upstanding buildings including a First World War prisoner of war accommodation hut, a pre-First World War store, an officers' hut and a number of brick and concrete drying rooms/sheds. Other features include a dammed bathing pool, the internee cemetery (all human remains have been exhumed), practice defensive emplacements and trench systems.

The scheduled area includes the remains described above and an area around them within which evidence relating to the monument's construction and use is expected to survive, as shown in red on the accompanying map. The schedule excludes any modern post and wire fencing and gates, cattle grids and their related sumps, the top 30cm of any surfaced roads/tracks, signposts and information boards and telegraph/power pylons.

Statement of National Importance:
Intrinsic characteristics:
Stobs Camp was originally intended as a permanent training base and barracks but this scheme was cancelled in 1904. After this date the site developed over several main phases which can be summarised as:
-the pre-First World War summer training camps in tented accommodation on the slopes west of Barnes Burn,
-the pre-First World War development of permanent camp buildings generally around and south of Barns House,
-the early First World War development of features around the camp including ancillary buildings and training trenches and fortification systems,
-the First World War purpose-built civilian internment camp west of Barnes Burn,
-the extension and development of the internment camp during the First World War into a prisoner of war camp,
-the use of the camp for military training use (not for prisoner of war accommodation) in the interwar period and during the Second World War, and its use as a resettlement camp for Polish troops after the Second World War.

Contemporary plans and images of the camp survive and greatly help in identifying the purpose of the physical remains visible today. The most significant and best understood phase of activity at Stobs Camp was during the First World War when the site was a crucial training camp for troops and then the primary internment and prisoner of war camp in Scotland. At the peak of wartime activity as a prisoner of war camp, Stobs Camp was divided into two areas; the eastern portion provided accommodation huts and mess quarters for guards and officers and administration buildings. The western side was the secured camp, first for internees and then for prisoners of war.

The plan form of the eastern camp area can still be clearly understood with surviving concrete hut bases, various minor earthworks and bunding, practice trench systems and training fortifications/dugouts, brick and concrete drying rooms, a timber and sheet metal storage building and a timber and sheet metal officers' accommodation hut. The timber and metal structures are rare survivals from the early 20th century period in Scottish military history. The storage building (NT 50305 09366) measures around 9.5m by 18.75m, constructed from corrugated iron panels with a high roof and nine steel cables run externally from the roof to the ground. The nearby officers' hut (NT 50244 09240) is rectangular and single-storey measuring about 30m by 6.5m, constructed from corrugated iron panels with external features including the remains of a veranda and picket fence on the north.

A key feature in the eastern area of Stobs Camp is the cemetery where 45 German soldiers, sailors and civilians who died at Stobs were interred (NT 50454 09606). At the west end of the cemetery, on a raised area with stone steps leading to it from the graves, was a memorial to the dead with stone benches placed to the north and south. When the camp closed, the graves were removed to the German Military Cemetery at Cannock Chase in Staffordshire and the memorial at Stobs was reportedly blown up. However, the base of the memorial and stone rubble survived, and they were reconstructed in 2018. Stones found at the cemetery were selected and cleaned before the memorial was assembled and efforts were made to locate the facing stones visible in First World War photographs.

The western portion of Stobs was developed as the internment camp and then prisoner of war camp. By 1917 this part of the camp was a large compound measuring internally about 750m by 280m surrounded by a heavy triple-barbed wire fence. There was a sentry post at each of the corners of the compound fence and other posts at 70-100 metre intervals round the perimeter. This fenced area was split into A, B, C and D compounds and each had a suite of buildings such as stores, kitchen, boiler house and accommodation huts. Each camp compound had twenty accommodation huts and in total up to 4500 men were accommodated.

The plan form of the western portion of the camp is still understandable from the surviving remains, and these are similar to those found at the east. The layout of the camp can be seen through the surviving road network and concrete hut bases. Notably, there is a single surviving First World War prisoner of war accommodation hut (NT 50126 09614). This is a unique example of a First World War prisoner of war hut that is still in its original location in the UK. The single storey hut is mostly of timber and sheet metal construction, measuring around 36.5m by 6m, and rests on brick and concrete plinths. Some windows and glazing survive and metal flues in the roofline for stoves. Internal features such as the shower and ablutions area at the north end of the hut still survive. This area of Stobs Camp also included a hospital, YMCA and arts theatre, operating theatre, mortuary, bakery, post offices and workshops and these survive as foundations and hut bases. There are also standing brick and concrete structures used as drying rooms and various minor earthworks and bunding. There survives a significant amount of camp infrastructure including a reservoir and freshwater system, on site waterworks, an internal road and narrow-gauge rail network. At the northeast edge of the camp is the remains of the water treatment works (NT 49924 09851) containing three rectangular and three octagonal concrete tank bases. A bridge constructed of concrete (NT 50089 09423) over Barnes Burn leads into the western camp area. Southwest of the bridge, Barnes Burn is collected into a pond by a concrete dam (NT 50047 09369). This was used as a bathing pool.

The training trenches and practice fortifications are in three groups around the eastern camp area and likely date from across the early to mid-20th century. A collection immediately northwest of Barns House (approximately NT 502 094) include well-preserved practice defences that can be matched with contemporary photos of their construction. Another group of trenches lie east of Barns House (approximately NT 504 093), some were partially excavated in a recent community archaeology project which helps provide further modern evidence of their construction and use. The final group of trenches lie in two areas (approximately NT 500 090 and NT 500 088) within fields southwest and south-southwest of Barns Cottage.

The largely complete plan-form of this camp makes Stobs a very rare and significant site. The camp has undergone changes and adaptations to structures and its plan, particularly the partial clearance of the site after its closure in 1957. However, ground survey, study of aerial imagery and comparison with contemporary plans and photographs allows us to confidently identify many archaeological features on site. The above ground remains such as the standing buildings are very rare survivors and greatly add to the importance of Stobs as a physical reminder of military training and wartime activities on home soil. There is high potential for surviving archaeological evidence both within and around the camp. The impressive array of remains and archaeological features covering all the various functions and activities of the camp helps us to understand its use and the daily lives of the men who built, worked, trained and were imprisoned there.

Contextual characteristics:
Stobs Camp was one of the largest military training sites within Britain in the first half of the 20th century and it was used by hundreds of thousands of troops over its operational lifetime. The site was established in 1903 and it was operated by the army until 1957, when most of the site was sold, with the remainder a few years later. During this extended period, the site was also used for a variety of functions in addition to military training including its use as a civilian internee camp and a prisoner of war camp. The extended use of the site, the concentration of remains and the additional functions it was put to, makes Stobs Camp a rare survival amongst military training sites.

The Stobs estate was bought by the War Office in 1902, initially with the intention of providing a permanent training and barracks complex for the British Army 6th Corps. By 1904 changes to the structure of the army led to Stobs changing roles from a barracks to a primarily summer training camp, some troops coming from the regular army forces but the majority from the many volunteer units around Britain. The volunteer units were formally reclassified as the Territorial Force during the Haldane Reforms in 1908, and Stobs continued to be used for annual summer training camps. Stobs Castle (LB2066), designed by Robert Adam around 1792, was the seat of the original estate Located around 1km east of Stobs Camp, it was used to house senior ranking military personnel and administration staff.

With the advent of the First World War, Stobs Camp was changed to operating as a year-round training facility, to accommodate the high numbers of new recruits during the conflict, and at the same time part of the site was turned into an internment camp, initially for civilian detainees from enemy nations and later for prisoners of war. Although most of the visiting troops to the camp both before and during the First World War were accommodated within tents during their time at the camp, permanent facilities were constructed for the core functions of the camp, including training ranges.

The monument forms part of the network of prisoner of war camps in Britain. Stobs was the main administrative centre and camp for Scotland. Prisoners arrived in Scotland at Stobs and some were relocated to satellite camps. For example, records suggest up to 1200 prisoners of war arriving at Stobs were then stationed at Kinlochleven camp (SM13681).

In the 1950s, Stobs was mainly used as a training base for the Territorial Army with the last military activity on site in 1955. The military use in the 1950s included training of troops for the Korean War and this period

appears to be less well publicly documented. In 1957, it was announced Stobs would cease operating as a training base and the site was partly cleared in 1959.

The wider landscape around the main Stobs Camp contains extensive further remains of the military training area. These ancillary features were constructed and used by the troops based at Stobs and were vital parts of the function of the wider camp. Other remains still identifiable within the former training area are the remains of the Acreknowe training trenches, Stobs Camp, 500m NW of Acreknowe (SM13768), Blakebillend, tracked target range, 750m WNW and 570m and 740m NW of Penchrise Peel (SM13769) and Stobs Camp rifle ranges, 650m W, 330m WNW and 450m SSE of White Knowe (SM13755).

Associative characteristics:
The monument forms the core of the substantial military training and internment camp complex at Stobs, directly linked to both the First and Second World Wars. The Stobs Camp complex is highly significant as an example of both a military training site for much of the first half of the 20th century, including both world wars, and as a First World War internment site for both civilians and later prisoners of war. The complex has a high potential to inform us about many aspects of military and civilian life during the First and Second World War, and their impact upon Scotland's society, economy and population.

Asset/Event Number	35
Asset/Event Name	Bonchester Hill, earthworks
Type of Asset/Event	Fort; Settlement; Cultivation Remains
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM2173; NT51SE 10.00
HER Number	
Status	Scheduled Monument
Easting	359479
Northing	611731
Parish	Hobkirk
Council	Scottish Borders
Description	A complex fortification is situated on the summit of Bonchester Hill, which overlooks Bonchester Bridge from the E and presents rugged crag around its southern flank. Two episodes of excavation have occurred here, in 1906 (Curle 1910) and 1950 (Piggott 1950), but it would be unwise to think that either the complexity or the chronology of the sequence are understood. The sequence adopted in the RCAHMS County Inventory (RCAHMS 1956, 150-2, no.277) was worked out in co-operation with the more recent excavator, Mrs C M Piggott, and places the innermost enclosure on the hill first, though it should be noted that Mrs Piggott recognised evidence of earlier occupation beneath its wall where it was sectioned on both the N and W. Measuring from 3m to 3.6m in thickness, this wall enclosed an oval area measuring 105m from N to S by 85m transversely (0.67ha); the W section, however suggested that the surviving outer face rested on an earlier bank of rubble, beneath the inner edge of which, and resting on the traces of earlier occupation, the upper stone of a rotary quern was discovered. This may provide a terminus post quem for both phases of the circuit here in the late Iron Age. Further complexity was uncovered immediately outside the wall of the inner enclosure on the N, where two lines of ramparts were uncovered, of which only the outer could be traced laterally, extending down to an entrance on the cliff-edge to the E; considered outworks to provide additional protection on this flank, this is a patently naive interpretation, and the section revealed that the inner of them had been built across an earlier paved surface. Notable features of the inner enclosure are its three entrances, on the N, E and SW respectively, each displaying an unusual degree of elaboration. At the E entrance a track climbs obliquely up the slope from the gap in the outer rampart noted above, exposing the approaching visitor's left side, but where the track turns in through the entrance itself, the N terminal also turns inwards, at this point exposing the visitor's right side. In contrast, both terminals of the N entrance are turned inwards, while at the S entrance they are simply staggered to expose the visitor's right side. The outer defences are no less complex and for the purposes of description can be divided into three elements, namely an inner enclosure of some 1.6ha, an outer enclosure of 2.6ha taking in the N and W slopes above the cliff-line, and further ramparts below the cliff-line on the SE that extend the overall footprint of the fortifications by a further 1ha. The perimeter of the inner these enclosures, varied in the different sections cut across it, from a bank of soil on the N to an unstructured mound of large boulders on the W, while nearby on this side an outer face of orthostatic slabs set below horizontally coursed slabs was revealed, a form of construction that was only known to Mrs Piggott in what she considered to be early medieval contexts; no reliance can be placed upon this chronology today. Like

	the other ramparts, those of the outer circuit vary in character from cutting to cutting, from a single faced wall on the W to a two period construction of double ramparts and ditches on the N; the earlier phase was a simple dump, sealed beneath a turf-line in both ramparts, while in the second the inner was faced on either side and surmounted by a double row of posts driven into its crest. There appear to have been numerous entrances through these outer defences, though it is difficult on the information available to distinguish between original gaps and later breaks. Nevertheless, there are probably entrances through the inner of the outer enclosures on the NNE, ENE and WSW, while the plan published by Mrs Piggott shows another four gaps in the circuit on the NW quarter, and of the eight shown in the outer, those on the N, NNE, ENE W, and NW are likely to be original. The outer of the two lines below the cliff-edge also has a well-defined entrance on the SSE, though how these ramparts and ditches relate to the rest of the defences is quite unknown. No fewer than twenty-eight round-houses can be identified within the interior of the fort, most of them with stone founded walls and likely to be of late iron Age date; while Mrs Piggott asserted that several were contemporary with adjacent ramparts, where a relationship is in evidence they more typically overlie the defences. Further information - https://canmore.org.uk/site/55300/bonchester-hill

Asset/Event Number	36
Asset/Event Name	Bonchester Hill, earthworks
Type of Asset/Event	Earthworks; Enclosures
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM2172
HER Number	
Status	Scheduled Monument
Easting	359602
Northing	612042
Parish	Hobkirk
Council	Scottish Borders
Description	Enclosure, Bonchester Hill. Some slight remains of an enclosure, otherwise destroyed by cultivation, are visible on a flat on the NW side of Bonchester Hill 220 yds. NNE of Ring Plantation and at a height of 850 ft. OD. It is oval on plan and measures 175 ft. from NNE to SSW by 150 ft. from ESE to WNW within a single bank and ditch. The bank, which is spread to a thickness of 18 ft. and is not more than 1 ft. high, shows no stonework; while the ditch is 15ft. wide and up to 1 ft. 6 in. deep. The entrance was situated either on the SSW or the NE, where there are large gaps in the bank. The only internal featue is a scooped hollow, measuring 60 ft. by 40 ft. and 2 ft. in depth, which extends from the centre of the enclosure to within 15 ft. of the ESE side. RCAHMS 1956, visited 1949 NT 5929 1193 The remains of this enclosure are as described by RCAHMS. There are traces of a small, circular scoop abutting the bottom of the inner face of the enclos-bank on the south side and to the south of the large, scooped hollow described by RCAHMS. Visited by OS (WDJ) 12 April 1965

Asset/Event Number	37
Asset/Event Name	Dykeheads, homestead moat
Type of Asset/Event	Homestead Moat
Date and/or Period	Medieval
Listing No./NRHE Number	SM2116; NT50NE 3.00
HER Number	
Status	Scheduled Monument

Easting	358223
Northing	607343
Parish	Hobkirk
Council	Scottish Borders
Description	This homestead moat is situated on flat, open ground on the gentle NW slopes of the NE extremity of Wauchope Rig at a height of 820 ft OD. It is rectangular on plan, with rounded corners, and measures internally 180 ft from NE to SW by 160 ft transversely. It consists of a steep- sided ditch about 12 ft in width, on either side of which is an earthen bank. At the W corner, where it is best preserved, the inner bank, 20 ft wide, stands 2 ft above the level of the interior and 7 ft above the bottom of the ditch. The outer bank, 28 ft wide, stands 3 ft 3 ins above ground level and 6 ft 6 ins above the bottom of the ditch. There is an entrance, 10 ft wide, in the NE. The interior is uneven and the only recognisable structure within it is a small rectangular foundation of but-and-ben type, of no great age. In 1892 it was recorded (J Hardy 1894) that within recent times the work was surrounded by a wall "filled with stones in the centre", but that this had been robbed for dyke building. The mutilated remains were planted with trees to prevent further destruction.

Asset/Event Number	38
Asset/Event Name	Fort and earthworks, Shaw Craigs
Type of Asset/Event	Fort; Earthworks
Date and/or Period	Prehistoric; Early Medieval
Listing No./NRHE Number	SM2152
HER Number	
Status	Scheduled Monument
Easting	367299
Northing	609502
Parish	Hobkirk
Council	Scottish Borders
Description	The monument comprises a later prehistoric/early medieval fort which has evidence of multiple phases of development and occupation. The fort survives as upstanding earthworks occupying the summit of Shaw Craigs. Immediately northeast of the fort are two substantial linear earthworks, each comprising a bank and ditch. The monument is around 300m above sea level. The fort is situated on the elongated summit of Shaw Craigs, from which the ground falls away steeply on all sides. The defences of the fort suggest three phases of construction. The most prominent belong to the second phase, comprising three ramparts extending along its northwest flank and around the northeast and southwest ends to enclose an area measuring 267m from northeast to southwest by 52m transversely. At either end, the inner rampart returns for a short distance along the lip of the escarpment forming the southeast flank of the hill, but this side is otherwise left undefended. There are entrances on the northeast and southwest sides. Several shallow scoops within the interior may represent round houses. The other main features visible within the interior are elements of earlier and later enclosures. The former comprises a heavily reduced rampart cutting across the northeast end, and the latter is represented by a rectilinear enclosure overlying the southwest end. Little more than a short length of the earlier rampart, which includes an entrance on the northeast, is visible. The rectilinear enclosure measures 85m from northeast to southwest by 49m transversely within a stone rampart over 3.5m in thickness, and also accompanied on the northeast and west by an outer rampart. The interior of the rectilinear enclosure is featureless and its entrance opens into the southwest entrance of the earlier fort. The two linear earthworks may have formed an associated land boundary and are truncated to the north by forestry. The scheduled area is irregular. It includes the remains described above and an area around within which evidence relating to the monument's construction, use and abandonment is expected to survive, as shown in red on the accompanying map. The scheduled area excludes the above ground elements of all fences, to allow for their maintenance.

Statement of National Importance:
Intrinsic characteristics:
The monument is a complex multi-period fort situated on the elongated summit of the hill above Shaw Craigs. The plan of the monument is clear and understandable with surviving elements of three phases of enclosure. Immediately outwith the defences on the northwest side are a pair of substantial linear earthworks likely to represent a land boundary.

Excavations on similar sites have shown that there is good potential for the survival of archaeological features and deposits, including occupation and abandonment debris, artefacts and environmental remains such as charcoal or pollen within the monument. It has the potential to add to our understanding of settlement, land-use and environment during the Iron Age and early medieval periods and to provide information about the economy, diet and social status of the occupants. Study of the monument's form and construction techniques compared with other forts would enhance our understanding of the development sequence of this site and of Iron Age forts in general.

Contextual characteristics:
he fort belongs to a wide class of later prehistoric / early historic defended enclosure or fort, with more than 1600 examples known of in Scotland. The Scottish Borders has a high concentration of this type of monument, there are 327 prehistoric forts recorded in the National Record for the Historic Environment for this area.

Later prehistoric forts are often sited on rocky knolls and ridges for defence as well as for territorial visibility in the wider landscape. The terrain at Shaw Craigs provides for natural defence on its western and southern sides while the inner and outer walling protect the easiest approach, from the north. The fort has been deliberately sited to take advantage of the terrain as well as its prominent position in the landscape, dominating lower ground to the south with commanding longer distance views to the southwest and northeast.

The site is part of a local cluster of near-contemporary settlement and agricultural activity; there are a further 19 forts within 10km of Shaw Craigs. There is potential to study these sites together to better understand their functions within the local communities, settlement hierarchy and possible chronological development in the area. The monument has the potential to enhance and broaden our understanding of later prehistoric society and community as well as social organisation, land division and land use.

Additionally, two substantial linear boundaries are located immediately to the northeast of the fort and prior to afforestation, prehistoric cord rig cultivation was recorded a short distance to the north of the fort (Canmore ID: 56805). It can therefore help us understand the broader prehistoric exploitation of landscape and how communities managed land and natural resources in a particular locale.

Associative characteristics:
There are no known associative characteristics that contribute to this monuments national importance.

Asset/Event Number	39
Asset/Event Name	Martinlee Plantation, enclosure 140m N of
Type of Asset/Event	Enclosure
Date and/or Period	Prehistoric?
Listing No./NRHE Number	SM6636
HER Number	
Status	Scheduled Monument
Easting	365703
Northing	608012
Parish	Southdean
Council	Scottish Borders
Description	The monument to be scheduled consists of the remains of a sub-circular enclosure which may be of prehistoric date. The enclosure lies to the NW of the Martinlee Sike immediately N of the A6088 road from Carter Bar to Hawick. The enclosure measures 32m from NW to SE by 29m transversly and is defined by a stony bank 2.5m wide by 0.6m high. There is an entrance into this enclosure on its SE side. The remains of a small hut are visible against the inside face of the bank on the SW side of the entrance. The area to be

scheduled is a 70m diameter circle centred on the enclosure but excluding a small part of the circle on the SW side where the boundary is formed by the edge of the public road, as indicated in red on the attached map extract.

Statement of National Importance:
This monument is of national importance as the remains of an enclosed settlement, possibly prehistoric in date. It retains considerable potential to provide important information about domestic architecture and contemporary economy and land-use.

Asset/Event Number	40
Asset/Event Name	Tamshiel Rig, fort, settlement and field system
Type of Asset/Event	Fort; Settlement; Field System
Date and/or Period	Prehistoric (Iron Age)
Listing No./NRHE Number	SM10605
HER Number	
Status	Scheduled Monument
Easting	364303
Northing	606342
Parish	Southdean
Council	Scottish Borders
Description	The monument comprises the remains of a fort, settlement and field system, probably dating from the later first millennium BC, visible as upstanding earthworks. The monument was originally scheduled in 1961 (index number 2171), but was descheduled in 1990, in the mistaken belief that forestry ploughing had largely destroyed the site. Although the western section of the monument was seriously damaged by ploughing, the rest of the site survived afforestation. This current scheduling recognises both the importance of the remains and their continued survival. The monument lies between 240m and 270m OD on the N-facing slope of Tamshiel Rig, overlooking the Black Burn. The fort is the earliest element of the monument and has been extensively overlain by later work, but it appears to have had at least two ramparts and ditches defining an area roughly circular on plan with an overall diameter of about 85m. The settlement superimposed on the fort is also roughly circular on plan and measures about 40m in diameter, within an earth and stone bank about 3m wide and up to 1m high. The remains of several roundhouses are visible within the fort and settlement and there is a well-defined entrance to the settlement on its E side. The remains of an extensive field system are visible around the W and N sides of the fort and settlement; this field system is possibly contemporary with the settlement. The field system is enclosed by a sub-circular arrangement of field banks. At a much later date, stone has been taken from the fort and settlement to build a sheepfold, which occupies the NW quarter of the settlement. The area to be scheduled comprises the remains described and an area around them within which related evidence may be expected to survive. It is irregular on plan and measures a maximum of 520m from NNE to SSW by 320m transversely, as shown in red on the accompanying map. Statement of National Importance: The monument is of national importance for its potential to enhance our knowledge of later prehistoric settlement, economy and social organisation. The relationship between the different settlement phases on the site is of particular interest. The monument has also been the focus of important archaeological work to investigate the impact of forestry planting on archaeological deposits, and offers opportunities for further research in this field.

