

Section 9 CULTURAL HERITAGE

Contents

9.1	Introduction	3
9.2	Competency and Expertise	3
9.3	Policy and Guidance	3
9.4	Consultations	5
9.5	Methodology	6
9.6	Baseline Conditions	11
9.7	Impact Assessment	15
9.8	Proposed Mitigation	25
9.9	Residual Effects.....	26
9.10	Cumulative Effects.....	26

Tables

Table 9.1	Summary of issues identified from consultations
Table 9.2	Archaeological potential
Table 9.3	Criteria for Assessing the Importance of Heritage Assets
Table 9.4	Criteria for Assessing the Magnitude of Impacts on Heritage Assets
Table 9.5	Criteria for Assessing the Significant of Effects on Heritage Assets
Table 9.6	Heritage Assets within the ISA included in the Assessment
Table 9.7	Scheduled Monuments included in the Assessment
Table 9.8	Listed buildings included in the Assessment
Table 9.9	Undesignated Heritage Assets in the OSA included in the Assessment
Table 9.10:	Designations grouped with NIDLs in the Assessment
Table 9.11:	Heritage Assets subject to potential Construction Impacts

Figures

Figure 9.1	Cultural Heritage Study Areas
Figure 9.2	Heritage Assets within the ISA – North
Figure 9.3	Heritage Assets within the ISA – South
Figure 9.4	Heritage Assets discussed in text within the OSA – North
Figure 9.5	Heritage Assets discussed in text within OSA – South
Figure 9.6	Viewpoint 1: LB9842: Craigelands House
Figure 9.7	Viewpoint 2: SM676 Milton, Roman Fort, fortlet and camps
Figure 9.8	Viewpoint 3: SM698: Lochwood Castle
Figure 9.9	Viewpoint 4: SM714: Wamphray, motte and bailey 100m NNE of Wamphray House
Figure 9.10	Viewpoint 5: SM12731: Laverhay Cottage, enclosure 480m NNE of
Figure 9.11	Viewpoint 6: SM10476: Peat Hill, fort and scooped settlement
Figure 9.12	Viewpoint 7: SM649: Carthur Hill, fort, Boreland
Figure 9.13	Viewpoint 8: LB9898, GDL322: Raehills House

Appendices

Appendix 9.1	Gazatteer of Heritage Assets Within The Inner Study Area
Appendix 9.2	Scheduled Monuments In The Outer Study Area Excluded

Glossary

Term	Definition
Scheduled Monuments	A scheduled monument is a nationally historic building or site that is included in the Schedule of Monuments kept by Historic Environment Scotland. The particular significance needed to define the monument as of 'national' importance may be established in terms of one or more of the following: <ul style="list-style-type: none"> a. its inherent capability or potential to make a significant addition to the understanding or appreciation of the past; b. its retention of the structural, decorative or field characteristics of its kind to a marked degree; c. its contribution, or the contribution of its class, to today's landscape and/or the historic landscape; d. the quality and extent of any documentation or association that adds to the understanding of the monument or its context; e. the diminution of the potential of a particular class or classes of monument to contribute to an understanding of the past, should the monument be lost or damaged; and f. its place in the national consciousness is a factor that may be considered in support of other factors. (HESPS 2016, Annex1)
Category A listed building	Buildings of national or international importance, either architectural or historic, or fine little-altered examples of some particular period style or building type (HESPS 2016, Note 2.17)
Category B listed building	Buildings of regional or more than local importance, or major examples of some particular period, style or building type. (HESPS 2016, Note 2.17)
Category C listed building	Buildings of local importance; lesser examples of any period, style, or building type, as originally constructed or altered; and simple, traditional buildings which group well with others. (HESPS 2016, Note 2.17)
Conservation Areas	Conservation areas "are areas of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance". (HESPS 2016, Annex 3)
Inventory Gardens and Designed Landscapes	The inventory includes gardens and designed landscapes of national importance. Sites are assessed for their: <ul style="list-style-type: none"> a. value as individual works of art in their own right; b. historic value; c. horticultural, arboricultural or silvicultural value; d. architectural value; e. scenic value; f. nature conservation value; and g. archaeological value. (HESPS 2016, Annex 5)
World Heritage Sites	World Heritage Sites are cultural and/or natural sites considered to be of 'Outstanding Universal Value', which have been inscribed on the World Heritage List by the World Heritage Committee. (ICOMOS 2017)

Abbreviations

Abbreviation	Description
AOD	Above Ordnance Datum
ASA	Archaeologically Sensitive Areas
CA	Conservation Areas
CIFA	Chartered Institute for Archaeologists
DGC	Dumfries and Galloway Council
EIA	Environmental Impact Assessment
HER	Historic Environment Record
HES	Historic Environment Scotland
HESPS	Historic Environment Scotland Policy Statement
IGDL	Inventory Garden and Designed Landscape
ISA	Inner Study Area
LDP	Local Development Plan
MCHE	Managing Change in the Historic Environment
NCAP	National Collection of Aerial Photography
NRHE	National Record of the Historic Environment
NSR	Non-statutory Register
OSA	Outer Study Area
SBC	Scottish Borders Council
SG	Supplementary guidance
SPP	Scottish planning Policy
ZTV	Zone of Theoretical Visibility

Section 9: Cultural Heritage

9.1 Introduction

9.1.1 This chapter presents an assessment of the effects of the Scoop Hill Community Wind Farm on the historic environment. The assessment was undertaken by Headland Archaeology (UK) Ltd. The objectives of this assessment are to:

- Describe the location, nature and extent of any known heritage assets or areas of archaeological potential which may be affected by the proposed development;
- Provide an assessment of the importance of these assets;
- Assess the likely scale of any impacts on the historic environment posed by the development;
- Outline suitable mitigation measures to avoid, reduce or offset significant adverse effects; and
- Provide an assessment of any residual effects remaining after mitigation.

9.1.2 A heritage asset (or historic asset) is any element of the historic environment which has cultural significance. Both discrete features, and extensive landscapes defined by a specific historic event, process or theme, can be defined as heritage assets; and assets may overlap or be nested within one another.

9.1.3 Designated assets include Scheduled Monuments, Listed Buildings, World Heritage Sites, Conservation Areas, Inventory Gardens and Designed Landscapes, Inventory Historic Battlefields and Historic Marine Protected Areas. Other assets may also be locally designated through policies in the Local Plan.

9.2 Competency and Expertise

The Company

9.2.1 Headland Archaeology is one of the largest archaeological contractors in the UK with many years of experience in the design, management and completion of complex and challenging archaeological projects.

9.2.2 Headland is a Registered Organisation with the Chartered Institute for Archaeologists (CIfA) and abides by its standards and codes of conduct. Headland has been independently assessed under the Achilles UVDB Verify audit and assessment service, which focuses on risk critical issues and provides demonstrable compliance to Safety, Health, Environment and Quality (SHEQ) requirements.

The Authors

9.2.3 Project Manager Tom Janes MA(Hons) MCIfA has undertaken responsible work in Environmental Impact Assessment and Cultural Heritage Consultancy since 2014 in the UK, and since 2008 in the Republic of Ireland. Prior to this Tom undertook archaeological fieldwork and project management throughout the UK and Ireland. In addition to an MA in Medieval history and Archaeology, Tom is a Member of the Chartered Institute for Archaeologists.

9.2.4 Lead Author Linn Glancy MA MA(Hons) ACIfA has undertaken responsible work in Environmental Impact Assessment and Cultural Heritage Consultancy since 2007. Prior to this Linn undertook archaeological fieldwork and surveys throughout the UK and Ireland. In addition to an MA(Hons) in Archaeology and an MA in Archaeological Survey, Linn is an Associate of the Chartered Institute for Archaeologists.

9.3 Policy and Guidance

9.3.1 The assessment has been undertaken with reference to relevant legislation, policy and guidance relating to Cultural Heritage.

Legislation

9.3.2 Scheduled Monuments, Listed Buildings and Conservation Areas are protected by statute.

9.3.3 Legislation regarding Scheduled Monuments is contained within The Ancient Monuments and Archaeological Areas Act 1979. Legislation regarding Listed Buildings is contained in The Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997.

9.3.4 The 1979 Act makes no reference to the settings of Scheduled Monuments. The 1997 Act does, however, place a duty on the planning authority with respect to Listed Buildings and Conservation Areas. Section 59 of the 1997 Act states (in part):

“In considering whether to grant planning permission for development which affects a listed building or its setting, a planning authority or the Secretary of State, as the case may be, shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.”

9.3.5 Section 64 states:

“In the exercise, with respect to any buildings or other land in a conservation area, of any powers under any of the provisions in subsection (2), special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area.”

9.3.6 The Historic Environment Scotland Act 2014 defines the role of Historic Environment Scotland (HES), and the processes for the designation of heritage assets, consents and rights of appeal.

Planning policy

National Policy

9.3.7 The Scottish Government’s planning policies in relation to the historic environment are set out in paragraphs 135-151 of Scottish Planning Policy (SPP) (The Scottish Government, June 2014). The historic environment is defined as *“the physical evidence for human activity that connects people with place, linked with the associations we can see, feel and understand”* and includes *“individual assets, related settings and the wider cultural landscape”*. The policy principles are stated in paragraph 137:

9.3.8 *“The planning system should:*

promote the care and protection of the designated and non-designated historic environment (including individual assets, related settings and the wider cultural landscape) and its contribution to sense of place, cultural identity, social well-being, economic growth, civic participation and lifelong learning; and enable positive change in the historic environment which is informed by a clear understanding of the importance of the heritage assets affected and ensure their future use. Change should be sensitively managed to avoid or minimise adverse impacts on the fabric and setting of the asset, and ensure that its special characteristics are protected, conserved or enhanced.”

9.3.9 The SPP applies these principles to all designated assets (paragraphs 141-149). In particular, it states that:

- Regarding developments affecting Listed Buildings, “special regard must be given to the importance of preserving and enhancing the building, its setting and any features of special architectural or historic interest”;
- Proposals “which will impact on its appearance, character or setting [of a Conservation Area], should preserve or enhance the character and appearance of the conservation area”;
- “Where there is potential for a proposed development to have an adverse effect on a scheduled monument or on the integrity of its setting, permission should only be granted where there are exceptional circumstances”;
- “Where a development proposal has the potential to affect a World Heritage Site, or its setting, the planning authority must protect and preserve its Outstanding Universal Value”;
- “Planning authorities should protect and, where appropriate, seek to enhance gardens and designed landscapes included in the Inventory of Gardens and Designed Landscapes and designed landscapes of regional and local importance”; and
- “Planning authorities should seek to protect, conserve and, where appropriate, enhance the key landscape characteristics and special qualities of sites in the Inventory of Historic Battlefields”.

9.3.10 The SPP also requires planning authorities to protect archaeological sites and monuments, preserving them in situ where possible, or otherwise ensure “appropriate excavation, recording, analysis, publication and archiving before and/or during development” (paragraph 150). “Non-designated historic assets and areas of historical interest, including historic landscapes, other gardens and designed landscapes, woodlands and routes such as drove roads” should also be preserved in situ wherever feasible (paragraph 151).

9.3.11 ‘Our Place in Time: the Historic Environment Strategy for Scotland’ (2014) presents the Scottish Government’s strategy for the protection and promotion of the historic environment. The Historic Environment Policy for Scotland (HEPS, 2019) and the Historic Environment Scotland Circular (2019) complement the SPP and provide further policy direction. In particular, HEPS provides more detailed policy on historic environment designations and consents.

Local Policy

Dumfries and Galloway Council

9.3.12 Dumfries and Galloway Council (DGC) adopted their Local Development Plan 2 (LDP2) in October 2019. In February 2020, DGC produced Supplementary Guidance (SG) on the Historic Built Environment. Excerpts of local policies from the LDP2 and Key Principles from the SG relevant to this assessment are summarised below;

Dumfries and Galloway Local Development Plan 2 (2019)

9.3.13 Policy OP1: Development Considerations [with regard to the Historic Environment]

“b) Development proposals should protect and/or enhance the character, appearance and setting of the region’s rich historic environment principally by ensuring they are sympathetic to nearby buildings, sites and features, integrate well and complement the surrounding area. The information contained within the Council’s Historic Environment Record and Historic Environment Scotland Policy Statement, and any subsequent revised or amended document, will be a material consideration in the assessment of proposals.”

9.3.14 Policy HE1: Listed Buildings

“The Council will support development that makes effective, efficient and sustainable use of listed buildings. In considering development that impacts on the character or appearance of a listed building or its setting the Council will need to be satisfied that:

a) Alterations

- proposals to extend or alter a listed building respect the appearance, character and architectural features which contribute to its listing and do not seek to overwhelm or otherwise damage its original character and appearance; and
- the layout, design, materials, scale, siting and the future use shown in any development proposals are appropriate to the character and appearance of the listed building and its setting; and
- proposals for a change of use will not result in loss of character or special architectural or historical features.”

9.3.15 Policy HE2: Conservation Areas

“The Council will support development within or adjacent to a conservation area that preserves or enhances the character and appearance of the area and is consistent with any relevant conservation area appraisal and management plan. In considering such development the Council will need to be satisfied that:

- new development as well as alterations or other redevelopment of buildings, will preserve or enhance the character, appearance and setting of the conservation area through appropriate design, general scale, massing and arrangement, use of materials and detailing of such development;
- the quality of views within, from and into the conservation area will be maintained or enhanced.”

9.3.16 Policy HE3: Archaeology

“a) The Council will support development that protects significant archaeological and historic assets, and the wider historic environment from adverse effects.

In considering development proposals the Council will need to be satisfied that:

- the development preserves or enhances the appearance, fabric or setting of the site or asset in-situ; and/or
- where there is uncertainty about the location, extent or significance of these assets an agreed scheme of assessment and evaluation to inform the application is included with the proposal; and/or
- due consideration has been given to the significance and value of the site or asset in relation to the long-term benefit and specific need for the development in the location proposed.

b) Where, due to exceptional circumstances, development is to proceed and the preservation of historic assets in-situ including buildings is not possible, a scheme of mitigation involving excavation, recording, analysis, publication and archiving and any other measures appropriate to the case has been agreed with the Council.”

9.3.17 Policy HE4: Archaeologically Sensitive Areas

“The Council will support development that safeguards the character, archaeological interest and setting of Archaeologically Sensitive Areas (ASAs) as designated by the Council.”

9.3.18 Policy HE6: Gardens and Designed Landscapes

“a) The Council will support development that protects or enhances the significant elements, specific qualities, character, integrity and setting, including key views to and from, gardens and designed landscapes included in the Inventory of Gardens and Designed Landscapes or the Non-Inventory List.

In considering development proposals the Council will need to be satisfied that:

- the development protects or enhances the significant elements of the garden or landscape in-situ; and*
- due consideration has been given to the significance and value of the asset in relation to the long-term benefit and specific need for the development in the location proposed.*

b) Developers will be required to submit the results of an assessment of the impact of their proposals on the sites and their settings plus details of any potential mitigation measures.

c) Proposals that would have a detrimental effect on the specific quality, character or integrity of a garden or designed landscape will not be approved unless it is demonstrated that the benefits of the proposal are of sufficient public interest to override that detriment.”

Dumfries and Galloway Council, Local Development Plan 2, Supplementary Guidance; Historic Built Environment

9.3.19 Key Principle; Views, Landmarks and Setting:

9.3.20 *“Proposals will be supported where they complement or preserve the setting of historic buildings and established views to and from landscapes or landmarks; this may include the creation of appropriate new views and vistas.”*

Dumfries and Galloway Council, Local Development Plan 2, Supplementary Guidance; Wind Energy Development: Development Management Considerations (February 2020)

9.3.21 Development Management Considerations, H19 to H28. Historic Environment and Cultural Heritage

“Within the broad sweep of the historic environment, there are particular assets and places ranging from architecturally or archaeologically significant buildings, monuments, and designed landscapes, to deep peat that contains valuable environmental historical data....All applications should demonstrate that they have assessed the potential effects on these assets, and other undesignated features.... When there is likely to be an impact on the historic environment and/or the cultural heritage, the developer must consider and assess potential effects on the aesthetic, historic, social and intangible/spiritual sensitivities.”

Guidance

9.3.22 Planning Advice Note 2/2011: Planning and Archaeology provides technical advice to planning authorities and developers on dealing with archaeological remains. Among other issues it covers the balance in planning decisions between the preservation of archaeological remains and the benefits of development; the circumstances under which developers can be required to provide further information, in the form of a field evaluation, to allow planning authorities to reach a decision; and measures that can be taken to mitigate adverse impacts.

9.3.23 HES published Designation Policy and Selection Guidance (DPSG, 2019) to accompany HEPS 2019. DPSG outlines the policy and selection guidance used by HES when designating sites and places of national importance.

9.3.24 HES provides guidance on how to apply the policies set out in the SPP in a series of documents entitled ‘Managing Change in the Historic Environment’, of which the guidance note on ‘Setting’ (Historic Scotland 2016) is particularly relevant.

9.3.25 Standards and Guidance published by the ClfA have been followed in preparing this assessment, in particular, the ‘Standard and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment’ (2014) and the ‘Standard and guidance for historic environment desk-based assessment’ (2014).

9.4 Consultations

9.4.1 Issues arising from scoping and other consultation carried out in the course of the cultural heritage assessment are summarised in Table 9.1.

Table 9.1: Summary of issues identified from consultations

Consultee & Correspondence	Issues raised	Action taken
Historic Environment Scotland, Scoping Response letter dated 4 th June 2019	HES commented; <i>“We consider that it may be possible to accommodate a wind farm at this location but, based on the information provided so far, note that there is the potential for significant adverse impacts on the setting of heritage assets in the vicinity of the proposed development. In order to address these issues mitigation by design, including alterations to the development layout and turbine heights, may be required. We would therefore be keen to engage further as the development progresses and are happy to offer more detailed comments as further ZTV information and wireframe views become available”.</i>	Further consultation was undertaken with HES to inform them as the design progressed.
Historic Environment Scotland, Email Response dated 3 rd October 2019	In response to receiving ZTV and further information, HES requested; <i>“We recommend that consideration should be given to potential impacts on the setting of nationally important heritage assets located within 25 km of the proposals. A systematic approach should be undertaken - underpinned by an understanding of each heritage asset and their setting, as well as an analysis of the potential for impacts on their settings. ZTV analysis will help to inform this approach, as well as information about the distance between each heritage asset and the nearest turbine. We also suggest that reviewing some initial wireframe visualisations, taken from the suggested viewpoints, as well as from viewpoints within the wider study area, will help focus the assessment and inform the selection of any assessment viewpoints for inclusion within an EIA Report.</i>	Further consultation was undertaken with HES to inform them as the design progressed.

Consultee & Correspondence	Issues raised	Action taken
	<i>We also recommend that any EIA undertaken for the proposals should include a narrative around the selection of heritage assets identified for detailed assessment."</i>	
Historic Environment Scotland, Post Scoping Advice letter 28 th February 2020	<p>In response to receiving ZTV and further information, HES recommended particular attention is paid to the following assets and their setting;</p> <ul style="list-style-type: none"> • Laverhay Cottage, enclosure 480m NNE of (Scheduled Monument, Index no. 12721) • Castle O'er, fort and linear earthworks (Scheduled Monument, Index no. 651) • Peat Hill, fort and scooped settlement (Scheduled Monument, Index no. 10476) • Carthur Hill, fort, Boreland (Scheduled Monument, Index no. 649) • Rangecastle Hill, fort (Scheduled Monument, Index no. 8364) • Wamphray, motte and bailey 100m NNE of Wamphray House (Scheduled Monument, Index no. 714) • Milton, Roman fort, fortlet & camps (Scheduled Monument, Index no. 676) • Lochwood Castle, The Mount, Motte and Tower House Complex (Scheduled Monument, Index no. 698) • Boreland Village, Hutton and Corrie Parish Church, Churchyard and Gatepiers (Category A listed building, LB9911) • Craigiels House (Category A listed building, LB9842) • Raehills House (Category A listed building, LB9898, and associated Inventory Designed Landscape, GDL322) <p>HES also requested careful consideration of cumulative impacts resulting from the development in combination with other existing and proposed wind farm developments in the surrounding area</p>	Potential impacts are assessed in Section 9.6 Impact Assessment and Section 9.9 Cumulative Effects
Dumfries and Galloway Council, scoping response dated 1 st July 2019	<p>DGC advised that indirect effects on the following assets must be considered in any assessment:</p> <ul style="list-style-type: none"> • Fenton Heights (SM104770) • Castle Hill (SM8366) • Barrack Hill (SM8365) • Rangecastle Hill (SM8364) • Carthur Hill (SM649) 	<p>Further information was sent 16th January 2020. No further comments received.</p> <p>Potential impacts are assessed in Section</p>

Consultee & Correspondence	Issues raised	Action taken
	<ul style="list-style-type: none"> • Peat Hill (SM10476) • Broom Hill (SM3350) • Broomhillbank Hill (SM12660) • Broomhillbank Hill (SM12662) • Wamphray (SM714) • Knock Hill (SM2197) • Castle O'er (SM651) • Todshawhill (SM2853) • Laverhay (SM12721) • Winsheids Hill (MDG7293) • Peat Hill (MDG7287) • Kirkhill (MDG7257) • Dundoran (MDG8943) • The Dod (MDG5375) • Leithehall Burn (MDG5375) • Gillesbie NIDL <p>Visualisations to illustrate potential effects should follow NatureScot 2017 guidelines as outlined in NatureScot guidance document 'Visual Representations of Wind Farms, Version 2.2'.</p> <p>A digital extract from the DGC Historic Environment Record (HER) should be used to inform the assessment.</p>	9.6 Impact Assessment

9.5 Methodology

The Assessment Process

9.5.1 The cultural heritage assessment has been carried out in the following stages:

- Desk-based study leading to the identification of heritage assets potentially affected by the development;
- Definition of baseline conditions, based on results of the desk-based study and visits to assets;
- Assessment of the importance of heritage assets potentially affected by the development;
- Identification of potential impacts on heritage assets, informed by baseline information, site visits, Zone of Theoretical Visibility (ZTV) mapping, wireframes and photomontages;
- Proposal of mitigation measures, to eliminate, reduce or offset adverse effects;
- Assessment of the magnitude of residual effects;
- Assessment of the significance of residual effects, broadly a product of the asset's importance and the magnitude of the impact; and
- Assessment of cumulative effects.

Study Areas

- 9.5.2 Two Study Areas were used for this assessment, and they are depicted on Figure 9.1.
- 9.5.3 The Inner Study Area (ISA) corresponds to the site boundary. Within this area, all heritage assets are assessed for construction, operational and decommissioning effects.
- 9.5.4 The Outer Study Area (OSA) extends to 25km from the turbines, which is taken as the maximum extent of potentially significant effects on the settings of heritage assets. Within the OSA, assets have been included in the assessment based on the level of importance assigned to the asset (Table 9.3), so as to ensure that all significant effects are recognised:
- Up to 2km from proposed turbines: All designated heritage assets, any undesignated asset of local importance which has a wider landscape setting that contributes substantially to its cultural significance, and all undesignated assets of regional and/or national importance.
 - Up to 5km from turbines: All designated heritage assets (excluding Category C Listed buildings), any undesignated asset of regional importance which has a wider landscape setting that contributes substantially to its cultural significance, and all undesignated assets of national importance.
 - Up to 10km from turbines: All designated heritage assets (excluding Category B and C Listed buildings), and any other undesignated heritage asset of national importance.
 - Up to 25km from turbines: any asset which is considered exceptionally important, and where long-distance views from or towards the asset are thought to be particularly sensitive, in the opinion of the assessor or consultees. In the case of this assessment, no such assets were identified, and so the effective OSA as depicted on Figures 9.1 to 9.5 is 10km from the turbines.

Data Sources

- 9.5.5 The baseline for the ISA has been informed by a comprehensive desk-based study, based on all readily available documentary sources, following the ClFA ‘Standard and Guidance for historic environment desk-based assessment’. The following sources of information were referred to:
- Designation data downloaded from the Historic Environment Scotland website on 2nd December 2019;
 - The National Record of the Historic Environment (NRHE), including the Canmore database and associated photographs, prints/drawings and manuscripts held by HES;
 - Historic Landscape Assessment data viewed through the HLAMap website;
 - The DGC Historic Environment Record (HER) received on 28th August 2019;
 - The National Collection of Aerial Photography;
 - Geological data available online from the British Geological Survey;
 - Historic maps held by the National Library of Scotland;
 - Ordnance Survey Name Books;
 - Unpublished maps and plans held by the National Records of Scotland;
 - Readily available published sources and unpublished archaeological reports.
- 9.5.6 A site visit and walkover survey were undertaken on the week commencing 3rd February 2020 by two qualified archaeologists. The weather varied from bright and dry to overcast.

Definition of baseline conditions

- 9.5.7 Designated assets within both the ISA and OSA which have been previously recorded on the NRHE are labelled with the reference number assigned to them by HES (prefixed SM for Scheduled Monuments, and LB for Listed Buildings); undesignated assets are labelled with the reference number in the HER (prefixed with ‘MDG’ for the DGC HER and ‘NRHE’ for assets recorded in the NRHE).

Known heritage assets within the Inner Study Area

- 9.5.8 Previously unrecorded heritage assets within the ISA have been assigned an Asset number (prefixed HA for Heritage Asset). A single asset number can refer to a group of related features, which may be recorded separately in the HER and other data sources.
- 9.5.9 Assets within the ISA are shown in Figure 9.2 and Figure 9.3 described and listed in Appendix 9.1.

Potential for unknown heritage assets within the Inner Study Area

- 9.5.10 The likelihood that undiscovered heritage assets may be present within the ISA is referred to as archaeological potential. Overall levels of potential can be assigned to different landscape zones, following the criteria in Table 9.2, while recognising that the archaeological potential of any zone will relate to particular historical periods and types of evidence. The following factors are considered in assessing archaeological potential:
- The distribution and character of known archaeological remains in the vicinity, based principally on an appraisal of data in the HER;
 - The history of archaeological fieldwork and research in the surrounding area, which may give an indication of the reliability and completeness of existing records;
 - Environmental factors such as geology, topography and soil quality, which would have influenced land-use in the past and can therefore be used to predict the distribution of archaeological remains;
 - Land-use factors affecting the survival of archaeological remains, such as ploughing or commercial forestry planting; and
 - Factors affecting the visibility of archaeological remains, which may relate to both environment and land-use, such as soils and geology (which may be more or less conducive to formation of cropmarks), arable cultivation (which has potential to show cropmarks and create surface artefact scatters), vegetation, which can conceal upstanding features, and superficial deposits such as peat and alluvium which can mask archaeological features.

Table 9.2: Archaeological potential

Potential	Definition
High	Undiscovered heritage assets of high or medium importance are likely to be present.
Medium	Undiscovered heritage assets of low importance are likely to be present; and it is possible, though unlikely, that assets of high or medium importance may also be present.
Low	The study area may contain undiscovered heritage assets, but these are unlikely to be numerous and are highly unlikely to include assets of high or medium importance.
Negligible	The study area is highly unlikely to contain undiscovered heritage assets of any level of importance.
Nil	There is no possibility of undiscovered heritage assets existing within the study area.

Heritage assets in the outer study area

9.5.11 Assets that meet the initial criteria for assessment are set out in paragraphs 9.6.21 to 9.6.37.

Identification of potential impacts

9.5.12 Effects on the historic environment can arise through direct physical impacts, impacts on setting or indirect impacts:

- Direct physical impacts describe those development activities that directly cause damage to the fabric of a heritage asset. Typically, these activities are related to construction works and will only occur within the application site.
- An impact on the setting of a heritage asset occurs when the presence of a development changes the surroundings of a heritage asset in such a way that it affects (positively or negatively) the cultural significance of that asset. Visual impacts are most commonly encountered but other environmental factors such as noise, light or air quality can be relevant in some cases. Impacts may be encountered at all stages in the life cycle of a development from construction to decommissioning but they are only likely to lead to significant effects during the prolonged operational life of the development.
- Indirect impacts describe secondary processes, triggered by the development, that lead to the degradation or preservation of heritage assets. For example, changes to hydrology may affect archaeological preservation; or changes to the setting of a building may affect the viability of its current use and thus lead to dereliction.

9.5.13 Potential impacts on unknown heritage assets are discussed in terms of the risk that a significant effect could occur. The level of risk depends on the level of archaeological potential combined with the nature and scale of disturbance associated with construction activities and may vary between high and negligible for different elements or activities associated with a development, or for the development as a whole.

9.5.14 Potential impacts on the settings of heritage assets are identified from an initial desk-based appraisal of data from HES and the HER, and consideration of current maps and aerial images available on the internet. Where this initial appraisal has identified the potential for a significant effect, the asset has been visited to define baseline conditions and identify key viewpoints. Visualisations have been prepared to illustrate changes to key views (Chapter 6: Landscape and Visual Impact Assessment, Figure 6.33 a-e).

Mitigation measures and identification of residual effects

9.5.15 Proposed mitigation measures are described in Section 9.8. The preferred mitigation option is always to avoid or reduce impacts through design, or through precautionary measures such as fencing off heritage assets during construction works. Impacts which cannot be eliminated in these ways will lead to residual effects.

9.5.16 Adverse effects may be mitigated by an appropriate level of survey, excavation, recording, analysis and publication of the results, in accordance with a written scheme of investigation (SPP paragraph 150 and PAN2/2011, sections 25-27). Archaeological investigation can have a beneficial effect of increasing knowledge and understanding of the asset, thereby enhancing its archaeological and historical interest and offsetting adverse effects.

Impact assessment criteria

Heritage importance, cultural significance and sensitivity

9.5.17 Cultural heritage impact assessment is concerned with effects on cultural significance, which is a quality that applies to all heritage assets, and as defined by Historic Environment Scotland (Environmental Impact

Assessment Handbook, NatureScot & HES 2018, Appendix 1 page 175) relates to the ways in which a heritage asset is valued both by specialists and the general public; it may derive from factors including the asset’s fabric, setting, context and associations. This use of the word ‘significance’, referring to the range of values we attach to an asset, should not be confused with the unrelated usage in EIA where the significance of an effect reflects the weight that should be attached to it in a planning decision.

9.5.18 The importance of a heritage asset is the overall value assigned to it based on its cultural significance, reflecting its statutory designation or, in the case of undesignated assets, the professional judgement of the assessor (Table 9.3). Assets of national importance and international importance are assigned a high and very high level respectively. Scheduled Monuments, Inventory Gardens and Designed Landscapes, Inventory Historic Battlefields and Historic Marine Protected Areas are, by definition, of national importance. The criterion for Listing is that a building is of ‘special architectural or historic interest’; following DPSG Annex 2.19, Category A refers to ‘outstanding examples of a particular period, style or building type’, Category B to ‘major examples of a particular period, style or building type’, and Category C to ‘representative examples of a particular period, style or building type’. Conservation Areas are not defined as being of national importance and are therefore assigned to a medium level. Any feature which does not merit consideration in planning decisions due to its cultural significance may be said to have negligible heritage importance; in general, such features are not considered as heritage assets and are excluded from the assessment.

Table 9.3: Criteria for Assessing the Importance of Heritage Assets

Importance of the asset	Criteria
Very high	World Heritage Sites and other assets of equal international importance
High	Category A Listed Buildings, Scheduled Monuments, Inventory Gardens and Designed Landscapes, Inventory Historic Battlefields, Historic Marine Protected Areas and undesignated assets of national importance
Medium	Category B Listed Buildings, Conservation Areas, and undesignated assets of regional importance
Low	Category C Listed Buildings and undesignated assets of lesser importance
Nil	Sites, features and artefacts which have been removed and exist only as documentary records

9.5.19 Cultural significance is assessed in relation to the criteria in DPSG Annexes 1-6, which are intended primarily to inform decisions regarding heritage designations, but may also be applied more generally in identifying the ‘special characteristics’ of a heritage asset, which contribute to its cultural significance and should be protected, conserved and enhanced according to SPP paragraph 137. Annex 1 is widely applicable in assessing the cultural significance of archaeological sites and monuments, for instance, while the criteria in Annex 2 can be used in defining the architectural or historic interest of buildings, whether listed or not.

9.5.20 The special characteristics which contribute to an asset’s cultural significance may include elements of its setting. Setting is defined in ‘Managing Change in the Historic Environment: Setting’ (HES 2016, Section 1) as ‘the way the surroundings of a historic asset or place contribute to how it is understood, appreciated and experienced’. The setting of an asset is defined and analysed according to Stage 2 of the three-stage approach promoted in ‘MCH: Setting’, with reference to factors listed on pages 9-10 (Stage 1 is to identify the historic

assets that may be impacted). The relevance of these factors to the understanding, appreciation and experience of the asset determines how, and to what extent, an asset’s cultural significance derives from its setting. All heritage assets have settings; however, not all assets are equally sensitive to impacts on their settings. In some cases, setting may contribute very little to the asset’s cultural significance, or only certain elements of the setting may be relevant.

Assessment of the magnitude of impacts on cultural significance

9.5.21 The magnitude of an impact is a measure of the degree to which the cultural significance of a heritage asset will be changed by the proposed development. This definition of magnitude applies to impacts on the setting, as well as impacts on the physical fabric, of an asset. Impacts on the settings of heritage assets are assessed with reference to the factors listed in ‘MCH: Setting’ Stage 3 (evaluate the potential impact of the proposed changes, pages 10-11). It is important to note that the magnitude of an impact resulting from an impact on setting is not a direct measure of the visual prominence, scale, proximity or other attributes of the development itself, or of the extent to which the setting itself is changed; therefore, Landscape and Visual Impact Assessment criteria for scale/magnitude cannot be applied directly in determining the magnitude of impact on the setting of a heritage asset. It is also necessary to consider whether, and to what extent, the characteristics of the setting which would be changed contribute to the asset’s cultural significance.

