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INTRODUCTION

- 11.1 The cultural heritage of an area comprises archaeological sites (including Scheduled Monuments), historic buildings (including Listed 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 that have the capacity to provide information about past human activity, or which have cultural significance due to their associations with literary or artistic work, folklore or historic events. The setting of an asset may also contribute to the understanding and appreciation of the asset and its cultural heritage significance.
- This Chapter assesses the potential effects of the construction and operation of the proposed development on heritage assets within the site and surrounding area. A full description of the proposed development is given in **Chapter 3: Description of Development**. The assessment has included consideration of all known designated and non-designated heritage assets within the site, all nationally significant heritage assets within 10km of the wind turbines that fall within the Zone of Theoretical Visibility model (ZTV), and further nationally significant heritage assets beyond 10km of the wind turbines identified in consultation with Statutory Consultees or during assessment as having a setting sensitive to change (**Figures 11.1** and **11.2**).
- 11.3 For the purposes of this assessment the historic environment and cultural heritage are 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 (LBs);
 - Inventoried Battlefields;
 - Conservation Areas; and
 - Inventoried Gardens and Designed Landscapes (GDLs).
- 11.4 World Heritage Sites (WHS) are of international importance. SMs and Category A Listed Buildings are considered to be of national importance. Conservation Areas may be of national or regional importance depending upon their composition. Category B Listed Buildings are considered of regional importance, and Category C Listed Buildings are of local importance (NatureScot Handbook, 2019).
- 11.5 In addition, the following non-designated assets are also included in the assessment for the assessment of archaeological potential in general:
 - nationally/regionally recorded archaeological sites and finds; and
 - other buildings and structures of historic or architectural importance.
- 11.6 This Chapter is supported by:



- Technical Appendix 11.1: Site Gazetteer;
- Technical Appendix 11.2: Appraisal of Designated Heritage Assetts Within 10km; and
- **Figures 11.1** to **11.6** (referenced within the text where relevant).
- 11.7 Planning policies of relevance to this assessment are provided in **Technical Appendix 4.1: Legislation, Planning Policy and Guidance**.

SCOPE AND CONSULTATION

Consultation and Scoping Responses

11.8 In undertaking the assessment, consideration has been given to the scoping responses and other consultations undertaken as detailed in **Table 11-1**.

Table 11-1: Consultation with Stakeholders

Consultee and Date	Scoping/ Other Consultation	Issue Raised	Response/Action	
Historic Environment Scotland (HES) on 27/04/2021	Scoping	HES raise the issue of insufficient methodology and study areas for the proposed development. HES requested a more detailed method for them to comment and a wider study area of 10km. HES highlights assets within their remit of concern for likely significant effects: Millburn Barrows (SM13622) Leathad Carnaich (SM1876) Halladale Bridge hut circles, (SM3304) The Borg, broch (SM1839) Bighouse, walled garden and associated structures (LB7160)	A scoping addendum was carried out with the addition of two further turbines considering HES's original concerns. The assets highlighted for consideration within the EIA Report included the assets set out by HES in their 27/04/2021 response.	
The Highland Council Historic Environment Team (THCHET)	Scoping	THCHET are satisfied with the scope set out in the scoping report.	No further action required	

received on 07/06/2021			
HES response to the Scoping Addendum and consultation response. Received on 26/08/2021	Consultation Response	HES is content with the revised scoping exercise. HES retain the position on the proposed methodology as per 27/04/21.	SLR has considered HES's comments on methodology and amended the methodology applied within this chapter accordingly as well as issued to HES during Gatecheck (confirmation from HES on 09/03/22 that they are content with the amended methodology).

Effects Assessed in Full

- 11.9 The following effects have been considered in full:
 - direct effects on all heritage assets within the site;
 - indirect effects on selected designated heritage assets of national importance within a 10km
 Study Area assets selected in agreement with HES (Table 11-1); and
 - indirect effects on selected designated assets of less than national importance within a 5km Study Area.

Effects Scoped Out

- 11.10 The following have been scoped out:
 - effects on the setting of heritage assets more than 10km from the proposed development unless identified as being particularly sensitive to change (none identified in consultee responses or identified during baseline collection);
 - effects on the setting of designated heritage assets within the Study Area that are beyond the ZTV, and so would not be anticipated to be intervisible with the proposed development (no 'third points' or potential for non-visual changes have been identified).

APPROACH AND METHODS

Study Areas

- 11.11 This assessment refers to the following:
 - the site: land within the application boundary of the proposed development; and
 - the Study Area: land within 10km of the proposed locations of the wind turbines.
- 11.12 The 10km Study Area has ensured that the potential for the proposed development to have an adverse indirect effect upon any designated assets of national/up to regional importance within



the vicinity of the site has been considered. No extension to the study area (10km) was requested via consultation with Historic Environment Scotland on 26 August 2021, at which point a refined list of nationally important assets to be included within the assessment was agreed (**Table 11-6**).

11.13 Heritage assets and other aspects of the historic environment recorded within the main site, excluding the two turning areas on the A836, and a surrounding 1km radius has been used to inform a predictive model of the probability for currently unrecorded archaeological remains to survive buried within the site (i.e., archaeological potential).

Data Sources

- 11.14 The baseline conditions have been determined using the following sources:
 - Historic Environment Scotland (HES), for information relating to designated heritage assets, including Scheduled Monuments, Listed Buildings and Gardens and Designed Landscapes on the Inventory;
 - The Highland Council's Historic Environment Record (HER), for records of known and potential heritage assets and other historic environment information;
 - historic cartographic sources, for information relating to the development of the historic landscape, and for purposes of map regression;
 - Historic Landscape Characterisation (HLC) data;
 - the National Collection of Aerial Photography, Edinburgh, for vertical and oblique aerial photographs of the site and its environs;
 - geotechnical data, including peat probing and sampling data;
 - previous heritage assessments for supplementary historic environment information;
 - published and archival sources, for information relating to the history of the site and its environs, its historic landscape and archaeological context, place names and any other relevant (tangible and intangible) cultural heritage associations; and
 - online resources, including Canmore, for additional historic environment information, as required.