Asset/Event Number	41

Asset/Event Name	Southdean Law, fort & settlement
Type of Asset/Event	Fort; Settlement
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM2211; NT60NW 2.00
HER Number	
Status	Scheduled Monument
Easting	363517
Northing	609392
Parish	Southdean
Council	Scottish Borders
Description	This fort occupies the western of the two summits that make up the top of Southdean Law. Pear-shaped on plan, it measures about 88m from NE to SW by up to 46m transversely (0.32ha) within two ramparts up to 12m apart. Both ramparts are reduced to scarps, the outer studded with intermittent outer facing stones on the SW quarter, and have been largely obliterated on the NE by an overlying late Iron Age settlement comprising up to twelve stone-founded round-houses and platforms with a series of scooped courts and enclosures. Probably reusing the entrance into the fort on the E, the SW side of this settlement is bounded by a bank that cuts across the interior of the fort from NE to SW, and may even be the remains of an independent enclosure taking in the summit. Further information - https://canmore.org.uk/site/56826/southdean-law

Asset/Event Number	42
Asset/Event Name	Black Hill, settlement
Type of Asset/Event	Settlement
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM2319; NT50NE 9.00
HER Number	
Status	Scheduled Monument
Easting	359609
Northing	606565
Parish	Southdean
Council	Scottish Borders
Description	This earthwork lies on the gently sloping W side of Black Hill at a height of 950 ft O D. Oval on plan, it measures 325 ft from NE to SW by about 200 ft transversely. It is formed by a ditch with an earthen bank on either side, but over 200 ft of the NW side has been broken and destroyed by cultivation and draining. The inner bank survives only on the SE half of the circuit; where best preserved, on the S, it is 16 ft wide, 1 ft 9 ins above the interior and 4 ft above the bottom of the ditch, which is 13 ft wide. The outer bank is here 15 ft wide, 4 ft 6 ins above the bottom of the ditch and 2 ft 3 ins high externally; it is preserved for a length of 100 ft on the N, and also round the S and SW arcs. A shallow gully, 30 ft wide, with a low turf bank on its S side, breaks through the E arc. This may be the remains of the bridle-road linking Hyndlee and Southdean, shown on O S 6"; it possibly passed through original entrances in E and SW. The interior has been cultivated. The SW part is low and marshy, and a curved length of earthen bank 170 ft from the SW end of the work borders the NE end of the depression for a distance of 90 ft. A short distance N of the W end of the curved bank there are traces of an oval scooped enclosure measuring 60 ft by 40 ft with entrances, 8 ft wide, on SE and NE. Another enclosure lies 10 yds NE; it is oval, measuring 50 ft by 30 ft, and is also partly scooped. The rest of the interior is uneven, with no definite features. RCAHMS 1956, visited 1949 The remains of this earthwork are generally as described by the RCAHMS. It now lies in afforestation and,

although the interior is clear of planting, the perimeter, especially on the NW, has been damaged by trenching and planting.

Visited by OS (WDJ) 13 April 1965

Asset/Event Number	43
Asset/Event Name	Martinlee Plantation, homestead NW of Martinlee Sike
Type of Asset/Event	Homestead; Hut Platform
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM6600
HER Number	
Status	Scheduled Monument
Easting	365617
Northing	607947
Parish	Southdean
Council	Scottish Borders
Description	The monument to be scheduled consists of the remains of a prehistoric homestead and hut platform on the NW side of the Martinlee Sike. The homestead comprises an enclosure that is slightly scooped into the slope on the NW measuring 11.5m from NE to SW by 10.5m transversely. It is defined by a stony bank that is 1.9m thick and 0.45m high. The hut platform lies to the ENE and is set into the slope to a depth of 0.30m and has a diameter of c 7.5m. The area to be scheduled is irregular, bounded on the SE by Martinlee Sike and measuring a maximum of 60m from NW to SE and 75m from NE to SW as marked in red on the attached map extract. Statement of National Importance: This monument is of national importance as the remains of a homestead and hut platform of prehistoric date. It has the potential to provide important information about domestic architecture and contemporary economy and land-use.

Asset/Event Number	44
Asset/Event Name	Martinlee Plantation, homestead SE of Martinlee Sike
Type of Asset/Event	Homestead
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM6601
HER Number	
Status	Scheduled Monument
Easting	365638
Northing	607911
Parish	Southdean
Council	Scottish Borders
Description	The monument to be scheduled is the remains of a homestead of prehistoric date on the SE side of the Martinlee Sike. It comprises the remains of a enclosure with a house platform which is set into the slope on its E side. The house platform has a diameter of 7m, is 0.7m deep and has a possible entrance on its W side. The enclosure is slightly scooped into the slope and measures c 2m from SW to NE within a stony bank that is 2m wide and 0.25m high. There is a possible entrance on its S side. The area to be scheduled is irregular and is bounded on the NW by Martinlee Sike and on the SE by the N edge of a track. It measures a maximum of 70m from SW to NE and 40m from NW to SE as marked in red on the attached map extract.

Statement of National Importance:
The monument is of national importance as the remains of an enclosed homestead of prehistoric date. It retains the potential to provide important information about domestic architecture and contemporary economy and land use.

Asset/Event Number	45
Asset/Event Name	Steel Knowe, medieval and later settlements and field systems
Type of Asset/Event	Settlements; Field Systems
Date and/or Period	Medieval; Post-medieval
Listing No./NRHE Number	SM7144
HER Number	
Status	Scheduled Monument
Easting	365246
Northing	608800
Parish	Southdean
Council	Scottish Borders
Description	The monument comprises a group of farmsteads, enclosures and field systems dating to medieval and post-medieval periods. It survives as a series of earthworks on the east and west sides of the Jordan Sike. On the east side of the stream are medieval and post-medieval round-ended buildings, turf huts, rig, stock enclosures and a prehistoric burial cairn, most of which are enclosed within at least three phases of boundary banks and ditches. On the west side of the stream are rig, stock enclosures, building platforms and a post-medieval farmstead which are enclosed also by boundary banks. Along the west side of the Jordan Sike from Croft Plantation in the north to the A6088 road on the south the monument comprises a broad swathe of rig, a farmstead, two possible building-platforms, a quarry and three phases of boundary (ditches and banks). The remains survive as turf covered banks of stone and earth standing up to a maximum height of 1m high in places. Later shooting butts are found across the monument. The scheduled area is irregular. It includes the remains described above and an area around within which evidence relating to the monument's construction, use and abandonment is expected to survive, as shown in red on the accompanying map. The monument specifically excludes the above ground elements all modern post and wire fences and gates. Statement of National Importance: Intrinsic characteristics: The monument survives as a complex of well-preserved multi-period earthworks of domestic and agricultural buildings and associated field systems. Evidence of earlier prehistoric land use also survives in the form of the remains of a burial cairn on the summit of Steel Knowe and a pair of possible house platforms near the head of the Jordan Sike. The monument highlights the advance and decline of agriculture over an extended period in an upland setting. The remains of two round-ended farmsteads with associated yards, buildings and enclosures are located on the east side of the Jordan Sike. Examples of similar buildings from elsewhere are thought to date to the 13th or 14th century and it is likely that these represent a spread of agriculture into the higher Cheviot foothills in the medieval period. A large head dyke encloses both the farmsteads; archaeological field survey has shown that this unusual earthwork has multiple periods of construction and appears from other examples to relate to control of land use under 'Forest Law' (RCAHMS 1994). The earthworks are surrounded by large areas of rig cultivation both medieval and post-medieval. Much of the rig that survives is medieval suggesting that there may have been a period of abandonment between the medieval use of the area and the post-medieval periods. This is likely to be as a result of climatic deterioration during the late medieval period (Parry 1975). The grass covered earthworks which form the farmsteads and associated field systems are well defined and relatively undisturbed. Therefore, there is good potential for the survival of buried structures and archaeological deposits, artefacts and environmental information within, beneath and around the settlement. Buried archaeological deposits have the potential to provide information about the date and character of the site, while any artefacts and environmental information such as pollen or charcoal, would enhance understanding of the economy, diet and social status of the occupants, as well as provide information about contemporary land use and environment.

Contextual characteristics:
Deserted settlements are found throughout Scotland. The example at Steel Knowe is of significance as an upstanding and well-preserved example which shows multiple periods of activity from the medieval to post-medieval periods. The farmsteads are located within a landscape which holds a number of other deserted medieval farmsteads, settlement and tower houses which may be broadly contemporary. Some have similar features to this monument; enclosures, field systems and domestic buildings are all present, for instance at Martinlee Sike, farmstead, field system and assart bank (scheduled monument SM6144) and Crink Law (Canmore ID: 74608 and 74631). These farmsteads are located within the Royal Forest of Jedburgh Ettrick, where the land was administered to preserve the area as a hunting ground for the King.

It is likely that the farmsteads began as a 'forest-steads', which was a defined area of land that was let on an annual basis. The forest was in the hands of the Douglas family from 1320 and remained at least, in part, in their hands until the 18th century. In the 16th century the forest was increasing given over to feus - perpetual heritable tenures given in return for annual fixed payments. During this time many of the pele towers and bastle houses (such as Northbank Tower [scheduled monument SM3766: 700m northeast] and Slack's Tower [scheduled monument SM3770: 950m northwest]) recorded in this area were founded, often on site of earlier medieval farms.

Comparison with this monument and others in the Scottish Borders and with historic rural settlement sites in other parts of Scotland and within 'Jedburgh Forest', could enhance our understanding of regional variations in rural settlement in the medieval and post-medieval periods. It could add to our understanding of the structure of society and the form and nature of contemporary rural settlement. There may have been social, economic, community and familial links between other nearby farmsteads and tower houses/ bastles. Although based on a subsistence economy with each family supporting itself, resources may have been shared. This monument therefore has the potential to enhance and broaden our understanding of such agricultural and domestic practices.

Associative characteristics:
There are no known associative characteristics that contribute to this monument's cultural significance.

Asset/Event Number	46
Asset/Event Name	Southdean Church
Type of Asset/Event	Church; Kirkyard
Date and/or Period	Medieval
Listing No./NRHE Number	SM7034
HER Number	
Status	Scheduled Monument
Easting	363141
Northing	609162
Parish	Southdean
Council	Scottish Borders
Description	The monument comprises the remains of a medieval church and its kirkyard, situated at the roadside some 50m NW of Southdean. The church is associated with the Battle of Otterburn in 1388; the leaders of the Scottish army are said to have met at the church on the eve of the battle. The monument comprises the foundations of a church and the fragmentary outline of an earlier structure 1.5m outside the N wall of the nave. The later building consists of a chancel, nave and a W tower. The E side of the tower is about 1.8m high but its outer sides had been reduced to the lowest courses. The nave walls stand approximately 0.7m-0.9m high but those of the chancel stand just to the base courses. The tower and nave are generally believed to date from the 13th century and are constructed of rubble masonry, roughly squared and built to courses. The tower has a splayed base course and was entered directly from the nave. Towards the W end of the nave are two doors, one through the S wall and a smaller one through the N wall. The chancel walls are faced with ashlar and have two angle buttresses at the E end, with a splayed base course (now fragmentary) carried round the whole exterior. The chancel is evidently later than the nave and tower, probably dating to the 15th century.

The roof of the church collapsed in 1688 and the site became a grassed-over mound. In 1910 the site was excavated by Hawick Archaeological Society. During the excavation numerous pieces of carved stone were discovered including a late medieval super-altar and a font, both of which are now used in the modern parish church. Other carved stones lie in the reconstructed tower of the church.

The area to be scheduled encompasses the church, the kirkyard and its associated funerary monuments. The area is four-sided, with maximum dimensions of 40m NW to SE and 40m NE to SW as marked in red on the accompanying map.

Statement of National Importance:
The monument is of national importance as an example of a 13th century parish church, which may overlie an even earlier site, and that was later altered in the 15th century. Its archaeology has the potential to greatly contribute to an understanding of medieval art, architecture, religious practices and material culture. The site's importance is accentuated by its association with the Battle of Otterburn.

Asset/Event Number	47
Asset/Event Name	Wheel Causeway, section 640m long on S slope of Wardmoor Hill
Type of Asset/Event	Earthwork; Track; Road
Date and/or Period	Unknown
Listing No./NRHE Number	SM3423; NT60NW 42.00
HER Number	
Status	Scheduled Monument
Easting	360881
Northing	605713
Parish	Southdean
Council	Scottish Borders
Description	Wheel causeway, section 640m long on south sideslope of Wardmoor Hill. No further information available.

Asset/Event Number	48
Asset/Event Name	Martinlee Sike, enclosure bank, field system, cairns & old road
Type of Asset/Event	Enclosure Bank; Field System; Cairns; Old Road
Date and/or Period	Medieval
Listing No./NRHE Number	SM6599
HER Number	
Status	Scheduled Monument
Easting	365522
Northing	607911
Parish	Southdean
Council	Scottish Borders
Description	The monument to be scheduled consists of the remains of a field system, enclosure bank and an old road line on the NW and SE sides of a watercourse known as the Martinlee Sike. The field system is enclosed by a bank and ditch that run NW from the NW side of Martinlee Plantation for 350m to the edge of the A6088 road. Cultivation rigs runs SSW to NNE up to the edge of a recent forestry plantation. There is a short section of old road that runs from NW to SE on either side of Martinlee Sike. Several small field clearance cairns are also visible to the NW and SE of Martinlee Sike, the largest of these measuring c 6m in diameter. It is possible that the bank and ditch enclosure represents the continuation of the "assart" (an intake of

land from the hill) that has been identified to the SE of Martinlee Plantation. The area to be scheduled is irregular on plan, to include all of the features described and an area around them in which evidence relating to their construction and use may survive, as marked in red on the attached map extract.

Statement of National Importance:
The monument is of national importance as the remains of enclosed field systems that are probably of medieval date. It has the potential to provide useful information regarding contemporary economy and land use and the strictures of medieval Forest Law.

Asset/Event Number	49
Asset/Event Name	Martinlee Sike, farmstead, field system and assart bank
Type of Asset/Event	Farmstead; Field System; Assart Bank
Date and/or Period	Medieval
Listing No./NRHE Number	SM6602
HER Number	
Status	Scheduled Monument
Easting	365790
Northing	607574
Parish	Southdean
Council	Scottish Borders
Description	The monument to be scheduled consists of the remains of a farmstead and a field system enclosed by bank and ditch. The farmstead comprises three buildings and an enclosure. The main building measures 11.1m from WNW to ESE by 4.6m transversely and is built on the edge of a terrace. A smaller building is attached to the main building and its W wall may run under the E end of the larger building. This smaller structure is set into the slope to a depth of 0.8m and measures 6.9m by 3.2m. An irregular enclosure lies on the SW side of these structures. To the NNE lie the remains of a small outbuilding measuring 5.4m by 3.2m. The stony banks that define these structures still stand to a height of c 0.60m. Due E of the forest road are the remains of several enclosure banks. Between these banks and the farmstead are the remains of ridge and furrow cultivation running NNE to SSW. There is a small area of cultivation remains due E of the farmstead. The farmstead and field system are surrounded by a well defined bank and ditch that encloses c 7 hectares. This bank and ditch represent an "assart" that was designed to keep animals, specifically deer, out of the cultivated land. The area to be scheduled is irregular, measuring a maximum of 500m from E to W and 270m from N to S as marked in red on the accompanying map extract. The top 0.3m of the forest road and its accompanying drainage ditches are excluded from scheduling, to allow for their routine maintenance. Statement of National Importance: The monument is of national importance as the remains of a farmstead of medieval date enclosed by a bank and ditch as part of an 'assart'. It has the potential to provide important information about rural architecture, economy, land use and medieval forest law.

Asset/Event Number	50
Asset/Event Name	Chapel Knowe, farmstead 100m WSW of
Type of Asset/Event	Farmstead
Date and/or Period	Medieval
Listing No./NRHE Number	SM6638

HER Number	
Status	Scheduled Monument
Easting	367052
Northing	608912
Parish	Southdean
Council	Scottish Borders
Description	The monument to be scheduled consists of the remains of a farmstead that may be of medieval date. The farmstead measures 43m from NE to SW by 33m transversely and is defined by a bank 3m wide and 0.5m high. There are gaps in the SE angle of this enclosure which may indicate the location of former entrances. A natural gully crosses the farmstead from NNW to SSE and on either side of it are traces of buildings. The area to be scheduled is irregular and measures a maximum of 80m from E to W by 60m from N to S as indicated in red on the accompanying map extract. Statement of National Importance: The monument is of national importance as the remains of a small farmstead of possible medieval date. It has the potential to provide important information about medieval rural domestic architecture and contemporary economy and land use.

Asset/Event Number	51
Asset/Event Name	Wattie's Spindles, pele house and associated buildings
Type of Asset/Event	Pele House; Buildings
Date and/or Period	Medieval
Listing No./NRHE Number	SM6637
HER Number	
Status	Scheduled Monument
Easting	366747
Northing	609054
Parish	Southdean
Council	Scottish Borders
Description	The monument to be scheduled is the remains of a settlement originally known as "Wadespinnels". On the summit of the knowe that is now called "Wattie's Spindles" are the footings of two rectangular buildings that lie parallel to each other. One building is c 42m long by 5m wide and the other 38m by 5m. 20m to the W of the northern building are the footings of a pele-house or tower measuring c 12m by 4.5m. This structure seems to have been heavily robbed in antiquity. There are traces of a turf bank enclosing the site on its SE side. The area to be scheduled is irregular with maximum dimensions of 140m NE to SW and 110m NW to SE as indicated in red on the accompanying map extract. Statement of National Importance: This monument is of national importance as the remains of a medieval fortified house and associated farmstead that has the potential to provide important information about defensive architecture and contemporary land-use.

Asset/Event Number	52
Asset/Event Name	Slack's Tower
Type of Asset/Event	Pele House
Date and/or Period	Medieval; Post-medieval

Listing No./NRHE Number	SM3770
HER Number	
Status	Scheduled Monument
Easting	364405
Northing	609907
Parish	Southdean
Council	Scottish Borders
Description	Slack's Tower, a 16th c pele-house, is oblong on plan, 38'9" NE-SW by 24 '3", and contains three storeys, none of which have been vaulted. Of the two-side walls, the NW one still stands to ita wall-head, but the SE one has been breached. Both gables are sufficiently entire to show that they were finished with a tabling and that there has never been a parapet. The masonry is rubble, roughly coursed and clay-built. A lintelled doorway, with checks, gives admission to the ground floor (See RCAHMS 1956, pl.100, fig.543), while the first floor had a separate entrance, reached from a forestair, which must have been situated in the part of the SE wall that is now demolished. The pele-house stands in association with enclosures and buildings, now in the last stages of ruin, as indicated on plan. At present it is impossible to sort out the complex into hall and chamber, stable, cattle-shed and barn, the constituents of the better sort of 16th C Border farm.

Asset/Event Number	53
Asset/Event Name	Dykeraw Tower, Southdean
Type of Asset/Event	Tower House
Date and/or Period	Medieval
Listing No./NRHE Number	SM3848; NT60NW 1.00
HER Number	
Status	Scheduled Monument
Easting	362832
Northing	609058
Parish	Southdean
Council	Scottish Borders
Description	Dykeraw Tower has been oblong on plan, with an addition on its SW side. Only a portion of the SW gable still stands, to a height of 7'11"; it is 4'9" thick and is built of unusually large stones, roughly coursed, and more massive on the SW than on the NE side. No features are left to indicate the date of this building. Only the amorphous remains of the building on the SW side of the tower are vident. It seems unlikely that it was contemporary with the tower. In 1513 the tower of 'Dyker' was burned by Sir John Ratclif. In a rental of 1541 'Dykraw' is described as one merk land let to George Armstrong, but his record may refer to another Dykeraw, in Liddesdale (NY59SW 16).

Asset/Event Number	54
Asset/Event Name	Westshiels, spur earthwork 1550m SW of
Type of Asset/Event	Linear Earthwork
Date and/or Period	Unknown
Listing No./NRHE Number	SM3425
HER Number	
Status	Scheduled Monument
Easting	360998

Northing	605432
Parish	Southdean
Council	Scottish Borders
Description	Linear earthwork, uncertain date. A narrow insignificant ditch unlike the cross ridge dykes and other linear earthworks of the Cheviot Hills. It is probably no more than a drainage ditch (Visited by OS (BS) 22 September 1976).

Asset/Event Number	55
Asset/Event Name	Northbank Tower
Type of Asset/Event	Pele House
Date and/or Period	Medieval; Post-medieval
Listing No./NRHE Number	SM3766
HER Number	
Status	Scheduled Monument
Easting	366079
Northing	609442
Parish	Southdean
Council	Scottish Borders
Description	The pele-house called Northbank Tower, which has been reduced to a single storey and converted for use as a sheepfold, stands on a terrace on the S side of the Shaw Burn. It measures 5.3m from NE to SW by 4m transversely within rubble-faced earth-bonded walls which range from 1.3m to 1.5m in thickness and up to 2.3m in height; it is entered from the NE, but the SE side of the entrance has been very much reduced and rebuilt in drystone rubble. There is a scarcement 1.8m above ground level on the SE side. On the same terrace as the pele-house there is a rectilinear stock enclosure, which overlies the faint traces of what may have been the platforms of buildings and a small enclosure on the NE side of the tower. On the lip of the whinstone terrace 30m SW of the tower are two turf-walled buildings, one of which has been cut away at its N end by quarrying. The W building measures 8.8m from NE to SW by 3.3m transversely within turf walls spread to 2.2m in thickness and 0.3m in height. The E building measures 12m from NE to SW by 7.6m transversely over turf walls reduced to 0.25m in height. The best parallels for these structures are the turf-walled buildings at Shiel Rig (NT60NE 24). A settlement called Northbank is depicted on Blaeu's map of Teviotdale, based upon Pont (Blaeu 1654), but not on Roy's map (Roy 1747-55) or Stobie's map of Roxburghshire (Stobie 1770). In the Hearth Tax return for 1691 there are two persons each with one hearth at Northbank (SRO E69/21/1). Further information - https://canmore.org.uk/site/74610/northbank-tower.

Asset/Event Number	56
Asset/Event Name	Burgh Hill, stone circle
Type of Asset/Event	Stone Circle
Date and/or Period	Prehistoric (Neolithic; Bronze Age)
Listing No./NRHE Number	SM3354; NT40NE 17.00
HER Number	
Status	Scheduled Monument
Easting	347011
Northing	606244

Parish	Teviothead
Council	Scottish Borders
Description	Burgh Hill, at 306m, in addition to its roughly rectangular fortified hill-settlement, hosts a setting of 25 stones, 13 of which are still erect. It is some 2.5km north-west of the Tinlee Stone (NT 484038), a standing stone set on rising ground above Dod Bum. The setting is low on the ground; it is egg-shaped, some 16.5m by 13.4m and, like Borrowstoun Rig (no. 101) is believed to have been constructed according to clearly defined geometrical mles involving a megalithic yard calculated at 0.829m. But whilst Borrowstoun is termed a Type II setting (based simply on two overlapping circles), Burgh Hill, like Caimpapple's much larger ring of standing stones, is termed Type 1. It is based on an initial notional circle and on further circles linked to pythagorean triangles placed back-to-back at the centre point of the diameter of the original circle! In this particular setting, the first circle has been calculated as 16 megalithic yards in diameter; the longer sides are arcs of 27 my diameter circles, the tip is part of a 10 my diameter circle based on the apex of the triangles. Regardless of such megalithic mathematics, the factors that determined the overall size of a setting (geographicallimitations apart) are still unknown; as also the reasons why they were built at all, whether ritual, ceremonial or astronomical. Further information - https://canmore.org.uk/site/54016/burgh-hill

Asset/Event Number	57
Asset/Event Name	Burgh Hill, fort and settlement
Type of Asset/Event	Fort; Settlement
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM2169
HER Number	
Status	Scheduled Monument
Easting	346793
Northing	606179
Parish	Teviothead
Council	Scottish Borders
Description	This fort occupies the rocky ridge forming the SW end of the elongated summit of Burgh Hill. Rectilinear on plan by virtue of the topography, it measures 98m from NE to SW by between 23m and 30m transversely (0.24ha) within twin ramparts with external ditches everywhere except the NW, where the flank of the hills drops away steeply. The inner rampart has been reduced to a stony bank some 9m in thickness, but while it is no more than 0.6m in internal height, externally it falls some 3m into the bottom of the external ditch. Likewise the outer, which is 7.5m in thickness falls about 2.8m into the outer ditch, though this disappears beneath traces of later cultivation around the SW end of the fort; where better preserved at the NE end there is also a counterscarp bank. There are entrances at both ends, that on the NE formed between the terminals of the ramparts and the steep NW flank of the hill, while at the SW end the gaps in the ramparts are staggered to expose the visitor's left side. All that is visible within the SW half of the interior are traces of small quarries, but the NE end has been incorporated into a late Iron Age settlement enclosure bounded on the NE and SE by the inner rampart and elsewhere by a thick stony bank; sub-rectangular on plan it measures about 40m from NE to SW by 30m transversely and contains the footings of at least three round-houses terraced into the slope. Further information - https://canmore.org.uk/site/54017/burgh-hill.

