Chapter 7 Archaeology and Cultural Heritage

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7 Archaeology and Cultural Heritage

7.1 Introduction

Background

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 significance.

7.1.2 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 (SMs);
- Listed Buildings (LB);
- Inventoried Battlefields;
- Conservation Areas; and
- Inventoried Gardens and Designed Landscapes (GDLs).

7.1.3 Most of these designations are of national importance. 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, 2018).

7.1.4 In addition, the following non-designated assets are included in the assessment:

- nationally/regionally recorded archaeological sites and finds; and
- other buildings and structures of historic or architectural importance.

7.1.5 This chapter considers the likely significant effects on Archaeology and Heritage associated with the construction and operation of the Proposed Development. The specific objectives of the chapter are to:

- describe the current baseline;

- describe the assessment methodology and significance criteria used in completing the impact assessment;
- describe the potential effects, including direct, indirect and cumulative effects;
- describe the mitigation measures proposed to address the likely significant effects;
- assess the residual effects remaining following the implementation of mitigation measures.

7.1.6 The assessment has been carried out by Erin Ashby MSc PCIfA and Beth Gray MA (Hons) ACIfA, of SLR Consulting Ltd. Relevant codes of practice have been followed.

7.1.7 The chapter is supported by:

- **Technical Appendix 7.1**: Gazetteer of Assets;
- **Technical Appendix 7.2**: Appraisal of Designated Heritage Assets within 10 km; and
- **Figures 7.1** to **7.13**.

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).

Planning Policy

7.2.2 Relevant planning policy includes:

- National Planning Framework 4 (NPF4) (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) (HEPS 2019); and
- Historic Environment Circular 1, HES 2019.

Guidance and Technical Standards

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 (PAN) 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 (EIA) 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 EIA Scoping responses and other consultation undertaken as detailed in **Table 7.1**.

Table 7.1 Consultation with Stakeholders

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action
Midlothian Council 13th April 2023	Scoping	Midlothian Council were content with the approach suggested in the EIA Scoping.	N/A
Historic Environment Scotland 15th March 2023	Scoping	HES agree that the following Scheduled Monuments should be considered as part of the EIA: • Hirendean Castle (SM5608) • Moorfoot Chapel (SM5976) • Loquhariot Fort (SM6260) • Falla Luggie Tower (SM5653) • Corsehope Rings fort (SM1166) • Halltree Rings settlement (SM1170) • Soutra Aisle, burial aisle and medieval hospital (SM3067) • Crichton Castle (SM13585) and the Borthwick and Crichton Conservation Area.	The Scheduled Monuments suggested by HES will be assessed as part of the EIA chapter. Any further assets noted by HES for inclusion for assessment that were not included in the Scoping Appraisal Table have been appraised as part of **Technical Appendix 7.2**. The relationship between Dundreich Cairn and Jeffries Corse Cairn and the

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action
		Whilst HES agrees that there will be a degree of overlap of the settings of Dundreich Cairn (SM2777) and Jeffries Corse Cairn (SM3527), they believe that there will be slightly different impacts from the development. Views from Dundreich Cairn to Jeffries Corse Cairn are anticipated to be of particular importance. These differences should be addressed and a visualisation should show the relationship between the assets. HES did not agree with the proposal to scope out Stonefieldhill Farm Henge (SM6258). It is recommended that the following listed buildings are assessed as part of the EIA: • Bush House (LB7463) • Glencorse Parish Church (LB7456) • Oxenfoord Castle (LB768) • A-listed buildings at Mavisbank (LB7404), Mavisbank House (LB7404), Mavisbank Walled Garden (LB44166), Mavisbank Gazebo (LB7387) Mavisbank Doocot (LB7386), Barony House (formerly Lasswade Cottage) (LB7398). • Preston Hall A-listed buildings and Garden (LB777, LB113, LB746 and GDL00320) HES disagree that Middleton Hall (LB806) derives its significance solely from its architecture. HES suggest that the house is aligned to take in views of the surrounding landscape, especially from the principal rooms. The asset should be assessed and visualisation should be provided. The grouping of assets for Arniston House (LB808) Garden and Designed Landscape (GDL29) is agreeable. HES are content with the 10km study area. HES note that the wording of the text in Table 5.4. describing "Cultural significance of Effect" does not explain or define "significance", and instead addresses similar issues of magnitude of impact as Table 5.3.	impact of the Proposed Development on this relationship will be assessed. A wireline will be provided for Middleton Hall. **Table 5.4** is not a table used in the assessment of an asset's significance. Rather it is a table which assists in describing the effects set out in **Table 5.5**. Contributing factors to an assets significance will be identified for each asset that has been scoped into assessment. Wireframe visualisations and photomontages will be provided for selected assets.

Consultee and Date	Scoping/Other Consultation	Issue Raised	Response/Action
		Any attempt to apply these criteria in the EIA process without defining the "significance" of assets could lead to misleading results, poor assessment, or confusion. HES expect that any assets that are identified through the EIA process as having the potential to experience Moderate or Major impacts (significant in EIA terms) to also be subject to detailed assessment. HES recommends that wireframe illustrations should be provided for all the scheduled monuments scoped into the EIA process.	
Historic Environment Scotland 28th July 2023	Gatecheck	HES reviewed the Gatecheck Report and are happy that the details reflect their involvement with and advice regarding the EIA development. Stonefieldhill Farm Henge (SM6258) had been redesignated as an enclosed settlement since the initial Scoping advice was provided. It should be assessed as such.	Stonefieldhill Farm Enclosed Settlement will be assessed as an enclosed settlement.

7.4 Methodology

Scope of Assessment

Study Area

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

- the site and an area buffer zone of 1 km to inform the predictive model of unknown buried archaeology from the site boundary; and
- a study area comprising land beyond the site up to 10 km from the proposed turbines, with theoretical intervisibility with the proposed turbines.

Effects Assessed in Full

7.4.2 The following effects have been assessed in full:

- direct effects on all heritage assets within the site within or immediately adjacent to the Proposed Development footprint of disturbance;
- effects on designated heritage assets which are sensitive to change within the study area; and

- Assets agreed with HES as set out in consultation within **Table 7.1.**

Effects Scoped Out

7.4.3 The following effects have been scoped out:

- effects on the setting of heritage assets more than 10 km from the Proposed Development unless identified as being particularly sensitive to change in the distant landscape; and
- effects on the setting of heritage assets within the study area shown by the Zone of Theoretical Visibility (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

Field Survey

7.4.4 A targeted walkover survey was carried out on the 2nd of May 2023. The Scoping layout of proposed turbines was used (see **Figure 2.1**). The majority of turbine locations were visited to confirm the presence/absence of unknown archaeological remains. Access to proposed turbines 16 and 19 was prohibited due to lambing season and access to proposed turbine 18 was restricted due to livestock.

7.4.5 Known heritage assets within the site boundary were visited to confirm absence/ presence. All assets recorded on the HER within the site were visited as listed within **Technical Appendix 7.1**. There were three new or unknown heritage assets recorded on the site, described further in Baseline.

Sources of Information and Data

- Consultation with the HER of East Lothian Council, which hold the records for Midlothian Council, for the site and study area, for site-specific information;
- Consultation with HES as appropriate for designated assets;
- Consultation of web-based facilities;
- Map regression using historic mapping sources to identify changes and development of the historic landscape;
- Review of available Historic Landscape Characterisation for the site;
- A review of aerial photographs of the site (National Collection of Aerial Photography (NCAP), Edinburgh);
- Review of any appropriate geotechnical data including peat probing and sampling data;

- Relevant heritage assessments for any nearby developments;
- Synthesis of published sources to establish historic landscape and archaeological context and any cultural heritage associations, including data from Canmore (the HES database);
- On-line data on designated assets including scheduled monuments, listed buildings and GDLs; and
- Place-name analysis and assessment of the intangible cultural heritage of the study area.

Approach to Assessment of Effects

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 physical 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 important of the asset and the magnitude of impact.

Cultural 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 significance of an asset related to designation, status and grading, and where non-designated, to a scale of importance from Highest to None. 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 Significance

Cultural Significance	Explanation
Highest	Designated assets of international importance, including: - World Heritage Sites.
High	Designated assets of national importance, including: - Scheduled Monuments; - Category A Listed Buildings; and - Gardens and Designed Landscapes included on the national inventory;

	- Designated Battlefields.
Medium	Designated assets of regional importance, including: - Category B Listed Buildings; - Some Conservation Areas; and - Non-designated assets of equivalent cultural significance.
Low	Assets of local importance, including: - Category C Listed Buildings; - Some Conservation Areas; and - Non-designated assets of equivalent cultural significance.
None	Features that do not retain any cultural significance.
Unknown	Assets of indeterminable cultural significance.

Magnitude of Impact

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 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 understand, appreciate and experience it.
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** then provides a matrix that relates the cultural 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 Moderate or above will be considered as receiving a 'significant' effect in EIA terms.

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 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 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 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 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 development would have 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	Cultural significance (excluding negligible and unknown)			
	Highest	High	Medium	Low
High beneficial	Substantial	Substantial	Moderate	Minor
Medium beneficial	Substantial	Moderate	Minor	Very Minor
Low beneficial	Moderate	Minor	Very Minor	Very Minor
Very low beneficial	Minor	Very Minor	Negligible	Negligible
Neutral/None	Negligible	Negligible	Nil	Nil
Very low adverse	Minor	Very Minor	Negligible	Negligible
Low adverse	Moderate	Minor	Very Minor	Very Minor
Medium adverse	Substantial	Moderate	Minor	Very Minor
High adverse	Substantial	Substantial	Moderate	Minor

7.4.14 Assessment of visual impact has been assisted by a ZTV calculation, prepared principally for the Landscape and Visual Impact Assessment (LVIA) 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' cultural significance.

Mitigation

7.4.17 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.

7.4.18 Direct Impact mitigations may include:

- the micro-siting of Proposed Development infrastructure 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.

7.4.19 Indirect impact mitigation upon an assets setting may include:

- Alteration to turbine layout;
- Reduction of turbine height; or
- Turbine colour.

Residual Effects

7.4.20 An assessment of the residual effects has been made following consideration of any further site-specific mitigation measures, where these have been identified.

Cumulative Effects

7.4.21 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 main development under assessment; and
- an effect on the same asset or groups of assets which would be caused by another development or developments.

7.4.22 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.

7.4.23 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.

7.4.24 A cumulative assessment is presented in **Section 7.9**.

Limitations to Assessment

7.4.25 The assessment is based on the sources outlined in References and, therefore, shares the same range of limitations in terms of comprehensiveness and completeness of those sources.

7.4.26 Access to proposed turbines 16, 18, and 19 was restricted due to the presence of livestock during the walkover survey.

7.4.27 Due to Middleton Hall (LB806) currently being occupied as a private dwelling, entry was not granted to the assessor or Landscape Architect to achieve internal photography as set out in **Paragraph 7.6.137**.

7.5 Baseline

7.5.1 A full description of the site and environs is given in **Chapter 3: Project Description**. All heritage assets within the site and 1 km 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 7.2**.

7.5.2 All recorded non-designated heritage assets within the site and 1 km of the site are listed in the gazetteer that is contained within **Appendix 7.1**. 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.

Current Baseline

Nationally Important Designated Heritage Assets

7.5.3 There are no designated heritage assets within the site.

7.5.4 There are 91 heritage assets of national importance within 10 km of the proposed turbine locations, consisting of 53 Scheduled Monuments, 32 Category A Listed Buildings, six Inventoried GDLs, and one Inventoried Battlefield. There are 54 assets of Regional Importance within 5 km of the proposed turbine locations, 51 Category B Listed Buildings and three

Conservation Areas. As per correspondence with HES and Midlothian Council, and the subsequent assessment of assets (refer to **Technical Appendix 7.2**), it has been established that the following assets should be taken forwards within this chapter, as outlined in **Table 7.6** below.

Table 7. 6 - Designated Heritage assets to be Assessed in Agreement with HES

Reference	*Name*	*Type*
SM5976	Moorfoot Chapel	Scheduled Monument
SM6260	Loquhariot, fort 500m SW of	Scheduled Monument
SM2777	Dundreich Cairn	Scheduled Monument
SM3527	Jeffries Corse Cairn	Scheduled Monument
SM5653	Falla Luggie Tower	Scheduled Monument
SM5608	Hirendean Castle	Scheduled Monument
SM1166	Corsehope Rings	Scheduled Monument
SM1170	Halltree Rings	Scheduled Monument
SM7573	Soutra Aisle	Scheduled Monument
SM3067	Soutra Aisle	Scheduled Monument
LB14633	Gladhouse Villa	Listed Building
LB45811	Gladhouse Reservoir	Listed Building
LB45914	Mauldslie Farmhouse and Steading	Listed Building
LB806	Middleton Hall	Listed Building
CA343	Borthwick and Crichton	Conservation Area
CA342	Temple and Arniston	Conservation Area
SM13585	Crichton Castle	Scheduled Monument
GDL00029	Arniston Designed Landscape	Inventoried Garden and Designed Landscape
LB808	Arniston House, Including Stable Block, Outbuildings, Orangery, Ha-Ha And Sundial	Listed Building
LB811	Arniston Policies, Grotto	Listed Building
LB814	Arniston Policies, North Lodge, And Lion And Elephant Gate, Including Gates And Gatepiers	Listed Building
LB14625	Arniston Policies, Walled Garden, Including Gateways And Loggia	Listed Building
LB810	Arniston Policies, Ornamental Pillar	Listed Building
LB45144	Arniston Policies, Sunken Garden, Rustic Bridge To West Over Purvies Hill Burn	Listed Building
LB45145	Arniston Policies, Sunken Garden, Stone Bench	Listed Building
LB45147	Arniston Policies, Sunken Garden, Vehicular Bridge Over Purvies Hill Burn	Listed Building
LB45143	Arniston Policies, Sunken Garden, Rustic Bridge To East Over Purvies Hill Burn	Listed Building

Reference	Name	Type
LB45804	Arniston Policies, Arniston Gardens House Including Gatepiers	Listed Building
LB812	Arniston Policies, South (Cougar) Gate	Listed Building
LB809	Arniston Policies, Garden Urn	Listed Building
LB18977	Arniston Polices, West Lodge, Including Gatepiers And Boundary Walls	Listed Building
LB45130	Arniston Policies, Arniston Mains Farmhouse Including Gatepiers And Boundary Walls	Listed Building
LB45133	Arniston Policies, East Lodge Including Railings And Piers	Listed Building
LB45140	Arniston Policies, Rustic Bridge No 6 Over River South Esk	Listed Building
LB45805	Arniston Policies, Horace's Bridge Over River South Esk	Listed Building

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

Known Heritage Assets

Prehistoric and Romano-British Context

7.5.6 There is a single prehistoric heritage asset recorded within the site, a potential burnt mound (SLR2) noted on the southern slope of Torfichen Hill, c.0.12 km southeast of proposed Turbine 6.

