

7 Cultural Heritage & Archaeology

7.1 Introduction

- 7.1.1 The cultural heritage of an area comprises archaeological sites, historic buildings, inventoried Gardens and Designed Landscapes (GDLs), inventoried battlefields and other historic environment features (collectively known as ‘heritage assets’). It also includes features or places which have the capacity to provide information about past human activity, or which have cultural significance due to associations with literary or artistic work, folklore or historic events. The setting of an asset within the wider landscape may contribute to the understanding and appreciation of the asset, and thereby the experience of it and its cultural heritage significance.
- 7.1.2 This chapter assesses the potential effects of the construction and operation of the proposed development on heritage assets within the site and surrounding area. A full description of the proposed development is given in **Chapter 3: Proposed Development Description**. The assessment has included consideration of all known designated and non-designated heritage assets within the site, all nationally significant heritage assets within 10km of the wind turbines that fall within the Zone of Theoretical Visibility model (ZTV), and further nationally significant heritage assets beyond 10km of the wind turbines identified in consultation with statutory consultees or by the assessment as having a setting sensitive to change to the distant landscape (**Figure 7.1 and 7.2**).
- 7.1.3 This assessment has been based on a range of data, including heritage assets recorded by regional and national bodies, readily available secondary sources and the results of a walk over survey of the site.
- 7.1.4 The historic development of the site and study area are discussed in the context of the wider region in order to predict the direct impact on any known or potential unknown archaeological remains within the site and indirect impacts on assets within the site and study area as appropriate. Measures necessary to safeguard or record any assets potentially affected by the proposed development are suggested.
- 7.1.5 For the purposes of this assessment the historic environment and cultural heritage is considered to consist of a variety of historic assets, including the following types of designated assets:
- World Heritage Sites (WHS);
 - Scheduled Monuments (SM);
 - Listed Buildings (LB);

- Inventoried battlefields;
- Conservation areas; and
- Inventoried Gardens and Designed Landscapes (GDLs).

- 7.1.6 These designations are of national importance, except that conservation areas may be of national or regional importance. Only Category A listed buildings are considered to be of national importance. Category B listed buildings are considered of regional importance, and Category C listed buildings of local importance (SNH Handbook, 2019).
- 7.1.7 In addition, the following non-designated assets are also included in the assessment:
- nationally/regionally recorded archaeological sites and finds; and
 - other buildings and structures of historic or architectural importance.
- 7.1.8 This chapter is supported by:
- Technical Appendices 7.1 and 7.2
 - Figures 7.1-7.17 are referenced in the text where relevant.
- 7.1.9 The assessment has been carried out by Beth Gray MA (hons) ACIfA of SLR Consulting Ltd. Detail professional qualifications and any relevant code of practice have been followed and can be found in **Chapter 1: Introduction**.

7.2 Legislation, Policy and Guidance

Legislation

- 7.2.1 Relevant legislation includes:
- The Ancient Monuments and Archaeological Areas Act 1979;
 - The Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997; and
 - The Historic Environment (Amendment) (Scotland) Act 2011 (this includes amendments to the above).

Policy

- 7.2.2 Relevant planning policy includes:
- National Planning Framework 4 (Scottish Government 2023);
 - Our Past, Our Future: The Historic Environment Strategy for Scotland (Scottish Government, 2023);
 - Scottish Statutory Instrument No. 101 The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017;
 - Historic Environment Policy for Scotland (HEPS 2019); and
 - Historic Environment Circular 1, HES 2019.

Guidance

- 7.2.3 A number of relevant pieces of guidance have been published by the national heritage agency, Historic Environment Scotland (HES), and the professional archaeological body, the Chartered Institute for Archaeologists (CIfA). These publications are:
- Planning Advice Note Planning and Archaeology PAN 2/2011;
 - HES's Managing Change in the Historic Environment: Setting (HES 2020);
 - HES's Designation, Policy and Selection Guidance (HES 2019);
 - Environmental Impact Assessment Handbook (SNH (NatureScot) and HES 2019)
 - CIfA's Standard and Guidance for Historic Environment Desk Based Assessment (CIfA 2014a), which gives best practice for the execution of desk based assessments; and
 - CIfA's Code of Conduct (CIfA 2014b).

7.3 Consultation

- 7.3.1 In undertaking the assessment, consideration has been given to the scoping responses and other consultation undertaken as detailed in **Table 7.1**.

Table 7.1: Consultation

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action
East Lothian Council (ELC)	Scoping	ELC archaeology officer did not respond to the consultation request. The ELC landscape officer raised further request for viewpoints outwith the proposed study area.	The additional request for viewpoints was covered in Chapter 6: Landscape and Visual .
Heriot County Council	Scoping	No issues were raised in regard to cultural heritage.	N/A
Oxton and Channelkirk Community Council (OCCC) (30/03/2023)	Scoping	OCCC request that the following sites should also be considered and included: <ul style="list-style-type: none"> • Fort at Ditcher Law near Carfrae and Hillhouse • Fort at Carfrae, located just above Carfrae Farm • Roman Camp near Kirktonhill • Roman Fortlet near Braefoot • Fort at Kirktonhill • Standing Stone at Tollishill 	A screening has been conducted on designated assets as per the methodology outlined in section 7.3 and can be found in Technical Appendix 7.2 . Assets with the potential for significant effect have been assessed below in agreement with Scottish Borders Council (SBC) and HES.

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action
Historic Environment Scotland (HES) (28/04/2023)	Scoping	HES raised concern with the following assets and particularly potential impacts on their integrity: <ul style="list-style-type: none"> • Longcroft, Fort (SM372) • Addinston, Fort (SM362) • Glenburnie, Fort (SM4473) • Longcroft Hill, Homestead (SM4480) • The Howe, settlement (SM4595) • Hog Hill, Settlement (SM4481) • HES raised particular concern with potential for direct impact on the following assets: <ul style="list-style-type: none"> • Longcroft, Fort (SM372) • Addinston, Fort (SM362) • Glenburnie, Fort (SM4473) • Longcroft Hill, Homestead (SM4480) • The Howe, (SM4595) • Dodcleugh, Fort And Settlement (SM4478) • Dabshead Hill ,Fort And Standing Stone (SM4657) • The Hillhouse Burn grouping of assets <ul style="list-style-type: none"> • Blackchester, Fort (SM364) • Burncastle, Fort (SM4656) 	Reassurance was given on the direct 'intrusive' impacts on designated assets within the site with supply of the infrastructure layout. Further justification was provided with regards to the scoping out of Hogs Hill (SM4481) and Dabshead Hill (SM4657). The following visualisations were agreed with HES and included within this chapter: : Photomontages: <ul style="list-style-type: none"> • SM372 • SM362 • SM4473 • SM4480 • SM4595 • GDL00971 • SM4616 • Wirelines: <ul style="list-style-type: none"> • SM4657 • SM4656 • SM364 • SM380 HES was concerned regarding the scoping out of Hog Hill (SM4481). HES noted that they welcome the proposal to assess the impact on settings of Thirlestane Castle and its Inventory Garden and Designed Landscape (LB8203/GDL00371) HES also raised that visualisation had only been produced for 5 scheduled monuments, and required visualisations of assets where turbines would appear behind them.

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action
HES (16 th of August 2023)	Pre-application	HES does not agree with scoping out SM4481 and SM4657. They were in agreement of proposed visualisations and requested the following: <ul style="list-style-type: none"> Leader Water Hillforts Hillhouse Grouping 	SM4481 and SM4657 are included in the assessment. The proposed locations were suggested and agreed. <ul style="list-style-type: none"> Lauder Water: E352107, N652353 Hillhouse Group: E350742, N658229
HES	Gatecheck	HES were broadly content with the summarised consultation.	N/A
Scottish Borders Council (SBC)	Consultation meeting	A meeting was held where design changes from scoping and proposed viewpoints were discussed. Enhancement features were equally discussed during the consultation meeting. Key concerns were raised with SM359 and requested to be scoped back in.	SM359 has been assessed.

7.4 Methodology

Scope of Assessment

Effects Assessed in Full

7.4.1 The following effects have been assessed in full:

- direct effects on all heritage assets within the site;
- effects on designated cultural heritage assets which are sensitive to change within the study area; and
- Assets agreed with Historic Environment Scotland as set out in consultation within **Table 7.1**.

Effects Scoped Out

7.4.2 The following have been scoped out:

- effects on the setting of heritage assets more than 10km from the proposed development unless identified as being particularly sensitive to change to the distant landscape; and
- effects on the setting of heritage assets within the study area shown by the ZTV not to be intervisible with the proposed development, and where there is no identified viewpoint of the heritage assets which contributes our understanding, appreciation and experience of the same within the ZTV.

Baseline Characterisation

Study Area

7.4.3 There is no guidance from HES which defines a required study area for the archaeological and cultural heritage assessment of wind farms. Two study areas are proposed:

- the site and a buffer zone of 1km to inform the predictive model of buried archaeology from the site; and
- a Study Area comprising of land beyond the site up to 10km from the proposed wind turbine locations, with theoretical intervisibility with the proposed wind turbines.

Field Survey

7.4.4 A targeted walkover survey was carried out on the 28 March and 01 August 2023. Wind turbine locations were visited to confirm the presence/absence of unknown archaeological remains and known heritage assets within the site were visited to confirm absence/ presence. Ground conditions were wet, but weather on the day was dry. All assets recorded on the Historic Environment Record (HER) within the site were visited as listed within **Technical Appendix 7.1: Site Gazetteer**. Any new HER assets were logged in **Technical Appendix 7.1**.

7.4.5 Setting assessments were carried out on 3rd of October 2023, assets that were deemed sensitive to significant effects were visited in the field.

Sensitivity Criteria

7.4.6 Impacts have the potential to be caused by the proposed development where it changes the baseline condition of either the asset itself or its setting; it being noted that change does not necessarily result in an impact.

7.4.7 In accordance with EIA Regulations, this assessment will identify impacts and effects as either direct or indirect, adverse or beneficial, and short-term, long-term or permanent. The definition of impact is described below:

- Direct (physical) impacts: occur where the physical fabric of the asset is removed or damaged, or where it is preserved or conserved, as a direct result of the proposal. Such impacts are most likely to occur during the construction phase and are most likely to be permanent.
- Indirect (physical) impacts: occur where the fabric of an asset, or buried archaeological remains, is removed or damaged, or where it is preserved or conserved, as an indirect result of the proposal, even though the asset may lie

some distance from the proposal. Such impacts are most likely to occur during the construction phase and are most likely to be permanent.

- **Setting impacts:** result from the proposal causing change within the setting of a heritage asset that affects its cultural significance or the way in which it is understood, appreciated, and experienced. Such impacts are generally, but not exclusively, visual, occurring directly as a result of the appearance of the proposal in the surroundings of the asset. Setting impacts may also relate to other senses or factors, such as noise, odour or emissions, or historical relationships that do not relate entirely to intervisibility, such as historic patterns of land-use and related historic features. Such impacts may occur at any stage of a proposal's lifespan and may be permanent, reversible, or temporary.
- **Cumulative impacts:** can relate to the physical fabric or setting of assets. They may arise as a result of impact interactions, either of different impacts of the proposal itself, or additive impacts resulting from incremental changes caused by the proposal together with other projects already in the planning system or allocated in a Local Development Plan.

- 7.4.8 Assessment will be undertaken separately for direct impacts and indirect impacts. The magnitude of both beneficial and adverse impact will be assessed according to scale of impact, from very high to neutral/none. The overall significance of effect will cross reference the importance of the asset and the magnitude of impact.

Cultural Heritage Significance

- 7.4.9 The cultural significance of undesignated heritage assets will be assessed by a consideration of their intrinsic, contextual, and associative characteristics as defined in HEPS (2019). In relation to these assets, this assessment will focus upon an assessment of the assets' inherent capability to contribute to our understanding of the past; the character of their structural, decorative and field characteristics as determined from the HER and Canmore records and / or site visits; the contribution of an asset to their class of monument, or the diminution of that class should an asset be lost; how a site relates to people, practices, events, and/or historical or social movements. Assessments of significance recorded within the HER will be taken into account where available.

- 7.4.10 **Table 7.2** shows the potential levels of cultural heritage significance of an asset related to designation, status and grading, and where non-designated, to a scale of Highest to Negligible importance. This table will act as an aid to consistency in the exercise of professional judgement and provides a degree of transparency for others in evaluating the conclusions that could be reached during assessment.

Table 7.2: Cultural Heritage Significance

Heritage significance	Explanation
Highest	Designated assets of international importance, including: <ul style="list-style-type: none"> • World Heritage Sites.
High	Designated assets of national importance, including: <ul style="list-style-type: none"> • Scheduled Monuments; • Category A Listed Buildings; • Gardens and Designed Landscapes included on the national inventory; and • Designated Battlefields.
Medium	Designated assets of regional importance, including: <ul style="list-style-type: none"> • Category B Listed Buildings; • Some Conservation Areas; and • Non-designated assets of equivalent significance.
Low	Assets of local importance, including: <ul style="list-style-type: none"> • Category C Listed Buildings; • Some Conservation Areas; and • Non-designated assets of equivalent significance.
None	Features that do not retain any cultural heritage significance.
Unknown	Assets of indeterminable significance.

Magnitude of Effect

- 7.4.11 Determining the magnitude of any likely impacts requires consideration of the nature of activities proposed during the construction and operation of the proposed development.
- 7.4.12 The changes could potentially include direct change (e.g. ground disturbance), and indirect change (e.g. visible change, noise, vibration, traffic movements affecting the setting of the asset). Impacts may be beneficial or adverse, and may be short term, long term or permanent. Magnitude of impact will be assessed with reference to the criteria set out in **Table 7.3**.

Table 7.3: Magnitude of Impact

Magnitude of impact	Explanatory criteria
High Beneficial	The proposed development would considerably enhance the cultural significance of the affected asset, or the ability to understand, appreciate and experience it.
Medium Beneficial	The proposed development would enhance to a clearly discernible extent the cultural significance of the affected asset, or the ability to understand, appreciate and experience it.
Low Beneficial	The proposed development would enhance to a minor extent the cultural significance of the affected asset, or the ability to understand, appreciate and experience it.
Very Low Beneficial	The proposed development would enhance to a very minor extent the cultural significance of the affected asset, or the ability to understand, appreciate and experience it.

Magnitude of impact	Explanatory criteria
Neutral/None	The proposed development would not affect or would have harmful and enhancing effects of equal magnitude on the cultural significance of the affected asset, or the ability understand, appreciate and experience it.
Very Low Adverse	The proposed development would erode to a very minor extent the cultural significance of the affected asset, or the ability understand, appreciate and experience it.
Low Adverse	The proposed development would erode to a minor extent the cultural significance of the affected asset, or the ability understand, appreciate and experience it.
Medium Adverse	The proposed development would erode to a clearly discernible extent the cultural significance of the affected asset, or the ability to understand, appreciate and experience it.
High Adverse	The proposed development would considerably erode the cultural significance of the affected asset, or the ability to understand, appreciate and experience it.