Asset/Event Number	58
Asset/Event Name	Gray Coat, settlement 540m NE of Priesthaugh
Type of Asset/Event	Fort; Settlement; Cord Rig
Date and/or Period	Prehistoric

Listing No./NRHE Number	SM3459; NT40SE 2.00; NT40SE 15.00
HER Number	
Status	Scheduled Monument
Easting	347144
Northing	605008
Parish	Teviothead
Council	Scottish Borders
Description	This fort or fortified settlement is situated on the low ridge that forms the very summit of the Gray Coat. Oval on plan, it measures about 105m from NE to SW by 57m transversely (0.52ha) within a ruinous wall, which where best preserved at the NE and SW ends forms a stony bank about 3.5m in thickness, though this is reduced to a scarp along the NW and barely traceable along the rocky SE flank; at both ends the wall is accompanied by an external ditch. There is one entrance at the NE end, towards the SE margin of the ridge, and a second towards the opposite margin in the SW end. From the latter a shallow worn hollow leads between the terminals of a low bank, set some 5m within the perimeter at this end. The character of this bank is that of those found between twin palisade trenches, and it is likely that these return in hairpin terminals to either side of the gap. If so, conventional sequences suggest this would be an earlier perimeter, though in this case the relationship is quite unknown. Within the interior, and also contained within this internal bank at the SW end, there are traces of numerous timber round-houses defined by single and double grooves. in 1949 RCAHMS investigators identified no fewer than eight, but aerial photography since has revealed at least another four lying beyond the perimeter on the NE. Further information https://canmore.org.uk/site/54101/gray-coat & https://canmore.org.uk/site/54096/gray-coat

Asset/Event Number	59
Asset/Event Name	Priesthaugh, earthwork 130m SSE of
Type of Asset/Event	Earthwork
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM3461
HER Number	
Status	Scheduled Monument
Easting	346670
Northing	604518
Parish	Teviothead
Council	Scottish Borders
Description	Earthwork, Priesthaugh. An earthwork formed by a single mound of earth and stones lie on the right bank of the Priesthaugh Burn immediately to the N of Priesthaugh cottages, at a point where the bank is in the process of erosion. It occupies sloping ground at a height of 800 ft. OD. In its original shape the work was probably subrectangular on plan, measuring internally 220 ft. from N to S by about 150 ft. from E to W, but the whole of the W side and the W half of the S side have been washed away. On the N side, where it is best preserved, the mound is spread to a maximum breadth of 25 ft. and is up to 1 ft. 3 in. high. There is no trace of a ditch at the present time. A well-defined entrance, 8 ft. wide, is situated in the NE corner, but the interior is boggy and featureless - RCAHMS 1956, visited 1948. (i) MISCELLANEOUS EARTHWORKS In the absence of excavation, over eighty earthworks in the county cannot be classified either because they do not conform to recognised types or because their plans are not sufficiently distinctive. A few of these, occupying commanding positions on hilltops or the crests of ridges, are unlikely to be later than the 11th century; such are Bonchester Hill (No. 278), the group of earthworks on Whitcastle Hill (No. 865), and five roughly D-shaped earthworks lying within a radius of two miles between the River Teviot and the Slitrig Water- Gray Hill 2 (No. 999), Birny Knowe (No. 995), Crom Rig (No. 1000), Dodburn (No. 160, ii), and Pen Sike (No. 168)- which are characterised by ramparts massive in portion to their size. The majority, however, are situated on hillsides or in the bottoms or valleys, generally below the 800 ft. contour, and are probably mediaeval. Most of these lower-lying structures, of which the

outstanding examples are Timpendean (No. 435), Iron Castle (No. 945), and Scraesburgh (No. 466), were evidently designed for habitation and presumably contained wooden buildings; but a few of the simpler earthworks such as Huntly Burn (No. 51) may have been enclosures for stock - RCAHMS 1956.

Asset/Event Number	60
Asset/Event Name	Dod, earthworks on right bank of Allan Water 670m WSW of
Type of Asset/Event	Earthworks
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM3353; NT40NE 23.00
HER Number	
Status	Scheduled Monument
Easting	346707
Northing	605504
Parish	Teviothead
Council	Scottish Borders
Description	he greatly dilapidated remains of two earthworks, one within the other, lie on gently sloping ground on the right bank of the Allan Water at 700 ft OD. The manner in which the structures of successive periods have interfered with one another, as well as later disturbance and a heavy growth of vegetation, makes the interpretation of the remains uncertain, but their character may be judged from the plan. This shows a large sub-rectangular enclosure (I) which has been mutilated by cultivation, drainage, and the intrusion of an oval enclosure (II). The former measures about 395 ft from NE to SW by about 345 ft transversely, and consists of a ditch with an earthen bank on either side of it; these features are best preserved on the NW where the inner bank is 12 ft wide and stands 1 ft above the interior and 2 1/2 ft above the bottom of the ditch, which is 12ft wide. The outer bank is spread to a width of 20 ft and stands 6 ft above the ditch bottom and 4 ft above the level of the ground outside. There is a mutilated entrance 45 ft wide in the NE end. On the W and SW the banks have been washed away by the river. A swamp has invaded the site on the E and SE, obliterating the features of this portion, and what seems to be a watercourse or an old roadway has introduced further confusion. The oval enclosure (II) occupies most of the interior of (I). It measures about 209 ft from NE to SW by about 220 ft transversely. It is formed by a ditch with an earthen bank on either side of it, which interfere with (I) on the E. The inner bank is best preserved on the W, where it is 17 ft in width and stands 5 ft in height above the interior and 8 1/2 ft above the bottom of the ditch. The ditch is irregular and fragmentary; it is 10 ft in width on the E, where it is best preserved. The outer bank at this point is 12 ft in width, and stands to a height of 1 ft above the bottom of the ditch; the outer face is only a few inches high. The entrance may have been on the N, in line with that of (I), but it has bee destroyed by a farm-track. The NE portion of the interior is occupied by three hollow courts, but the remainder contains only swampy ground cut up by surface drains. Further information - https://canmore.org.uk/site/54023/allan-water.

Asset/Event Number	61
Asset/Event Name	Dod, earthwork 300m NW of
Type of Asset/Event	Earthwork; Settlement; Souterrain
Date and/or Period	Prehistoric (Iron Age)
Listing No./NRHE Number	SM3355
HER Number	
Status	Scheduled Monument

Easting	347265
Northing	606010
Parish	Teviothead
Council	Scottish Borders
Description	The fragmentary remains of this sub-oval earthwork occupy a non-defensive position, overlooked by Burgh Hill on the NE and facing level ground on the other three sides, in rough pasture at a height of 700 ft OD. The remains, which straddle an unnamed sike, are difficult to interpret in detail owing to mutilation by drainage-ditching, but the following main elements can be distinguished: (i) a bank and ditch (A on plan) which, apart from a gap of 100 ft on the SW and a short break in the opposite side, enclose the whole work, an area measuring externally 450 ft from NW to SE by about 350 ft transversely. (ii) An oval enclosure (B) occupies the NW half of the interior; it measures 190 ft by 160 ft within an independent bank and ditch, the latter now partly obliterated. (iii) A sub-oval enclosure, measuring internally 115 ft by 55 ft, is attached to the main enclosure wall, SE of the sike. All the banks are formed of upcast material from their ditches; there is no trace of stone revetting. Where best preserved, the main bank (A) is 30 ft thick and 4 ft 10 ins high externally; the bank of enclosure B is 27 ft thick and 4 ft 7 ins high, and that of C is 18 ft thick and 3 ft high. Enclosure B, entered from the E, contains two compartments bounded by low mounds of slight scarps; C has a well-defined entrance in the W, 10 ft wide, and is slightly hollowed-out internally. In situation and construction this earthwork closely resembles that described on NT40NE 23 and it is possible that here, too there are two structural phases present; i.e. a first phase represented by enclosure A, and a later phase in which B and C were intruded and the main wall modified on the NE. Further information - https://canmore.org.uk/site/54060/the-dod.

Asset/Event Number	62
Asset/Event Name	Dod, enclosure on Gray Coat, 530m SW of
Type of Asset/Event	Enclosure
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM3356
HER Number	
Status	Scheduled Monument
Easting	347166
Northing	605248
Parish	Teviothead
Council	Scottish Borders
Description	This homestead, situated at a height of about 1100 ft OD, is formed by the surface traces of a twin palisade, the elements of which unite in a curve on either side of the entrance. It measures 154 ft by 123 ft internally, and contains the surface traces of a ring-groove house 50 ft in diameter.

Asset/Event Number	63
Asset/Event Name	Dod, earthworks on Gray Coat 540m SSW of
Type of Asset/Event	Earthworks; Cairn?

Date and/or Period	Prehistoric
Listing No./NRHE Number	SM3391; NT40NE 24.00
HER Number	
Status	Scheduled Monument
Easting	347238
Northing	605153
Parish	Teviothead
Council	Scottish Borders
Description	Possible cairn recorded at this location: This cairn (R W Feachem 1963) is situated on the NE slopes of Gray Coat at a height of about 1100 ft OD. It consists of a low, disturbed mound 19 ft in diameter, surrounded at distances of 5 ft, 10 ft and 15 ft respectively by three low, grass-covered banks each about 3 ft in width. The resemblance of this plan to that of the cairn known as the Rounds of Tivla (HP61SW 5) is striking - RCAHMS 1956, visited 1949. Further information - https://canmore.org.uk/site/54024/gray-coat.

Asset/Event Number	64
Asset/Event Name	Gray Coat, pele-house 370m SE of
Type of Asset/Event	Pele House
Date and/or Period	Medieval; Post-medieval
Listing No./NRHE Number	SM3432
HER Number	
Status	Scheduled Monument
Easting	347317
Northing	604666
Parish	Teviothead
Council	Scottish Borders
Description	Pele-House, Gray Coat: All that can now be seen at this site, on the SE slopes of Gray Coat, are low mounds covering the base of an oblong building measuring 26 ft from NE to SW by 13 1/2 ft within walls about 4 3/4 ft thick, but an exploratory trench has disclosed the rybats of an entrance in the SE gable, identical with those found in pele-houses in the county of Roxburghshire (NT60NW 3, NT60NE 9, NT61SW 5, and NT61SE 18). The masonry, where exposed, is of smaller stones than is commonly found in such structures, but it is tempting to identify these remains as belonging to the same class. Some 25 ft SE, there is a small excavated hollow containing the remains of an oblong house, and the foundations of a second house are traceable WNW of the pele-house. Broken tobacco-pipes have been recovered from mole-casts in proximity to these buildings. These latter buildings may be associated with some turf enclosures near by, and also with the fairly recent cultivation that seems to have taken place all over this side of the valley. (The 'pele-houses' with which this site is compared are dated to the second half of the 16th century by the RCAHMS.) RCAHMS 1956, visited 1946. Further information - https://canmore.org.uk/site/54090/gray-coat.

Asset/Event Number	65
Asset/Event Name	Two round cairns 870m south east of Butteryhaugh Bridge including Deadman Cairn
Type of Asset/Event	Round Cairns
Date and/or Period	Prehistoric (Bronze Age)

Listing No./NRHE Number	1009665
HER Number	
Status	Scheduled Monument
Easting	363779
Northing	592212
Parish	Kielder
Council	Northumberland
Description	The monument includes the remains of a substantial round cairn of Bronze Age date, known as Deadman Cairn, situated on a south facing slope. The cairn, of large irregular stones, measures 20m in diameter and stands to a maximum height of 1.8m. The centre has been disturbed by 19th century antiquarian excavation, and the stones have been more recently rearranged by shepherds. On the south side of the cairn there is a second, smaller cairn constructed of stone and earth 5m in diameter and standing to a maximum height of 0.6m. A hole in the centre of the smaller cairn is also the result of antiquarian exploration. Reasons for Designation: Round cairns are prehistoric funerary monuments dating to the Bronze Age (c.2000-700 BC). They were constructed as stone mounds covering single or multiple burials. These burials may be placed within the mound in stone-lined compartments called cists. In some cases the cairn was surrounded by a ditch. Often occupying prominent locations, cairns are a major visual element in the modern landscape. They are a relatively common feature of the uplands and are the stone equivalent of the earthen round barrows of the lowlands. Their considerable variation in form and longevity as a monument type provide important information on the diversity of beliefs and social organisation amongst early prehistoric communities. They are particularly representative of their period and a substantial proportion of surviving examples are considered worthy of protection. Despite the fact that their central areas have been disturbed, the round cairns south east of Butteryhaugh Bridge survive reasonably well and contain significant archaeological deposits.

Asset/Event Number	66
Asset/Event Name	Devil's Lapful Long Cairn, 1km east of Butteryhaugh Bridge
Type of Asset/Event	Long Cairn
Date and/or Period	Prehistoric (Neolithic)
Listing No./NRHE Number	1009666
HER Number	
Status	Scheduled Monument
Easting	364193
Northing	592866
Parish	Kielder
Council	Northumberland
Description	The monument includes the remains of a long cairn of Neolithic date situated on the south west slope of Castle Hill commanding extensive views southwards. The long cairn, orientated NNE to SSW, measures a maximum of 60m long and 14m wide and stands to a maximum height of 2m. It has been constructed of rounded boulders and some stone slabs with smaller stones around the edge. The surface of the cairn, particularly at the north end, has been disturbed by quarrying to construct the adjacent sheep fold which has been built partly into the north west face of the cairn. The above ground walls of the later sheep fold are excluded from the scheduling but the ground beneath them is included. Reasons for Designation: Long barrows were constructed as earthen or drystone mounds with flanking ditches and acted as funerary monuments during the Early and Middle Neolithic periods (3400-2400 BC). They represent the burial places of Britain's early farming communities and, as such, are amongst the oldest field monuments surviving visibly in the present landscape. Where investigated, long barrows appear to have been used for communal burial, often with only parts of the human remains having been selected for interment. Certain sites

	provide evidence for several phases of funerary monument preceding the barrow and, consequently, it is probable that long barrows acted as important ritual sites for local communities over a considerable period of time. Some 500 long barrows are recorded in England. As one of the few types of Neolithic structure to survive as earthworks, and due to their comparative rarity, their considerable age and their longevity as a monument type, all long barrows are considered to be nationally important. Devil's Lapful Long Cairn is one of few surviving long cairns in Northumberland. It survives reasonably well and will add to our understanding of Neolithic settlement and activity in the region.

Asset/Event Number	67
Asset/Event Name	Midfell Round Cairn
Type of Asset/Event	Round Cairn
Date and/or Period	Prehistoric (Bronze Age)
Listing No./NRHE Number	1009668
HER Number	
Status	Scheduled Monument
Easting	363642
Northing	598419
Parish	Kielder
Council	Northumberland
Description	The monument includes the remains of a substantial round cairn of prehistoric date situated high on the summit of Midfell. It commands extensive views in all directions. It is composed of large angular stones and measures 14.5m in diameter amd stands to a maximum height of 2.2m. The central area of the cairn has been rearranged to form a small rectangular sheep pen but the lower courses of the cairn material are undisturbed. Reasons for Designation: Round cairns are prehistoric funerary monuments dating to the Bronze Age (c.2000-700 BC). They were constructed as stone mounds covering single or multiple burials. These burials may be placed within the mound in stone-lined compartments called cists. In some cases the cairn was surrounded by a ditch. Often occupying prominent locations, cairns are a major visual element in the modern landscape. They are a relatively common feature of the uplands and are the stone equivalent of the earthen round barrows of the lowlands. Their considerable variation in form and longevity as a monument type provide important information on the diversity of beliefs and social organisation amongst early prehistoric communities. They are particularly representative of their period and a substantial proportion of surviving examples are considered worthy of protection. Despite the fact that the stones have been rearranged, the round cairn on Midfell survives reasonably well and contains significant archaeological deposits.

Asset/Event Number	68
Asset/Event Name	Round cairn, 330m SSW of Deadman's Cairn
Type of Asset/Event	Round Cairn
Date and/or Period	Prehistoric (Bronze Age)
Listing No./NRHE Number	1009671
HER Number	
Status	Scheduled Monument
Easting	363648
Northing	591915
Parish	Kielder

Council	Northumberland
Description	The monument includes the remains of a round cairn of prehistoric date situated on a south facing slope above Kielder Water. Composed of stone and earth it is 7m in diameter amd stands to a maximum height of 1m. Reasons for Designation: Round cairns are prehistoric funerary monuments dating to the Bronze Age (c.2000-700 BC). They were constructed as stone mounds covering single or multiple burials. These burials may be placed within the mound in stone-lined compartments called cists. In some cases the cairn was surrounded by a ditch. Often occupying prominent locations, cairns are a major visual element in the modern landscape. They are a relatively common feature of the uplands and are the stone equivalent of the earthen round barrows of the lowlands. Their considerable variation in form and longevity as a monument type provide important information on the diversity of beliefs and social organisation amongst early prehistoric communities. They are particularly representative of their period and a substantial proportion of surviving examples are considered worthy of protection. The round cairn SSW of Deadman's Cairn survives reasonably well and retains significant archaeological deposits.

Asset/Event Number	69
Asset/Event Name	Gibbie's Knowe defended settlement and later rectangular building
Type of Asset/Event	Settlement; Building
Date and/or Period	Prehistoric; Romano-British?
Listing No./NRHE Number	1014079
HER Number	
Status	Scheduled Monument
Easting	364745
Northing	595077
Parish	Kielder
Council	Northumberland
Description	The monument includes a defended settlement of Iron Age date situated on a slope above the Kielder Burn to the north. The enclosure, which is roughly D-shaped, measures a maximum of 75m east to west by 63m north to south within a single rampart. The rampart, constructed mainly of stone with turf facing, is on average 4m wide and stands to a maximum height of 2.2m. There are two entrances through the walls of the enclosure, the larger one in the eastern side is up to 8m wide and the smaller on the south side is 3m wide. The latter entrance is flanked by large boulders. A later field wall crosses the monument from north to south immediately west of the large entrance, and the footings of a later rectangular building 15m by 4m are attached to the enclosure immediately to the north of the eastern entrance. These features are included in the scheduling as their removal may damage important archaeological deposits. Reasons for Designation: During the mid-prehistoric period (seventh to fifth centuries BC) a variety of different types of defensive settlements began to be constructed and occupied in the northern uplands of England. The most obvious sites were hillforts built in prominent locations. In addition to these a range of smaller sites, sometimes with an enclosed area of less than 1ha and defined as defended settlements, were also constructed. Some of these were located on hilltops, others are found in less prominent positions. The enclosing defences were of earthen construction, some sites having a single bank and ditch (univallate), others having more than one (multivallate). At some sites these earthen ramparts represent a second phase of defence, the first having been a timber fence or palisade. Within the enclosure a number of stone or timber-built round houses were occupied by the inhabitants. Stock may also have been kept in these houses, especially during the cold winter months, or in enclosed yards outside them. The communities occupying these sites were probably single family groups, the defended settlements being used as farmsteads. Construction and use of this type of site extended over several centuries, possibly through to the early Romano-British period (mid to late first century AD). Defended settlements are a rare monument type. They were an important element of the later prehistoric settlement pattern of the northern uplands and are important for any study of the developing use of fortified settlements during this period. All well-preserved examples are believed to be of national importance. Gibbie's Knowe defended settlement is well preserved and retains significant archaeological deposits. It will add greatly to any study of the wider prehistoric settlement pattern at this time.

Asset/Event Number	70
Asset/Event Name	Defended settlement 580m north west of Gowanburn and associated medieval buildings
Type of Asset/Event	Settlement
Date and/or Period	Prehistoric (Iron Age)
Listing No./NRHE Number	1009672
HER Number	
Status	Scheduled Monument
Easting	364271
Northing	591770
Parish	Kielder
Council	Northumberland
Description	The monument includes the remains of a defended enclosure of Iron Age date situated on the crest of a south east facing spur. The enclosure, roughly circular in shape, measures 50m in diameter within a narrow ditch up to 2.5m wide and 0.6m deep. Outside the ditch there is a substantial earthen bank 5m wide and a maximum of 1m high above the external ground surface. On the western side of the enclosure there are several large stones embedded in the bank; these are interpreted as the remains of an outer revetment. The existence of an internal rather than an external ditch is an unusual feature in this enclosure. On the south east side of the enclosure the bank has been levelled and the ditch infilled, however the latter can be traced for part of its course as a damp hollow. Immediately to the south of the enclosure there are the remains of at least two rectangular buildings first noted by MacLaughlan in 1867 when there were apparently more than two. The two remaining buildings measure 10m by 5m and are placed at an angle to each other. It is presumed that the other buildings have been destroyed by the adjacent fire break. Reasons for Designation: During the mid-prehistoric period (seventh to fifth centuries BC) a variety of different types of defensive settlements began to be constructed and occupied in the northern uplands of England. The most obvious sites were hillforts built in prominent locations. In addition to these a range of smaller sites, sometimes with an enclosed area of less than 1ha and defined as defended settlements, were also constructed. Some of these were located on hilltops, others are found in less prominent positions. The enclosing defences were of earthen construction, some sites having a single bank and ditch (univallate), others having more than one (multivallate). At some sites these earthen ramparts represent a second phase of defence, the first having been a timber fence or palisade. Within the enclosure a number of stone or timber-built round houses were occupied by the inhabitants. Stock may also have been kept in these houses, especially during the cold winter months, or in enclosed yards outside them. The communities occupying these sites were probably single family groups, the defended settlements being used as farmsteads. Construction and use of this type of site extended over several centuries, possibly through to the early Romano-British period (mid to late first century AD). Defended settlements are a rare monument type. They were an important element of the later prehistoric settlement pattern of the northern uplands and are important for any study of the developing use of fortified settlements during this period. All well-preserved examples are believed to be of national importance. Despite having been partially levelled at the south east side by afforestation, the defended settlement near Gowanburn is reasonably well preserved and retains significant archaeological deposits. It is one of a group of prehistoric monuments situated near the confluence of the River North Tyne and Kielder Burn; taken together they will add to our knowledge and understanding of prehistoric settlement and activity at this time.