9.5.22 Magnitude is assessed as high/medium/low, and adverse/beneficial, or negligible, using the criteria in Table 9.4 as a guide. In assessing the effects of a development, it is often necessary to take into account various impacts which affect an asset’s significance in different ways, and balance adverse impacts against beneficial impacts. For instance, there may be adverse impacts on an asset’s fabric and on its setting, offset by a beneficial impact resulting from archaeological investigation. The residual effect, given in Section 9.9, is an overall measure of how the asset’s significance is reduced or enhanced.

Table 9.4: Criteria for Assessing the Magnitude of Impacts on Heritage Assets

Magnitude of impact	Guideline Criteria
High beneficial	Changes to an asset and/or its setting resulting in considerable enhancement of cultural significance. <i>Or:</i> Preservation of an asset and/or its setting where it would otherwise suffer considerable loss of cultural significance in the do-nothing scenario.
Medium beneficial	Changes to an asset and/or its setting resulting in moderate enhancement of cultural significance. <i>Or:</i> Preservation of an asset and/or its setting where it would otherwise suffer moderate loss of cultural significance in the do-nothing scenario.
Low beneficial	Changes to an asset and/or its setting resulting in a slight enhancement of cultural significance. <i>Or:</i> Preservation of an asset and/or its setting where it would otherwise suffer slight loss of cultural significance in the do-nothing scenario.

Magnitude of impact	Guideline Criteria
Negligible beneficial	Changes to an asset and/or its setting resulting in a very slight enhancement of cultural significance. <i>Or:</i> Preservation of an asset and/or its setting where it would otherwise suffer very slight loss of cultural significance in the do-nothing scenario.
No Impact	The asset’s cultural significance is not altered.
Negligible adverse	Changes to an asset and/or its setting resulting in a very slight loss of cultural significance.
Low adverse	Changes to an asset and/or its setting resulting in a slight loss of cultural significance.
Medium adverse	Changes to an asset and/or its setting resulting in a moderate loss of cultural significance.
High adverse	Alterations to an asset and/or its setting resulting in a considerable loss of cultural significance.

Assessment of the significance of effects

9.5.23 The significance of an effect (EIA ‘significance’) on the cultural significance of a heritage asset, resulting from a direct or indirect physical impact, or an impact on its setting, is assessed by combining the magnitude of the impact and the importance of the heritage asset. The matrix in Table 9.5 provides a guide to decision-making but is not a substitute for professional judgement and interpretation, particularly where the asset importance or impact magnitude levels are not clear or are borderline between categories. EIA significance may be described on a continuous scale from negligible to major; it is also common practice to identify effects as significant or not significant, and in this sense major and moderate effects are regarded as significant in EIA terms, while minor effects are ‘not significant’.

Table 9.5: Criteria for Assessing the Significance of Effects on Heritage Assets

Asset importance	Magnitude of Impact			
	High	Medium	Low	Negligible
Very high	Major	Major	Major to moderate	Negligible
High	Major	Major or moderate	Moderate or minor	Negligible
Medium	Major to moderate	Moderate or minor	Minor	Negligible
Low	Moderate to minor	Minor	Negligible	Negligible

Assessment of Cumulative Effects

- 9.5.24 Cumulative effects can occur when other existing or proposed developments would also be visible in views that are relevant to the setting of a heritage asset. Cumulative effects are considered in cases where an effect of more than negligible significance would occur as a result of the proposed development. Other existing or proposed wind energy developments are included in the cumulative assessment where they also lie within 5km of the asset, or within 20km in cases where an asset's wider landscape setting is judged to be exceptionally sensitive. A cumulative effect is considered to occur where the magnitude of the combined effect of two or more developments is greater than that of the developments considered separately.

9.6 Baseline Conditions

Archaeological and historical overview of the Inner Study Area

Previous investigations

- 9.6.1 In 1912, 'Langholm As It Was; A History of Langholm and Eskdale from the Earliest Times' (Hyslop 1912) was published. The book provides a detailed account of the archaeology and history of the area from the Neolithic through to the early 20th century. The level of detail provided in this book is such that it forms a useful aid to all future work in the area.
- 9.6.2 In the 1990s the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) carried out extensive fieldwork in Eastern Dumfriesshire which culminated in the production of the monograph; Eastern Dumfriesshire, An Archaeological Landscape (RCAHMS 1997). This extensive volume of work covers all sites and monuments recorded within the area prior to April 1997. The ISA is covered in its entirety by this volume.

Geology and geomorphology

- 9.6.3 The majority of the ISA is covered with sedimentary bedrock; wacke of the Hawick Group. The lower slopes in the west of the ISA are sedimentary sandstone, breccia and conglomerate of the Stewarty Group. Two seams of sedimentary mudstone, chert and smectite claystone of the Crawford Group and Moffat Shale Group cross the ISA from south-west to north-east. Superficial geology within the ISA comprises glacial tills mantling the hillsides and slopes, with sand, gravel and silt deposits on the lower western slopes surrounding the River Annan (<http://mapapps.bgs.ac.uk/geologyofbritain/home.html> accessed 06.01.20).

Prehistoric Period

- 9.6.4 The earliest prehistoric asset in the ISA is Wamphray stone circle (MDG7257). This is the possible remains of a stone circle consisting of seven stones of which only one survives upstanding. As a probable stone circle this is a ritual site of Neolithic to Bronze Age date. Also of possible early prehistoric date in the ISA is a fallen standing stone; Chapman's Stone (MDG7265) which may be a ritual site dating from the Neolithic. However, the NRHE records a local tradition that this stone dates to the 19th century and was firstly used as a droving stance and subsequently as a grave marker for a horse trader named Chapman.
- 9.6.5 Assets dating to the Bronze Age dominate the archaeological record of the ISA with 32 undesignated burnt mounds of probable Bronze Age to early Iron Age date within the ISA. These burnt mounds were largely recorded by the RCAHMS during their field survey of East Dumfriesshire in the 1990s. Many of these burnt mounds were verified by RCAHMS in the field by removing a small area of turf from the mounds to reveal burnt stones and charcoal. The exact function of burnt mounds is poorly understood but a common theory is that they were used for domestic cookery during the Bronze Age. These assets are largely located on the lower western slopes of the ISA – below 280m AOD and along watercourses. Burnt mounds are indicative of settlement and agricultural activity within the area though there is only one possible contemporary settlement, a cropmark of a ring ditch (MDG7267) currently recorded within the ISA.
- 9.6.6 Within the ISA there are three undesignated Iron Age Forts (MDG407, MDG7268 & MDG8943) and five settlements / enclosures of probable Iron Age date (MDG5005, MDG7269, MDG7277, MDG7308 & MDG9006). Also, within the ISA is the scheduled monument; Laverhay Cottage, enclosure (SM12721) which is designated as a possible Iron Age or medieval rectangular enclosure.

- 9.6.7 In the OSA, evidence of prehistoric activity comprises approximately 95 scheduled monuments, there are concentrations of these assets to the south, south-east and west. These features date from the Neolithic through to the Iron Age and include funerary cairns, stone circles, standing stones, forts and settlements and agricultural remains. The distribution indicates that known and potential prehistoric activity is concentrated in valleys and alongside watercourses on land below approximately 250m Above Ordnance Datum (AOD), as ground above this tends to be steeper and less suitable for settlement and cultivation. The exception to this is largely hill top forts located around 250m AOD (SM649, SM2346, SM4748, SM10476 & SM10544) and one Rangecastle fort (SM8364) at 293m AOD these would have been located on higher ground for greater visibility and defensibility.

Roman Period

- 9.6.8 The valleys and glens of Dumfriesshire provided the shortest, most accessible routes from the Roman province into central Scotland, and Dumfriesshire uniquely in Scotland must have been subject to periodic occupation by Roman forces (RCAHMS 1997, 168).
- 9.6.9 The undesignated probable Roman Road (MDG5027) runs through part of the ISA. In the OSA, there are seven scheduled monuments of Roman date including evidence of military settlement; the Raeburn Roman fort (SM671), Milton Roman Camp (SM676) and Lambs Knowe Roman Camp (SM7603). Military routes and associated signal stations; Coats Hill, Roman Signal Station (SM3965), Coatshill Quarry to Holehouse Linn, Roman Road (SM3347), Mid Raeburn to Craik Cross Hill, Roman road and watch tower (SM675), and Fauld Brae to Craik Knowes, Roman Road (SM3834). No evidence of Roman activity has been recorded to date in the ISA and as evidence in the surrounding area appears to be military and focussed on the lines of communication it is likely that there was no further Roman military activity within the ISA aside from patrolling.

Medieval to Modern

- 9.6.10 Within the ISA the medieval to modern period is dominated by agrarian remains. While the majority of these assets are probably of post medieval date, they may have their origins in the medieval period. Of possible medieval date are four ring enclosures (MDG5271, MDG9713, MDG9714 & MDG9716) these assets have been identified from aerial photography and have not been verified on the ground so their date and function cannot be confirmed. Also of possible medieval date, is Poldean Tower house (MDG9761), however this survives only as a documentary record having been depicted on a 16th century map; there is no evidence for this on the ground. The majority of assets recorded within the ISA of this period are locally common assets representing upland farming and stock management and include; sheepfolds, enclosures, farmhouses, areas of ridge and furrow, a sheiling and field boundaries.
- 9.6.11 In the OSA the medieval period, mottes, castles and tower houses providing evidence of the importance and wealth of the surrounding valleys and the political importance of this area close to the national border during this period. As in the ISA, the post medieval period in the OSA is dominated by agrarian remains largely relating to upland farming and stock management.
- 9.6.12 The modern period continued to see the ISA largely used for upland grazing interspersed with large areas of commercial forestry.

Known Heritage Assets within the Inner Study Area

- 9.6.13 In this assessment, a selective approach has been adopted. While all assets within the ISA have been considered (and listed in the gazetteer in Appendix 9.1), only assets subject to potential impacts are discussed in detail.
- 9.6.14 There is one scheduled monument within the ISA, a rectangular enclosure of uncertain date possible late prehistoric or medieval; Laverhay cottage enclosure (SM12721). As a scheduled monument this is an asset of high importance.
- 9.6.15 There are 87 undesignated HER assets recorded by the HER within the ISA (Appendix 9.1, Figures 9.2 and 9.3). Of these, 81 are outside the proposed construction footprint and will not be subject to direct impacts. Six assets are within or adjacent to the construction footprint and will be assessed for construction impacts (Table 9.6).
- 9.6.16 Four of the undesignated HER assets within the ISA have been identified by the DGC Archaeologist as potentially being subject to operational impacts (one of these MDG5375 is included within the assets considered for construction impacts). A further two undesignated assets, Oak Bank Fort (MDG7268) and Chapman’s Stone (MDG7265), have been identified as potentially subject to operational impacts and have been included for assessment. The remaining 81 undesignated assets within the ISA comprise a further 31 burnt mounds, which are largely functional assets placed near streams, possibly used for cooking in the Bronze Age. The remaining 50 heritage assets comprise features largely relating to upland farming and livestock management and include ring enclosures, a scooped settlement, farmsteads, enclosures, buildings, a road and quarrying sites as well as the possible site of a chapel. It is considered that wider views and setting make a limited contribution to the cultural significance of these 81 assets. These 81 assets are therefore excluded from further assessment of operational impacts.
- 9.6.17 Also recorded within the ISA, though not given an HER number, are six linear features including paths and drove roads, for the purposes of this assessment they have been given the reference numbers HA1 - HA6. These are all assets of low importance. Two of these assets (drove road HA1 and path HA2) are partly within the construction footprint and will be assessed for construction impacts (Table 9.6).
- 9.6.18 There are thirteen undesignated assets within the ISA (Table 9.6) which will be subject to potential direct and/or setting impacts and are therefore included in the assessment.

Table 9.6: Heritage Assets within the ISA included in the Assessment

Ref.	Name	Easting	Northing	Importance	Potential Impact
SM12721	Laverhay Cottage, enclosure 480m NNE of	314150	598734	High	Operational
MDG407	The Dod Fort	311360	600840	Medium	Operational
MDG5027	Border - Crawford – Inveresk, possible Roman Road	310355	598568	Medium (if remains survive)	Construction
MDG5375	Leithenhall Burn, Burnt Mound	312690	599550	High	Construction and Operational

Ref.	Name	Easting	Northing	Importance	Potential Impact
MDG5376	Leithenhall Burn, Burnt Mound	312710	599520	Medium	Construction
MDG5379	Leithenhall Burn, Burnt Mound	312695	599535	Medium	Construction
MDG7265	Chapman’s Stone, Standing Stone	310779	598984	Medium	Operational
MDG7257	Wamphray Stone Circle	313979	595926	Medium	Operational
MDG7267	Newbigging Ring Ditch	310925	598781	Medium	Construction
MDG7268	Oak Bank Fort	310411	598953	High	Operational
MDG8943	Dundoran Fort	312650	597470	Medium	Operational
MDG10462	Craigfield Farmstead	311760	600650	Low	Construction
HA1	Drove Road	312195	600507	Low	Construction
HA2	Path	314777	598935	Low	Construction

Archaeological potential of the Inner Study Area

- 9.6.19 There is evidence of activity throughout history within the ISA and OSA in the form of recorded sites and as with any large area there is potential for further unrecorded assets to be present. The potential for previously unrecorded cultural heritage assets varies between the two areas of the ISA: steeper slopes and land above 350m AOD, and the gently sloping ground below 350m along the larger watercourses; River Annan, Dryfe Water and Wamphray Water. The areas below 300m are the areas in which settlements, enclosures and sheepfolds are concentrated. This contrasts with the higher areas which are consistently depicted on early maps as rough grazing and heather moorland. Earthen banked and stone-built cultural heritage assets in these areas, if originally present, would likely survive as upstanding features, as there is no history of intensive agricultural management and ploughing which would have removed such assets.
- 9.6.20 It is considered that steeper slopes and land above 350m AOD within the ISA are of negligible archaeological potential. On gently sloping land below 350m AOD there is low archaeological potential. The archaeological potential will be increased in areas immediately surrounding known cultural heritage assets such as forts, enclosures and burnt mounds. In the areas surrounding these assets there will be the potential for related sub-surface assets to be present, such assets would likely be less substantial features such as structures built from timber or dug into the ground. It is therefore considered that in the areas immediately surrounding known assets there is medium archaeological potential.

Heritage assets in the Outer Study Area**Scheduled Monuments**

- 9.6.21 There are 134 scheduled monuments (SMs) within 10km of the turbines. Almost thirty of these are outside or only slightly in the ZTV and there are no views from or across them in which the turbines will be visible. A further 50 SMs comprise a variety of features relating to cultivation and livestock management, farmsteads, settlements and industry. The wider landscape setting makes a limited contribution to understanding or appreciating the cultural significance of these assets, and no operational impacts are anticipated upon them. Seventy-eight SMs are therefore excluded from further assessment (Appendix 9.2).

9.6.22 Fifty-six scheduled monuments are included for further assessment (Table 9.7, Figures 9.4 & 9.5), these include the sites requested by the consultees during scoping and comprise numerous prehistoric settlement sites, enclosures and forts, and cairns and barrows. Eight Roman monuments comprise three sections of Roman road and a signal station, camps and a fort. Dating from the medieval to post medieval period are mottes, castles, tower houses and a church.

9.6.23 In accordance with the criteria in Table 9.3, all these scheduled monuments are considered to be of high cultural heritage importance.

Table 9.7: Scheduled Monuments included in the Assessment

Ref.	Designation Title	Easting	Northing	Importance
SM1	Hutton Mote, motte	316339	589340	High
SM636	Little Hartfell, stone circle 1010m NNW of Whitcastles Cottage	322389	588056	High
SM640	Stiddrig Cairn, long cairn and cairn	304119	598780	High
SM646	Bogle Walls, fort	329257	591246	High
SM647	Camp Hill, fort, 175m WSW of Bailliehill	325602	590518	High
SM649	Carthur Hill, fort, Boreland	318393	594017	High
SM651	Castle O'er, fort and linear earthworks	324199	592813	High
SM653	Dalmakethar Burn, fort	311978	592172	High
SM671	Raeburnfoot, Roman fort 200m SW of	325106	599087	High
SM675	Mid Raeburn to Craik Cross Hill, Roman road & watch tower	329144	603451	High
SM676	Milton, Roman fort, fortlet & camps	309234	601222	High
SM683	Auchen Castle	306338	603512	High
SM684	Auldton Mote, motte	309370	605814	High
SM686	Coats Hill, motte 480m NE of St Margaret's	307214	604124	High
SM693	Frenchland Tower, tower house	310172	605371	High
SM698	Lochwood Castle, The Mount, Motte and Tower House Complex	308465	596825	High
SM714	Wamphray, motte and bailey 100m NNE of Wamphray House	312833	596519	High
SM2197	Knock Hill, fort 1200m WSW of Kirkpatrick-Juxta Church	307299	600436	High
SM2265	Firtree Hill, fort	316325	587672	High
SM2331	Carterton, fort	320339	589581	High
SM2853	Todshawhill, settlement 1085m WSW of	321916	593067	High
SM3299	Davie's Kirk, fort 40m W of	304729	591894	High

Ref.	Designation Title	Easting	Northing	Importance
SM3347	Coatshill Quarry to Holehouse Linn, Roman Road.	306418	607148	High
SM3350	Broom Hill, fort 1400m NW of Shaw	315407	591613	High
SM3362	Hencastle Rig, fort 140m NW of Old Craighouse	318559	585134	High
SM3834	Fauld Brae-Craik Knowes, Roman road	323394	596516	High
SM3964	Newland Hill, fort 1100m ENE of Capelfoot	324886	586374	High
SM3965	Coats Hill, Roman Signal Station 215m W of Moffat Golf Club clubhouse	307435	604823	High
SM4091	Archwood Hill, fort	309114	588376	High
SM4370	Saugh Hill, barrow 28m NNE of summit of	324325	599129	High
SM4514	Tom's Knowe, bank barrow 25m to 350m S of Holm	325003	598102	High
SM4709	John's Wood, two burial mounds	324257	603303	High
SM4748	Beattock Hill, fort and unenclosed settlement 935m W of Braeside	306569	602060	High
SM7215	Dinwoodie Mains, cremation burials 500m WSW of	310394	590540	High
SM7603	Lamb Knowe, bank barrow and Roman camp 480m NNW of Raeburnfoot	325031	599624	High
SM8364	Rangecastle Hill, fort	318996	593660	High
SM8365	Barrack Hill, scooped settlement	318814	593277	High
SM8366	Castle Hill, fort	318617	592567	High
SM8566	Garpol Water, Motte-and-Bailey 650m SW of Rosetta	305067	604024	High
SM8659	Blacklaw Tower, associated buildings and enclosures	305211	606733	High
SM10432	Dumgree Church and burial ground	306137	596763	High
SM10433	Gillesbie Tower	317170	591933	High
SM10476	Peat Hill, fort and scooped settlement	317729	593860	High
SM10477	Fenton Heights, scooped settlement	319279	592641	High
SM10544	Park Hill, fort	306136	597489	High
SM10545	Stidriggs, fort and settlement 400m ESE of	306137	599481	High
SM12614	Benoaks, stone row 150m N of	308372	603813	High
SM12655	Kinnelhead Cottage, cairn 540m S of	303139	600994	High
SM12658	Stidriggs, cairn 750m SSW of	305534	598938	High
SM12660	Broomhillbank Hill, fort	313103	591077	High
SM12662	Broomhillbank, fort 910m ENE of	312855	590866	High
SM12697	Poldean, standing stone 110m SSW of	310379	600015	High
SM12708	Elbeckhill, fort and farmstead 345m ESE of	314265	593551	High

Ref.	Designation Title	Easting	Northing	Importance
SM12952	Hangingshaw Farm, Roman camp and prehistoric enclosures 800m WNW of	309793	589732	High

Listed Buildings

- 9.6.24 There are 218 Listed Buildings (LBs) within the 10km study area, 88 of these are Category C LBs beyond 2km from the turbines and 99 are Category B LBs beyond 5km and so, according to the methodology for defining baseline Study Areas (paragraph 9.5.4), these are all excluded from further assessment.
- 9.6.25 There are 12 Category A LBs within 10km of the turbines, three (LB37928, LB37935 & LB37881) are in Moffat Conservation area and are discussed in relation to the Conservation Area (para 9.7.120 to 9.7.125). One, Raehills House (LB9898) is within the associated Raehills (GDL00322) Inventory Garden and Design Landscape (IGDL) and are assessed as a group. The remaining eight Category A LBs are also assessed (para 9.7.126 to 9.7.144). In accordance with the criteria in Table 9.3, Category A LBs are considered to be assets of high cultural heritage importance.
- 9.6.26 There are 16 Category B LBs within 5km of the turbines, of these, four are associated with Non-Inventory Designed Landscapes (NIDLs) and are discussed in relation to those (Table 9.9, paragraph 9.6.37). The remaining are farmsteads, a bridge, a school, a schoolhouse, churches and houses to which the wider landscape setting makes a limited contribution to their cultural significance, and no operational impacts are anticipated upon them, therefore these are excluded from further assessment. In accordance with the criteria in Table 9.3, Category B LBs are considered to be assets of medium cultural heritage importance.
- 9.6.27 There are two Category C LBs within 2km of the turbines; these are both farmhouses. The wider landscape setting makes a limited contribution to their cultural significance, and no operational impacts are anticipated upon them, these are excluded from further assessment. In accordance with the criteria in Table 9.3, Category C LBs are considered to be assets of low cultural heritage importance.

Table 9.8: Listed buildings included in the Assessment

Ref	Designation Title	Category	Easting	Northing	Importance
LB3340	Jardine Hall Stable Block	A	310053	587855	High
LB3341	Jardine Hall, Walled Garden and Gateways	A	309915	587866	High
LB9842	Craigielands House	A	307644	601561	High
LB9898	Raehills House	A	306375	594336	High
LB9908	Beattock Village, The Old Brig Inn, Hotel, outbuildings and stables	A	307740	602808	High
LB9911	Boreland Village, Hutton and Corrie Parish Church, churchyard and gatepiers	A	317048	590833	High
LB9965	Spedlins Tower	A	309767	587553	High
LB16847	Archbank Farm, Tall Barn with Waterwheel	A	309096	606785	High

Ref	Designation Title	Category	Easting	Northing	Importance
LB16861	Heatheryhaugh	A	309246	606246	High
LB37881	St Andrew's Parish Church	A	308443	605126	High
LB37928	Moffat House Hotel	A	308370	605369	High
LB37935	Sidmount Cottage	A	308971	605543	High

Inventory Gardens and Designed Gardens

- 9.6.28 There is one Inventory Garden and Designed Landscape (IGDL) within the 10km Study Area; Raehills (GDL00322) which is assessed. In accordance with the criteria in Table 9.3, IGDLs are considered to be assets of high cultural heritage importance.

Conservation Areas

- 9.6.29 There is one Conservation Area (CA) in the OSA; Moffat Conservation Area (CA491). At 5.9km from the nearest turbine the Category B and C listed buildings within this area are excluded from the assessment following the methodology for defining baseline Study Areas (paragraph 9.5.4). There are three Category A LBs (LB37928, LB37935 & LB37881) within the CA which are considered jointly. In accordance with the criteria in Table 9.3, Conservation Areas are considered to be assets of medium cultural heritage importance.

Other Designated Assets

- 9.6.30 There are no World Heritage Sites or Inventory Battlefields within the OSA.

Undesignated heritage assets

DGC HER

- 9.6.31 DGC HER categorise heritage assets on the basis of importance and maintain a non-statutory register (NSR). Categories of significance are defined by DGC. In brief they comprise 'National' (existing designated assets and undesignated assets considered to be of schedulable/listable quality), 'Regional' (undesignated assets of regional significance and interest), 'Local' (undesignated assets of local significance and interest), 'Regional/Local' refers to heritage assets identified before 2003 that have not yet been fully categorised. 'Unknown' (undesignated assets identified from documentary sources and whose survival and/or heritage significance has not been ground-truthed). 'Other' is used for minor agricultural features, and 'None' are sites not considered significant for planning purposes.
- 9.6.32 Following consultation with the DGC Archaeology Officer (Table 9.1), it was agreed that up to 5km from the turbines, all HER entries of regional and/or regional/local significance would be included, and up to 10km all HER entries of national significance would be included.
- 9.6.33 The DGC HER records 160 undesignated heritage assets of 'Regional/Local' significance within 5km of the turbines. Of these, 29 are outside the ZTV and there are no views from or across them in which the turbines will be visible. A further 131 comprise sites of burnt mounds, roman roads, highly denuded remains of cairns, farm buildings, settlement sites, livestock enclosures and field systems. The wider landscape setting makes a limited contribution to the cultural significance of these assets, and no operational impacts are anticipated upon them. Two forts of 'Regional/Local' significance are included in the assessment of operational impacts (Table 9.10).

- 9.6.34 There are four NIDLs of regional significance recorded within 5km of the turbines which are included for assessment and are assessed with their associated Listed Buildings or Scheduled Monuments (Table 9.11).
- 9.6.35 There are 206 DGC HER entries of ‘National’ significance recorded within 10km of the turbines. Of these, 155 are also scheduled monuments and one is a Category A Listed Building, as these are designated assets they are assessed as such. A further 18 assets are outside the ZTV and there are no culturally significant views from or across the features which the turbines will affect. A further 30 HER entries comprise settlements, burnt mounds, and cultivation features relating to farming and livestock management. Wider views and setting make a limited contribution to the cultural significance of these assets, and no operational impacts are anticipated upon them. Four HER assets of national significance are therefore taken through to operational impacts assessment; a fort, a standing stone, a Roman fortlet and a temporary camp (Table 9.10).
- 9.6.36 There are also three Archaeologically Sensitive Areas (ASAs) within the 10km Study Area. These are at Dryfe Water to the immediate south and bordering the southern entrance to the ISA, Tanlawhill 3.5 km to the south-east, and Raeburnfoot 4.3km to the east. An ASA defines an area of archaeological interest and/or a group of archaeological features sensitive to impacts, rather than comprising a heritage asset in its own right and the wider landscape setting makes a limited contribution to their cultural significance. The ASAs are therefore excluded from further assessment.
- 9.6.37 A total of ten undesignated heritage assets are therefore included in the assessment (Table 9.10). These include two HER entries of ‘Regional/Local’ significance and four HER entries considered to be of ‘National’ significance. It also includes four NIDLs which will each be assessed as part of a group with their associated designations (Table 9.11).

Table 9.9: Undesignated Heritage Assets in the OSA included in the Assessment

HER ref	Name & Description	HER Significance	Importance	Easting	Northing
MDG7262	Woodend / Fort	Regional/Local	Medium	310180	595000
MDG9353	Castle Knowe Fort	Regional/Local	Medium	309940	597010
MDG7318	Skip Knowe, Standing Stone	National	High	311180	594430
MDG309	Bankend Temporary Camp	National	High	308400	602050
MDG7146	Blindhillbush Hill Fort	National	High	314690	589630
MDG318	Barnhill Fortlet	National	High	308549	602851
MDG25635	Lochwood Policies NIDL	Regional	Medium	308300	569700
MDG25653	Gillesbie Policies NIDL	Regional	Medium	316600	591500
MDG333	Craigielsands Policies NIDL	Regional	Medium	307700	601500
MDG25676	Drumcrieff Policies NIDL	Regional	Medium	310150	603800

Table 9.10: Designations grouped with NIDLs in the Assessment

Ref	Name & Description	NIDL	Designation	Importance	Easting	Northing
LB9842	Craigielsands House	Craigielsands Policies	Category A LB	High	307644	601561
LB9845	South Lodge, Craigielsands House	Craigielsands Policies	Category B LB	Medium	308008	601157
LB16856	Drumcrieff House	Drumcrieff Policies	Category B LB	Medium	310195	603618
LB9916	Gillesbie House	Gillesbie Policies	Category B LB	Medium	316515	591491
SM698	Lochwood Castle, The Mount, Motte and Tower House Complex	Lochwood Policies	Scheduled Monument	High	308465	596825

‘Do Nothing’ Scenario

- 9.6.38 Conditions affecting the survival of archaeological remains within the site boundary are likely to remain unchanged in the absence of the proposed development, and no ongoing processes of change have been identified beyond those represented by the forestry plantations within the ISA.

9.7 Impact Assessment**Construction Impacts**

- 9.7.1 Likely construction impacts could result from topsoil stripping and excavation associated with turbines, borrow pits and hardstands, access tracks, site compounds, substations, cable trenches and other infrastructure within the construction footprint. There is also a risk of accidental damage to heritage assets outside the construction footprint from uncontrolled plant movement.

Predicted Construction Impacts

- 9.7.2 Of the known heritage assets within the ISA, eight will be subject to potential construction impacts (Table 9.11).

Table 9.11: Heritage Assets subject to potential Construction Impacts

Ref	Name & Description	Easting	Northing	Type of impact	Importance	Magnitude of Impact (in absence of mitigation)	Significance of impact (in absence of mitigation)
MDG5027	Border - Crawford – Inveresk, Possible Roman Road	310355	598568	Direct construction impact	Medium (if remains survive)	Negligible	Negligible
MDG5375	Leithenhall Burn, Burnt Mound	312690	599550	Accidental damage	High	Medium	Moderate
MDG5376	Leithenhall Burn, Burnt Mound	312710	599520	Accidental damage	Medium	Medium	Moderate
MDG5379	Leithenhall Burn, Burnt Mound	312695	599535	Accidental damage	Medium	Medium	Moderate
MDG7267	Newbigging Ring Ditch	310925	598781	Accidental damage	Medium	High	Moderate
MDG10462	Craigfield Farmstead	311760	600650	Accidental damage	Low	Medium	Minor
HA1	Drove Road	312195	600507	Direct construction impact	Low	Negligible	Negligible
HA2	Path	314777	598935	Direct construction impact	Low	Negligible	Negligible

9.7.3 There is potential for a direct construction impact on the possible Roman road Border-Crawford-Inveresk (MDG5027) at Murthat. If remains of this road survive subsurface, they have the potential to be of regional significance and medium importance. The access track will diagonally cross this asset close to the main western access to the proposed development, this would potentially remove a small section of this long linear asset and would be an adverse impact of negligible magnitude and negligible significance.

9.7.4 There will be two direct construction impacts on the route of the drove road (HA1). An access route will be constructed along a 360m section of the drove road between Brock Hill and Gallatae and a 90m section will be built along the route of the drove road where the access track turns towards turbine T4. The removing or upgrading of relatively small sections of this long linear asset, of low importance, will be an adverse impact of negligible magnitude and negligible significance.

9.7.5 There will be four direct construction impacts on the route of the path (HA2). An access route will cross the path four times between turbines T30 and T26. The removing or upgrading of relatively small sections of this

long linear asset, of low importance, will be an adverse impact of negligible magnitude and negligible significance.

9.7.6 There is a risk of accidental damage to the group of Leithenhall Burn burnt mounds (MDG5375, MDG5376 & MDG5379) assets of medium to high importance. The proposed access track passes approximately 45m to the west of these assets on route to turbine T1. Given the distance of the proposed tracks from the burnt mounds, it is considered that there is low potential for accidental damage as a result of plant traversing the area. Without mitigation, accidental damage could result in the partial removal of this asset and an impact of medium adverse magnitude and moderate significance.

9.7.7 There is a risk of accidental damage to the Newbigging Ring Ditch (MDG7267) from the construction of the western site entrance to the proposed development. The proposed site entrance is immediately adjacent to the site of the ring ditch. This is a cropmark site which has been transcribed and so should be relatively well plotted. Given the proximity of the site entrance to this ring ditch there is high potential for accidental damage as a result of plant traversing the area. Without mitigation, accidental damage could result in the removal of this asset and an impact of high adverse magnitude and moderate significance.

9.7.8 There is also a risk of accidental damage to the Craigfield Farmstead (MDG10462) assets of low importance. The proposed access track passes immediately to the south-west of this asset near Brock. The farmstead is an upstanding asset which should reduce the potential for accidental traversing, however given the proximity of the proposed tracks to the farmstead, it is considered that there is low potential for accidental damage to the farmstead. Without mitigation, accidental damage could result in the partial removal of this asset and an impact of medium adverse magnitude and minor significance.

9.7.9 It is considered that in the areas immediately surrounding known assets there is medium archaeological potential. Land on steeper slopes and land above 350m AOD within the ISA is of negligible archaeological potential. On gently sloping land below 350m AOD there is low archaeological potential. Effect significance cannot be meaningfully assessed for unknown assets, as neither the sensitivity of the receptor nor the magnitude of the effect can be known. Consequently, only the likelihood of construction effects is considered here.

9.7.10 Construction works at the Substation Control Room, Temporary Construction Compound and temporary construction compound will be approximately 160m to the south of the Dod Fort (MDG407). This area may have been an approach to the fort and it is considered that the area is of medium archaeological potential for assets. It is considered that in this area there is an increased risk of direct construction impacts on unknown heritage assets. Without mitigation any effect resulting from such an impact is unlikely to be of greater than medium significance.

9.7.11 Approximately 8.3km of proposed access tracks, three turbines and associated hardstands (T1, T3 and T4), the construction compound, the site entrance, the substation and substation construction compound, and two borrow pits are located in areas below 350m AOD considered to be of low archaeological potential (where they are not next to known assets and therefore in areas of medium archaeological potential).

9.7.12 A direct construction impact on unknown heritage assets in these areas is possible, although unlikely. Any effect resulting from such an impact is unlikely to be of greater than minor significance.

Operational Impacts

- 9.7.13 Potential operational effects could occur because of changes to views towards and from heritage assets. No other operational effects have been identified in this assessment (i.e. noise, light, air quality).