7.5.7 A single prehistoric findspot was noted within 1 km of the site, a findspot for a cremation urn (SLR1) is recorded north of the site, c.1.1 km north of Turbine 9.

7.5.8 There are no recorded Romano-British heritage assets within the site.

Medieval Context

7.5.9 There are no recorded medieval heritage assets within the site or 1 km of the site boundary.

Post-Medieval

7.5.10 There are 18 post-medieval heritage assets within the site boundary.

7.5.11 There is one enclosure/farmstead (SLR33), located c.0.4 km north-west of Turbine 2. This asset comprises a large rectangular enclosure with multiple potential sub enclosures. A sheepfold and house (SLR21) is located along the north-east boundary of the site, c.0.2 km north-west of

Turbine 16. There are a further seven post-medieval sheep folds within the site boundary[1].

7.5.12 Broadlaw Quarry and associated trackway (SLR31) is located in the south and south-west of the site. The asset was a granite quarry, which was first used in the later 19th century for a short period of time, before quarrying was restarted in the 1950s. The quarry is now disused. A quarry workers cottage (SLR30) is located 0.3 km to the east of the quarry, comprising an unroofed and ruinous structure.

7.5.13 There are seven post-medieval heritage assets recorded within 1 km of the site. These assets are mainly agricultural in nature, with the majority of the assets comprising farmsteads or other agriculture related buildings.

7.5.14 There are three estate cottages (SLR5, SLR6, SLR18), constructed as part of the Arniston Estate, located 1.1 km south-west of Turbine 2. Mauldslie Farmhouse (LB45814, SLR14) is located c.1.4 km southwest of Turbine 2. A sheep house (SLR20) is located c.1.2 km northeast of Turbine 17.

7.5.15 Two Limeworks (SLR36, SLR37) are located to the north of the site, indicating some industrial exploitation of the surrounding landscape.

Undated Features or Structures

7.5.16 There are 11 recorded undated heritage assets within the site, with the majority of these sites being agricultural in nature. There are seven undated enclosures/sheepfolds throughout the site[2], two structures that are likely agricultural in nature (SLR53, SLR54), and an area of ridge and furrow along the south-eastern site boundary (SLR60). There are two areas of clearance cairns throughout the site (SLR43, SLR45), indicating agricultural land use in the surrounding area. There is a cluster of smaller areas of quarrying (SLR56, SLR57, SLR58), located in the northwest portion of the site c.0.7 km north of Turbine 7.

7.5.17 A further three undated heritage assets were identified during the walkover survey in May 2023. SLR101 is a series of enclosures that were visible on both LiDAR data and in person, as a series of small turf covered walls, located c.0.2 km south-west of Turbine 12. SLR102 is a circular turf covered feature, with a hollowed out interior area, located c.0.13 km north of proposed Turbine 12. SLR103 is a circular turf covered feature, approximately 80 m in diameter, appearing to be a mound with a

[1] *SLR7, SLR8, SLR28, SLR29, SLR32, SLR34, SLR35*
[2] *SLR42, SLR44, SLR49, SLR50, SLR51, SLR52, SLR62*

distinctive ditch encircling it. It is located c.0.17 km north-east of proposed Turbine 2.

7.5.18 There are a further six undated heritage assets within the 1 km study area. These comprise two enclosures (SLR55, SLR61), three areas of quarrying (SLR56, SLR57, SLR58) and a clearance cairn (SLR59).

Historic Mapping and Historic Land Use Assessment

7.5.19 Assessment of the Historic Land Use Assessment (HLA) map indicates that the land within the site boundary was primarily used as an area of rough grazing. The entry for this category of land use notes that areas of rough grazing were associated with pre-19th century agriculture and settlement and may contain remains dating back to the prehistoric period. The description states that 'Archaeological landscapes are most likely to survive in this type of modern land use. Nevertheless, there will be extensive areas with little sign of historic use'. There are some areas within the site, mostly focussed along the south-west border that are noted as areas of medieval/post-medieval settlement and agriculture.

7.5.20 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[i]. There is a settlement noted within the site boundary named Recthouse. This appears to be small and agricultural in nature (e.g., a farmstead). Whilst all settlements do not directly map to any known heritage assets, due to the scale of the map, there is potential that 'Recthouse' is the farmstead of Pigsknowes (SLR33), first labelled on the 1st edition Ordnance Survey Map of 1843[ii].

7.5.21 No other features within the site were identified on historic mapping.

Aerial Photography and LiDAR

7.5.22 LiDAR data for the site was reviewed and used to inform the site walkover. SLR101 is a series of enclosures that were visible on both LiDAR data and in person, as a series of small turf covered walls, located c.0.2 km south-west of Turbine 12. A large ovular feature (SLR103), c.70 m in width and c.80 m in length, was identified c.0.17 km northeast of Turbine 2. The ovular feature has an associated circular feature immediately to its east, c.20 m in diameter. The potential asset is not present on any historic mapping and its precise function is unknown.

7.5.23 The online aerial imagery of NCAP was examined for evidence of archaeological sites. No further archaeological sites were identified.

Discussion of Site

7.5.24 There is limited evidence of prehistoric activity within the site with one potential prehistoric burnt mound (SLR2) identified in the south of the site and a singular find spot within 1 km of the site. Due to this limited evidence of prehistoric activity, there is a low potential for further unrecorded prehistoric heritage assets within the site.

7.5.25 There is no evidence of Romano-British activity within the site. As such, there is a very low potential for unknown prehistoric heritage assets within the site.

7.5.26 There is no evidence of medieval heritage assets within the site. As such, there is a very low potential for unknown medieval heritage assets within the site. Any medieval activity in the site would likely have been agricultural in nature, with any evidence of activity likely removed by later activity.

7.5.27 There is a high amount of post-medieval activity within the site and within 1 km of the site, mainly consisting of agricultural activity. Some of this activity is likely associated with Pigsknowes farmstead, which was located in the western extent of the site. The south-east of the site contains the site of a post-medieval quarry, which continued use into the 20th century. Any unrecorded or unknown post-medieval heritage assets within the site are likely to be agricultural in nature, potential field boundaries, enclosures, or other associated features.

Future Baseline

7.5.28 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

7.5.29 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 paleo-environment. The presence of peat across the site, as detailed in **Chapter 9: Geology, Hydrology & Hydrogeology**, means there is a potential for environmental or organic deposits to survive. Climate change could affect naturally formed peat deposits leading to the destruction of paleoenvironmental evidence. This might result in the loss of previously unrecorded heritage assets.

7.5.30 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.

7.5.31 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

7.6.1 Assessment of potential direct impacts on heritage assets is based on the maximum likely impact that could be caused by the Proposed Development.

7.6.2 Direct impacts would derive from 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 in this way include:

- excavation of turbine bases, substation foundations, crane hardstandings, borrow pits and cable trenches; and
- construction and upgrading of access tracks, working compounds and laydown areas.

7.6.3 Where significant ground disturbance takes place, these activities would remove or change any heritage assets located within the area of ground disturbance. This damage would be irreversible and permanent.

7.6.4 With reference to **Figure 7.1**, the Proposed Development has the potential for a direct impact upon the following known assets recorded within the site:

- SLR35 – Sheepfold, located adjacent to track leading to proposed Turbine 1; and
- SLR42 – Enclosure, located within potential borrow pit location at east end of site.

7.6.5 These assets are of low cultural significance. Due to their location within the site boundary and their proximity to the proposed infrastructure an

adverse impact is predicted of up to high magnitude in the worst case. The overall significance of effect would however be minor adverse. This is not a significant impact. Potential unknown assets cannot be ruled out. Whilst earlier assets may be present, the baseline assessment infers that unknown assets (should they be present) would most likely be of post medieval date and agricultural in character. These would be of low cultural significance. Subject to a potential high adverse magnitude of impact, the overall significance of effect would be minor adverse. This is not a significant impact.

7.6.6 In respect to other known site-based assets, mitigation of direct impacts on heritage assets has taken the form of avoidance through careful design and positioning of the proposed infrastructure away from all known heritage features. In respect to SLR35, SLR42 and other unknown assets appropriate mitigation to be undertaken during construction would be in the form of:

- fencing off and avoidance of SLR35, in order to avoid damage during construction works; and
- a targeted watching brief on SLR42 and if considered necessary a general watching brief to record presently unknown remains.

7.6.7 The precise scope of the watching brief would be negotiated with the East Lothian Council Archaeology Officer (on behalf of Midlothian Council), on behalf of the Applicant and the agreed mitigation programme would be documented in an agreed Written Scheme of Investigation.

Operational Effects

Moorfoot Chapel, monastic grange and chapel (SM5976) (Figure 7.2)

7.6.8 Moorfoot Chapel, located c.2.6 km south-west of the site, is the remains of a monastic grange, likely dating to the 13th century. The monastic grange was likely run by the Cistercians, an order of Catholic Monks originally founded in the south of France. The first Cistercian abbey in Scotland was founded in Melrose, in 1136. Monks from Melrose Abbey founded nearby Newbattle Abbey in 1140, located c.14 km to the north-east of the Moorfoot Chapel.

7.6.9 The land of Moorfoot was likely granted to the Cistercian monks from Newbattle by King David I, who ruled Scotland between 1124 and 1153. A grange is an outlying landholding held by a monastery, of which most were used for agricultural production for the monastic community and run by either lay-brothers or paid labourers. It is believed that Moorfoot Chapel

comprises the remains of these agricultural buildings, evidence of land exploitation, and a potential chapel.

7.6.10 There are few upstanding remains at Moorfoot Chapel, with the majority of the identifiable remains comprising turf-covered footings. Remains of buildings encircle a potential courtyard, 30 m square. In the south-east of the courtyard, there are two upstanding pieces of rubble masonry, identified as the remains of a potential chapel. There are three rooms along both the south and north sides of the courtyard, with the courtyard itself being split into two by an enclosure wall, running east to west. The River South Esk, which runs to the west of the Scheduled Monument, has changed its course and has eroded part of the east side of the courtyard. There are potential flood defences to the north of the complex, identified by an L-shaped earthwork, and a set of banks to the south of the complex, potentially fishponds or water control features.

7.6.11 The asset is one of few surviving settlements of this date, type and complexity in Scotland. Excavation of the asset may provide evidence of ecclesiastical and domestic architecture, social organisation, domestic land use and economy in a small monastic community. These elements contribute primarily to the asset's significance.

7.6.12 The asset is situated along the west bank of the River South Esk, c.0.5 km south of Gladhouse Reservoir. Gladhouse Reservoir was constructed in 1879, so would not have been part of the landscape at the time of the grange's initial construction nor would the grange have been occupied when the reservoir was in operation. The immediate landscape surrounding the asset is relatively flat at approximately 290 m above ordnance datum (AOD), however, the land rises sharply to the south where it meets the Moorfoot Hill range. The asset sits within agricultural farmland, with the post-medieval/modern Moorfoot Farm located to the immediate west, with the associated farm track running along the western asset boundary. There are a few farmsteads sparsely populating the surrounding landscape. Bowbeat Wind Farm is located c.4.2 km south of the asset, within the Moorfoot Hills.

7.6.13 The asset's local setting does form part of its significance. The asset's placement along the bank of the River South Esk would have provided fertile land for the grange to produce crops or graze animals. The location of potential fishing ponds to the south of the courtyard indicates that the river was an important food source for the monastic community. The asset is located c.14 km south-west of the associated Newbattle Abbey

(**SM1190**), which is also located along the River South Esk, which indicates that the river may have been a key component in transporting goods towards the abbey. There is no visual connection between the abbey and the grange due to the distance and intervening landscape. Whilst the positioning of the grange does allow for views along the river to the north and over the Moorfoot hills to the south, there is no indication that these views contribute to the significance of the asset. Furthermore, the placement of the grange in an isolated location may have provided a sense of isolation and a place of contemplation for the inhabitants.

7.6.14 The ZTV (**Figure 7.2**) indicates that between nine and 18 proposed turbines would be visible from the asset, with the closest turbine (Turbine 1) located c.2.4 km to the east. The Proposed Development would be present in views from the asset towards the river to the east. However, as the connection between the asset and the river was functional rather than purely aesthetic, the presence of turbines within this view would not impact the ability to appreciate, understand and experience the assets agricultural and food production setting. In addition, whilst turbines represent a new element within the landscape to the east, the sense of isolation at the asset is not anticipated to be impacted.