Asset/Event Number	71
Asset/Event Name	Romano-British enclosed settlement, 290m south east of Butteryhaugh Bridge
Type of Asset/Event	Enclosed Settlement
Date and/or Period	Romano-British
Listing No./NRHE Number	1009667
HER Number	

Status	Scheduled Monument
Easting	363466
Northing	592736
Parish	Kielder
Council	Northumberland
Description	The monument includes the remains of a settlement of Romano-British date, levelled into a north west facing hillside above the Kielder Burn. The settlement, oval in shape, measures a maximum of 34m north west to south east by 30m north east to south west, within a bank of stone and earth varying between 3m-5m wide and standing to a maximum height of 1.6m above the interior on the south east side. In places on the downhill side of the enclosure the surrounding bank has been reduced to a scarp. Within the enclosure there are the remains of a stone-founded circular house 9m in diameter visible as a stony platform. Reasons for Designation: In Cumbria and Northumberland several distinctive types of native settlements dating to the Roman period have been identified. The majority were small, non- defensive, enclosed homesteads or farms. In many areas they were of stone construction, although in the coastal lowlands timber-built variants were also common. In much of Northumberland, especially in the Cheviots, the enclosures were curvilinear in form. Further south a rectangular form was more common. Elsewhere, especially near the Scottish border, another type occurs where the settlement enclosure was `scooped' into the hillslope. Frequently the enclosures reveal a regularity and similarity of internal layout. The standard layout included one or more stone round-houses situated towards the rear of the enclosure, facing the single entranceway. In front of the houses were pathways and small enclosed yards. Homesteads normally had only one or two houses, but larger enclosures could contain as many as six. At some sites the settlement appears to have grown, often with houses spilling out of the main enclosure and clustered around it. At these sites up to 30 houses may be found. In the Cumbrian uplands the settlements were of less regimented form and unenclosed clusters of houses of broadly contemporary date are also known. These homesteads were being constructed and used by non-Roman natives throughout the period of the Roman occupation. Their origins lie in settlement forms developed before the arrival of the Romans. These homesteads are common throughout the uplands where they frequently survive as well-preserved earthworks. In lowland coastal areas they were also originally common, although there they can frequently only be located through aerial photography. All homestead sites which survive substantially intact will normally be identified as nationally important. The enclosed settlement south east of Butteryhaugh Bridge is reasonably well preserved and retains significant archaeological deposits.

Asset/Event Number	72
Asset/Event Name	Romano-British enclosed settlement, 720m north east of Catcleugh
Type of Asset/Event	Enclosed Settlement
Date and/or Period	Romano-British
Listing No./NRHE Number	1009669
HER Number	
Status	Scheduled Monument
Easting	362050
Northing	594259
Parish	Kielder
Council	Northumberland
Description	The monument includes the remains of a settlement of Romano-British date, levelled into a sloping hillside commanding extensive views of the Kielder valley. The settlement, roughly oval in shape, measures a maximum of 59m north east to south west by 42m north west to south east, within a substantial bank of stone and earth measuring a maximum of 5m to 6m wide and 1.5m high. There is a well defined entrance in the north east side of the enclosure. Within the enclosure, situated in the upper western part, there are the remains of three stone-founded circular houses 4.2m, 9.2m and 9.5m in diameter; in addition there are traces of the remains of at least a further two stone houses visible as low stony platforms. Reasons for Designation:

In Cumbria and Northumberland several distinctive types of native settlements dating to the Roman period have been identified. The majority were small, non- defensive, enclosed homesteads or farms. In many areas they were of stone construction, although in the coastal lowlands timber-built variants were also common. In much of Northumberland, especially in the Cheviots, the enclosures were curvilinear in form. Further south a rectangular form was more common. Elsewhere, especially near the Scottish border, another type occurs where the settlement enclosure was `scooped' into the hillslope. Frequently the enclosures reveal a regularity and similarity of internal layout. The standard layout included one or more stone round-houses situated towards the rear of the enclosure, facing the single entranceway. In front of the houses were pathways and small enclosed yards. Homesteads normally had only one or two houses, but larger enclosures could contain as many as six. At some sites the settlement appears to have grown, often with houses spilling out of the main enclosure and clustered around it. At these sites up to 30 houses may be found. In the Cumbrian uplands the settlements were of less regimented form and unenclosed clusters of houses of broadly contemporary date are also known. These homesteads were being constructed and used by non-Roman natives throughout the period of the Roman occupation. Their origins lie in settlement forms developed before the arrival of the Romans. These homesteads are common throughout the uplands where they frequently survive as well-preserved earthworks. In lowland coastal areas they were also originally common, although there they can frequently only be located through aerial photography. All homestead sites which survive substantially intact will normally be identified as nationally important. The enclosed settlement near Catcleugh is very well preserved and retains significant archaeological deposits. It is one of few surviving examples of this form of Romano-British settlement in this area and will contribute to our knowledge and understanding of settlement and activity at this time.

Included on Historic England's 'Heritage at Risk' register:
Condition - Generally unsatisfactory with major localised problems
Principal Vunerability - Bracken
Trend - Declining
https://historicengland.org.uk/advice/heritage-at-risk/search-register/list-entry/30004

Asset/Event Number	73
Asset/Event Name	Bran's Walls Romano-British enclosed settlements, 400m SSE of Kielder Head
Type of Asset/Event	Enclosed Settlements
Date and/or Period	Romano-British
Listing No./NRHE Number	1009670
HER Number	
Status	Scheduled Monument
Easting	366750
Northing	597640
Parish	Kielder
Council	Northumberland
Description	The monument includes the remains of two settlements of Romano-British date, situated on a north west facing slope overlooking the valley of the Kielder Burn. The most northerly settlement is roughly oval in shape and measures a maximum of 28m north west to south east by 58m north east to south west, within a bank of stone and earth varying between 3m to 5m wide and standing to a maximum height of 1.2m above the exterior ground level. The enclosure is subdivided at its northern end into two compartments by a broad earthen bank. There are the remains of at least eight stone-founded circular houses with diameters of between 5m to 10m within the enclosure, two of which have been built into the broad dividing wall. Three of the other circular houses are situated in the south eastern corner of the enclosure upon a raised platform. There are two well defined entrances in the easten side of the enclosure, towards the northern end. The second settlement, situated 20m south of the first is long, narrow and irregularly shaped and has been scooped into the hillslope on the eastern side. It measures a maximum of 68m north to south by 40m east to west externally and is bounded on the west side by a substantial bank of stone and earth 5m wide and standing to a maximum height of 1m. There is an entrance through the north and the south walls of the enclosures. Within the enclosure there are the remains of at least six stone-founded circular houses ranging in diameter from 6m to 10m. It is considered that more than one phase is represented by the remains at this monument. Reasons for Designation: In Cumbria and Northumberland several distinctive types of native settlements dating to the Roman period

have been identified. The majority were small, non- defensive, enclosed homesteads or farms. In many areas they were of stone construction, although in the coastal lowlands timber-built variants were also common. In much of Northumberland, especially in the Cheviots, the enclosures were curvilinear in form. Further south a rectangular form was more common. Elsewhere, especially near the Scottish border, another type occurs where the settlement enclosure was `scooped' into the hillslope. Frequently the enclosures reveal a regularity and similarity of internal layout. The standard layout included one or more stone round-houses situated towards the rear of the enclosure, facing the single entranceway. In front of the houses were pathways and small enclosed yards. Homesteads normally had only one or two houses, but larger enclosures could contain as many as six. At some sites the settlement appears to have grown, often with houses spilling out of the main enclosure and clustered around it. At these sites up to 30 houses may be found. In the Cumbrian uplands the settlements were of less regimented form and unenclosed clusters of houses of broadly contemporary date are also known. These homesteads were being constructed and used by non-Roman natives throughout the period of the Roman occupation. Their origins lie in settlement forms developed before the arrival of the Romans. These homesteads are common throughout the uplands where they frequently survive as well-preserved earthworks. In lowland coastal areas they were also originally common, although there they can frequently only be located through aerial photography. All homestead sites which survive substantially intact will normally be identified as nationally important. The two settlements at Bran's Walls are very well preserved and retain significant archaeological deposits. There are few surviving examples of this form of Romano-British settlement in this area, and they will contribute to our knowledge and understanding of settlement and activity at this time.

Included on Historic England's 'Heritage at Risk' register:
Condition - Extensive significant problems
Principal Vunerability - Bracken
Trend - Declining
https://historicengland.org.uk/advice/heritage-at-risk/search-register/list-entry/30120

Asset/Event Number	74
Asset/Event Name	Kershope Castle
Type of Asset/Event	Earthwork?; Tower House
Date and/or Period	Early Medieval; Medieval
Listing No./NRHE Number	1018956
HER Number	
Status	Scheduled Monument
Easting	361446
Northing	595957
Parish	Kielder
Council	Northumberland
Description	The monument includes the remains of a tower of medieval date, situated on a steep south west facing slope overlooking the valley of the North Tyne. The monument is visible as a rectangular mound measuring 7m north west to south east by 5m north east to south west, truncated on the north eastern side by a forestry track. The mound supports the remains of a stone tower which is visible as a section of stone walling at the north western side. The mound is surrounded on three sides by a ditch 1.3m deep and on average 6.5m wide. Outside the ditch there are the remains of a slight outer bank which, where it is best preserved on the south eastern side, is 1.5m wide. The north eastern side of the tower and its supporting mound are buried beneath debris resulting from the construction of a forestry track. The surrounding ditch on this side, which survives below ground level as a buried feature, has been infilled and overlain by the track. Kershope Castle is thought to have been the tower referred to in a document of 1249 when it was associated with one Robert of `Gresshope'. It is thought that the castle was in existence by the mid-12th century, as a document of 1304 confirms a grant of land in `Gresshoppa' which was originally made by Malcolm, King of Scotland, who died in 1165. It is possible that the tower was a later addition to an earlier earthwork site. Reasons for Designation: Tower houses are a type of defensible house particularly characteristic of the borderlands of England and Scotland. Virtually every parish had at least one of these buildings. Solitary tower houses comprise a single square or rectangular `keep' several storeys high, with strong barrel-vaults tying together massive outer walls. Many towers had stone slab roofs, often with a parapet walk. Access could be gained through a

ground floor entrance or at first floor level where a doorway would lead directly to a first floor hall. Solitary towers were normally accompanied by a small outer enclosure defined by a timber or stone wall and called a barmkin. Tower houses were being constructed and used from at least the 13th century to the end of the 16th century. They provided prestigious defended houses permanently occupied by the wealthier and aristocratic members of society. As such, they were important centres of medieval life. The need for such secure buildings relates to the unsettled and frequently war-like conditions which prevailed in the Borders throughout much of the medieval period. Around 200 examples of tower houses have been identified of which less than half are of the free- standing or solitary tower type. All surviving solitary towers retaining significant medieval remains will normally be identified as nationally important. Kershope Castle survives well and retains significant archaeological deposits. As an example of a solitary tower house which retains its earthwork defences, it is unusual and will add to our knowledge of the diversity of medieval settlement in the Border area of England. The fact that it is mentioned in medieval documents enhances the importance of the monument.

Included on Historic England's 'Heritage at Risk' register:
Condition - Extensive significant problems
Principal Vunerability - Forestry
Trend - Declining
https://historicengland.org.uk/advice/heritage-at-risk/search-register/list-entry/28236

Asset/Event Number	75
Asset/Event Name	Shieling on north bank of Lewis Burn
Type of Asset/Event	Shieling
Date and/or Period	Medieval
Listing No./NRHE Number	1010042
HER Number	
Status	Scheduled Monument
Easting	363267
Northing	589473
Parish	Kielder
Council	Northumberland
Description	The monument includes the remains of a shieling of medieval date situated on a level terrace on the north bank of the Lewis Burn. The shieling is well defined and is visible as the foundations of a rectangular dry stone building measuring 6.5m east to west by 3.5m north to south. It is bounded by stone walls spread to 1.5m and standing to a height of 0.5m. A semicircular platform 2m wide is attached to the east side of the shieling defined by an arc of regular stones, and is included in the scheduling. Reasons for Designation: Shielings are small seasonally occupied huts which were built to provide shelter for herdsmen who tended animals grazing summer pasture on upland or marshland. These huts reflect a system called transhumance, whereby stock was moved in spring from lowland pasture around the permanently occupied farms to communal upland grazing during the warmer summer months. Settlement patterns reflecting transhumance are known from the Bronze Age (c.2000-700 BC) onwards. However, the construction of herdsmen's huts in a form distinctive from the normal dwelling houses of farms, only appears from the early medieval period onwards (from AD 450), when the practice of transhumance is also known from documentary sources and, notably, place-name studies. Their construction appears to cease at the end of the 16th century. Shielings vary in size but are commonly small and may occur singly or in groups. They have a simple sub- rectangular or ovoid plan normally defined by drystone walling, although occasional turf-built structures are known, and the huts are sometimes surrounded by a ditch. Most examples have a single undivided interior but two roomed examples are known. Some examples have adjacent ancillary structures, such as pens, and may be associated with a midden. Some are also contained within a small ovoid enclosure. Shielings are reasonably common in the uplands but frequently represent the only evidence for medieval settlement and farming practice here. Those examples which survive well and which help illustrate medieval land use in an area are considered to be nationally important. The shieling on the Lewis Burn is reasonably well preserved and retains significant archaeological deposits.

Asset/Event Number	76
Asset/Event Name	Kielder Viaduct
Type of Asset/Event	Railway Viaduct
Date and/or Period	Post-medieval
Listing No./NRHE Number	1002913
HER Number	
Status	Scheduled Monument
Easting	363216
Northing	592420
Parish	Kielder
Council	Northumberland
Description	The monument includes the remains of a mid 19th century railway viaduct which spans the River North Tyne shortly before it enters Bakethin Reservoir. The multi span viaduct which once carried the Border Counties Railway, is built of squared masonry in the baronial style with a castellated parapet and false arrowslits in the voussoirs. The arches are skewed meaning that each stone had to be specially shaped to fit. The viaduct was designed by John Furness Tone, with Peter Nicholson devising the method for shaping the stone for the skew arch and William Hutchison acting as contractor. It was completed in 1862 and eventually closed to passengers in 1956 and to freight in 1958. Reasons for Designation: Railway viaducts are usually multi span structures of two or more arches supported on piers used to carry rail. Their development is linked closely with the inception and growth of the railway transport network, which began with the opening of the Stockton and Darlington Railway in 1825 followed by rapid expansion throughout the 19th century and early 20th century. The development of the rail network required the preparation of straight, flat routes and necessitated the crossing of widely varied terrain through a series of engineering works including tunnels, cuttings, embankments, bridges and viaducts. Railway viaducts were built to connect points of similar height separated by topographical features such as river valleys. As an integral part of the railway network, viaducts are representative of a technological and engineering phenomenon that was initiated in Britain and allowed the industrial revolution to flourish permanently transforming the socioeconomic status of the country. As such, early, well-preserved or architecturally outstanding examples of railway viaducts are deemed to be of national importance. Kielder viaduct survives exceptionally well and is one of the finest surviving examples of skew arch form construction in England. As such it is an excellent example of it class and provides insight into the engineering feats involved in the development of the rail transport network, a process that transformed the economy and society of England.

Asset/Event Number	77
Asset/Event Name	Rubers Law, fort and Roman signal station
Type of Asset/Event	Fort; Signal Station
Date and/or Period	Prehistoric; Roman
Listing No./NRHE Number	SM2128; NT51NE 8.00
HER Number	
Status	Scheduled Monument
Easting	358051
Northing	615572
Parish	Cavers
Council	Scottish Borders
Description	Further information - https://canmore.org.uk/site/55249/rubers-law

A complex fortification encloses the summit and upper slopes of Rubers Law, a rugged and distinctive landmark between Jedburgh and Hawick. The principal remains can be divided into two elements; a citadel enclosure on the summit, with an annexe taking in a terrace and a rocky ridge on the SE; and a large outer enclosure contouring along natural terraces lower down the slope. The citadel is enclosed by what has been a substantial wall extending round the craggy lip of the summit and measures internally about 72m from ENE to WSW by a maximum of 32m transversely (0.18ha). There is a well-defined entrance at the ENE end, and a possible second at the W end of the SE side, from which a path drops obliquely down the slope into the annexe; the wall at the WSW end is also pierced by a narrow cleft in the rock face known as Peden's Pulpit, but RCAHMS investigators in 1949 did not think this provide a practicable route to the summit. Apart from a mound towards the ENE end of the grassy hollow between the rock outcrops forming the summit area, the interior is featureless; Alexander Curle dug into this mound and beneath a deep layer of soil found a loose heap of stones which he believed was the remains of a rampart, and he also found what he described as a well-defined hut-circle elsewhere (Curle 1907). The wall of the annexe springs from the foot of the summit on the SW and swings round the leading edge of a terrace and along the flank of a rocky ridge to return across a gully at the foot of the summit on the SE. Internally it measures about 90m from ENE to WSW by between 80m and 35m transversely (0.5ha). Its wall is largely reduced to a stony scarp, but where it crosses the gully on the E it forms a mound of rubble about 7m in thickness by 0.6m in height and the massive surviving facing-stones indicate an original thickness in the order of 3.6m; another row of upright stones can be seen 9m in front of the wall in this sector. An entrance on the SW is approached by a hollowed trackway. A notable feature of the walls of both the citadel and the annexe is that they incorporate dressed sandstone blocks which almost certainly derive from a Roman structure, speculated to have been a watchtower on the summit. Several other fragments of walling can be seen to the N of the citadel, which are possibly the remains of outworks controlling access up to the entrance on the ENE. Lower down the slope, however, there are the remains of a heavily ruined rampart contouring round the slope on all sides except the E, essentially following natural terraces and shoulders to form an enclosure of about 3.7ha; an entrance on the S is approached by a hollowed trackway mounting the slope obliquely to expose the visitor's left side, while other entrances possibly utilise two natural gullies on the N - Information from An Atlas of Hillforts of Great Britain and Ireland – 19 October 2016. Atlas of Hillforts SC3282

Location and landscape

Rubers Law, which is situated about 5 miles (8km) south-west of Jedburgh and 4 miles (7km) east of Hawick, is one of the most distinctive hills in the Scottish Borders. Rising steeply to almost 425m (1400ft) above Teviotdale, its lower flanks are formed of old red sandstone, while its lofty, rocky summit is composed of igneous rocks. These influence the land-use, with the improved ground around its broad, expansive skirt gradually giving way to a sourer, rougher pasture at higher elevations until the summit is reached, where there is very little vegetation to clothe the sharp ridges, deep gullies, small plateaus and screes.

From here the landscape far below unfolds to reveal the familiar silhouettes of the Eildon Hills and the Lammermuirs to the north, the Cheviots to the east and south and the hills of Selkirk, Roxburgh and Dumfries far away in the distant west.

There are ancient remains on the upper slopes of Rubers Law. In making an ascent from the north, the west, or south, one first encounters a discontinuous, grass-grown, natural terrace upon which there is the tumbled debris of a discontinuous, boulder-faced wall, which encloses almost 3 ha (7ac). This is an Iron Age fort. There are two entrances on the north, where gullies offer an easy approach and another on the south. Much of the broken ground the fort encompasses consists of the rocks that outcrop immediately below the hill’s bare summit. These support the remains of further collapsed walls looping from outcrop to outcrop.

Although it can be difficult to perceive their overall plan, these curling walls define a roughly oval enclosure interrupted by a deep gully on the hill’s peak, while lower down on the south, there is a roughly rectangular plateau that also incorporates a gully. There is an entrance on the east-north-east providing access to the oval enclosure on the summit, the approach to which is controlled by the natural configuration of outcropping rocks to the north, which are reinforced by further lengths of walling. A narrow path descending from the south-west of the oval enclosure provides a link with the plateau below.

The lost Roman building

These remains were first recognised by Alexander Curle at the beginning of the 20th century, who also made a startling discovery. The walls forming the enclosure and plateau consisted for the most part of the grey igneous rocks outcropping on the summit, but their lower courses also included sporadic, neatly-shaped rectangular blocks of pale red sandstone, some of which displayed ‘diamond-broaching’ – a criss-cross pattern scored into one surface that is characteristic of Roman work. Others exhibited herring-bone patterns, while some appeared to have formed sills or lintels. Curle concluded that these could only have been robbed from some abandoned Roman building that had once stood in the immediate neighbourhood. He also noted that their incidence clearly demonstrated that the fortifications around the summit (embracing the oval enclosure, its outworks to the north and the rectilinear plateau) could only have been

constructed after the Romans had left Scotland. The blocks had been re-used as raw material in the construction of a new stronghold that had been built perhaps several hundred years after the abandonment of the Iron Age fort.

Nevertheless, the location of this lost Roman building in such an exposed and hostile environment was a puzzle. While they could have been robbed from a military post situated on the lower flanks of the hill, Curle could find nothing to support this. Instead, he surmised that the edifice must have stood upon the summit, 'from whence a most extensive prospect would make it suitable for a post of observation, or for a signalling station'.

This idea was subsequently developed by Professor J. K. St Joseph of Cambridge University, who in the latter part of the 1940s discovered from the air the remains of a small Roman fortlet on the flanks of Brownhart Law in the Cheviots. Impressed by the extensive view to the north where Rubers Law dominated the centre-ground, he concluded that this must have been used for long distance signalling, with both sites forming part of a system exerting control over Southern Scotland. In the next few years, further weight was added to this hypothesis by the discovery of the earthworks of a possible timber watchtower on the summit of Craik Cross amongst the mountains far to the west, while those of another was recognised on the top of Eildon Hill North, sited immediately above the Roman fort of Newstead – the most important military post in the region.

However, it is now generally accepted that long-distance signalling would have been impractical and an explanation for the Roman stonework at Rubers Law still remains elusive. While the blocks could derive from a stone watchtower with a much more local remit, it is also possible that they originate from a shrine or some other kind of landmark.