Predicted Operational Impacts ISA

Stone Circle

- 9.7.14 Kirkhill Stone Circle (MDG7257) was de-scheduled by Historic Scotland (now HES) in 2009, however the asset remains of national importance in the HER. The stone circle is therefore considered here to be of high importance.
- 9.7.15 Kirkhill Stone Circle is the remains of a possible stone circle comprising of at least seven stones, however only one of these stones is in its original position though apparently broken to a stub, the other six stones have all fallen and it is possible that further stones were removed in the past.
- 9.7.16 The cultural significance of this asset derives largely from the intrinsic value of its fabric, while this is a much-disturbed stone circle it remains possible that the stone and their original subsurface footings have the potential to add to our knowledge of ritual and ceremonial activity during the Bronze Age.
- 9.7.17 The contextual value of these stones also contributes to their cultural significance. This is derived from understanding their position in the wider landscape located on a gentle south-west facing slope above Staffenbigging Burn overlooking the Valley of Annandale to the west. These stones have no apparent associative value.
- 9.7.18 The proposed development will largely be visible from this asset at a minimum distance of 885m (T38) to the east. The proposed development will not interfere with views of importance to the Kirkhill Stone Circle (MDG7257) and will not prevent any understanding of the stone circle's setting. There will be no impact on its cultural significance.

Burnt Mound

- 9.7.19 **Leithenhall Burn Burnt Mound (MDG5375)** is an undesignated asset considered to be of National Importance by the HER and therefore of high importance. The remains of a probable Bronze Age burnt mound are represented by a low turf covered mound located on the south-east side of a small stream, within the natural gully of the stream in an area of rough pasture.
- 9.7.20 The burnt mound has intrinsic value in its fabric as a potential data source on the domestic cooking activities of the Bronze Age. The exact function of these burnt mounds is poorly understood, and their fabric may aid our understanding.
- 9.7.21 The contextual value of this asset lies in its clear relationship with the local landscape being located in close proximity to a water source. Burnt mounds appear to have been purely functional features and it is unlikely that it was located in relation to any wider views. There is no associative value to this asset.
- 9.7.22 The proposed wind farm has turbines to the east, south and north of this asset. The closest of these turbines will be Turbine T4 which will be located approximately 450m to the east of this asset. Given the limited value burnt mounds derive from their wider setting, it is considered that the proposed development will not impact on the cultural significance of Leithenhall Burn Burnt Mound (MDG5375).

Forts

- 9.7.23 There are three undesignated Iron Age forts included for assessment within the ISA. These are assets of medium importance. The attributes that typically form the cultural significance of forts are as follows;
- 9.7.24 The intrinsic value of these forts lies in their potential as a data source on the defences, construction techniques and domestic activities of the Iron Age and in some cases information on the transition from the Bronze Age to the Iron Age and the Romano-British period.
- 9.7.25 The contextual value of Iron Age forts largely derives from an appreciation of why a particular site was chosen – often in a naturally defensible location with strategic views available from, towards, and between forts. As elements within the landscape have changed considerably since the Iron Age the details of what is visible from such forts is of less relevance. However, defensive and/ or commanding views from the forts – where such views still exist – are also considered a key characteristic, and the maintenance of these particular views is considered desirable, as the underlying topographic features within the landscape may be relevant to an understanding and appreciation of the forts' cultural significance. Forts rarely have associative value.
- 9.7.26 **The Dod (MDG407)** is the remains of an approximately circular fort which survives as a rampart and ditch. Located on the summit of a conical hillock this fort has long views over the valley of Annandale to west, the BeldCraig Burn to the north and the small valley of Brunstone Burn to the south-west which forms the route between the two small hills of Dod Hill and Brock Hill, to the west is the rising ground of hills surrounding Craig Fell. The views of importance to the cultural significance of this fort are the strategic views over these communication routes through which we understand and appreciate why the fort was sited in this strategic location.
- 9.7.27 The nearest turbine of the proposed development is T8, 1.3km to the south-east of this asset. 125m down slope to the south-east of the fort is a Substation Control Room, a Substation Construction Compound and a temporary construction compound will be constructed, as will an access track.
- 9.7.28 The turbines are not in views of cultural significance to this fort. However, the proposed Substation Control Room, a Substation Construction Compound and a temporary construction compound will be located on the side of the small hill on which the fort is set and on one of the probable approaches to this fort. It is considered that this will affect the way this fort is understood and appreciated. This is considered to be an adverse operational impact of low magnitude resulting in an effect of minor significance on this asset of medium importance.
- 9.7.29 **Oak Bank Fort (MDG7268)** is the remains of an oval fort which survives as double ditched defences cutting of a promontory on the west bank of the River Annan. The site was evaluated in advance of quarrying but was subsequently preserved. The fort was clearly sited for the strategic position on the River Annan which was an important communication route.
- 9.7.30 The nearest turbine of the proposed development is T8, 2.5km to the west of this asset while the access track passes approximately 340m to the south. The turbines and access track will not affect the views of cultural importance to this asset over and along the route of the River Annan. It is therefore considered that there will be no impact on Oak Bank Fort (MDG7268).
- 9.7.31 **Dundoran Fort (MDG8943)** is the remains of an oval fort which survives as twin ramparts with an outer ditch, while the north end of this fort survives, the southern end is largely destroyed. The fort is located at the southern end of a ridge with long views over Annandale to the west and Wamphray Water which runs past

Dundoran from the northwest through to the south where it then curves west to join the River Annan. The fort was clearly sited for the strategic views over these important communication routes.

- 9.7.32 The nearest turbine of the proposed development is T3, 225m to the north of this asset. The turbines will not affect the views of cultural importance to this asset over the surrounding communication routes. However, the proximity of turbine T3 will mean it dominates this end of the ridge and will to an extent detract from the prominent position of this fort. It is considered this will be an adverse impact of low magnitude and minor significance on this asset of medium importance.

Late Prehistoric or Medieval Enclosure

- 9.7.33 **Laverhay Cottage enclosure (SM12721)** is a rectangular earthwork enclosure defined by a double bank and a medial ditch. This scheduled monument is unusual as there is no general consensus to what these earthworks represent.
- 9.7.34 The enclosure is set in an area of rough pasture on a relatively steep slope immediately overlooking Wamphray Water, with the confluence of Wamphray Water and Birney Gill to the north. The small burn, Thor Beck, runs down slope immediately to the north. The ground rises steeply from Wamphray Water to Turf Hill to the west, Glen Gap to the north and Laverhay Height to the east. To the north and east the surrounding hills are covered in plantation forestry which is currently in the process of being felled and harvested. Currently the view to the south is blocked by an established shelter belt of pine trees, beyond which is the working farm of Laverhay. In the absence of this shelter belt and farm buildings there would have been an extensive view along the valley of Wamphray Water to the plains of Annandale beyond. Also of note, is the incursion of noise from traffic on the A74 (M) and trains on the west coast main line which pass to the west beyond Turf Hill.
- 9.7.35 The intrinsic value of this asset lies in its potential to reveal the date and function of this structure which will add to our knowledge of the little understood rectangular defended enclosures of eastern Dumfriesshire.
- 9.7.36 Without understanding the date and function of this asset its contextual value is difficult to define. If a medieval enclosure related to a chapel, it may have been located here due to its relatively isolated location and sense of solitude. If a late prehistoric enclosure or a later stock enclosure it may have been that the Wamphray Water and other surrounding streams formed connection routes and the enclosure was well placed for access to these routes. Although the enclosure has substantial banks and a ditch, it is not located in a readily defensible location as steep hills surrounding it on almost all sides – unless an attacker was passing along the course of the Wamphray Water to the west, this enclosure would not be readily defensible from any other direction.
- 9.7.37 Without knowing the date or function of this asset, no associative value can be confirmed.
- 9.7.38 The proposed development will be built around this asset with approximately 26 turbines visible to the east, north and west on the summits of the surrounding hills and beyond. The closest turbines will be T30 at 515m to the north-east, T6 at 760m to the west and T32 at 780m to the east.
- 9.7.39 The values from which this enclosure gains its cultural significance will remain largely unaffected. The intrinsic value from which the asset primarily gains its cultural significance will remain unaffected. The contextual value of this asset set in a valley surrounded by high hills, close to the confluences of a number of watercourses, will remain readily understandable. However, the turbines will be prominent and dominant features on the hills surrounding this asset which will introduce an element of distraction from the sense of place and relative

isolation at this asset. It is therefore considered that there will be an adverse operational impact of low magnitude resulting in an effect of minor significance on the Laverhay Cottage enclosure (SM12721).

Predicted Operational Impacts OSA

Scheduled Monuments

Early Prehistoric assets

- 9.7.40 **Little Hartfell, stone circle (SM636)** is the remains of a stone circle of probable Neolithic to early Bronze Age. It survives as a circular arrangement of nine stones. It is located in an area of rough ground on the west side of a saddle formed by Whitecastle Hill and Hartfell.
- 9.7.41 The cultural significance of Little Hartfell, stone circle derives largely from its intrinsic value and the potential for the footing of the standing stones to reveal information on how the stones were erected and increase our knowledge of ritual practices in the Little Hartfell, stone circle. The stone circle has contextual value derived from its relationship with the wider landscape in particular the views along the River Annan Valley. This prehistoric stone circle has no apparent associative value.
- 9.7.42 The proposed development will largely be visible from this asset at a minimum distance of 7km (T62) to the north. The proposed development will not hinder or otherwise affect views of importance to the Little Hartfell, stone circle (SM636) and will not impact on its cultural significance.
- 9.7.43 **Benoaks stone row (SM12614)** is a ritual monument of Neolithic to early Bronze Age date comprising the remains of a row of three standing stones. The asset is located on a level river terrace to the west of the River Annan which has become the verge of the A701.
- 9.7.44 The cultural significance of this asset derives from the intrinsic value of its fabric and the potential the stones and their subsurface footings to add to our knowledge of ritual and ceremonial activity during the Bronze Age.
- 9.7.45 The contextual value of these stones is somewhat diminished by their proximity to the A701, though they have clearly been aligned NNE-SSW with the stones diminishing in size from the SSW to the NNE. These stones have no apparent associative value.
- 9.7.46 The proposed development will largely be visible from this asset at a minimum distance of 5.4km (T10) to the south-west. The proposed development will not interfere with views of importance to the Benoaks stone row (SM12614) and will not impact on its cultural significance.
- 9.7.47 **Poldean standing stone (SM12697)** is a large standing stone, of probable Neolithic to early Bronze Age, approximately 1.5m tall. It is located in a low-lying field to the east of the River Annan immediately adjacent to a minor road.
- 9.7.48 The cultural significance of Poldean standing stone derives largely from its intrinsic value and the potential for the footing of the standing stone to reveal information on how the stone was erected and increase our knowledge of ritual practices in the Neolithic to Bronze Age. This stone has contextual value in its relationship with the wider landscape, in particular the views along the River Annan Valley. This standing stone has no apparent associative value.
- 9.7.49 While the bare-earth ZTV suggests the proposed development will be visible from this asset, it seems probable that the structures of Poldean Farm and the shelter belt to its east will largely block these views. If visible the nearest turbine of the Proposed Development, Turbine T8 is located approximately 2.2km to the east of the

asset. The proposed development will not interfere with views of importance to the Poldean standing stone (SM12697) and will not impact on its cultural significance.

Forts

- 9.7.50 There are 23 scheduled Iron Age forts included for assessment within 10km of the turbines. The scheduled monuments are assets of high importance. The intrinsic, contextual and associative values common to Iron Age forts are presented in the Operational impacts in the ISA section (paras 9.7.24 to 9.7.25) and are referred to here.
- 9.7.51 **Carthur Hill Fort (SM649), Rangecastle Hill, Fort (SM8364), Castle Hill, fort (SM8366) and Peat Hill, fort and scooped settlement (SM10476).** These four forts form a group along the hills either side of the Dryfe Water.
- 9.7.52 **Carthur Hill Fort (SM649)** is the remains of an oval fort, surrounded by an earth and stone rampart and a ditch, internally there are possibly earthworks of four house platforms. Carthur Hill Fort is located to the south of the summit of Carthur Hill on a south-east sloping facing plateau overlooking the valley of Dryfe Water which runs from the north-east to the south-west of the fort. It also overlooks the confluence of the Dryfe Water with Murthat burn. Views to the north-west are restricted by the summit of Carthur Hill. The nearest turbine of the proposed development is T8, 1.4km to the north of the asset.
- 9.7.53 **Rangecastle Hill, Fort (SM8364),** is the remains of an oval fort which survives as a scarp on the summit of a hill, surrounded by a ditch and rampart. The interior of this fort appears to be featureless. Located on the summit of Rangecastle Hill, there are long views in every direction from this fort though those of most relevance to cultural significance are presumed to be those over and along the communication route of the valley of Dryfe Water and its confluence with Murthat Burn to the north and west. To the south and east this fort has views over the valley of Boreland Burn and the communication route now represented by the B723 road. The nearest turbine of the proposed development is T62, 1.4km to the north-east of this asset.
- 9.7.54 **Castle Hill, fort (SM8366),** is the remains of an apparently unfinished fort. It survives as a large semi-circular rampart and ditch. Internally there are three house platforms. Located on the eastern edge of the summit of Castle Hill, the views from this fort are primarily to the east and along and over the valley of Boreland Burn. To the west are views over the valley of Dryfe Water. The nearest turbine of the proposed development is T62, 2.5km to the north-east of this asset.
- 9.7.55 **Peat Hill, fort and scooped settlement (SM10476)** is the remains of a roughly oval fort with rampart and ditch with an overlying scooped settlement. This fort is located on a relatively poor defensive position on a south-east facing terrace with wide views over and along the valley of Dryfe Water. Views to the north-west are largely blocked by the raised ground of the summit of Peat Hill. The nearest turbine of the proposed development is T54, 1.6km to the north-east of this asset.
- 9.7.56 These four forts form a group along the hills either side of the Dryfe Water, although all of a typology dating to the Iron Age it is suggested that the character of these different earthworks is sufficiently different to suggest that they represent different periods of occupation (RCAHMS 1997, 140). If these forts were not occupied at the same time, the importance of intervisibility between these assets will be reduced and while these views contribute to an understanding and appreciation of the forts, they are considered to be of less relevance.
- 9.7.57 The setting of the forts overlooking the valley of the Dryfe Water is a key characteristic of their cultural significance. It can be surmised that these forts were located here due to the importance of the Dryfe Water valley as a communication route and it is likely that they were positioned to monitor and control movement along this corridor. The view to and along the Dryfe Water is considered to be that of most relevance to these forts as it contributes to an appreciation and understanding of their function and situation. More distant views, beyond the focus on the Dryfe Water, are considered to be of less relevance.
- 9.7.58 The turbines will be visible in views to the north from these forts to varying degrees at a minimum distance of 1.3km. The presence of the turbines will add an element of distraction and prominence in views from the forts over the confluence of Dryfe Water and Murthat Burn and in views between the forts. This will be an adverse operational impact of low magnitude resulting in effects of minor significance on these forts (Carthur Hill Fort (SM649), Rangecastle Hill, Fort (SM8364), Castle Hill, fort (SM8366) and Peat Hill, fort and scooped settlement (SM10476).
- 9.7.59 **Castle O'er fort and linear earthworks (SM651), Camp Hill fort (SM647), Bessie's Hill fort (SM2346). Castle O'er fort and linear earthworks (SM651),** (Chapter 6: Landscape and Visual, Figures 6.31 a-e) is the central fort of this group and is the largest of the Esk Valley forts with large ramparts, banks and ditches and traces of approximately 30 hut circles in its interior. As the largest of the forts it has been identified as the main fort of the area and probably the base for an important branch of the Selgovae tribe who ruled much of south-west Scotland in the Iron Age (<https://scotland.forestry.gov.uk/managing/work-on-scotlands-national-forest-estate/conservation/archaeology/investigation/castle-o-er-hillfort>). Although smaller than Castle O'er, Camp Hill (SM647) and Bessie's Hill fort (SM2346) are both substantial forts in themselves with large ramparts and interior hut circles. The forts are all located on eponymous hills on the southern edge of the Esk Valley with wide views along and over the valley.
- 9.7.60 These assets gain some cultural significance from their setting in that there is intervisibility between the forts and as these are well preserved forts with large ramparts, in some views it remains possible to see these forts from one another. As these forts are probably contemporary, it has been suggested that these forts worked together as a frontier, with Camp Hill to the south-east and Bessie's hill to the north-west, acting as lookout posts for Castle O'er Fort. The smaller two forts observing any potential threats approaching along the valley and informing Castle O'er Fort. In addition to the intervisibility between these forts, views along the Esk Valley, which allow an appreciation of the communication corridor, the forts defended and the fertile land of the valley which they would have farmed, are relevant to the setting of these assets. The Esk Valley also contains remains of assets contemporary with the forts. These remains are also relevant to the ability to understand and appreciate why these assets were sited along the Esk Valley. It is not considered that more distant views beyond the Esk Valley add to the cultural significance of these forts.
- 9.7.61 The nearest turbine of the proposed development is T62, 4.4km to the west of these forts beyond the hills that form the western edge of Esk Valley and currently somewhat screened by commercial forestry. As demonstrated in the visualisations (Figures 6.32 a-e) the turbines will all be visible on the western horizon.
- 9.7.62 While the proposed development will be a prominent feature in views to the west from these forts it will not affect those aspects of their setting of most relevance to their cultural significance. It is therefore considered that the proposed development will not have an operational impact on the cultural significance of Castle O'er fort and linear earthworks (SM651), Camp Hill fort (SM647), Bessie's Hill fort (SM2346).
- 9.7.63 **Beattock Hill, fort and unenclosed settlement (SM4748), Knock Hill, fort (SM2197), Stidriggs, fort and settlement (SM10545) and Park Hill, fort (SM10544).** These four forts form a group along the hills above the valley of Kinnel Water. Beattock Hill, fort and unenclosed settlement (SM4748) is the northernmost fort in this group and, while not overlooking Kinnel Water, it is at the head of the valley with the ground sloping down

towards Kinnel Water. Typical of the other Iron Age forts in the study area it is the strategic views (in this case along the communication corridor of Kinnel Valley) that are the key characteristics from which these assets derive some of their cultural significance. It is also possible that while the forts are not currently intervisible, it is reasonable to assume that if the forts were occupied simultaneously occupation activity represented by smoke from cooking or signal fires would have been visible. The proposed development will largely be visible from these forts at a minimum distance of 5.3km (T8) to the west of these forts. The proposed development will not interfere with views of importance to these forts and will not impact on the cultural significance of these assets.

9.7.64 **Dalmakethar Burn, fort (SM653), Broom Hill fort (SM3350), Broombank Hill, fort (SM12660), Broomhillbank fort (SM12662) and Elbeckhill fort and farmstead (SM12708).** These five forts form a group overlooking the lower grounds of Dalmakethar Burn, Back Burn and Howthat Burn, with Broom Hill Fort also having views over Dryfe Water to the west. Broombank Hill, fort (SM12660), Broomhillbank fort (SM12662) are the southern forts of this group and occupy either end of the summit of Broomhillbank Hill. The key setting characteristics of most relevance to the cultural significance of these forts are the strategic views along the neighbouring watercourses which are likely to have been communication routes during the Iron Age. It is also possible that while the forts are not currently intervisible, it is reasonable to assume that if the forts were occupied simultaneously occupation activity represented by smoke from cooking or signal fires would have been visible. The proposed development will largely be visible from these forts at a minimum distance of 2.1km (T42) to the north of these forts. The proposed will not interfere with views of importance to or between these forts and will not impact on the cultural significance of these assets.

9.7.65 **Davie's Kirk Fort (SM3299), Archwood Hill Fort (SM4091), Firtree Hill Fort (SM2265), Hencastle Rig Fort (SM3362), Newland Hill fort (SM3964), Careton Fort (SM2331) and Bogle Walls Fort (SM646).** There are a further seven forts which are located at a minimum distance of 5km from the nearest turbine, these forts do not form a group and are only discussed together due to their distance from the proposed development and similarity of values. The key setting characteristics of most relevance to the cultural significance of these forts, are the strategic views along the neighbouring water courses which are likely to have been communication routes during the Iron Age. The proposed development will be visible to varying amounts from these forts at a minimum distance of 5km (T62) to the north of these forts. The proposed development will not interfere with views of importance to or from these forts and will not impact on the cultural significance of these assets.

9.7.66 **Todshawhill settlement (SM2853)** is the remains of a possible fort or defended settlement. It is oval in plan and survives as a stony bank with external ditch, there is an entrance with a slight horn-work on the north-east. Todshawhill settlement is located on the summit of Hamlin Knowe which provides it with a strong defensive and strategic position, from this asset there would have been extensive views in all directions and in particular to the north-east towards the valley of the Black Esk. The proposed development will be visible at a minimum distance of 2.4km (T62) to the north-west of the asset. The proposed development will not interfere with views of importance to the cultural significance of this asset and it is considered there will be no impact on the cultural significance of Todshawhill settlement (SM2853).

Scooped Settlements

9.7.67 Assessment of potential operational effects upon four scooped settlements within the OSA was requested by the DGC Archaeologist. These include two scheduled monuments of national importance (SM8365 & SM10477) and two undesignated assets of national importance (MDG7293 & MDG7287).

9.7.68 In general, intrinsic and contextual characteristics are of most relevance to the cultural significance of the majority of these scooped settlements. The intrinsic value of scooped settlements lies in their potential as an archaeological data source on the construction techniques, domestic and agricultural activities of the Iron Age. The contextual value of scooped settlements derives from an appreciation and understanding of why a particular location was chosen. These settlements are understood to have been agricultural settlements, and are typically located in areas of good agricultural land close to a source of fresh water. Scooped settlements rarely have associative value as they cannot easily be related to particular historical figures or events.

9.7.69 **Barrack Hill, scooped settlement (SM8365)** is the remains of a roughly circular settlement, within a turf covered stony bank, within the interior there are the remains of a sub-circular house platform and a ring groove. Barrack Hill, scooped settlement is located on the south-east facing slopes of Barrack Hill in an area of rough pasture above Boreland burn. The nearest turbine of the proposed development is T62, 1.9km to the north-east of the asset.

9.7.70 **Fenton Heights, scooped settlement (SM10477)** is the remains of an oval settlement surrounded by a bank and ditch, within the interior there are the remains of at least two-house platforms and a small oval enclosure. The settlement is located on a terrace below the crest of Fenton Heights Hill on a south-west facing slope in an area of rough pasture above Boreland burn. The nearest turbine of the proposed development is T62, 2.1km to the north-east of this asset.

9.7.71 **Shankend scooped settlement (MDG7293)** is the remains of an oval settlement surrounded by a turf covered stony bank, within the interior is a probable house platform and a sunken yard. The settlement is located on a south-east facing slope in improved pasture above Cladwell Burn. The nearest turbine of the proposed development is T53, 2.5km to the north of this asset.

9.7.72 **Peat Hill settlement (MDG7287)** is the remains of a sub oval settlement surrounded by a turf covered, earth and stone bank and ditch, within the interior there is a single house platform. The settlement is located on sloping ground in the saddle between Peat Hill and Carthur Hill in an area of rough pasture above the Dryfe Water. The nearest turbine of the proposed development is T54, 1.2km to the north.

9.7.73 While the proposed development will be visible to the north of these scooped settlements it will not affect the aspects of their setting relevant to their cultural significance or any understanding and appreciation of their relationship with the surrounding land which they would have farmed. It is therefore considered that the proposed development will not have an operational impact on the cultural significance of Shankend scooped settlement (MDG7293), Barrack Hill, scooped settlement (SM8365), Fenton Heights, scooped settlement (SM10477) or Peat Hill settlement (MDG7287).

Romans

River Annan Roman Sites

9.7.74 Following the course of the River Annan in Annandale is the route of a Roman Road. Some of it survives as an upstanding feature and is scheduled as **Coatshill Quarry to Holehouse Linn, Roman Road (SM3347)**. Other sections have largely been removed by agricultural activity and are more speculatively recorded (Border-Crawford-Inveresk Road which is recorded in the DG HER in three sections of regional importance (**MDG5027, MDG8698 & MDG10280**) and one of national importance (**MDG5028**)). Along the course of this road a number of associated features have been recorded also in various states of preservation including three scheduled monuments **Milton, Roman fort, fortlet & camps (SM676), Coats Hill, Roman Signal Station 215m W of Moffat Golf Club clubhouse (SM3965) and Hangingshaw Farm, Roman camp and prehistoric enclosures**

800m WNW of (SM12952), and four undesignated HER entries; a temporary camp (**MDG309**) and a fortlet (**MDG318**) of national importance and two temporary camps of regional importance (**MDG319** and **MDG20982**).

- 9.7.75 The Roman Road (SM3347, MDG5027, MDG5028, MDG8698 & MDG10280) along which the associated assets are all located largely follows the route of the River Annan and its river terraces. As evident by the route of the A74 motorway, Annandale remains one of the most accessible routes from the south into central Scotland
- 9.7.76 In general, intrinsic and contextual characteristics are of most relevance to the cultural significance of Roman military features, and in some cases such features can derive associative value from their connection to known historical figures and/or events.
- 9.7.77 The intrinsic value of these particular assets derives from their potential to increase our knowledge of Roman military engineering architecture and patterns of development and distribution as well as the social and economic interactions of the period. The contextual value of these assets derives from their landscape setting which had a clear bearing on the siting of this road and the assets along it. The road was constructed along the route of the River Annan largely on low lying river terraces. The importance of the route as an access route remains readily apparent in the modern landscape with the A74 (M) continuing to utilise this route through Annandale almost mirroring the route of the Roman Road. The siting of these assets on the lower lying slopes and river terraces of Annandale, often overlooked by the rising ground to the east and west suggests that speed of movement through this area was of greater importance than defensive properties, which in turn demonstrates the political power and military dominance of the Roman Empire in this area.
- 9.7.78 The associative value of these assets comes from their role in controlling a northern frontier of the Roman empire and their part in the Roman campaigns in Scotland.
- 9.7.79 The proposed development will be visible at least 2km to the east of the Annandale Roman Assets, the number of turbines visible on the hills to the east of these assets will vary from between 38 and 75 turbines. This will not alter the contribution that setting makes to the cultural significance of this asset. The ability to understand and appreciate the route of the Roman Road and the position of the associated forts, fortlets, temporary camps and watch tower along its route will be unaffected. It is therefore considered that there will be no impact on the cultural significance of these assets (SM676, SM3347, SM3965, SM12952, MDG308, MDG318, MDG319, MDG5027, MDG5028, MDG8698, MDG10280 & MDG20982).

Eskdale Roman Sites

- 9.7.80 **Mid Raeburn to Craik Cross Hill, Roman road & watch tower (SM675) and Fauld Brae-Craik Knowes, Roman road (SM3834)** are two scheduled sections of the Roman road also recorded in Canmore as the Torwood-Raeburnfoot-Newstead Roman Road (NHRE NT20SE 24). As sections of the same Roman road these assets are considered here as a group. Also included in this group is the Craik Cross watch tower (SM675). These assets are scheduled monuments of high importance.
- 9.7.81 The Roman road follows a high route north-east to south-west across Craik Muir down to the valley floor of the River White Esk, past Lamb Knowe Roman Camp (SM7603) and Raeburnfoot Roman Fort (SM671) before continuing south-west out of the River White Esk valley.
- 9.7.82 The watch tower comprises a mound on the summit of Craik Cross. A trial excavation on the site was carried out in 1946, however due to the lack of finds from this excavation, meant the mound remained of

indeterminate date and the question of whether it was a prehistoric barrow or a Roman watch tower was unconfirmed. However, its morphology indicates that it is a watch tower.

- 9.7.83 The cultural significance of both the watch tower and the road derives primarily from their intrinsic archaeological value, and their potential to increase our knowledge of Roman military engineering, architecture and patterns of development and distribution as well as the social and economic interactions of the period. It is considered that the fabric of this monument has the potential to inform answers to this question.
- 9.7.84 The contextual value of these assets derives from their landscape setting which had a clear bearing on the siting of this road in that it was constructed up and along a high pass. The road's current landscape context, surrounded by plantation forestry, places it in a modern landscape and diminishes the ability to appreciate its original landscape setting.
- 9.7.85 The landscape setting had a bearing on the siting of the watch tower. Along the line of this Roman Road the watch tower is located at the point with the most extensive views along the route of the Roman road and across the wider landscape. Watch towers were typically sited with intervisibility to associated roads and with adjacent watch towers, forts or fortlets. While this tower has good visibility along the line of the road it is unclear whether there would have been visibility with the forts of the River White Esk Valley; Lamb Knowe Roman Camp (SM7603) and Raeburnfoot Roman Fort (SM671).
- 9.7.86 The proposed development will be visible to a varying extent along the route of the road at a minimum distance of 3.4km (T61) to the south-west.
- 9.7.87 The presence of the turbines to the west at a distance of 7.5km will not alter the contribution that setting makes to the cultural significance of this asset. The ability to understand and appreciate the route of the Roman Road and the commanding position of the watch tower will be unaffected. It is therefore considered that there will be no impact on the cultural significance of this asset.
- 9.7.88 **Lamb Knowe bank barrow and Roman Camp (SM7603)** is a scheduled monument of high importance. This scheduling includes two monuments; a bank barrow dating to the Neolithic period and a Roman Camp.
- 9.7.89 The cultural significance of the barrow derives primarily from its intrinsic value as a well-preserved example of a rare monument type and its potential to increase our knowledge of funerary and ritual practice in the Neolithic. This importance is increased as it is likely to cover a well-preserved section of the contemporary land surface which could increase our knowledge of the local prehistoric environment.
- 9.7.90 The cultural significance of the Roman Camp derives primarily from its intrinsic value as a well-preserved example of a rare 'Stracathro' type and the only camp of this type to preserve upstanding remains. The archaeological deposits have the potential to increase our understanding of the domestic, social and economic activities of the Romans and enhance knowledge of Roman military structures and logistics.
- 9.7.91 The contextual value of these assets derives from their landscape setting which had a clear bearing on the siting of both the Barrow and the Roman Camp. Both are sited on the south-west flank of Lamb Knowe, a ridge hill lying between the Rae and Moodlaw Burns, it slopes south-west towards the valley floor of the River White Esk. From this location the Roman Camp would have been able to monitor the important communication route of the White Esk valley and the smaller passes of the Rae and Moodlaw Burns. Also of relevance is the camp's association with the Torwood-Raeburnfoot-Newstead Roman Road (NHRE NT20SE 24) which runs to the east of the Camp and the Raeburnfoot Roman Fort (SM671) which lies on the low slopes to the immediate south

of the camp. The bank barrow would have had wide views particularly to the south-east along and over the valley of the White Esk River.

- 9.7.92 The proposed development will be visible at a minimum distance of 6.2km (T60) to the south-west.
- 9.7.93 The presence of the turbines to the south-west at a distance of 6.2km will not alter the contribution that setting makes to the cultural significance of this asset. The ability to understand and appreciate the location of the Roman camp for its commanding position and proximity to contemporary assets and the relationship between the barrow and the wider topographic setting of the White Esk valley will be unaffected. It is therefore considered that there will be no impact on the cultural significance of this asset.
- Mottes*
- 9.7.94 There are five scheduled timber castles of the motte and bailey style within 10km of the turbines (SM1, SM684, SM686, SM714 & SM8566) though one of these Coats Hill (SM686) has no evidence of a bailey. Motte and Baileys are typically associated with 12th to 13th century Anglo-Norman Castles.
- 9.7.95 These assets have intrinsic value in that they have potential in their fabric to enhance our knowledge of architecture, economic, domestic and defensive activities of the medieval motte and baileys.
- 9.7.96 These assets have contextual value in their relationship with the surrounding landscape. These assets are typically located in strategically important positions. It is largely from the landscape siting of these mottes that RCAHMS conclude that “*what emerges from the siting and distribution of the timber castles, particularly those in Annandale, is confirmation that their purpose was firstly to protect the lordship of Annandale from intrusions from Galloway, and secondly to protect the routeways through Eastern Dumfriesshire into the rest of the kingdom, and indeed into the northern counties of England.*” (RCAHMS,1997, 192). The prominent siting of the mottes would also have been important to proclaim the importance of the new lords and the new way the country was being governed.
- 9.7.97 The motte and baileys of Annandale have associative value in that they are well recorded historically. These motte and baileys lie within the Anglo-Norman lordship area, created by David I when he installed Robert de Brus as Lord of Annandale in 1124, the first known act of his reign and the first major recorded act of military feudalism in Scotland (RCAHMS,1997, 188). Of these five castles; Auldton was built on land managed by the Lordship of Annandale and ascribed to the Brus family itself, while the remaining four castles are believed to have been minor timber castles held by vassals of Brus. Their associative value lies in their connection with the Brus family and their historical importance as important feudal strongholds on the much-disputed border with England.
- 9.7.98 **Hutton (SM1)** is the upstanding remains of a motte and possible bailey. It is located in an elevated position at the north-east end of a ridge overlooking the valley of Dryfesdale which would have been an important communication route. The proposed development will be visible at a minimum distance of 5.9km (T43) to the north of this motte.
- 9.7.99 **Coats Hill (SM686)** is the remains of a motte which stands on a high spur overlooking the River Annan and Evans Water at the point where the important routes through Tweedale and Yarrow join. The proposed development will be visible at a minimum distance of 6.5km (T10) to the south-east of this motte.
- 9.7.100 **Auldton (SM684)** is the remains of a motte and bailey located on the northeast edge of Moffat near the confluence of Moffat Water, the River Annan and Evan Water, and was well placed to overlook the Tweedale

and Yarrow routeways. The proposed development will be visible at a minimum distance of 5.7km (T10) to the south-east of this motte.