Field Survey

11.15 A targeted walkover survey was carried out on 14 July 2021. The turbine locations were inspected to confirm the absence of any unknown above-ground archaeological remains. Due to changes to the application boundary, a secondary site visit was completed in February 2022, clearer definition was given to assets within the vacinity of the proposed infrastructure. Known heritage assets within the site boundary were also inspected to confirm their presence and location. Weather conditions were fair on the day of the survey. Ground conditions were predominantly those of upland moorland with some areas of peatland. All assets recorded on the HER within the site were inspected, as listed within **Technical Appendix 11.1: Site Gazetteer**. There were no new heritage



assets recorded within the site and all recorded assets were located and were as described in the HER.

Zone of Theoretical Visibility (ZTV) Analysis

- Assessment of visual impact (as far as this is relevant to considering changes to setting and the effect on heritage significance) has been assisted by a ZTV calculation, which is presented in **Figure 11.2**. The ZTV calculation methodology is set out in detail in **Chapter 7: Landscape and Visual Impact Assessment**. 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 11.2** is based on the maximum height of the blade tips of the proposed development (149.9m). The ZTV model has been used to assist in the assessment of potential indirect impacts upon designated assets within the study area; it is understood that visual change does not necessarily concur with setting change which would affect cultural significance.
- 11.17 The ZTV is a 'bare earth' representation of visibility; it is based on landform only and does not take into account the screening or filtering effects of vegetation, buildings or other surface features. In that respect, it provides an overestimate of the actual level of visibility of the proposed development, i.e., a worst-case scenario that may need to be ground-truthed or subject to cartographic/satellite analysis to determine the conditions under which an asset is truly experienced.
- 11.18 Assets that fall outside the ZTV have been excluded from any further assessment, with the exception of those assets anticipated to be co-visible with the proposed development, i.e., where both would be visible within the same viewshed from a given location; this is sometimes referred to as a 'third point'. Furthermore, assets that would be intervisible with the site, but which could be affected by other changes in setting, such as increased noise, would be considered as necessary. As noted above, however, no assets falling outside the ZTV have been identified for consideration under these factors.

Approach to Assessment of Effects

- 11.19 Effects may be caused by the proposed development where it changes the physical condition of either the asset itself or the setting in which it is experienced and understood.
- 11.20 In accordance with the EIA Regulations, the assessment identifies impacts and effects as either direct or indirect, adverse or beneficial, and short-term, long-term or permanent.
- 11.21 Direct impacts are those which change the heritage significance of an asset through physical alteration. Direct effects on the heritage significance of an asset (or potential assets) have been assessed in relation to heritage significance and the magnitude of impact resulting from the proposed development.
- 11.22 Indirect impacts are those which affect the cultural heritage significance of an asset by causing change within its setting; it being accepted that change does not necessarily equate to adverse effects.



11.23 Indirect effects on the heritage significance of heritage assets have been identified and assessed with reference to 'Managing Change in the Historic Environment: Setting' (HES, 2016) and the guidance set out in SNH and HES (2018). Assessment has been carried out in the following stages:

Stage 1: Identifying historical assets sensitive to change

- initial consideration of intervisibility (including third point sensitivity) and other factors (such as changes in noise levels) leading to the identification of potentially affected assets; and
- assessment of the heritage significance of the potentially affected assets;

Stage 2: Define and analyse the setting

assessment of the contribution of setting to the heritage significance of those assets;

Stage 3: Evaluate the potential impact of the proposed changes

- assessment of the magnitude of impact of the proposed development on the contribution of settings to the significance of assets (by causing change within those settings); and
- prediction of the significance of the effect.

Cultural Heritage Significance

- 11.24 **Table 11-2** provides the criteria against which cultural heritage significance has been assessed. For designated heritage assets, this has taken into account their designation, status and grading. For non-designated heritage assets, this has taken into account their intrinsic, contextual, and associative characteristics as defined in Annex 1 of HES (2019). Assessments/statements of significance recorded within the HER for specific assets were also taken into account as available.
- 11.25 This table acts as an aid to consistency in the exercise of professional judgement and provides a degree of transparency for others in evaluating the conclusions reached by this assessment. Its application for the purposes of this Chapter has involved the exercise of professional judgment.

Table 11-2: Heritage Significance

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



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

Magnitude of Impact

- 11.26 Determining the magnitude of any likely impacts (direct or indirect) requires consideration of the nature of the activities proposed during the construction and operation of the proposed development.
- 11.27 The changes could potentially include direct change (e.g., ground disturbance, effects of vibration), and indirect change (e.g., visible change, noise, traffic movements affecting the setting of the asset). Impacts may be beneficial or adverse and may be short term, long term, or permanent. The magnitude of impact has been assessed with reference to the criteria set out in **Table 11-3**.

Table 11-3: Magnitude of Impact

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



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

Significance of Impact

11.28 **Table 11-4** provides a matrix that relates the heritage significance of the asset to the magnitude of impact on its significance to establish the likely overall level of significance of impact.

Table 11-4: Level of Significance of Impact

Magnitude of Impact	Heritage Significance (excluding unknown)			
(Beneficial/Adverse)	Highest	High	Medium	Low
High	Substantial	Substantial	Moderate	Minor
Medium	Substantial	Moderate	Minor	Very Minor
Low	Moderate	Minor	Very Minor	Very Minor
Very low	Minor	Very Minor	Negligible	Negligible
None	Nil	Nil	Nil	Nil

Table 11-5. Provides a narrative for the terms expressed above.

Table 11-5: Level of Impact Criteria

Level of Impact	Description
Substantial	Severe harm or enhancement such as total loss of significance or integrity of the setting, or exceptional improvement by the development on the heritage 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 heritage 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 heritage 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 baseline that would harm or enhance the heritage significance of the asset an ability to understand, appreciate and experience it in its setting.	
None	The development would not affect, or would have harmful and enhancing effects of equal magnitude, on the heritage significance of the affected asset and the ability to understand, appreciate and experience it in its setting.

Cumulative Effects Assessment

11.30 A cumulative assessment is presented in Section 11.116. Cumulative effects have been assessed in relation to only those assets that would be affected by the proposed development. The potential effects of other forthcoming wind energy developments within up to 10km on the affected heritage assets are then considered; this includes wind energy developments that have been consented, those that are subject of a live planning application, and those that are subject to a planning appeal/inquiry. Operational wind farms are considered as part of the baseline assessment.