Asset/Event Number	78
Asset/Event Name	Peniel Heugh, fort
Type of Asset/Event	Fort
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM1703; NT62NE 2.00
HER Number	
Status	Scheduled Monument
Easting	365362
Northing	626298
Parish	Crailing
Council	Scottish Borders
Description	Further information - https://canmore.org.uk/site/56959/peniel-heugh. A complex sequence of fortifications can be seen on the summit of Peniel Heugh, a well-known landmark crowned by a tower built to commemorate the Battle of Waterloo. The earliest is probably a bivallate work occupying the higher part of the summit on the E, while the latest comprises a single wall taking in the whole of the summit area. This latter wall incorporates a series of massive stones up to 1m high set up on end in its outer face; these can be seen along the N side, where the rubbles has been pulled back and the face has also been rebuilt to a height of up to 1.8m. Roughly oval on plan, this latest fort measures about 175m from WNW to ESE by a maximum of 75m transversely (1.1ha). On the E and S its wall follows the crags along the edge of the summit and a track that mounts the slope via a broad causeway in a ditch dug into the foot of the slope below them on the S is probably reusing an original entrance; the gateway in a rebuilt length of wall on the opposite side of the fort on the N may mark a second. While this fort is clearly set out eccentrically across the earliest fort, it is evidently not the first fortification to have taken this line. At the far WNW end, above a small D-shaped annexe taking in a lower terrace, there are fragmentary remains of a wall extending along the crest of the slope. Its likely course has been adopted by the wall of the latest fort on the N, thus implying another enclosure of a similar size; its E end is perhaps represented by another fragmentary wall, which can be traced southwards from a curious re-entrant on the ENE where the latest fort wall has been re-aligned to drop down to the crag at this end. The defences of the earliest fort apparently contour round the E end of the summit, but the defences are only clearly visible outside the latest fort wall on the NE. For the most part both ramparts have been reduced to no more that scarps, but on the NW side of an entrance preserved on the NE, the inner forms a bank 4.5m in thickness by up to 1.2m in height. The oval interior, which measures about 105m from NE to SW by 80m transversely

(0.65ha), is traversed by a post-medieval field-bank and has probably been cultivated - Information from An Atlas of Hillforts of Great Britain and Ireland – 18 October 2016. Atlas of Hillforts SC3376

Asset/Event Number	79
Asset/Event Name	The Law, fort
Type of Asset/Event	Fort
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM1699; NT71NW 21.00
HER Number	
Status	Scheduled Monument
Easting	371958
Northing	615844
Parish	Oxnam
Council	Scottish Borders
Description	Further information - https://canmore.org.uk/site/58019/the-law. The remains of a heavily damaged fort are situated on the summit of The Law. Its defences comprise three ramparts disposed in two slightly eccentric circuits, but all had largely been reduced to scarps by the time RCAHMS investigators drew up a plan in 1948, and further reduced by ploughing since in the field on the NW side of the stone dyke that traverses the crest of the hill from NE to SW. Oval on plan, the inner circuit measures internally about 125m from NE to SW by 70m transversely (0.54ha), and the outer circuit, comprising twin ramparts with a medial ditch, a correspondingly larger area measuring 138m by 90m (0.88ha). Additional material for the outermost rampart was probably extracted from the small external quarry pits intermittently visible round the circuit. Despite the ploughing, aerial photographs taken by Dennis Harding in 1982 apparently show traces of palisade trenches in the crests of the innermost and outermost ramparts at the SW end, and in the middle rampart at the NE end, where there are also traces of a smaller palisaded enclosure within the interior and possibly as many as five timber round-houses. There are three entrances, each penetrating both circuits, and situated on the NNE, SSW and NW respectively; at the NNE entrance the middle and outer rampart return and unite around the terminals of the ditch medial. While the three ramparts may have been designed as a single scheme, it is equally possible the two circuits represent different periods of construction - Information from An Atlas of Hillforts of Great Britain and Ireland – 31 August 2016. Atlas of Hillforts SC3407

Asset/Event Number	80
Asset/Event Name	Cunzierton, fort
Type of Asset/Event	Fort
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM2170; NT71NW 12.00
HER Number	
Status	Scheduled Monument
Easting	374384
Northing	617505
Parish	Oxnam
Council	Scottish Borders
Description	Further information - https://canmore.org.uk/site/58009/cunzierton-hill. This fort occupies the summit of Cunzierton Hill, which is the first hill to the W of the Roman Road S of

	Whitton Edge. Roughly oval on plan, it measures 152m from NE to SW by 76m transversely within a rampart reduced to a bank of rubble up to 0.9m in internal height; the material from the ramparts has been extracted from linear quarries immediately to the rear. Outer defences represented by short arcs of rampart are visible at both ends, apparently forming little more than hornworks springing from the main rampart. In 1947 RCAHMS investigators suggested these were simply to provide additional protection at the entrances on the NE and SW, but it is notable that the defences at the third entrance into the fort, midway along the SE side, have no additional enhancement. This last entrance is approached by a terraced trackway that drops down to a boggy hollow that they suggested was a pond. Another trackway drops down from below the NE entrance, but it is unclear whether this is an original feature or to service a later quarry. There is little trace of any round-house stances in the interior, though the RCAHMS investigators noted several 'indefinite scoopings' in the SW end - Information from An Atlas of Hillforts of Great Britain and Ireland – 18 May 2016. Atlas of Hillforts SC3406.

Asset/Event Number	81
Asset/Event Name	Thowliestane Hill, fort
Type of Asset/Event	Fort
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM1705; NT71NE 4.00
HER Number	
Status	Scheduled Monument
Easting	376559
Northing	619287
Parish	Hownam
Council	Scottish Borders
Description	This fort is situated on the summit of Thowliestane Hill, a steep hill overlooking Hownam from the W. Heart-shaped on plan, it measures about 75m from NE to SW by 70m transversely (0.43ha) within a rampart forming a low mound up to 6m in thickness by 0.6m in height. An external ditch is visible on the NE and S, where there are also the remains of an outer rampart; the latter has short segments of an external ditch on the E and S. In addition to these inner defences, there are a series of outlying banks and ditches on the SE, where two natural ridges of rock extend away from the E and S angles of the fort, flanking a broad gully running up to the entrance. These include a bank extending down the spine of the W ridge, a bank and ditch cutting at right-angles across the eastern ridge, and an outlying earthwork which crosses the bottom of the gully, where it is broken by an entrance, and carries on round to peter out on the E and SW flanks of the fort respectively. How these relate to the defences of the fort is unknown, though the last is a substantial barrier with a ditch up to 6m in breadth and a counterscarp bank on its downslope side; on the slope above the ditch on the E side of the eastern ridge of rock there is also a possible length of palisade trench, though it quickly disappears in a patch of cord rig. Within the interior of the fort there are two stone founded round-houses, one lying roughly at the centre, with low banks radiating on the NNW and ENE to form a small enclosure, and the second on its NNW; these are likely to represent a late Iron Age occupation - Information from An Atlas of Hillforts of Great Britain and Ireland – 18 May 2016. Atlas of Hillforts SC3402.

Asset/Event Number	82
Asset/Event Name	Hownam Law, fort and cairn
Type of Asset/Event	Fort; Cairn
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM298; NT72SE 10.00; NT72SE 11.00
HER Number	
Status	Scheduled Monument

Easting	379636
Northing	622002
Parish	Hownam
Council	Scottish Borders
Description	Further information on the fort - https://canmore.org.uk/site/58271/hownam-law; cairn - https://canmore.org.uk/site/58272/hownam-law. The fort crowning Hownam Law, which is a prominent summit on the northern flank of the Cheviots, is one of the larger around the Tweed basin, enclosing about 8.8ha and second only in size to Eildon Hill North. The single rampart, which has stone faces and measures about 3m in thickness, follows natural shoulders from which the ground drops away steeply on all sides, extending along the SSE flank of the summit ridge before dropping down to take in a lower terrace on the NNW flank. Topographically defined in this way, the plan is irregular and the interior measures a maximum of 490m from NE to SW by 238m transversely. A single entrance is visible at the SW end, piercing the rampart at the foot of the summit ridge, and the plan drawn up by RCAHMS investigators places a second, unremarked, at the NE apex; they failed to locate an entrance noted in 1929 by James Hewat Craw in a re-entrant created by a natural hollow on the E flank of the fort and dismissed a second gap in the SSE side as a relatively recent breach. Within the interior there are numerous traces of timber round-houses, ranging from shallow circular depressions to well-defined platforms, but counts vary; a plan by Roger Mercer prepared in 1985 (RCAHMS DC48788) shows about 110, whereas the RCAHMS investigators identified 155 and James Hewat Craw 187 (1931, 219), which perhaps accounts for why the RCAHMS investigators speculated that many more might be hidden beneath the heather and coarse grass, a contention that is broadly supported by oblique aerial photographs taken under a range of conditions since. The interior is also unusual for the two artificial ponds measuring 15m and 13m in diameter respectively, which a have been dug on the lower terrace close to the centre. The only other feature of note is a a later enclosure which overlies the rampart on the NE, taking in an oval area measuring 75m from NW to SE by 70m transversely; the perimeter comprises a bank 3m to 4.5m in thickness by 0.7m in height with an external ditch up to 2.4m in breadth and is broken by an entrance in its N side - Information from An Atlas of Hillforts of Great Britain and Ireland – 19 October 2016. Atlas of Hillforts SC3426. Towards the NE end of the highest part of the summit-ridge of Hownam Law, and within the perimeter of the fort (RCAHMS 1956, No.299), there are the grass-covered remains of a greatly dilapidated cairn. The structure is about 42ft in diameter and stands to a maximum height of 1ft 6in, the interior being hollowed (RCAHMS 1956, visited 25 May 1949). Generally as described by the Commission although the interior is not noticeably hollowed. An OS pillar now stands on the cairn (Visited by OS (RD) 8 July 1968).

Asset/Event Number	83
Asset/Event Name	Carby Hill, settlement
Type of Asset/Event	Settlement
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM1690; NY48SE 7.00
HER Number	
Status	Scheduled Monument
Easting	349058
Northing	584362
Parish	Castleton
Council	Scottish Borders
Description	Further information available at: https://canmore.org.uk/site/67896/carby-hill This fort is situated on the summit of Carby Hill and its wall was heavily robbed of stones in the 1820s. Nevertheless, it is oval on plan and measures about 86m from NNE to SSW by 68m transversely (0.48ha) within a band of rubble spread up to 8m in thickness on the S. The wall probably measured in the order of 3m in thickness, though the only evidence of either face is a short run of the outer on the SE; a later field wall extending around its inner margin may mask the line of the inner face. Four gaps in the line of the wall have been noted, one on the SW, another on the NNW and two on the E; that on the SW has the

	appearance of being original and the status of the others is uncertain. Within the interior the stone footings of at least six round-houses can be seen; they measure in the order of 7m in internal diameter and one appears to have a concentric bank around it - Information from An Atlas of Hillforts of Great Britain and Ireland – 23 May 2016. Atlas of Hillforts SC1130

Asset/Event Number	84
Asset/Event Name	Kirk Hill
Type of Asset/Event	Fort; Palisaded Enclosure
Date and/or Period	Prehistoric
Listing No./NRHE Number	SM2149; NY48NE 1.00
HER Number	
Status	Scheduled Monument
Easting	346276
Northing	586391
Parish	Castleton
Council	Scottish Borders
Description	Further information available at - https://canmore.org.uk/site/67858/kirk-hill This fort is situated on the rounded summit of Kirk Hill and is bisected by a stone march dyke that traverses the hill from NNE to SSW. Oval on plan, the fort measures 90m from NNE to SSW by 62m transversely (0.49ha) within a rampart 4.5m in thickness by 0.6m in height internally, and 2m externally, and an external ditch 4.6m in breadth by 1.5m in depth. The entrance on the ESE is now 11m wide as a result of post medieval cultivation ploughing, which has also extended across the S half of the interior. In the northern half, however, on the W, N and NE, there are traces of two concentric palisade trenches set about 5.5m apart within the line of the rampart and describing an enclosure measuring at least 48m across - Information from An Atlas of Hillforts of Great Britain and Ireland – 23 May 2016. Atlas of Hillforts SC1129

Asset/Event Number	85
Asset/Event Name	Whitrope Tunnel, Viaduct and Tunnel
Type of Asset/Event	Viaduct; Tunnel; Culvert
Date and/or Period	Post-medieval
Listing No./NRHE Number	LB49311
HER Number	
Status	Listed Building - Category B
Easting	352496
Northing	599977
Parish	Cavers
Council	Scottish Borders
Description	Note - this Listed Building is located across three discrete locations: -Whitrope Culvert (Asset 85.1) - NGR NY 5249 9997; -Whitrope Viaduct (Asset 85.2) - NGR NY 5247 9998; and -Whitrope Sandy Edge (Tunnel) (Asset 85.3) - NGR NT 5245 0118. Circa 1860 for the North British Railway. Former railway tunnel with round-arched entrance portals to N and S; skew-arch viaduct crossing road with reversed S-plan and diagonal wing walls and circular drainage culvert set within brick wing walls. Rock-faced ashlar wing walls with red engineering brick terraces to rear; brick lined tunnel. Red engineering brick viaduct and culvert inset into earth embankment.

TUNNEL:
S ELEVATION: to centre, arched tunnel entrance with ashlar voussoirs, projecting band course and plain spandrels, parapet inset into hillside. To right, vast abutment of red engineering brick (comprising of irregular terraces holding hillside back) and inset bricks laid to form sloped wall, all with rock-faced ashlar supporting wall to ground with pain coping. To left, lesser abutment of similar style to that on right.

N ELEVATION: to centre, arched tunnel entrance with ashlar voussoirs, projecting band course and plain spandrels, parapet inset into hillside. To left and right, small brick retaining abutments inset into hillside.

INTERIOR: brick lined tunnel with ballast base (sleepers and track removed); drainpipes for drainage system lead to under ballast drainage channel.

VIADUCT: single segmental-arched skewed viaduct set across road, each elevation identical (see below).

E AND W ELEVATIONS: to right, large curved retaining wall (with slightly projecting plain coping) advancing and descending in height. To centre, diagonally set arch with flush 4-brick banded voussoirs and slightly projecting parapet with a heightened straight section (following the line of the embankment) carrying track bed over arch. To left, further diagonally set retaining wall (with slightly projecting copes) advancing from embankment. Drainage holes (missing bricks at regular intervals in structure) ensure track and retaining wall stability. Open ironwork fence flanks former viaduct track bed.

CULVERT: to north, large round brick lined drainage pipe with flush 3-brick banded voussoirs with rock-faced band to exterior, all set within plain brick spandrelled wall with projecting sloped brick wing walls advancing at flanks; exiting on S side of railway embankment.

Statement of Special Interest:
This viaduct was formerly part of the 'Waverley Route', which ran between Edinburgh and Carlisle. This particular section of line was called The Border Union Railway and was under the control of The North British Railway. The terrain becomes inhospitable and where the tunnel and bridge are sited was described as one of the most 'desolate stretches of the line'. It is also one of the highest points of the route and a tunnel was constructed through the hill. The Whitrope tunnel is the second engineering feat of the line (the first being the Shankend Viaduct, listed separately); it is 1208 yards long and was constructed by gangs of navvies working in hard and demanding conditions. There were extremes of temperature and also vast amounts of water. 400 gallons of water poured every minute from the tunnel during construction. Due to the nature of the hill (called Sandy Edge), a vast drainage system channelled water into downpipes that led to a large central drain under the tunnel?s ballast. The south portal exited the hill at a point where the rock was soft and unstable (a stream was sited above the tunnel mouth). This led to vast retaining abutment being built. The dangerous nature of the tunnelling did lead to casualties; formerly a plaque commemorated the navvies' task and 2 graves are located above the south portal. This tunnel is the 4th longest in Scotland and boasts a constant gradient of 1 in 96 for almost ? of a mile. To the south of the tunnel, the hill continues to ascend to Whitrope Summit. After this (1/4 mile S), there is a stream and a minor road for the railway to cross. A large embankment called the Whitehope Culvert was built and Whitrope Viaduct is part of this. The viaduct is known by several names. It crosses the B6399 and is also known as Bridge 200 or The Golden Bridge. The latter name came into being because of the navvies's fondness for alcohol and the amount of time they spent in the Whitrope Bar (1 ?-miles south). The navvies lived in small shanty towns which moved as the railway was extended and visits to the bar were popular during leisure time. Although the track bed for the railway was straight, the Whitrope Viaduct is skewed. This leads to both elevations appearing the same. The stream adjacent to the road was also a problem and this was diverted through a culvert built under the embankment. The surfacemen's cottages also survive in the Whitrope area and currently the Waverley Route Heritage Association are relaying track here and reinstating copies of the mile posts that once served the line. The bridges and viaducts on this route are becoming fewer (due to demolition) and the few that remain are good surviving examples of not only the Borders railway engineering but also fine testaments to the builders and workers employed in their construction.

Asset/Event Number	86
Asset/Event Name	Harwood
Type of Asset/Event	House
Date and/or Period	Post-medieval
Listing No./NRHE Number	LB8371
HER Number	

Status	Listed Building - Category B
Easting	356530
Northing	608320
Parish	Hobkirk
Council	Scottish Borders
Description	Early 19th century. Simple gothic style house with gables, windows with square-headed drip moulds, and centre glazed.

Asset/Event Number	87
Asset/Event Name	Riccarton Mill
Type of Asset/Event	Granary; Byre; Kiln
Date and/or Period	Post-medieval
Listing No./NRHE Number	LB51762
HER Number	
Status	Listed Building - Category C
Easting	354947
Northing	594977
Parish	Castleton
Council	Scottish Borders
Description	18th century. L-plan arrangement of former meal mill complex with split-level granary and byre and detached kiln buildings at Riccarton. Sandstone rubble with stugged ashlar dressings and in-and-out quoins. GRANARY AND BYRE: dated 1770. 2-storey, rectangular-plan, gabled granary and byre with metal forestair to doorway at first floor to S elevation. Timber door to byre at ground floor with lintel stone inscribed with 1770 date. Double-leaf timber doors to N elevation; blocked opening to first-floor. Part of timber floor to upper level survives. Further single storey gabled building adjoining to W with narrow slitted openings to W gable. KILN: 2-leaf timber door to W with timber lintel and window above. Round-arched draw-hole to ground at N elevation. Battered interior walls. Piended roof. Graded grey slate to roofs. Cast-iron rainwater goods. Evidence of lade system survives as earthwork extending 200 metres S to the Liddel Water. Statement of Special Interest: The surviving mill buildings at Riccarton are part of a rare 18th century meal mill complex including a drying kiln. The kiln retains its battered walls internally which supported the drying floor and increased the building's stability. The first floor of split-level granary is accessed by a metal staircase to the S. An opening to the N elevation with double-leaf timber doors was widened after 1965. The single storey section at the NE corner, which housed the machinery and water-wheel, is no longer extant. The earliest recorded mention of a mill at Riccarton dates to 1611. Located on the Buccleuch Estates, the Duchess ordered the building of a new 'Corn Milne for the conveniency of her tennants' at Riccarton in 1718. Although the granary is dated 1770, the kiln is understood to date from around 1711. The surving elements of the complex are built from good quality stone. Mills that had their own kilns offered improved drying time and increased output. The feudal law of thirlage, by which the laird could force farmers living on his lands to bring their grain to his mill to be dried and ground, was abolished around 1790 leading to the decline in use of many mills. The 1st Edition Ordnance Survey map of 1863 shows an earlier L-plan house (now demolished) to the N of the mill which also operated as an Inn. The present house, built in 1873 and extended late 20th century, is situated to the SW of the mill buildings. The mill remained in use as such until around 1887 after which the machinery, belonging to the Duke of Buccleuch, was sold.

Asset/Event Number	88
Asset/Event Name	United Reformed Church
Type of Asset/Event	Church
Date and/or Period	Post-medieval
Listing No./NRHE Number	1156185
HER Number	
Status	Listed Building - Grade II
Easting	362388
Northing	594147
Parish	Kielder
Council	Northumberland
Description	Formerly Presbyterian Church, now United Reformed. 1874 by F.R. Wilson. Rock-faced stone, Welsh and Lakeland slate roof. Romanesque style. Single- cell church with south porch and north vestry. Three bays. Porch to left has round-headed doorway. Paired round-headed windows. East window three stepped lights with shafts and cushion capitals. Similar-west window. Gabled roof with overlapping coping and gabled kneelers. Polychrome patterned roof with bands of fish-scale slates and band of Greek-key design above the eaves. Interior has open timber roof with big semicircular braces.

Asset/Event Number	89
Asset/Event Name	Allison Syke
Type of Asset/Event	Bank; Rig and Furrow; Structure
Date and/or Period	Unknown
Listing No./NRHE Number	NY59NE 87.00
HER Number	
Status	Non-designated Heritage Asset
Easting	356144
Northing	599909
Parish	Castleton
Council	Scottish Borders
Description	A building, rig and furrow and a bank was recorded by field survey on a south facing hill. The two-celled building (at 356124 599927) measures 20m by 3m, defined by grassed over stone walls, 0.3m high and spread to 2m wide. An L-shaped structure was recorded to the SW (at 356137 599923) which may be the remains of a second building. An associated area of rig and furrow (c. 80m by 60m) was recorded with a wavelength of 2m. A bank (0.3m high and 1m wide) encloses the rig and furrow.

Asset/Event Number	90
Asset/Event Name	Alison Sike
Type of Asset/Event	Bank
Date and/or Period	Post-medieval
Listing No./NRHE Number	NY59NE 72.00

HER Number	
Status	Non-designated Heritage Asset
Easting	356100
Northing	599522
Parish	Castleton
Council	Scottish Borders
Description	The Ordnance Survey 1st Edition map depicts a curvilinear dyke that crosses the Dorothy Sike. Field survey recorded that there were no visible remains of the possible dyke, but did note there were extensive sheep tracks and soil creep in the area. It is possible that subsurface traces survive that relate to the dyke.

Asset/Event Number	91
Asset/Event Name	'Dexastan'
Type of Asset/Event	Battle Site
Date and/or Period	Early Medieval
Listing No./NRHE Number	NY59NE 16.00
HER Number	
Status	Non-designated Heritage Asset
Easting	356978
Northing	598031
Parish	Castleton
Council	Scottish Borders
Description	In the year 603, Aidan, king of the Scots who dwelt in Britain, came against Aethelfrith, the king of the Northumbrians, with an immense and powerful army; but beaten, he fled away with few. For in a very renowned place called Dexastan, that is to say Dexa Stone, almost all his army was slain. And Aethelfrith accomplished this battle in the eleventh year of his kingdom, and in the first year of Phocas, who then occupied the summit of the Roman realm. And the aforesaid king Aethelfrith reigned for twenty-four years. (Chronicles of Holyrood). Degsaston may have been at the head of Liddesdale, near Dawston Burn, within the Catrail; not far within the present boundary of Scotland. Dawston Rigg is a low rounded hill situated at the very head of Liddesdale, overlooked by Peel Fell, and itself over-looking the railway between Deadwater and Saughtree, which skirts it on the south. To the north at the base of the hill runs the highroad from Liddesdale to the valleys of the Rule, Jed and Teviot. To the east is Cauldron Burn. This hill is one of the two claimants for the site of the Battle of Daegsaston fought in 603 between Edelfrid, King of the Northumbrians, and the Cumbrian Britons with the Scots as allies, in which the latter were decisively defeated. The other claimant for the site is Dalston, Carlisle. The hill-side bears traces of escarpments raised for defence, and is full of small stone mounds. Numerous arrow-heads and other implements have from time to time been picked up on the spot, most of which unfortunately have been scattered or preserved without any particular record of where they were found (A D Murray 1896).

Asset/Event Number	92
Asset/Event Name	Abbey Knowe
Type of Asset/Event	Boundary Bank
Date and/or Period	Unknown
Listing No./NRHE Number	NY59NE 40.00

HER Number	
Status	Non-designated Heritage Asset
Easting	357540
Northing	599860
Parish	Castleton
Council	Scottish Borders
Description	A bank and a ditch extends across the saddle on the watershed between Cliffhope Burn in the SW and Abbey Sike in the NE, enclosing the land between the two burns. The bank is about 0.75m in height and is spread to as much as 3m in thickness and the ditch is on the NW or upslope side. A drystone-walled sheepfold overlies the earthwork at its NE end (NY59NE 31), and an earthen-banked enclosure is attached to the bank at the SW end.

Asset/Event Number	93
Asset/Event Name	Beattie's Knowe
Type of Asset/Event	Boundary Dyke; Enclosure
Date and/or Period	Post-medieval
Listing No./NRHE Number	NY59NE 38.00
HER Number	
Status	Non-designated Heritage Asset
Easting	356600
Northing	597600
Parish	Castleton
Council	Scottish Borders
Description	Marked by pecked lines, three enclosures, two of which are conjoined, and what may be a boundary dyke (NY566 974 to NY571 981) are depicted on the 1st edition of the OS 6-inch map (Roxburghshire 1863, sheet xxxix). The fragmentary remains of one enclosure are shown on the current edition of the OS 1:10000 map (1988).

Asset/Event Number	94
Asset/Event Name	Barren Hill
Type of Asset/Event	Building
Date and/or Period	Medieval; Post-medieval
Listing No./NRHE Number	NY59NE 93.00
HER Number	
Status	Non-designated Heritage Asset
Easting	357490
Northing	599174
Parish	Castleton
Council	Scottish Borders
Description	No further details - https://canmore.org.uk/site/378945/barren-hill.