Significance of Effect

7.4.13 The significance criteria are presented in Table 7.4. Table 7.5 provides a matrix that relates the heritage significance of the asset to the magnitude of impact on its significance (incorporating contribution from setting where relevant), to establish the likely overall significance of effect. This assessment will be undertaken separately for direct effects and indirect effects, the latter being principally concerned with effects through development within the setting of heritage assets. Those assets which the matrix scores as Major will be considered as receiving a significant effect.

Table 7.4: Significance Criteria

Significance	Description
Major	Severe harm or enhancement such as total loss of significance or integrity of the setting, or exceptional improvement by the proposed development on the cultural significance of the asset and the ability to understand, appreciate and experience the asset in its setting.
Moderate	Harm or enhancement such as the introduction or removal to the baseline of an element that would affect to a clearly discernible extent the cultural significance of the asset and the ability to understand, appreciate and experience it in its setting.
Minor	To a minor extent the proposed development would introduce change to the baseline that would harm or enhance the cultural significance of the asset and the ability to understand, appreciate and experience it in its setting.
Very Minor	To a barely discernible extent the proposed development would introduce change from the baseline that would harm or enhance the cultural significance of the asset and the ability to understand, appreciate and experience it in its setting.
Negligible	The proposed development would not affect or would have harmful and enhancing effects of equal magnitude, on the cultural significance of the affected asset and the ability to understand, appreciate and experience it in its setting.
Neutral/Nil	The proposed development have would no effect on the cultural significance of the affected asset and the ability to understand, appreciate and experience it in its setting.

Table 7.5: Significance of Effect

Magnitude of Impact	Heritage Significance (excluding negligible and unknown)			
	Highest	High	Medium	Low
High beneficial	Major	Major	Moderate	Minor
Medium beneficial	Major	Moderate	Minor	Very Minor
Low beneficial	Moderate	Minor	Very Minor	Very Minor
Very low beneficial	Minor	Very Minor	Negligible	Negligible
Neutral/None	Neutral/Nil	Neutral/Nil	Neutral/Nil	Neutral/Nil
Very low adverse	Minor	Very Minor	Negligible	Negligible
Low adverse	Moderate	Minor	Very Minor	Very Minor
Medium adverse	Major	Moderate	Minor	Very Minor
High adverse	Major	Major	Moderate	Minor

Zone of Theoretical Visibility (ZTV)

- 7.4.14 Assessment of visual impact has been assisted by a ZTV calculation, prepared principally for the Landscape and Visual Impact Assessment and presented in Figure 7.2. The ZTV calculation methodology is set out in detail in Chapter 6: Landscape and Visual Impact Assessment, but in summary it maps the predicted degree of visibility of the proposed development from all points within a study area around the site, as would be seen from an observer's eye level two metres above the ground. The ZTV model presented in Figure 7.2 is based on the maximum height of the blade tips of the proposed development. The ZTV model is used to inform the potential impacts on the setting of designated assets within the Study Area.
- 7.4.15 The ZTV is theoretical because it is based on landform only and does not take into account the screening or filtering effects of vegetation, buildings or other surface features, and in that respect is likely to provide an over-estimate of the actual visibility.
- 7.4.16 Assets that fall outwith the ZTV are excluded from any further assessment, with the exception of where a view is identified which includes the heritage asset and the proposed wind turbines, and that view may enable appreciation of the assets' heritage significance.

Network of Intervisibility

- 7.4.17 The Intervisibility Network (**Figure 7.4**) has been generated using the Visibility Analysis plugin for QGIS. The digital terrain model (DTM) has been derived from the OS Terrain 50 dataset (+/-10m). Earth curvature was not taken into account when generating the model, with atmospheric refraction set at 0.13. The model was generated using a viewing height of 2m as per guidance from NatureScot on ZTV's. At present, there are no industry standards for the parameters for Intervisibility Networks and as such professional judgement was used.
- 7.4.18 The Intervisibility Network map should be used alongside the following assumptions:
- 7.4.19 The network has been generated using the central locations for each Scheduled Monument. The Scheduled Monument data is provided by Historic Environment Scotland (2023).
- 7.4.20 The network is generated from a bare earth terrain and does not account for the screening effect of features within the landscape such as settlement and woodland

Mitigation

- 7.4.21 Where adverse effects on cultural heritage are identified, measures to prevent, reduce, and / or where possible offset these effects, will be proposed. Measures can be broken down into two categories Direct and Indirect Impacts.
- 7.4.22 Direct Impact mitigations may include:
- the micro-siting of proposed development away from sensitive locations;
 - the fencing off or marking out of heritage assets or features in proximity to construction activity in order avoid disturbance where possible;
 - a programme of archaeological work where required, such as an archaeological watching brief during construction activities in or in proximity to areas of particular concern, or excavation and recording where damage is unavoidable; or
 - a working protocol to be implemented should unrecorded archaeological features be discovered.
- 7.4.23 Indirect impact mitigation upon an assets setting may include:
- Alteration to layout of the proposed development;
 - Reduction of wind turbine height; or
 - Wind turbine colour.

Residual Effects

- 7.4.24 A statement of the residual effects has been given following consideration of any further site-specific mitigation measures, where these have been identified.

Cumulative Effects

- 7.4.25 A cumulative effect is considered to occur when there is a combination of:
- A moderate or above effect on an asset or group of assets due to changes which would be caused by the proposed development under assessment; and
 - an effect on the same asset or groups of assets which would be caused by another development or developments.
- 7.4.26 Consideration of the other developments will be limited to:
- wind farm planning applications that have been submitted and have a decision pending; and
 - wind farm planning applications which have been granted permission but not yet constructed.
- 7.4.27 Effects from operational wind farms would be included in the baseline. Cumulative effects would be addressed in two stages:
- assess the combined effect of the developments including the proposed development; and
 - assess the degree to which the proposed development contributes to the combined effects from the other wind farm developments.
- 7.4.28 A cumulative assessment is presented in Section 7.9.

Statement of Significance of Effects

- 7.4.29 The cultural heritage assessment concludes with a Statement of Significance of Effects summarising the predicted significance of the effects arising from the proposed development. Effects that are considered significant in EIA terms are those that are assessed to be moderate or substantial, in accordance with the suggestion contained in current guidance HES and SNH (2019) Environmental Impact Assessment Handbook, Section C, Page 75.

Limitations to the assessment

- 7.4.30 The assessment is based on the sources outlined in Section 7.11 and, therefore, shares the same range of limitations in terms of comprehensiveness and completeness of those sources.
- 7.4.31 Further enhancement works for the scheduled assets within the site and Longcroft, Fort (SM372) was examined and designed. However, due to access restrictions, the applicant could not commit to such features. Some assets were not visited due to recreational shooting or could otherwise not be accessed due to health and safety, however; the closest publicly available point was used.

7.5 Baseline

Current Baseline

- 7.5.1 A full description of the site and environs is given in **Chapter 3: Proposed Development Description**. All heritage assets within the site and 1km of this area are shown on **Figure 7.1**. Nationally designated assets within the study areas are shown in relation to the ZTV on **Figure 7.3**.
- 7.5.2 All recorded non-designated heritage assets within the site and 1km of the site are listed in the gazetteer that is contained within **Technical Appendix 7.1: Site Gazetteer**. Where designated assets are tabulated in this chapter they are identified by the index number (i.e., Scheduled Monuments) or reference number (i.e. Listed Buildings) under which they are registered by HES.
- Nationally Important Designated Heritage Assets**
- 7.5.3 There are two designated assets located within the site. These comprise Glenburnie, Fort (SM4473) and Longcroft Hill, Homestead (SM4480). There are 16 non-designated cultural heritage assets located within the site. Non-designated assets are discussed in the below and in **Technical Appendix 7.1: Site Gazetteer**.
- 7.5.4 There are 93 heritage assets of national importance within 10km, consisting of 82 Scheduled Monuments, nine Category A Listed Buildings, and two Inventoried Gardens and Designed Landscapes. There are 76 Category B Listed Buildings and two Conservation Areas of national/regional importance located within 10km. There is one asset of Regional Importance within 5km, comprising a Category B Listed Building. As per correspondence with HES and Scottish Borders Council, it was agreed through a heritage appraisal that the assets to be considered are outlined in **Table 7.6**.

Table 7.6: Designated Heritage Assets to be assessed in agreement with HES.

Reference	Name	Type
(GDL00371)	Thirlestane Castle Inventory Garden and Designed Landscape	Garden and Designed Landscape
(LB8203)	Thirlestane Castle	Listed Building
(SM359)	Borrowston Rig, Stone Circle and Cairns	Scheduled Monument
(SM362)	Addinston, Fort	Scheduled Monument
(SM364)	Blackchester, Fort	Scheduled Monument
(SM365)	Bowerhouse, Fort	Scheduled Monument
(SM372)	Longcroft, Fort	Scheduled Monument

Reference	Name	Type
(SM4473)	Glenburnie, Fort	Scheduled Monument
(SM4478)	Dodcleugh, Fort	Scheduled Monument
(SM4480)	Longcroft Hill, Homestead	Scheduled Monument
(SM4481)	Hog Hill, Settlement	Scheduled Monument
(SM4595)	The Howe, Settlement	Scheduled Monument
(SM380) (SM4616) (SM4627) (SM4478) (SM4479)	The Hillhouse Burn group of Assets	Scheduled Monuments
(SM4656)	Burncastle, Fort	Scheduled Monument
(SM4657)	Dabshead Hill, Fort	Scheduled Monument
(SM7573)/(SM3067)	Soutra Ailse	Scheduled Monument

- 7.5.5 All other assets in the appraisal in **Technical Appendix 7.2** were considered for assessment but were excluded due to the asset and its approach falling outwith the ZTV.

Known Heritage Assets within the Site

Prehistoric and Roman

- 7.5.6 There are five assets of a prehistoric date within the site. A findspot for a bronze axe (SLR2, SLR5) thought to be dated to the Bronze Age, is thought to have been located 0.4km south of T16. The precise findspot is unknown. A potential prehistoric palisaded enclosure (SLR72) is located c.0.38km north-east of SLR5.
- 7.5.7 A short cist grave and associated burial goods (cinerary urn, food vessel) were discovered c.0.5km south-west of T19 (SLR9, SLR12). The assets are thought to be Bronze Age in date and were discovered inside a quarried mound.
- 7.5.8 Longcroft Hill Homestead, a Scheduled Monument, (SM4480, SLR47) is located c. 0.5km south-east of T19. Longcroft Hill Homestead is a scooped Iron Age settlement, situated on the eastern flank of Longcroft Hill. The settlement has a likely associated field system, marked by a mostly demolished drystone wall stretching to the south-west of the asset. Traces of rig and furrow (SLR47) are noted below the enclosure.

- 7.5.9 Glenburnie, Fort (SM4473, SLR50) is located c.0.57km south-west of T4. Glenburnie Fort is an Iron Age promontory fort, located on a spur on the western side of Hog's Hill. The fort has internal features, including two potential roundhouses, as well as some external defensive ramparts and ditches.
- 7.5.10 There are a further 16 prehistoric heritage assets within 1km of the site. There are two find spots (SLR1, SLR6), located c.0.7km south-west of the site, comprising multiple arrowheads, stone tools, and potential 'stone rings'. A burial cist (SLR10) is located c.0.08km south-east of the findspots, with a cinerary urn (SLR11) and associated human remains found inside in the early 1900s.
- 7.5.11 A potential prehistoric barrow is located c.0.7km west of the site, inside a post-medieval plantation bank.
- 7.5.12 Dodcleugh, Fort (SM4478, SLR34) is located c.0.8km west of the site. Dodcleugh Fort is an Iron Age fort and overlying settlement on a spur overlooking Kelhope Burn to the west. A further prehistoric hill fort, Longcroft, Fort (SLR56, SM372) is located c.0.25km south-west of the site, above the north-eastern bank of Whalplaw Burn.
- 7.5.13 A potential prehistoric pit alignment (SLR7) is located c.1km south of the site.
- 7.5.14 There are two areas of Scooped Settlements located c.0.9km west of the site (SLR20, SLR21), one with a potential associated enclosure (SLR27). Two areas of scooped settlement are located to the south of the site (SLR45, SLR54), c.60m and 0.4km from the site respectively. A large area of Iron Age Settlement (SLR23) is located c.0.1km north-east of the site.
- 7.5.15 An area of prehistoric cord rig (SLR29) is located c.1km west of the site.

Medieval

- 7.5.16 There are three heritage assets of medieval date within the site. There is a medieval track/road (SLR17, SLR18) running through the east of the site, first identified on the Roy Military Survey map from 1752-1755. The road is named on Canmore as Herring Road, however that name is not stated on the map and its origin is unknown.
- 7.5.17 An area of rig and furrow, likely medieval in date crosses the south-western site, covering an area of approximately 3.1ha. The area of rig and furrow indicates agricultural exploitation of the land.
- 7.5.18 A further medieval road (SLR13, SLR14, SLR15) is noted c.0.6km to the west of the site.
- 7.5.19 There are two medieval farmsteads recorded within 1km of the site. A farmstead named as Langatt (SLR40, SLR41) on Pont's 1590 map of Lauderdale is located c.0.55km west of the site, albeit there are no upstanding remains noted. Furthermore, a farmstead named as Whalpa (SLR62, SLR63) on Pont's map is thought

to have been located c.0.88km south-west of the site. The precise locations of these farmsteads are unknown, with historic mapping having been used as evidence for their location.

Post-medieval

- 7.5.20 There are seven post-medieval heritage assets within the site. There is a post-medieval plantation bank (SLR33), visible on aerial photography and identified through historic mapping, located along the eastern site c. 0.67km west of T17.
- 7.5.21 There are also five stock enclosures dated as post-medieval within the site. Three stock enclosures are focussed along Soonhope Burn (SLR43, SLR44, SLR46), with two being circular in nature and visible on both historic Ordnance Survey mapping and one being three-pronged and not visible on any current aerial photography. A single circular stock enclosure (SLR48) is recorded on the west bank of Whalplaw Burn, c.0.75km east of T19. Remnants of SLR48 are visible on aerial photography. A further circular stock enclosure (SLR49) is recorded within the Historic Environment Record, c.0.47km south-west of T4.
- 7.5.22 There is a record of a post-medieval track or road (SLR16), following the rough path of a current track visible on aerial photography running through the south-eastern part of the site. The asset branches off from the aforementioned medieval Herring Road (SLR17, SLR18) and may have been a later iteration.
- 7.5.23 There are a further nine post-medieval heritage assets recorded within 1km of the site. A northern section of the aforementioned Herring Road (SLR19) runs directly to the north-east of the site, through the Fallago Rig Wind Farm. A marker cairn (SLR71) was identified c.0.8km north-west of the road.
- 7.5.24 There are three stock enclosures to the south-west of the site (SLR42, SLR53, SLR61), located c.0.15km, c.0.45km, and c.0.7km from the site respectively. There are two post-medieval quarry sites to the south-west of the site (SLR8, SLR64), located c.1km and c.0.8km from the site respectively, and one quarry site (SLR28) located c.0.75km west of the site.
- 7.5.25 A further post-medieval road (SLR26) is noted as running c.0.6km west of the site, which appears to connect at its southern end with the medieval roads mentioned previously (SLR14, SLR15).
- Modern*
- 7.5.26 There is one modern heritage asset within 1km of the site, a 20th Century war memorial (SLR25) for a pilot killed in a training exercise during 1941. There are no modern heritage assets recorded within the site.