- 9.7.101 **Wamphray (SM714)** is not located in an as obvious a strategic point as the other mottes in the region. However, it may be that it was located to overlook the point where it is possible to cross the head of the Wamphray Water to the head of the Ettrick Water. The proposed development will be visible at a minimum distance of 1.3km (T3) to the north of this motte. While it will remain possible to understand and appreciate the siting of this motte, the proximity of this turbine and its position on a spur overlooking the Motte will result in it dominating and reducing the sense of place. This will be an adverse operational impact of low magnitude resulting in an effect of minor significance on Wamphray Motte (SM714).
- 9.7.102 **Grapol Water (SM8566)** is located on Grapol Water, a small tributary of the Evan Water which is not a strong strategic position; it has therefore been suggested that this motte was used as a hunting seat. The proposed development will be visible at a minimum distance of 8.4km (T8) to the south-east of this motte.
- 9.7.103 With the exception of Wamphray (SM714) the mottes are all located over 5.7km from the proposed development. At this distance the turbines will not dominate the strategic sittings of these mottes nor will they interfere with our ability to understand and appreciate why the mottes were sited in these locations. It is therefore considered that the proposed development will have no impact on the mottes (SM1, SM686, SM684, SM8566) and an effect of minor significance on Wamphray Motte (SM714).

Late Medieval

- 9.7.104 **Gilesbie Tower (SM10433)** is the remains of a late medieval (16th century) tower which survives as an upstanding stone tower on the side of Dryfe Water. It is situated on the west bank of the Dryfe Water and is surrounded by a D-shaped rampart on all other sides (which has been cut by a 19th century single track road).
- 9.7.105 The intrinsic value of this asset lies in the potential of its fabric as a data source for the architecture, defensive and domestic life of this tower during the late medieval period. The contextual value of this monument is evident in its clear relationship with the Dryfe Water and the surrounding improved fields and shelter belts of its NIDL. The tower has associative value through the historic records with the Grahams of Mosskeswra.
- 9.7.106 It is considered that while the ZTV suggests there will be visibility of the proposed development from Gilesbie Tower the woodland of Tower Plantation to the immediate north of this asset is likely to block any views. If the trees were felled the turbines would be visible at a distance of 3.3km to the nearest turbine T54. At this distance the turbines will be beyond the setting of most relevance to understanding and appreciating the cultural significance of this asset. It is considered that there will be no impact on the cultural significance of Gilesbie Tower (SM10433).
- 9.7.107 **Auchen Castle (SM683)** is the remains of a 13th century courtyard castle which was substantially altered in the 15th or 16th century.
- 9.7.108 The intrinsic value of this asset lies in the potential of its fabric as a data source for the architecture, defensive and domestic life of this castle during the medieval period. The contextual value is evident in its location in an area of improved pasture, above Garpol Glen in a strategic point in the valley of Annandale. The castle has associative value through the historic records of its relationship with Sir Humphrey de Kirkpatrick.
- 9.7.109 The proposed development will largely be visible from this castle at a minimum distance of 6.9km (T8) to the south-west. At this distance the turbines will be beyond the setting of most relevance to understanding and

appreciating the cultural significance of this asset. It is considered that there will be no impact on the cultural significance of Auchen Castle (SM683).

- 9.7.110 **Frenchland Tower (SM693)** is the upstanding remains of a 16th century tower house which was originally built as a rectangular tower house later modified to an L-shaped plan by an additional wing. While the building is a ruin it survives upstanding to gable height. It is situated on the west bank of the Frenchland Burn in a field of improved pasture.
- 9.7.111 The intrinsic value of this asset lies in the potential of its fabric as a data source for the architecture, defensive and domestic life of this tower during the late medieval period. The contextual value of this monument is seen in its relationship with the surrounding landscape with the non-defensive nature of the landscape suggesting that defence was not a primary influence in the siting of this asset, it appears rather to have been located for proximity to good agricultural land. This is evident in its clear relationship with the Dryfe Water and the surrounding improved fields and shelter belts. The castle has associative value through the historic records with the French Family.
- 9.7.112 The ZTV suggests that there will be limited visibility of the proposed development from Frenchland Tower at a minimum distance of 4.9km (T10) to the south. At this distance the turbines will be beyond the setting of most relevance to understanding and appreciating the cultural significance of this asset. It is considered that there will be no impact on the cultural significance of Frenchland Tower (SM693).
- 9.7.113 **Lochwood Castle, The Mount, Motte and Tower House Complex (SM698)** is assessed here with its associated **NIDL (MDG25635)**. This is the site of a 12th century motte and bailey castle which was replaced in the 15th century by a large L-planned tower house. Lochwood was the principal seat of the Johnstone family from the 12th century until the castle was burned down in the 18th century. The motte and bailey castle is located on the eastern side of a promontory which projects northwards into Lochwood Moss. The 15th century castle on the promontory survives as an upstanding ruin to the immediate south. The NIDL is largely characterised by areas of mature deciduous trees to the north and east and an area of improved pasture to the south-west.
- 9.7.114 This asset has intrinsic value deriving from its fabric and the continuity of use of the site from the 12th century to the late 18th century when the castle was burnt down. The surviving fabric has the potential to increase our knowledge of architecture, defence, social, domestic from the 12th century through to the 18th century.
- 9.7.115 The contextual value of this asset comes from the strategic importance of this site for controlling routes between Scotland/England and west into Dumfriesshire. Lochwood has associative value in its association with the Johnstone family as their principal seat from the 12th century to the 18th century
- 9.7.116 The proposed development will be a minimum of 4.1km to the east of this asset and the surrounding deciduous trees will largely block views. The proposed development will not impact on the cultural significance of this asset. The castle site has no clear association to the hills to the east on which the proposed development will be located and given the distance from the asset there will be no competition with the turbines for prominence. It is considered that there will be no impact on Lochwood Castle, The Mount, Motte and Tower House Complex (SM698) and its NIDL (MDG25635).
- 9.7.117 **Blacklaw Tower, associated buildings and enclosures (SM8659)** is the remains of a late medieval (16th century) tower house and associated estate. While ruined the tower survives as a basement and the remains of the 1st floor, there is a substantial enclosure to the east and the remains of a number of associated structures can be seen surrounding it. The tower is situated on the north-west bank of Blacklaw burn on the

slopes overlooking Evan Water and what would have been the important communication route now evidenced by the A74 motorway.

- 9.7.118 The intrinsic value of this asset lies in the potential of its fabric as a data source for the architecture, defensive and domestic life of this tower and associated estate during the late medieval period. The contextual value of this monument is evident in its clear relationship with the valley of Evan Water. The tower has associative value through the historic records of its associations with the Lindsays, the Herries of Terregles, the Maxwells and the Johnstones.
- 9.7.119 The proposed development will be visible from this castle at a minimum distance of 9.5km (T10) to the south-east. At this distance the turbines will be beyond the setting of most relevance to understanding and appreciating the cultural significance of this asset. It is considered that there will be no impact on the cultural significance of Blacklaw Tower, associated buildings and enclosures (SM8659).

Listed Buildings, Inventory Gardens and Designed Landscapes and Conservation Areas.

- 9.7.120 **Moffat Conservation Area** encompasses the town centre, the parkland to the north-west and an area of 19th century residential development to the east. The conservation area extends for 960m north to south along the main axis of the village and up to 1.1km east to west. Given the status of this asset as a Conservation Area, it is considered to be of medium importance. Included in this assessment are the listed buildings in the Conservation Area and immediately neighbouring it (including the category A listed buildings **LB16847, LB16861, LB37881, LB7929 & LB37935**)
- 9.7.121 The cultural significance of a Conservation Area is derived primarily from the architectural character of its buildings and their arrangement in a characteristic street pattern that reflects the history of the settlement. Moffat originated as a wool trading centre in the 16th century but the discovery of Moffat Well in the 17th century led the town to become a popular spa retreat throughout the 17th to the 19th centuries.
- 9.7.122 This history is reflected in the architectural character of the High Street of Moffat which was largely demolished and rebuilt in the 18th century. The High Street is dominated by 18th century buildings including the Category A listed Moffat House (LB37928) which was built in this period for the Earl of Hopetoun. It is believed that the 18th century street pattern largely reflects the pre-18th century layout. Reference to the town's historic relationship with sheep farming and the wool trade is readily seen in the large Bronze statue of a ram which is situated in the marketplace. The historical associations with the wool trade and as a spa resort are fundamental to the cultural significance of Moffat.
- 9.7.123 The contribution that setting makes to the cultural significance of Moffat is derived from the association with sheep farming on the surrounding hills and the attractiveness of the countryside to the town becoming a spa resort. No particular views of cultural importance from the town to the surrounding landscape are identified in the Conservation Area Character Appraisal (Groves-Raines Architects, 2019).
- 9.7.124 The cultural significance of Moffat Conservation Area is derived primarily from the architectural character of its buildings and their arrangement in a street pattern that reflects the rebuilding of the town in the 18th century at its height as a spa resort. These key characteristics of the Conservation Area would be entirely unaffected by the proposed wind farm.
- 9.7.125 The proposed wind farm would not be visible from a large part of Moffat Conservation Area and barely visible from much of the remainder. It would be partly visible in views to the south-east from the Main Street and would be a prominent feature on the skyline behind the village when approaching from the north on the A701.

However, most views out from the Conservation Area itself would remain unaffected and, where visible, the hill tops on which the proposed wind farm will be located would remain as open moorland, albeit with wind turbines. The presence of the wind farm is therefore considered to be an adverse operational impact of negligible magnitude resulting in an effect of negligible significance on the cultural significance of the Conservation Area and associated listed buildings.

- 9.7.126 **Jardine Hall, Walled Garden and Gateways (LB3341), Jardine Hall Stable Block (LB3340)** are Category A listed buildings of high importance and they are considered here as part of a group with an associated NIDL Jardine Hall (MDG25648). Jardine Hall was built on the east side of the River Annan in the early 19th century by the Jardine family to replace their former residence the Speldin Tower (LB9965). While Jardine Hall overlooks the surrounding fields of improved pasture the NIDL is largely composed of large shelter belts of trees which provide the buildings with some seclusion, to the immediate east and cutting through part of the NIDL is the A74 motorway.
- 9.7.127 The proposed development will be visible from this group at a minimum distance of 8.3km (T38) to the north-east. At this distance the turbines will be beyond the setting of cultural significance to this asset. It is considered that there will be no impact on the cultural significance of Jardine Hall, Walled Garden and Gateways (LB3341), Jardine Hall Stable Block (LB3340) and its non-inventory garden and designed landscape (MDG25648).
- 9.7.128 **Craigielands House (LB9842)** is a Category A listed building of high importance. It is considered here as part of a group with the associated NIDL Craigielands (MDG333) and South Lodge (LB9845), both of which are of medium importance. Craigielands House was built in the early 19th century as a small country residence in the Greek revival villa / small mansion style. The house is set on a ENE-SWS axis with views over its designed landscape including its loch to the valley of Annandale and the hills beyond.
- 9.7.129 The proposed development will be visible from this asset at a minimum distance of 5.1km (T8) to the ESE. It is considered that the turbines are at a sufficient distance not to distract from the key characteristics of cultural heritage significance to these assets as the views are though and within the NIDL and out to the wider landscape. While the turbines will be visible, they will simply form another feature in the distant wider landscape. It is therefore considered that there will be no impact on the cultural significance of Craigielands House (LB9842), South Lodge (LB9845) and associated designed landscape (MDG333).
- 9.7.130 **Raehills House (LB9898)** is a Category A listed building and its associated designed landscape (IGDL 322) are assets of high importance. Raehills House is a late 18th century country house, built in an Italian Villa style. The principal façade of Raehills House faces east and the house has been set on two grass terraces overlooking a loch which was created from fish ponds. As part of the designed landscape, beyond the loch, the house overlooks Kinnel Water which flows north to south through the designed landscape. The extensive surrounding park and garden has been landscaped and there is a substantial number of mature deciduous trees. The trees surround Raehills House and outbuildings to the north, west and south. The planting of the trees has been designed to provide the buildings of the estate with a sense of seclusion and privacy.
- 9.7.131 Setting adds to the cultural heritage significance of this group as the principal building, Raehill House, has been orientated to capture the view to the east. In addition to this the planting of trees around the buildings adds to the sense of privacy and seclusion in the estate. Views over the parklands and woodlands of the designed landscape are important in views from the A701 road.
- 9.7.132 The proposed development will be visible on the hills on the opposite side of the Annandale Valley at a distance of 7.1km to the north-east. While some of the turbines will be visible, they will be sufficiently distance so as

not to distract from the elements of its surroundings which are of importance to the cultural significance of Raehills and its associated designed landscape. It is therefore considered that there will be no impact on the cultural significance of Raehills House (LB9898) and designed landscape (IGDL 322).

- 9.7.133 **Boreland Village, Hutton and Corrie Parish Church, Churchyard and Gatepiers (LB9911)** is a Category A listed building and as such an asset of high importance. Built in the early 18th century, the presence of 17th century gravestones and the east to west orientation of the church, may suggest the re-use of a pre- reformation church as the building has seen subsequent alterations. The church is surrounded by its graveyard and located on the rising slopes to the south of Boreland.
- 9.7.134 The contextual value of the church comes from its relationship with the settlements of Boreland and Nether Boreland, as the church overlooks and is visible from the villages. This setting reflects the status of the church in the community and its function as a local parish church. The church does not have a high steeple and is therefore not a prominent landmark in more distant views. The visual and physical relationship between the church and its graveyard also contribute.
- 9.7.135 The proposed development will be visible from this church at a minimum distance of 4.4km (T51) to the north. While the turbines will be visible in distant views to the north beyond the villages of Boreland and Nether Boreland, they will not affect the cultural significance of the church. It will remain possible to understand and appreciate the setting of the church and its relationship with the neighbouring settlements. The local setting and key views towards the church would not be affected by the proposed development. It is therefore considered that there will be an impact of negligible magnitude and negligible significance on Boreland Village, Hutton and Corrie Parish Church (LB9911).
- 9.7.136 **Gillesbie House (LB9916)** is a Category B listed building considered here as part of a group with is associated NIDL (MDG25653), both are assets of medium importance. Gillesbie House was built in the classical mansion style in the mid-19th century and incorporates an 18th century house. The house is set on a north-east/south-west axis with the front of the house to the south-west; views from the principal façade are over its designed landscape to the valley of Dryfe Water beyond.
- 9.7.137 The proposed development will be at a minimum distance of 3.4km (T51) to the north. It is probable that views to the wind farm will largely be screened by the mature shelterbelts of the NIDL. The turbines will also be outwith the key views from the principal front elevation of the house. It is therefore considered that there will be no impact on the cultural significance of Gillesbie House (LB9916) and the associated designed landscape (MDG25653).
- 9.7.138 **Speldin Tower (LB9965)** is a Category A listed building of high importance. It is an early 15th century tower house which was later remodelled and rebuilt before being abandoned in the 19th century, it was subsequently restored in the late 20th century. The tower is located on a bank overlooking the Annan Water to the north and east.
- 9.7.139 The intrinsic value of this asset lies in the potential of its fabric as a data source for the architecture, defensive and domestic life of this tower and during the late medieval to post medieval period. The contextual value of this monument is evident in its strategic position in the valley of the Annan Water, next to the River Annan and surrounded by improved pasture. The tower has associative value through the historic records of association with the Jardines of Applegarth, who built Jardine Hall, on the opposite side of the River Annan in the early 19th century to replace this tower.

- 9.7.140 The proposed development will be visible from this castle at a minimum distance of 9.4km (T38) to the north-east. At this distance the turbines will be beyond the setting of cultural significance to this asset. It is considered that there will be no impact on the cultural significance of Speldin Tower (LB9965).
- 9.7.141 **The Old Brigg Inn Hotel, Outbuildings and Stables (LB9908)** is a Category A listed building of high importance. It is an early 20th century Coaching Inn with a stable courtyard to the rear. This asset was built to serve travellers through Annandale, its current location just to the west of the A74 Motorway at the junction between Moffat and Beattock confirms the importance of routes to the decision to place this Inn in this location.
- 9.7.142 The proposed development will be visible from this Inn at a minimum distance of 5.5km (T8) to the south-east. At this distance the turbines will be beyond the setting of most relevance to understanding and appreciating the cultural significance of this asset. It is considered that there will be no impact on the cultural significance of The Old Brigg Inn Hotel, Outbuildings and Stables (LB9908).
- 9.7.143 **Drumcrieff House (LB16856)** is a Category B listed building and is considered here as part of a group with its associated grounds, an NIDL (MDG25676). Both are assets of medium importance. Drumcrieff House was built as a classical style mansion house in the late 18th to early 19th century and incorporates an earlier house. The house is located on a steep riverbank above the Moffat Water which passes the house to the east. The house is set on a roughly east to west axis with the principal façade facing west along its sweeping driveway. Surrounding the house to the east, north and west are the mature deciduous trees of the NIDL while beyond to the west are landscaped grounds.
- 9.7.144 The proposed development will be at a minimum distance of 3.5km (T10) to the south-west. It is probable that views to the proposed development will largely be screened by the mature shelterbelts of the NIDL. The turbines will also be outwith the key views from the principal front elevation of the house. It is therefore considered that there will be no impact on the cultural significance of Drumcrieff House (LB16856) and associated designed landscape (MDG25676).

Undesignated HER Assets

Early Prehistoric assets

- 9.7.145 **Skip Knowe, standing stone (MDG7318)** is a large standing stone, of probable Neolithic to early Bronze Age, approximately 1.8m tall. It is located on a low-lying field to the east of the River Annan immediately adjacent to a minor road.
- 9.7.146 The cultural significance of Skip Knowe standing stone derives from its intrinsic value and the potential that the footing of the standing stone may reveal information on how the stone was erected and increase our knowledge of ritual practices in the Neolithic to Bronze Age. This stone has contextual value in its relationship with the wider landscape in particular views along the River Annan Valley. This standing stone has no apparent associative value.
- 9.7.147 The proposed development will be at a minimum distance of 3.8km (T33) to the north-east. At this distance the turbines will be beyond the setting of most relevance to understanding and appreciating the cultural significance of this asset. It is considered that there will be no impact on the cultural significance of Skip Knowe, standing stone (MDG7318).

Forts

- 9.7.148 There are three undesignated HER Iron Age forts included for assessment. One (MDG7146), is a site of national significance and hence considered to be of high importance and two (MDG7262 & MDG9353), are assets of regional/local significance and hence considered to be of medium importance. The intrinsic, contextual and associative values common to Iron Age forts are presented in the operational impacts in the ISA section (paras 9.7.24 to 9.7.25 and are referred to here.
- 9.7.149 **Blindhill Bush Fort (MDG7146)** is the remains of an oval fort, it survives as an earth and stone rampart on the southern end of the summit of the eponymous hill, internally there is evidence of four hut platforms. The fort overlooks the valley of the Dryfe Water which flows north-east/south-west past the fort and would have been an important communication route at the time of occupation. The conical shape of Blindhillbush Hill provides the fort with a highly defensive position and wide views over the surrounding landscape. The proposed development will be visible at a minimum distance of 5.7km (T42) to the north of the asset. At this distance the proposed development will not appear in any views of relevance to understanding or appreciating cultural significance and there will be no operational impact on this asset.
- 9.7.150 **Woodend Fort (MDG7262)** is the remains of an oval fort, only the north portion of this fort survives extant the remainder visible as cropmarks. The surviving earthworks include three earth and stone banks with medial ditches. Woodend Hill Fort is located on the high riverbank above Cleughheads Burn and would have been in a relatively strategic though not highly defensible location within the valley of Annan Water. The importance of Annandale as a communication route is evidenced by the A74 motorway which runs north to south 260m to the east of this fort. The proposed development will be visible at a minimum distance of 4.6km (T38) to the east of the asset. The proposed development will not interfere with any views of relevance to cultural significance and there will be no operational impact on this asset.
- 9.7.151 **Castle Knowe Fort (MDG9353)** is the remains of an oval fort sites on the summit of a natural steep on the low east facing slopes above the valley of Annan Water. The fort survives as a rampart around the summit of the knoll. Similarly, to Woodend Fort (MDG7262) the fort is sited in a relatively strategic though not highly defensive location within the valley of Annan Water, an important communication route, the A74 motorway which runs north to south 240m to the east of this fort. The proposed development will be visible at a minimum distance of 2.8km (T3) to the east of the asset. The proposed development will not interfere any views of relevance to understanding or appreciating cultural significance and there will be no operational impact on this asset.

Decommissioning Impacts

- 9.7.152 The extent of ground disturbance associated with decommissioning will not extend beyond the construction footprint and so decommissioning impacts on heritage assets within the ISA will not occur.

9.8 Proposed Mitigation

Mitigation During Construction

- 9.8.1 Construction impacts on the Border Crawford-Inveresk possible Roman road (MDG5027) will be mitigated by a programme of archaeological evaluation. The location and scope of evaluation works will be detailed in a Written Scheme of Investigation, which will be agreed with DGC Archaeologist. It is proposed that this work comprises archaeological monitoring of groundworks during construction.

- 9.8.2 Where construction effects are unavoidable, these will be offset by excavation and recording of the remains in accordance with SPP, paragraph 150 and PAN2/2011, sections 25-27, and Dumfries & Galloway Local Development Plan Policy HE3 and Supplementary Guidance; Part 1 Wind Energy Development: Development Management Consideration F Historic Environment and Cultural Heritage.
- 9.8.3 The potential accidental impacts on the Leithenhall Burn burnt mounds (MDG5375, MDG5376 & MDG5379), Newbigging Ring Ditch (MDG7267) and the Craigfield Farmstead (MDG10462) will be mitigated through the fencing off of the assets, prior to construction commencing and contractors being given a toolbox talk to avoid these areas.
- 9.8.4 Impacts on currently undiscovered archaeological remains elsewhere in the ISA may also occur during the construction phase.
- 9.8.5 The programme of archaeological evaluation will identify any significant undiscovered remains and allows for effects upon them to be mitigated by avoidance and preservation *in situ* where possible, or otherwise by excavation and recording. Any adverse effect on a heritage asset's archaeological interest, due to the loss of *in situ* archaeological remains, would be offset to some extent by the beneficial effect on its archaeological interest due to the increase in understanding resulting from archaeological investigation.
- 9.8.6 The risk of impacts on unknown archaeological remains is judged to be negligible; and the overall effect, in the absence of mitigation, is highly unlikely to be of more than minor significance.

Mitigation during Operation

- 9.8.7 No significant operational effects are predicted on the setting of cultural heritage assets in the ISA or the OSA from the operation of the proposed development. No mitigation is therefore proposed.

Mitigation during Decommissioning

- 9.8.8 Decommissioning impacts on heritage assets within the ISA will not occur and no mitigation is proposed in respect of this.

9.9 Residual Effects

Summary of Residual Effects

Residual Construction Effects

- 9.9.1 Following mitigation of construction impacts upon the Border Crawford-Inveresk possible Roman road (MDG5027) there will remain a residual adverse effect of negligible significance.
- 9.9.2 Following mitigation there will be no accidental impacts on Leithenhall Burn burnt mounds (MDG5375, MDG5376 & MDG5379), Newbigging Ring Ditch (MDG7267) and the Craigfield Farmstead (MDG10462) and therefore no construction effects on these assets.
- 9.9.3 Impacts on currently undiscovered archaeological remains elsewhere in the ISA may also occur during the construction phase.
- 9.9.4 The programme of archaeological evaluation will identify any significant undiscovered remains and allow for effects upon them to be mitigated by avoidance and preservation *in situ* where possible, or otherwise by excavation and recording. Any adverse effect on a heritage asset's archaeological interest, due to the loss of

in situ archaeological remains, would be offset to some extent by the beneficial effect on its archaeological interest due to the increase in understanding resulting from archaeological investigation.

- 9.9.5 The risk of significant effects on unknown archaeological remains is judged to be low; and the overall effect, taking into account mitigation, is highly unlikely to be of more than negligible significance.

Residual Operational Effects

- 9.9.6 There will be no significant operational effects on cultural heritage assets during the operation of the wind farm. The residual effect on the setting of cultural heritage assets would be no greater than minor adverse and therefore not significant.

9.10 Cumulative Effects

- 9.10.1 The cumulative effects of the proposed development and the 82 proposed, consented and operational wind farms within a 45km radius of the proposed development (as described in Chapter 6: Landscape and Visual Impact Assessment) have been considered.
- 9.10.2 No cumulative construction impacts are predicted for known cultural heritage assets from any combination of developments. Furthermore, due to the nature of previously unrecorded cultural heritage assets likely to be found in this area (relatively small prehistoric features), it is considered that there is no potential for cumulative construction impacts on previously unrecorded cultural heritage assets.
- 9.10.3 Cumulative operational effects can occur when the proposed development would be visible in the setting of an asset in combination with other operational or consented wind farms. The assessment of effects uses precisely the same methodology applied in considering the current application alone. All analysis of asset significance and the contribution made by setting remains unchanged. All that is altered is the nature of visual change predicted for the one or more scenarios under consideration.
- 9.10.4 Cumulative operational effects are considered in cases where an effect of minor or greater significance has been predicted on the setting of an historic asset as a result of the proposed development. The purpose of this threshold is to ensure that the assessment remains proportionate and focused on those cases where there is potential for an EIA-significant effect to arise.
- 9.10.5 There are eight assets, comprising six scheduled monuments (Carthur Hill Fort (SM649), Wamphray Motte (SM714), Rangecastle Hill, Fort (SM8364), Castle Hill, fort (SM8366), Peat Hill, fort and scooped settlement (SM10476) and Laverhay Cottage enclosure (SM12721)) and two undesignated HER assets (The Dod (MDG407) and Dundoran Fort (MDG8943)) which will be subject to operational effects of minor significance from the proposed development and therefore there is potential for a significant cumulative effect to occur. The potential for cumulative operational effects is discussed briefly in the following paragraphs.
- 9.10.6 **Carthur Hill Fort (SM649), Rangecastle Hill, Fort (SM8364), Castle Hill, fort (SM8366) and Peat Hill, fort and scooped settlement (SM10476)** form a geographical, and broadly contemporary, group of forts outside and to the south of the ISA. As noted above, the setting of these forts overlooking the valley of the Dryfe Water is a key characteristic of their cultural significance. It can be surmised that these forts were located here due to the importance of the Dryfe Water valley as a communication route and it is likely that they were positioned to monitor and control movement along this corridor. The view to and along the Dryfe Water is considered to be that of most relevance to these forts as it contributes to an appreciation and understanding of their function and situation. More distant views, beyond the focus on the Dryfe Water, are considered to be of less relevance.

- 9.10.7 The nearest cumulative turbines are those at Millriggs Farm (currently at scoping stage, 3.7km south-west of Castle hill fort) and Little Hartfell (consented but not under construction, 4.9km to the south-east). The closest operational turbines are those of Ewe Hill wind farm, (9.8km south-east of Castle hill fort) None of these developments (or any other proposed, consented or operational schemes in the vicinity) will hinder the appreciation or understanding of the key views along the Dryfe Water. No cumulative effects are predicted.
- 9.10.8 **Wamphray Motte (SM714)** is not located in an obvious strategic point. However, it may be that it was located to overlook the point where it is possible to cross the head of the Wamphray Water to the head of the Ettrick Water. The proposed development will be visible at a minimum distance of 1.3km (T3) to the north of this motte. While it will remain possible to understand and appreciate the siting of this motte, the proximity of this turbine and its position on a spur overlooking the Motte will result in it dominating and reducing the sense of place. This will be an adverse operational impact of low magnitude resulting in an effect of minor significance on Wamphray Motte (SM714).
- 9.10.9 The nearest operational turbines to Wamphray motte are those of the operational Harestanes/Forest of Ae and Minnygap wind farms, approximately 12.5km west of the scheduled monument. Millriggs Farm and Little Hartfell are 8.5km and 12km to the south-east respectively. None of these developments (or any other proposed, consented or operational schemes in the vicinity) will result in increased operational impacts upon Wamphray motte. No cumulative effects are predicted.
- 9.10.10 **Laverhay Cottage enclosure (SM12721)** gains its cultural significance primarily from its intrinsic value. The contextual value of this asset (set in a valley surrounded by high hills, close to the confluences of a number of watercourses) will also remain readily understandable. However, the Scoop Hill turbines will be prominent and dominant features on the hills surrounding this asset and will introduce an element of distraction from the sense of place and relative isolation to be found at this asset. The nearest operational turbines to Laverhay enclosure are those of the operational Harestanes/Forest of Ae and Minnygap wind farms, approximately 14km west of the scheduled monument. Millriggs Farm and Little Hartfell are 10km and 12.5km to the south-east respectively. None of these developments (or any other proposed, consented or operational schemes in the vicinity) will result in increased operational impacts upon Laverhay enclosure. No cumulative effects are predicted.
- 9.10.11 Aspects of the setting of **The Dod (MDG407)** of most relevance to the cultural significance of this fort are the strategic views over communication routes, enabling us to understand and appreciate why the fort was sited in this strategic location. **Dundoran Fort (MDG8943)** is located at the southern end of a ridge with long views over Annandale to the west and Wamphray Water which runs past Dundoran from the northwest through to the south where it then curves west to join the River Annan. The fort was clearly sited for the strategic views over these important communication routes.
- 9.10.12 The nearest operational turbines to these undesignated forts are those of the operational Harestanes/Forest of Ae and Minnygap wind farms, approximately 10km west of The Dod. Millriggs Farm and Little Hartfell are respectively 9km and 13km to the south-east of Dundoran fort. None of these developments (or any other proposed, consented or operational schemes in the vicinity) will result in increased operational impacts upon either fort. No cumulative effects are predicted.
- 9.10.13 It is considered that none of the cumulative developments will introduce turbines into the culturally important views from or to these assets, to such an extent that they will increase the impact on the setting of these assets. **It is therefore considered that at most there will be a cumulative effect of minor significance on these assets.**

References

Bibliographic references

Groves-Raines Architects, 2019 *Moffat Conservation Area Character Appraisal and Management Plan*, Dumfries and Galloway Council

Royal Commission on the Ancient and Historical Monuments of Scotland, 1997 *Eastern Dumfriesshire: An Archaeological Landscape* Edinburgh

OSA, 1792 *Moffat, County of Dumfries* Vol II, p285-298

NSA, 1845 *Moffat, County of Dumfries* Vol IV, p102-123

OSA, 1794 *Wamphray, County of Dumfries* Vol XII, p465-469

NSA, 1845 *Wamphray, County of Dumfries* Vol IV, p137-150

Historic maps

Roy W, 1747-55 Military Survey of Scotland

Ordnance Survey Six-inch 1st edition

1861 - Dumfriesshire, Sheet XXV

1861-3 - Dumfriesshire, Sheet XVII

1900 - Dumfriesshire, Sheet XVIISE

1900 - Dumfriesshire, Sheet XVIISW

1900 - Dumfriesshire, Sheet XXVNW

1900 - Dumfriesshire, Sheet XXVSW

Appendix 9.1 – Gazetteer of Heritage Assets within the Inner Study Area

Ref	Name	Site Type	Period	Easting	Northing
MDG407	The Dod / Beldcraig Linn	Fort	Iron Age	311360	600840
MDG5005	Poldean	Site; Hearth; Site	Iron Age to 19th Century	310530	600560
MDG5027	Border - Crawford - Inveresk (?)	Roman Road	Roman	310355	598568
MDG5271	Sparrow Sike	Ring Enclosure	Medieval to Modern	317510	597040
MDG5272	Kirkhill	Ridge and Furrow; Field Boundary; Cultivation Terrace; Boundary Bank	Medieval to Modern	314348	596046
MDG5371	Western Gill	Cultivation Terrace; Enclosure; Ridge and Furrow; Structure	Medieval to Modern	314370	597310
MDG5374	Kirkhill / Charter Cleuch	Burnt Mound	Early Bronze Age to Late Bronze Age	313740	596509
MDG5375	Leithenhall Burn	Burnt Mound	Early Bronze Age to Late Bronze Age	312690	599550
MDG5376	Leithenhall Burn	Burnt Mound	Early Bronze Age to Late Bronze Age	312710	599520
MDG5377	Mirk Gill	Burnt Mound	Early Bronze Age to Late Bronze Age	311255	599533
MDG5378	Mirk Gill	Burnt Mound	Early Bronze Age to Late Bronze Age	311243	599525
MDG5379	Leithenhall Burn / Leithenhall Hope	Burnt Mound	Early Bronze Age to Late Bronze Age	312695	599535
MDG5380	Ewe Gutter / Rispie Hill	Burnt Mound	Early Bronze Age to Late Bronze Age	311844	599579
MDG5381	Ewe Gutter / Rispie Hill	Burnt Mound	Early Bronze Age to Late Bronze Age	311834	599626
MDG5382	Mirk Gill	Burnt Mound	Early Bronze Age to Late Bronze Age	311268	599537
MDG5384	Ewe Gutter / Rispie Hill	Burnt Mound	Early Bronze Age to Late Bronze Age	311839	599604
MDG5435	Beldcraig Burn	Burnt Mound	Early Bronze Age to Late Bronze Age	311750	600770