7.6.15 As a Scheduled Monument, the asset is considered to be of high cultural significance. The magnitude of impact is anticipated to be **very low adverse**, and as such, the significance of effect is **very minor**.

Loquhariot, fort 500m SW of (SM6260) (Figure 7.2, Figure 7.3, Figure 7.11)

7.6.16 Loquhariot is a prehistoric hill fort located 4.8 km north-east of the site. It is potentially Iron Age in date. The fort is believed to be a multivallate hill fort, meaning it has multiple ramparts, however, the asset is only visible from crop marks. The fort is believed to enclose an inner area, with an internal rampart, of 0.7 ha, with an external rampart enclosing a total area of 1.3 ha. There are no ditches visible at ground level, but aerial photos have identified a potential set of two ditches in the north-east quadrant of the fort. There is a small segment of ditch at the east of the fort, potentially indicating an internal enclosure. The western extent of the site has been destroyed by a former quarry.

7.6.17 The asset is of national importance due to its archaeological potential, having the potential to contribute to our understanding of prehistoric settlement and economy through excavation.

7.6.18 The asset is located on the crest of a sand and gravel ridge, which sits at 200 m AOD above the northern bank of Gore Water and the convergence of

Middleton North Burn and Middleton South Burn. Gore Water runs to the south and west of the asset, creating a shallow valley which the fort overlooks. Whilst not directly situated within the valley that Loquhariot Fort overlooks, Tyne Water is located c.1.3 km to its east. The asset is situated across three agricultural fields, with field boundaries crossing the asset, with the associated farmstead located c.0.13 km to the north-east and the aforementioned former quarry located immediately to the west. An unnamed road runs to the west of the quarry.

7.6.19 The borders railway runs through the valley, utilising the natural pathway and generally following the watercourse. The village of Borthwick is located within the valley, c.0.7 km south of the asset, and the larger town of Gorebridge is located c.1.8 km to the north-west of the asset. In addition to the settlements, the valley is lined with dispersed agricultural and domestic structures, many of which follow the A7 road.

7.6.20 The asset's setting contributes to its significance. The asset is located at a high point within the landscape, overlooking the valley, the convergence of three watercourses and has proximity to the Tyne Water to the east. The positioning of the asset allowed its inhabitants to command the valley and monitor and control access along the path. The asset is located within proximity to several other hill forts, which also roughly follow the Gore Water or Tyne Water to the north. Camp Wood Fort (SM1164) is located c.3.4 km to the north-west and Lawfield Wood Fort (SM6338) is located c.5.2 km to the north-west. Due to the surrounding landscape and topography, it is unlikely that the asset shared intervisibility with these assets, however, they have an intangible connection due to a shared setting focus.

7.6.21 The modern development within the valley to the south of the asset does cause a minor distraction to the ability to understand and appreciate the original setting of the asset, with the railway, settlements and agricultural buildings obscuring part of the approach along the valley towards the asset and when looking from the asset along the valley.

7.6.22 The ZTV (**Figure 7.2**) indicates that 18 proposed turbines would be visible from Loquhariot fort, with the closest proposed turbine (Turbine 16) located c.4.6 km to the south-west. The wireline (**Figure 7.11**) shows all 18 hubs would be visible from the asset. The Proposed Development is not located within the valley of Gore Water, which is the immediate focus of the asset, but the turbines are anticipated to be visible in views from the asset to the south-east across Gore Water. Due to the intervening modern

development, including Borthwick, the Borders railway and various farmsteads, the Proposed Development is anticipated to be a minor distraction in the ability to understand, appreciate and experience the connection of the asset to the Gore Water Valley.

7.6.23 The turbines are not anticipated to be visible in approaches towards the asset along Gore Water, the burns, or Tyne Water to the east. The Proposed Development would not feature within views from the asset towards contemporary assets to the north but may feature in views from Camp Wood Fort (**SM1164**) towards the asset. Due to the orientation of the Proposed Development, these views are likely to be peripheral and would be a minor distraction to the understanding of the spatial connection between these assets.

7.6.24 As a Scheduled Monument, the asset is considered to be of high cultural significance. The magnitude of impact is anticipated to be **very low adverse**, and as such, the significance of effect is **very minor**.

Jeffries Corse Cairn (SM3527) (Figure 7.2, Figure 7.3, Figure 7.6)

7.6.25 Jeffries Corse Cairn is a prehistoric funerary cairn, located 5.4 km south-west of the site on the summit of Jeffries Corse Hill. Jeffries Corse Cairn comprises a circular grassy mound, approximately 10 m in diameter and 1.2 m in height. The cairn is not easily distinguishable from the surrounding landscape, having been heavily eroded. It currently has a wood and wire fence, a field boundary, running directly through the centre of it in a north-east/south-west direction.

7.6.26 The asset has archaeological significance, with excavation of the asset having the potential to further our understanding of prehistoric burial practices, society and economy. There is a modern fence running through the centre of the cairn and this likely impacts the archaeological potential of the asset, potentially disrupting the archaeological deposits which have the potential to further inform our understanding and thus impacting the assets cultural significance.

Setting

7.6.27 The asset is located at a high point within the landscape, located at 613 m AOD at the summit of Jeffries Corse Hill. The hill forms part of the north-western peaks of the Moorfoot Hills, which stretch to the south and east. Along with Dundreich Hill to the south-west, Jeffries Corse Hill forms the highest point along the northern hills of the Moorfoots, meaning they are highly visible from the landscape to the north.

7.6.28 The land that the asset is situated within comprises rough grazing, with the aforementioned wire and wood fence. There is a steep slope to the north and west of the asset, which runs down to valleys on the north and west.

7.6.29 Dundreich Cairn (SM2777), a prehistoric burial cairn, is located at the summit of Dundreich Hill c0.8 km south-west of the asset. Dundreich Cairn is visible from the asset and is located along the same ridgeline at the north-west of the Moorfoot Hills.

7.6.30 There is a record for a series of prehistoric burial cairns within Borthwick County (HER Ref: MEL8220), with the record point being placed on The Kips, a hill c.2.2 km to the east of the asset. However, these records are noted as not located and it is unknown if this position is accurate or if there was a cairn on this hill at all.

7.6.31 The asset overlooks the entrance to a valley which contains the source of the River South Esk c.1.8 km to the east, which occupies the valley to the east and comprises the confluence of multiple burns. Jeffries Corse Hill forms the west side of the entrance to the valley, which is bordered by The Kips to the east. Eddleston Water is located c.3.3 km west of the asset, occupying a slight valley within the landscape.

7.6.32 The asset has considerable views through the surrounding landscape, with views towards the Pentland Hills to the north-west as well as the flood plain and valley of the River North Esk which fills the intervening landscape.

7.6.33 The Pentland Hills themselves have multiple peaks topped with prehistoric burial cairns, including Caerkelton Craigs Cairn (SM4118), Carnethy Hill Cairn (SM1152) and Dunsyre Cairn (SM3370). Whilst these cairns are no longer distinguishable from the summits of the hills that they are on, they may have been originally visible from the asset.

7.6.34 The setting of the asset includes modern additions. Bowbeat Wind Farm is extremely visible to the south of the asset, with the closest turbine being located 1.6 km to the south. Additional wind farms can be seen to the rear of the view, to the north-east of the asset, including parts of Dun Law Wind Farm and its extension and Toddleburn Wind Farm.

7.6.35 Gladhouse Reservoir is visible to the north-east of the asset within the valley, surrounded by farmsteads and agricultural land. The valley of the River North Esk is populated by settlements of various sizes, most notably the town of Penicuik located c.11 km north-east of the asset. The A701,

A702, and A703 run through the valley, forming major routeways out of the city of Edinburgh. The city of Edinburgh and its greater metropolitan area is located to the north of the asset, by approximately 17 km.

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.

7.6.37 The following aspects of the setting of Jeffries Corse Cairn are considered to contribute to its cultural significance:

- Visibility within the surrounding landscape, especially from the River North Esk Flood Plain and Valley. Along with nearby Dundreich Hill, the asset is placed at the highest point along the northern edge of the Moorfoot Hills. It is believed that funerary cairns may also have acted as way markers or indicators within the landscape, as well as acting as funerary monuments. Cairns were often placed on high ground along bodies of water or a natural route way through a landscape, with Jeffries Corse Cairn potentially acting as a marker to those approaching through the landscape;
- Views towards the Pentland Hills, which contain multiple prehistoric burial cairns. Spatial analysis of these cairns and their distribution has the potential to further our understanding of prehistoric funerary monuments;
- The assets position at the entrance to the valley which contains the source of the River South Esk. The orientation of Jeffries Corse Hill, looking to the northeast, forms a natural entrance to the valley along with The Kips to the east. The assets position at the head of this valley may have been significant; and
- Views towards Dundreich Cairn to the south-west contribute to the significance of the asset in a way that has the potential to increase the understanding of funerary monuments and prehistoric society.

Development Effects

7.6.38 The Proposed Development would introduce 18 turbines within the lowland landscape to the north-east of the asset, with the closest turbine being Turbine 1 c.5.3 km to the north-east of the asset. The ZTV (**Figure 7.2**) indicates that all 18 proposed turbines and 18 hubs would be visible from the asset.

7.6.39 The Proposed Development would not be visible in views from the asset towards Dundreich Cairn to the south-west, due to the placement of the

Proposed Development to the rear of the observer at this point. As such, the Proposed Development is not anticipated to impact the ability to understand, appreciate and experience the connection between the two cairns when experienced from Jeffries Course Cairn. However, the Proposed Development would be visible to the rear of Jeffries Corse Cairn when viewed from Dundreich Cairn (**Figure 7.5**). This is a relatively important view in respect to Jeffries Corse Cairn, although it is noted that in this view the eroded nature of Jeffries Corse Cairn affects its appreciation and the level of importance that can be attributed to this view.

7.6.40 Other important views towards and from the asset relate to lower ground to the west within the River North Esk flood plain. This aspect of the assets setting is considered to be its primary contributing factor to its significance, as it is believed that the asset was likely intended to provide a viewpoint both over this landscape and be viewed from approaches along the valley floor.

7.6.41 The Proposed Development would not detract from views from the asset towards the Pentland Hills and this flood plain, again due to the orientation of the observer and the location the Proposed Development. The Proposed Development may be visible in reciprocal views from the hills and the valley but it is noted that the assets erosion means that it is not easily distinguishable within these views; it is already hard to appreciate the asset within these views and no viewpoints were identified during a walkover survey undertaken as part of this assessment. Furthermore, it is noted that if the observer is able to distinguish the asset, then the Proposed Development located to the north-east of the asset would be peripheral to any views along key approaches through the wider River North Esk valley and would not be anticipated to impact the ability to understand, appreciate or experience the asset in respect to the intentions of the cairn builders.

7.6.42 The site visit also confirmed that the cairn is not visible when approaching along the River South Esk from Gladhouse Reservoir. As such, it is unlikely that views towards the asset from this route were important to its original placement. Rather, views from the asset over the river valley to its east may have been important.

7.6.43 The Proposed Development is anticipated to be fully visible when looking over the entrance of the valley that holds the source of the River South Esk, towards The Kips to the north-east (**Figure 7.6**). The orientation and

topography of both Jeffries Corse Hill and Dundreich Hill naturally form a diagonal on a north-east/south-west axis, when standing at the top of Jeffries Corse Hill this pulls the eye towards the north-east across the mouth of the valley. The full Proposed Development would be within the centre of the view across the mouth of the valley and would form a distraction to the ability to understand, experience and appreciate the relationship of the cairn and its setting to the north-east.

7.6.44 The Proposed Development would result in a comparatively modest level of effect upon two of multiple positively contributing aspects of the asset's setting, the remainder of which would be preserved. Specifically, a view of the monument from another cairn (Dundreich) and a view from the asset over the landscape to the north-east. Other important views of and from the asset would be unaffected.

7.6.45 A **medium adverse** magnitude of impact would be anticipated, 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. This integrity is preserved in the archaeological remains, the overall views from Jeffries Corse Cairn to the north-west and across towards the Pentland Hills, as well as its connection to the nearby Dundreich Cairn. The asset's connection to Dundreich Cairn will not be affected when viewed from Jeffries Corse Hill, due to the placement of the Proposed Development to the rear of the observer, and it is noted to be minimally affected in reciprocal views due to the condition of Jeffries Corse Cairn.

Dundreich Cairn (SM2777) (Figure 7.2, Figure 7.3, Figure 7.5)

7.6.46 Dundreich Cairn is a prehistoric burial cairn, located at the summit of Dundreich Hill. Dundreich Cairn comprises a circular grassy mound, approximately 9 m in diameter and 0.7 m in height. The centre of Dundreich Cairn is hollow, appearing to have been robbed, and there is an Ordnance Survey Trig Pillar directly on its north-east boundary within the scheduled area.

7.6.47 The asset has archaeological significance, with excavation of the asset having the potential to further our understanding of prehistoric burial practices, society and economy. The placement of the Ordnance Survey trig pillar within the scheduled area has the potential to have disrupted the archaeological potential of the asset and have impacted its significance.

Setting

7.6.48 The asset is located at a high point within the landscape, located at 622 m AOD at the summit of Dundreich Hill. The hill forms part of the north-western peaks of the Moorfoot Hills, which stretch to the south and east and are highly visible within the surrounding landscape. The land that the asset is situated within comprises rough grazing, with a field boundary located to the north of the scheduled area. There is a steep slope to the west of the asset, which runs down to valleys on the west.