Undated Features or Structures

- 7.5.27 There are four undated heritage assets recorded within the site. There is a recorded undated farmstead within the site, c.0.35km south of T16 (SLR37), named as Glenburnie Farm on the Historic Environment Record. The farmstead has potentially associated enclosures directly to its north-east (SLR77), identified during the 2023 walkover survey. An undated linear earthwork is recorded c.0.37km north of T18, with its function unclear (SLR36). A further linear earthwork is recorded c.0.46km south-east of T1 (SLR57), again with its function unclear. An undated enclosure is recorded c.0.5km west of T17; it is sub-rectangular in nature and was likely used for agricultural purposes (SLR35).
- 7.5.28 A further five undated potential heritage assets were identified during the 2023 walkover survey. Four of these features are thought to be agricultural in nature. The aforementioned enclosures associated with Glenburnie Farm (SLR77) comprised four stone-built enclosures, seemingly no longer in use. A set of two connected stone built circular stock enclosures (SLR73), with one only visible as a grass covered mound, was identified c.0.4km north-west of T17. Two sets of cleared field boundaries or clearance cairns were identified within the site, one located c.0.35km south-east of T18 (SLR75) and one c.0.8km south-east of T1 (SLR76).
- 7.5.29 A potential burial cairn (SLR74) was identified c.0.2km east of T5. The potential asset comprised a circular mound of stones, surrounded by a turf covered potential kerb.
- 7.5.30 There are a further 19 undated heritage assets recorded outwith the site. The majority of these assets are agricultural in nature, including multiple farmsteads (SLR59, SLR60), potential cairns with unspecified functions (SLR51, SLR52, SLR58), and some undated pits (SLR67, SLR68). A full list of undated heritage assets outwith the Site can be found in **Technical Appendix 7.1: Site Gazetteer**.

Historic Mapping and Historic Land-Use Assessment

- 7.5.31 Assessment of the Historic Land Use Assessment (HLA) map indicates that the land within the site was primarily used for settlement and agriculture up to the post-medieval period. From the post-medieval period, due to agricultural improvements in the 18th and 19th centuries, the majority of the land was used for rectilinear fields and farms, associated rough grazing, and more recently small areas of forestry plantation.
- 7.5.32 A review of the online historic mapping available from the National Library of Scotland was undertaken. The site is first seen in detail on the Roy Military Survey of

Scotland map from 1747-1755. There are no noted features within the site on this map, nor are there any noted features within the site on slightly later detailed maps, including Armstrong's Map of the County of Berwick, from 1771, and Thomson's map of Berwick-Shire from 1821. Armstrong's map (1771) does depict a marker at the peak of Hoglaw, potentially associated with the current cairn at this location (SLR51), however, the marker is not labelled.

- 7.5.33 The first edition Ordnance Survey map (Berwickshire, Sheet XIV) offers a more detailed view of the site in 1857. A cairn is noted at the peak of Hogs Law, located just outside of the eastern edge of the site. A track named Herring Road, leads northward towards Wedder Law located within the site. A sheepfold is located to the west of this approach to Wedder Law. The Whinstone Quarry is referenced on the map due east of the Peat Law summit, located just east of the Site.
- 7.5.34 The map identifies the course of the Whalplaw Burn and its valley, which passes through the site from the north. Along the course of the river, various sheepfolds are noted on the map, one in proximity to Glenburnie, a sub-rectangular area of enclosed land containing a single rectangular building. Numerous 'Cleughs', tributaries of the Whalplaw Burn flow eastward and westward within the site. Along the Wide Cleugh, a stiel is noted on the map, just south of the summit of Widecleugh Rig.
- 7.5.35 Just south of the Gladescleugh Burn, a ford is also noted crossing the Whalplaw Burn. Little can be identified at Riddel Law, located centrally to the site. In the western part of the site (Berwickshire, XIII), there is a clear depiction of the course of the Soonhope Burn which flows east of Cadam Law and Hog Hill. Various sheepfolds are also located along the watercourse.
- 7.5.36 The Longcroft, Fort (SM372), is identified as a 'Camp' on this map located just outside of the site on the eastern valley of the Soonhope Burn. An old sheepfold is noted at the summit of Hog Hill and a square plantation of trees can be identified atop the summit of Cadam Law. Just north of Cadam Law and within the site was the location of the Old Quarry (Whinstone) and a small rectangular enclosure located to the immediate west of the Soonhope Burn. Dod House is also located in proximity to the site and to the north-west of Cadam Law. The plot comprises two buildings, one smaller rectangular building and a long building, likely a barn, amongst curtilage of rectangular enclosures and springs and a well.

- 7.5.37 Within the northern part of the site (Berwickshire VIII), the map depicts a barren moorland landscape, only identifying the various summits of Hunt Law, Adingston Rig, Harts Law and the eastern parts of Broomy Law and Saddler Rig. The summits lie east of Lockies Lodge, a small farmstead located just north of the site.
- 7.5.38 The second edition Ordnance Survey maps (1897) are largely reflective of the earlier 1860s maps, only identifying the addition of a sub-rectangular enclosure within the site, along the Gladescleugh Burn. An unnamed circular feature, which appears to reflect a sheepfold, can be identified within the western part of the site along the Whalplaw Burn in proximity to Longhope Rig (Berwickshire, Sheets VIII.SW, XIII.NE, XIV.NW).
- 7.5.39 The third edition Ordnance survey maps (1906) also do not identify any substantial change within the site. Another enclosure appears just north of the Ferny Cleugh, located centrally within the southern part of the site (Berwickshire, Sheets VIII.SW, XIII.NE, XIV.NW).
- 7.5.40 The 1957 Ordnance Survey maps (NT55NW - A, NT55NE - A, NT55SW - A), surveyed between 1930 and 1957, depict a lot of the same features noted on previous historic mapping. The Herring Road to Wedder Law remains along the eastern valley of the Whalplaw Burn, as does Glenburnie and the plantation atop the summit of Cadam Law. Lockie Lodge has been renamed 'The Howe' with some new enclosures following the Soonhope Burn north-west of the site. Various unnamed sheepfolds and a former Stell are also depicted.

Aerial Photography and LiDAR

- 7.5.41 There is no publicly available LiDAR data for the site. The online aerial imagery of National Collection of Aerial Photography (NCAP) was examined for evidence of archaeological sites. No further archaeological sites were identified.

Discussion of the site

- 7.5.42 There is evidence for prehistoric activity within the Site, mainly characterised by the presence of Glenburnie Fort (SLR50) and Longcroft Hill Homestead (SLR47). The prehistoric activity within the site is mainly focussed along the watercourses (e.g., Whalplaw Burn). There is also extensive prehistoric activity recorded within 1km of the site, including hill forts, cairns, and settlements. As such, there is a high potential for unknown prehistoric assets within the site.
- 7.5.43 There is no evidence for Romano-British activity within the site. As such, there is a very low potential for unknown Romano-British heritage assets within the site.

- 7.5.44 There is some evidence for medieval activity within the site comprising trackways and an area of rig and furrow. Outwith the site, there are two recorded medieval farmsteads, which may have farmed land within the site. As such, there is a low potential for any unrecorded medieval heritage assets within the site.
- 7.5.45 There are several post-medieval heritage assets located within the site. Features comprise multiple stock enclosures (SLR43, SLR44, SLR46, SLR48, SLR49) which are mostly reflected on historic mapping. A plantation bank (SLR33) and former trackways (SLR16, SLR17, SLR18) are also located within the site. Farmsteads outwith the site and respective stock enclosures and roads/tracks may also relate to land located within the site. There is considered a low potential for unknown post-medieval heritage assets within the site, which are likely only related to agricultural activity.
- 7.5.46 One modern heritage asset is located within the site (SLR25) comprising a war memorial. It is not anticipated that any other modern heritage assets are located within the site. As such, there is a minimal potential for any surviving modern remains.
- 7.5.47 Undated heritage assets within the site are likely to reflect post-medieval agricultural activity, as most identified features comprise enclosures (SLR77, SLR35) and field boundaries (SLR75). Glenburnie Farm (SLR37) is also undated but identified on 19th century historic mapping. Undated linears in proximity to wind turbines (SLR36, SLR57) may also have post-medieval agricultural links but this is unclear. A potential burial cairn (SLR74) was identified during the site walkover survey (2023). Outwith the site, features are largely agricultural in nature aside from potential pits and cairns of unknown function.

Future Baseline

- 7.5.48 If the proposed development was not to proceed, there would likely be no change to the baseline condition of the various heritage assets and features that presently survive within the site.

Implications of Climate Change

- 7.5.49 As per ‘A Guide to Climate Change Impacts on Scotland’s Historic Environment’ (October 2019), peat is classed as a cultural heritage resource due to its formation during the Bronze Age as mass deforestation occurred. Due to the anaerobic conditions under which peat is formed, it is often seen as a ‘window’ onto the palaeo-environment. The limited presence of peat across the site, as detailed in **Chapter 10: Hydrology, Hydrogeology & Geology**, means there is limited potential for environmental or organic deposits to survive. Climate change could affect any natural forming peat deposits leading to the destruction or limitation of paleoenvironmental evidence. This might result in the loss of previously unrecorded cultural heritage assets. The ongoing land use would potentially limit further peat growth and retention due to the repeated burning of heather as part of the land management strategy for recreational shooting.
- 7.5.50 Other impacts of climate change on buried remains might result from increased rainfall and fluctuating temperatures, with the sequence and frequency of natural soil saturation and desiccation changing the preservative conditions. This might result in damage or loss of organic artefacts. For upstanding remains, such change has the potential to result in increased water penetration, which may then cause/accelerate erosion/decay of historic fabric.
- 7.5.51 Notwithstanding the above, it is considered that the description of the baseline conditions remains robust for purposes of this assessment, and that it allows for a robust assessment of the impacts of the proposed development on cultural heritage.

7.6 Assessment of Potential Effects

Construction Effects

Embedded Measures

- 7.6.1 The assessment of potential direct impacts on heritage assets is based on the maximum likely impact that could be caused by the proposed development. The layout design of the proposed development has undergone a number of revisions to avoid impacts, including avoidance. Impacts are considered with due regard to embedded mitigation measures.
- 7.6.2 Direct impacts would comprise any groundworks or other ground disturbance undertaken as part of the construction phase of the proposed development. Specific activities which have the potential to cause impacts through the construction phase of the proposed development include the excavation of wind turbine foundations,

substation and battery energy storage system compounds, crane hardstands, borrow pits and cable trenches. This will also include the construction and maintenance of access tracks, laydown areas and working compounds.

- 7.6.3 Where ground disturbance takes place, these activities would remove, truncate or change any heritage assets located within the area of ground disturbance. Damage to heritage assets caused in this way would be permanent and irreversible.
- 7.6.4 With regard to the scheduled monuments Glenburnie, Fort (SM4473), Longcroft Hill, Homestead (SM4480), and Longcroft, Fort (SM372), a buffer of 500m around each asset has been embedded into the design to ensure that no direct physical impacts would occur to these assets.
- 7.6.5 With regard to setting (operational) effects, as detailed in **Chapter 2: Design Evolution & Alternatives**, mitigation through design has been implemented. This has been shown through turbine deletion and relocation to limit turbine stacking and infringement on the relationships between assets.

Potential Effects

- 7.6.6 Taking account of the embedded design mitigation, and with reference to **Figure 7.1**, it is predicted that the proposed development would have a direct impact on the assets outlined in **Table 7.7**.

Table 7.7: Potential Direct Impacts

Asset	Infrastructure	Cultural Heritage Significance	Magnitude of Impact	Significance of Effect	Proposed Mitigation
Road (SLR16 and SLR18)	Access tracks	Low	Low Adverse	Very Minor	No mitigation proposed
Road (SLR17)	Access Tracks	Low	Medium Adverse	Very Minor	No mitigation proposed
Linear Earthwork/ Quarry (SLR57)	Access Track	Low	Low Adverse	Very Minor	Watching Brief
Linear Earthwork (SLR36)	Access Tracks	Low	Low adverse	Very Minor	Watching Brief

Residual Construction Effects

- 7.6.7 The completion of the archaeological mitigation programme outlined above would offset direct adverse impact upon archaeological remains. Any harm caused to buried remains as a result of ground disturbance during construction would be offset to some degree by the benefits provided through the information gained during the archaeological investigation and reporting process. Any significant impacts identified in relation to buried archaeological remains should be considered in this context.

Operational Effects

Glenburnie, Fort (SM4473)

Description

- 7.6.8 The fort is comprised of two dry stone enclosed walls at the peak of the knoll where the monument sits, measuring 95m by 45m. Located >10m to the south-east are the main manmade defences of the monument comprising two grass covered stone ramparts and an earthen ditch beyond. Within the south-eastern defences there is a small square enclosure believed to be a guard tower which would face southward to Longcroft, Fort (SM372).
- 7.6.9 The fort is a promontory hill fort defined as: ‘sites set on promontories e.g., between a river valley and an affluent and in which the principal line or lines of enclosure are drawn across the easiest access’ (Ralston, I. (2016). This can be seen reflected in the ramparts to the south-east of the asset, enclosing the fort on the knoll it is situated upon.

Significance

- 7.6.10 As a scheduled monument, the fort is of high significance due to being protected at national level. The earthwork and archaeological preservation of this asset has the ability to contribute to our ability to understand the defensive nature and function of the watchtower. The composition of the prominent ramparts located on the south-east also have the ability to increase the understanding of construction methods in the Iron Age and the fort’s relationship with other forts in the area (SM372). Whilst the asset is not as prominent as Longcroft, Fort (SM372) it encompasses a particular northern point of the valley and may be an outpost related to the larger forts in the area.
- 7.6.11 In addition to archaeological interest, setting also contributes to the cultural significance of the asset through providing a topographic and geographical understanding of the earthworks and remains.