Ref	Name	Site Type	Period	Easting	Northing
MDG5436	Beldcraig Burn	Burnt Mound	Early Bronze Age to Late Bronze Age	311730	600800
MDG5437	Beldcraig Burn	Burnt Mound	Early Bronze Age to Late Bronze Age	311720	600860
MDG5438	Beldcraig Burn	Burnt Mound	Early Bronze Age to Late Bronze Age	311730	600890
MDG5499	Ewe Gutter	Burnt Mound	Early Bronze Age to Late Bronze Age	312130	600140
MDG5553	Ewe Gutter	Burnt Mound	Early Bronze Age to Late Bronze Age	312130	600200
MDG5558	Brock Hill	Burnt Mound	Early Bronze Age to Late Bronze Age	311620	600440
MDG5559	Brock Hill	Burnt Mound	Early Bronze Age to Late Bronze Age	311560	600340
MDG5569	Grey Rig	Burnt Mound	Early Bronze Age to Late Bronze Age	310860	600040
MDG5573	Mirk Gill	Burnt Mound	Early Bronze Age to Late Bronze Age	311170	600290
MDG5577	Mirk Gill	Burnt Mound	Early Bronze Age to Late Bronze Age	311140	600520
MDG5596	Mirk Gill	Burnt Mound	Early Bronze Age to Late Bronze Age	311110	600640
MDG5607	Craigfield	Burnt Mound	Early Bronze Age to Late Bronze Age	311870	600650
MDG5608	Craigfield	Burnt Mound	Early Bronze Age to Late Bronze Age	311960	600600
MDG6748	Whinny Plantation	Burnt Mound	Early Bronze Age to Late Bronze Age	310914	599867
MDG7116	The Caple	Building	Medieval to Modern	316289	595302
MDG7251	Mary's Grave, Macmaw Edge	Burial?	Medieval to Modern	318740	597160
MDG7257	Kirkhill / Wamphray	Stone Circle?	Early Neolithic to Early Bronze Age	313979	595926
MDG7265	Chapman's Stone	Standing Stone	Early Neolithic to 19th Century	310779	598984
MDG7267	Newbigging	Ring Ditch	Early Bronze Age to Late Bronze Age	310925	598781

Ref	Name	Site Type	Period	Easting	Northing
MDG7268	Oak Bank / Nether Murthat/ Oakbank	Fort	Iron Age	310411	598953
MDG7269	Stobb's Knowe / Chapman's Stone/ Newbigging	Enclosure	Iron Age	310860	599170
MDG7274	Kirk Burn	Burnt Mound	Early Bronze Age to Late Bronze Age	313229	595799
MDG7275	Kirk Burn	Burnt Mound	Early Bronze Age to Late Bronze Age	313240	595829
MDG7277	Leithenhall	Scooped Settlement	Iron Age	313180	597310
MDG7279	Chapel Lea, Wamphray	Chapel?	Anglian to Medieval	313932	599149
MDG7308	Sauchy Gutter / Shankend	Settlement?	Iron Age	315850	594170
MDG8639	Brunstone Burn	Ridge And Furrow; Lazy Beds?; Enclosure	Medieval to 19th Century	311210	599280
MDG8845	Craigfield / Beldcraig Burn	Burnt Mound	Early Bronze Age to Late Bronze Age	311910	600900
MDG8846	Craigfield / Beldcraig Burn	Burnt Mound	Early Bronze Age to Late Bronze Age	311980	600960
MDG8847	Beldcraig Burn	Burnt Mound	Early Bronze Age to Late Bronze Age	311700	600800
MDG8848	Rae Gill	Shieling; Hut	Medieval to 19th Century	313170	600310
MDG8862	Brunstone Burn	Field Boundary; Building?; Non Antiquity; Boundary Bank	Unknown	311534	599380
MDG8943	Dundoran / Dundoran Plantation	Fort	Early Bronze Age to Roman	312650	597470
MDG8947	Glengap Burn	Building	Medieval to Modern	313800	599500
MDG8948	Kirk Burn	Burnt Mound	Early Bronze Age to Late Bronze Age	313198	595739
MDG8949	Kirk Burn	Burnt Mound	Early Bronze Age to Late Bronze Age	313241	595814
MDG9006	Caldwell Moss / Gudewife's Hill	Building; Scooped Settlement	Iron Age to 19th Century	315905	594802
MDG9710	Brunstone Burn / Brunstane Burn	Building	Medieval to Modern	311540	599540
MDG9712	Whinny Plantation	Ridge and Furrow	Medieval to 19th Century	310897	599903
MDG9713	Western Gill	Ring Enclosure	Medieval to Modern	314340	597200

Ref	Name	Site Type	Period	Easting	Northing
MDG9716	Thor Beck	Ring Enclosure	Medieval to Modern	313860	598710
MDG9761	Poldean / 'Poodine'	Tower House	Medieval to 19th Century	310399	600101
MDG9762	Poldean	Farmstead; Farmhouse	Post Medieval to Modern	310439	600151
MDG9923	The Caple	Ridge and Furrow	Medieval to Modern	316250	595270
MDG10462	Craigfield	Farmstead; Farmhouse	Post Medieval to 20th Century	311760	600650
MDG10699	Nether Murthat	Farmstead; Farmhouse	Post Medieval to Modern	310461	598661
MDG10711	Kirkhill	Farmstead; Farmhouse	Post Medieval to Modern	313451	596268
MDG10713	Laverhay	Farmstead; Farmhouse	19th Century to Modern	314010	598080
MDG10715	Blackcraig Quarry / Dundoran Plantation	Quarry	19th Century	312271	597837
MDG12244	Nether Murthat	Spoil Heap	19th Century to Modern	310090	598740
MDG12536	Comb Rig	Structure	Early Bronze Age to Roman	310144	598055
MDG12906	Finniegill, 'Finnygill', 'Finnigill', 'Fringal'	Farmstead	Medieval to 19th Century	317130	598270
MDG12907	Macmaw Hill	Field System; Ridge and Furrow	Medieval to 19th Century	317760	596080
MDG13146	Stoney Gill / Ramshawrig	Aircraft	20th Century	316410	597690
MDG13240	Macmaw Edge	Gravel Pit	18th Century to 19th Century	317940	596600
MDG16971	Garrogill	Farmstead; Field	Post Medieval to 18th Century	315750	602960
MDG16972	Nether Ruegill Burn	Sheep Fold; Building	Post Medieval to 18th Century	315560	601970
MDG16975	Wamphry Water	Sheep Fold; Enclosure; Field; Building?	Post Medieval to 18th Century	314240	600380
MDG16976	Peat Rig	Sheep Fold; Building	Post Medieval to 18th Century	317000	600270
MDG17046	Milkymoss	Building; Enclosure	Post Medieval to 18th Century	311003	598551
MDG17047	Milne / Milnehouse	Building	Post Medieval to 18th Century	313780	597200
MDG17048	Western Gill	Building; Sheep Fold	Post Medieval to 18th Century	314240	597050
MDG17049	Wamphry Water	Sheep Fold	Post Medieval to 18th Century	314330	599120
MDG18229	Laverhay Farmhouse And Steading	Farmstead; Farmhouse	19th Century to Modern	314017	598081
MDG24793	Faulds	Farmstead; Sheep Fold	18th Century to 20th Century	317300	597250

Ref	Name	Site Type	Period	Easting	Northing
MDG25982	Wamphray Water	Sheep Fold	Post Medieval to 18th Century	314555	601143
MDG26139	The Caple	Sheep Fold	Post Medieval to Modern	316310	595206
MDG27139	Kirkhill	Enclosure?; Field System?	Unknown	313278	596237

Appendix 9.2 – Scheduled Monuments in the Outer Study Area excluded

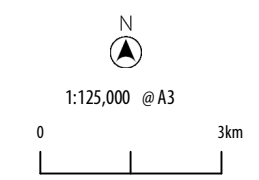
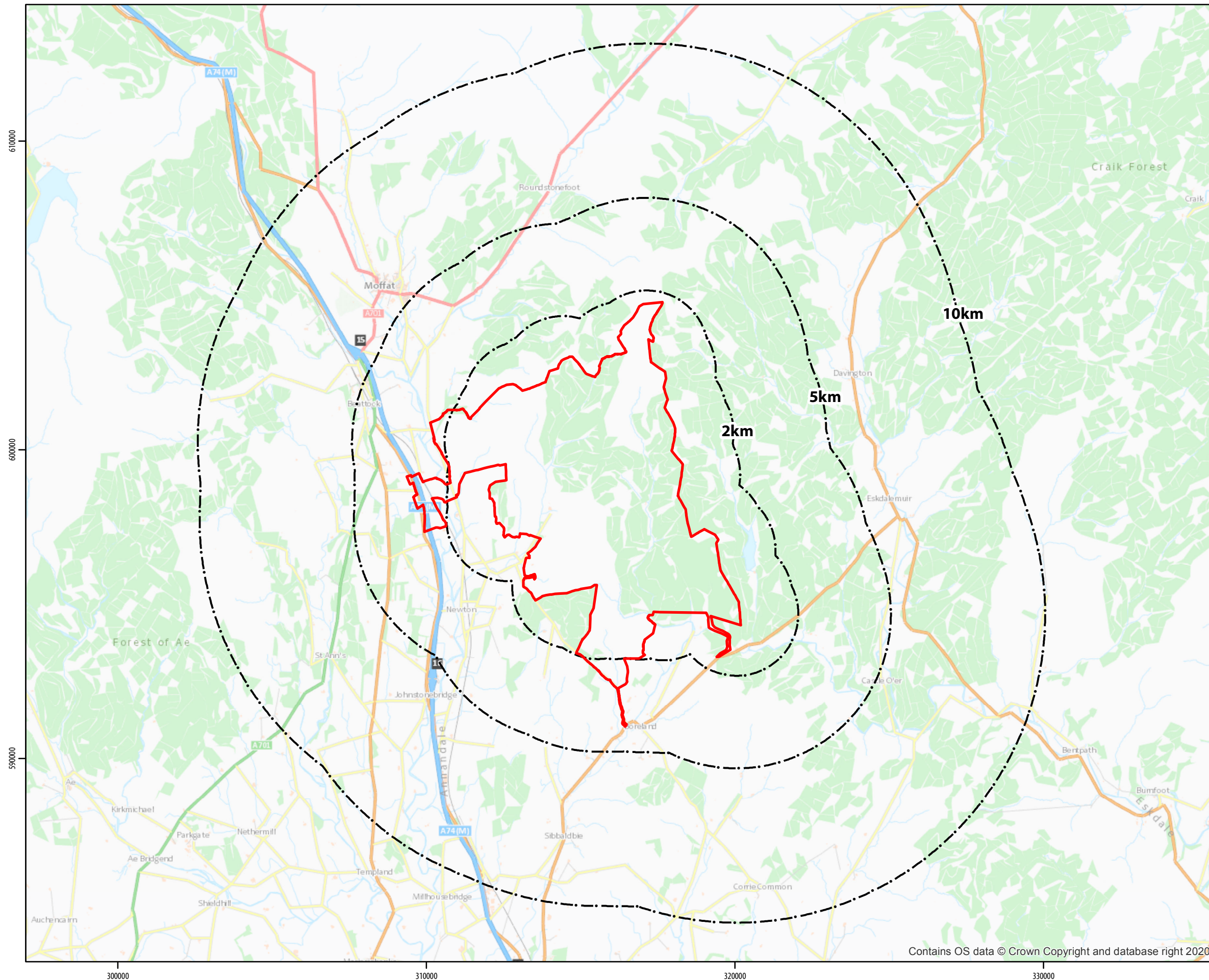
Ref.	Designation Title	Easting	Northing
SM634	Girdlestanes, stone circle	325348	596154
SM637	Loupin' Stanes, stone circle	325704	596637
SM2346	Bessie's Hill, fort 250m E of summit	325040	595407
SM2851	Tanlawhill, settlement 480m WNW of	323275	591486
SM2852	Haw Birren, enclosure, Westside	322689	592896
SM3351	Shaw, rectangular enclosure 800m NNW of, on bank of Coates Burn	315676	591735
SM3819	Long Knowe, settlement 905m SW of Monkenshaw	321924	599937
SM3827	Rough Castle Hill, earthworks 525m W of Garwald	322380	600821
SM3835	Steelman's Craig, enclosure 400m S of Watcarrick	324766	595858
SM4057	Stanshielrig, homestead,enclosures,field systems & clearance cairns	305807	601731
SM4062	Mid Raeburn,enclosure 200m NNE of	326498	600600
SM4333	Bankburnfoot, settlement 375m NW of	326489	592762
SM4368	Crooks, scooped settlement 290m NNE of	329787	592449
SM4369	The Knowe, settlement 300m S of Castle O'er Farm	324798	592269
SM4372	Shielburn,settlement 350m NW of	328557	591969
SM4374	Clerkhill,settlements 800m NNW of	325344	598569
SM4380	Bankburnfoot, enclosure 1350m WNW of	325377	592814
SM4383	Stennieswaterfoot,settlement 625m NNE of	329753	593306
SM4384	Shiel Rig,settlement 650m N of Clerkhillgrain	326797	598691
SM4386	Tanlawhill Cottages, farmstead 865 m E of	324749	590902
SM4391	Bankburnfoot, settlement 1550m WSW of	325214	592124
SM4457	Deil's Jingle South, linear earthwork	325492	591389
SM4458	Deil's Jingle North, linear earthwork	325382	593200
SM4477	Selcoth,scooped homestead 150m SW of	313500	607157
SM4541	Castlehill,settlement 200m NNW of	324619	594996
SM4542	Old Johnstone,settlement and farmstead 350m WNW of	324342	600002
SM4543	Eskdalemuir Manse,cairn 230m W of	325309	597155
SM4691	Lyneholm,settlement 500m WSW and homestead 250m SW of	327320	591492
SM4692	Tanlawhill,farmstead and field system 1250m NW of	323159	592428
SM4693	Black Esk Bridge,farmstead and cultivation remains 680m S of	325131	590018

Ref.	Designation Title	Easting	Northing
SM4694	Tanlawhill,settlement 250m S of	323714	591028
SM4695	Tanlawhill,farmstead and cultivation remains 950m ESE of	324660	591024
SM4696	Tanlawhill,settlement 1150m SE of	324635	590652
SM4720	Watcarrick,earthwork 140m S of Bankhead	325294	596353
SM4721	Moodlaw,settlement 600m S of	325584	600707
SM4966	Clerkhill,homestead,unenclosed settlements & field system 400m N of	325703	598270
SM5290	Davington,settlement and field system 400m W of to 1150m WNW of	323026	602638
SM8567	Garpol Water Moated Homestead, 500m SW of Rosseta	305317	603967
SM8610	Kinnelhead Tower, fortified farmstead & cross incised stones	302790	601688
SM10346	Bessie's Hill, settlement 150m NE of summit	324911	595543
SM10478	Gillesbie Cottages, moated site 160m NNE of	316869	592157
SM10497	Ogle Linn, earthwork	304761	595196
SM10498	Boreland Tower	306540	595752
SM10533	Tanner's Linn, earthwork	305686	592560
SM10547	Plewlands, scooped settlement and farmstead 485m SW of	306616	597935
SM10548	Raehills, scooped settlement 650m NE of	306732	594892
SM10789	Beattock Hill, settlement 700m W of Hillside Cottages	306644	602552
SM10790	Easter Earshaig, settlement 100m NW of	304775	602448
SM12607	Eyre Burn, settlement 1km NNW of Stidriggs	305247	600498
SM12612	Carrifran, farmstead 310m SW of	315841	611402
SM12613	Fauld Burn, enclosure and building 875m W of Stidriggs	304909	599743
SM12615	Kinnelhead Cottage, building 285m SSW of	302990	601291
SM12616	Cowburn, burnt mounds 1085m SE of	321300	588041
SM12619	Potburn, house platforms 1425m NW of	317108	609548
SM12620	Craiglynne, two scooped settlements 660m and 750m SSE of	312045	604499
SM12623	Stennieswaterfoot, homestead and enclosure 335m SW of	329406	592452
SM12629	Upper Fenton, burnt mounds 1605m and 1740m ESE of	319867	592275
SM12661	Dinwoodie, settlement 425m E of	310855	590121
SM12664	Craigbeck Hope, burnt mound 1100m SW of	313070	602760
SM12665	Millhill, settlement, enclosure and road 500m ENE of	310765	592446
SM12667	Newland Hill, settlement 1560m E of Capelfoot	325391	586254
SM12694	Camp Cottage, fort and settlement 50m S of	311613	605149
SM12706	Saddle Yoke, township 1100m and 1050m NE of	315494	610617
SM12710	Blaebeck, burnt mound 240m N of	309282	607793
SM12711	Roundstonefoot House, burnt mound 565m NNE of	314226	609044
SM12712	Lochbrow, palisaded enclosures 270m SW of	309457	588711
SM12716	2 Dinwoodie Green Cottages, settlement 530m ENE of	311416	588560
SM12719	Bodesbeck, standing stone 1180m E of	316190	609720

Ref.	Designation Title	Easting	Northing
SM12723	Alton, moated site 530m ESE of	310105	606014
SM12726	Frenchland, farmstead and cultivation remains 695m NE of	310235	605753
SM12729	Parks, scooped settlement and house platforms 770m NNW of	306490	597778
SM12733	Hunterheck Cottages, scooped settlements 95m NNE of	309989	604990
SM12736	Catharine's Hill, settlement 620m N of Nether Murthat	310538	599272
SM12737	Kirkholm Hill, enclosure 500m W of Dinwoodie Lodge Cottage	310030	590675
SM12755	Witchshaw Rig, unenclosed settlement 1290m NE of Heithatpark	318976	590361
SM12767	Whiteyett, earthworks 575m SSE to 935m S and 650m S to 1060m S of	324881	593244
SM12775	Over Rig, enclosure 750m SSW of Whiteyett	324569	593482
SM12783	Craik's Craig, scooped settlement 755m ESE of	306452	606145

KEY

- ▭ Inner Study Area
- Outer Study Area



Contains OS data © Crown Copyright and database right 2020

Figure 9.1
Cultural Heritage Study Areas

- KEY**
- Scheduled monument
 - + Category A listed building
 - Inventory garden and designed landscape
 - Conservation area
 - Cultural heritage asset
 - Non inventory designed landscape
 - ⊕ Turbine
 - Inner study area
 - 2km study area
 - 5km study area
 - 10km study area

- No. of turbines visible**
- 1 - 11
 - 12-22
 - 23-33
 - 34-44
 - 45-55
 - 56-66
 - 67-75

Sites and Monuments Record information derived from Dumfries and Galloway Council data dated 28.08.19 © Crown Copyright Dumfries and Galloway Council

Designed Landscape area information derived from Historic Environment Scotland data dated 2.12.19 © Crown Copyright. All rights reserved.

Scheduled monument area information derived from Historic Environment Scotland data dated 2.12.19 © Crown Copyright (Historic Environment Scotland)

Listed Building data provided by Historic Environment Scotland dated 2.12.19 © Crown Copyright (Historic Environment Scotland)

Conservation Area data provided by Historic Environment Scotland dated 2.12.19 © Crown Copyright (Historic Environment Scotland)

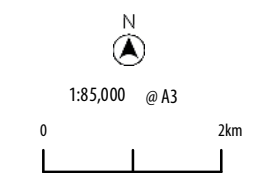
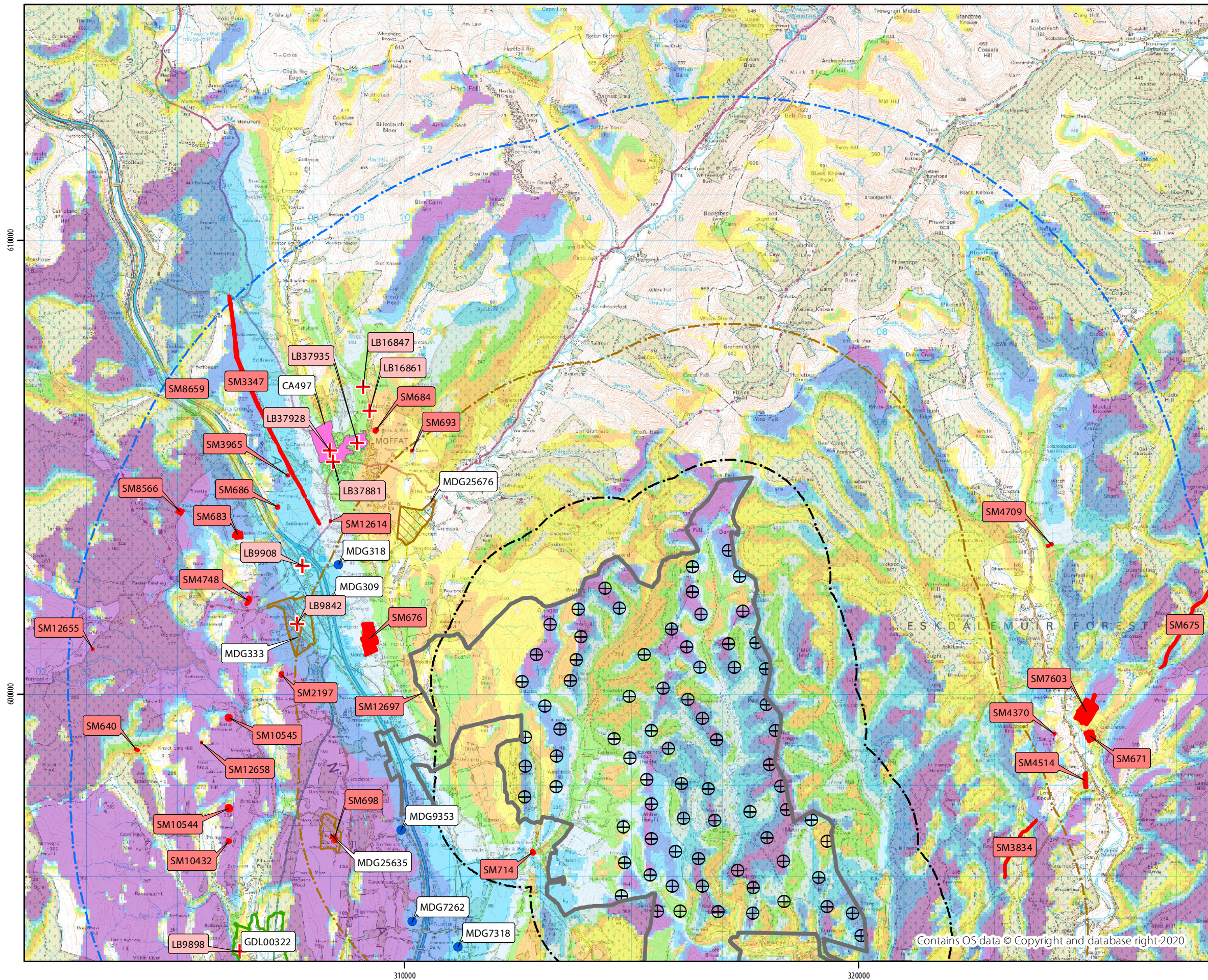
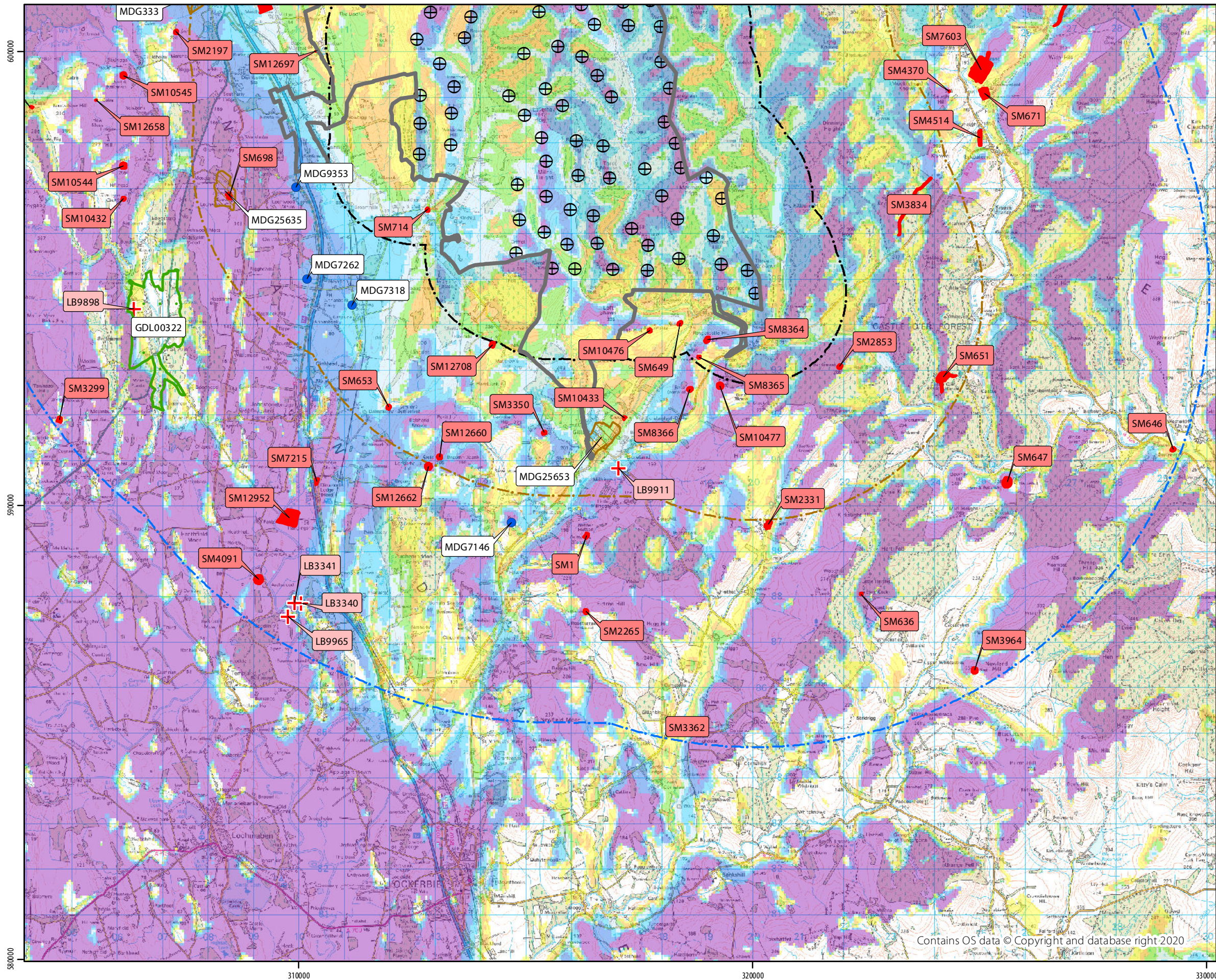


Figure 9.4
Heritage Assets discussed in text within the OSA –North



Contains OS data © Copyright and database right 2020



- KEY**
- Scheduled monument
 - + Category A listed building
 - Inventory garden and designed landscape
 - Conservation area
 - Cultural heritage asset
 - Non inventory designed landscape
 - ⊕ Turbine
 - Inner study area
 - 2km study area
 - 5km study area
 - 10km study area

- No. of turbines visible**
- 1 - 11
 - 12-22
 - 23-33
 - 34-44
 - 45-55
 - 56-66
 - 67-75

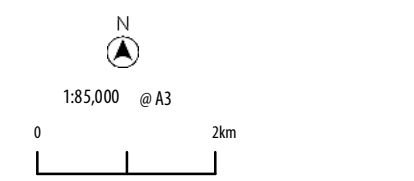
Sites and Monuments Record information derived from Dumfries and Galloway Council data dated 28.08.19 © Crown Copyright Dumfries and Galloway Council

Designed Landscape area information derived from Historic Environment Scotland data dated 2.12.19 © Crown Copyright. All rights reserved.

Scheduled monument area information derived from Historic Environment Scotland data dated 2.12.19 © Crown Copyright (Historic Environment Scotland)

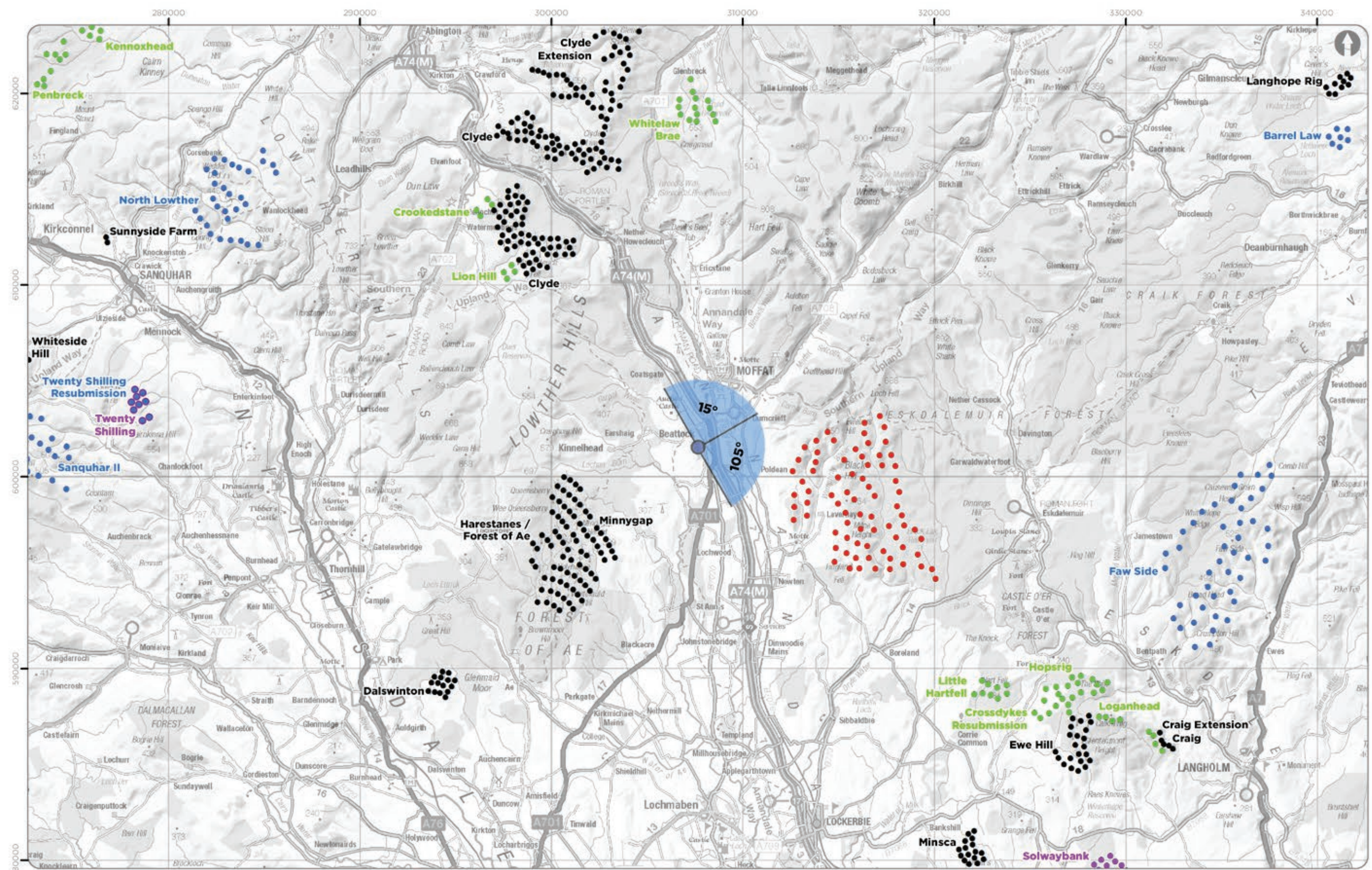
Listed Building data provided by Historic Environment Scotland dated 2.12.19 © Crown Copyright (Historic Environment Scotland)

Conservation Area data provided by Historic Environment Scotland dated 2.12.19 © Crown Copyright (Historic Environment Scotland)

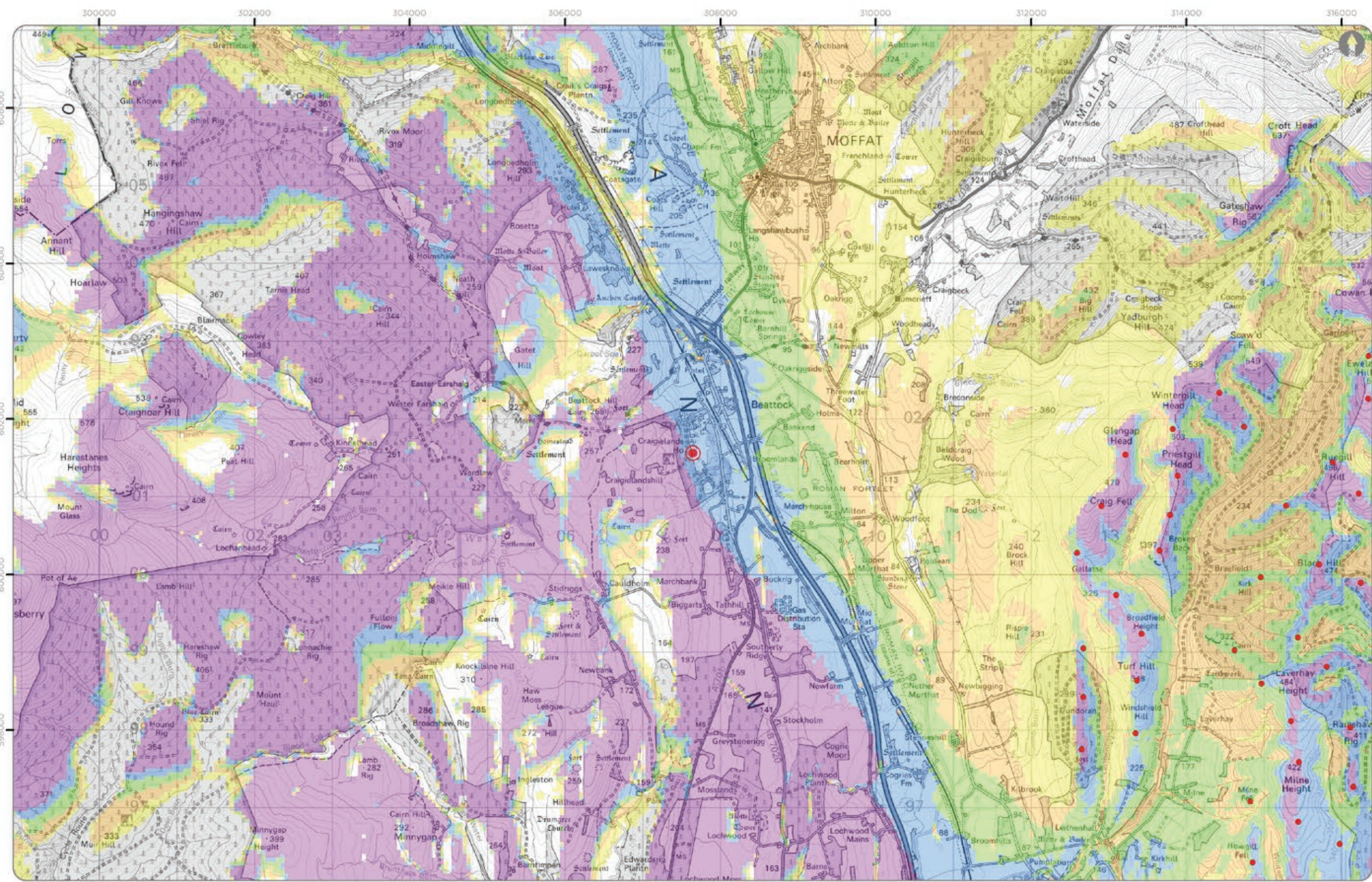


Contains OS data © Copyright and database right 2020

Figure 9.5
Heritage Assets discussed in text within the OSA – South



Viewpoint Location Plan Baseline Panorama (90 Degree View)
Scale: 1:200,000
0 2.5 5 10 Km



Viewpoint Location Plan (53.5 Degree View)
Scale: 1:50,000
0 0.5 1 2 Km

Note:
1. ZTV: Created using ESRI ArcGIS 10.7.1 software using the following data and parameters:
Blade tip height: 180 / 200 / 225 / 250m
DTM Data: OS Terrain 50 DTM
Observer height: 2m
No surface features, such as buildings or trees, were included in the analysis.
Earth curvature and light refraction have been included in the calculations.
2. © Crown copyright and database rights 2020 Ordnance Survey 0100031673.