7.6.49 The landscape slopes gently downwards to the north, reaching Jeffries Corse Hill c.0.8 km to the north-east. Jeffries Corse Hill is topped by Jeffries Corse Cairn (SM3527), a prehistoric burial cairn. Jeffries Corse Cairn is highly eroded and is not distinctive within the landscape when viewing it from the asset.

7.6.50 Due to its elevated position, the asset has extensive views in all directions. Eddleston Water is located c.3.3 km west of the asset, occupying a slight valley within the landscape. The asset has open views towards the Pentland Hills towards the north-west, over the flood plain and valley of the River North Esk which fills the intervening landscape.

7.6.51 The Pentland Hills themselves have multiple peaks topped with prehistoric burial cairns, including Caerkelton Craigs Cairn (SM4118), Carnethy Hill Cairn (SM1152) and Dunsyre Cairn (SM3370). Whilst these cairns are no longer distinguishable from the summits of the hills that they are on, they may have been originally visible from the asset.

7.6.52 The setting of the asset includes some modern additions. Bowbeat Wind Farm is visible to the south of the asset, with the closest turbine being located 1.6 km to the south. Additional wind farms can be seen in the background, to the north-east of the asset, including parts of Dun Law Wind Farm and its extension and Toddleburn Wind Farm.

7.6.53 Gladhouse Reservoir is visible to the north-east of the asset within the valley, surrounded by farmsteads and agricultural land. The valley of the River North Esk is populated by settlements of various sizes, most notably the town of Penicuik located c.11 km north-west of the asset. The A701, A702, and A703 run through the valley, forming major routeways out of the city of Edinburgh. The city of Edinburgh and its greater metropolitan area is located to the north of the asset, by approximately 17 km.

Contribution of Setting to Significance

7.6.54 Not all aspects of a heritage asset's setting will contribute to its cultural significance. Some aspects will be neutral, others may detract.

7.6.55 The following aspects of the setting of Dundreich Cairn are considered to contribute to its cultural significance:

- Visibility within the surrounding landscape, especially from the River North Esk Flood Plain and Valley. Along with Jeffries Corse Hill to the east, the asset is at the highest point along the northern boundary of the Moorfoot Hills. It is believed that funerary cairns may also have acted as way markers or indicators within the landscape, as well as acting as funerary monuments. Cairns were often placed on high ground along bodies of water or a natural route way through a landscape, with Jeffries Corse Cairn potentially acting as a marker to those approaching through the landscape;
- Views towards the Pentland Hills, which contain multiple prehistoric burial cairns. Spatial analysis of these cairns and their distribution has the potential to further our understanding of prehistoric funerary monuments; and
- Views towards Jeffries Corse Cairn to the north-east contribute to the significance of the asset in a way that has the potential to increase the understanding of funerary monuments and prehistoric society.

Development Effects

7.6.56 The ZTV (**Figure 7.2**) indicates that 18 proposed turbine tips would be visible from the asset. The closest turbine is Turbine 1, located c.6.1 km to the north-east of the asset. The photomontage (**Figure 7.5**) shows that 15 proposed turbine hubs would be visible from the asset, visible to the north-east over the left flank of Jeffries Corse Hill.

7.6.57 The Proposed Development would be peripheral to views from the valley floor to the asset, along approaches from the east and the west. The Proposed Development would not obscure or interrupt the interpretation of the asset as a way marker or reference point within the landscape when approaching along the valley. The asset is still a distinctive highpoint within the landscape. As such, the Proposed Development would not impact the ability to understand or appreciate this aspect of the asset's setting.

7.6.58 The Proposed Development would also be peripheral to views from the asset to the north towards the Pentland Hills. The proposed turbines

would not impact any views towards the prehistoric heritage assets on the opposing hills and would not impact the ability to appreciate the asset within this aspect of its wider prehistoric landscape.

7.6.59 The Proposed Development would be visible in views from Dundreich Cairn towards Jeffries Corse Cairn, with the turbines visible along the left flank of the hill. Due to its erosion, Jeffries Corse Cairn is no longer distinguishable within the surrounding landscape, which does diminish the ability to appreciate and understand the relationship between the two cairns (**Figure 7.5**). Nevertheless, the placement of the turbines beyond the left flank of the Jeffries Corse Cairn may distract from any perceivable understanding of the relationship between the cairns.

7.6.60 However, the Proposed Development would result in a comparatively modest level of effect upon only one of multiple positively contributing aspects of the asset's setting, the remainder of which would be preserved.

7.6.61 A **medium adverse** magnitude of impact would be anticipated, 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. This integrity is preserved in the archaeological remains of the monument and in the acknowledgement that the relative importance of the view towards Jeffries Corse Cairn is affected by the erosion of the Jeffries Corse Cairn and also the acknowledgement that the overall views to the north-west across the valley of the River North Esk and across towards the Pentland Hills would be unaffected.

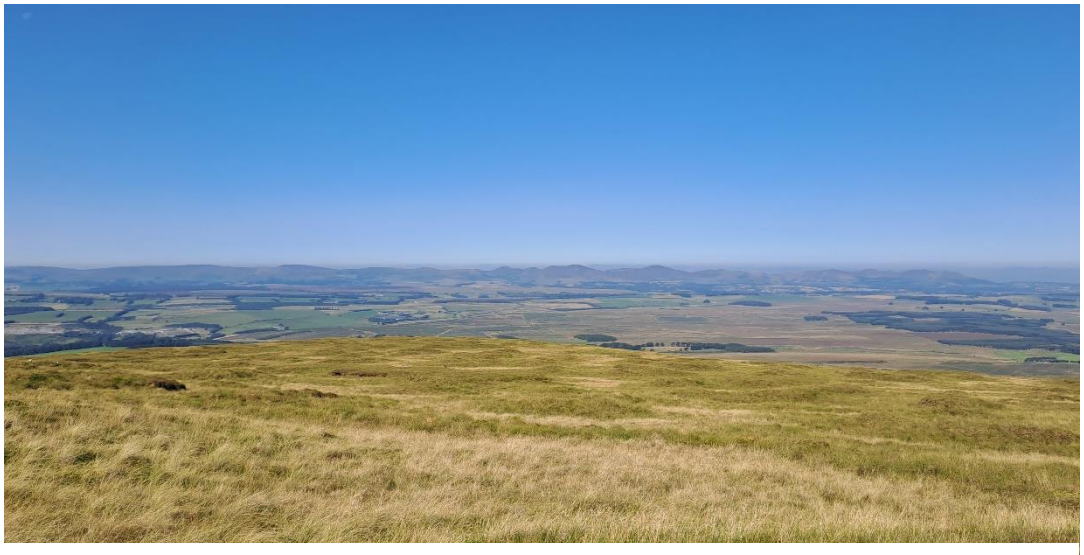

Plate 7.1 - View from Jeffries Corse Cairn (SM3527) towards the Pentland Hills to the north-west

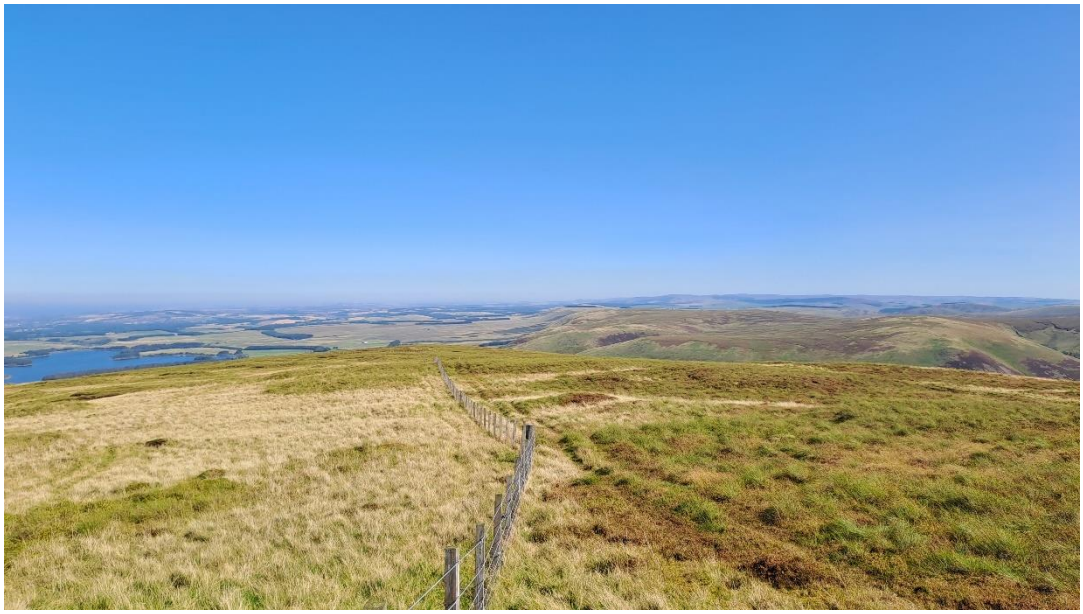

Plate 7.2 - View from Jeffries Corse Cairn towards the Proposed Development to the north-east

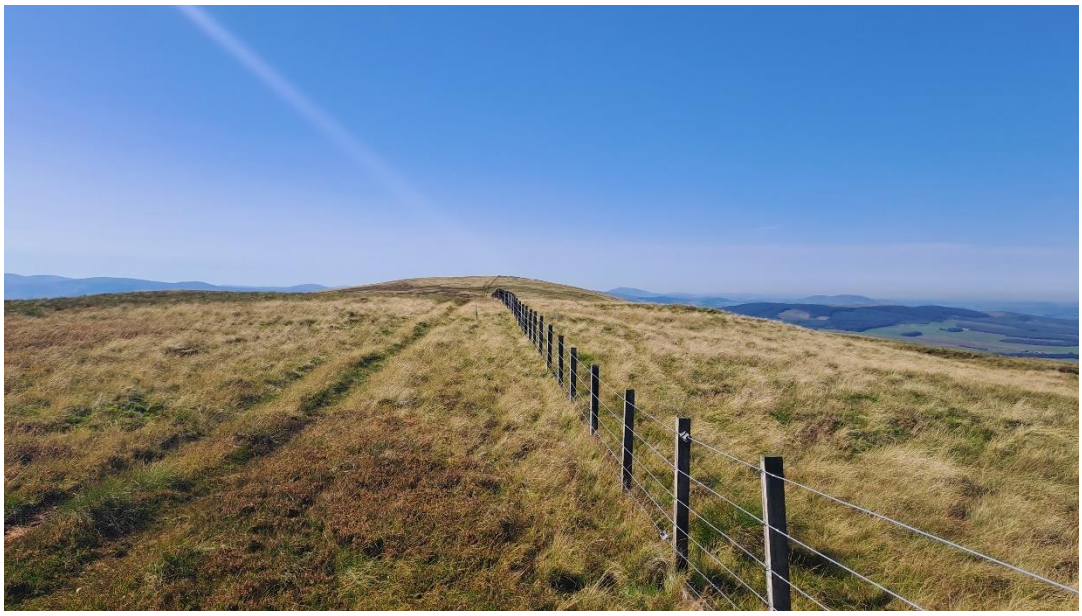

Plate 7.3 - View from Jeffries Corse Cairn towards Dundreich Cairn (SM2777) to the south-west

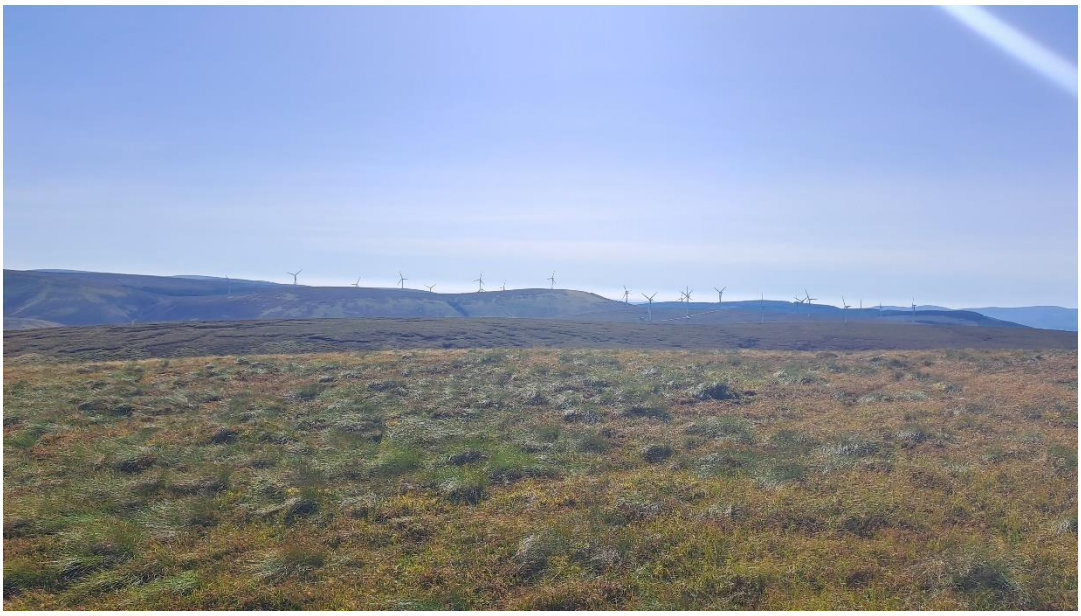

Plate 7.4 - View from Jeffries Corse Cairn towards Bowbeat Wind Farm to the south