Contribution of Setting to Significance

- 7.6.12 The asset sits on Wallace’s Knowe, a small knoll that sits atop a spur of Hogs Law at 230m above ordnance datum (aOD). To the south-east of the asset, Hogs Law rises sharply from the knoll of Wallace’s Knowe going from 230m aOD to 400m aOD. The asset is surrounded by steep slopes apart from its approach to the south-east where its main defences lie with the gatehouse. The other sides of the asset are steep sided with the confluence of Wide Cleugh and Whalplaw Burn, the latter situated in a flat valley floor which would have been a main routeway up the valley.
- 7.6.13 Views to the south show that visibility with SM372, would have been an important factor in the defence of the fort, with SM372 being a larger and potentially more fortified location. Intervisibility is also shared with Longcroft Hill, Homestead (SM4480), adding to the Iron Age landscape and contributing to the significance of Glenburnie Fort. This significance can be shown in the shared intervisibility between the assets (**Figure 7.4**). The positioning of the fort in this location shows it was there to monitor movement along Whalplaw Burn and with a watch tower likely used for the defence of both the fort and homestead located 0.6km south-west.
- 7.6.14 The upland landscape which surrounds the fort is largely undeveloped, with a single trackway running north-south up the valley and views to the wider Lauder Valley beyond remaining intact with little modern intrusion.
- 7.6.15 Third points of appreciation can be found through the intervisibility shared between SM372 and SM4480. This intervisibility can contribute to the understanding of the defensive settlements of the valley and the shared value to the economy during this period.

Development Effects

- 7.6.16 The proposed development would introduce 19 wind turbines upon the summit and crests of the hills that comprise the south-eastern spurs of the Lammermuir Hill Ranges. Notably, Longcroft Hill, Peat Law, Riddel Law and Hogs Law. The closest of these, T4, is situated 0.5km to the north-east of the asset. Analysis of the ZTV and Photomontage suggests that 18 of the 19 proposed turbines would be visible from the asset (**Figure 7.3 and 7.7**).
- 7.6.17 As outlined above the factors which contribute to the significance of Glenburnie, Fort which may be impacted by the proposed development is the ability to appreciate, understand and experience the contemporaneous relationship between the asset and SM372 and SM4480.

- 7.6.18 The ability to appreciate the relationship between the asset and the valley above which it sits and which it controls is a key contributor to the asset's significance, as the most northerly known defensive fort in this particular valley. Whilst 19 wind turbines would be visible, it is T1, T4, T18 and T19 which could cause the most encroachment on the asset and distract from the ability to appreciate and experience these relationships.
- 7.6.19 Mitigation through design has occurred with respect to the southern wind turbines as outlined in **Chapter 2**. The removal of previously identified T3 and T5 of the scoping layout and the movement of T18 further north-east has also benefited the asset by limiting encroachment. Further mitigation by the movement of T8, T18 and T21 was also addressed. An initial 500m buffer was placed on the asset to limit any direct impacts on the assets itself and any associated archaeology, this buffer was also to limit any initial encroachment into key views from the outset of the design process. Given the nature of the topography, it is unlikely to reduce impact by the proposed development completely, and as such certain wind turbines still have the potential to distract from the relationship between the monument, its contemporaneous relationships and the landscape which surrounds it. T1, T4, T18 and T19 still stand pronounced which as a result may cause an erosion of the ability to appreciate such aspects of the asset's setting that contribute to its cultural significance.
- 7.6.20 Views along the valley would remain, as well as the intervisibility between SM372 and SM4480. These views are key contributors to significance and have been retained. However, the introduction of T18 and T19 would significantly distract from the ability to appreciate these relationships. The relationship with the valley of Whalplaw Burn, whilst still intact could result in a feeling of envelopment by the proposed development which would distract from key contributors to the asset's significance.
- 7.6.21 In reference to **Table 7.4**, as an asset of high significance, the proposed development has the potential to considerably distract from key relationships which contribute to the significance on the asset. As such this would result in a Medium/High magnitude of impact resulting in a Moderate/Major significance of effect.
- Longcroft Hill, Homestead (SM4480)**
- 7.6.22 The asset is a scooped homestead dating to between 1000BC and 0BC. The homestead consists of a roughly oval scoop with a broad, high bank on the downhill side. Whether this bank continued around the scoop or not is unclear. To the south-west, and at a higher level than the main scoop, are two smaller scoops which overlie the supposed line of the enclosure bank. The entrance to the homestead is within this bank on the south-east. A drystone wall that was likely a boundary for a field system sits 9m south-east of the entrance and runs for 30m north-east - south-west.
- 7.6.23 The homestead sits on the eastern flank of Longcroft Hill at 246m aOD and above Whalplaw Burn (0.1km to the east). Situated on a raised elevation above the watercourse, the burn would have provided a significant water source for crops and the residents that lived there. The asset is contemporaneous with other settlements in the area (SM372 and SM4473). There is a visual relationship primarily between SM4473 and SM4480 as there is a clear line of sight between the two, Glenburnie likely being a source of defence for the homestead. Situated on the eastern flank would have been a clear point of location for crop growth and to utilise the sunlight with views over the east and south.
- 7.6.24 Whilst the landscape remains largely unaltered, commercial forestry has been grown in small clusters in the immediate area to the south (50m) and to the north (0.2km and west (0.3km). The introduction of the proposed development in the area would be in the form of all 19 wind turbines being visible from the asset. Located 0.5km from the asset, the closest turbine is T19 (**Figure 7.3** and **Figure 7.8**)
- 7.6.25 The key factor which contributes to the assets significance is its contribution to the understanding of prehistoric scooped settlements within a wider Iron Age landscape. The monument has the potential to further the understanding of the economy and development of such a rich Iron Age landscape in the region surrounding Leader Water. Whilst the proposed development would be visible, impact would be focussed on the ability to appreciate and experience the relationship between the asset and SM4473, as the later was a clear line of defence on the homestead. The introduction of wind turbines behind Glenburnie Fort would impact the visual relationship between the two as a community connection distracting from this relationship.
- 7.6.26 The proposed development would result in a comparatively modest level of effect upon one element of setting contributing positively towards an understanding of the asset. A medium adverse magnitude of impact would be anticipated in the worst instance, resulting in an overall Moderate level of effect which is considered Significant in EIA terms. The operation of the proposed development would not result in such a high level of impact that it would adversely affect the integrity of the asset's setting such as its relationship with Whalplaw Burn or the contribution of its archaeological remains to our understanding of society during this time period.

Longcroft, Fort (SM372)*Description*

- 7.6.27 Longcroft Fort is a multiphase hillfort comprising of two inner most ramparts, likely dating to the same period, which are then succeeded by a third rampart. Oval in shape, the hillfort has three entrances, one to the east, south-west and north. Whilst the entrances to the east and south-west are clear in plan, the northern is more obscure (Canmore Photo: DP 225492). It shows the entrance as being offset in a zig zag pattern, likely a form of defence, as the approach to the north looks along the ridgeline of Longcroft Hill, most likely the main approach to the monument. Internal to the fort, there are lengths of internal stone walling, likely the remains of hut circles.
- 7.6.28 In relation to paragraph 7.6.9, the fort is of a promontory classification, as demonstrated by its focal point on the southern spur of Longcroft Hill.
- 7.6.29 To the south of the scheduled area, within one of the hut circles, a memorial has been erected dating to 2000.

Significance

- 7.6.30 As a scheduled monument, the fort is of high significance due to being protected at national level. The earthwork and archaeological preservation of this asset has the ability to contribute to our ability to understand the defensive structure of the watchtower. The composition of the fort has the ability to increase the understanding of large communities during the Iron Age and the fort's relationship with other forts in the area (SM362 and SM4480).
- 7.6.31 In addition to the archaeological interest of the site, setting also contributes to the cultural significance of the asset through providing a topographic and geographical framework within which to understand the earthworks and other remains. As well as this, the relationship with other assets in the region forms part of the monument's significance.

Setting

- 7.6.32 The fort is situated on the southern spur of Longcroft Hill at 350m aOD, above the confluence of Soonhope Burn and Whalplaw Burn. The fort has clear views to the southern valley along the Cleekhimin Burn out to the wider Leader Water valley.
- 7.6.33 The asset has near 360° views of the valleys which it controls, with subsequent monuments that also feature in them, forming a network of defensive structures of which Longcroft forms part of a central cluster. This central cluster includes Longcroft, Fort (SM372), Addinston, Fort (SM362), Hillhouse (SM4627) and

Blackchester, Fort (SM364). These forts are some of the largest and most heavily defended in the area and the presence of their multiple ramparts and often their multiple phases indicate they were likely economic centres. Intervisibility between the assets is a key aspect of Longcroft Fort's setting. Notably to the north-east, Longcroft has clear views of Glenburnie, Fort (SM4473) located to its north-east by 1.5km and vice versa.

- 7.6.34 Similarly, views to and from the following forts allow for an appreciation of Longcroft Fort: Addinston, Fort (SM362) (1.1km to the south-east), Bowerhouse, Fort (SM365) (5km to the south-east), Tollis Hill, Fort (SM380) (3.9km to the north-west) and Blackchester, Fort (SM364) (4.5km to the south-east). These views contribute to the group value of the forts, and preserve a sense of the local settlement pattern. This is supplemented by the proximity of the following assets; whilst not defensive in nature and not all sharing intervisibility, they do date to the same period and are likely contemporaneous with the fort:
- Soonhope, Homestead (SM4476);
 - Hog Hill, Settlement (SM4481);
 - Longcroft, Homestead (SM4480); and
 - The Howe, Settlement (SM4595).
- 7.6.35 A post medieval farmstead and buildings have been erected 0.4m to the south of the asset at the base of Longcroft Hill and a dry stone wall likely dating to a similar period runs adjacent to the scheduled area. 20 wind turbines of Fallago Rig Wind Farm can be seen from the asset in the background behind SM4480 which is located 6km to the north-east. Equally, four of these wind turbines can be viewed behind Longcroft Hillfort from the A697, a third point of appreciation of the fort (**Figure 7.5**).
- Contribution of Setting to Significance*
- 7.6.36 Not all aspects of a heritage asset's setting will contribute to its cultural significance. Some aspects will be neutral, others may detract. The following aspects of the setting of Longcroft Hillfort are considered to contribute to its cultural significance:
- the complexity of the fort itself and its multiphase construction which assist in understanding the archaeological remains of the monument, in their demarcation of spaces;
 - Longcroft Hill itself whose slopes elevate the asset and provide for topographic advantage over the adjacent valley floor - affording the asset the ability to monitor localised movement for the possible purposes of defensibility;

- The valleys of the waterways surrounding Longcroft Hillfort, (Whalplaw Burn, Soonhope Burn and Cleekhimin Burn); the asset utilises the natural landscape and the channel which it creates. The asset's location creates a natural funnel which would assist in the control and defence of the area; and
- Surrounding designations (7.6.35) contribute to the significance of the asset in a way that has the potential to increase the understanding of community and landscape control during the Iron Age.

7.6.37 The following aspects of the setting of Longcroft Fort are considered to detract from its cultural significance:

- Fallago Rig Wind Farm.

7.6.38 The following aspects of the setting of Longcroft Fort are considered to have a neutral effect upon its cultural significance:

- the surrounding agricultural land, including the post-medieval and modern farmsteads, and the minor roads connecting them.

Development Effects

7.6.39 The addition of the proposed development in the landscape with respect to Longcroft Hillfort would introduce 19 wind turbines to the surrounding hill of Longcroft. With the closest T19, being 0.8km to the north (**Figure 7.2**). The key contributors to the asset's significance such as its relationship with the assets in the valley and its defences, particularly to the south of the monument along Soonhope Burn and Cleekhimin Burn, would remain intact as would the shared intervisibility with other assets such as Addinston, Fort (SM362) and Blackchester, Fort (SM364). The primary point of impact from the proposed development would be its distraction from the ability to appreciate its relationship with Glenburnie, Fort (SM4473), this distraction, particularly from the northern entrance, would distract from the group value the two forts derive from one another within the context of the valley of Whalplaw Burn. Whilst this distraction has the potential to significantly impact the asset, the views to the south will remain intact down Cleekhimin Burn and across the Lauder Water valley. Mitigation through design has occurred in the scattering of wind turbines behind Glenburnie, Fort (SM4473) as outlined in **Chapter 2**, to limit the distraction from the appreciation of the relationship between the two assets.

7.6.40 The proposed development would have the potential to impact upon one element of setting contributing positively towards an understanding of the asset. A medium adverse magnitude of impact would be anticipated in the worst instance, resulting in an overall Moderate level of effect which is considered Significant in EIA terms.

Addinston, Fort (SM362)

7.6.41 Addinston Fort measures 82m by 50m and the fort is made up of a double rampart defensive structure with internal hut circles. The ramparts are impressive in scale, being as deep as 33m in some cases, with a further bank to the south. The fort has cut into the crest of the spur with its ramparts being visible from over 3km away at Blackchester, Fort (SM364).

7.6.42 Situated on the south-eastern spur of Addinston Hill at 310m aOD, the asset shares intervisibility with Longcroft, Fort (SM372), Hog Hill (SM4481) Blackchester, Fort (SM364) and Bowerhouse, Fort (SM365). The topography of the asset is purposeful in allowing it to monitor movement to the north-east over the confluence of Whalplaw Burn and Soonhope Burn as well as to the south-west, looking out over the Cleekhimin Burn and its confluence with Leader Water. Overlooking the Cleekhimin Burn the asset has clear views to the south across the Leader Water valley both to the north and south. The flat valley floor of Leader Water allows the fort to have long distance views as far south as Salt Moor, 10.2km to the south along Leader Valley.

7.6.43 Located 0.6km to the north-east is the hamlet of Longcroft and associated buildings with Addinston farmstead to the south of the asset by 0.4km. Two wind turbines of the operational Fallago Rig Wind Farm can be seen over Longcroft, Fort (SM372) (**Figure 7.5**). The proposed development would introduce all 19 wind turbines to the north of the asset with the closest turbine being T19, 1.8km to the north-east (**Figure 7.3** and **Figure 7.6**).

7.6.44 The introduction of the proposed development would sit on the periphery of views to the south-east and would cause a minor infringement on these views and the ability to understand, appreciate and experience the defensive nature of this fort. However, views to Hog Hill (SM4481) and, more importantly, Longcroft, Fort (SM372) would be altered significantly in terms of distraction in the landscape. The views from Addinston to Longcroft are key in understanding how these two large centres would have operated and while this cannot be truly understood without archaeological investigation, their spatial proximity might indicate that these were large hubs in the area and central to the community.

7.6.45 The introduction of the proposed development behind Longcroft Fort would create a level of distraction that would alter the appreciation and experience of the relationship between these defensive structures. With that in mind, the relationship between the two is only one contributing factor of the asset's significance, which also include its setting to the south and north as well as its archaeological potential in enhancing our understanding of the forts uses and sequence of construction.

7.6.46 It is therefore anticipated that as the asset is of high importance, with a minor erosion to its cultural significance, the magnitude of impact would be Medium resulting in a significance of effect of Moderate.

Hillhouse Grouping

7.6.47 The assets within the grouping of Hillhouse are all assets which occupy defensive positions based on their location within the valley of Kelphope Burn. All assets are situated just off the summits of spurs of the Addinston Hill range and are situated varying at similar heights to those summits, between 300m - 377m aOD.

7.6.48 Many of the assets share intervisibility with one another and this is a key point of significance to the assets in the area, creating group value.