Asset/Event Number	95
Asset/Event Name	Alison Syke, 'Knocking Stone'
Type of Asset/Event	Building; Knocking Stone
Date and/or Period	Post-medieval
Listing No./NRHE Number	NY59NE 6.00
HER Number	
Status	Non-designated Heritage Asset
Easting	356170
Northing	599630
Parish	Castleton
Council	Scottish Borders
Description	The NMRS and HER records a knocking stone and the remains of two buildings. The stone is located on a narrow ledge above the Alison Sike. It is 1.2m by 0.6m and 0.3m high, and on its upper surface a circular cavity has been cut measuring 0.2m diameter and 0.2m deep. To the NE of the stone are the footings of a small building measuring 7.5m E-W x 3m. It is slightly hollowed out within, and the drystone wall that formed it is now reduced to 0.2m in height and 1.0m in breadth. The possible remains of a second building or structure are visible to the west. Field survey recorded no change in the baseline condition for both the stone and the first building. A L-shaped wall (at 356190 599624) was all that could be identified of the second possible building, measuring 2m by 9m and 0.2m high. A possible bank was recorded adjacent to the burn (possibly acting as a flood defence) 0.2m high and 1m wide. At 356149 599624 the remains of a bridge of crossing points were also recorded.

Asset/Event Number	96
Asset/Event Name	Needs Law
Type of Asset/Event	Summit Cairn
Date and/or Period	Post-medieval; Modern
Listing No./NRHE Number	NT60SW 1.00
HER Number	
Status	Non-designated Heritage Asset
Easting	360610
Northing	602260
Parish	Castleton
Council	Scottish Borders
Description	The cairn on top of Needs Law is in a ruinous condition, appearing as an uneven, stony mound about 55' in diameter by 3' high. One large and two small modern cairns, known as Meg and the Bairns, have been built upon it with its own stones.

Asset/Event Number	97
Asset/Event Name	Copper Cleuch
Type of Asset/Event	Shepherd's Cairn
Date and/or Period	Unknown
Listing No./NRHE Number	NT50SE 20.00

HER Number	
Status	Non-designated Heritage Asset
Easting	357129
Northing	600150
Parish	Castleton
Council	Scottish Borders
Description	Field survey recorded the base of a disused shepherd's cairn, 1m by 1m and 0.7m high.

Asset/Event Number	98
Asset/Event Name	Copper Cleuch
Type of Asset/Event	Shepherd's Cairn
Date and/or Period	Unknown
Listing No./NRHE Number	NT50SE 21.00
HER Number	
Status	Non-designated Heritage Asset
Easting	357113
Northing	600126
Parish	Castleton
Council	Scottish Borders
Description	Field Survey recorded a shepherd's cairn 1m by 1m and 1.1m high.

Asset/Event Number	99
Asset/Event Name	Caddrounburn Culvert
Type of Asset/Event	Cairn (possible)
Date and/or Period	Unknown
Listing No./NRHE Number	NY59NE 1.00
HER Number	
Status	Non-designated Heritage Asset
Easting	358150
Northing	598570
Parish	Castleton
Council	Scottish Borders
Description	Cairn, Caddrounburn Culvert. Some 230 yds. W of the railway bridge that spans the Caddroun Burn, and 50 yds. NE of No.129 (RCAHMS 1956), there are the remains of a ruined cairn originally about 10 ft. in diameter. Some large blocks of stone appear through the turf (RCAHMS 1956, visited 1945). This 'cairn' is almost certainly field clearance, and there are several other stony mounds in the vicinity (Visited by RCAHMS (SH) March 1985).

Asset/Event Number	100
Asset/Event Name	Hudhouse Rig
Type of Asset/Event	Cairn (possible)
Date and/or Period	Unknown
Listing No./NRHE Number	NY59NE 25.00
HER Number	
Status	Non-designated Heritage Asset
Easting	357840
Northing	598570
Parish	Castleton
Council	Scottish Borders
Description	A semi-circular spread of stones around the W side of a small sheepfold on the crest of Hudhouse Rig may be the remains of a cairn measuring about 10.5m in diameter by 0.2m in height.

Asset/Event Number	101
Asset/Event Name	Saughtree Parish Church
Type of Asset/Event	Church; War Memorial
Date and/or Period	Modern
Listing No./NRHE Number	NY59NE 53.00
HER Number	
Status	Non-designated Heritage Asset
Easting	356110
Northing	596818
Parish	Castleton
Council	Scottish Borders
Description	No further information - https://canmore.org.uk/site/339809/saughtree-saughtree-parish-church.

Asset/Event Number	102
Asset/Event Name	Site of Medieval Cross, Singdean
Type of Asset/Event	Cross
Date and/or Period	Medieval
Listing No./NRHE Number	NT50SE 3.00
HER Number	
Status	Non-designated Heritage Asset
Easting	358000
Northing	601000
Parish	Castleton
Council	Scottish Borders

Description	"About five years ago a stone, nearly four feet long, with a cross rudely sculptured on it, was found in the mountain pass near Singdean, and is now, we believe, in the possession of Mr Stavert of Saughtree. (NY 563 967). It appears to have been a memorial cross, but tradition is altogether silent in regard to it" (A Jeffrey 1864).

Asset/Event Number	103
Asset/Event Name	Site of Farmstead; Dawston Burn
Type of Asset/Event	Farmstead; Findspot - Cross
Date and/or Period	Unknown
Listing No./NRHE Number	NY59NE 5.00
HER Number	
Status	Non-designated Heritage Asset
Easting	357370
Northing	599450
Parish	Castleton
Council	Scottish Borders
Description	The NMRS records a farmstead and a find spot of a cross-head, discovered in the 1850s, which is now placed in Hawick museum. The Ordnance Survey recorded that in 1960, there were no visible traces of the farmstead at this location.

Asset/Event Number	104
Asset/Event Name	Hudshouse Rig
Type of Asset/Event	Findspot (Cross)
Date and/or Period	Unknown
Listing No./NRHE Number	NY59NE 14.00
HER Number	
Status	Non-designated Heritage Asset
Easting	356909
Northing	598099
Parish	Castleton
Council	Scottish Borders
Description	"... a stone cross, which in a dilapidated condition, once stood on Dawston Rigg, has recently been removed, and, I believe, is in Hawick Antiquarian Museum" (A D Murray 1896). Site of unprovenanced find.

Asset/Event Number	105
Asset/Event Name	Abbey Sike
Type of Asset/Event	Findspot (Cross)
Date and/or Period	Unknown
Listing No./NRHE Number	NY59NE 15.00
HER Number	

Status	Non-designated Heritage Asset
Easting	357580
Northing	599610
Parish	Castleton
Council	Scottish Borders
Description	The NMRS records the find spot of round head of a cross, identified in 1880. The fragment now lies in Hawick Museum. Further information - https://canmore.org.uk/site/67958/abbey-sike.

Asset/Event Number	106
Asset/Event Name	Hudshouse Rig
Type of Asset/Event	Enclosure
Date and/or Period	Unknown
Listing No./NRHE Number	NY59NE 12.00
HER Number	
Status	Non-designated Heritage Asset
Easting	357000
Northing	598000
Parish	Castleton
Council	Scottish Borders
Description	On the face of the slope (of Dawston Rigg) looking south and over the railway, there exist three large British camps close together. One, which lies on the shoulder of the hill, has been converted into a sheepfold, and the other two (NY59NE 2) situated close to the railway, are side by side. A D Murray 1896. The southern slope of Dawston and Hudshouse Rig was perambulated without any trace of the earthwork allegedly converted into a sheepfold. Visited by OS (JLD) 7 October 1960.

Asset/Event Number	107
Asset/Event Name	Abbey Knowe
Type of Asset/Event	Enclosure; Rig and Furrow
Date and/or Period	Medieval; Post-medieval
Listing No./NRHE Number	NY59NE 42.00
HER Number	
Status	Non-designated Heritage Asset
Easting	357400
Northing	599640
Parish	Castleton
Council	Scottish Borders
Description	The NMRS and HER records extensive rig and furrow on the top of Abbey Knowe and its gentle SE slopes. The top of the Knowe is encircled by a low earthen bank which overlies the rig on the SE of the hill. Field survey recorded the bank (0.7m wide and 0.2m high) which encircled the majority of the hill, together with an area of rig and furrow (25m by 50m, with a wavelength of 4m and 0.2m high). The bank does not,

however cut the rig and furrow. Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	108
Asset/Event Name	March Sike
Type of Asset/Event	Enclosure
Date and/or Period	Unknown
Listing No./NRHE Number	NY69NW 8.00
HER Number	
Status	Non-designated Heritage Asset
Easting	360250
Northing	599120
Parish	Castleton
Council	Scottish Borders
Description	Faint traces of two large enclosures situated on the S side of the Peel Burn and flanking the Wheel Causeway (X?) are visible on vertical aerial photographs (RAF 541/A/553 F20 frames 3190 and 3191, 13 June 1950). They were observed in 1957 by the OS, who thought them to be similar to drover's stances. The area has since been afforested. Information from RCAHMS (PM) 14 August 2003.

Asset/Event Number	109
Asset/Event Name	Riccarton Junction, Engine Shed And Turntable
Type of Asset/Event	Engine Shed; Turntable
Date and/or Period	Post-medieval; Modern
Listing No./NRHE Number	NY59NW 17.08
HER Number	
Status	Non-designated Heritage Asset
Easting	354057
Northing	597508
Parish	Castleton
Council	Scottish Borders
Description	The original building was a three road structure situated on the W side of the station (NTNT 53905 97650). When this was closed, railway engines were coaled and serviced at a point NE of the south signal box (NT50SW 17.09). The turntable stood at NT 54052 97581.

Asset/Event Number	110
Asset/Event Name	Cliffhope Farm
Type of Asset/Event	Farmstead
Date and/or Period	Post-medieval
Listing No./NRHE Number	NY59NE 64.00
HER Number	

Status	Non-designated Heritage Asset
Easting	356460
Northing	599834
Parish	Castleton
Council	Scottish Borders
Description	The HER records Cliffhope settlement. A single building is depicted at this location on Tennant's 1840 and Thomson's 1822 maps, annotated as 'Grain'. Two buildings are depicted on the Ordnance Survey 1863 Edition, but only one building by the Ordnance Survey 1899 edition map. A possible area of cultivation is also depicted on the opposite side of Cliffhope Burn. Field survey recorded the remains of a four compartmented rectangular building (15m by 8m and 0.3m to 1m high). An associated denuded enclosure also survives between the building and the burn, but has mostly been replace a modern post and wire fence. A second roofed rectangular building survives in good condition and appears to have recently been used to store farm products in, but may have originally been a dwelling structure. The possible cultivation patch has been wiped out by a modern sheepfold. Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	111
Asset/Event Name	Site of Singdean
Type of Asset/Event	Farmstead; Settlement
Date and/or Period	Medieval; Post-medieval
Listing No./NRHE Number	NT50SE 12.00
HER Number	
Status	Non-designated Heritage Asset
Easting	358600
Northing	601600
Parish	Castleton
Council	Scottish Borders
Description	The original settlement of Singdean is on record as early as 1376. 18th century maps (Stobie 1770) and estate plans (1718) show that the settlement was close to the confluence of the Wane Cleugh and the Singdean Burn. Evidence for this site, or the origins of this site, comes from documentary sources. Nothing may be visible at this location.

Asset/Event Number	112
Asset/Event Name	Abbey Sike
Type of Asset/Event	Farmstead
Date and/or Period	Unknown
Listing No./NRHE Number	NY59NE 44.00
HER Number	
Status	Non-designated Heritage Asset
Easting	357540
Northing	599400
Parish	Castleton
Council	Scottish Borders

Description	There is a farmstead on a rise to the N of the Abbey Sike. It comprises a single two-compartment building, which measures about 21m from N to S by 3.5m transversely within faced-rubble walls much mutilated by robbing, and now only 0.5m in maximum height and spread to 1.2m in thickness. A bank extends E from the SE corner and there is a drystone dyke leading up to a quarry to the N. Visited by RCAHMS (PJD) 26th February 1999. The NMRS records a farmstead on a rise to the N of the Abbey Sike. It comprises a single two-compartment building, which measures about 21m from N to S by 3.5m transversely within faced-rubble walls much mutilated by robbing, and now only 0.5m in maximum height and spread to 1.2m in thickness. A bank extends E from the SE corner and there is a drystone dyke leading up to a quarry to the N. Field survey recorded the building and found it as described by the NMRS. The bank has been severely truncated by a modern ditch and road improvements. Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	113
Asset/Event Name	Abbey Sike
Type of Asset/Event	Farmstead
Date and/or Period	Unknown
Listing No./NRHE Number	NY59NE 46.00
HER Number	
Status	Non-designated Heritage Asset
Easting	357490
Northing	599300
Parish	Castleton
Council	Scottish Borders
Description	There is a farmstead comprising a building and an enclosure on a terrace between the public road and the Abbey Sike to the S of the track to Saughtree Grain. The building which is round-ended on the SSW and slightly bow-sided, measures 22.5m in length by 8m in breadth over grass-grown stony banks spread to about 2m in thickness and 0.3m in height. The interior is slightly sunken, and there is a gap in the NNE end, possibly the outflow for a byre-drain; a slight dip in the crest of the bank on the WNW may mark the entrance. A bank that extends to the S of the building ends in a quarry scoop, and the enclosure, which lies to the NW, is only defined by a bank on its SE and SW and by the edge of the terrace on the other two sides. Visited by RCAHMS (PJD) 26th February 1999.

Asset/Event Number	114
Asset/Event Name	Saughtgrain
Type of Asset/Event	Farmstead
Date and/or Period	Modern
Listing No./NRHE Number	NY59NE 77.00
HER Number	
Status	Non-designated Heritage Asset
Easting	356784
Northing	599763
Parish	Castleton
Council	Scottish Borders
Description	A rectangular roofed building is depicted on the Ordnance Survey 1923 Edition map and is annotated as Saughtgrain. The Ordnance Survey 1988 Edition map depicts three buildings. Field survey recorded the farmstead, consisting of a two-storey stone built farmhouse of early 20th century date, together with an

	outbuilding (of the same construction as the house) and corrugated iron barn. A local shepherd stated that the house has been used as summer retreat for the last 15 years. Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	115
Asset/Event Name	Site of Tower House and Farmstead, Liddel Water
Type of Asset/Event	Tower House; Farmstead
Date and/or Period	Medieval; Post-medieval
Listing No./NRHE Number	NY59NE 7.00
HER Number	
Status	Non-designated Heritage Asset
Easting	357550
Northing	597860
Parish	Castleton
Council	Scottish Borders
Description	No definite traces of a tower exist, but the foundations of a farmstead (probably of early modern date) remain in a considerably mutilated condition, now grassed over. The footings of two rectangular buildings can be traced lying paralled to each other c.7.0m apart; and abutting the NW angle of the larger building is a rubble mound, c.10m square, which seems to have been another building - possibly the tower. The site has been enclosed by a now mutilated bank on the N, E and W sides and by the river on the S. Visited by OS (JLD), 6 October 1960. The mound of rubble, 10m square, is probably the remains of the tower. Visited by RCAHMS (PC), March 1985. A farmstead annotated Hudshouse (Ruins of) and comprising one unroofed long building of two compartments and one enclosure is depicted on the 1st edition of the OS 6-inch map (Roxburghshire 1863, sheet xxxix). The fragmentary remains of one unroofed building and of one enclosure are shown on the current edition of the OS 1:10000 map (1988). Information from RCAHMS (SAH), 1 August 2000.

Asset/Event Number	116
Asset/Event Name	Abbey Sike
Type of Asset/Event	Field Boundary (possible)
Date and/or Period	Unknown
Listing No./NRHE Number	NY59NE 81.00
HER Number	
Status	Non-designated Heritage Asset
Easting	357504
Northing	599474
Parish	Castleton
Council	Scottish Borders
Description	Field survey recorded a small section of a possible field bank spread to 1m wide and 0.3m high. Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	117
Asset/Event Name	Myredykes
Type of Asset/Event	Findspot (Bronze Flanged Axehead)
Date and/or Period	Prehistoric (Bronze Age)
Listing No./NRHE Number	NY59NE 36.00
HER Number	
Status	Non-designated Heritage Asset
Easting	359000
Northing	598000
Parish	Castleton
Council	Scottish Borders
Description	(Unclassified flanged axe). Single find. Fl;anged axe, porous and finely pitted, cleaned, one flange notched, hammered up bar-stop (?) of 4mm height; length 128mm, butt 19mm, cutting edge 54mm, weight 295 gms.

Asset/Event Number	118
Asset/Event Name	Saughtree Fell
Type of Asset/Event	Findspot (Flint)
Date and/or Period	Prehistoric
Listing No./NRHE Number	NY59NE 30.00
HER Number	
Status	Non-designated Heritage Asset
Easting	355000
Northing	598000
Parish	Castleton
Council	Scottish Borders
Description	A retouched flint from Saughtree Fell (name centred NY 557 988) is in Wilton Lodge Museum, Hawick (HAKMG 3768).

Asset/Event Number	119
Asset/Event Name	Riccarton Junction Station
Type of Asset/Event	Footbridge; Railway Junction; Railway Station
Date and/or Period	Post-medieval
Listing No./NRHE Number	NY59NW 17.01
HER Number	
Status	Non-designated Heritage Asset
Easting	353940
Northing	597710
Parish	Castleton

Council	Scottish Borders
Description	his station was situated at the junction of the Edinburgh-Carlisle main line (the 'Waverley Route') of the former North British Rly with that company's Northumberland branch through Kielder and Plashetts to Bellingham and the Tyne valley. It was opened as Riccarton Station by the Border Union Rly on 2 July 1862, was renamed Riccarton Junction Station by the North British Rly on 1 January 1905, and closed to regular passenger traffic on 6 January 1969. The station is famous in railway history for its exposed position high in the border hills and for its role in provising banking engines for the ascent to Whitrope summit [Whitrope Tunnel; NT 5267 0066 to NT 5223 0170; NT50SW 11]. Without road access, the station formed an operating and maintenance facility of considerable importance with a substantial and self-contained supporting community, about which much folklore has gathered. Information from RCAHMS (RJCM), 16 March 1999. Riccarton Juntion is situated on level ground NW of Fawhope Knowe and immediately E of Leysburnfoot famrsteading (formerly Fawhopeknowe farmsteading, depicted on the 1st edition of the OS 6-inch map (Roxburghshire, 1863, sheet xliii). The junction station consisted on an island platform with pitched slated roof buildings and brick chimneys, including the Co-operative store and village pub. There was also an engine shed with turntable (NY59NW 17.08), sidings and two signal boxes, N and S. The land immediately to the W was made up by the deposition of ash and spent ballast over a period of approximately a hundred years. Much of this waste materiaL has been removed over the last forty years, but some is still extant. The buildings including the two signal boxes have been removed and only the remains of the platforms can be found in dense undergrowth.

Asset/Event Number	120
Asset/Event Name	Caddrounburn Culvert
Type of Asset/Event	Fort (possible); Settlement
Date and/or Period	Prehistoric
Listing No./NRHE Number	NY59NE 2.00
HER Number	
Status	Non-designated Heritage Asset
Easting	358229
Northing	598362
Parish	Castleton
Council	Scottish Borders
Description	Settlement, Caddrounburn Culvert. The remains of a small settlement are situated on a gentle slope facing SE, 200 yds. SW of Caddrounburn Culvert and at the SE end of the dykes described under No.129 (RCAHMS 1956). The settlement, which is 160 yds. from the right bank of the Liddel Water, at a height of 640 ft. OD, consists of two separate enclosures (Fig.130). The larger is a three-sided enclosure with rounded corners, which measures 170 ft. from N to S by 140 ft. transversely. It is formed by a drystone wall, the debris of which is spread to a width of as much as 25 ft. and stands to a height of 5 ft. on the SE side. No facing-stones are visible, but the wall was probably about 7 ft. in thickness. There is a single entrance, 7 ft. wide, in the SE side, immediately within which the ground is depressed and marshy. In the SW part of the enclosure an area of about one-third of the whole is cut off by the ruins of a cross-wall of similar proportions to that of the enclosure wall itself. It runs from NW to SE with a gap between each end of it and the enclosure wall. There are no features within the part of the enclosure that lies SW of the cross-wall, but in the remainder there are four circular hut-foundations, of stones covered with turf but with no apparent entrance gaps; the walls of these huts are 2 ft. 6 in. in thickness and a few inches in height. The westernmost hut is 19 ft. in diameter, the other three 14 ft. A length of ruined wall runs SSW from the side of the northernmost hut for a distance of about 30 ft., then becoming lost in marshy vegetation. The smaller enclosure lies a few yards ENE of the larger. It is an enclosure of irregular shape, measuring 110

	ft. from E to W by 80 ft. transversely. It is formed by a drystone wall, once probably about 5 ft. thick but now spread to a width of up to 15 ft.; a well-preserved portion in the SE side, just SW of the entrance-gap, stands to a height of 2 ft. The entrance is about 8 ft. in width; it has been disturbed by a drain which passes through it to carry off water from the boggy interior. Within the entrance there is a depressed marshy area and immediately to the N. of this a natural terrace on which there is a circular hut-foundation 19 ft. in diameter with a low wall 2 ft. 6 in. in thickness. Like those in the larger enclosure this hut shows no sign of a doorway. RCAHMS 1956, visited 1949. As described above. Visited by OS (JLD) 7 October 1960

Asset/Event Number	121
Asset/Event Name	Abbey Sike
Type of Asset/Event	Kiln (possible)
Date and/or Period	Unknown
Listing No./NRHE Number	NY59NE 91.00
HER Number	
Status	Non-designated Heritage Asset
Easting	357277
Northing	599502
Parish	Castleton
Council	Scottish Borders
Description	Field survey recorded a possible kiln (4m by 3m and 1.2m high) visible as an area of stone rubble, with a cleared field. Information from Oasis (cfaarcha1-140357) 29 May 2014

Asset/Event Number	122
Asset/Event Name	Fairloans
Type of Asset/Event	Lime Kiln
Date and/or Period	Post-medieval
Listing No./NRHE Number	NY59NE 62.00
HER Number	
Status	Non-designated Heritage Asset
Easting	359700
Northing	597600
Parish	Castleton
Council	Scottish Borders
Description	Disused limekilns marked on the 1:10,560 scale map.

Asset/Event Number	123
Asset/Event Name	March Sike
Type of Asset/Event	Linear Earthwork
Date and/or Period	Unknown

Listing No./NRHE Number	NT60SW 4.00
HER Number	
Status	Non-designated Heritage Asset
Easting	361270
Northing	601520
Parish	Castleton
Council	Scottish Borders
Description	This linear earthwork runs NW for about 700 yds from the right bank of March Sike, near its head, to the moss in which the line of the Wheel Causeway is temporarily lost at a point about 150 yds SW of the summit ridge. The work is very poorly preserved owing to the spreading of the bank and the filling-up of the ditch; in parts it appears as no more than a terrace, and at its NW end only a belt of green moss indicates the line of the ditch. RCAHMS 1956, visited 1945. This earthwork is as described above. Visited by OS(WDJ) 6 October 1960. As described by the RCAHMS, except that the E half lies in a new plantation. Visited by OS(TRG) 22 September 1976.