Legend

- Proposed Turbine Location

Cumulative Wind Farm Status:
(December 2019)

- Operational
- Under Construction
- Consented
- Appeal / Application

Blade Tip Zone of Theoretical Visibility
No. of Theoretically Visible Turbines

- 1 - 15
- 16 - 30
- 31 - 45
- 46 - 60
- 61 - 75

Viewpoint:

- 90 Degree Field of View
- No 53.5 Degree Field of View

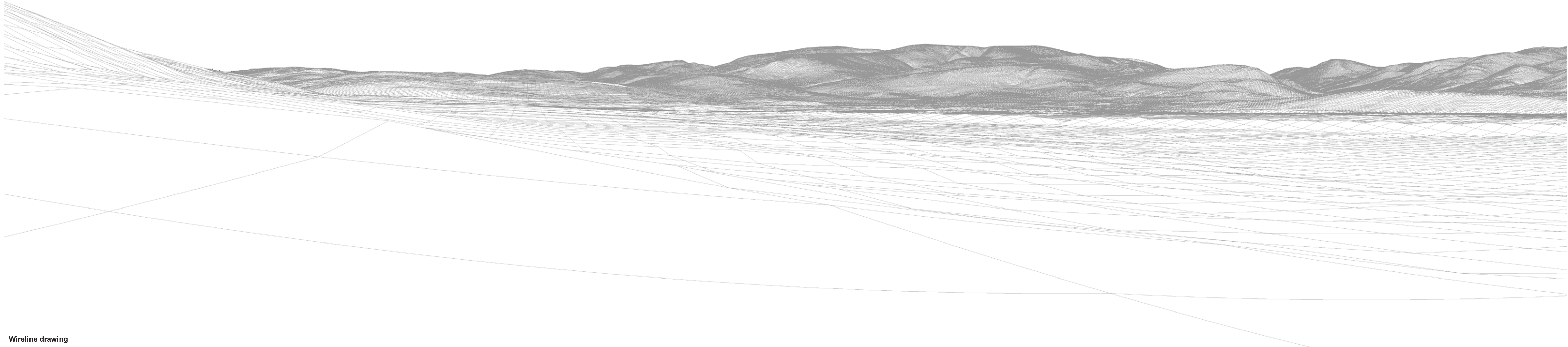
SCOOP HILL WIND FARM

Figure 9.6a
Viewpoint 1: LB9842: Craigelands House

Ref No: 160971	Created By: LA	Rev No: 2
	Drawing Size: A3	Date: 10/07/2020

Coordinate System: BNG OS GB 1936 Datum

Clyde (12.0km)



Wireline drawing

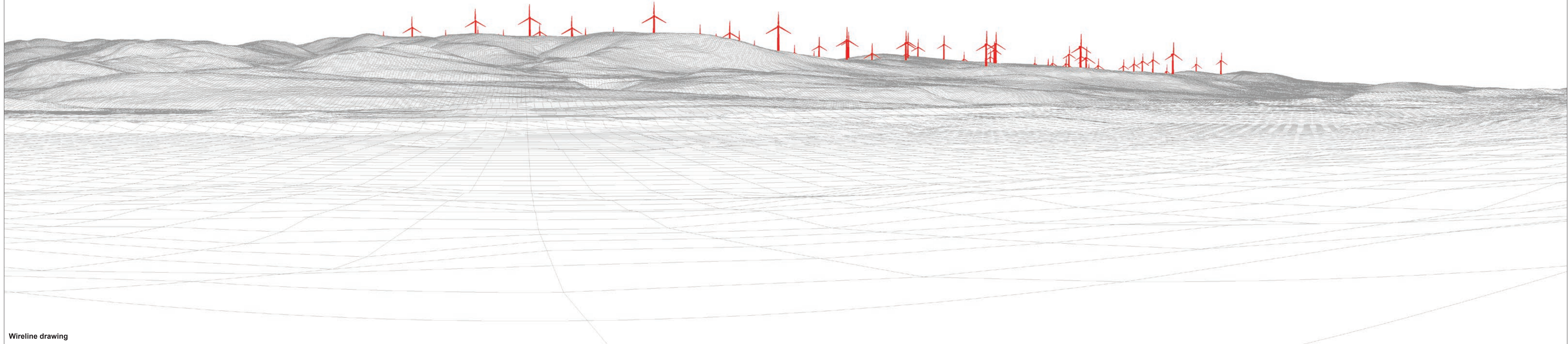
OS reference: 307644 E 601561 N
Eye level: 116.6 mAOD
Direction of view: 15°
Nearest turbine: 5113 m

Horizontal field of view: 90° (cylindrical projection)
Principal distance: 522 mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

Camera: N/A
Lens: N/A
Camera height: 1.5 m
Date and time: N/A

Figure: 9.6b
Cultural Heritage Viewpoint 1: LB9842: Craigelands House
Scoop Hill

Proposed Development (5.1km)



Wireline drawing

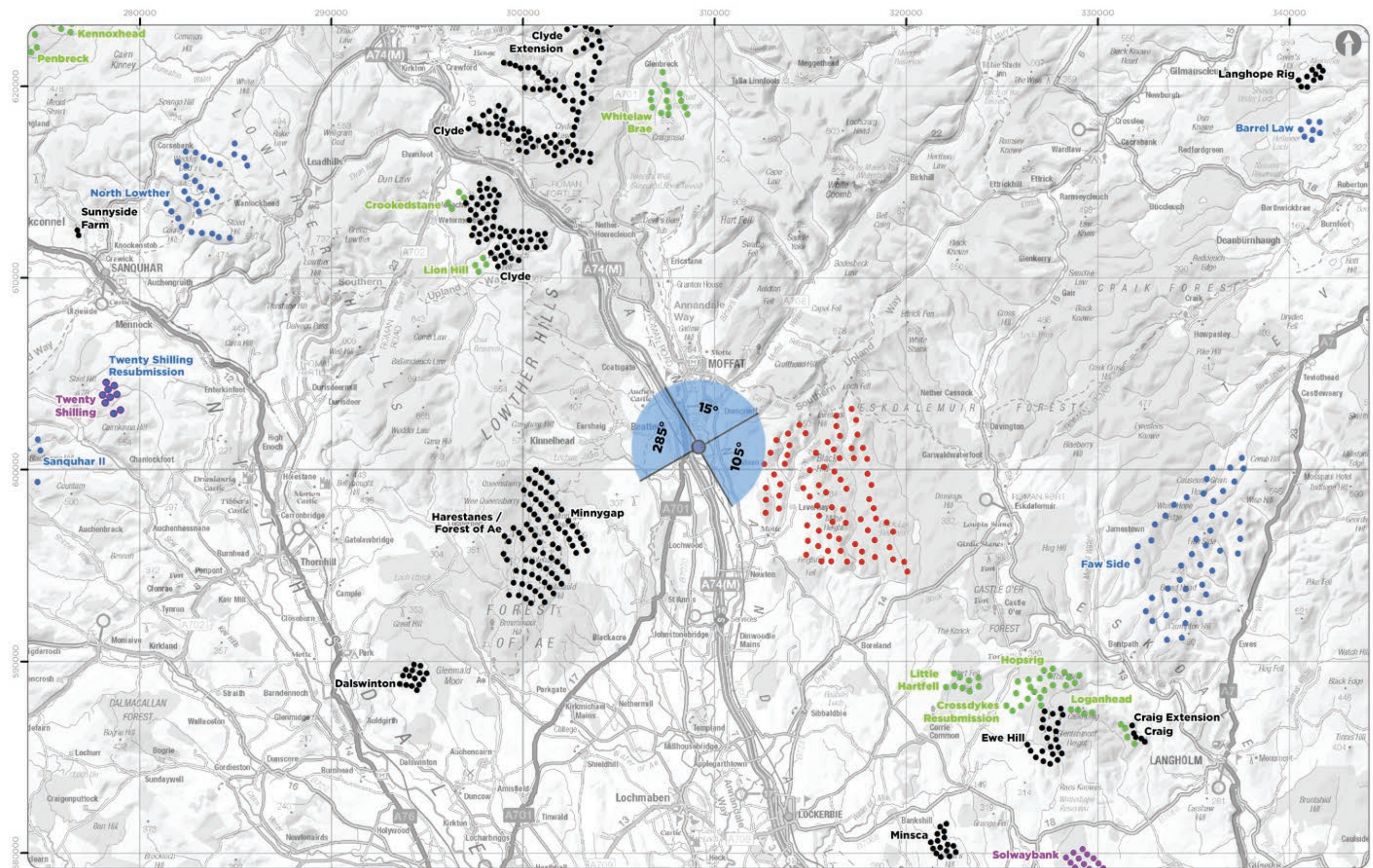
OS reference: 307644 E 601561 N
Eye level: 116.6 mAOD
Direction of view: 105°
Nearest turbine: 5113 m

Horizontal field of view: 90° (cylindrical projection)
Principal distance: 522 mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

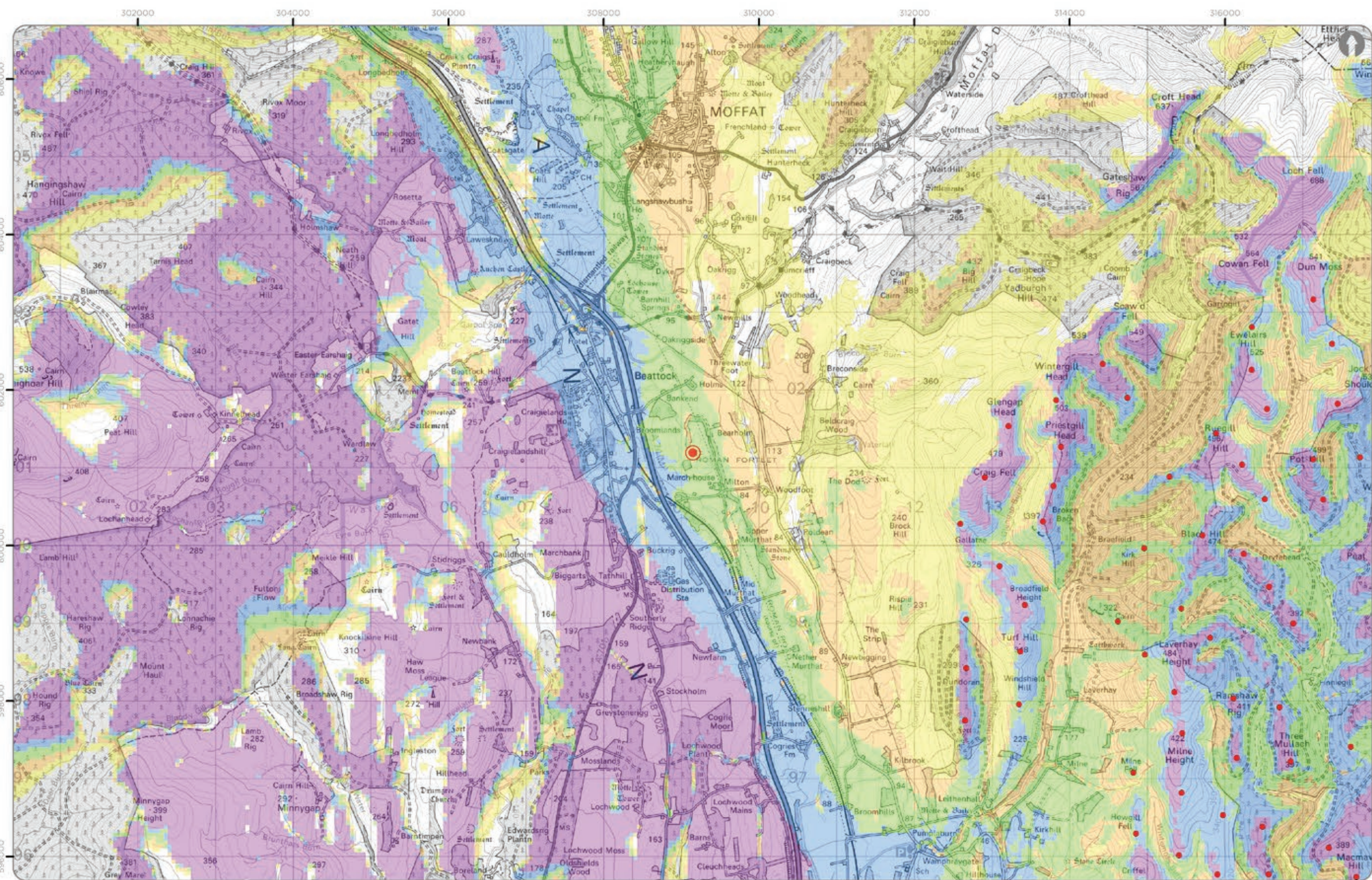
Camera: N/A
Lens: N/A
Camera height: 1.5 m
Date and time: N/A

Figure: 9.6c
Cultural Heritage Viewpoint 1: LB9842: Craigelands House
Scoop Hill

© Crown copyright, All rights reserved (2019). Licence number 0100031673



Viewpoint Location Plan Baseline Panorama (90 Degree View)
Scale: 1:200,000
0 2.5 5 10 Km



Viewpoint Location Plan (53.5 Degree View)
Scale: 1:50,000
0 0.5 1 2 Km

Note:
1. ZTV: Created using ESRI ArcGIS 10.7.1 software using the following data and parameters:
Blade tip height: 180 / 200 / 225 / 250m
DTM Data: OS Terrain 50 DTM
Observer height: 2m
No surface features, such as buildings or trees, were included in the analysis.
Earth curvature and light refraction have been included in the calculations.
2. © Crown copyright and database rights 2020 Ordnance Survey 0100031673.

Legend

- Proposed Turbine Location

Cumulative Wind Farm Status:
(December 2019)

- Operational
- Under Construction
- Consented
- Appeal / Application

Blade Tip Zone of Theoretical Visibility

No. of Theoretically Visible Turbines

- 1 - 15
- 16 - 30
- 31 - 45
- 46 - 60
- 61 - 75

Viewpoint:

- 90 Degree Field of View
- No 53.5 Degree Field of View

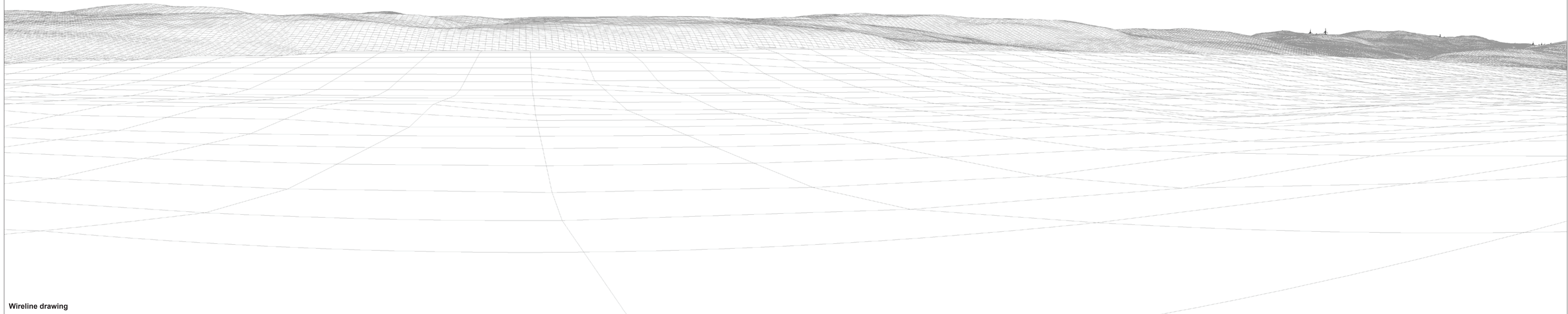
SCOOP HILL WIND FARM

Figure 9.7a
Viewpoint 2: SM676: Milton, Roman Fort, fortlet and camps

Ref No: 160971	Created By: LA	Rev No: 2
	Drawing Size: A3	Date: 10/07/2020

Coordinate System: BNG OS GB 1936 Datum

Clyde (13.2km)



Wireline drawing

OS reference: 309147 E 601189 N
Eye level: 108.7 mAOD
Direction of view: 285°
Nearest turbine: 3565 m

Horizontal field of view: 90° (cylindrical projection)
Principal distance: 522 mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

Camera: N/A
Lens: N/A
Camera height: 1.5 m
Date and time: N/A

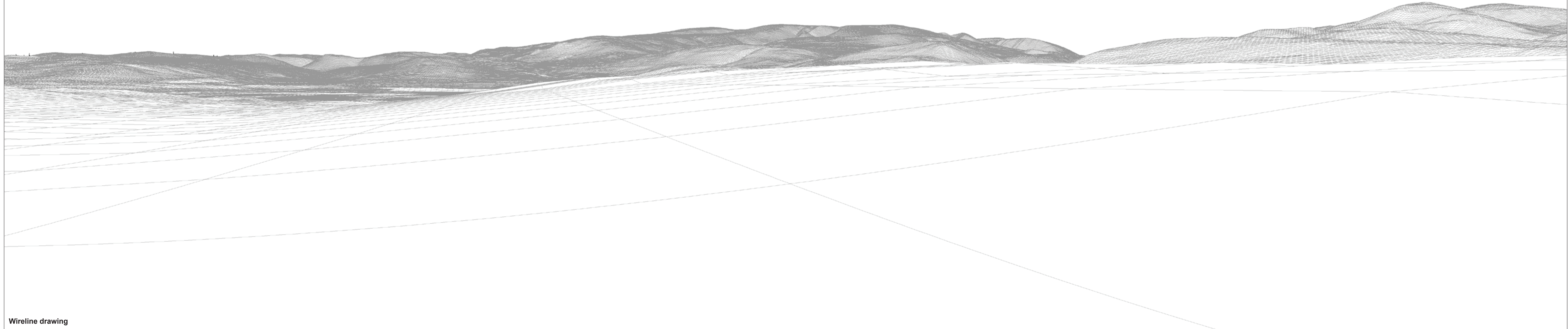
Cultural Heritage Viewpoint 2: SM676: Milton, Roman Fort, fortlet and camps

Figure: 9.7b

Scoop Hill

Clyde (13.2km)

Clyde Extension (19.0km)



Wireline drawing

OS reference: 309147 E 601189 N
Eye level: 108.7 mAOD
Direction of view: 15°
Nearest turbine: 3565 m

Horizontal field of view: 90° (cylindrical projection)
Principal distance: 522 mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

Camera: N/A
Lens: N/A
Camera height: 1.5 m
Date and time: N/A

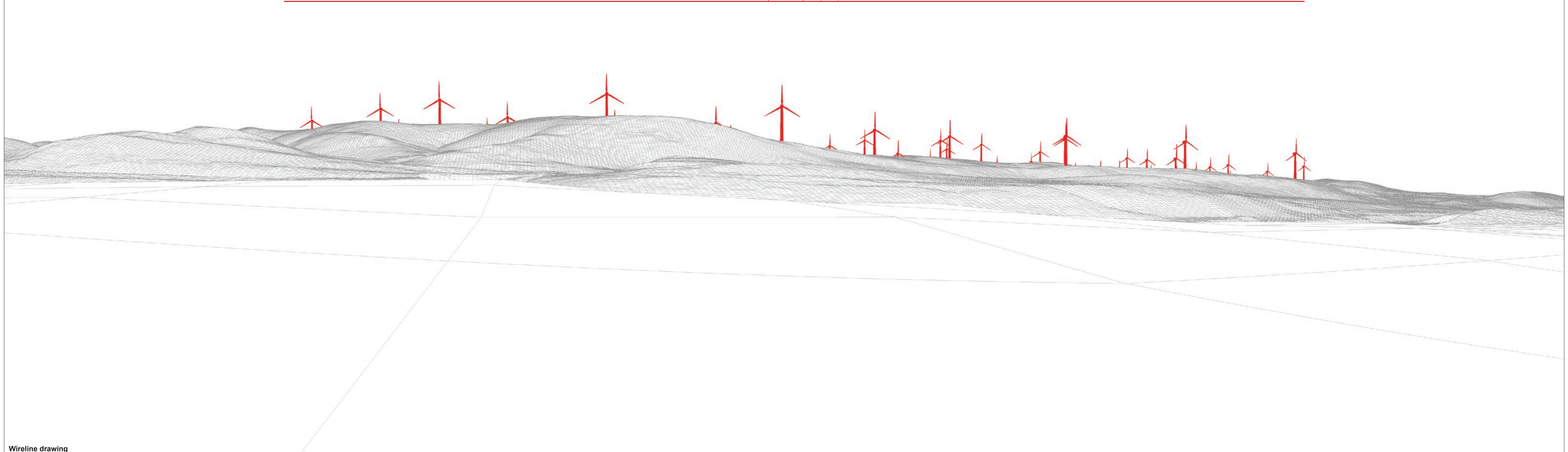
Cultural Heritage Viewpoint 2: SM676: Milton, Roman Fort, fortlet and camps

Figure: 9.7c

Scoop Hill

© Crown copyright, All rights reserved (2019). Licence number 0100031673

Proposed Development (3.6km)



Wireline drawing

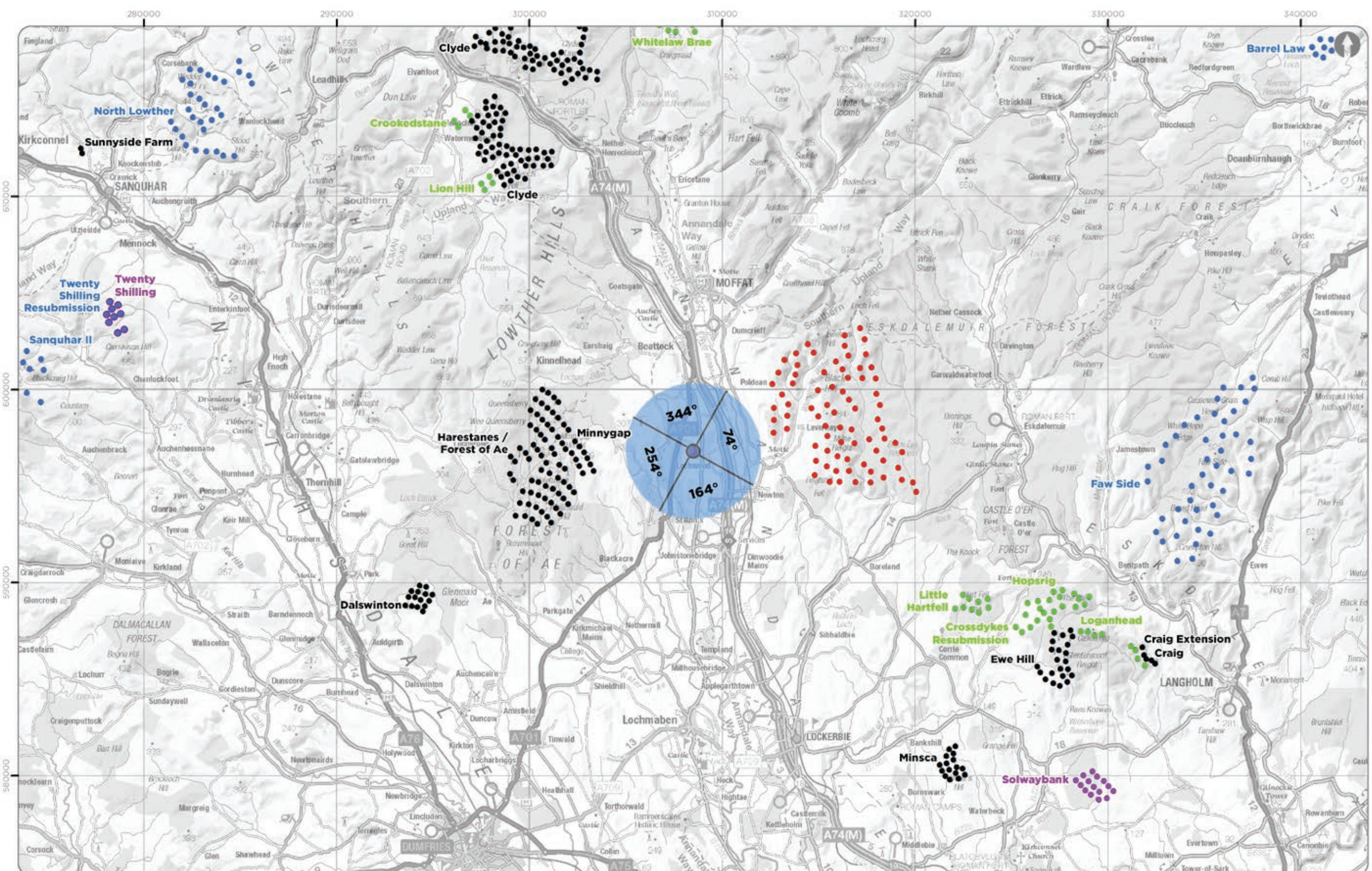
OS reference: 309147 E 601189 N
Eye level: 108.7 mAOD
Direction of view: 105°
Nearest turbine: 3565 m

Horizontal field of view: 90° (cylindrical projection)
Principal distance: 522 mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

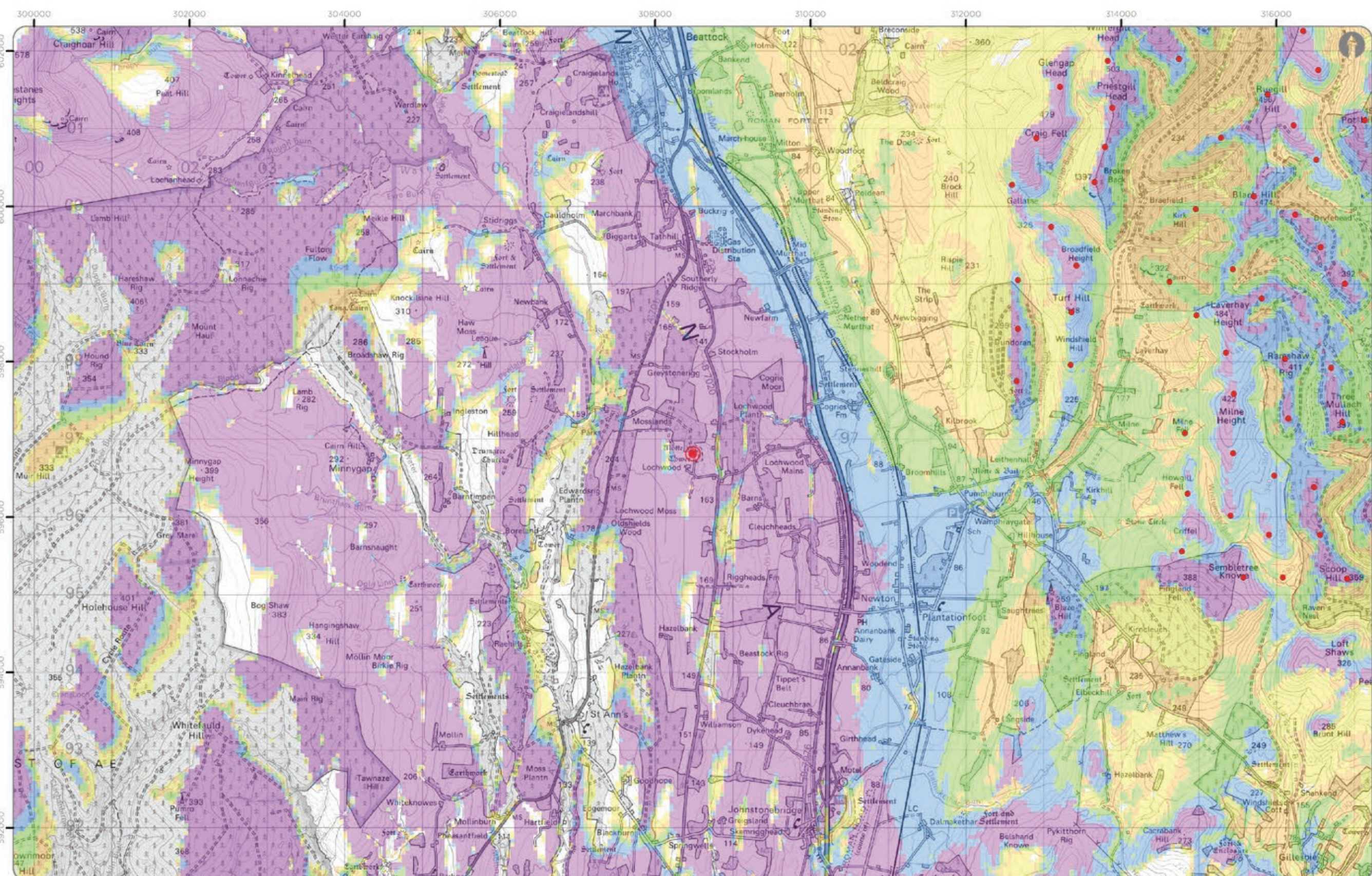
Camera: N/A
Lens: N/A
Camera height: 1.5 m
Date and time: N/A

Figure: 9.7d
Cultural Heritage Viewpoint 2: SM676: Milton, Roman Fort, fortlet and camps

Scoop Hill



Viewpoint Location Plan Baseline Panorama (90 Degree View)
Scale: 1:200,000
0 2.5 5 10 Km



Viewpoint Location Plan (53.5 Degree View)
Scale: 1:50,000
0 0.5 1 2 Km

Note:
1. ZTV: Created using ESRI ArcGIS 10.7.1 software using the following data and parameters:
Blade tip height: 180 / 200 / 225 / 250m
DTM Data: OS Terrain 50 DTM
Observer height: 2m
No surface features, such as buildings or trees, were included in the analysis.
Earth curvature and light refraction have been included in the calculations.
2. © Crown copyright and database rights 2020 Ordnance Survey 0100031673.