Tollis Hill, Fort (SM380)

7.6.49 The monument comprises the remains of a prehistoric fort with a single rampart and ditch. The earthwork spans 90m in diameter with the entrances to the west and north. The interior contains a number of features including several enclosures which may relate to the occupation of the fort in the prehistoric period.

7.6.50 The monument is situated on the summit of Tollis Hill with steep sides all around, apart from to the east of the asset where the land levels on the crest of the hill. The asset shares intervisibility with Dodcleugh, Fort (SM4478) located to the south by 1.7km. It also shares intervisibility with Longcroft, Fort (SM372) (4km to the south-east) and Bowerhouse, Fort (SM365) (7.5km to the south-west). This intervisibility, in line with the defensive nature of the fort, is a key aspect of its setting and thus its cultural significance. The fort is contemporaneous with the following assets which make up the Iron Age grouping within the valley:

- Tollishill Dod, Homestead (SM4598)
- Tollishill Dod, Homestead (SM4616)
- Hillhouse, Fort (SM4627)
- Dodcleugh, Fort and Settlement, (SM4478)
- Dodcleugh, Homestead and Enclosure (SM4479)
- Kelphope, Settlement (SM4556)

7.6.51 The fort was previously covered by a commercial conifer plantation and some trees remain adjacent to the scheduled area, potentially disrupting archaeological remains still there. This conifer plantation currently obscures visibility to the south of the asset along Kelphope Burn. Tollishill farmstead is located 0.1km to the south-east of the asset with an unnamed road that runs up the valley that the fort defends.

7.6.52 As per **Figure 7.3** and **Figure 7.15**, the proposed development would introduce 19 wind turbines to the area with the closest being T17 (2.6km away). The proposed development would remain on the fringes of the asset's setting, Kelphope Burn and thus the ability to appreciate, understand and experience the monument and its defence of this valley would be preserved, as would the asset's relationship with other monuments in the valley. The main change would be to the views to Longcroft, Fort (SM372) and the distraction from the ability to appreciate that relationship. However, given that the commercial forestry currently obscures this view, it cannot be appreciated at present.

7.6.53 Taking into consideration what is outlined above, with the asset being of high cultural significance, it is predicted that the asset would have a magnitude of impact of Low resulting in a Minor significance of effect.

Tollishill Dod, Homestead (SM4598)

7.6.54 A scooped homestead that is circular in plan, spanning 27m by 25m and enclosed by a bank which stands to 0.5m. Part of the north-eastern bank has been destroyed by a dry stone wall. The entrance to the homestead is on the south-east, possibly to allow the occupants to monitor the valley and also to make best use of the daylight.

7.6.55 Situated above the confluence of Kelphope Burn and an unnamed watercourse that transect southwards down the valley, the asset is located at 300m aOD above the flood plain of the burn. The location of the homestead would have been to utilise the sunlight and water for crop growth as well as views down the valley for defensive purposes. The asset is 0.4km to the south of Tollis Hill, Fort (SM380), which would have been a main point of defence for the people that lived within the homestead. As listed in section 7.6.9 and 7.6.47, the asset sits within a rich Iron Age landscape which contributes to the significance of the monument. The asset shares intervisibility with Dodcleugh, Fort (SM4478).

7.6.56 At present a modern trackway transects the monument and is located 50m from a c-class road used for access to the modern housing in the area. The proposed development would introduce 16 of the proposed wind turbine tips to the area (**Figure 7.3**). Whilst the proposed development would be visible from the asset, the wind turbines remain on the periphery of views from the asset and out of the views from the asset to Dodcleugh, Fort (SM4478). It is predicted that the magnitude of impact would be None resulting in a significance of effect of Nil.

Tollishill Dod, Homestead (SM4616)

7.6.57 A scooped homestead measuring 40m by 35m enclosed by a bank and shallow ditch. Situated on the southern slope of Tollishill Dod, the homestead overlooks the valley of Dod Cleugh Watercourse. The monument is situated in a rich Iron Age landscape as outlined in 7.6.8 and 7.6.48 and shares intervisibility with Dodcleugh Homestead and Enclosure (SM4479) located south-east of the asset by 0.2km. The entrance to the asset is situated on the west of the monument above the steep south-western face of Tollishill Dod.

7.6.58 The location of the homestead indicates a more defensive nature than that of SM4598, with an increase of height (350m aOD) and distance from the watercourses and floodplains. The intervisibility shared between SM4479 also shows this with a clear point of defence in the valley indicating that this may have been a main routeway to the higher ridgeline of the spur that Tollishill, Hog Hill and Addinston Hill form. The HER indicates that the settlement occupied the span of the gentler southern slopes which would have been used for cultivation (HER: 55988), with the homestead to the north above.

7.6.59 At present, there is the modern development of Dodcleugh 0.2km to the south, with deciduous forestry encasing the property. Located 0.4km to the south-east are clusters of commercial conifer plantations, located behind SM4479. The introduction of the proposed development would introduce 19 wind turbines into the landscape with the closest wind turbine being T17, located 1.7km away (**Figure 7.3**).

7.6.60 The proposed development would not change the contribution of the agricultural elements of the asset's setting to its significance such as HER:55988, nor its relationship with the valley surrounding the asset. The proposed development would infringe on the relationship between the asset and SM4479 however, appearing behind the asset and the crest of the hill beyond. This infringement would be a distraction from the relationship between these assets. As a single contributor to the asset's significance which would help enhance the understanding of the relationship

between communities in this period, the introduction of the proposed development would be limited to impacting this single factor.

7.6.61 As such the magnitude of impact would be low adverse, which would result in a significance of effect of Minor.

Dodcleugh, Homestead and Enclosure (SM4479)

7.6.62 An oval in plan homestead spanning 30m by 25m with an enclosure 40m to the south-west located beside an unnamed burn which flows into the Dod Cleugh. The enclosure measures 25m by 16m and was likely used for agricultural purposes due to its proximity to the burn; this would either have been for grazing animals or improvement and arable.

7.6.63 The monument is located on the north-western slope of the spur that leads to Hog Hill, opposite Tollishill Dod. Overlooking the confluence of Dod Cleugh and the unnamed burn which runs through the scheduled area of the monument, the asset likely utilised the watercourses for agricultural purposes. The asset shares intervisibility with SM4616 and can be appreciated from that asset. As outlined in 7.6.60, the proposed development would appear above the asset, though the proposed development is not predicted to be visible from the asset as shown in **Figure 7.2.2**. As such there is a point of appreciation being from SM4616. This appreciation would be eroded minimally from SM4616, while the asset's archaeological value and the key contributing aspects of setting to the asset's significance would remain, including its relationship and views to SM4616.

7.6.64 The magnitude of impact on the asset is Nil with a significance of effect of None, due to the erosion being on the significance of SM4616 as covered in 7.6.61.

Dodcleugh, Fort and Settlement (SM4478)

7.6.65 A promontory fort and associate settlement, Dodcleugh measures 155m by 66m with a double rampart located on the eastern side surviving to 2.5m high. Based on DP225484 and ground conditions, the ramparts appear to have extended in a circular formation, though not extending to the limit of the promontory. Whilst the spur is a natural form of defence this may indicate that there were further hut circles or remains in the west of the area.

- 7.6.66 Located on a spur above Hazeldean Wood, the asset overlooks the Kelphope Burn Valley with views to the north and south. Situated at 350m aOD, the asset shares intervisibility with SM380, SM4627 and SM365. These points of intervisibility are key contributors to the setting of the asset as they enhance the understanding of community in the Iron Age. The spur is bracketed by two burns, north and south which flow into the Kelphope Burn, providing additional defence to the steep sides of the spur. The monument overlooks the valley of Kelphope Burn and its key approaches.
- 7.6.67 To the immediate south of the monument is a modern enclosure used for a shooting estate, and 0.1km to the east is a modern commercial conifer plantation obscuring views in that direction; a large scale access track for the forestry has also been constructed. The proposed development would introduce all 19 wind turbines to views to the east of the monument. Located 1.5km to the east, T17 would be the closest to the asset.
- 7.6.68 Despite the wind turbines being predicted to be fully visible from the asset, the proposed development would not infringe on any key views from the asset and would not obstruct any intervisibility between the assets. They would introduce a minimal addition of tips located behind the asset, and this would not impact the ability to understand, appreciate and experience the monument or its relationships with the valley and other associated assets.
- 7.6.69 As such the magnitude of impact is predicted to be Very Low equating to a significance of effect of Very minor.
- Hillhouse, Fort (SM4627)*
- 7.6.70 Measuring 80m by 45m internally, the fort is multi-vallated, resulting in a significant increase in size, due to its four ramparts that span to the north and south above the spur it sits upon. The asset is strategically defended by its ramparts to the west and south, and the northern approach, likely where its entrance lay, is heavily defended by at least three ramparts; due to ploughing these have been eroded, and the fort has also been damaged by medieval quarrying and ploughing.
- 7.6.71 Situated on the southern step of Ditcher Law (302m aOD), the fort overlooks the confluence of Hillhouse Burn and Kelphope Burn, looking south onto Leader Water Valley. The asset shares intervisibility with key hubs in the area such as Burncastle, Fort (SM4365) and Blackchester, Fort (SM364). The asset also shares intervisibility with SM4478, to the north up the valley of Hillhouse Burn. As well as this, intervisibility is shared with Hog Hill, Homestead (SM4481)
- 7.6.72 Hillhouse Farm is located 0.1km to the south of the asset, with a c road cutting over the stepped spur to the south, which overlooks the confluence of the two burns. The

proposed development is predicted to introduce all 19 wind turbines to the east of the asset. The closest wind turbine being T19 at 2.8km away, as shown on **Figure 7.3**. The introduction of the proposed development to the east would alter peripheral views both to and from the asset and the associated assets. There would be minor distraction to the east, however, this would not infringe on the ability to understand, appreciate or experience the monument, nor it's relationships with SM4478, SM4365 or SM364.

- 7.6.73 As such, the magnitude of impact would be Low resulting in a Minor significance of effect.

Development effects on Grouping

- 7.6.74 The individual settings of the assets within the grouping, as outlined in their relevant sections, contribute to their significance. However, there is an added contribution from their group value as outlined by HES in their designation listings for the above assets:
- "Its importance is increased by the proximity of several other sites of similar date which, taken together, have the potential to greatly increase our understanding of the settlement, economy and development of the landscape in the Iron Age in this area."* (SM4478, HES).
- 7.6.75 The assets within the grouping have the potential to further the understanding and appreciation of the complexity of the Iron Age society in this area and this is shown in the complex matrix of shared intervisibility between the assets (**Figure 7.4**).
- 7.6.76 Visibility from the proposed development would create a level of distraction from key views between the monuments, particularly where the wind turbines would appear behind assets such as SM4616. However, the key focus of these assets is the Hillhouse Burn and its centrality to this particular valley and the intelligibility of that focus would be preserved. The ability to understand, appreciate and experience this relationship and the relationships between the individual assets within the grouping would also largely be preserved.
- 7.6.77 As such, the magnitude of impact on the asset group as a whole would be Low resulting in a significance of effect of Minor.

Hog Hill, Settlement (SM4481)

- 7.6.78 Situated amongst rough pasture, the monument comprises of a scooped settlement measuring 38m by 36m, enclosed by a modern drystone wall. The entrance of the asset lies to the south-west which abuts a circular platform settlement. Situated on the southern slope of Hog Hill, the monument sits at 350m aOD above Hope Burn and its confluence with Soonhope Burn to the south-east. The asset shares intervisibility with Longcroft, Fort (SM372), 1km to the east and Addinston, Fort (SM362) 1.2km to the south. The views along the Hope Burn to the north are shielded topographically and therefore indicate that any defensive nature to this asset relates to views down Hope Burn and towards SM372, and not northwards.
- 7.6.79 A modern enclosure used for the estate has been erected 30m to the north-west of the asset and commercial forestry sits 0.3km to the south on the opposite side of Hope Burn. The forestry likely obstructs any views to and from SM362.
- 7.6.80 The proposed development would introduce five of the proposed wind turbines to the north-east of the asset, with the closest being T19, 1km away. The wind turbines would be visible on the periphery of views shared with Longcroft, Fort (SM372) and as such would not interrupt the intervisibility shared between them. All other contributors of significance in relation to setting, such as the assets relationship with the valleys of Hope Burn and Soonhope Burn would remain. Due to the asset not being visible from any other assets to the west the proposed development would not appear behind the asset and impact its appreciation.
- 7.6.81 As such the magnitude of impact would be Nil resulting in a significance of effect of None.

Blackchester, Fort (SM364)

- 7.6.82 Blackchester is a prehistoric contour hill fort located on a north-east facing hilltop ridge. The hillfort utilises the steep rocky sides of the ridge to act as ramparts, with the south-east side of the fort exhibiting signs of being enhanced for further defence. There appears to be a single rampart at the south-west of the fort and two ramparts, spaced 50m apart on the north-eastern side. Due to the spacing of the ramparts, it is believed that there were at least two phases of construction. There appears to be an entrance at the south of the fort, with the interior being featureless. The fort itself appears to have been partially damaged by cultivation, quarrying and the presence of trees.

- 7.6.83 The asset derives part of its significance from its archaeological value, with excavation having the potential to further our understanding of Iron Age society, defensive structures and construction methods.
- 7.6.84 As previously stated, the asset is situated on a north-east facing ridge of an unnamed hill. Leader Water runs approximately 1km north-east of the asset, with minor burns, including Mid Burn, running through the intervening landscape. Leader Water has formed a valley through the landscape, with the fort overlooking this valley. Cleekhimin Burn, an offshoot of Whalplaw Burn, joins Leader Water. The fort is situated at 230m aOD, with there being lower ground in the valley to the north-east and higher ground rising to the south-west, towards Inchkeith Hill and Scroof Hill.
- 7.6.85 The asset's ridge setting contributes to its significance, with the asset utilising both the natural topography as a defensive feature and the asset's prominence above the valley providing a defensive position. The asset would be prominent in views when approaching along the valley, as well as having wide-ranging views along the valley out from the asset. The inhabitants of the fort would have utilised this position to command the valley and control access across that part of the valley. The position of the asset at the conjunction of Cleekhimin Burn and Leader Water suggests that this joining of two valleys was the main focus of the asset.
- 7.6.86 The asset is situated within a wider landscape of prehistoric assets, with multiple Iron Age hill forts within the surrounding landscape. The closest asset is Bowerhouse, Fort (SM365), located c.1.7km to the west. Both Blackchester and Bowerhouse Fort share the same focus of Leader Water to the north-east and would share intervisibility.
- 7.6.87 To the north-east of the asset, lining either side of Cleekhimin Burn are Addinston, Fort (SM362), Longcroft, Fort (SM372) and Glenburnie, Fort (SM4473), located c.3.5km, c.4.7km and c.6.2km from the asset respectively. These assets share the same focus of Cleekhimin Burn and the associated valley, likely commanding access along it and sharing intervisibility. In addition, the asset shares visibility with Hillhouse, Fort (SM4627), which commands the conjunction of Hillhouse Burn, Kelphope Burn and Leader Water and is located c.5km to the north of the asset. In addition, the asset shares intervisibility with Burncastle, Fort (SM4656) and Dabshead Hill, Fort (SM4657), which straddle and command the entrance to the Earnscleugh Water Valley, c.3.5km east of the asset.