Asset/Event Number	124
Asset/Event Name	Caddrounburn Culvert
Type of Asset/Event	Linear Earthwork
Date and/or Period	Unknown
Listing No./NRHE Number	NY59NE 4.00
HER Number	
Status	Non-designated Heritage Asset
Easting	358086
Northing	598547
Parish	Castleton
Council	Scottish Borders
Description	Indeterminate Remains, Caddrounburn Culvert. From a point on the railway 250 yds. SW of the Caddroun Burn, a ditch-like depression runs NW for some 270 yds. It is 35 ft. wide near the railway but expands as it mounts the hillside to about 50 ft.; it is about 3 ft. deep, the bottom being somewhat hollowed, and there is a greatly-spread spoil-bank on the NE side. A trench which has recently been cut across the ditch shows that its sides are lined with drystone masonry, now considerably tumbled. The edition of the OS map published in 1899 marks the remains as extending downhill, on the SE side of the railway, as far as the settlement (RCAHMS 1956 No.97); but this ground is wet and broken, and nothing can be seen today beyond a slight hollow which appears to continue their line. The mistaken idea that the Catrail (Appendix D) ran on beyond Robert's Linn Bridge to Liddesdale and Peel Fell (G Chalmers 1887) has no doubt drawn some support from the existence of these remains, as well as from that of an old road (Appendix B) which appears nearby, but in fact the depression bears no resemblance to the Catrail, and may well be simply a wide roadway, originally flanked by low drystone walls, intended to give passage to cattle through cultivated ground. What is probably another such passageway is mentioned under No.62. RCAHMS 1956, visited 1945. It is c.13m broad and c.1m deep. There are traces of a spoil bank on the NE side. The hollow can be traced lass well-defined on the S side of the disused railway running to the NE angle of the larger enclosure of site NY59NE 2). Information from OS (MD) 6 Oct 1960. Earlier reports suggest that the Catrail ran for about 9km from Peel Fell to Roberts Linn (NT 5385 0262) via the Wormscleuch (NY 596 996), Liddel, Dawtson (NY 575 993) and Cliffhope (NY 563 999) valleys. The only definite linear earthwork now visible on this line is an indeterminate fragment at Caddrounburn Culvert

	(NY59NE 4). As the RCAHMS (1956) survey points out, the topography of the steep-sided Roberts Linn forms a convenient natural break to its course here. Information from J Milln, in J Barber 1999.

Asset/Event Number	125
Asset/Event Name	Abbey Knowe
Type of Asset/Event	Peat Cutting
Date and/or Period	Unknown
Listing No./NRHE Number	NY59NE 79.00
HER Number	
Status	Non-designated Heritage Asset
Easting	357316
Northing	599730
Parish	Castleton
Council	Scottish Borders
Description	Field survey recorded two areas of overgrown peat cutting below Abbey Knowe, one encompassing an area of 50m by 30m and the other 20m by 60m. Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	126
Asset/Event Name	Alison Syke
Type of Asset/Event	Peat Cutting; Structure
Date and/or Period	Unknown
Listing No./NRHE Number	NY59NE 88.00
HER Number	
Status	Non-designated Heritage Asset
Easting	355846
Northing	599956
Parish	Castleton
Council	Scottish Borders
Description	Field survey recorded a square structure (4m by 4m) defined by grassed over banks 0.1m high and 0.5m wide. Two areas of peat cutting (each c. 20m by 5m) were recorded close by. Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	127
Asset/Event Name	Abbey Knowe
Type of Asset/Event	Quarry
Date and/or Period	Unknown
Listing No./NRHE Number	NY59NE 80.00
HER Number	
Status	Non-designated Heritage Asset

Easting	357478
Northing	599893
Parish	Castleton
Council	Scottish Borders
Description	Field survey recorded a kidney shaped quarry scoop, 10m by 5m and 3m deep. Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	128
Asset/Event Name	Abbey Sike
Type of Asset/Event	Quarry
Date and/or Period	Unknown
Listing No./NRHE Number	NY59NE 82.00
HER Number	
Status	Non-designated Heritage Asset
Easting	357484
Northing	599440
Parish	Castleton
Council	Scottish Borders
Description	Field survey recorded a small grassed over quarry scoop, 5m by 4m and 2m deep. Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	129
Asset/Event Name	Alison Sike
Type of Asset/Event	Quarry
Date and/or Period	Unknown
Listing No./NRHE Number	NY59NE 84.00
HER Number	
Status	Non-designated Heritage Asset
Easting	356679
Northing	599818
Parish	Castleton
Council	Scottish Borders
Description	Field survey recorded a grassed over quarry scoop 4m by 3m and 2m deep. Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	130
Asset/Event Name	Saughtgrain
Type of Asset/Event	Quarry

Date and/or Period	Unknown
Listing No./NRHE Number	NY59NE 90.00
HER Number	
Status	Non-designated Heritage Asset
Easting	356850
Northing	599746
Parish	Castleton
Council	Scottish Borders
Description	Field survey recorded a grassed over, road side quarry scoop 3m in diameter and 2m deep. Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	131
Asset/Event Name	Abbey Sike
Type of Asset/Event	Quarry
Date and/or Period	Unknown
Listing No./NRHE Number	NY59NE 86.00
HER Number	
Status	Non-designated Heritage Asset
Easting	357439
Northing	599381
Parish	Castleton
Council	Scottish Borders
Description	Field survey recorded two grassed over quarry scoops each 3m in diameter and 2m deep. Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	132
Asset/Event Name	Hudshouse Rig
Type of Asset/Event	Railway; Spoil Heap
Date and/or Period	Post-medieval; Modern
Listing No./NRHE Number	NY59NE 50.00
HER Number	
Status	Non-designated Heritage Asset
Easting	356980
Northing	597980
Parish	Castleton
Council	Scottish Borders
Description	No further information - https://canmore.org.uk/site/214806/hudshouse-rig.

Asset/Event Number	133
Asset/Event Name	Saughtree Station
Type of Asset/Event	Railway Station
Date and/or Period	Post-medieval; Modern
Listing No./NRHE Number	NY59NE 48.00
HER Number	
Status	Non-designated Heritage Asset
Easting	356472
Northing	598067
Parish	Castleton
Council	Scottish Borders
Description	Saughtree Station is depicted on the OS 2nd Edition map (Roxburghshire, sheet XXXIX, 1899). It has since been demolished. Information from RCAHMS (HMLB), July 2002.

Asset/Event Number	134
Asset/Event Name	Caddronburn Culvert
Type of Asset/Event	Enclosure
Date and/or Period	Unknown
Listing No./NRHE Number	NY59NE 69.00
HER Number	
Status	Non-designated Heritage Asset
Easting	358330
Northing	598274
Parish	Castleton
Council	Scottish Borders
Description	A possible prehistoric ring-banked enclosure measuring approximately 6 metres in diameter appears on aerial photos. The scale is small for a sheepfold, though this is a possibility. The location relative to the Caddrounburn Culvert settlement to the north-west increases the potential that this is a prehistoric feature.

Asset/Event Number	135
Asset/Event Name	Myredykes
Type of Asset/Event	Road
Date and/or Period	Post-medieval
Listing No./NRHE Number	NY59NE 55.00
HER Number	
Status	Non-designated Heritage Asset
Easting	359741
Northing	598774
Parish	Castleton

Council	Scottish Borders
Description	Old road marked on the 1st Edition OS map.

Asset/Event Number	136
Asset/Event Name	Myredykes
Type of Asset/Event	Road
Date and/or Period	Post-medieval
Listing No./NRHE Number	NY69NW 10.00
HER Number	
Status	Non-designated Heritage Asset
Easting	360315
Northing	599431
Parish	Castleton
Council	Scottish Borders
Description	Old road marked on the 1st Edition OS map.

Asset/Event Number	137
Asset/Event Name	Liddel Water To Wormscleuch
Type of Asset/Event	Road
Date and/or Period	Post-medieval
Listing No./NRHE Number	NY59NE 60.00
HER Number	
Status	Non-designated Heritage Asset
Easting	359023
Northing	598772
Parish	Castleton
Council	Scottish Borders
Description	Old road marked on the 1st Edition OS map.

Asset/Event Number	138
Asset/Event Name	Riccarton Junction Village School
Type of Asset/Event	School; Schoolhouse
Date and/or Period	Unknown
Listing No./NRHE Number	NY59NW 17.07
HER Number	
Status	Non-designated Heritage Asset
Easting	354091

Northing	597763
Parish	Castleton
Council	Scottish Borders
Description	Still standing and situated on at the extreme SE corner of the village enclosure.

Asset/Event Number	139
Asset/Event Name	Site of Saughtree School
Type of Asset/Event	School; War Memorial
Date and/or Period	Post-medieval; Modern
Listing No./NRHE Number	NY59NE 54.00
HER Number	
Status	Non-designated Heritage Asset
Easting	356047
Northing	596473
Parish	Castleton
Council	Scottish Borders
Description	Saughtree school now demolished. War memorial removed to parish church (see NY59NE 53). Information from RCAHMS (PR) 25 March 2014.

Asset/Event Number	140
Asset/Event Name	Abbey Sike
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NY59NE 78.00
HER Number	
Status	Non-designated Heritage Asset
Easting	357547
Northing	599359
Parish	Castleton
Council	Scottish Borders
Description	A sheep shelter is depicted on the Ordnance Survey 1863 Edition map. Field survey recorded the sheep shelter as a dry stone wall. Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	141
Asset/Event Name	Copper Cleuch
Type of Asset/Event	Sheepfold
Date and/or Period	Unknown
Listing No./NRHE Number	NT50SE 19.00

HER Number	
Status	Non-designated Heritage Asset
Easting	357164
Northing	600124
Parish	Castleton
Council	Scottish Borders
Description	Field Survey recorded a dry stone sheepfold (5m internal diameter and 1.1m high). Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	142
Asset/Event Name	Mid Hill
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NT50SE 14.00
HER Number	
Status	Non-designated Heritage Asset
Easting	355438
Northing	600445
Parish	Castleton
Council	Scottish Borders
Description	A circular sheepfold is recorded by the HER and depicted and annotated on the Ordnance Survey 1st Edition map. The feature is still depicted on the Ordnance Survey 1899 Edition map, but is not annotated. Field survey recorded a dry stone wall sheepfold, measuring 10m internal diameter, with walls 1.1m high and to 0.6m wide. Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	143
Asset/Event Name	Mid Hill
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NT50SE 15.00
HER Number	
Status	Non-designated Heritage Asset
Easting	356638
Northing	600721
Parish	Castleton
Council	Scottish Borders
Description	A circular sheepfold is recorded by the HER and depicted and annotated on the Ordnance Survey 1st Edition map. The feature is still depicted on the Ordnance Survey 1899 Edition map, but is not annotated. Field survey recorded a dry stone wall sheepfold, measuring 7m internal diameter, with walls 1m high and 0.5m wide. An entrance is visible in the E side. Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	144
Asset/Event Name	Mid Hill
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NT50SE 17.00
HER Number	
Status	Non-designated Heritage Asset
Easting	356468
Northing	601537
Parish	Castleton
Council	Scottish Borders
Description	A circular sheepfold is recorded by the HER and depicted and annotated on the Ordnance Survey 1st Edition map. The feature is still depicted on the Ordnance Survey 1899 Edition map, but is not annotated. Field survey recorded an overgrown, denuded dry stone wall sheepfold, measuring 10m internal diameter, with walls 0.6m high and spread to 1m wide. An entrance is visible in the W side. Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	145
Asset/Event Name	Alison Sike
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NY59NE 70.00
HER Number	
Status	Non-designated Heritage Asset
Easting	355583
Northing	599866
Parish	Castleton
Council	Scottish Borders
Description	A circular sheepfold is recorded by the HER and depicted and annotated on the Ordnance Survey 1st Edition map. The feature is still depicted on the Ordnance Survey 1899 Edition map, but is not annotated. Field survey recorded an overgrown, denuded dry stone wall sheepfold, measuring 10m internal diameter, with walls 0.6m high and spread to 1m wide. A possible entrance is visible in the SW side. Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	146
Asset/Event Name	Alison Sike
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NY59NE 71.00
HER Number	
Status	Non-designated Heritage Asset

Easting	356190
Northing	599485
Parish	Castleton
Council	Scottish Borders
Description	A circular sheepfold is recorded by the HER and depicted and annotated on the Ordnance Survey 1st Edition map. The feature is still depicted on the Ordnance Survey 1899 Edition map, but is not annotated. Field survey recorded a denuded and overgrown sheepfold, 10m diameter and 1.2m high and 0.6m high. Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	147
Asset/Event Name	Alison Sike
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NY59NE 73.00
HER Number	
Status	Non-designated Heritage Asset
Easting	356388
Northing	599794
Parish	Castleton
Council	Scottish Borders
Description	A sheepfold is recorded by the HER. Field survey recorded a five- compartmented sheepfold (30m by 20m). The dry stone walls are 1m high and 0.6m wide. Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	148
Asset/Event Name	Alison Sike
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NY59NE 74.00
HER Number	
Status	Non-designated Heritage Asset
Easting	356685
Northing	599827
Parish	Castleton
Council	Scottish Borders
Description	A circular sheepfold is depicted and annotated on the Ordnance Survey 1st Edition map. The feature is still depicted on the Ordnance Survey 1899 Edition map, but is not annotated. Field survey recorded a dry stone sheepfold (9m internal diameter, with walls 1.2m high). Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	149

Asset/Event Name	Mid Hill
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NT50SE 18.00
HER Number	
Status	Non-designated Heritage Asset
Easting	356073
Northing	600569
Parish	Castleton
Council	Scottish Borders
Description	A circular sheepfold is recorded by the HER and depicted and annotated on the Ordnance Survey 1st Edition map. The feature is still depicted on the Ordnance Survey 1899 Edition map, but is not annotated. Field survey recorded a dry stone wall sheepfold, measuring 10m internal diameter, with walls 1.2m high and 0.5m wide. Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	150
Asset/Event Name	Caddrounburn Culvert
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NY59NE 65.00
HER Number	
Status	Non-designated Heritage Asset
Easting	358400
Northing	598457
Parish	Castleton
Council	Scottish Borders
Description	No further information - https://canmore.org.uk/site/350920/caddrounburn-culvert.

Asset/Event Number	151
Asset/Event Name	Caddrounburn Culvert
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NY59NE 66.00
HER Number	
Status	Non-designated Heritage Asset
Easting	358477
Northing	598422
Parish	Castleton
Council	Scottish Borders

Description	No further information - https://canmore.org.uk/site/350922/.

Asset/Event Number	152
Asset/Event Name	Dead Sike
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NY59NE 67.00
HER Number	
Status	Non-designated Heritage Asset
Easting	358845
Northing	598090
Parish	Castleton
Council	Scottish Borders
Description	No further information - https://canmore.org.uk/site/350923/dead-sike.

Asset/Event Number	153
Asset/Event Name	Caddrounburn Culvert
Type of Asset/Event	Sheepfold (possible)
Date and/or Period	Post-medieval?
Listing No./NRHE Number	NY59NE 68.00
HER Number	
Status	Non-designated Heritage Asset
Easting	358380
Northing	598322
Parish	Castleton
Council	Scottish Borders
Description	A turf sheepfold approximately 11m in diameter apears on aerial photos. It is probably a sheepfold given scale relative to stone sheepfolds in the area, though its close proximity to the Caddrounburn settlement may provide an alternative explanation. This does not appear on historic OS mapping.

Asset/Event Number	154
Asset/Event Name	Abbey Knowe
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NY59NE 76.00
HER Number	
Status	Non-designated Heritage Asset
Easting	357530

Northing	599805
Parish	Castleton
Council	Scottish Borders
Description	Marked as a sheepfold on the OS 1st edition.

Asset/Event Number	155
Asset/Event Name	Mid Hill
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NT50SE 16.00
HER Number	
Status	Non-designated Heritage Asset
Easting	356413
Northing	600384
Parish	Castleton
Council	Scottish Borders
Description	A circular sheepfold is recorded by the HER and depicted and annotated on the Ordnance Survey 1st Edition map. The feature is still depicted on the Ordnance Survey 1899 Edition map, but is not annotated. Field survey recorded a dry stone wall sheepfold, measuring 9m internal diameter, with walls 1.2m high and 0.5m wide. An entrance is visible in the W side. Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	156
Asset/Event Name	Alison Sike
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NY59NE 75.00
HER Number	
Status	Non-designated Heritage Asset
Easting	355977
Northing	599707
Parish	Castleton
Council	Scottish Borders
Description	Two 'opposing' sheepfolds are recorded by the HER and depicted and annotated on the Ordnance Survey 1st Edition map. The features are still depicted on the Ordnance Survey 1899 Edition map. Field survey recorded an oval sheepfold (13m by 9m and 1.3m high), on the south side of Alison Sike, with an entrance in the SSW side. A second, square sheepfold was recorded to the north of Alison Sike, measuring 20m by 20m, with dry stone walls 1.2m high. The shepherd said the sheepfold was used up to three years ago. A possible L-shaped wall, which may be the remains of a building were identified on a shelf above Alison Syke, directly below the square sheepfold. The denuded feature is 6m by 4m and 0.2m high. Information from Oasis (cfaarcha1-140357) 29 May 2014

Asset/Event Number	157
Asset/Event Name	Site of South Signal Box, Riccarton Junction
Type of Asset/Event	Signal Box
Date and/or Period	Post-medieval; Modern
Listing No./NRHE Number	NY59NW 17.09
HER Number	
Status	Non-designated Heritage Asset
Easting	354038
Northing	597485
Parish	Castleton
Council	Scottish Borders
Description	South signal box was situated in the fork of the lines to Carlisle and Hexham. Of two storeys, was roughcast, slated and had an external wooden staircase at the E gable end, to access the first floor. Two windows at ground floor level with eleven on the first floor providing viewing for the signalman. The wooden staircase had a small wooden porch at the top. The building has been demolished.

Asset/Event Number	158
Asset/Event Name	Riccarton Junction Stationmaster's House
Type of Asset/Event	Station Master's House
Date and/or Period	Post-medieval; Modern
Listing No./NRHE Number	NY59NW 27.00
HER Number	
Status	Non-designated Heritage Asset
Easting	353877
Northing	597804
Parish	Castleton
Council	Scottish Borders
Description	No further information - https://canmore.org.uk/site/317120/hawick-1-riccarton-junction-riccarton-junction-stationmasters-house.

Asset/Event Number	159
Asset/Event Name	Wheel Rig
Type of Asset/Event	Stock Enclosure
Date and/or Period	Unknown
Listing No./NRHE Number	NT60SW 3.00
HER Number	
Status	Non-designated Heritage Asset
Easting	360300
Northing	600260
Parish	Castleton

Council	Scottish Borders
Description	The earthwork marked "Camp" on the OS map seems to be an enclosure for stock of relatively recent date and should not be regarded as an ancient monument. RCAHMS 1956. An enclosure, formed by an earth-and-stone bank 0.9m high, measuring 35.0m x 40.0m. The N and S sides have been broken through in places by the tracks of the "Wheel Causeway". Visited by OS(WDJ) 7 October 1960. This enclosure has been so fragmented by deep ploughing and afforestation as to be no longer recognizable. Visited by OS(TRG) 22 September 1976.

Asset/Event Number	160
Asset/Event Name	Wheel-land Sike
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NY59NE 56.00
HER Number	
Status	Non-designated Heritage Asset
Easting	358520
Northing	599060
Parish	Castleton
Council	Scottish Borders
Description	Sheepfold marked on the 1st Edition OS map.

Asset/Event Number	161
Asset/Event Name	Wheel-land Sike
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NY59NE 57.00
HER Number	
Status	Non-designated Heritage Asset
Easting	358570
Northing	598900
Parish	Castleton
Council	Scottish Borders
Description	Sheepfold marked on the 1st Edition OS map.

Asset/Event Number	162
Asset/Event Name	Saughie Sikes
Type of Asset/Event	Sheepfold

Date and/or Period	Post-medieval
Listing No./NRHE Number	NY59NE 58.00
HER Number	
Status	Non-designated Heritage Asset
Easting	358600
Northing	599970
Parish	Castleton
Council	Scottish Borders
Description	Sheepfold marked on the 1st Edition OS map.

Asset/Event Number	163
Asset/Event Name	Liddel Water
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NY59NE 59.00
HER Number	
Status	Non-designated Heritage Asset
Easting	358830
Northing	598570
Parish	Castleton
Council	Scottish Borders
Description	Sheepfold marked on the 1st Edition OS map.

Asset/Event Number	164
Asset/Event Name	Stonygair Sikes
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NT50SE 5.00
HER Number	
Status	Non-designated Heritage Asset
Easting	359340
Northing	600330
Parish	Castleton
Council	Scottish Borders
Description	Sheepfold marked on the 1st Edition OS map.

Asset/Event Number	165

Asset/Event Name	Wormscleuch Burn
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NT60SW 7.00
HER Number	
Status	Non-designated Heritage Asset
Easting	360230
Northing	600890
Parish	Castleton
Council	Scottish Borders
Description	Sheepfold marked on the 1st Edition OS map.

Asset/Event Number	166
Asset/Event Name	Wheel Village
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NT60SW 8.00
HER Number	
Status	Non-designated Heritage Asset
Easting	360340
Northing	600060
Parish	Castleton
Council	Scottish Borders
Description	Sheepfold marked on the 1st Edition OS map.

Asset/Event Number	167
Asset/Event Name	Murderdean Sike
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NT50SE 7.00
HER Number	
Status	Non-designated Heritage Asset
Easting	358600
Northing	602580
Parish	Castleton
Council	Scottish Borders
Description	Sheepfold marked on the 1st edition OS map.

Asset/Event Number	168
Asset/Event Name	Singdean Burn
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NT50SE 8.00
HER Number	
Status	Non-designated Heritage Asset
Easting	357860
Northing	602320
Parish	Castleton
Council	Scottish Borders
Description	Sheepfold marked on the 1st edition OS map.

Asset/Event Number	169
Asset/Event Name	Singdean Burn
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NT50SE 9.00
HER Number	
Status	Non-designated Heritage Asset
Easting	357760
Northing	602560
Parish	Castleton
Council	Scottish Borders
Description	Sheepfold marked on the 1st edition OS map.

Asset/Event Number	170
Asset/Event Name	Mid Grain
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NT50SE 10.00
HER Number	
Status	Non-designated Heritage Asset
Easting	357420
Northing	602720
Parish	Castleton
Council	Scottish Borders

Description	Sheepfold marked on the 1st edition OS map.

Asset/Event Number	171
Asset/Event Name	Cuttit Sike
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	NT50SE 11.00
HER Number	
Status	Non-designated Heritage Asset
Easting	357060
Northing	602720
Parish	Castleton
Council	Scottish Borders
Description	Sheepfold marked on the 1st edition OS map.

Asset/Event Number	172
Asset/Event Name	Alison Sike
Type of Asset/Event	Structure
Date and/or Period	Unknown
Listing No./NRHE Number	NY59NE 83.00
HER Number	
Status	Non-designated Heritage Asset
Easting	356099
Northing	599668
Parish	Castleton
Council	Scottish Borders
Description	Field survey recorded a possible structure, 5m by 7m and 0.2m high. The structure is within an area of rubble (10m by 7m). Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	173
Asset/Event Name	Alison Sike
Type of Asset/Event	Structure
Date and/or Period	Unknown
Listing No./NRHE Number	NY59NE 85.00
HER Number	
Status	Non-designated Heritage Asset
Easting	355871

Northing	599676
Parish	Castleton
Council	Scottish Borders
Description	Field survey recorded the denuded remains of a stone built rectangular 3-cell building, 13m by 5m, with walls 0.6m wide and 0.3m high. Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	174
Asset/Event Name	Alison Syke
Type of Asset/Event	Structure (possible)
Date and/or Period	Unknown
Listing No./NRHE Number	NY59NE 89.00
HER Number	
Status	Non-designated Heritage Asset
Easting	356543
Northing	599859
Parish	Castleton
Council	Scottish Borders
Description	Field Survey recorded the remains of a possible building or structure, delimited by grassed over stone banks, measuring 7m by 5m and 0.2m high. Information from Oasis (cfaarcha1-140357) 29 May 2014.