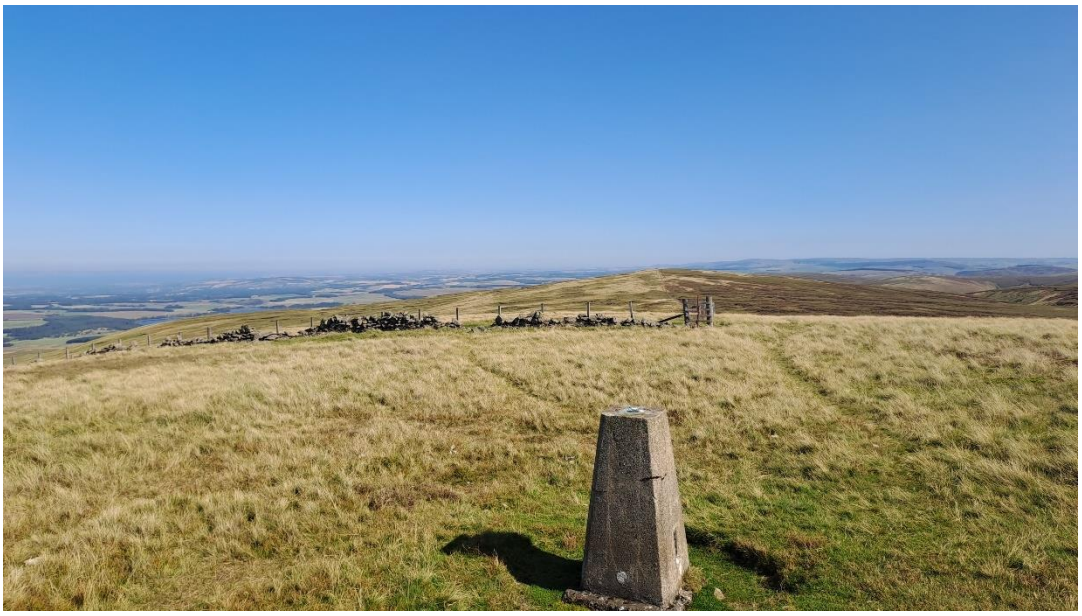

Plate 7.5 - View from Dundreich Cairn towards Jeffries Corse Cairn and the site to the north-east

Falla Luggie Tower (SM5653) (Figure 7.2)

7.6.62 Falla Luggie Tower, located 7.6 km north-east of the Proposed Development, comprises the remains of a late 16th or early 17th century tower house. The Scheduled Monument currently comprises a single wall, originally the south-east corner of the tower house, which measures 8.3 m

in length, 5 m in height and 1.6 m in thickness. The tower would have measured 8.3 m by 9 m in area at its original construction. The tower is built out of rubble masonry, with some sandstone facings, and appears to have been at least three storeys in height, with the first being barrel vaulted. There is evidence of windows within the south-east wall.

7.6.63 The monument is of national importance, reflected in its status as a Scheduled Monument. Its archaeological significance derives from the remains of a 16th or 17th century tower house, with the potential through further excavation or analysis to provide information about the architectural development of defensive dwellings and the lifestyle of minor gentry in rural lowland Scotland during the later medieval period.

7.6.64 The asset is located on the north-eastern edge of Fala Moor, located approximately 320 m AOD. The Cakemuir Burn runs c.1.2 km to the west of the tower house, along a valley. The ground slopes steeply to the west to meet the burn. Fala Moor is located to the direct west of the asset and comprises a relatively flat moorland. A modern unnamed track runs through the centre of the moor, but it contains no other visible infrastructure.

7.6.65 The small settlement of Blackcastle is located within the Cakemuir Burn valley to the direct west of the asset. Blackcastle contains the remains of the 16th century Category B Listed Cakemuir Castle (LB764), which was likely contemporaneous and possibly occupied at the same time as Falla Luggie Tower.

7.6.66 Five unnamed wind turbines are located to the southwest of the asset, clustered c.3 km to the south-west around Cowbraehill Farmstead and c.5 km south-west on Fala Hill.

7.6.67 The asset's setting contributes to its significance. The asset's positioning on the edge of the moor and overlooking the valley to the west allows for wide-ranging and open views, allowing the asset to monitor and command access over the surrounding landscape, including through the valley below. In addition, due to its position on high ground above the valley, the asset would have been visible when approaching through the landscape.

7.6.68 In addition, the asset may have had a connection with Cakemuir Castle to the west, as they were constructed and occupied within a similar time frame. Further analysis of this relationship has the potential to inform our understanding of medieval and post-medieval society and defensive structures.

7.6.69 The ZTV (**Figure 7.2**) indicates that 18 of the proposed turbines would be visible from the asset, with the closest proposed turbine, Turbine 17, located c.7.8 km to the south-west of the asset. The Proposed Development may be visible when approaching the asset along the Cakemuir Burn valley or over the moor, however, these views would be peripheral to the views towards the asset due to the orientation of the Proposed Development and only contribute a minor distraction to the ability to understand, appreciate and experience the contributing factors of the assets setting to its significance.

7.6.70 Views from the asset into the surrounding landscape are anticipated to include the Proposed Development, specifically the views to the south-west along the Cakemuir Burn Valley. However, it is noted that pre-existing turbines and other modern additions are already present to the south-west and that these do not necessarily diminish an understanding of the landscape context of the asset. As such, the addition of the Proposed Development within this view would be a minor distraction at most to this appreciation.

7.6.71 The Proposed Development may be visible in views between the asset and Cakemuir Castle, however, these views would be peripheral due to the orientation of the Proposed Development which would not infringe between the two assets.

7.6.72 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 **negligible**.

Hirendean Castle (SM5608) (Figure 7.2, Figure 7.3, Figure 7.4)

7.6.73 Hirendean Castle is a ruined 16th-century peel tower; a type of fortified tower house found along the Scottish and English border. It is located 3.1 km south-west of the site. The castle was built on land worked by the Cistercian monks based at nearby Moorfoot Chapel grange (SM5976), which was owned and run by the monks from Newbattle Abbey. After the reformation, the land fell into the hands of the Kerr family, whose head, Mark Kerr, had been the Abbot of Newbattle Abbey.

7.6.74 The castle is built out of irregular coursed rubble, with visible remains indicating a structure measuring c.7 m by c.13.5 m. Only the south wall and part of the west gable are visible as upstanding remains and indicate that the building had a least three storeys. The south-west corner stands at approximately 9 m in height. A doorway at the south end provided access to a basement level.

7.6.75 The asset derives part of its significance from both its historical connections and its archaeological value. The connection of the castle with Newbattle Abbey and later the Earls of Lothian provides historical context for any archaeological remains. Further investigation at the castle in the form of excavation has the potential to further our understanding of late medieval and post-medieval defensive architecture, settlement, domestic life and pre-improvement land use.

7.6.76 The asset is located at the base of a north-facing slope of The Kips in the Moorfoot Hills, at approximately 330 m AOD. The hillside slopes upwards sharply to the south towards the summit of The Kips and the high Moorfoot Hills. This hillslope forms a protective shelter around the east, south and west of the asset. The Hirendean Burn is located immediately to the east of the asset and converges with the River South Esk, which runs to the west of the asset, c.0.3 km to the north. The source of the River South Esk is located c.2.6 km south of the asset, along a valley through the Moorfoot Hills. Hirendean Castle sits at the entrance to this valley.

7.6.77 The landscape comprises rough grazing land, with evidence of post-medieval agricultural use in both Sheepfolds and nearby Gladhouse Cottage and Moorfoot Farm, located c.1 km to the north. There is a band of commercial forestry directly adjacent to the east of the Scheduled area, which currently screens views to the east from the asset. The surrounding landscape has other small bands of commercial forestry. The nearby Moorfoot Chapel (SM5976), originally owned by the same landowner, is located c.1 km to the north and Gladhouse Reservoir (LB45811) is located c.1.7 km to the north of the asset. The reservoir was not constructed or in operation at the time of the asset's occupation, having been formed in the 19th century by damming the River South Esk.

7.6.78 The asset's setting contributes to its significance. The raised elevation of the asset allows wide-ranging views to the north, north-east and north-west. These views allowed the occupants of the castle to monitor and control the landscape, including those approaching along the River South Esk from the north. The Moorfoot Hills provide protection and natural defence to the south, east and west, shielding and enclosing the castle. The asset has an association with the earlier Moorfoot Chapel monastic grange, having shared the same landowner (Newbattle Abbey), and a visual connection between the assets may have been important in the siting of the later castle. However, this is not confirmed and may be coincidental. Whilst there is modern development within the surrounding landscape, including the modern farmsteads surrounding the Moorfoot

Chapel grange and Gladhouse Reservoir itself, these modern developments have not impacted the ability to understand and appreciate the contribution of the setting to the significance of the asset.

7.6.79 The ZTV (**Figure 7.2**) indicates that 18 turbines would be visible from the castle itself, with the closest turbine, Turbine 1, being located 3 km to the north-east. The Proposed Development would be present in views to the north-east of the asset, currently partially screened by commercial forestry (**Figure 7.4**). Without the screening of the commercial forestry, there would be a mild encroachment of the Proposed Development in these views to the north-east, but the views to the north and north-west would not be impacted. The Proposed Development would be peripheral to views between the asset and Moorfoot Chapel monastic grange, as well as peripheral to views along the River South Esk, both to and from the asset. As such, the Proposed Development would erode the heritage significance of the asset to a minor extent. The ability to understand, experience and appreciate the contribution of the asset's setting (primarily the natural defence formed by the Moorfoots, the open views along the River South Esk and the connection to the grange) would not be impacted by the Proposed Development.

7.6.80 As a Scheduled Monument, the asset is considered to be of high cultural significance. The magnitude of impact is anticipated to be **low adverse**, and as such, the significance of effect is **minor**.

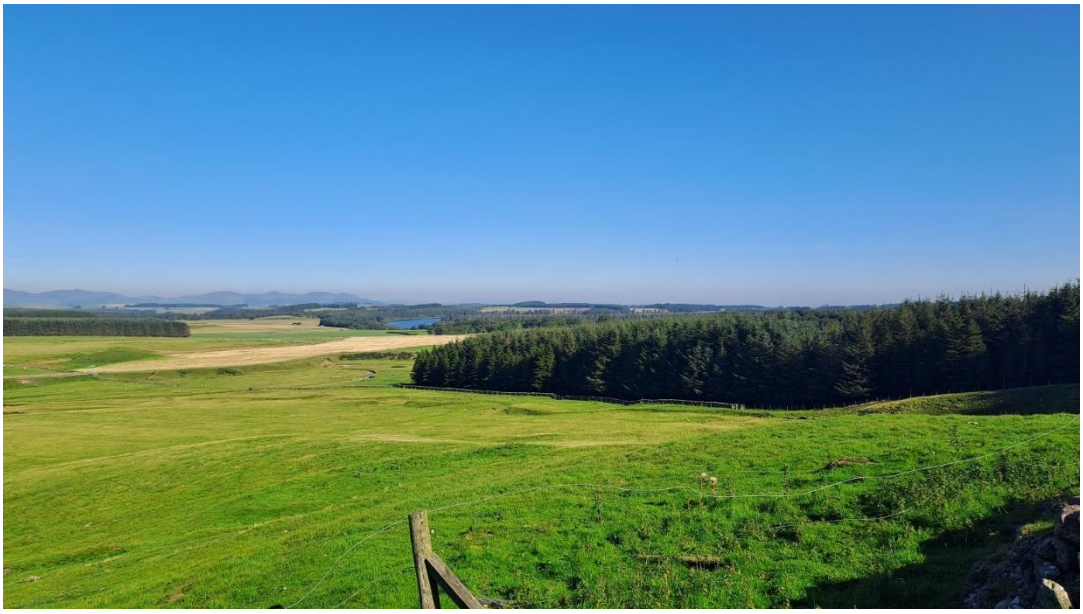

Plate 7.6 - View from Hirendean Castle (SM5608) towards Moorfoot Chapel (SM5976) to the north. The Proposed Development would be screened by the commercial forestry to the east.

Corsehope Rings (SM1166) (Figure 7.2, Figure 7.3, Figure 7.13)

7.6.81 Corsehope Rings is a prehistoric hill fort, located 5.1 km south-east of the site, occupying the summit of Mid Hill. The hill fort has four concentric single ramparts, each with an external ditch, as well as a fifth one on the north-western side. These defences enclose an area of approximately 130 m by 82 m, with the defences measuring 30 m in breadth. Whilst the internal area of the hill fort has been ploughed, there appears to be approximately 20 ring ditch houses.

7.6.82 The asset derives its significance from its archaeological potential, with further excavation providing the opportunity to further our understanding of prehistoric hill forts, defensive structures, society and economy.

7.6.83 The asset is located on the summit of Mid Hill, which is a north-east-facing ridge. The ridge overlooks Heriot Water, located c. 0.6 km to the west, and Corsehope Burn, located c.0.3 km to the east. Both watercourses run through their own valleys, before converging c.2 km north-east of the asset, at the base of the Mid Hill ridge. The fort is situated at 404 m AOD, which provides wide ranging views of the surrounding landscape, but does not mark the highest point in the surrounding landscape.

7.6.84 The asset is located within rough grazing pasture, with areas of commercial forestry directly to the south and east. Further commercial forestry is located c. 0.18 m to the south-east and east of the asset. The

asset sits within a wider prehistoric landscape, including Halltree Rings (SM1170) fortified settlement located to the east side of Corsehope Burn, c.0.6 km east of the asset and Hodge Cairn Fort (SM1171) located c.2.5 km east of the asset.