Legend

- Proposed Turbine Location

Cumulative Wind Farm Status:
(December 2019)

- Operational
- Under Construction
- Consented
- Appeal / Application

Blade Tip Zone of Theoretical Visibility

No. of Theoretically Visible Turbines

- 1 - 15
- 16 - 30
- 31 - 45
- 46 - 60
- 61 - 75

Viewpoint:

- 90 Degree Field of View
- No 53.5 Degree Field of View

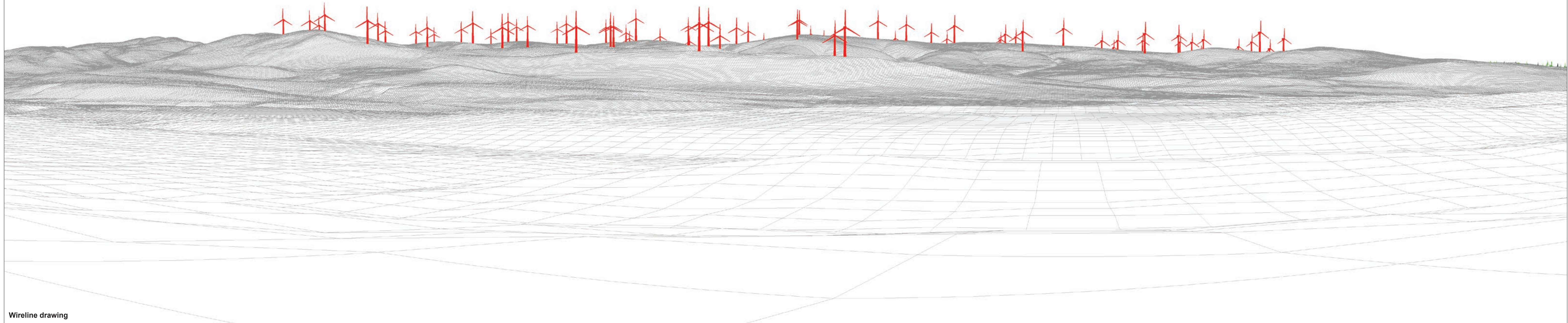
SCOOP HILL WIND FARM

Figure 9.8a
Viewpoint 3: SM698: Lochwood Castle

Ref No: 160971	Created By: LA	Rev No: 2
	Drawing Size: A3	Date: 10/07/2020
Coordinate System: BNG OS GB 1936 Datum		

Proposed Development (4.3km)

Ewe Hill (21.0km)
Crossdykes Resub (19.0km)
Hopsrig (20.1km) Little Hartfell (15.9km)
Loganhead (22.2km)



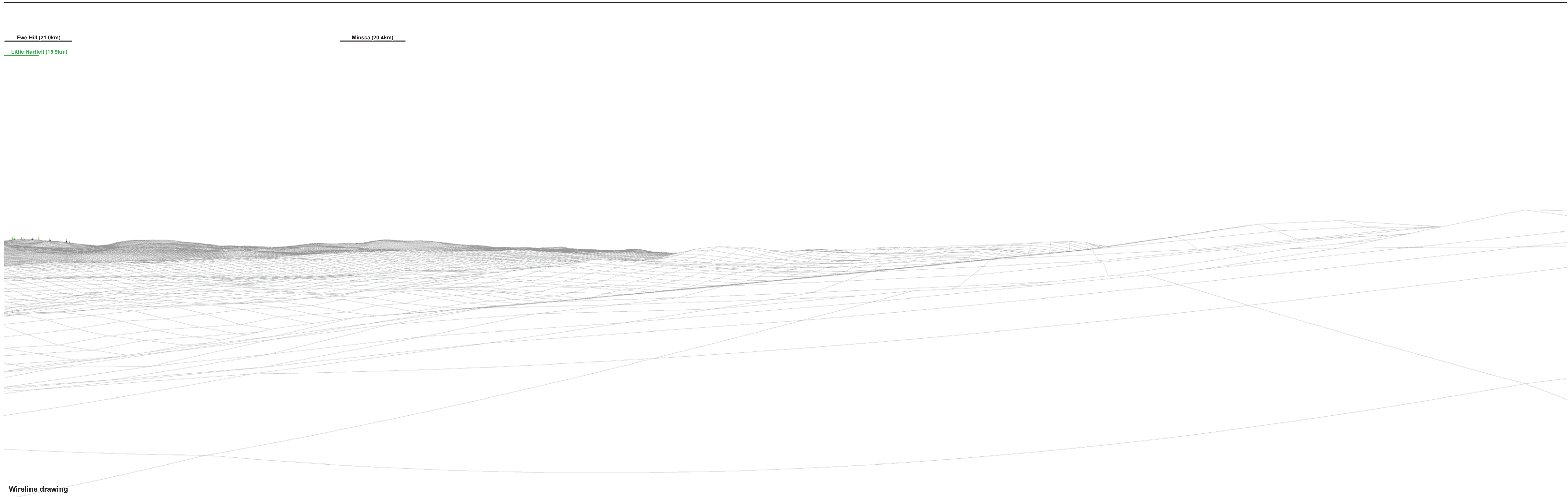
Wireline drawing

OS reference: 308483 E 596816 N
Eye level: 182.4 mAOD
Direction of view: 74°
Nearest turbine: 4271 m

Horizontal field of view: 90° (cylindrical projection)
Principal distance: 522 mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

Camera: N/A
Lens: N/A
Camera height: 1.5 m
Date and time: N/A

Figure: 9.8b
Cultural Heritage Viewpoint 3: SM698: Lochwood Castle
Scoop Hill
© Crown copyright, All rights reserved (2019). Licence number 0100031673



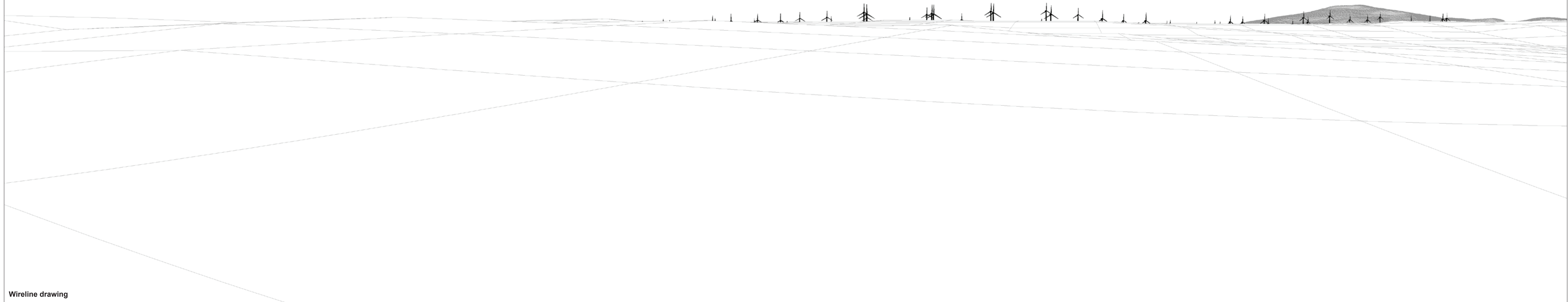
Wireline drawing

OS reference: 308483 E 596816 N
 Eye level: 182.4 mAOD
 Direction of view: 164°
 Nearest turbine: 4271 m

Horizontal field of view: 90° (cylindrical projection)
 Principal distance: 522 mm
 Paper size: 841 x 297 mm (half A1)
 Correct printed image size: 820 x 260 mm

Camera: N/A
 Lens: N/A
 Camera height: 1.5 m
 Date and time: N/A

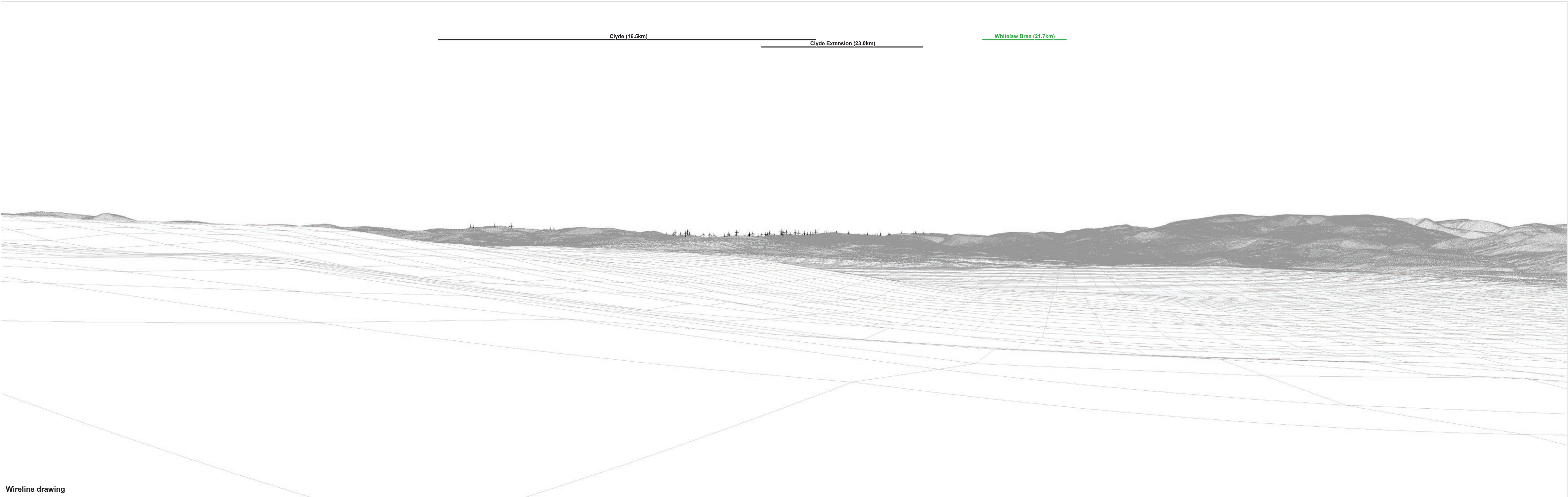
Harestones Forest of Ae (6.5km)
Minnygap (5.3km)



Wireline drawing

OS reference:	308483 E 596816 N	Horizontal field of view:	90° (cylindrical projection)	Camera:	N/A
Eye level:	182.4 mAOD	Principal distance:	522 mm	Lens:	N/A
Direction of view:	254°	Paper size:	841 x 297 mm (half A1)	Camera height:	1.5 m
Nearest turbine:	4271 m	Correct printed image size:	820 x 260 mm	Date and time:	N/A

Figure: 9.8d
Cultural Heritage Viewpoint 3: SM698: Lochwood Castle
Scoop Hill

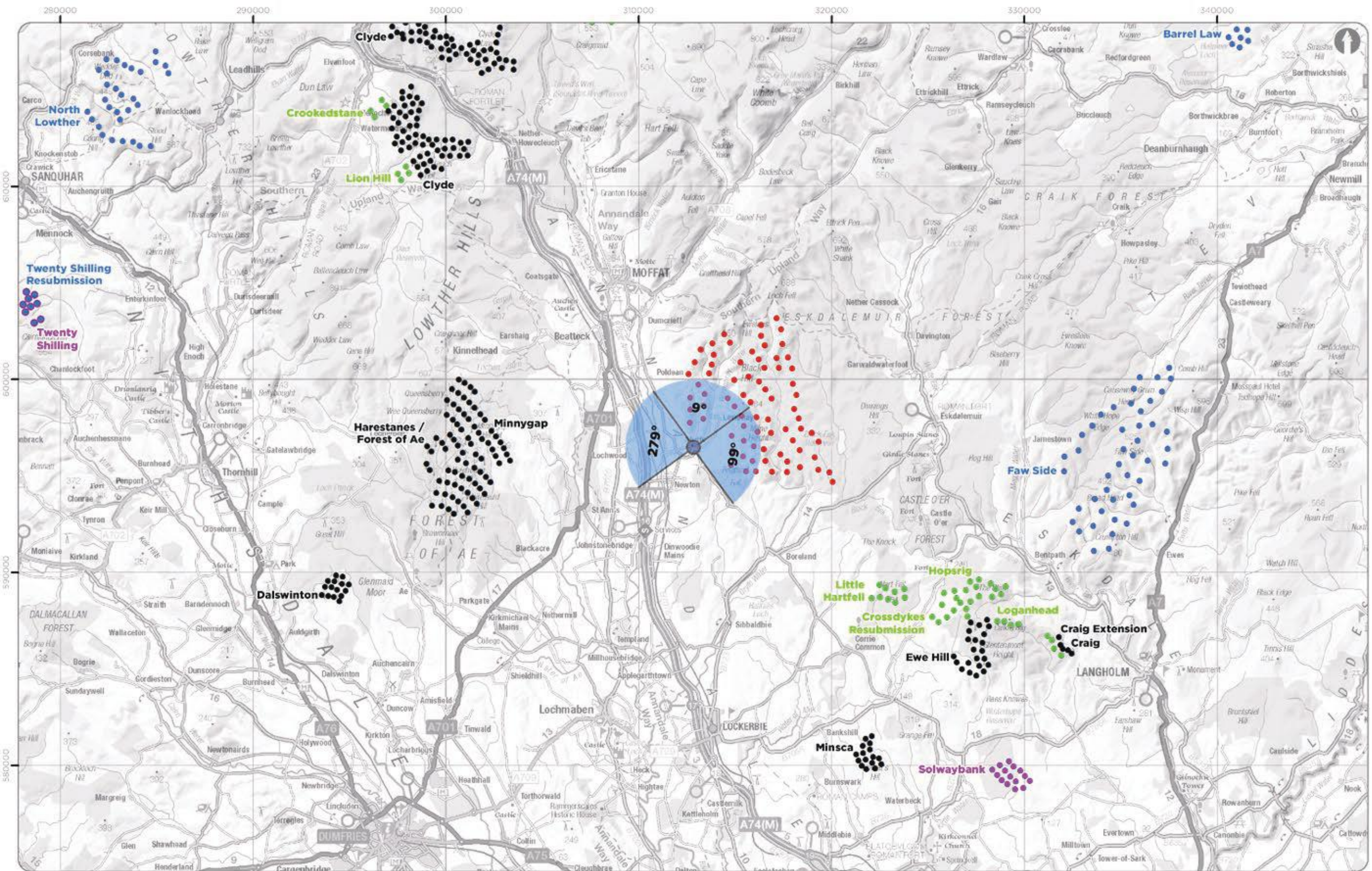


Wireline drawing

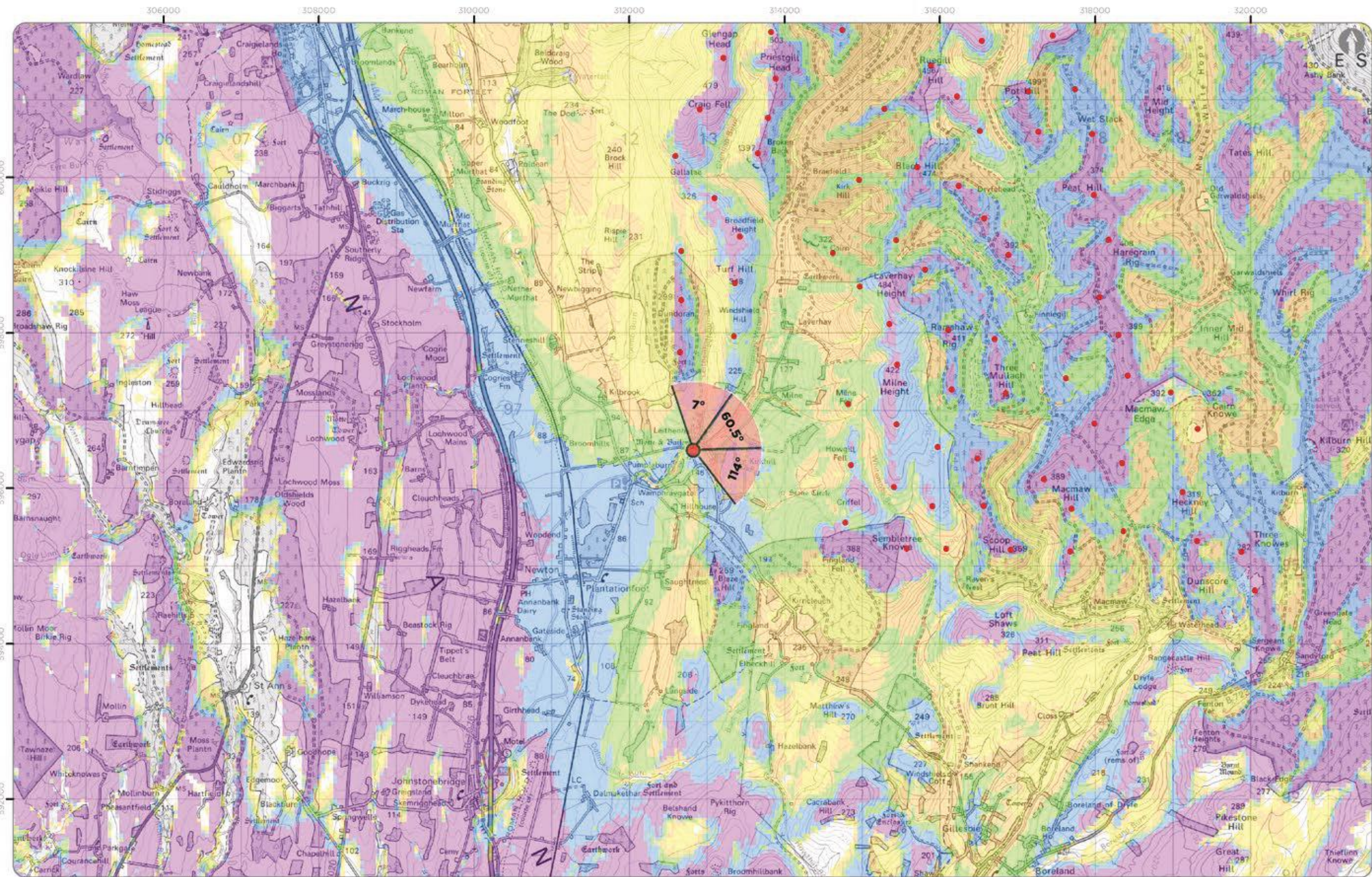
OS reference: 308483 E 596816 N
 Eye level: 182.4 mAOD
 Direction of view: 344°
 Nearest turbine: 4271 m

Horizontal field of view: 90° (cylindrical projection)
 Principal distance: 522 mm
 Paper size: 841 x 297 mm (half A1)
 Correct printed image size: 820 x 260 mm

Camera: N/A
 Lens: N/A
 Camera height: 1.5 m
 Date and time: N/A



Viewpoint Location Plan Baseline Panorama (90 Degree View)
Scale: 1:200,000
0 2.5 5 10 Km



Viewpoint Location Plan (53.5 Degree View)
Scale: 1:50,000
0 0.5 1 2 Km

Note:
1. ZTV: Created using ESRI ArcGIS 10.7.1 software using the following data and parameters:
Blade tip height: 180 / 200 / 225 / 250m
DTM Data: OS Terrain 50 DTM
Observer height: 2m
No surface features, such as buildings or trees, were included in the analysis.
Earth curvature and light refraction have been included in the calculations.
2. © Crown copyright and database rights 2020 Ordnance Survey 0100031673.

Legend

- Proposed Turbine Location

Cumulative Wind Farm Status:
(December 2019)

- Operational
- Under Construction
- Consented
- Appeal / Application

Blade Tip Zone of Theoretical Visibility

No. of Theoretically Visible Turbines

- 1 - 15
- 16 - 30
- 31 - 45
- 46 - 60
- 61 - 75

Viewpoint:

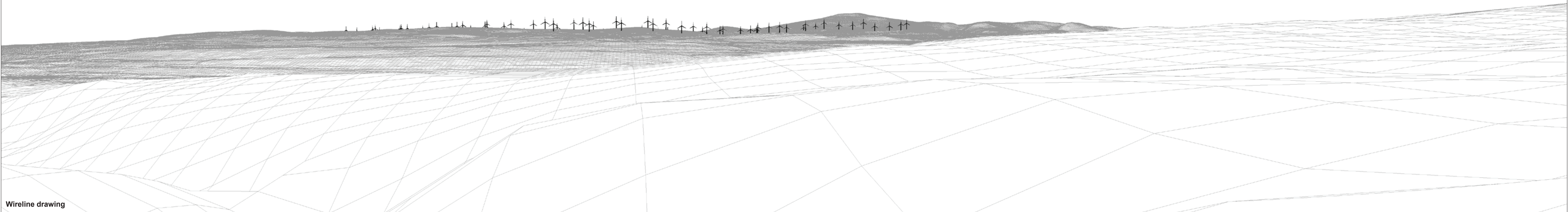
- 90 Degree Field of View
- 53.5 Degree Field of View

SCOOP HILL WIND FARM

Figure 9.9a
Viewpoint 4: SM714: Wamphray, motte and bailey 100m NNE of Wamphray House

Ref No: 160971	Created By: LA	Rev No: 2
	Drawing Size: A3	Date: 10/07/2020
Coordinate System: BNG OS GB 1936 Datum		

Harestanes Forest of Ae (10.7km)
Minnygap (9.5km)



Wireline drawing

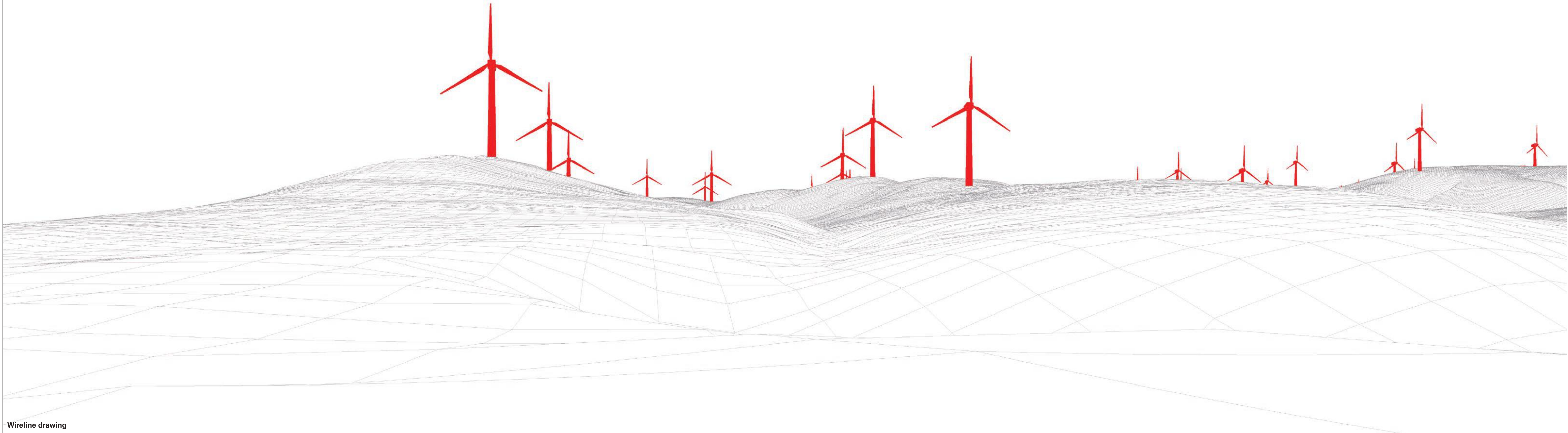
OS reference: 312826 E 596489 N
Eye level: 126.9 mAOD
Direction of view: 279°
Nearest turbine: 1269 m

Horizontal field of view: 90° (cylindrical projection)
Principal distance: 522 mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

Camera: Canon EOS 6D
Lens: Canon EF 50mm f/1.4
Camera height: 1.5 m
Date and time: 20.03.2020 14:03

Cultural Heritage Viewpoint 4: SM714: Wamphray, motte and bailey 100m NNE of Wamphray House
Scoop Hill
Figure: 9.9b

Proposed Development (1.3km)



Wireline drawing

OS reference: 312826 E 596489 N
Eye level: 126.9 mAOD
Direction of view: 9°
Nearest turbine: 1269 m

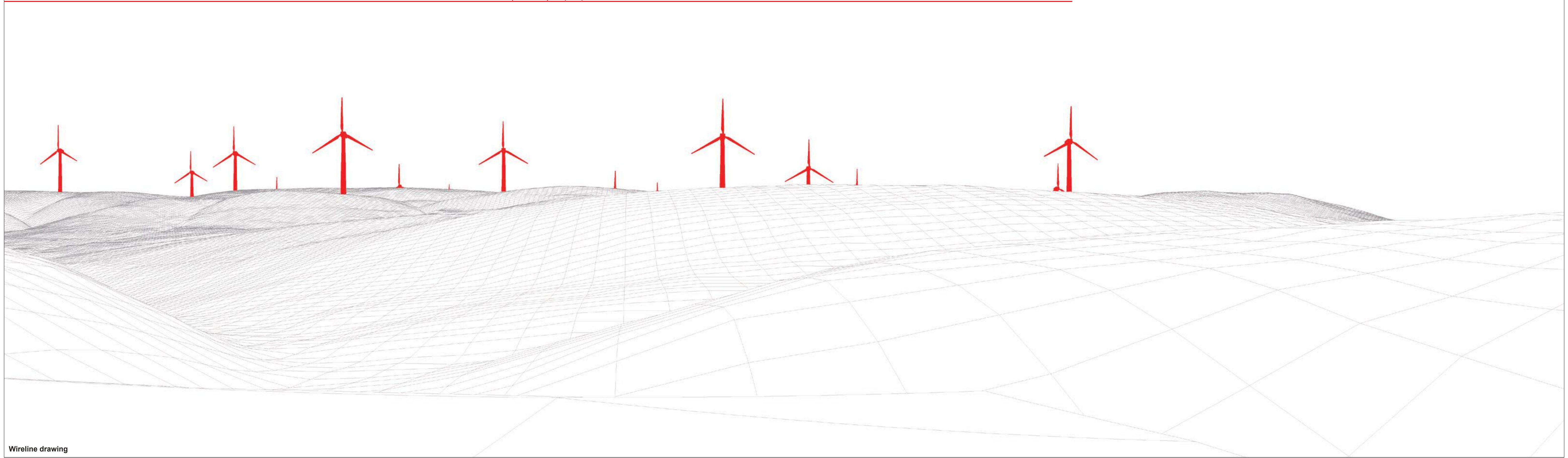
Horizontal field of view: 90° (cylindrical projection)
Principal distance: 522 mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

Camera: Canon EOS 6D
Lens: Canon EF 50mm f/1.4
Camera height: 1.5 m
Date and time: 20.03.2020 14:03

Cultural Heritage Viewpoint 4: SM714: Wamphray, motte and bailey 100m NNE of Wamphray House
Scoop Hill

Figure: 9.9c

Proposed Development (1.3km)



Wireline drawing

OS reference: 312826 E 596489 N
Eye level: 126.9 mAOD
Direction of view: 99°
Nearest turbine: 1269 m

Horizontal field of view: 90° (cylindrical projection)
Principal distance: 522 mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

Camera: Canon EOS 6D
Lens: Canon EF 50mm f/1.4
Camera height: 1.5 m
Date and time: 20.03.2020 14:03

Cultural Heritage Viewpoint 4: SM714: Wamphray, motte and bailey 100m NNE of Wamphray House

Figure: 9.9d

Scoop Hill



Baseline photograph

This image provides landscape and visual context only

OS reference: 312826 E 596489 N	Horizontal field of view: 90° (cylindrical projection)	Camera: Canon EOS 6D
Eye level: 126.9 mAOD	Principal distance: 522 mm	Lens: Canon EF 50mm f/1.4
Direction of view: 279°	Paper size: 841 x 297 mm (half A1)	Camera height: 1.5 m
Nearest turbine: 1269 m	Correct printed image size: 820 x 260 mm	Date and time: 20.03.2020 14:03

Figure: 9.9e
Cultural Heritage Viewpoint 4: SM714: Wamphray, motte and bailey 100m NNE of Wamphray House
Scoop Hill

© Crown copyright. All rights reserved (2019). Licence number 0100031673



Baseline photograph

This image provides landscape and visual context only

OS reference: 312826 E 596489 N	Horizontal field of view: 90° (cylindrical projection)	Camera: Canon EOS 6D
Eye level: 126.9 mAOD	Principal distance: 522 mm	Lens: Canon EF 50mm f/1.4
Direction of view: 9°	Paper size: 841 x 297 mm (half A1)	Camera height: 1.5 m
Nearest turbine: 1269 m	Correct printed image size: 820 x 260 mm	Date and time: 20.03.2020 14:03

Figure: 9.9f
Cultural Heritage Viewpoint 4: SM714: Wamphray, motte and bailey 100m NNE of Wamphray House
Scoop Hill

© Crown copyright. All rights reserved (2019). Licence number 0100031673



Extent of 53.5° planar panorama

Baseline photograph

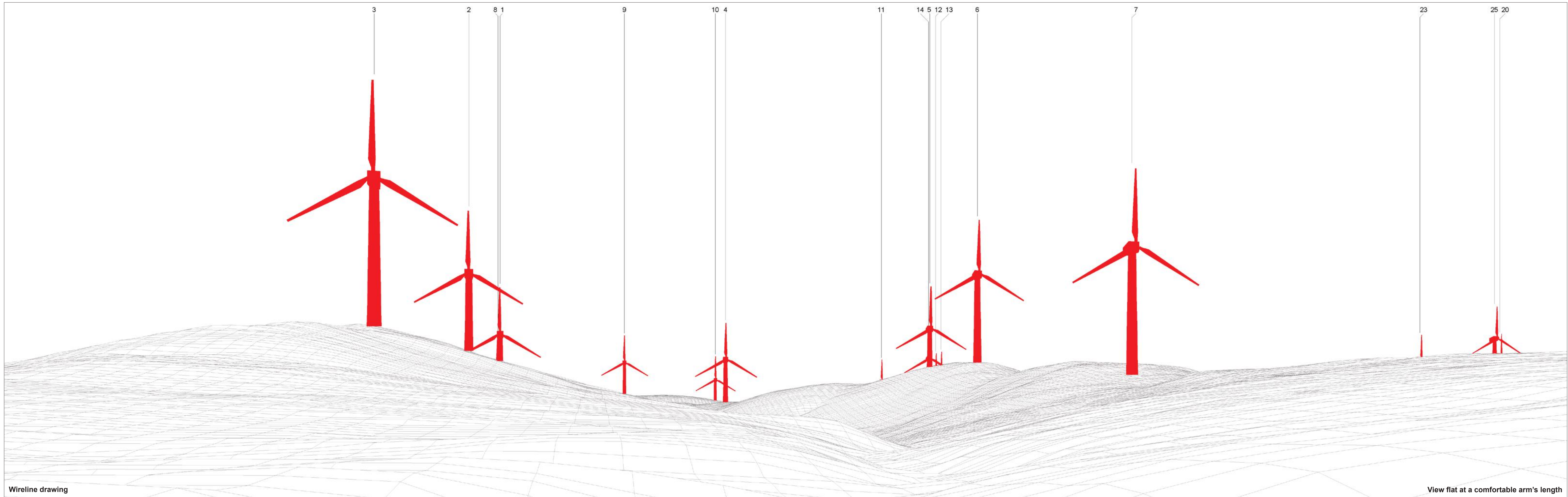
This image provides landscape and visual context only

OS reference: 312826 E 596489 N
Eye level: 126.9 mAOD
Direction of view: 99°
Nearest turbine: 1269 m

Horizontal field of view: 90° (cylindrical projection)
Principal distance: 522 mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

Camera: Canon EOS 6D
Lens: Canon EF 50mm f/1.4
Camera height: 1.5 m
Date and time: 20.03.2020 14:03

Figure: 9.9g
Cultural Heritage Viewpoint 4: SM714: Wamphray, motte and bailey 100m NNE of Wamphray House
Scoop Hill



Wireline drawing

View flat at a comfortable arm's length

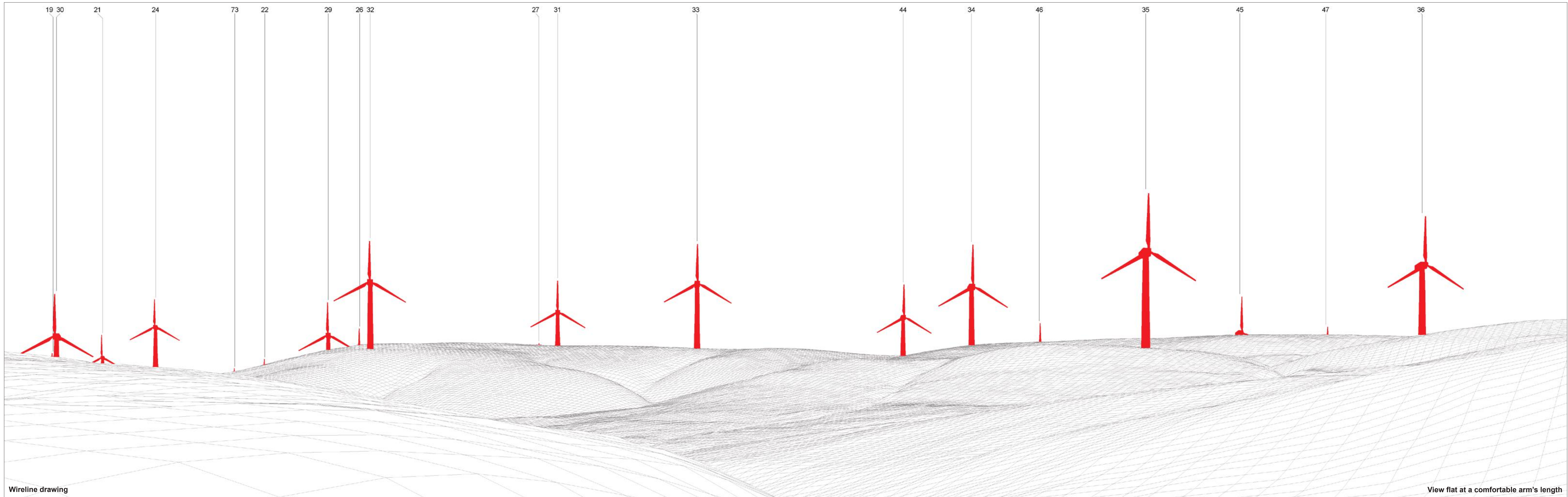
OS reference: 312826 E 596489 N
 Eye level: 126.9 mAOD
 Direction of view: 7°
 Nearest turbine: 1269 m

Horizontal field of view: 53.5° (planar projection)
 Principal distance: 812.5 mm
 Paper size: 841 x 297 mm (half A1)
 Correct printed image size: 820 x 260 mm

Camera: Canon EOS 6D
 Lens: Canon EF 50mm f/1.4
 Camera height: 1.5 m
 Date and time: 20.03.2020 14:03

Cultural Heritage Viewpoint 4: SM714: Wamphray, motte and bailey 100m NNE of Wamphray House
 Scoop Hill