Mitigation

- 11.31 A statement of any embedded mitigation measures proposed to be implemented in response to identified cultural heritage impacts is provided, with the impact predictions taking these into account. The main approach to mitigating both direct and indirect impacts has been through design. Avoidance of direct impacts on heritage assets has been a consideration throughout the design process. Where avoidance is not possible, further mitigation is proposed as a condition to consent.
- 11.32 In relation to indirect effects, embedded mitigation measures including adjustments to turbine numbers, layout and height, have been considered and incorporated as part of the design process (See Chapter 2: Site Description and Design Evolution).

Residual Effects

11.33 A statement of the residual effects of the proposed development has been provided, taking into account any site-specific mitigation measures which could be implemented as a condition to consent.

Statement of the Significance of identified Effects

- 11.34 This chapter concludes with a 'Statement of the Significance of identified Effects' anticipated to result from the proposed development.
- 11.35 Effects considered 'significant' in EIA terms are typically those assessed as moderate or substantial when measured against the matrix presented in **Table 11-4**, in accordance with the suggestion contained in current guidance HES and SNH (2018) 'Environmental Impact Assessment Handbook', Section C, Page 75. However, professional judgment has also been applied in determining whether such effects are in fact 'significant' for purposes of EIA; this is especially so in relation to 'moderate'



effects which for heritage receptors, in particular, require professional consideration beyond strict EIA terminology.

Limitations to the Assessment

11.36 The assessment is based on the sources outlined in Section 11.14 and, therefore, shares the same range of limitations in terms of comprehensiveness and completeness of those sources.

BASELINE CONDITIONS

Introduction

- 11.37 A full description of the site and environs is given in **Chapter 2: Site Description and Design Evolution**. All heritage assets within the site¹ and 1km of this area are shown in **Figure 11.1**. Designated assets within the Study Areas are shown in relation to the ZTV in **Figure 11.2**.
- 11.38 All recorded non-designated heritage assets within the site and 1km of the site are listed in the gazetteer that is contained within **Technical Appendix 11.1**. 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.

Designated Heritage Assets

- 11.39 There are no designated heritage assets within the site.
- 11.40 Within the 1km buffer zone there are two regionally important designated heritage assets: two Category B listed buildings (LB12915, LB7141).
- 11.41 There are 17 heritage assets of national importance within the 10km Study Area. As per correspondence with HES on 08/08/2021, it was agreed through a heritage appraisal that five nationally important assets were to be considered (**Table 11-6**). The rationale for their consideration and the exclusion of the other 12 nationally important assets is found in the appraisal in **Technical Appendix 11.2**.

Table 11-6: Designated Heritage Assets to be Assessed

Name	Туре	Index Number	Distance to closest Turbine	Within the ZTV
Halladale Bridge	Scheduled Monument	SM3304	2.97km	Yes
Leathad Carnaich	Scheduled Monument	SM1876	3.14km	Yes
Millburn barrows, Strath Halladale	Scheduled Monument	SM13622	2.35km	Yes

¹ This area only includes the main site area and does not include the two turning areas along the A836.





Bighouse, Garden Pavillion and Walled Garden	Category A Listed Building	LB7160	3.88km	Yes
Bighouse and associated buildings	Category B Listed Buildings	LB7159	3.88km	Yes
The Borg	Scheduled Monument	SM1839	7.28km	Yes
Smigel Bridge	Category B Listed Building	LB12915	1.4km	Yes
Smigel Mill	Category B Listed Building	LB7141	1.4km	Yes

Non-Designated Heritage Assets

11.42 Known undesignated sites are detailed in **Figure 11.1**, including those in the 1km buffer zone surrounding the site. Thus, the type and density of archaeological remains can be used to inform a predictive model of what further, as yet undefined, buried remains may exist within the site. Non-designated heritage assets, either recorded on the Highland Council HER or recorded by SLR during baseline collection are pre-fixed by an SLR reference number (see **Technical Appendix 11.1**).

Prehistoric and Roman

- There are six recorded prehistoric assets within the site. Two areas of clearance cairns are found near the water feature of Allt Na H-eaglaise, in the northeast of the site boundary. **SLR18** is situated 0.4km northeast of Turbine 1, and in addition to the clearance cairns is comprised of a field system and two lynchets. Asset **SLR03** is located 0.17km southeast of **SLR18** and is comprised of several clearance cairns. These sites were first identified during an OS visit in 1977, and their existence was confirmed during an SLR site walkover in February 2022.
- 11.44 Potentially associated with **SLR18** are three hut circles (**SLR34**, **SLR35**, and **SLR37**), identified during the 2022 walkover. They are located approximately 0.35km northeast of Turbine 1, on an east-facing slope. **SLR34** and **SLR35** are located within the footprint of the proposed temporary construction compound. Each hut circle is approximately 2m in internal diameter and consists of a circular area of stones that have been heavily robbed out and overgrown by turf and vegetation. An area of cultivation terracing (**SLR36**) is located 20m east of **SLR37**, covering an area of approximately 125m². The terracing survives as a stepped area on the eastern face of a hill.
- There are eight recorded prehistoric sites within the 1km buffer. Near Kirkton Farm, two prehistoric hut circles (**SLR01**, **SLR02**) are located 1.3km northeast of Turbine 1. Ordnance Survey (OS) identified both hut circles during a 1972 field investigation. During the same field investigation, an additional contemporaneous cairnfield (**SLR02**) was identified 0.14km to the south east of the corresponding hut circle.
- On the slopes of Meall Mor a' Bealaich, there are a collection of prehistoric sites. 0.2km east of the proposed development there are several prehistoric features, including a stone-walled hut circle, a poorly preserved field system, and clearance cairns (**SLR07**). Approximately 0.08km north of the



hut circle is a platform set on a steep slope. Due to the lack of stone walls, it is not thought to be part of a hut. Along the south-eastern slope of Meall Mor a' Bealaich, 0.8km east of the proposed development, an extensive prehistoric field system of approximately 5ha in size can be found (**SLR09**). This field system includes clearance cairns, possible field enclosures, a poorly preserved stone-walled hut circle, and evidence of lynchets caused by ploughing. A 1911 RCAHMS survey identified further possible huts; however, a later survey identified these as quarried clearance cairns. OS identified the features on Meall Mor a' Bealaich during a 1977 field investigation.