7.6.85 The asset's setting contributes to its significance. The asset's placement height at 404 m AOD at the top of a ridge allows views in all directions, placing the surrounding landscape within its control and influence and providing defensive views. The asset overlooks two watercourses (Corsehope Burn and Heriot Water) and it likely commanded the valleys and controlled movement along them, however, the surrounding topography would limit views onto the valley floors themselves. The placement of the asset within a ridge separated from the surrounding Moorfoot Hills affords views over the surrounding hills and ridges, allowing control over the wider landscape. The fort would have been visible from the surrounding hills, further asserting the fort's dominance within the landscape.

7.6.86 A visual relationship may have been important between Corsehope Rings and the surrounding contemporary assets, most notably Halltree Rings (SM1170). Both Corsehope Rings and Halltree Rings share views along Corsehope Burn and this suggests that the burn was a key area of control for the asset.

7.6.87 The setting of the asset has changed since its initial construction, with modern development occurring within the surrounding landscape. The settlement of Heriot is located within the Heriot Water Valley, c.0.8 km north of the asset. The surrounding landscape includes interspaced agricultural buildings. The presence of Heriot and other settlement within the valleys surrounding the asset does contribute a minor distraction to the ability to understand and appreciate it and its setting, obscuring the fort in some approaches along the valley.

7.6.88 The ZTV (**Figure 7.2**) indicates that 18 of the proposed turbines tips will be visible from the asset, with the closest, Turbine 10, being located c.5.5 km to the north--west. In addition, the wireline (**Figure 7.13**) indicates that five hubs would be visible from the asset when looking towards the Proposed Development. Whilst these turbines would be visible when viewing the wider landscape to the north of the asset, they would be peripheral to the wider view and would be a minor distraction to the ability to understand and appreciate the connection of the asset to its

immediate hinterland, that relating to its function in respect to the Heriot Water and the Corsehope Burn.

7.6.89 The Proposed Development is not anticipated to be visible in approaches towards the asset along Heriot Water and Corsehope Burn. Nor would the Proposed Development be visible in views towards the asset from nearby Hodge Cairn fort.

7.6.90 Whilst views are predicted from Halltree Rings towards the asset, the wireline (**Figure 7.12**) indicates that only 11 proposed turbine tips will be visible from Halltree Rings in views towards Corsehope Rings, visible only to the east of the asset. Due to the placement of the visible turbines to the east of the asset, these tips would form a minor distraction at most to the ability to appreciate the relationship between these two assets.

7.6.91 As a Scheduled Monument, the asset is considered to be of high cultural significance. The magnitude of impact is anticipated to be **very low adverse**, and as such, the significance of effect is **very minor**.

Halltree Rings (SM1170) (Figure 7.2, Figure 7.3, Figure 7.12)

7.6.92 Halltree Rings is a later prehistoric settlement, possibly a small fort, located on Chapel Hill. The settlement is circular in shape, measuring approximately 79 m in diameter. The asset has a single surrounding rampart, which reaches 3 m in height, and an external quarry ditch which survives around the entire settlement apart from on the south-east. The settlement has an entrance on the west side and there are no visible internal features.

7.6.93 The asset derives its significance from its archaeological value, with excavation having the potential to further our understanding of prehistoric defensive settlements, economy and society.

7.6.94 The asset is located on the summit of Chapel Hill at 373 m AOD. Corsehope Burn runs c.0.3 km to the west of the asset, along a valley. Corsehope Burn converges with Heriot Water c.1.3 km to the north-east. The asset is situated within an agricultural field, directly bordered to the south-east by an area of forestry. A field boundary runs directly through the centre of the asset.

7.6.95 The wider surrounding landscape comprises the Moorfoot Hills in all directions, with the asset occupying one of the lower hills within the range. The asset is located within a wider prehistoric landscape, with Corsehope Rings (SM1166), a hillfort, located c.0.6 km to the west of the

asset on the opposite side of Corsehope Burn, and Hodge Cairn fort (SM1171) located c.1.8 km to the south-east of the asset.

7.6.96 There is some minor modern development within the Corsehope Burn valley to the west of the asset, comprising a farmstead c.0.4 km to the north-west. The general surrounding landscape contains dispersed agricultural and domestic structures.

7.6.97 The setting of the asset contributes to its significance. The placement of the fortified settlement at an elevated position along the Corsehope Burn and with the visibility of its convergence with Heriot Water indicates that its inhabitants monitored and commanded these natural pathways through the landscape and controlled the access through the landscape. Whilst the base of the Corsehope Burn valley is obscured from view from the asset itself, its presence and prominence on the adjacent hill still places the valley firmly within its control. The nearby Corsehope Rings hillfort also controlled access along Corsehope Burn, indicating both a visual and functional relationship between the two contemporary assets.

7.6.98 The ZTV (**Figure 7.2**) indicates that 11 of the proposed turbines would be visible from the asset, with the closest proposed turbine, Turbine 10, located c.6.2 km to the north-west of the asset. The wireline (**Figure 7.12**) indicates that 0 hubs will be visible from the asset.

7.6.99 The proposed turbines are not anticipated to be visible in approaches towards the asset along the Corsehope Burn or Heriot Water and will be peripheral in any views around the surrounding landscape apart from views to the north-west.

7.6.100 The tips of 11 proposed turbines will be visible when viewing Corsehope Rings from the asset as it is orientated in the same direction as the Proposed Development. These turbine tips are situated to the east of Corsehope Rings and do not impact the ability to distinguish the asset from the surrounding landscape. Due to the placement of the visible turbines to the east of the asset, these tips would form a minor distraction at most to the ability to appreciate the relationship between the two assets.

7.6.101 As a Scheduled Monument, the asset is considered to be of high cultural significance. The magnitude of impact is anticipated to be **very low adverse**, and as such, the significance of effect is **very minor**.

Soutra Aisle (SM3067, SM7573) (Figure 7.2)

7.6.102 Soutra Aisle comprises the remains of a medieval hospital and a later associated chapel with an intact burial aisle. It is located 10.1 km east 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.

7.6.103 Soutra Hospital is said to have been founded in 1164 by Malcolm IV, however, 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, however, 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.

7.6.104 A geophysical survey and trial excavation at the site 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.

7.6.105 Soutra Aisle derives its significance from its position as a rare set of surviving remains for a medieval hospital, as well as the re-use of the site 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 religious life of the members of the Augustinian Order.

7.6.106 The asset is located c.0.9 km to the south of the summit of Soutra Hill, at approximately 370 m 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 more long ranging 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.

7.6.107 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.

7.6.108 The surrounding landscape broadly consists of commercial forestry, agricultural land and fields, and dispersed farmsteads. Soutra Hill Quarry, a modern quarry, is located c.0.6 km 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 south-east. A set of power lines pass through the landscape c.0.27 km north of the asset.

7.6.109 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 pilgrims[iii]. The asset, whilst diminutive in character, would 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 locating factors such as the road.

7.6.110 On approach from the south Soutra Aisle is visible on the crest of a hill breaking the skyline. The visibility of the extant turbines to the south of the asset do 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.

7.6.111 The ZTV (**Figure 7.2**) indicates that 18 proposed turbines would be visible from the asset, located c.10 km to the south-west, with the closest turbine being Turbine 18. The turbines are anticipated to be peripheral to any key views towards the asset when approaching along the B6368. The appreciation of the assets on the crest of a hill would be unaffected. The Proposed Development may also be present in views out from the site to the west and south-west, however 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.

7.6.112 As a Scheduled Monument, the asset is considered to be of high cultural significance. The magnitude of impact is anticipated to be **very low adverse**, and as such, the significance of effect is **very minor**.

Gladhouse Villa (LB14633) and Gladhouse Reservoir Including Dam, Weirs, Revetments, Gangway, Measuring House, Tweedaleburn Aqueduct and Bridges over Tributaries (LB45811) (Figure 7.2)

7.6.113 Gladhouse Villa is a Category B Listed Building, located on the northern shores of the Gladhouse Reservoir, 2 km west of the site. Gladhouse Reservoir and its associated infrastructure is also a Category B Listed Building. The reservoir was constructed in 1879, ordered by the governing body of the city of Edinburgh and designed by the civil engineers James and Alexander Leslie, as a way to collect and provide water for the nearby communities of Edinburgh, Leith, Portobello and Dalkeith. The reservoir was needed as the original smaller reservoirs in the nearby Pentland Hills could no longer provide for the population. The reservoir itself covers an area of 186 ha, with two small islands in the centre, and is designed to have the capacity for 1700 million gallons of water. The reservoir was created by damming the River South Esk to the south. The listing for Gladhouse Reservoir covers the infrastructure surrounding the reservoir, including the dam, revetments, weir, gangway, measuring house, Tweedleburn Aqueduct, and the bridge over the Crosslee Burn.

7.6.114 Gladhouse Villa is a baronial-style villa, originally built for the caretaker of Gladhouse Reservoir. The villa is two storeys with a three-storey tower to the left of the entrance and is constructed in bull-faced squared and snecked sandstone, with droved dressings. On the south (front) elevation, there is a heraldic panel which potentially depicts Neptune and has a Latin phrase reading 'NISI COMINUS FRUSTRA', potentially a misspelling of the city of Edinburgh motto. The external architecture of the villa is consistently asymmetrical on all faces, with external timber doors, and multiple letterbox fanlights. The interior of the villa maintains a water/reservoir theme, with the former board room having a fine coomb ceiling with a cornice with a waterlily and bulrush design.

7.6.115 Both the villa and the reservoir derive their significance primarily from their architectural style and exceptional engineering design. At the time of its construction, the design and capacity of Gladhouse Reservoir was an exceptional feat of engineering, and the baronial architectural style of the associated villa provides architectural value to the asset.

7.6.116 Both the reservoir and the villa are located at the foot of the Moorfoot Hills, which are visible from the reservoir c.1.3 km to the south and c.2 km to the east. The River South Esk, which was dammed at the north of the reservoir, runs from the Moorfoot Hills to the south and continues to the north after exiting the reservoir.

7.6.117 The setting of Gladhouse Villa is the reservoir itself, providing both the place of work for the original caretaker and a picturesque backdrop from the principal south elevation. The setting of the asset contributes to its significance by providing context for its construction.

7.6.118 Whilst the reservoir itself does have a setting, with the River South Esk forming its water source, the wider landscape setting of the asset does not contribute to its significance.

7.6.119 The ZTV (**Figure 7.2**) indicates that 18 of the proposed turbines would be visible from the assets, located to the north-east. The Proposed Development would not be present within views from the villa over the reservoir from the southern (principle) elevation and would be peripheral to views from the villa over the reservoir when looking to the east. Thus, the Proposed Development would not impact the ability to appreciate, understand or experience the asset and its connection to its setting.

7.6.120 As Category B Listed Buildings, both Gladhouse Reservoir (LB45811) and Gladhouse Villa (LB14633) are considered to be of medium cultural significance. The magnitude of impact is anticipated to be **very low adverse**, and as such, the significance of effect is **negligible**.

Mauldslie Farmhouse and Steading (LB45814) (Figure 7.2, Figure 7.3, Figure 7.7)

7.6.121 Mauldslie Farmhouse and Steading is a Category B Listed Building. The farmhouse was constructed in 1836 and is a two-storey, three-bay rectangular structure, with some additions and alterations. The south elevation of the farmhouse is comprised of coursed tooled sandstone, with the other elevations comprising tooled rubble. The south elevation is the principal elevation, with a harled porch, a bordered timber door and three windows on each floor. The east and west elevations have later additions, in the form of lean-tos. The north elevation also has a later addition lean to and has a tooled lintel above the centre window on the 1st floor, reading 1836, potentially indicating the initial date of construction. The roof of the farmhouse is grey slate with a lead ridge and the farmhouse has cast iron rainwater goods. Notably, the windows of the farmstead are

predominantly made up of lying pane glazing, which was fashionable in the 1830s.

7.6.122 The steading, located to the north of the farmhouse, dates from 1824 and the early 19th century. The west range comprises a U-plan structure made of random rubble with droved dressings. A dovecot is located to the south of the west range, a cart shed and granary are located to the east and there is a bothy, single-storey with an attic, to the south-east of the steading.

7.6.123 Mauldslie Farmhouse and Steading primarily derives its significance from its architectural value, with a little altered vernacular style from the early 1800s. The lying pane glazing provides significant interest to the farmstead due to its importance in the early 1800s. The obvious phasing of the building, with the extant lean-tos, provides further architectural interest as it demonstrates the change in vernacular architectural styles over time.

7.6.124 The asset is located to the north of the Moorfoot Hills, c.0.3 km to the south-east of Gladhouse Reservoir, which was created in the late 19th century by damming the River South Esk. Due to its positioning along the eastern bank of the River South Esk, which is located c.0.7 km to the west of the asset, the asset sits within fertile land, which is ideal for agriculture. The farmhouse and steading sits within agricultural land, which appears to have been used for rough grazing or pastoral land for hundreds of years.

7.6.125 The wider landscape comprises a small number of farmsteads, within a network of agricultural fields and rough grazing land. The Moorfoot Hills lie c.1 km to the south of the asset.

7.6.126 The local agricultural setting of the asset contributes to the asset's significance, as it provides context for the placement of the farmstead. The fertile land surrounding the River South Esk provides ideal land for agricultural exploitation.

7.6.127 The ZTV (**Figure 7.2**) indicates that all 18 of the proposed turbines would be visible from the asset, which is confirmed by the photomontage. The closest turbine would be Turbine 2, located c.1.2 km to the north-east. Whilst Mauldslie Farmhouse and Steading does have views of the whole Proposed Development (**Figure 7.7**), these views are not integral to the ability to understand, appreciate or experience the agricultural context and nature of the assets setting. As such, the aspects of the setting of the

asset which contribute to its significance would not be impacted by the Proposed Development.