- 7.6.88 This wider prehistoric landscape contributes to the significance of the asset. Further spatial analysis has the potential to further enhance our understanding of prehistoric society, communication, defensive structures, and defensive networks. The assets, especially those that share the same setting focus, may have been part of a network of forts controlling access through the landscape.
- 7.6.89 There is some modern development within the surrounding landscape. The A68, a major route, passes through the Leader Water Valley c.0.9km to the east of the asset, with an unnamed single-lane road located c.75m to the west of the asset. The surrounding land is mainly agricultural in nature, with multiple small farmsteads and settlements throughout the surrounding landscape, with the closest being Blackchester cottage directly to the south and Midburn farmstead, c.0.8km to the north. A telecom mast is located to the south-west of the asset. As previously stated, the asset is covered with a plantation of historic deciduous trees, screening views from the asset in all directions, and is enclosed by a stone wall on all sides.
- 7.6.90 The ZTV indicates that all 19 wind turbines and 19 wind turbine hubs of the proposed development would be visible from the asset, with the closest wind turbine being T4, located c.5.4km north-east of the asset.
- 7.6.91 The proposed development would be peripheral in views to and from the asset from Bowerhouse Fort, Hillhouse Fort, Burncastle Fort and Dabshead Fort. As such, the wind turbines would form a minor distraction at most to the ability to understand, appreciate and experience their connection within the landscape.
- 7.6.92 The proposed development would be peripheral in approaches along Leader Water towards the asset and would be to the rear of the viewer when approaching the asset along the majority Whalplaw Burn valley. Whilst the proposed development would be present in views from the asset towards both the burn and the larger river, the proximity of the confluence to the asset itself would mean that these views would be distant and minor. As such, the proposed development would be a minor distraction to the ability to appreciate, understand and experience the connection of the asset to its positioning at the confluence of Cleekhimin Burn and Leader Water.
- 7.6.93 The wireline (**Figure 7.13**) shows that the proposed development would be present within views to Addinston Fort, Longcroft Fort and Glenburnie Fort, located to the north-east. The proposed development would form a backdrop to views of these forts and would impact the ability to experience the connection between the hillforts, their setting and each other.
- 7.6.94 However, the wireline is based upon a bare earth model, ignoring the presence of any vegetation or built environment that may be present within this view. As **Plate**

7.1 shows, the views to the north from the asset are completely obscured by historic deciduous forestry. This demonstrates that these views towards the proposed development are no longer possible, and as such the proposed development would not impact the ability to experience the connection between the hillforts, their setting and each other.

- 7.6.95 As a Scheduled Monument, the asset is considered to be of high cultural heritage significance. The magnitude of impact is anticipated to be Low Adverse, and as such, the significance of effect is Minor.

Plate 7.1 - View from inside Blackchester Fort towards proposed development.



Borrowston Rig, Earthwork (SM4655)

- 7.6.96 The asset comprises a linear earthwork, up to 3m wide and 0.6m high with a line of continuous pits along the north side, aligned north-west to south-east and two hut circles identified at the south-east end. The two hut circles, c.10m in diameter, lie immediately to the east of the south-east end of the bank. As the asset remains largely intact, it has the potential through investigation to provide further information about local Iron Age settlement, land division and use, and its relationship with the surrounding prehistoric landscape.
- 7.6.97 The asset's setting contributes toward its significance. The asset is situated upon the upper steep slopes to the south-east of the Earnsclough Water, below the Borrowston Rig, stone circles and cairns (SM359), where the land gently slopes to the south-east. The position of the asset provides views along the valley to the north-east, north-west and south-west, and access to the gentle slopes to the south-east. The Dabshead Hill fort and standing stone (SM4657) is located c.1.3km to the south-west along the same ridge on the south side of the valley and would be prominent and visible within the landscape from the asset, while the Burncastle Fort is located c.1.5km to the south-west on the northern side of the valley, directly opposite the Dabshead fort.
- 7.6.98 The asset's setting demonstrates its visual relationship to the forts to the south-west and its control over the Earnsclough Water and its valley from the upper slopes, and how the settlement would have been defended by the forts located on either side of the valley entrance. The approach to the asset is from Dabshead Hill, along the south ridge above the valley.
- 7.6.99 The asset is located c.2.3km to the south of T1, c.1.6km to the south of the site, and the ZTV analysis indicates that all 19 of the wind turbines would be visible from the asset.
- 7.6.100 The views from the asset to Dabshead Hillfort and Burncastle Fort and the views overlooking Earnsclough Water to the south-west and west would be unchanged by the wind turbines. The relationship and position of the asset with the topography of the landscape in these views and the views of the forts to the south-west would remain intact and the ability to understand, appreciate and experience these relationships would remain unchanged. The approach to the asset from Dabshead Hill faces to the north-east, with the proposed wind turbines within the periphery of this view to the north, and views from the asset to the north along the Earnsclough Water and its valley also include the proposed wind turbines within the background, across the valley.

- 7.6.101 The visibility of wind turbines within the views from the asset to the north and within the periphery of its approach infringes partially upon two contributing aspects of the asset's setting. This would cause a very low adverse magnitude of impact on the ability to understand, appreciate and experience these aspects of the asset's setting. As a scheduled monument, the asset is considered to be of high significance, the significance of effect would be very minor.

Borrowston Rig, Stone Circles and Cairns (SM359)

- 7.6.102 Borrowston Rig is a prehistoric scheduled monument, comprising a stone circle and at least four funerary cairns, potentially dating to the late Neolithic/early Bronze Age. The stone circle is oval in plan, measuring approximately 41m by 48m in diameter, with 14 surviving upright stones and at least 21 more under the topsoil.
- 7.6.103 There is a cairn directly to the north of the stone circle, on a broad natural platform, along with a mound interpreted as a potential further cairn. Three additional cairns lie within the surrounding area, with two located c.70m to the south of the circle and one located 0.5km north-north-west of the circle respectively. All cairns appear to be substantially robbed but do maintain some form and should have preserved archaeological remains.
- 7.6.104 The assets derive part of their significance from their archaeological value. Excavation on both the cairns and the stone circle has the potential to further our understanding of prehistoric rituals, ceremonies and funerary monuments. The surviving cluster of monuments is rare in the area and this rarity adds further to their significance.
- 7.6.105 The assets are located on high ground, near the peak of Borrowstone Rig Hill at approximately 350m aOD. The assets are not located at the highest point within the landscape, though Borrowstone Rig Hill is at a similar height to the surrounding hills, with Edgarhope Law to the north-east at 367m aOD and Dabshead Hill to the south-west at 382m aOD. This has created a plateau, named Edgarhope Moor, on which the assets occupy a central position. Earnsclough Water runs through a valley c.0.5km to the east of the assets, eventually joining the larger Leader Water c.4.6km to the south-east of the assets. The land is moorland, currently in use for grouse hunting and rough grazing.

- 7.6.106 The assets open moorland setting and position above the Earnscleugh Water valley contributes to its significance. The positioning of the stone circle and the cairns within the open moorland indicates that both visibility out from the assets and visibility of the assets when approaching from a distance may have been important. Cairns are often found along watercourses or natural pathways through the landscape, indicating that they may have acted as boundary markers or waymarkers as well as funerary monuments. The asset's position above Earnscleugh Water correlates with this belief and indicates that approaches along the valley may hold significance for the asset.
- 7.6.107 Furthermore, the views between the stone circle and cairns also contribute to the asset's significance as they provide the ability to appreciate the entire funerary complex.
- 7.6.108 The assets sit within a wider prehistoric landscape. Borrowston Rig linear earthwork and hut circles (SM4655) are located c.0.1km to the west of the stone circle. These earthworks and hut circles are believed to be late Bronze Age or early Iron Age in date. Dabshead Hill Fort and Standing Stone (SM4657) are located c.1.4km south-west of the asset, at the peak of Dabshead Hill. The hill fort is believed to be Iron Age in date, with the standing stone having been erected at the fort in the 19th century. The standing stone is cup-marked, and whilst its original position is unknown it may have originated from the Borrowston Rig assets.
- 7.6.109 Whilst the asset sits within a prehistoric landscape, it is unlikely that the surrounding assets are contemporaneous with the cairns and the stone circle. The placement of the later assets may have been informed by the location of the stone circles and the cairns, though they are not aspects of the setting of the asset which contribute to its significance. The standing stone at Dabshead Fort may be Neolithic in date, however, its original location is unknown and thus there is no discernible spatial connection.
- 7.6.110 There is some minor modern development within the surrounding landscape, with Burncastle Lodge and Burncastle hamlet situated in the valley to the east. Aerial photographs show a modern sheepfold directly to the south of the asset and a number of unpaved tracks running across the moor, with access to a variety of grouse butts. Fallago Rig Wind Farm is located c.6.4km to the north-east of the asset. This sparse modern development does not provide a distraction to the ability to understand, appreciate or experience the aspects of the asset's setting which contribute to its significance.
- 7.6.111 **Figure 7.3** indicates that all 19 wind turbines would be visible from the asset, with the closest wind turbine being T2 c.2km to the north-west. The ZTV indicates that the proposed development would not be present within the Earnscleugh Water valley, indicating that views towards the cairns and stone circle would not be impacted along this approach.
- 7.6.112 The proposed development would be fully visible in views to the north-west, including in views from the stone circle towards the cairns to the north and north-west as well as in views towards Earnscleugh Water. The proposed development would appear in the background beyond the north-westerly cairns, thus creating an element of distraction when viewing this aspect of the asset. The elements outlined above such as the asset's relationship with Earnscleugh Water would remain, as would its association with the southern cairns and stone circle; this may have been originally part of the asset itself, since it was moved in the 19th century (see paragraph 7.6.103). The archaeological value would also be preserved, being the intrinsic contributor to the asset's significance. As such, only a small element of the assets setting would be eroded due to the presence of the proposed development.
- 7.6.113 As a Scheduled Monument, the asset is considered to be of high cultural heritage significance. The magnitude of impact is anticipated to be low adverse, and as such, the significance of effect is Minor.
- Bowerhouse, fort 480m NW of (SM365)**
- 7.6.114 Bowerhouse is a prehistoric hill fort measuring 75m by 45m and comprising two earth and stone ramparts and a medial ditch. The entrance to the asset is on the north-east of the fort and the interior of the fort is featureless. There is evidence of quarrying within the fort, with two areas on the south and the east having been disturbed.
- 7.6.115 The asset derives part of its significance from its archaeological potential, with excavation having the potential to further our understanding of prehistoric society, defensive structures and construction techniques.
- 7.6.116 The asset is located on the eastern flank of Collie Law hill, at approximately 320m aOD, c.0.6km to the east of the summit. The asset overlooks Leader Water and its associated valley, which is located c.2.4km to the east of the asset. The asset sits within an agricultural landscape, with the asset contained within a fenced off area surrounded by a small plantation of trees. The asset's positioning on the eastern slope of the hill focuses views from the asset towards the river valley. The convergence of Hillhouse Burn Valley and Kelphope Burn Valley with the Leader Water Valley is located c.3.3km to the north-east of the asset, and would have been visible from the asset. In addition, the asset is flanked by two burns, c.0.8km to the north and south.

- 7.6.117 The asset utilises its height above the Leader Water valley to achieve wide-ranging views along the valley as well as ensuring its visibility from the valley below and prominence within the landscape. The occupants of the hill fort would have used this position to command the valley and control access through it. The asset's placement near the convergence of the Hillhouse Burn Valley, the Kelphope Burn Valley and the Leader Water Valley indicates that the hill fort may have controlled and monitored this junction of natural pathways through the landscape. This part of the setting of the asset contributes to its significance.
- 7.6.118 The asset is located within a wider prehistoric landscape, notably, the asset is surrounded by other Iron Age hill forts. The closest hill fort is Blackchester, Fort (SM364), located c.1.9km to the east. The assets share intervisibility and a focus on the Leader Water Valley, suggesting that they both administered the same landscape feature, the Leader Water Valley and had a connection.
- 7.6.119 The asset also shares visibility with the Hillhouse grouping of hill forts, Hillhouse, Fort (SM4627), Dodcleugh, Fort (SM4478), and Tollis Hill, Fort (SM380). These hill forts line Kelphope Burn and controlled access along the valley. The closest asset from this grouping is Hillhouse Fort, located c.4.6km to the north-east. Hillhouse Fort also overlooks the junction of the three valleys, although from the north. As these assets share a focus, they may have had some societal or defensive connection.
- 7.6.120 Also to the north-east, the asset shares visibility with Addinston, Fort (SM362) and Longcroft, Fort (SM372), located c.4.1km from the asset. Along with Glenburnie, Fort (SM4473), these assets controlled access along Whalplaw Burn, which joins Leader Water c.2.6km to the north-east. In addition, the asset shares visibility with Burncastle, Fort (SM4656) and Dabshead Hill, Fort (SM4657), located c.5.1km to the east of the asset. These forts were focussed upon Earnscleugh Water.
- 7.6.121 This wider prehistoric landscape contributes to the asset's significance. Further spatial analysis of the assets has the potential to further enhance our understanding of prehistoric society, communication, defensive structures, and defensive networks. The assets, especially those that share the same setting focus, may have been part of a network of forts controlling access through the landscape.
- 7.6.122 There has been some modern development within the surrounding landscape. The fort is situated in a fenced enclosure, surrounded by a small plantation of trees. The asset is located within agricultural land, which is divided by fences. A set of electricity pylons are located c.20m to the west of the asset, running north to south, and converging with a separate set of pylons which run c.0.5km to the east.
- 7.6.123 Bowerhouse farmstead is located c.0.8km to the south-east of the asset, along a single-track road. The surrounding landscape has other dispersed farmsteads. The major road A68 runs 2.5km to the east of the asset, roughly following the valley of Leader Water. The small village of Oxton is located c.2.5km to the north. These aspects of modern development within the landscape form a minor distraction when appreciating and understanding the aspects of the setting of the asset which contribute to its significance.
- 7.6.124 The ZTV (**Figure 7.3**) indicates that all 19 wind turbines and wind turbine hubs would be visible from the asset. They would be present within views to the north-east.
- 7.6.125 The proposed development would be peripheral in views towards the Hillhouse grouping of forts, located to the north-north-east and the Dabshead and Burncastle hill forts grouping, located to the east. Whilst the proposed development would be present on the periphery when viewing these assets, the wind turbines would be a minor distraction when viewing the hill forts from the assets. They would not impact the ability to understand, appreciate or experience this aspect of the asset's setting.
- 7.6.126 The proposed development would be peripheral in views towards the nearby Blackchester Fort, located to the east, and would contribute a minor impact at most to the ability to understand and appreciate this connection.
- 7.6.127 The proposed development would not be present in views from the Leader Water valley towards the proposed development, being located behind the viewer to the north. These views include those from the convergence of the burns and valleys. The proposed development would have no impact on these views, with the asset's prominence to the south of the valley being intact. Views from the asset towards the Leader Water Valley, including towards the convergence of the valleys, would have peripheral views of the proposed development, infringing on views to the north-east. Whilst present, the proposed wind turbines would form a minor distraction at most due to their distance and orientation, and would not diminish the ability to appreciate, understand or experience the asset's connection to this aspect of its setting.