Asset/Event Number	175
Asset/Event Name	Note O' The Gate Toll Point
Type of Asset/Event	Toll House
Date and/or Period	Modern
Listing No./NRHE Number	NT50SE 6.00
HER Number	
Status	Non-designated Heritage Asset
Easting	358820
Northing	602840
Parish	Castleton
Council	Scottish Borders
Description	This was the site of an archaeological monument, which may no longer be visible. The toll road between Jedburgh and Newcastleton was laid down by William Oliver of Dinlabyre and John Elliot of Whithaugh (Sheriff of Roxburghshire). The toll house bar was installed in 1825 and the house was built in 1830. In the 1841 census, the house was occupied by Robert Beattie, bar keeper and his daughter Isabella. In the 1881 census, it was occupied by William Beattie, general labourer, his wife, daughter and two grandchildren. The license was removed in 1883. The house became uninhabitable and was vacated in 1885. The roof slates were used to build Saughtree Manse in 1890, and the stonework broken up for road metalling, hence the lack of above ground remains.

Asset/Event Number	176
Asset/Event Name	Peel Tower
Type of Asset/Event	Tower House
Date and/or Period	Medieval
Listing No./NRHE Number	NY69NW 6.00
HER Number	
Status	Non-designated Heritage Asset
Easting	360630
Northing	599510
Parish	Castleton
Council	Scottish Borders
Description	This was the site of an archaeological monument, which may no longer be visible. No remains survive.

Asset/Event Number	177
Asset/Event Name	Caddroun Burn Tower
Type of Asset/Event	Tower House
Date and/or Period	Medieval
Listing No./NRHE Number	NY59NE 17.00
HER Number	
Status	Non-designated Heritage Asset
Easting	358310
Northing	598460
Parish	Castleton
Council	Scottish Borders
Description	John of Copshaw's Tower stood on the right bank of Helcaldron (probably Caddroun) Burn at a place where that burn joins the other source of the Lyd. This was the site of an archaeological monument, which may no longer be visible.

Asset/Event Number	178
Asset/Event Name	Caddroun Burn Tower
Type of Asset/Event	Tower House
Date and/or Period	Medieval
Listing No./NRHE Number	NY59NE 18.00
HER Number	
Status	Non-designated Heritage Asset
Easting	358000
Northing	598850
Parish	Castleton
Council	Scottish Borders

Description	A map in the British Museum, dated December, 1590, marks a tower symbol, on the right bank of the River Liddel north-east of Helcaldenburne (NY 5800 9885), with the name 'Martin Crozier of Rakestonleis'. The Wheel Causeway is marked on the opposite side of the Liddel. This was the site of an archaeological monument, which may no longer be visible.

Asset/Event Number	179
Asset/Event Name	Byrsted Tower
Type of Asset/Event	Tower House
Date and/or Period	Medieval
Listing No./NRHE Number	NY59NE 19.00
HER Number	
Status	Non-designated Heritage Asset
Easting	356780
Northing	598520
Parish	Castleton
Council	Scottish Borders
Description	Byrsted with tower symbol on Ponts map of Liddesdale (1608).

Asset/Event Number	180
Asset/Event Name	Dastenrigg Tower
Type of Asset/Event	Tower House
Date and/or Period	Medieval
Listing No./NRHE Number	NY59NE 20.00
HER Number	
Status	Non-designated Heritage Asset
Easting	356710
Northing	597670
Parish	Castleton
Council	Scottish Borders
Description	Dastenrigg with tower symbol on Ponts map of Liddesdale (1608).

Asset/Event Number	181
Asset/Event Name	Fasetsyde Tower
Type of Asset/Event	Tower House
Date and/or Period	Medieval
Listing No./NRHE Number	NY59NE 21.00
HER Number	
Status	Non-designated Heritage Asset

Easting	355870
Northing	597440
Parish	Castleton
Council	Scottish Borders
Description	Faseysyde with tower symbol on Ponts map of Liddesdale (1608).

Asset/Event Number	182
Asset/Event Name	Dawstonburn Tower
Type of Asset/Event	Tower House
Date and/or Period	Medieval
Listing No./NRHE Number	NY59NE 22.00
HER Number	
Status	Non-designated Heritage Asset
Easting	356360
Northing	596660
Parish	Castleton
Council	Scottish Borders
Description	Dastenburn with tower symbol on Ponts map of Liddesdale (1608).

Asset/Event Number	183
Asset/Event Name	Wheel Causeway
Type of Asset/Event	Track
Date and/or Period	Unknown
Listing No./NRHE Number	NY69NW 9.00
HER Number	
Status	Non-designated Heritage Asset
Easting	360138
Northing	599856
Parish	Castleton
Council	Scottish Borders
Description	Deadwater Rigg to Wheel Rig, Castleton Parish: The Wheel Causeway first enters Roxburghshire from Northumberland at NY 6049 9772, half a mile N of the farm of Deadwater and about 85yds N of spot-level 842. (The current edition of the (NMRS record map) 1:10,000 OS map marks its point of entry 350yds to the NE. There are some traces of old fields with a roadway between them near this point,, and an alternative track may have taken the line shown.) For the previous 250yds, though it actually lies within England, its W margin has formed the Border. It here consists of two hollow tracks, and although some stone bottoming could be felt with a long probe in certain marshy spot, no evidence was found, either here or elsewhere, of a continuous metalled road such as would accord with the title of "Causeway" or with the associated place-names "Causeway Rig" or "Causeway Sike". In particular, the linear mound that runs N from the Border for some 40yds proved to be of soft earth, and must therefore not be mistaken for a raised roadway. The road can then be traced across the heads of the Hartweell Burn (NT 6039 9832), about 50yds E of a

stell, as a set of hollow tracks of the usual type. From here across the marshy flat of Myredykes Muir no trace of it can be seen, but near the track from Myredykes to Peel it again becomes visible as a hollow, broader than before and flanked in part by a greatly spread bank. Such banks occur fairly commonly alongside drove-roads, and the two large enclosures (NY 69NW 8) that flank the Causeway on the left bank of the Peel Burn likewise seem to be drovers' stances. The descent to Bagraw Ford and the ascent on the right bank are made by numerous and deeply worn hollow tracks, which point to a very large volume of traffic having used the ford in the past; but on the flatter ground above the right bank the traces of the road become indistinct and intermittent, and at last fade out altogether (NY 602 994) on ground which seems to have been cultivated. However, the line as marked on the OS map is no doubt accurate enough, as a hollow track, at first a mere ditch but later broadening to a width of 15ft, reappears in the correct position NNE of the point just stated.

Somewhere near the point NY 602 994, traces of the branch road can be seen leading in a SW direction No actual junction of the two roads can be seen owing to the obliteration of their traces by the improvement of the ground, but it is fair to assume that what may be tentatively distinguished as the 'Wheel Causeway proper' and the 'branch' actually joined up somewhere in this vicinity.

Information from OS (DT) 4 Nov 1957.

Asset/Event Number	184
Asset/Event Name	Wheel Causeway
Type of Asset/Event	Track
Date and/or Period	Unknown
Listing No./NRHE Number	NY59NE 51.00
HER Number	
Status	Non-designated Heritage Asset
Easting	359720
Northing	599210
Parish	Castleton
Council	Scottish Borders
Description	The feature on the current edition of the (NMRS record map) 1:10,000 OS map is actually the remains of an old road, the full course of which cannot be ascertained on this sheet. From the Bellingham roadside to the disused railway, the old road appears mainly as a terrace way c.7m to 8m wide. From the disused railway to NY 592 988 the road appears as a hollow way 9m-10m wide and c.1m maximum depth. At the Holy Grain, it appears as two hollow ways. The upper reaches of this streth merge into many natural water courses and the actual course of the road must end at NY 592 988. From NY 592 988 to the Wormscleuch Burn there are no traces in mossy ground much cut-up by drains. The section from Wormscleuch Burn to the crest of Wheel Rig can be traces as a mutilated and shallow hollow way 3m-5m wide and 0.8m maximum depth. It ends near the crest of Wheel Rig with no traces beyond on this sheet. Information from OS (MD) 6 Oct 1960.

Asset/Event Number	185
Asset/Event Name	Myredykes
Type of Asset/Event	Village
Date and/or Period	Medieval
Listing No./NRHE Number	NY59NE 61.00
HER Number	

Status	Non-designated Heritage Asset
Easting	359700
Northing	598200
Parish	Castleton
Council	Scottish Borders
Description	Shown on Pont's Map as Meerydych. Evidence for this site, or the origins of this site, comes from documentary sources. Nothing may be visible at this location.

Asset/Event Number	186
Asset/Event Name	Riccarton Junction Village
Type of Asset/Event	Village
Date and/or Period	Post-medieval
Listing No./NRHE Number	NY59NW 17.06
HER Number	
Status	Non-designated Heritage Asset
Easting	353893
Northing	597818
Parish	Castleton
Council	Scottish Borders
Description	Railway village situated on sloping ground immediately E of the junction station (NY59NW 17.01). Orignally consisted of two terraces of houses with an additional terrace of four semi-detacthed cottages making a total of thirty. Larger houses were built for the stationmaster, school and schoolhouse. The area is now very overgrown and only the footings of the stationmasters house are visible with the school and schoolhouse, which is still occupied, remaining standing.

Asset/Event Number	187
Asset/Event Name	Black Rig
Type of Asset/Event	Cross
Date and/or Period	Medieval
Listing No./NRHE Number	NT50SE 4.00
HER Number	
Status	Non-designated Heritage Asset
Easting	355770
Northing	602880
Parish	Hobkirk
Council	Scottish Borders
Description	Recorded in 1859. This was the site of an archaeological monument, which may no longer be visible.

Asset/Event Number	188

Asset/Event Name	Old Road dawston Burn-robert's.
Type of Asset/Event	Road
Date and/or Period	Unknown
Listing No./NRHE Number	NT50SW 15.00
HER Number	
Status	Non-designated Heritage Asset
Easting	354660
Northing	601870
Parish	Hobkirk
Council	Scottish Borders
Description	This road is visible as a slight hollow way at Caddroun Burn Culvert. Its route unlcear on the ground on Hudhouse Rig. Information from SBC (RMcD), 2004

Asset/Event Number	189
Asset/Event Name	Old Road dawston Burn-catlee Burn
Type of Asset/Event	Road
Date and/or Period	Unknown
Listing No./NRHE Number	NT50SE 13.00
HER Number	
Status	Non-designated Heritage Asset
Easting	358820
Northing	602920
Parish	Southdean
Council	Scottish Borders
Description	Enters Southdean parish on the NE flank of DogKnowe while joining Liddel & Rule waters by way ofthe Note O' The Gate . Ends at Barren Hill.

Asset/Event Number	190
Asset/Event Name	Wheelrig Head
Type of Asset/Event	Road
Date and/or Period	Post-medieval
Listing No./NRHE Number	NT60SW 12.00
HER Number	
Status	Non-designated Heritage Asset
Easting	361310
Northing	601960
Parish	Southdean
Council	Scottish Borders
Description	Old road marked on the 1st Edition OS map. Also passes through Castleton parish (see 303/0257).

Asset/Event Number	191
Asset/Event Name	Wheel Causeway
Type of Asset/Event	Road
Date and/or Period	Medieval; Post-medieval
Listing No./NRHE Number	NT60SW 6.00
HER Number	
Status	Non-designated Heritage Asset
Easting	360906
Northing	601379
Parish	Southdean
Council	Scottish Borders
Description	Old Road (probably in use during the 13th Century.) From NT 6019 0000 the Causeway continues northwards, the hollowed characters of the road becoming very obvious. N of the enclosure (NT60SW 3) the road splits into two sets of hollow tracks and further N these are further subdivided. Beyond Watch Knowe to the S boundary fence of the Wauchlope Forest (NT 612 017) it is impossible to define the road in broken peaty ground. The road descends through the forest between Piper Sike and Raven Burn, again represented by mutilated hollow tracks. The number and depth of these tracks is particularly noticeable at the crossing of Piper Sike (NT 6132 0341). From this point the road continues as a mutilated hollow-way through the forest to NT 6094 0499 to NT 6094 0499, on this map sheet. Two roads are said to have branched off the Wheel Causeway on Causeway Rig running north-eastwards past Raven Burn and Jedhead (NT 6243 0500), one on either side of the Raven Burn (see NT60NW 30). Information from OS (WDJ) 7 Oct 1960.

Asset/Event Number	192
Asset/Event Name	Sheep Shelter, Fanna Bog
Type of Asset/Event	Sheep Shelter
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	357667
Northing	603034
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping 'Sheep Shelter' depicted on 1st and 2nd edition OS map. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.NW. Date revised: 1896, Date Published: 1899.

Asset/Event Number	193
Asset/Event Name	Boundary Stone, Dog Knowe
Type of Asset/Event	Boundary Stone
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	358261
Northing	603174
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping 'Boundary Stone' depicted on 1st and 2nd edition OS map. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.NE. Date revised: 1896, Date Published: 1899.

Asset/Event Number	194
Asset/Event Name	Sheepfold W of Dogbank Hill
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	357417
Northing	602496
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping 'Sheepfold' depicted on 1st and 2nd edition OS map. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.NW. Date revised: 1896, Date Published: 1899.

Asset/Event Number	195
Asset/Event Name	Milestone E of Dogbank Hill
Type of Asset/Event	Milestone
Date and/or Period	Post-medieval

Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	358591
Northing	602479
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping 'M.S' depicted on 1st and 2nd edition OS map. 'New Castleton 12; Jedburgh 14; Canonbie 23'. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.NE. Date revised: 1896, Date Published: 1899.

Asset/Event Number	196
Asset/Event Name	Enclosure, Singden
Type of Asset/Event	Enclosure
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	358222
Northing	601690
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping Large roughly rectangular enclosure depcited to the west of the Singden farmstead (Asset 190). -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.NE. Date revised: 1896, Date Published: 1899.

Asset/Event Number	197
Asset/Event Name	Singden
Type of Asset/Event	Farmstead; Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	358359

Northing	601700
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping Farmstead and sheepfold depicted on 1st and 2nd edition OS maps. One NE/SW oriented building. Immedietely north of the 'Singden Plantation'. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.NE. Date revised: 1896, Date Published: 1899.

Asset/Event Number	198
Asset/Event Name	Sheepfold E of Singden
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	358593
Northing	601567
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping Large roughly rectangular sheepfold depicted 1st and 2nd edition OS map. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.NE. Date revised: 1896, Date Published: 1899.

Asset/Event Number	199
Asset/Event Name	Sheepfold E of Singden
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	358885
Northing	601693
Parish	Castleton
Council	Scottish Borders

Description	*DL *05/02/2025 *Historic Mapping 'Sheep shelter' depicted on 1st and 2nd edition OS map. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.NE. Date revised: 1896, Date Published: 1899.

Asset/Event Number	200
Asset/Event Name	Milestone SW of Singden Plantation
Type of Asset/Event	Milestone
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	358101
Northing	601048
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping 'M.S.' depicted on 1st and 2nd edition OS map. 'New Castleton 11; Jedburgh 15; Canonbie 22). -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.NW. Date revised: 1896, Date Published: 1899.

Asset/Event Number	201
Asset/Event Name	Sheepfold W of Butterlee Plantation
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	361147
Northing	600919
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping 'Sheepfold' depicted on 1st and 2nd editions OS maps. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863.

	-OS. Roxburghshire Sheet XXXIX.NE. Date revised: 1896, Date Published: 1899.

Asset/Event Number	202
Asset/Event Name	Sheepfold SW of Buterlee Plantation
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	361206
Northing	600677
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping 'Sheepfold' depicted on 1st and 2nd editions OS maps. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.NE. Date revised: 1896, Date Published: 1899.

Asset/Event Number	203
Asset/Event Name	Sheepfold S of Wheel Rig
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	360843
Northing	600117
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping 'Sheepfold' depicted on 1st and 2nd editions OS maps. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.SE. Date revised: 1896, Date Published: 1899

Asset/Event Number	204

Asset/Event Name	Sheepfold N of Wheel Rig
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	360548
Northing	600422
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping 'Sheepfold' depicted on 1st and 2nd editions OS maps. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.NE. Date revised: 1896, Date Published: 1899.

Asset/Event Number	205
Asset/Event Name	Sheepfold W of Dod Fell
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	358189
Northing	600677
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping 'Sheep Shelter' depicted on 1st and 2nd editions OS maps. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.NE. Date revised: 1896, Date Published: 1899.

Asset/Event Number	206
Asset/Event Name	Sheepfold S of Abbey Knowe
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	

HER Number	
Status	Non-designated Heritage Asset
Easting	357420
Northing	599127
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping 'Sheepfold' depicted on 1st and 2nd editions OS maps. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.SW. Date revised: 1896, Date Published: 1899.

Asset/Event Number	207
Asset/Event Name	Sheepfold S of Barren Hill
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	357914
Northing	599156
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping 'Sheepfold' depicted on 1st and 2nd editions OS maps. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.SW. Date revised: 1896, Date Published: 1899.

Asset/Event Number	208
Asset/Event Name	Milestone E of Abbey Knowe
Type of Asset/Event	Milestone
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	357677
Northing	599725

Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping 'M.S.' depicted on 1st and 2nd editions OS maps. 'New Castleton 10; Jedburgh 16; Canonbie 21'. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.SW. Date revised: 1896, Date Published: 1899.

Asset/Event Number	209
Asset/Event Name	Sheepfold, Caddroun Burn
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	358379
Northing	599858
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping 'Sheepfold' depicted on 1st and 2nd editions OS maps. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.SE. Date revised: 1896, Date Published: 1899

Asset/Event Number	210
Asset/Event Name	Farmstead, Wormscleuch
Type of Asset/Event	Farmstead; Enclosure
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	359673
Northing	599631
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping

	Farmstead at 'Wormscluech' depicted on 1st and 2nd editions OS maps. One building surrounded by large irregular enclosure. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.SE. Date revised: 1896, Date Published: 1899

Asset/Event Number	211
Asset/Event Name	Sheepfold W of Peel Tower
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	360449
Northing	599584
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping 'Sheepfold' depicted on 1st and 2nd edition OS map. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.SE. Date revised: 1896, Date Published: 1899

Asset/Event Number	212
Asset/Event Name	Sheepfold E of Wormscleuch Burn
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	359812
Northing	598868
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping 'Sheepfold' depicted on 1st and 2nd edition OS map. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.SE. Date revised: 1896, Date Published: 1899

Asset/Event Number	213
Asset/Event Name	Building and Enclosure E of Wormscleuch Burn
Type of Asset/Event	Building; Enclosure
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	359910
Northing	598807
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping Small rectangular NW/SE oriented building with a rectangular enclosure projecting off to the NE. Depicted on 2nd edition OS. -OS. Roxburghshire Sheet XXXIX.SE. Date revised: 1896, Date Published: 1899

Asset/Event Number	214
Asset/Event Name	Enclosure NW of New Myredykes
Type of Asset/Event	Enclosure
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	359405
Northing	598500
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping Large irregular NW/SE oriented enclosure depicted on 1st edition OS map. -OS. Roxburghshire Sheet XXXIX.SE. Date revised: 1896, Date Published: 1899

Asset/Event Number	215
Asset/Event Name	Sheepfold and Shepherds Cairn N of North British Railway
Type of Asset/Event	Sheepfold; Shepherds Cairn

Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	357831
Northing	598278
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping 'Sheep shelter' and 'Cairn (Shepherds)' depicted on 1st and 2nd edition OS map. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.SW. Date revised: 1896, Date Published: 1899.

Asset/Event Number	216
Asset/Event Name	Sheepfold N of Black Linn
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	357242
Northing	598761
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping 'Sheep shelter' depicted on 1st and 2nd edition OS map. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.SW. Date revised: 1896, Date Published: 1899.

Asset/Event Number	217
Asset/Event Name	Cairn Knowe
Type of Asset/Event	Cairn?
Date and/or Period	Unknown
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset

Easting	357207
Northing	598359
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping 'Cairn Knowe' depicted on 1st and 2nd editions OS maps. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.SW. Date revised: 1896, Date Published: 1899.

Asset/Event Number	218
Asset/Event Name	Sheepfold, W of Black Linn
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	356927
Northing	598645
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping 'Sheepfold' depicted on 1st and 2nd editions OS maps. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.SW. Date revised: 1896, Date Published: 1899.

Asset/Event Number	219
Asset/Event Name	Milestone N of Dawstonburn Viaduct
Type of Asset/Event	Milestone
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	356899
Northing	598281
Parish	Castleton
Council	Scottish Borders

Description	*DL *05/02/2025 *Historic Mapping 'M.S.' depicted on 1st and 2nd editions OS maps. 'New Castleton 9; Jedburgh 17; Canonbie 20'. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.SW. Date revised: 1896, Date Published: 1899.

Asset/Event Number	220
Asset/Event Name	Sheepfold N of Saughtree Station
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	356600
Northing	598388
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping 'Sheepfold' depicted on 1st and 2nd edition OS maps. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.SW. Date revised: 1896, Date Published: 1899.

Asset/Event Number	221
Asset/Event Name	Sheepfold NW of Saughtree Station
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	356203
Northing	598093
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping 'Sheepfold' depicted on 1st and 2nd edition OS maps. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863.

	-OS. Roxburghshire Sheet XXXIX.SW. Date revised: 1896, Date Published: 1899.

Asset/Event Number	222
Asset/Event Name	Sheepfold W of March Sike
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	355859
Northing	597868
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping 'Sheepfold' depicted on 1st and 2nd edition OS maps. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.SW. Date revised: 1896, Date Published: 1899.

Asset/Event Number	223
Asset/Event Name	Sheepfold W of March Sike
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	355878
Northing	597834
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping 'Sheepfold' depicted on 1st and 2nd edition OS maps. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.SW. Date revised: 1896, Date Published: 1899.

Asset/Event Number	224

Asset/Event Name	Sheepfold N of Dawston Burn
Type of Asset/Event	Sheepfold
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	356320
Northing	597890
Parish	Castleton
Council	Scottish Borders
Description	*DL *05/02/2025 *Historic Mapping 'Sheepfold' depicted on 1st and 2nd edition OS maps. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863. -OS. Roxburghshire Sheet XXXIX.SW. Date revised: 1896, Date Published: 1899.

Asset/Event Number	225
Asset/Event Name	Sheepfold, W of Stirk Sike
Type of Asset/Event	Sheepfold
Date and/or Period	Unknown
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	355663
Northing	597596
Parish	Castleton
Council	Scottish Borders
Description	*DL *17/02/2025 *Satellite Imagery Circular sheepfold approx 11m across. Visible on modern satellite imagery. Not depicted on historic mapping.

Asset/Event Number	226
Asset/Event Name	Peat Cutting, E of Allison Sike
Type of Asset/Event	Peat Cutting
Date and/or Period	Unknown
Listing No./NRHE Number	
HER Number	

Status	Non-designated Heritage Asset
Easting	355750
Northing	600347
Parish	Castleton
Council	Scottish Borders
Description	*DL *17/02/2025 *Satellite Imagery Large area of peat cutting visible on modern satellite imagery.

Asset/Event Number	227
Asset/Event Name	Caddrounburn Culvert
Type of Asset/Event	Culvert
Date and/or Period	Post-medieval
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	358297
Northing	598529
Parish	Castleton
Council	Scottish Borders
Description	*DL *17/02/2025 *Historic Maps; Satellite Imagery Culvert recorded on historic mapping. Visible on modern satellite imagery. -OS. Roxburghshire, Sheet XXXIX. Survey date: 1858-59, Publication date: 1863.

Asset/Event Number	228
Asset/Event Name	Site of Abbey, Abbey Knowe
Type of Asset/Event	Abbey
Date and/or Period	Unknown
Listing No./NRHE Number	
HER Number	
Status	Non-designated Heritage Asset
Easting	357363
Northing	599498
Parish	Castleton
Council	Scottish Borders
Description	*DL *19/02/2025

	*Historic Mapping
	'Abbey (Site of)' depicted to the south of Abbey Knowe on 1st and 2nd edition OS mapping.