7.6.128 As a Category B Listed Building, Mauldslie Farmhouse and Steading (LB45814) is considered to be of medium cultural significance. The magnitude of impact is anticipated to be **very low adverse**, and as such, the significance of effect is **negligible**.

Middleton Hall, including gatepiers, gates, Ha-ha and boundary walls (LB806) (Figure 7.2, Figure 7.3, Figure 7.10)

7.6.129 Middleton Hall comprises a corps-de-logis, the main block of a country house which is distinct from any subsidiary blocks[iv], built in 1710, with later additions. The main house is a two-storey classical country house. The house is harled, with polished sandstone ashlar dressings. The west elevation of the house contains the main entrance, with a central doorway and ionic columns supporting a balustraded balcony. Additions to the west elevation were made by J MacIntyre Henry in 1898, including balustraded stone steps leading up to the entrance. The stable block was attached to the south elevation of the house in the mid-1900s. The east elevation of the house has a distinctive bowed central bay, with a central doorway and steps leading to the gardens.

7.6.130 The interior of the house is still heavily decorated as it was in 1898, with oak panelling, a galleried oak staircase, and an oak fireplace. The ground floor principal rooms have dado and neoclassical-style fireplaces and the billiard room has an Adam-style plastered ceiling.

7.6.131 The Listing also includes the gatepiers, gates, boundary walls, and a stone ha-ha to the east of the house. The main gates lie to the north-west of the house. The gatepiers are made of polished ashlar, with the gates being modern replacements.

7.6.132 Middleton Hall was originally built by John Mitchelson of Middleton, with the estate being divided up into farms and sold in 1843. Wings were added to the house in 1843, with the wings being extended upwards in the late 19th century. In 1938 the Edinburgh Corporation, the predecessor to the City of Edinburgh Council, took over the house as a children's convalescent home, using it as an evacuation camp during the Second World War. The estate was purchased by the Scottish National Camps Association in 1947, adding wooden huts onto the grounds to use as holiday huts for children. The house has changed hands multiple times since and is now in use as a private home.

7.6.133 The asset primarily derives its significance from its architectural and historical interests. The asset has multiple areas of architectural interest, including the corps-de-logis, the external decorative features and the preserved interior decoration. The asset is a well-preserved example of a Scottish country manor from the early 1700s, with evidence of multiple phases of development over the succeeding years. The phases of development, as well as the multiple uses of the estate and house, provide historic value.

7.6.134 The asset's setting contributes to its significance. The asset is situated within the former Middleton estate, with evidence of the former estate boundaries still visible. The key approach to the estate is from the A7 to the north, running south and then turning east before arriving at a paved courtyard outside the west elevation of the house. The A7 is located c0.2 km to the north of the asset. A formal garden, bounded by a ha-ha is located to the east of the asset, indicating that an eastward view from the principal rooms was key.

7.6.135 The house is surrounded by historic mixed deciduous trees in all directions, which are heavier towards the boundaries of the estate and are sparser in the views to the east past the ha-ha. An unnamed watercourse runs through the former estate to the east of the ha-ha. The B7007 runs out with the estate boundary, located c.0.4 km to the east of the asset. Evidence of the camp buildings from the mid-1900s can be seen on aerial photographs, to the west of the asset. The small settlement of Middleton, mainly comprising post-medieval farmsteads and some domestic cottages, is located c.0.5 km to the south-west of the asset, likely having housed some original workers for the estate.

7.6.136 The unscreened ZTV (**Figure 7.2**) indicates that 17 proposed turbines would be visible from the east of the asset, with 16 proposed turbines visible from the paved area to the west. The closest proposed turbine is Turbine 17, located c.2.9 km to the south-west. **Figure 7.10** indicates that the proposed turbines would be visible to the south-west from the driveway directly to the west of the house, however due to historic deciduous forestry that was likely planted as part of the designed gardens surrounding the house, these views would be limited.

7.6.137 Due to the asset currently being occupied as a private dwelling, entry was not granted to the assessor or Landscape Architect to achieve internal photography, thus, the potential for visibility from first-floor rooms was not assessed. As previously stated, key views to and from the asset would

comprise the approach along the drive to the west and views out across the formal garden to the east. As the Proposed Development is located to the south-west of the asset, it would be peripheral to any of these key views and thus, the turbines would form a minor distraction to the ability to understand, appreciate or experience the asset within its setting. Furthermore, the presence of historic deciduous trees surrounding the house forms a visual barrier and would further obscure the visibility of any turbines.

7.6.138 As a Category A Listed Building, the asset is considered to be of high cultural significance. The magnitude of impact is anticipated to be **very low adverse**, and as such, the significance of effect is **very minor**.

Borthwick and Crichton Conservation Area (CA343) and Crichton Castle (SM13585) (Figure 7.2, Figure 7.3, Figure 7.8)

7.6.139 The Borthwick and Crichton Conservation Area is approximately 1180 ha in size and covers the settlement of Borthwick to the south and the settlement of Crichton to the north, as well as many intervening smaller settlements and farmsteads. The Conservation Area contains two prominent castles, Crichton Castle (SM13585) and Borthwick Castle (LB805).

7.6.140 Borthwick Castle, located in the Gore Water Valley in the south of the Conservation Area, was constructed in 1430 by Sir William Borthwick and has an extensive history, including housing Mary Queen of Scots and her husband Lord Bothwell after the murder of Lord Darnley in 1567. The Castle was attacked by Oliver Cromwell's forces in 1650 and has surviving visible damage.

7.6.141 Crichton Castle (SM13585) is a medieval courtyard castle, believed to have begun construction in 1400 as a tower house and developed over the 15th and 16th centuries. In the 1580s, the 5th Earl of Bothwell, transformed the castle into a renaissance palace, notably building lodging to the north of the asset which can still be seen today. There is a two-storey building to the south of the castle, which is believed to be a stable block.

7.6.142 The castle was first constructed by John de Crichton, forming the seat of power for the Crichton Family. The Crichton Family forfeited the lands in 1483, having been supporters of Alexander Stweart, the Duke of Albany, who was sentenced for treason. The castle was eventually given to the 1st Earl of Bothwell and eventually passing to the 4th Earl of Bothwell, 3rd husband of Mary Queen of Scots. The Queen is thought to have visited on at least one occasion. After the 4th Earl of Bothwell was accused of the

murder of Lord Darnley in 1567, the Crichton estate and title of the 5th Earl of Bothwell was given to John Stewart, the illegitimate son of King James V. The 5th Earl of Bothwell lost the favour of King James VI, being accused of witchcraft, and was made to forfeit Crichton Castle in 1592. The castle was eventually given to the son of the 5th Earl but financial pressures meant the castle was sold to the Hepburns of Humbie, before being passed through the family and eventually into state care in 1956. The castle is the subject of a painting by JMW Turner and is mentioned in Sir Walter Scott's poem Marmion.

7.6.143 The castles primarily derive their significance from their potential to further our understanding of medieval domestic fortified dwellings, both through analysis of the architectural elements of the upstanding remains and the potential for further buried archaeological remains. Borthwick Castle, as a Listed Building, is an extremely good example of a complete 15th century Scottish keep, demonstrating its architectural value. Any further investigation gives us the potential to development research into medieval architecture, society, economy and construction. The castles also have historical interest, with connection to multiple well known historic figures, including Mary Queen of Scots, playing a key role in many important parts of Scottish History and featuring in the works of well-known artists.

7.6.144 The Borthwick and Crichton Conservation Area forms the setting for Crichton Castle and Borthwick Castle.

7.6.145 Crichton Castle is located on a west facing terrace, overlooking the valley of a small Burn, Tyne Water, which flows north to south. Crichton Kirk and the hamlet of Crichton are located c.0.5 km to the north. The castle would have utilised this position to control the valley that Tyne Water runs through and command access through this part of the landscape. The Valley of Gore Water, which contains the aforementioned Borthwick Castle is located c.1.7 km to the south-west.

7.6.146 Borthwick Castle is located within the hamlet of Borthwick, within the valley of Gore Water. Gore Water itself runs to the direct north of the asset. Due to its placement within the valley, the ground rises sharply to the north and south of the asset. The castle would have utilised its position within the valley, commanding access through the landscape and using the hills as a natural form of defence.

7.6.147 There is relatively little modern development within the Conservation Area, allowing for the preservation of views between the two castles and

maintaining the medieval character of the landscape. There are some agricultural buildings and domestic dwellings, with the only major road being the A7 which bounds the Conservation Area to the south. The Borders Railway Line runs through the Gore Valley, to the north of Borthwick Castle.

7.6.148 As well as the two castles. other key structures within the Conservation Area include Crichton Kirk (LB753) and Borthwick Kirk (LB804), which lie adjacent to their associated castles and are both medieval in original date and have had renovations over the years. These structures, as well as manses, schoolhouses, and some domestic dwellings in Borthwick and Crichton maintain the medieval character of the Conservation Area and the setting of Crichton Castle.

7.6.149 Key views within the Conservation Area include those from Crichton Castle along the burn to the west, from Borthwick Castle along the valley to the east and west. Views between the castles may have been important due to them having been in use at the same time period and having a shared history, however, the visit for the Settings Assessment did not find any intervisibility between the assets due to the intervening landscape and modern development.

7.6.150 Crichton Castle also heavily features in significant views throughout the Conservation Area. The Conservation Area appraisal[v] notes a key view of Crichton Castle being from Colegate Road to the west of the asset, across the valley to the east. The character appraisal notes that the majority of views within the Conservation Area focus on either castle. From the high ground outside of the valleys, notably in the east and west of the conservation area, there are views in all directions including towards the Moorfoot Hills to the south-west.

7.6.151 The ZTV (**Figure 7.2**) indicates that there would be a range of visibility of turbines, with 0 visibility at the base of the valleys and full visibility at the top of the surrounding hills. Crichton Castle would have views of 16 turbines, with the closest turbine being Turbine 16, located 6.1 km south-west of the asset. Borthwick Castle has views of 3 of the proposed turbine tips, with the closest turbine being Turbine 16 located c.4.3 km south-west of the asset.

7.6.152 The Proposed Development would be visible from Crichton Castle (**Figure 7.8**), however it would be peripheral to key views along the gorge to the west. Views of the Proposed Development would be very limited from Borthwick Castle in all directions. In addition, the Proposed Development

would be peripheral in views that focus on the castles and would not impact on the ability to appreciate, understand, or experience the assets within their Conservation Area setting.

7.6.153 These views of the Proposed Development would not be anticipated to impact the character of the Conservation Area, which would maintain its medieval character.

7.6.154 As a Conservation Area, the asset is considered to be of medium cultural significance. The magnitude of impact is anticipated to be **very low adverse**, and as such, the significance of effect is **negligible**.

Temple and Arniston Conservation Area (CA342) (Figure 7.2)

7.6.155 Temple and Arniston Conservation Area is located in Midlothian and covers the village of Temple and the south of the Arniston Inventoried GDL (GDL00029). A full assessment of the Arniston GDL can be found in **Paragraphs 7.6.163** to **7.6.176**.

7.6.156 The Conservation Area has a long history of human settlement, with written record of the area spanning at least 900 years. It is believed that Hugues de Payens, the first Grand Master of the Knights Templar, met with David I of Scotland in 1128 and was granted the land of Balantrodach (eventually renamed Temple). Temple was the Scottish headquarters of the Knights Templar until their suppression in 1312. The land, now comprising the village of Temple and the estate of Arniston, was eventually given to the Knights Hospitaller, who may have assimilated with the Templar Knights and managed the land with them. The Old Parish Church (SM1191) comprises the remains of the principal preceptory of the Templars in Scotland, with some remaining medieval fabric and visible 17th-century alterations. In addition to the ecclesiastical buildings, the Knights are believed to have had a mill and a coal mine. After the reformation, the estate was given into the hands of the Crown and a large portion of land was eventually purchased by George Dundas in 1571. This land eventually became Arniston Estate, with a tower house built on the land for the Dundas family.

7.6.157 In the 1630s, the 1st Laird of Temple used the stones from the former Knights Templar buildings to construct Temple House (HER Ref: MEL8246). Temple House is no longer extant, having passed into the hands of Robert Dundas in 1748 after the Laird of Temple during that period, Patrick Deuchar, ran out of money. According to local legend, the stones of Temple House were used to construct the cottages within the village. The village of Temple developed from an ecclesiastical settlement to an

agricultural village, supporting a small community of farmers and craftsmen throughout the next hundred years. In the 1870s the village house the navigational engineers (or navvies) that were brought to the area to construct the surrounding reservoirs.

7.6.158 In 1726-33, Arniston House was built to the north of Temple, designed by renowned architect William Adam, and a semi-formal park was developed around the house, forming the basis for the GDL that exists today. The house and estate were continuously developed over the next couple of centuries, with the descendants of the Dundas family still living on the estate today.

7.6.159 The significance of the Temple and Arniston Conservation Area derives from its historic associations, with over 900 years of documented history and connections to key historic figures and groups like the prominent Dundas family and the Knights Templar. The Arniston estate and the village of Temple have an intertwined history, with the Knights Templar originally owning the land and the village later providing accommodation for estate workers.

7.6.160 The Conservation Area is located c.5 km north of the Moorfoot Hills, with the River South Esk running directly through the centre of both the village and the estate to the north. The village no longer retains its medieval character, with the majority of the stones from the Templar buildings believed to have been used in the creation of the manor house and then the cottages. The Conservation Area retains its post-medieval character, with the estate and cottages providing a sense of daily life in the 18th and 19th centuries.