- 11.47 Along the south bank of the Smigel Burn (Allt an Tigh-choinneimh) are three prehistoric hut circles (**SLR10**). They are located approximately 0.3km east of the site. The hut circles are closely grouped upon an east-facing hillside, with one being placed on the slope's rise. The hut circles were identified during a 1977 OS site visit and a site walkover by Alba Archaeology in 2005.
- 11.48 An additional hut circle (**SLR33**) can be found approximately 0.9km northeast of the site. The hut circle was discovered during a 1972 OS site survey and was noted as having been stripped of materials.
- An Iron Age broch (**SLR06**) is situated 0.5km north of the abandoned crofting township of Upper Bighouse (**SLR29**) and 0.6km southeast of the site. The broch was first identified in 1873 and was recorded and planned by OS in 1977. The broch itself has been heavily robbed, and as such, is hardly visible; the surrounding fortified enclosure is more visible. Within the Scoping Opinion, **SLR06** (Canmore ID: 6797) was identified by Historic Environment Scotland as being of importance to the understanding of The Borg (**SM1839**, see **Paragraph 11.105**), a broch approximately 7km south of the proposed development.
- 11.50 To the west of the Halladale River, and 0.3km east of the site, there is a hillfort and associated cairnfield, possibly Iron Age in date (**SLR04**). This hillfort was first identified during a 1977 OS investigation and in a 2005 walkover survey by Alba Archaeology.

Early Medieval and Medieval

11.51 There are no early medieval or medieval assets identified within the site and the 1km buffer.

Post Medieval

- 11.52 Within the site there are two post-medieval assets. Within the northern portion of the site, approximately 0.15km northwest of Turbine 2, an area of rig and furrow (SLR17) was identified during a 2005 walkover survey by Alba Archaeology. This area was identified during the SLR Consulting walkover survey in July 2021, however thick ground vegetation made defining the extent of the boundaries difficult. A further area of possible rig and furrow (SLR28) was identified 0.85km southeast of SLR17 during the July 2021 SLR walkover survey. It is located approximately 0.7km east of Turbine 3. This area appears to be approximately 0.48ha in size but the original extent could not be established due to the erosion of clearly defined boundaries.
- 11.53 There are five post-medieval sites within the 1km buffer zone. A post-medieval graveyard (SLR05) lies to the west of the Halladale River, 70m east of the proposed development and 1km northeast of Turbine 1. The graveyard can be seen on the 1st Edition OS map of 1878, but a gravestone with the date of 1749 indicates that it was constructed in the mid-1700s at the latest. There are reports



of a 16th Century chapel having existed on the site, however, no archaeological evidence of this has been observed.

- 11.54 To the south of the Smigel Burn (Allt an Tigh-choinneimh), approximately 0.4km east of the site, are the ruins of a non-conformist meeting house (**SLR11**). Whilst a date for construction is unknown, the classification of the structure as being non-conformist means that it is most likely post-reformation (1560), as non-conformist is a term referring to those who do not follow the main presbyterian (protestant) church. The meeting house can be seen on the 1st Edition OS map of 1878 and was later identified by Alba Archaeology during a 2005 walkover survey. Only the footprint of the building remains.
- Furthermore, within Smigel, there are three listed buildings located approximately 1km east of the site boundary. The Strath Halladale Mission Church (SLR30) is a category C listed building (LB7142) constructed in 1845. It was initially a small rectangular structure with a corrugated iron porch and slate roof. The structure has since been converted into a domestic property. Approximately 0.1km to the south of SLR30 is the Smigel Bridge (SLR31), a category B listed building (LB12915) that straddles the Smigel Burn. The bridge was constructed around 1850 and is made of coursed rubble. The bridge is associated with the Smigel Mill (SLR32), which sits 0.03km to the east. The mill is a former scheduled monument (de-scheduled in 2003) and a current category B listed grain mill (LB7141), constructed in approximately 1850 as part of a cooperative venture. The structure is two storeys tall and has a wood and iron wheel. The Smigel Mill is currently used as a holiday let named the Corn Mill Bunkhouse.

Undated Features or Structures

- 11.56 Within the site, there are 16 undated features, see Figure 11.1. In 2021, SLR Consulting undertook a walkover survey to identify any unrecorded assets within the proposed development boundaries. A possible marking stone (SLR19), a rectangular feature (SLR20), possibly a sheepfold, and a circular mound feature (SLR21) were identified in the south of the site. The shape of SLR20 and SLR21 indicate that they are manmade, but due to vegetation coverage their precise function is unable to be identified. SLR19 and SLR20 are located approximately 0.3km to the east of Turbine 9, and SLR21 is located approximately 0.25km northeast of Turbine 10. A distinctive stone outcrop was identified (SLR22) approximately 0.2km northeast of Turbine 8. This outcrop appears to be natural, however, its size is unique compared to other rocky outcrops in the vicinity. A possible cairn (SLR08) sits 0.1km south of SLR22, however, a 1979 survey indicated that it was likely a natural feature. Approximately 0.38km to the north of SLR22, two mounds were identified (SLR23, SLR24). These mounds are 0.09km apart and are both visible within the surrounding flat landscape, albeit close inspection was not possible. The thick vegetation means that the purpose of these mounds is unclear. SLR23 is located equidistant between Turbines 7 and 8, with SLR24 located 0.15km southeast of Turbine 6.
- 11.57 A further possible mound was identified 0.7km to the east of the proposed location of Turbine 3 (SLR28), however, this feature is less distinctive. A long linear feature (SLR26) is located 0.02km to the south of SLR28. The feature is aligned along the northeast to the southwest axis and is at least 0.09km in length. SLR27 intersects with another long linear feature (SLR27) which is orientated east to west and is at least 0.08km in length. They are both mounded linear earthworks, bordered by shallow ditches on either side and are believed to be field boundaries.



- 11.58 The abandoned township of Kirkton (**SLR13**) is partially located within the northeast portion of the proposed development, approximately 1km northeast of Turbine 1 and in the vicinity of the access track. The township is undated, but it can be found on the 1st Edition OS map from 1878. In 1995, The Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) stated that five roofed and two unroofed buildings were visible. The asset was noted during the SLR site walkover in February 2022 and contained upstanding remains of one structure outside of the site boundary, and a rectangular enclosure or structure foundation within the site boundary. The rectangular feature was approximately 15m in length and 5m in diameter and is currently used as a grazing area for sheep.
- 11.59 Within the 1km of the site, there are five undated features and structures. A possible enclosure (SLR12), located 0.5km east of the site boundary, and a possible farmstead (SLR15), approximately 1km east of the site boundary, are shown on the 1st Edition OS map from 1878. Furthermore, a 1977 OS site survey identified a series of rectangular plots separated by earthen banks (SLR16) situated 0.86km east of the proposed development, their purpose could not be established.
- 11.60 A depopulated settlement (**SLR14**), named Thaiphaig and Eadha interchangeably, is located 0.4km east of the proposed development. The 1878 1st Edition OS map records the presence of one roofed structure and one enclosure. A depopulated crofting township, Upper Bighouse (**SLR29**), lies approximately 1km southeast of the proposed development. The township can be seen on the 1st Edition 1878 OS map, with 22 roofed and two unroofed structures. On the 1963 1:10,560 OS map, the number of recorded structures was changed to show 12 roofed and four unroofed buildings.