- 7.6.128 The proposed development would be visible in views towards Addinston Fort and Longcroft Fort from the asset, with the proposed development forming a backdrop to any views. The proposed development has the potential to impact this part of the asset's setting, impacting to a modest extent the ability to distinguish the hillforts within the landscape and the ability to appreciate, understand and experience their connection to Bowerhouse Fort.
- 7.6.129 As a Scheduled Monument, the asset is considered to be of high cultural heritage significance. The magnitude of impact is anticipated to be Low Adverse, and as such, the significance of effect is Minor.
- The Howe (SM4595)**
- 7.6.130 The Howe is an Iron Age settlement, located c.0.1km to the west of the site. The settlement is sub-oval in plan, measuring 50m by 60m, is surrounded by a bank, and has a gap in the south-west side forming an entrance.
- 7.6.131 The Howe derives part of its significance from its archaeological value. As a well-preserved Iron Age settlement, excavation has the potential to further our understanding of the assets of this type, as well as the settlement, economy and development of the Iron Age in this area of the country.
- 7.6.132 The asset is located on a west facing spur, at approximately 290m aOD. The spur is at the base of a south facing slope of Waddelscairn Moor hill, with high hills in all directions, meaning that it is not particularly prominent within the landscape when approaching. Howe Cleugh, a burn, is located to the direct south of the asset, and runs through a small valley in the landscape. Soonhope Burn is located c.0.2km to the west of the asset and occupies a valley which runs to the south and west of the asset. Soonhope Burn runs through the proposed development.
- 7.6.133 The asset is situated within rough grazing land, with post-medieval and modern sheepfolds located to the west and The Howe farmstead located c.80m to the south. A set of electricity wires pass over the asset, with pylons to the west and east. A minor road runs directly to the north of the asset.
- 7.6.134 The asset's setting also contributes to its significance. The asset utilised its located on a west facing spur as a natural defence, monitoring access along Howe Cleugh and Soonhope Burn and using its projection into the valleys to get wide ranging views.
- 7.6.135 The asset is situated within a wider prehistoric landscape. There are two assets which line Soonhope Burn, both settlements. Hog Hill (SM4481) is located c.3km south-west and Soonhope, Homestead (SM4476) is located c.3.1km south. Whilst these assets utilise the same landscape features, they do not appear to share visibility.
- 7.6.136 The Howe likely shares visibility with Tollis Hill, Fort (SM380) and Tollis Hill, Enclosure (SM4642), located c.2km to the west. The fort and enclosure overlook Kelphope Burn, which runs to their west. As such, they do not share the same focus within the landscape.
- 7.6.137 The ZTV (**Figure 7.3**) indicates that 14 of the proposed wind turbine tips and 11 wind turbine hubs will be visible from the asset. The proposed development would be visible to the south and east of the asset, with the closest turbine being T17, located c.1.3km to the south.
- 7.6.138 Whilst Soonhope Burn runs through the site, those approaching the asset along the burn would only have peripheral views of the wind turbines as they are all situated to the east of the burn. For this reason, the proposed wind turbines would also be peripheral to views down the burn to the south. The proposed development would be visible in views along Howe Cleugh when approaching the asset from the west, however, these views would not impact the ability to identify the asset's prominence within the landscape. The proposed development would not impact the views from the asset along the aforementioned burns, nor diminish the asset's prominence within the landscape.
- 7.6.139 The proposed development would be situated behind the asset in views from the asset towards nearby Tollis Hill Fort and associated enclosures, and as such would not impact the ability to appreciate, understand, or experience the asset's placement within a wider prehistoric landscape.
- 7.6.140 As a Scheduled Monument, the asset is considered to be of high cultural heritage significance. The magnitude of impact is anticipated to be Very Low adverse, and as such, the significance of effect is Very Minor.
- Burncastle, Fort (SM4656)**
- 7.6.141 The asset is an Iron Age fort occupying the summit of the south spur of Willowcleugh Hill, overlooking the entrance to the steep valley of the Earnscleugh Water to the north-east. The fort is oval in plan with surviving west, south and east defences. There is evidence for at least five lines of defence surviving as ditches within the north. The asset's significance derives from its archaeological interests as well as its setting.

7.6.142 The asset's setting comprises the summit of Willowcleugh Hill, with Dabshead hill fort flanking the summit of Dabshead Hill, c.0.65km to the south-east. The two forts flank either side and overlook the entrance to the steep sided, narrow valley of the Earnsclough Water, and also both overlook the Leader Water and its wider valley to the south-west. Their position would have provided the ability to observe all movements along the Leader Water and any approaches to the narrower valley of the Earnsclough Water, as well as defend and control these parts of the landscape. The main approaches to the asset would be along the higher ridge line from Lylestone Hill from the north, or directly up the steep slopes from the south. The two forts are also part of a much wider prehistoric settlement landscape, with a number of forts within the vicinity which occupy similar summits overlooking and controlling valleys and watercourses.

7.6.143 The asset is located c.2.75km to the south of T1, c.1.8km to the south of the site. The ZTV analysis indicates that up to 16 of the proposed wind turbines would be visible from the asset. Up to 16 wind turbines would also be visible when navigating north from the south approach proximate to the asset and exiting to along the north approach, toward the site. Whilst any views of the wind turbines would not prevent the ability to understand, appreciate and experience the asset and its setting, the visibility and proximity of these wind turbines within these views would detract from the experience of the asset, as they would be conspicuous in views to the north. The proposed development would therefore cause a very low magnitude of impact, and as the asset is considered to be of high significance this would result in a Very Minor significance of effect.

Dabshead Hill, fort and standing stone (SM4657)

7.6.144 Dabshead Hill is an Iron Age fort with a cup-marked standing stone in the centre. The standing stone was erected in the 19th century, as a memorial to the marriage of the Countess of Meath. The stone has five potential cup marks, which demonstrate a prehistoric origin, however, as the original location of the stone is unknown it may not be from the surrounding area.

7.6.145 The fort itself measures approximately 185m by 135m in diameter and is surrounded by twin ramparts with external ditches. The fort has been damaged by ploughing in the post-medieval period, with two sections of the fort (in the north-east and south-west) being completely levelled. There may be an entrance in the north-east of the fort and the centre of the fort is featureless. The scheduling description states that the fort's defences were not finished.

7.6.146 The fort derives part of its significance from its archaeological potential. As a well-preserved iron age fort, especially one that is unfinished, it has the potential to further our understanding of forts of this type, including their construction, connection to society and wider prehistoric defensive structures.

7.6.147 As the original location of the standing stone is unknown, it derives its significance in its entirety from its potential to further enhance our understanding of prehistoric rock art through further analysis of the five cup marks on its surface.

7.6.148 The fort is positioned at the peak of Dabshead Hill, at approximately 370m aOD. The hill is the most prominent hill on the south-east side of Earnsclough Water, a burn which runs in a valley c.0.47m to the west of the asset. The burn runs to the west and south of the asset, at the base of the hill. The asset is surrounded on the north and east by Edgarhope Moor, a relatively flat expanse of moorland connecting the nearby hilltops of Borrowstone Rig, Wheelburn Law and Edgarhope Law. The asset sits at the high point within this area of moorland, providing wide-ranging views across the surrounding landscape. This view extends to the neighbouring set of hills on the west side of Earnsclough Water, where the proposed development is located. The larger watercourse, Leader Water, is located c.2.3km to the south-west of the asset, within the Leader Water valley.

7.6.149 The asset's placement both at a high point within the landscape above the Earnsclough Water Valley and at a high point above the Earnshope Moor provides wide-ranging views, allowing the inhabitants of the fort to visually dominate the surrounding landscape, as well as monitor and control access throughout the landscape. The positioning of the asset at the narrow entrance to the Earnsclough Water valley indicates that it primarily monitored and controlled access along this valley.

7.6.150 The asset sits within a wider landscape of prehistoric assets, particularly a network of prehistoric hill forts. The closest hill fort is Burncastle, Fort (SM4656), which is located c.0.66km to the north-west of the asset, on the opposing hilltop to the west of Earnsclough Water. These assets share visibility and as such likely had both a spatial and societal connection. These assets share aspects of their setting, both placed at the pinch point along Earnsclough Water, where the two hills create a narrowing of the valley. These assets likely monitored access along this valley together, utilising the defensive positioning and their proximity.

- 7.6.151 Additional hill forts within the surrounding area include Hare Faulds, Fort (SM370) and Blythe, Fort (SM4468) located c.2.7km and c.3.6km to the south-east of the asset respectively and Bowerhouse, Fort (SM365) and Blackchester, Fort (SM364) located c5.5km and c.3.8km to the south-west of the asset respectively. Whilst these assets may have shared intervisibility, they do not appear to relate to or utilise the same landscape features. As such, the asset derives part of its significance from its spatial connection to these assets, with the potential to further our understanding of the connection of prehistoric defensive structures in this region.
- 7.6.152 The asset is located c.1.3km to the south-west of Borrowston Rig stone circle and cairns (SM359), which likely predate the hill fort. These assets are significant prehistoric funerary monuments and may have informed the later placement of the hill fort, which would have had visibility over the moorland towards the stone circles and cairns.
- 7.6.153 These aforementioned aspects of the setting of the asset contribute to the asset's significance.
- 7.6.154 Due to the surrounding topography, the asset would not share intervisibility with the prehistoric hill fort within the site (SM4473), nor the two hillforts directly to the south-west of the site (SM372, SM362).
- 7.6.155 There is some modern development within the surrounding landscape, with the town of Lauder being located c.3.8km to the south-west of the asset, the A68 and the A697 roads running through Leader Water Valley to the south of the asset and some minor roads and farmsteads located throughout the landscape, including along the Earnsclough Water valley. The land that the asset sits within is currently used as rough grazing and grouse hunting and is interspersed with modern walking tracks and some land boundary fences. Whilst these modern developments within the landscape have changed the asset's setting from when it was originally constructed, they do not greatly impact the ability to understand, appreciate or experience the connection of the asset to its setting or the surrounding prehistoric assets.
- 7.6.156 **Figure 7.3** that all 19 proposed wind turbine tips and hubs would be visible from the asset, with the closest wind turbine being T1, c.3.2km to the north-west. The proposed development would not be visible from the Earnsclough Water valley and would not impact the ability to experience the asset's prominence within the landscape when approaching this natural routeway.
- 7.6.157 Whilst the proposed wind turbines are anticipated to be visible from the asset itself, the orientation of the proposed development to the north-west means that the wind turbines would be peripheral in views from the asset towards the pinch point at the entrance to the Earnsclough Water Valley. The same can be said for views between Dabshead Fort and Burncastle Fort on the opposing side of the valley. The proposed development would create a minor distraction at most in the ability to understand, appreciate and experience the asset's defensive and commanding position and its connection with the associated fort.
- 7.6.158 In addition, the proposed development is anticipated to be peripheral in views from the asset towards the stone circles and cairns to the north. As such, the proposed development would result in a minor distraction at most to the ability to understand the connection of the hillfort to the earlier ceremonial site, potentially partly explaining the hillfort's placement.
- 7.6.159 As a Scheduled Monument, the asset is considered to be of high cultural heritage significance. The magnitude of impact is anticipated to be Very Low adverse, and as such, the significance of effect is Very Minor.
- Soutra Ailse (SM7573)/(SM3067)**
- 7.6.160 Soutra Ailse comprises the remains of a medieval hospital and a later associated chapel with an intact burial aisle. It is located 7.3km west of the site. The asset is located to the east and west of Dere Street (SM2962), a Roman road which continued to be used as the main routeway to Edinburgh from England during the medieval period.
- 7.6.161 Soutra Hospital is said to have been founded in AD 1164 by Malcolm IV, though it may be earlier in date. The hospital was run by an Augustinian Order and was known as a House of the Holy Trinity. The hospital was in use as late as 1584, though the only upstanding remains visible are parts of the former church that were re-used to build the burial aisle. The burial aisle was built in 1686 and houses the remains of members of the prominent Pringle family.
- 7.6.162 A geophysical survey and trial excavation at the asset suggest that there were two adjacent rectangular walled enclosures. The southern enclosure contained the church and some hospital and domestic buildings. There may have been outbuildings, middens and gardens outwith these enclosures, and evidence indicates that there may be burials concentrated in the south of the scheduled area. In addition, the asset has provided palaeobotanical evidence from one of the church buildings further informing our understanding of medieval medical practices.