7.6.161 The ZTV (**Figure 7.2**) indicates that between 0 and 18 of the proposed turbines would be visible from various locations within the Conservation Area, with the Proposed Development located to the south-east of the Conservation Area. As the significance of the Conservation Area derives from its historical associations and its post-medieval character, external views out of the area do not contribute to its significance. As such, the presence of the Proposed Development to the south-east of the Conservation Area would not impact the Conservation Area's character nor impact the ability to understand and appreciate its historical associations.

7.6.162 As a Conservation Area, the asset is considered to be of medium cultural significance. The magnitude of impact is anticipated to be **neutral**, and as such, the significance of effect is **nil**.

Arniston Inventoried Garden and Designated Landscape (GDL00029) (Figure 7.2, Figure 7.3, Figure 7.9)

7.6.163 Arniston policies and gardens contain a number of designated heritage assets which relate to the significance of the designed landscape, they are all assessed in this section as one group. The GDL comprises of a late 18th century to early 19th century estate containing 43 Listed Buildings, comprising four Category A, 15 Category B and 24 Category C.

7.6.164 The land was first designed between 1689-1700 by William Adam, prior to this the lands belonged to the Knights Templar of South Esk up until 1309 when it was passed to Hospitallers. After the Reformation, Mary Queen of Scots sold the land which was later purchased by George Dundas. It is thought that James Dundas, son of George, built the first Arniston House in 1620. The Dundas family has held the grounds to the present day.

7.6.165 Arniston House (LB808) is a Georgian House which was built and designed by William Adam in 1726 to the design of William Adam. Part of the old house dating from c.1620, which stood on the same site, was incorporated into the design. The gardens which immediately surround the house are extensive and grand in their design with a formal 'Wilderness' and accompanying pond. It is shown in detail on Roys, (1750) and the subsequently on Ordnance Survey Mapping (1st Ed). Key approaches at Arniston were from its three lodges (North, East and South), with tree lined avenues on all.

7.6.166 The main approach into the estate is along the north drive. This entrance passes through the North Lodge (LB814), with two prominent lodges flanking the gate. Once passing the farmstead (LB45130), the trees become less dense and open up views across the estate's lawns, with the woodland band along the river visible to the west, and the Arniston House appearing upon the approach. This approach, and the selective gaps in the tree planting, creates designed, focused views of appreciation of the house from a distance. The east and south driveways are more practical, with less distance to travel to the house, but treelines and small areas of dense woodland are also used to prevent full views of agricultural areas. The east and south drives also have approaches to the house which have focused views of appreciation to the house, maintaining it as the focus of the estate.

7.6.167 From the house, the lawn to the north and south provide wide, long-distance views. To the south, views would comprise views of the series of paths branching out in an irregular grid-like way, providing access to the

woodland to the west and 'The Wilderness' to the south. In general, the designed landscape was designed to appreciate all within its boundaries, with treelines and low lying walls to act as a barrier between the 'designed' and the agricultural land beyond.

7.6.168 The estate is based on both the east and west sides of the River South Esk; the land to the west of the river comprises agricultural fields, while the east side is a mixture of agricultural fields, landscaped parkland, gardens, woodland and tree-lined approaches approaching the main house and pathways to a number of other built features. It is bounded by the B6372 along its east and south boundaries and agricultural land to its west. The estate's layout reflects the merging of the Shank Estate and Arniston Estate, with the Shank Estate within the north and Arniston component comprising the majority of the land toward the south.

7.6.169 The Proposed Development is located c.3.6 km to the south of the asset. The bare earth ZTV (**Figure 7.2**) analysis indicates that all 18 turbines would be visible from the majority of the estate, with the only area with less visibility being located along the River South Esk.

7.6.170 Although the ZTV disregards a great deal of woodland and trees which the estate would have in place to lower this visibility, in the worst-case scenario the Proposed Development would be present within a number of views within the estate. With reference to the section above, aspects of the asset's setting which would hold views of the Proposed Development include the approach, views to and from Listed Buildings within the designated GDL, and across the estate.

7.6.171 Visibility of turbines along the north and east drive would occur on the approach into the estate, particularly along the north drive where turbines would be present in designed views of the house. The south drive would also hold some views of turbines, upon exiting the estate.

7.6.172 The Proposed Development also has potential to be present within views from the house facing south, where views are intended to be dominated by woodland south of the lawn. Views to the house, from the long lawn to the north, would also potentially share views with the Proposed Development, and potentially detract from the intended visual focus on the house.

7.6.173 Views of the Proposed Development could also be possible from the pathways throughout the estate, particularly those to the south of the house and to the Sunken and Walled Garden (**Figure 7.9**). While this area is shrouded in trees, there is limited visibility, primarily of proposed

Turbines 1 and 2, which may detract from the intended sense of isolation within the estate.

7.6.174 Whilst the agricultural assets and landscape within the estate are partially incorporated into the setting of the designated garden and designed landscape along the east drive at Farm House, the majority of the agricultural landscape is visually isolated from the estate to the east of Arniston Mains. Any visibility of the Proposed Development within this area would not be considered to affect the setting of the principal assets, as this area's use is practical in nature, and does not share views with contributing aspects of the setting such as the house.

7.6.175 Overall, the potential visibility of the Proposed Development would be anticipated to cause a low adverse magnitude of effect, resulting in a minor significance of effect, which is considered not 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 GDL's setting. Despite the anticipated changes to the backdrop of the approach, views of Listed Buildings including the North Lodge upon entry in the north and Arniston House along the north, east and south drives would remain intact, and the relationship between the agricultural and leisure landscapes within the site, the woodland, lawn and garden spaces focused upon Listed Buildings would all remain unchanged. The woodland would also still dominate the backdrop from within the asset and, whilst it remains, create screening for much of the estate.

7.6.176 Overall, as a designated GDL it is considered to be of National Significance, and contains Listed Buildings of national, regional and local significance. As set out above, it is concluded that the magnitude of change/effect is **very low adverse** upon the contributing aspects of significance, and therefore has an overall significance of effect of **minor**. This is not significant in EIA terms.

Decommissioning Effects

Embedded Measures

7.6.177 The landscape would be reinstated to its original state following decommissioning.

Potential Effects

7.6.178 There would be no negative post-operational effects upon the setting or significance of any assets within 10 km, as the landscape would be

returned to its original state. There would be no direct effects on any assets as there would be no new groundworks during this stage.

Residual Post-Operational Effects

7.6.179 There would be no residual effects resulting from the decommissioning of the Proposed Development.

7.7 Mitigation

Direct Construction Effects

7.7.1 As outlined in **Paragraphs 7.6.1** to **7.6.7**, direct impacts have the potential to derive from any groundworks or ground disturbance undertaken as part of the construction phase of the Proposed Development. The following mitigation is proposed for assets SLR35 and SLR42 and other unknown assets which may be present within the footprint of any ground disturbance:

- SLR35 – Sheepfold, proposed fencing off with a 10 m buffer due to proximity to access track;
- SLR42 – Enclosure, proposed watching brief due to location within borrow pit at east of site.

7.7.2 The precise scope of the watching brief would be negotiated with the East Lothian Council Archaeology Officer (on behalf of Midlothian Council), on behalf of the Applicant and the agreed mitigation programme would be documented in an agreed Written Scheme of Investigation.

Operational Effects

7.7.3 Design mitigation measures are outlined in the Embedded Measures section. No further mitigation is proposed.

Decommissioning Effects

7.7.4 As outlined in **Paragraph 7.6.177**, decommissioning of the Proposed Development would not result in any adverse effects, and thus no mitigation is proposed.

7.8 Assessment of Residual Effects

Direct Effects

7.8.1 As outlined in **Paragraphs 7.6.1** to **7.6.7**, mitigation in the form of a watching brief for SLR42 and any unknown buried remain is proposed. Any residual effect shall be for the benefit of the archaeological community

and preserved through recording in agreement with the East Lothian Archaeological Officer (on behalf of Midlothian Council).

Operational Effects

7.8.2 These remain as set out within the impact assessment. Residual Operational effects are summarised in **Table 7.7**.

Decommissioning Effects

7.8.3 As outlined in **Paragraph 7.6.177**, 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 measuring 50 m to blade tip or greater that are:

- consented or the subject of valid but currently undetermined planning or s36 applications; and
- within 10 km 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.

Jeffries Corse Cairn (SM3527)

7.9.2 Jeffries Corse Cairn (SM3527) is described in **Paragraphs 7.6.25 to 7.6.45**. A photomontage of the asset can be found in **Figure 7.6**.

7.9.3 There are three proposed wind farms within approximately 10 km of the asset anticipated to be visible from the asset; Wull Muir Wind Farm comprises 8 proposed turbines and is located c.10.2 km to the north-east, Greystone Knowe Wind Farm comprises 14 proposed turbines and is located c.10.4 km to the east of the asset and Cloich Forest comprises 12 proposed turbines and is located c.7.5 km south-west of the asset. Only Wull Muir and Greystone Knowe would be visible in views towards the Proposed Development from the asset, and there would be a peripheral change to the asset's setting. However, those interests and the aspects of setting that make the greatest contribution to its significance (**Paragraph 7.6.37**) would be preserved. There would be a very low adverse cumulative effect upon this asset.

Dundreich Cairn (SM2777)

7.9.4 Dundreich Cairn (SM2777) is described in **Paragraphs 7.6.46** to **7.6.61**. A photomontage of the asset can be found in **Figure 7.5**.

7.9.5 There is one proposed wind farm within 10 km of the asset anticipated to be visible from the asset; Cloich Forest Wind Farm comprises 12 proposed turbines and is located c.6.5 km southwest of the asset. The photomontage shows that this development would not be visible in views towards the Proposed Development from the asset, those interests and the aspects of setting that make the greatest contribution to its significance (**Paragraph 7.6.55**) would be preserved. There would be a very low adverse cumulative effect upon this asset.

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 7.7**, which provides a summary of the identified significance of effect upon them.

7.10.3 Jeffries Corse Cairn (SM3527) and Dundreich Cairn (SM2777) have resulted in a Moderate impact and these impacts are not considered to be of such significance that they would reduce the ability to understand or appreciate those assets, and the integrity of their settings would therefore not be overly adversely affected. As the integrity of both assets settings would be preserved, the Proposed Development would thus be consistent with Policy 7 of NPF4 (2023).

Table 7. 7 - Summary of Residual Effects

Asset	Likely Significant Effect	Mitigation	Means of Implementation	Residual Effect
Sheepfold (SLR35)	Slight	Fencing Off	Planning Condition	Slight
Enclosure (SLR42)	Very Slight	Targeted Watching Brief	Planning Condition	Very Slight

Asset	Likely Significant Effect	Mitigation	Means of Implementation	Residual Effect
Moorfoot Chapel, Monastic Grange And Chapel (SM5976)	Very Minor	N/A	N/A	Very Minor
Loquhariot, Fort 500m SW Of (SM6260)	Very Minor	N/A	N/A	Very Minor
Jeffries Corse, cairn SM3527	Moderate	N/A	N/A	Moderate
Dundreich, cairn (SM2777)	Moderate	N/A	N/A	Moderate
Falla Luggie Tower, towerhouse (SM5653)	Negligible	N/A	N/A	Negligible
Hirendean Castle (SM5608)	Minor	N/A	N/A	Minor
Corsehope Rings, fort (SM1166)	Very Minor	N/A	N/A	Very Minor
Halltree Rings, settlement, Chapel Hill (SM1170)	Very Minor	N/A	N/A	Very Minor
Soutra Aisle, burial aisle and part of site of medieval hospital (SM3067, SM7573)	Very Minor	N/A	N/A	Very Minor
Gladhouse Villa (LB14633) And Gladhouse Reservoir Including Dam, Weirs, Revetments, Gangway, Measuring House, Tweedaleburn Aqueduct And Bridges Over Tributaries (LB45811)	Negligible	N/A	N/A	Negligible
Mauldslie Farmhouse And Steading (LB45814)	Negligible	N/A	N/A	Negligible
Middleton Hall, Including Gatepiers, Gates, Ha-Ha And Boundary Walls (Lb806)	Very Minor	N/A	N/A	Very Minor
Borthwick and Crichton Conservation Area (CA343), including Crichton Castle (SM13585)	Negligible	N/A	N/A	Negligible
Temple and Arniston Conservation Area (CA342)	Nil	N/A	N/A	Nil
Arniston Inventoried Garden And Designated Landscape (GDL00029)	Minor	N/A	N/A	Minor

7.11 References

Legislation, Policy and Guidance

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)
- 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).

Additional References

i *Roy Military Survey of Scotland (1747-55), Strip 7, Section 4c*. Available at: https://maps.nls.uk/roy/ Accessed: 22 September 2023

ii *Ordnance Survey (1854), Edinburghshire, Sheet 19*. Available at: https://maps.nls.uk/view/74426719 Accessed: 22 September 2023

iii Hunter, James. (1892) *Fala and Soutra, including a History of the Ancient "Domus de Soltre"*. Hitt, Edinburgh.

iv Oxford Reference (2012). *Corps de logis*. Available at: https://www.oxfordreference.com/display/10.1093/oi/authority.20110803095640365;jsessionid=6692F382C20E659755AF45400BF79931 Accessed: 22 September 2023

v Midlothian Strategic Services (n.d.). *Borthwick & Crichton Conservation Area*. Available at: https://vdocuments.mx/borthwick-crichton-conservation-area-midlothian-committee-borthwick.html?page=1 Accessed: 22 September 2023

[i] Roy Strip/Section: 7/4c
[ii] Edinburghshire, Sheet 19
[iii] Hunter, James (1892)
[iv] Oxford Reference (2023)
[v] Midlothian Strategic Services (n.d.)