Historic Mapping and Historic Land-Use Assessment

- 11.61 A review of the online historic mapping available from the National Library of Scotland was undertaken. The earliest map showing the site is the Roy Military Survey map from 1747-1755. The map does not show any heritage assets within the site but did show the location of the settlements of Upper Bighouse (named Bighouse) and Kirkton. The Sutherland Sheet XIX 6 Inch First Edition Ordnance Survey Map, published in 1878, and the 1 Inch 3rd Edition 1909-1910 Ordnance Survey Map were also consulted, but no further heritage assets were identified.
- 11.62 Historic Land-Use Assessment data provided by Historic Environment Scotland was consulted to identify the general use of the site throughout history. The data shows that the site was used for rough grazing, which is noted as being the type of landscape most likely to preserve archaeological features due to lack of disruption.

Aerial Photography

11.63 The aerial photography from the National Collection of Aerial Photography (Historic Environment Scotland) within the area were consulted but provided no further information than already established by both the HER data, historic mapping and the site walkover survey.

Discussion of the Archaeological Potential

11.64 There are six known prehistoric heritage assets within the site, two areas of clearance cairns within the northeast of the site (SLR03, SLR18), three hut circles (SLR34, SLR35, and SLR37), and an area of cultivation terracing (SLR36). Within the 1km of the site, there are substantial domestic and



agricultural prehistoric remains, mainly comprising hut circles, field systems and clearance cairns. Furthermore, an Iron Age broch and an Iron Age hillfort are found within 1km of the site. This indicates significant prehistoric settlement activity within the vicinity of the site. The potential for unknown prehistoric remains within the site cannot be discounted and several mounds were recorded during the walkover survey which could relate to activity of this date, but which remain undated, (SLR references 23, 24 and 25). It is noted that all the features identified within the site during the walkover survey were significantly degraded by thick vegetation, reducing the possibility for well-preserved archaeology. Therefore, whilst prehistoric potential may be considered to be moderate to high based on the activity in the region and the presence of features of unknown date within the site, the potential presence for well-preserved features of prehistoric date is considered minimal.

- 11.65 There are no archaeological features that are Roman in origin due to the lack of Roman activity within the far north of Scotland. Thus, the potential for unknown Roman activity within the site is very low (if not nil) as the site is significantly further north than any other known Roman site within Scotland. Roman remains are not anticipated.
- 11.66 There is no evidence of early-medieval and medieval activity within the site boundary and the 1km of the site. As such, the potential for unknown medieval remains within the site is low.
- 11.67 Within the site boundary, there are two post-medieval rig and furrow areas, indicating agricultural activity. Alongside other features recorded during the walkover survey (including linear earthworks likely boundary features (SLR references 26 and 27) and a sheepfold (SLR20), which are likely to represent a post-medieval phase of agricultural activity, these assets are significantly covered with vegetation which precludes full observation but also indicates a level of degradation which would affect preservation. Thus, whilst the potential for the presence of post-medieval heritage assets of an agricultural nature is moderate to high, the potential for well-preserved remains is lower.
- 11.68 Associated post-medieval occupation activity is referenced by **SLR13**, the former location of a township that once extended across the northern part of the site. Within the site boundary, no upstanding remains were observed, but a rectangular enclosure or foundation was identified approximately 10m to the north of the access track. Outwith the site boundary, one upstanding building associated with the township was identified. The footprint of the asset, therefore, holds potential for the presence of remains related to post-medieval occupation. This was likely the focal point of any occupation activity, the potential of further unidentified post-medieval occupation assets within the remainder of the site is anticipated to be low.
- 11.69 Multiple undated features within the site have been discussed above with regard to potential dating phases where appropriate.



ASSESSMENT OF EFFECTS

Construction Effects

Embedded Measures

11.70 Mitigation in relation to the majority of the heritage assets within the site has been embedded into the design of the proposed infrastructure with the majority of known assets being avoided to reduce the risk of direct impacts wherever possible. These are assets **SLR03**, **SLR18**, **SLR36** & **SLR37**.

Potential Effects

11.71 There are potential direct impacts on four heritage assets where mitigation by avoidance could not be implemented. These assets are **SLR13** (an abandoned township), **SLR24** (a mound of unknown date), and two hut circles (**SLR34** and **SLR35**). This impact would most likely result from infrastructure installation (e.g., access tracks).

Township (SLR13)

- With reference to **Figure 11.1**, the proposed development would have a potential direct impact on **SLR13**, an abandoned township. The township covers a large area, and as such, this impact would be anticipated to result from groundworks associated with infrastructure installation and track widening. During the February 2022 walkover, a singular feature (an enclosure or building foundation), was identified within the proposed development site boundary. The feature consisted of a low stone wall, ranging between 0.1m to 0.5m in height, forming a rectangular enclosure. The feature had been heavily robbed out and there were multiple gaps. This feature is located approximately 10m north of the current access track, and any widening of this track has the potential to impact this asset.
- 11.73 The asset is be considered to be of low heritage significance. Given the relative footprint of the asset to be affected, an impact of low to medium magnitude is predicted. The overall significance of effect would be **very minor adverse effect**. This is not a significant impact.

Mound (SLR24)

- 11.74 **SLR24**, a potential mound, was not visible during the site visit. With reference to **Figure 11.1**, this mound has the potential to be impacted by groundworks associated with the installation of a new track.
- 11.75 The asset is be considered to be of low heritage significance in the most likely circumstance. An impact of high magnitude in the worst case is predicted. The overall significance of effect would be **minor adverse**. This is not a significant impact.

Hut Circles (SLR34 and SLR35)

11.76 **SLR34** and **SLR35**, hut circles, have the potential to be impacted by the installation of the temporary construction compound. Both hut circles have an approximate internal diameter of 2m and consist of a heavily robbed out circular structure. They are located approximately 5m apart, within the southwest corner of the proposed construction compound footprint.