- 7.6.163 Soutra Aisle derives some significance from its historic value as a rare set of surviving remains of a medieval hospital, enhanced by the re-use of the asset as a burial aisle for the Pringle family. Archaeological excavation and analysis have the potential to provide further evidence relating to early medieval medical practices, hospital architecture, the lives of patients and staff, as well as the religious life of the members of the Augustinian Order.
- 7.6.164 The asset is located c.0.9km to the south of the summit of Soutra Hill, at approximately 370m aOD. It sits at a flat point in the landscape, which slopes slightly upwards to the south and down to the north but allows open views in all directions, although these are much longer range to the north-west. The scheduled monument is separated by the B6368, a modern road which follows, in part, the route of a Roman road, with the modern name Dere Street (SM2962). Dere Street was the main route from York, crossing Hadrian's Wall into Scotland and terminating at the Antonine Wall. This route continued in use during the medieval period, connecting important ecclesiastical sites in Scotland, including Soutra Aisle.
- 7.6.165 The asset sits within rough grazing land, with the road lined with a wood and wire fence on both sides with metal and wooden gates for access into the fields. The burial aisle itself is fenced off from the rest of the rough grazing and the majority of the Scheduled Area and contains a series of interpretation boards.
- 7.6.166 The surrounding landscape broadly consists of commercial forestry, agricultural land and fields, and dispersed farmsteads. Soutra Hill Quarry, a modern quarry, is located c.0.6km to the north-east of the asset. There are multiple operational wind farms in the surrounding landscape, with the closest being Dun Law and Dun Law Extension c.1.1 km to the east and south-east. A set of power lines pass through the landscape c.0.27km north of the asset.
- 7.6.167 The setting of Soutra Aisle is a contributing factor to its significance. The asset's placement was in part informed by the presence of Dere Street, which in the medieval period was a key pilgrim route. The asset was placed along this route on plateauing land to provide succour, assistance or aid, to the pilgrimsⁱ. The asset, whilst diminutive in character may have been visible within the approach through the landscape, as a 'beacon' of safety or help. Furthermore, the views out from the asset over the surrounding landscape may have been intentional to aid in the convalescence of those at the hospital, although this may be secondary to other influencing factors such as the road.
- 7.6.168 The presence of Dun Law and Dun Law extension Wind Farms within views to the east and south-east screen views out in that direction.
- 7.6.169 On approach from the south, Soutra Aisle is visible on the crest of a hill breaking the skyline. The visibility of the extant wind turbines to the south of the asset does not infringe on this approach as they do not affect the silhouette of the structure against the skyline or an appreciation of it within its enclosure.
- 7.6.170 The ZTV (**Figure 7.3**) indicates that 19 proposed wind turbines would be visible from the asset, located c.8.7km to the south-west, with the closest turbine being T17. The wind turbines are anticipated to be peripheral to any key views towards the asset when approaching along the B6368. The appreciation of the asset on the crest of a hill would be unaffected. The proposed development may also be present in views out from the site to the east and south-east, however, these views would already be obscured by Dun Law and Dun Law Extension Wind Farms. These views are not considered to be important in understanding the function and position of the asset on the edge of a medieval road. As such, it is not anticipated that the proposed development would impact the ability to understand, appreciate or experience the asset or the aspects of its setting which contribute to its significance.
- 7.6.171 As a Scheduled Monument, the asset is considered to be of high cultural significance. The magnitude of impact is anticipated to be Neutral, and as such, the significance of effect is Nil.
- Thirlestane Castle Inventoried Garden and Designed Landscape (GDL00371)**
- 7.6.172 Thirlestane Castle is an Inventoried Garden and Designed Landscape centred around Thirlestane Castle (LB8203). There has been a defensive structure on the site of Thirlestane Castle since at least the 12th century AD, when a motte-and-bailey castle was constructed. Between 1548 and 1550, an Italianate artillery fort constructed by the English was built on the site. In 1587, the land of Thirlestane Castle was sold to the Maitland Family, who still own the land and castle today.
- 7.6.173 Thirlestane Castle was constructed over multiple phases, spanning multiple centuries, originally constructed in sandstone and extended with granite. The castle is a mixture of a 16th century keep with renaissance and Scots Baronial style additions. Thirlestane Castle was first constructed between 1587 to 1590, comprising a square keep with towers at each corner. The castle was redeveloped by the renowned architect Sir William Bruce between 1670 and 1676, adding both the north and south wings, embellishing the corner towers and modifying the interior. In 1840, the castle was extended again, with the wings being extended in granite instead of the original sandstone. The south wing was extended to include a courtyard, carriage house, stable house and servant quarters.

- 7.6.174 The castle itself derives a lot of its significance from its architectural value and historic value. The multi-phased castle displays excellent and well preserved architecture from a large range of periods, often designed by well-known architects of that period.
- 7.6.175 The castle sits within the Inventoried Garden and Designed Landscape, which forms its setting. The GDL first existed as the formal grounds surrounding the castle in the 17th century, before being developed over time with new parks and estate buildings being constructed. In addition to the castle, the GDL contains four Category C Listed Buildings and six Category B Listed Buildings. The GDL is surrounded by rubble boundary walls, which are punctured in the south by the Eagle Gates, which are included under the listing of the house (LB8203). There is a walled garden located c.0.68km to the north-west of the castle, built in the early- to mid-19th century, and a number of lodges throughout the grounds.
- 7.6.176 There are two principal approaches within the GDL, comprising of drives which lead from the castle to the south-east of the GDL. The southern approach enters via the Eagle Gates, from the B6362, and winds through plantation to the north-west until it reaches the south of the castle. The west approach comes through Lauder, passing the Wyndhead Stables lodge and joining the same track to the south of the castle. The original main drive comprised a straight avenue that headed directly south of the castle, however this has now been removed.
- 7.6.177 There are a variety of landscape features, both man made and natural, which form the GDL. Leader Water runs to the north of the castle, creating a partition through the north and south of the GDL. The Ladies Walk Plantation runs from the castle to the walled garden at the north-east, featuring a woodland pathway which would have provided scenic access between the two aspects for the inhabitants of the castle. The woodland mainly maintains its historic form and encircles the castle to the north, screening views out of the principal rooms.
- 7.6.178 There are a small number of garden features surrounding the castle, with private rose gardens to the south-east and north-west of the castle. In addition, there is a small herb garden by the north wing of the castle. The north of the estate appears to be in use as a mixture of agricultural land and commercial forestry.
- 7.6.179 The ZTV indicates that between 0 and 19 of the proposed wind turbines would be visible from various areas of the GDL, with the closest wind turbine being T1 located c.4.6km north of the GDL. The majority of the wind turbines would be visible in the central portion of the Thirlestane Estate, with an average of 12 wind turbines visible from the north-west and south-east. From the castle itself, it is predicted that 15 wind turbine tips would be visible.
- 7.6.180 The ZTV disregards the placement of historic trees surrounding the castle, which obscure any views out from the principal rooms as the photomontage (**Figure 7.10**) shows. These views would not be impacted by the proposed development.
- 7.6.181 The views along the Ladies Walk between the castle and the walled garden would not be impacted by the proposed development as they are entirely contained within a deciduous historic plantation, designed to screen outward views from the walk.
- 7.6.182 Whilst the ZTV indicates that the proposed development would be visible from the north of the estate, the proposed wind turbines would not be anticipated to be present within any views towards the castle. In addition, they would not impact views from the castle to the north, as the views are blocked by historic deciduous forestry. The ability to understand the agricultural nature of the north of the estate does not rely on outward views towards the proposed development and as such, the proposed development would not impact the ability to understand this aspect of the asset's setting.
- 7.6.183 The photomontage (**Figure 7.10**) shows that the proposed development would be present within views along the south-western drive, approaching the castle from the Eagle Gates. The proposed development would be present to the east of the castle in these views, but not present behind the castle itself. As such, the proposed development would form a minor distraction in the ability to appreciate the approach to the castle along this drive.
- 7.6.184 As an Inventoried Garden and Designed Landscape, the asset is considered to be of high cultural significance. The magnitude of impact is anticipated to be Neutral, and as such, the significance of effect is Nil.
- Decommissioning Effects**
- 7.6.185 On the assumption that decommissioning of both the wind farm and the grid connection would cause no additional ground disturbance to that which occurred during construction, no additional direct impacts to the buried archaeological resource are anticipated.
- Potential Indirect Effects**
- 7.6.186 There would be no indirect effects, concerning the setting of the assets, during the decommissioning of the proposed development. During the decommissioning process, the land within the site will return to its pre-development state and as such the current setting of the assets, as stated within this chapter, will be re-established.

7.7 Mitigation

- 7.7.1 The proposed development has the potential to result in direct impacts to heritage assets as a result of any groundworks or ground disturbance undertaken as part of the construction phase of the proposed development.
- 7.7.2 As outlined in paragraph 7.4.7 and shown in **Table 7.7**, mitigation is proposed for those heritage assets where there is the potential for direct impacts, subject to agreement with the SBC archaeologist.
- 7.7.3 The following mitigation is proposed for those assets which may be present within the footprint of any ground disturbance:
- SLR16, SLR17 and SLR18 - No mitigation proposed;
 - SLR57 - watching brief;
 - SLR36 - watching brief;
 - Unknown Prehistoric remains - watching brief or archaeological recording;
 - Unknown buried remains - watching brief or archaeological recording.
- 7.7.4 The precise scope of the proposed mitigation measures would be agreed with the SBC archaeologist on behalf of the applicant and the agreed mitigation programme would be outlined and carried out following a Written Scheme of Investigation.

7.8 Assessment of Residual Effects

Direct Effects

- 7.8.1 As outlined in paragraph 7.6.1, proposed mitigation is shown in 7.7.3. Any residual effect shall be for the benefit of the archaeological community and preserved through recording in agreement with the SBC archaeologist.

Operational Effects

- 7.8.2 Residual Operational effects are summarised in **Table 7.8**.

Decommissioning Effects

- 7.8.3 As outlined in paragraph 7.6.185, decommissioning of the proposed development would not result in any adverse effects and thus there would be no residual effects.

7.9 Assessment of Cumulative Effects

- 7.9.1 Cumulative effects have been considered with regard to any wind farm developments 50m to blade tip or greater that are:

- consented or the subject of valid but currently undetermined planning or s36 applications); and
- within 10km of assets of any nationally important assets anticipated to be subject to a Moderate adverse effect (or above) as a result of the proposed development.

Glenburnie, Fort (SM4473)

- 7.9.2 SM4480 is described in paragraphs 7.6.8- 7.6.21. A photomontage of the asset can be found in **Figure 7.7**.

- 7.9.3 The proposed Dunside Wind Farm is located approximately 6km to the north-east of the monument. The scheme consists of 15 wind turbines where none of the wind turbines would be visible. This would result in no cumulative impact.

Longcroft Hill, Homestead (SM4480)

- 7.9.4 The asset is described in paragraphs 7.6.22- 7.6.26. A photomontage of the asset can be found in **Figure 7.8**.

- 7.9.5 The proposed Dunside Wind Farm is located approximately 6km to the north-east of the monument. The scheme consists of 15 wind turbines where none of the wind turbines would be visible. This would result in no cumulative impact.

Longcroft, Fort (SM372)

- 7.9.6 The fort is described in paragraphs 7.6.27-7.6.40. A photomontage of the asset can be found in **Figure 7.5**.

- 7.9.7 The proposed Dunside Wind Farm is located approximately 6km to the north-east of the monument. The scheme consists of 15 wind turbines where 11 wind turbines would be visible.

- 7.9.8 Whilst both developments would be visible from the asset, the addition of Dunside Wind Farm alongside the proposed development, would not create a further impact than that predicted in paragraph 7.6.40.

Addinston, Fort (SM362)

- 7.9.9 Addinston is described in paragraphs 7.6.41- 7.6.46. A photomontage of the asset can be found in **Figure 7.6**.

7.9.10 The proposed Dunside Wind Farm is located approximately 6km to the north-east of the monument. The scheme consists of 15 wind turbines where three turbines would be visible. The proposal for Ditcher Law is located 3.3km to the north west of the asset and comprises of 15 wind turbines. Four turbines would be visible from the asset.

7.9.11 Whilst both developments would be visible from the asset, the addition of Dunside Wind Farm and Ditcher Law Wind Farm, alongside the proposed development, would not create a further impact than that predicted in paragraph 7.6.46.

7.10 Summary

7.10.1 This assessment has considered data from a diverse range of sources in order to determine the presence of heritage assets which may be affected by the proposed development. The potential direct and indirect effects of the proposed development on the identified assets, mitigation measures for protecting known assets during construction or recording of currently unknown features which could be lost due to groundworks during construction, and the residual effects of the proposed development have also been assessed.

7.10.2 The assessment has considered the potential indirect impacts on the designated heritage assets outlined in **Table 7.8**, which provides a summary of the identified significance of effect upon them.

Table 7.8: Summary of Residual Effects

Asset Reference	Asset Name	Likely Significant Effect	Mitigation	Means of Implementation	Residual Effect
SLR16 and SLR18	Road	Very Minor	None	N/A	Very Minor
SLR17	Road	Very Minor	None	N/A	Very Minor
SLR57	Linear Earthwork/Quarry	Very Minor	Watching Brief	Planning Condition	Very Minor
SLR36	Linear Earthwork	Very Minor	Watching Brief	Planning Condition	Very Minor
GDL00371 and LB8203	Thirlestane Castle and associated Inventory Garden and Designed Landscape	Nil	N/A	N/A	Nil
SM359	Borrowston Rig, Stone Circle and Cairns	Minor	N/A	N/A	Minor
SM362	Addinston, Fort	Moderate	N/A	N/A	Moderate

Asset Reference	Asset Name	Likely Significant Effect	Mitigation	Means of Implementation	Residual Effect
SM364	Blackchester, Fort	Minor	N/A	N/A	Minor
SM365	Bowerhouse, Fort	Minor	N/A	N/A	Minor
SM372	Longcroft, Fort	Moderate	N/A	N/A	Moderate
SM4473	Glenburnie, Fort	Moderate/Major	N/A	N/A	Moderate/Major
SM4480	Longcroft Hill, Homestead	Moderate	N/A	N/A	Moderate
SM4481	Hog Hill, Settlement	None	N/A	N/A	None
SM4595	The Howe, Settlement	Very Minor	N/A	N/A	Very Minor
SM380, SM4616, SM4627, SM4478, SM4479	The Hillhouse Burn group of Assets	Minor	N/A	N/A	Minor
SM4656	Burncastle, Fort	Very Minor	N/A	N/A	Very Minor
(SM4657)	Dabshead Hill, Fort	Very Minor	N/A	N/A	Very Minor
(SM7573)/(SM3067)	Soutra Aisle	Nil	N/A	N/A	Nil

7.10.3 Mitigation through design has been embedded as outlined in **Chapter 2: Design Evolution & Alternatives** and efforts have been taken to ensure that the assets outlined in **Table 7.8** have been considered during the design process as well as seeking ongoing advice from HES in regard to mitigating any effects where possible. This has been highlighted in the reduction in number, and relocation of wind turbines away from assets.

7.10.4 Moderate impact has been identified with regard to Addinston, Fort (SM362), Longcroft, Fort (SM372) and Longcroft Hill, Homestead, (SM4480) while Moderate/Major impact has been identified with regard to Glenburnie, Fort (SM4473).

7.10.5 These impacts might reduce the ability to experience the inter-relationship between these assets. The aforementioned assets contribute to the contextual characteristics of their significance as they enhance the understanding of the Iron Age landscape and the people that occupied this area's economy and society.

7.10.6 These contextual characteristics only make up a portion of these assets' significance and as such large elements of their setting would be retained and their integrity would largely be preserved. Therefore, it is considered that with the proposed design mitigation in place, the proposed development will be in line with Policy 7 (h) of NPF4 (2023).

7.11 References

Legislation

- The Ancient Monuments and Archaeological Areas Act 1979;
- The Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997; and
- The Historic Environment (Amendment) (Scotland) Act 2011 (this includes amendments to the above).

Policy

- National Planning Framework 4 (Scottish Government 2023);
- Our Past, Our Future: The Historic Environment Strategy for Scotland (Scottish Government, 2023);
- Scottish Statutory Instrument No. 101 The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017;
- Historic Environment Policy for Scotland (HEPS 2019); and
- Historic Environment Circular 1, HES 2019

Guidance

- Planning Advice Note Planning and Archaeology PAN 2/2011;
- HES's Managing Change in the Historic Environment: Setting (HES 2020);
- HES's Designation, Policy and Selection Guidance (HES 2019);
- Environmental Impact Assessment Handbook (SNH (Naturescot) and HES 2019)
- ClfA's Standard and Guidance for Historic Environment Desk Based Assessment (ClfA 2014a), which gives best practice for the execution of desk based assessments; and
- ClfA's Code of Conduct (ClfA 2014b).

Literature

- Ralston, I. Atlas of Hillfort of Britain and Ireland (2016).

ⁱ Hunter, James (1892)