11.77 The asset would be considered to be of low heritage significance in the most likely circumstance. Due to their location within the construction compound, an adverse impact is predicted of up to high magnitude in the worst-case scenario. The overall significance of effect would be **Minor**. This is not a significant impact.

Proposed Mitigation and Enhancement

- 11.78 In addition to the assets avoided during design, (see embedded measures), appropriate mitigation could comprise:
 - Preservation of SLR13, SLR24, SLR34 and SLR35 within the digital record through the implementation of a pre-commencement condition and/or a watching brief according to the requirements of The Highland Council.
- 11.79 The precise scope of the mitigation works would be negotiated with The Highland Council and the agreed mitigation programme would be documented in an agreed Written Scheme of Investigation through an appropriate planning condition.

Residual Construction Effects

11.80 The completion of the archaeological mitigation programme outlined in Section 11.78 would minimise the loss of the cultural heritage resource that could occur as a result of the construction of the proposed development. Any harm caused to buried remains would be balanced by the net gain in knowledge (heritage capital) resulting from investigation and reporting. No significant residual direct effects are anticipated from the construction of the proposed development.

Operational Effects on Designated Heritage Assets

Halladale Bridge (SM3304)

- 11.81 The scheduled monument of Halladale Bridge is a settlement of four stone-walled huts with stone clearance heaps. These are clearly evident to the west of the scheduled area and comprise several other structures of uncertain date. The hut circles characteristically have south-facing entrances. The monument comprises a further structure indicating a large agricultural settlement in the area. There is evidence of lynchets, prehistoric cultivation terracing, and evidence of a complex hut system that is rare for the region. Due to this and its excellent preservation, despite the intrusion of modern features, it has been a scheduled monument since 1974. Its significance also derives from its potential to inform current and future generations on the economic and social context of the prehistoric settlement. Since its scheduling, the monument has been marked of high importance as per Table 11-2.
- 11.82 The hut circles are situated on ridges on either side of the Gibigill Burn, a tributary of the Halladale River. The primary focus of the hut circles is the burns. The monument clearly responds to the burn and its confluence with the Halladale River. The association with watercourses is typical of assets of this period, given their reliance on freshwater for agricultural and domestic purposes.
- 11.83 The wider landscape has been largely altered since its prehistoric occupation, with the addition of post-medieval townships and farm steadings, road networks and a post-medieval agricultural landscape. The addition of the A836, first noted on Arrowsmith (1807), however, it is likely to predate this, has truncated the scheduled monument resulting in the potential loss of buried deposits.



The addition of post-medieval townships such as Melvich and farms like Achredigill. The upland moorland has remained largely untouched for over five hundred years with the addition of conifer plantation 50m to the east and west of the scheduled area. Overall, contemporary features providing context to the monument and an understanding of its original locating factors are restricted to the watercourses and the general topographic form of the landscape as far as it can be determined in consideration of later activities which includes conifer plantation 50m east of the scheduled area.

- 11.84 The ZTV and wirelines (Figure 11.2, Figure 11.6: Viewpoint 4) indicate that all 11 turbine blades and tips would be visible from the monument. The closest turbine would be located 2.9km to the southwest. Important contextual elements of the setting of the asset are the confluence of the watercourses in its vicinity as is customary for assets of this period and the general understanding of wider topography and landscape. It is noted that the asset is not a landmark feature and does not take express advantage of any views towards the turbines. The visual presence of the turbines within the landscape backdrop would not infringe on an understanding of the asset's location in close proximity to watercourses and an understanding of its wider topographical location.
- 11.85 However, the presence of the turbines may cause some peripheral distraction in the wider landscape and could therefore cause a minimal impact on views from the monument which could detract from its wider landscape context. It is therefore predicted that the operation of the proposed development could result in a low adverse magnitude of impact with an overall effect of **Minor Adverse** on the significance of the monument. This is not a significant impact as is indicated within the EIA handbook (2019).

Leathad Carnaich (SM1876)

- 11.86 SM1876 is comprised of a field system with one or two associated hut circles. The field system covers seven hectares primarily to the north-eastern slopes of Halladale River with the largest hut circle 6m in diameter. As per a survey carried out by CFA Archaeology Ltd in 2010, there were substantial clearance cairns and remains of cultivation terraces.
- 11.87 The cultural significance of this asset derives primarily from the intrinsic value of its fabric and its potential to increase our knowledge of settlement and agricultural activities during the Bronze Age.
- 11.88 The contribution of the setting to the significance of the monument lies primarily with its immediate landscape of the floor of Strath Halladale. This relationship is highlighted with the understanding that the occupants of Leathad Carnaich would have farmed this plateau. There is no evidence to suggest that the hut circles have been built in relation to wider views of the landscape.
- 11.89 The contemporary landscape that may have contributed to the significance of the monument has been altered through post-medieval agriculture as well as new residents establishing residence and improving land across time. This is shown in the addition of the A897 running parallel with the monument as well as the creation of medieval and post-medieval residencies such as Birchwood and Halladale Public Hall located to the immediate west of the scheduled area. There is also the war memorial located 50m to the south of the asset, further illustrating the passage of time.
- 11.90 The nearest turbine (Turbine 11) of the proposed development is located 2.6km to the northwest of the monument. As per **Figure 11.2** and **Figure 11.4**: **Viewpoint 2**, it is predicted that all eleven turbines would be visible from the asset.
- 11.91 The location of the turbines sat above the Strath Halladale would have a minimal distraction from the setting that contributes to the cultural significance of the asset. The ability to understand and



- appreciate the monument within the extant landscape would not be substantially unaffected by the proposed development as the relationship between the asset and the Strath Halladale would not be diminished.
- 11.92 The limited peripheral distraction in the wider landscape which could detract from an understanding of its wider contemporary context is predicted to result in a low adverse magnitude of impact with an overall **Minor Adverse** impact on the significance of the monument which is categorised as High as per **Table 11-2**. This is not a significant impact and is reversible.

Milburn, Strath Halladale (SM13622)

- 11.93 The monument is a prehistoric burial monument probably dating to the 2nd millennium BC (Bronze Age). It survives as a prominent, circular, grass-covered mound, built mainly of earth but with some stone visible on its sides, with a smaller secondary barrow to the east. The monument is situated on rising ground to the east of the Halladale River, at around 40m above sea level.
- 11.94 The monument is of national importance as a prehistoric burial mound with an inherent potential to make a significant addition to our understanding of the past, particularly the design and construction of burial monuments, the nature of burial practices, and their significance in Bronze Age and later society. The monument has the potential to contribute to our understanding of the form, function and distribution of Bronze Age burial monuments. Such monuments are important for our understanding of the form and nature of the prehistoric landscapes of the Highlands. Due to the rare nature of this type of burial monument in Scotland, (a bowl barrow), its loss would very significantly diminish the ability to understand Bronze Age burial practices and society more widely.
- 11.95 The primary focus of the monument that contributes to its cultural significance is the Halladale River and its confluence to the south with the Halladale River, Allt a' Mhuilinn and Alltan Geal. The barrow has views up and down the Strath Halladale with its primary focus upon the confluence of the burns and river, looking along the river and the base of the Strath. Across the UK it is typical of prehistoric funerary monuments to sit along the ridgeline or shores of watercourses, Milburn Barrow follows this conformity. As per the scheduling assessment carried out between 2015 and 2016 (McCrone E, 2016. HES²), there are few other funerary Bronze age sites in close proximity to the monument as noted by HES, however, the asset may be contemporaneous with Leathad Carnaich hut circles, (SM1876) located to its southeast.
- 11.96 The setting that now surrounds the monument is largely compromised of upland moorland, there is intermittent post-medieval housing within the landscape the closest located 0.2km to the east, which is the Mission House, (LB12922). Running approximately 50m to the east of the barrow is an overhead telecoms line interrupting its views between the Halladale River and the asset.
- 11.97 The nearest turbine (Turbine 11) is located 2.2km to the north of the monument. As per **Figure 11.2** and **Figure 11.5: Viewpoint 3**, it is predicted that all four blade tips would be visible from the asset.
- 11.98 The location of the turbines sat above the Strath Halladale and the limited intervisibility would have a minimal distraction from the setting that contributes to the cultural significance of the asset which is categorised as High as per **Table 11-2**. The ability to understand and appreciate the monument would not be affected by the proposed development as the relationship between the asset and the Strath Halladale would not be diminished.

² Decision notice for Milburn (SM13622) http://portal.historicenvironment.scot/decision/500000619 Accessed 27/01/2022





11.99 It is therefore considered that the operation of the proposed development would result in no magnitude of impact with an overall impact on the significance of the monument of **Nil**.

Bighouse, Garden Pavillion and Walled Garden (LB7160) and associated Category B buildings

- 11.100 Bighouse, constructed in 1765 for Louisa Mackay, is a non-designated designed landscape comprising a garden pavilion and walled garden, (Category A; LB7160), the barracks, (Category B; LB7161), an icehouse, (Category B; LB7162), Farm Steading (Category B; LB7140) and Gatepiers and Garden Wall, (Category B; LB7159). Bighouse while originally constructed for Louisa Mackay, has ties to the chieftains of Bighouse and Sandwood chieftains of Clan Mackay. The buildings and designed landscape feature buildings and characteristics of their composition for example the 18th-century buildings such as the main house and pavilion are harled with ashlar whereas the steading and icehouse are later additions to the estate constructed in the 19th century.
- 11.101 Bighouse and its associated buildings are culturally significant due to their historical relationship with the MacKay family and their rarity, surviving as an example of an 18th-century Highland estate.
- 11.102 Bighouse and its associated features are situated at the mouth of the River Halladale, overlooking the bay of Melvich 0.2km to the north. The Category A Garden Pavillion and Walled Garden have a much more enclosed setting defined by the walls and the rising topography immediately beyond them to the south and east. The primary setting of the walled garden and pavilion is its relationship with the main house and its associated buildings within the wider landscape. The walled garden creates the emphasis of a formal garden in a rural landscape highlighting the status of those within Bighouse.
- 11.103 The proposed development is located to the south west, with the closest turbine (Turbine 1) 4km from the asset. The ZTV (Figure 11.2) and wireline (Figure 7.9a) indicates that all 11 turbines would be visible from the Category A asset. However, the focus of the asset is the garden and the main house, the asset is clearly aligned to the west in this respect. The potential visibility of blade tips to the south would not infringe on this association or detract from any intended designed views within the garden and reciprocated by the main house. Visibility of the turbines from the asset looking south along the Strath Halladale would not impact upon the ability to understand or appreciate the grandeur of the house at the mouth of the Halladale River. The visibility of the proposed development would also not infringe on the ability to understand, appreciate or experience the relationship it holds between the individual buildings of the Bighouse estate. The distant visibility of the proposed development on the approach to the wider asset group from the public car park over the walkway across the River Halladale would be oblique to the main focus of the view, neither presenting as a backdrop to the view the Category A asset or infringing on any design intention of the garden to an extent that would affect understanding. The effect of the oblique presence of the turbines in a view on the approach to the garden pavilion and walls and the effect of potential views from the garden pavilion and walls needs to be considered with regard to how important any views are to the understanding and appreciation of the Category A asset. In this instance, the presence of the turbines in the views described would be considered to not dimmish the ability to appreciate or understand the asset. There would be no effect to the cultural significance of the asset which is categorised as High as per **Table 11-2**. **No impact** is predicted.
- 11.104 Similarly, all effects on the Category B Listed Buildings at Bighouse would be considered to be neutral, their group value and tangible association with the estate being unaffected.



The Borg (SM1839)

- 11.105 The monument is a broch, a complex stone-built substantial roundhouse, dating from the Iron Age (between 600BC and AD 400). The broch is visible as a substantial upstanding structure with surviving walling, entrance and intermural cells, crowning a large rocky knoll. The broch is located on an elevated position on the valley floor overlooking the River Halladale. The asset is a well-preserved example of monuments of this scale with surviving wall heights of up to 3m, with the overall diameter of the asset approximately 20m.
- 11.106 The cultural significance of this asset is linked to its contribution to the understanding of Iron Age brochs in Strath Halladale. The broch adds to the understanding of settlement patterns and social structure during the Iron Age in Strath Halladale and this potential is enhanced by the numerous broadly contemporary monuments in the vicinity such as Upper Bighouse broch (Canmore Id:6797) and Carn Liath (Canmore Id: 6833).
- 11.107 The setting of the broch is its defensive position overlooking Strath Halladale. There are open views across the adjacent landscape to the north and south. The focus appears to be on a narrow section of the Strath, and it may have been positioned here to control movement through this area and the better agricultural land within the valley. Its relationship with Carn Liath and Upper Bighouse brochs may indicate community catchments within the landscape of Strath Halladale.



Plate 1: Views from the Borg looking North up Strath Halladale.

- 11.108 The setting that now surrounds the monument is largely compromised of upland moorland and modern conifer plantations. 60m to the east of the monument runs the 275kV overhead line which runs north-south along past the asset. To the west of the asset the A897 is present with an overhead line 0.15km beyond that. The modern intrusions of the conifer plantation and overhead line obscure the views to the Upper Bighouse broch (Canmore ID.6797). The views to Carn Lath are currently not obscured however during the site visit for setting assessments on the 3rd of November 2021 it was noted that further commercial forestry plantation was undertaken 200m to the west of the asset with the potential to obscure views between the assets.
- 11.109 The proposed development is located 6.9km to the north with the closest turbine being 7.2km to the northwest. It is predicted that all 11 turbines would be visible from the monument, (Figure 11.2, Figure 11.3: Viewpoint 1). The introduction of the proposed development would not diminish the significance of the landscape in which the Borg sits. This landscape is defined in its relationship with Strath Halladale, other brochs which it shares views with (not limited to Canmore Id.6797 and Canmore Id.6833), and its defensive position. The proposed development, while visible on the periphery would not distract from the topographical understanding of the Borg. Neither would it interrupt views or distract from the views to contemporary monuments which contribute towards an understanding of the Borg's significance. The ability to appreciate the Borg from its raised defensive position would not be diminished through the introduction of turbines on the periphery of Strath Halladale. However, the prominence of the turbines looking from the A897 looking north with the Borg to the east and development to the northwest may cause a distraction to the views of Strath Halladale and the assets within it.
- 11.110 As a scheduled monument the asset is of high significance. As the views of the proposed development both to and from the asset would not dimmish the ability to appreciate or understand the monument, and the minor distraction on the approach from the public right of way, the proposed development is assessed to have a low magnitude of impact resulting in a **minor adverse** significance of effect which is not considered to be significant in EIA terms.

Smigel Bridge (LB12915) and Mill (LB7141)

- 11.111 Smigel Bridge is a single span rubble bridge, built in 1850 which carries road traffic. To the west of the Bridge is Smigel Mill, a rectangular mill building constructed of slate and rubble with a waterwheel situated on the southern gable end. The cultural significance of both the mill and bridge lies in their history of having been built as a cooperative venture in the area.
- 11.112 The setting of the mill and bridge is that of Smigel Burn which is a tributary of the River Halladale which runs perpendicular to the burn. The burn contributes heavily to the relationship between the mill and bridge, one requires it to generate power, the mill and the other for transportation, the bridge.
- 11.113 The proposed development is located 1.5km to the west of the asset, and it is predicted that the whole development would be visible on the western slopes of Bighouse Hill. Despite this the development would not impact upon the understanding or appreciation of the assets and their relationship with Smigel Burn, it's most prominent aspect of the assets setting. It would not affect the experience of the relationship between the mill, burn and bridge as one cumulative setting. As per **Table 11-2**, the heritage significance of these assets are Medium cultural significance.
- 11.114 It is therefore considered that the operation of the proposed development would result in no magnitude of impact with an overall impact on the significance of the monument as **None**.



Cumulative Effects Assessment

- 11.115 Cumulative effects have been considered with regard to wind farm developments (See **Chapter 5**: **Environmental Impact Assessment**) that are:
 - Consented or are in the planning process as a planning application, appeal or inquiry; and
 - Within 10km of assets of national importance that are predicted to receive an above Minor effect from the proposed development.
- 11.116 The proposed development would not form any significant effects in EIA terms, and would therefore not contribute to any significant cumulative effects.

Post-Operational Stage Effects (Decommissioning)

Potential Direct Effects

11.117 On the assumption that decommissioning would cause no additional ground disturbance to that which occurred during construction, no additional direct impacts to the buried archaeological resource are anticipated. There would be no direct effects on assets which results in no significant effects.

Potential In-direct Effects

11.118 There would be no in-direct effects, concerning the setting of the assets, during the decommissioning of the proposed development. During the decommissioning process, the land within the site boundary will return to its pre-development state and as such the current setting of the assets, as stated within this chapter, will be re-established.

STATEMENT OF SIGNIFICANCE

- 11.119 This assessment has considered data from a diverse range of sources in order to identify heritage assets that may be affected by the proposed development. A consideration of the potential direct and indirect effects on designated and non-designated assets has been set out with full regard to archaeology and cultural heritage legislation, policy and guidance.
- 11.120 With regard to designated assets, a minor adverse effect has been identified with respect to three Scheduled Monuments. No significant impacts to designated assets have been identified at the construction or operational stages of the proposed development. This conclusion extends to cumulative and residual impacts. Furthermore, with reference to SPP Paragraph 145, it is considered that the changes in setting affecting the monument would not affect the integrity of the setting itself, which in all instances would remain wholly tangible.
- 11.121 With due regard to potential insignificant impacts identified to the buried archaeological resource during construction, mitigation measures for protecting or recording non-designated assets during construction have been set out.



11.122 All effects are within the lowest level of effects identified within the NatureScot and HES EIA Handbook 2019. There are no predicted significant effects in EIA terms on heritage assets resulting from the construction or operation of the proposed development.

FURTHER SURVEY REQUIREMENTS AND MONITORING

11.123 A mitigation strategy that could be implemented as a condition to consent is outlined in **Table 11-7**.

Table 11-7: Proposed Impacts and Mitigation

SLR ID	Assets	Impact	Mitigation
SLR13	Township	Track Widening and Infrastructure	A pre-commencement condition and/or a watching brief according to the requirements of The Highland Council.
SLR34 and SLR35	Hut Circles	Construction Compound	
SLR24	Mound	Track Widening and Infrastructure	

- 11.124 In addition to the above targeted response, it is SLR's professional recommendation that a watching brief be conducted on all ground-breaking works within the site due to peat depths and the potential for preservation of previously unrecorded archaeology. Due to the nature of the landscape and its historical value, archaeological monitoring would mitigate any loss of deposits with archaeological potential.
- 11.125 The precise scope of the mitigation works would be negotiated with THCHET and the agreed mitigation programme would be documented in an agreed Written Scheme of Investigation for Archaeological works.



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