Figure: 9.9h



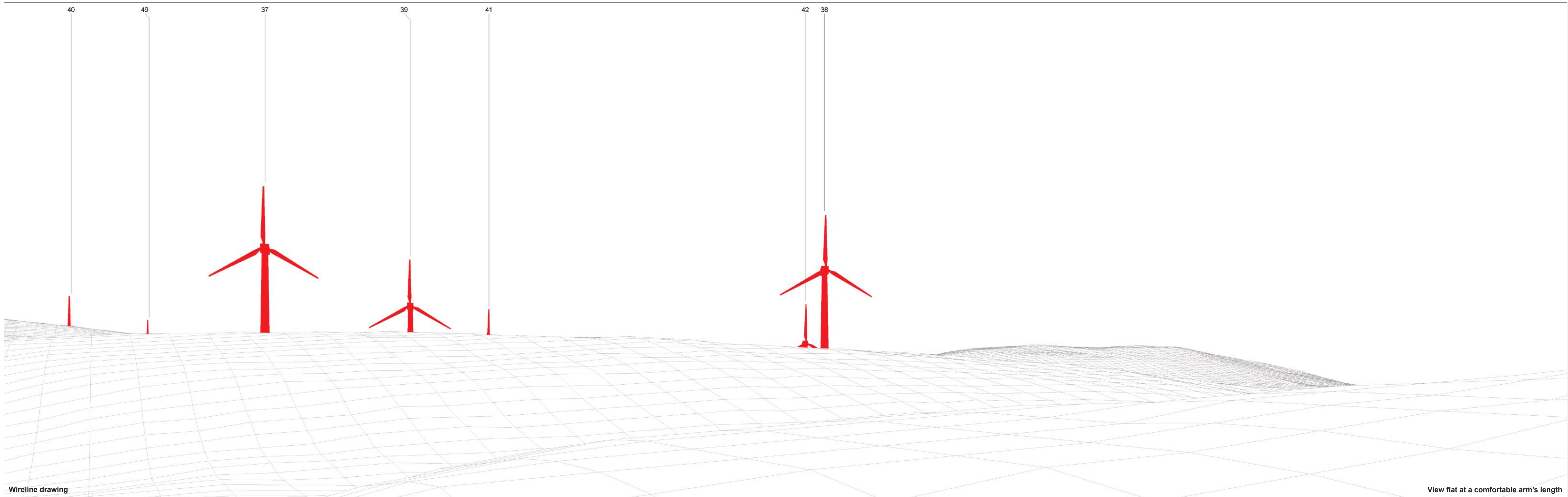
OS reference: 312826 E 596489 N
 Eye level: 126.9 mAOD
 Direction of view: 60.5°
 Nearest turbine: 1269 m

Horizontal field of view: 53.5° (planar projection)
 Principal distance: 812.5 mm
 Paper size: 841 x 297 mm (half A1)
 Correct printed image size: 820 x 260 mm

Camera: Canon EOS 6D
 Lens: Canon EF 50mm f/1.4
 Camera height: 1.5 m
 Date and time: 20.03.2020 14:03

Cultural Heritage Viewpoint 4: SM714: Wamphray, motte and bailey 100m NNE of Wamphray House
 Scoop Hill

Figure: 9.9i



Wireline drawing

View flat at a comfortable arm's length

OS reference: 312826 E 596489 N
 Eye level: 126.9 mAOD
 Direction of view: 114°
 Nearest turbine: 1269 m

Horizontal field of view: 53.5° (planar projection)
 Principal distance: 812.5 mm
 Paper size: 841 x 297 mm (half A1)
 Correct printed image size: 820 x 260 mm

Camera: Canon EOS 6D
 Lens: Canon EF 50mm f/1.4
 Camera height: 1.5 m
 Date and time: 20.03.2020 14:03

Cultural Heritage Viewpoint 4: SM714: Wamphray, motte and bailey 100m NNE of Wamphray House
 Scoop Hill

Figure: 9.9j



Photomontage: Proposed Development

View flat at a comfortable arm's length

OS reference: 312826 E 596489 N	Horizontal field of view: 53.5° (planar projection)	Camera: Canon EOS 6D
Eye level: 126.9 mAOD	Principal distance: 812.5 mm	Lens: Canon EF 50mm f/1.4
Direction of view: 7°	Paper size: 841 x 297 mm (half A1)	Camera height: 1.5 m
Nearest turbine: 1269 m	Correct printed image size: 820 x 260 mm	Date and time: 20.03.2020 14:03

Cultural Heritage Viewpoint 4: SM714: Wamphray, motte and bailey 100m NNE of Wamphray House
Scoop Hill

© Crown copyright. All rights reserved (2019). Licence number 0100031673



Photomontage: Proposed Development

View flat at a comfortable arm's length

OS reference:	312826 E 596489 N	Horizontal field of view:	53.5° (planar projection)	Camera:	Canon EOS 6D
Eye level:	126.9 mAOD	Principal distance:	812.5 mm	Lens:	Canon EF 50mm f/1.4
Direction of view:	60.5°	Paper size:	841 x 297 mm (half A1)	Camera height:	1.5 m
Nearest turbine:	1269 m	Correct printed image size:	820 x 260 mm	Date and time:	20.03.2020 14:03

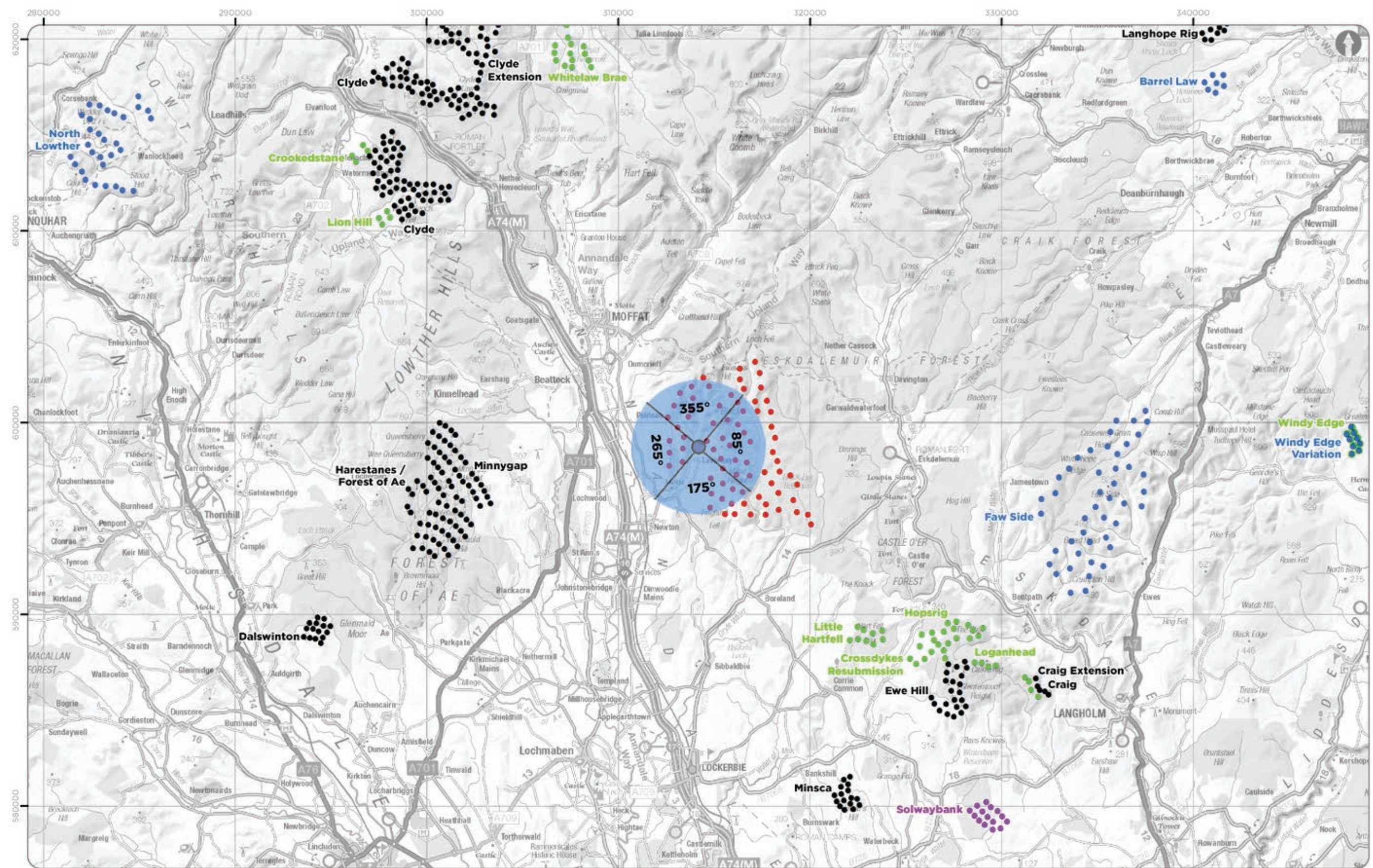
Figure: 9.91
 Cultural Heritage Viewpoint 4: SM714: Wamphray, motte and bailey 100m NNE of Wamphray House
 Scoop Hill
© Crown copyright. All rights reserved (2019). Licence number 0100031673



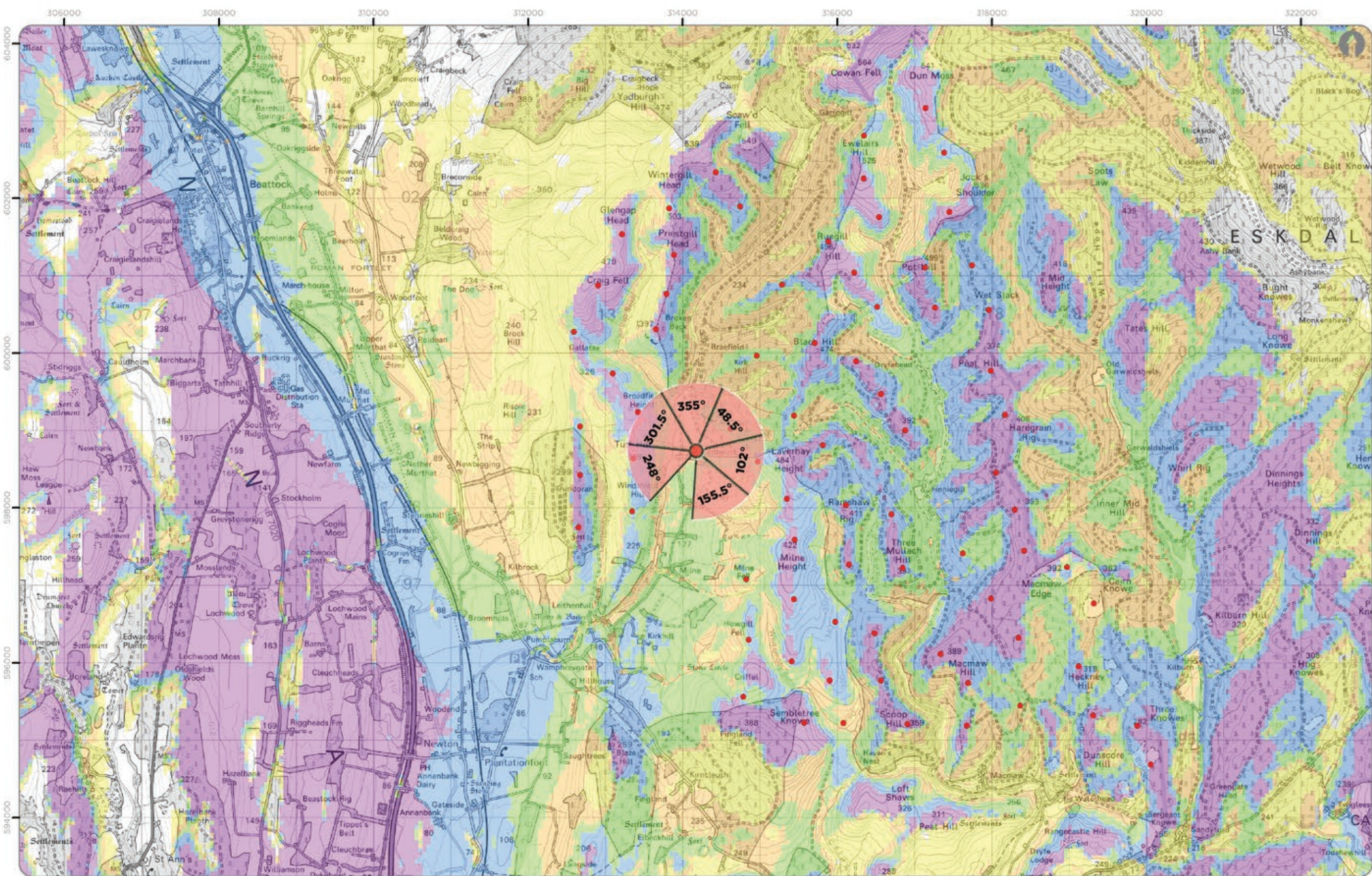
Photomontage: Proposed Development

View flat at a comfortable arm's length

OS reference: 312826 E 596489 N	Horizontal field of view: 53.5° (planar projection)	Camera: Canon EOS 6D	Figure: 9.9m Cultural Heritage Viewpoint 4: SM714: Wamphray, motte and bailey 100m NNE of Wamphray House Scoop Hill <small>© Crown copyright. All rights reserved (2019). Licence number 0100031673</small>
Eye level: 126.9 mAOD	Principal distance: 812.5 mm	Lens: Canon EF 50mm f/1.4	
Direction of view: 114°	Paper size: 841 x 297 mm (half A1)	Camera height: 1.5 m	
Nearest turbine: 1269 m	Correct printed image size: 820 x 260 mm	Date and time: 20.03.2020 14:03	



Viewpoint Location Plan Baseline Panorama (90 Degree View)
Scale: 1:200,000
0 2.5 5 10 Km



Viewpoint Location Plan (53.5 Degree View)
Scale: 1:50,000
0 0.5 1 2 Km

Note:
1. ZTV: Created using ESRI ArcGIS 10.7.1 software using the following data and parameters:
Blade tip height: 180 / 200 / 225 / 250m
DTM Data: OS Terrain 50 DTM
Observer height: 2m
No surface features, such as buildings or trees, were included in the analysis.
Earth curvature and light refraction have been included in the calculations.
2. © Crown copyright and database rights 2020 Ordnance Survey 0100031673.

Legend

- Proposed Turbine Location

Cumulative Wind Farm Status:
(December 2019)

- Operational
- Under Construction
- Consented
- Appeal / Application

Blade Tip Zone of Theoretical Visibility
No. of Theoretically Visible Turbines

- 1 - 15
- 16 - 30
- 31 - 45
- 46 - 60
- 61 - 75

Viewpoint:

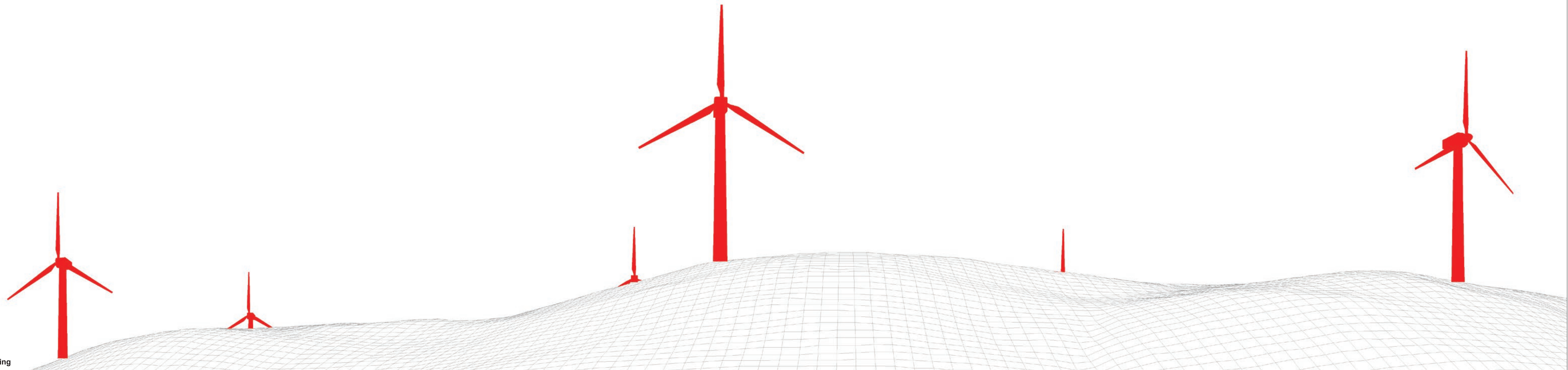
- 90 Degree Field of View
- 53.5 Degree Field of View

SCOOP HILL WIND FARM

Figure 9.10a
Viewpoint 5: SM12721: Laverhay Cottage, enclosure 480m NNE of

Ref No: 160971	Created By: LA	Rev No: 2
	Drawing Size: A3	Date: 10/07/2020

Proposed Development (538m)



Wireline drawing

OS reference: 314170 E 598735 N
Eye level: 220.5 mAOD
Direction of view: 265°
Nearest turbine: 538 m

Horizontal field of view: 90° (cylindrical projection)
Principal distance: 522 mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

Camera: Canon EOS 6D
Lens: Canon EF 50mm f/1.4
Camera height: 1.5 m
Date and time: 20.03.2020 15:35

Cultural Heritage Viewpoint 5: SM12721: Laverhay Cottage, enclosure 480m NNE of
Scoop Hill

Figure: 9.10b

Proposed Development (538m)



Wireline drawing

OS reference: 314170 E 598735 N
Eye level: 220.5 mAOD
Direction of view: 355°
Nearest turbine: 538 m

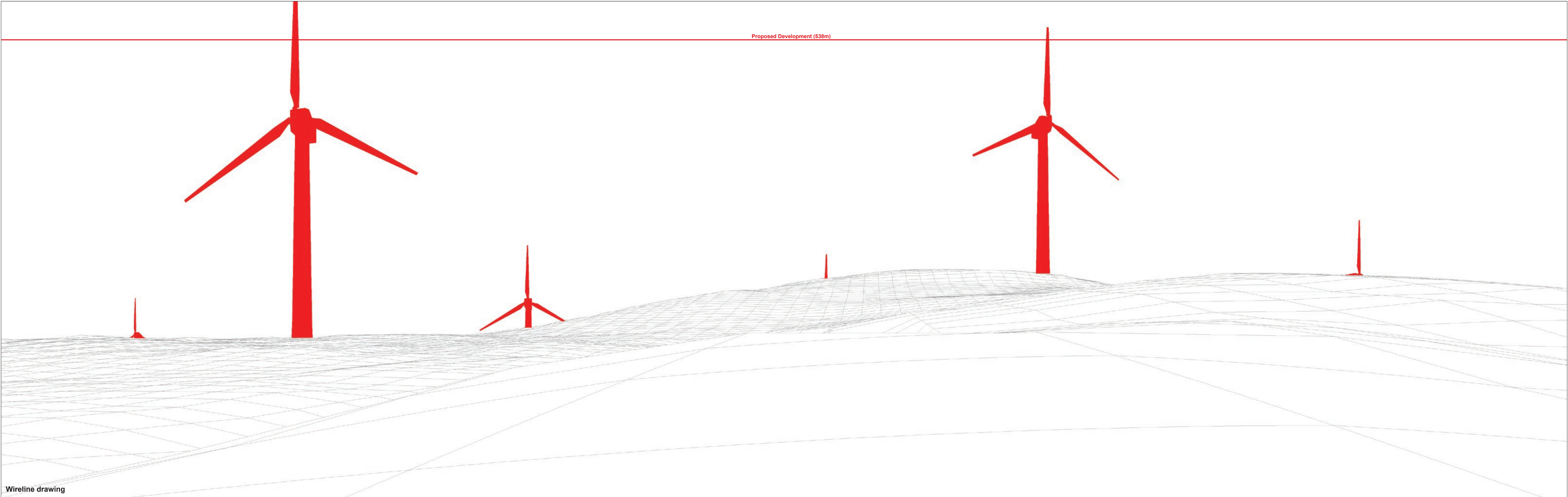
Horizontal field of view: 90° (cylindrical projection)
Principal distance: 522 mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

Camera: Canon EOS 6D
Lens: Canon EF 50mm f/1.4
Camera height: 1.5 m
Date and time: 20.03.2020 15:35

Cultural Heritage Viewpoint 5: SM12721: Laverhay Cottage, enclosure 480m NNE of
Scoop Hill

Figure 9.10c

Proposed Development (538m)



Wireline drawing

OS reference: 314170 E 598735 N
Eye level: 220.5 mAOD
Direction of view: 85°
Nearest turbine: 538 m

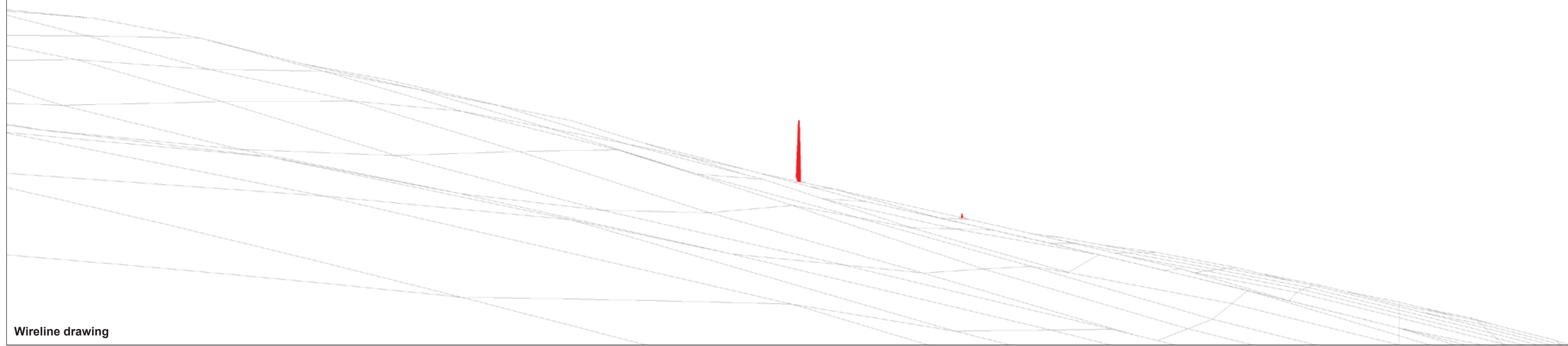
Horizontal field of view: 90° (cylindrical projection)
Principal distance: 522 mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

Camera: Canon EOS 6D
Lens: Canon EF 50mm f/1.4
Camera height: 1.5 m
Date and time: 20.03.2020 15:35

Cultural Heritage Viewpoint 5: SM12721: Laverhay Cottage, enclosure 480m NNE of
Scoop Hill

Figure: 9.10d

Proposed Development (538m)



Wireline drawing

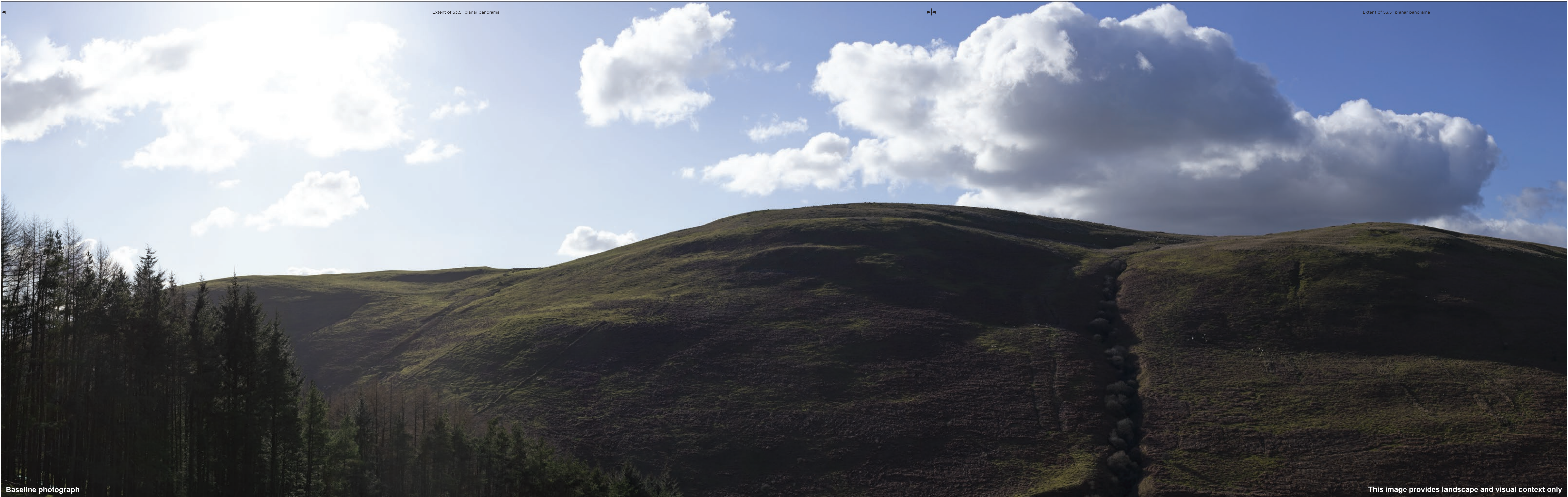
OS reference: 314170 E 598735 N
Eye level: 220.5 mAOD
Direction of view: 175°
Nearest turbine: 538 m

Horizontal field of view: 90° (cylindrical projection)
Principal distance: 522 mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

Camera: Canon EOS 6D
Lens: Canon EF 50mm f/1.4
Camera height: 1.5 m
Date and time: 20.03.2020 15:35

Figure: 9.10e
Cultural Heritage Viewpoint 5: SM12721: Laverhay Cottage, enclosure 480m NNE of

Scoop Hill



Extent of 53.5° planar panorama

Extent of 53.5° planar panorama

Baseline photograph

This image provides landscape and visual context only

OS reference: 314170 E 598735 N	Horizontal field of view: 90° (cylindrical projection)	Camera: Canon EOS 6D
Eye level: 220.5 mAOD	Principal distance: 522 mm	Lens: Canon EF 50mm f/1.4
Direction of view: 265°	Paper size: 841 x 297 mm (half A1)	Camera height: 1.5 m
Nearest turbine: 538 m	Correct printed image size: 820 x 260 mm	Date and time: 20.03.2020 15:35

Figure: 9.10f
 Cultural Heritage Viewpoint 5: SM12721: Laverhay Cottage, enclosure 480m NNE of Scoop Hill

© Crown copyright, All rights reserved (2019). Licence number 0100031673



Baseline photograph

This image provides landscape and visual context only

OS reference:	314170 E 598735 N	Horizontal field of view:	90° (cylindrical projection)	Camera:	Canon EOS 6D
Eye level:	220.5 mAOD	Principal distance:	522 mm	Lens:	Canon EF 50mm f/1.4
Direction of view:	355°	Paper size:	841 x 297 mm (half A1)	Camera height:	1.5 m
Nearest turbine:	538 m	Correct printed image size:	820 x 260 mm	Date and time:	20.03.2020 15:35

Figure: 9.10g
 Cultural Heritage Viewpoint 5: SM12721: Laverhay Cottage, enclosure 480m NNE of Scoop Hill

© Crown copyright. All rights reserved (2019). Licence number 0100031673



Baseline photograph

This image provides landscape and visual context only

OS reference: 314170 E 598735 N	Horizontal field of view: 90° (cylindrical projection)	Camera: Canon EOS 6D	Figure: 9.10h Cultural Heritage Viewpoint 5: SM12721: Laverhay Cottage, enclosure 480m NNE of Scoop Hill
Eye level: 220.5 mAOD	Principal distance: 522 mm	Lens: Canon EF 50mm f/1.4	
Direction of view: 85°	Paper size: 841 x 297 mm (half A1)	Camera height: 1.5 m	
Nearest turbine: 538 m	Correct printed image size: 820 x 260 mm	Date and time: 20.03.2020 15:35	

© Crown copyright. All rights reserved (2019). Licence number 0100031673



Baseline photograph

This image provides landscape and visual context only

OS reference: 314170 E 598735 N
Eye level: 220.5 mAOD
Direction of view: 175°
Nearest turbine: 538 m

Horizontal field of view: 90° (cylindrical projection)
Principal distance: 522 mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

Camera: Canon EOS 6D
Lens: Canon EF 50mm f/1.4
Camera height: 1.5 m
Date and time: 20.03.2020 15:35

Figure: 9.10i
Cultural Heritage Viewpoint 5: SM12721: Laverhay Cottage, enclosure 480m NNE of Scoop Hill



Wireline drawing

View flat at a comfortable arm's length

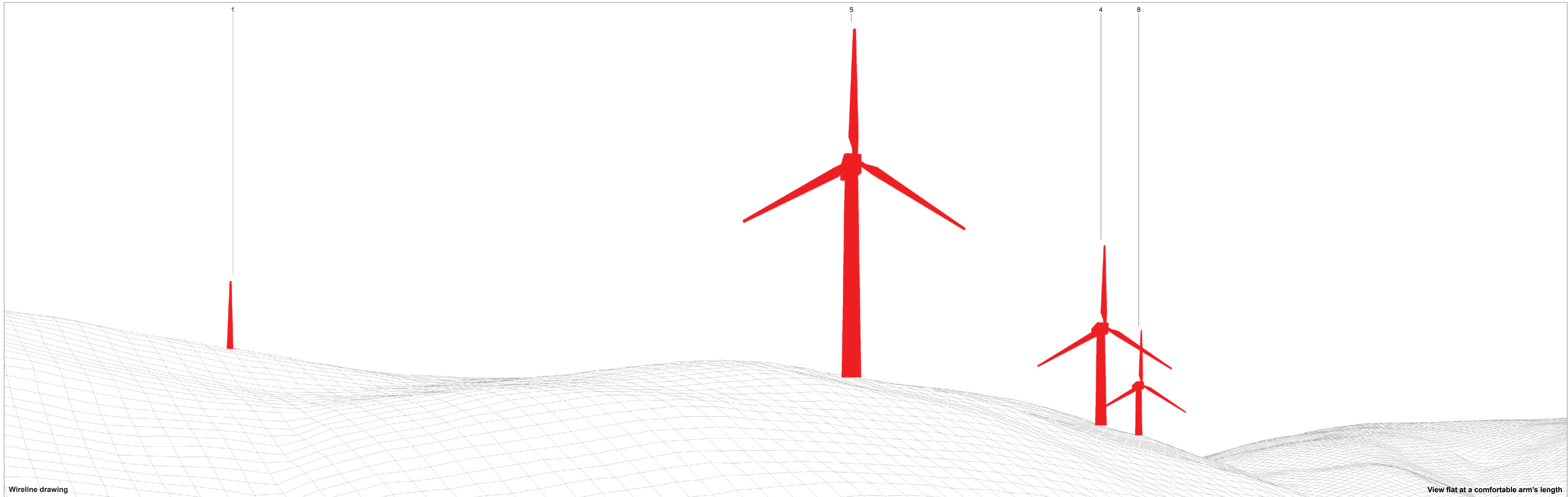
OS reference: 314170 E 598735 N
 Eye level: 220.5 mAOD
 Direction of view: 248°
 Nearest turbine: 538 m

Horizontal field of view: 53.5° (planar projection)
 Principal distance: 812.5 mm
 Paper size: 841 x 297 mm (half A1)
 Correct printed image size: 820 x 260 mm

Camera: Canon EOS 6D
 Lens: Canon EF 50mm f/1.4
 Camera height: 1.5 m
 Date and time: 20.03.2020 15:35

Cultural Heritage Viewpoint 5: SM12721: Laverhay Cottage, enclosure 480m NNE of
 Scoop Hill

Figure: 9.10j



Wireline drawing

View flat at a comfortable arm's length

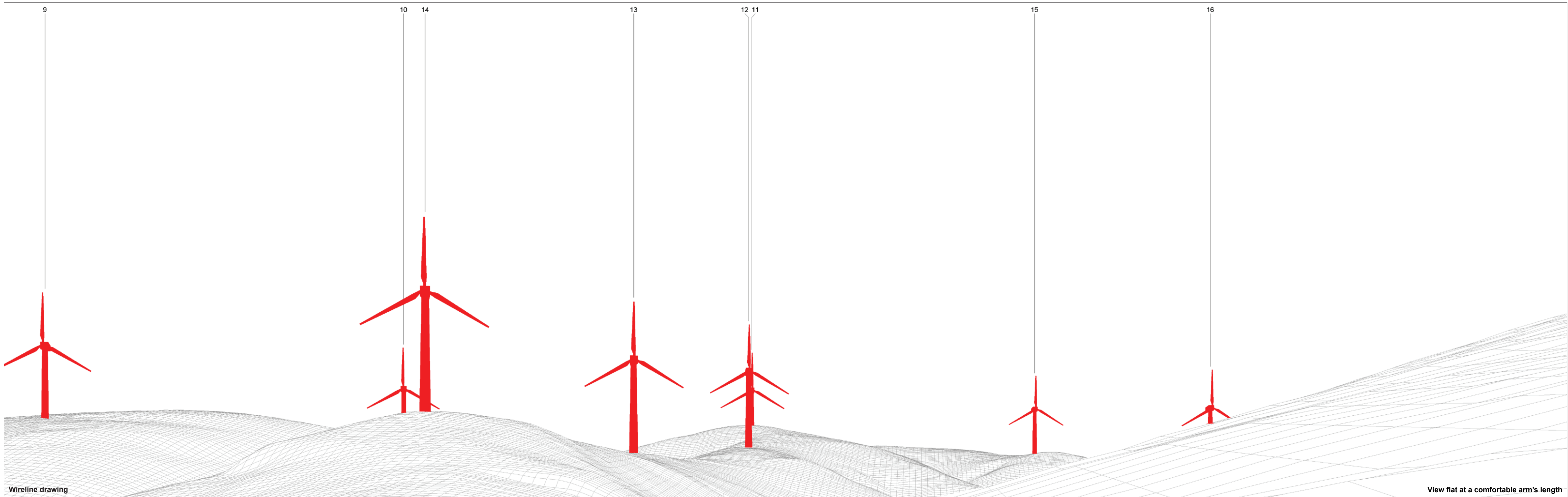
OS reference: 314170 E 598735 N
 Eye level: 220.5 mAOD
 Direction of view: 301.5°
 Nearest turbine: 538 m

Horizontal field of view: 53.5° (planar projection)
 Principal distance: 812.5 mm
 Paper size: 841 x 297 mm (half A1)
 Correct printed image size: 820 x 260 mm

Camera: Canon EOS 6D
 Lens: Canon EF 50mm f/1.4
 Camera height: 1.5 m
 Date and time: 20.03.2020 15:35

Cultural Heritage Viewpoint 5: SM12721: Laverhay Cottage, enclosure 480m NNE of
 Scoop Hill

Figure: 9.10k



Wireline drawing

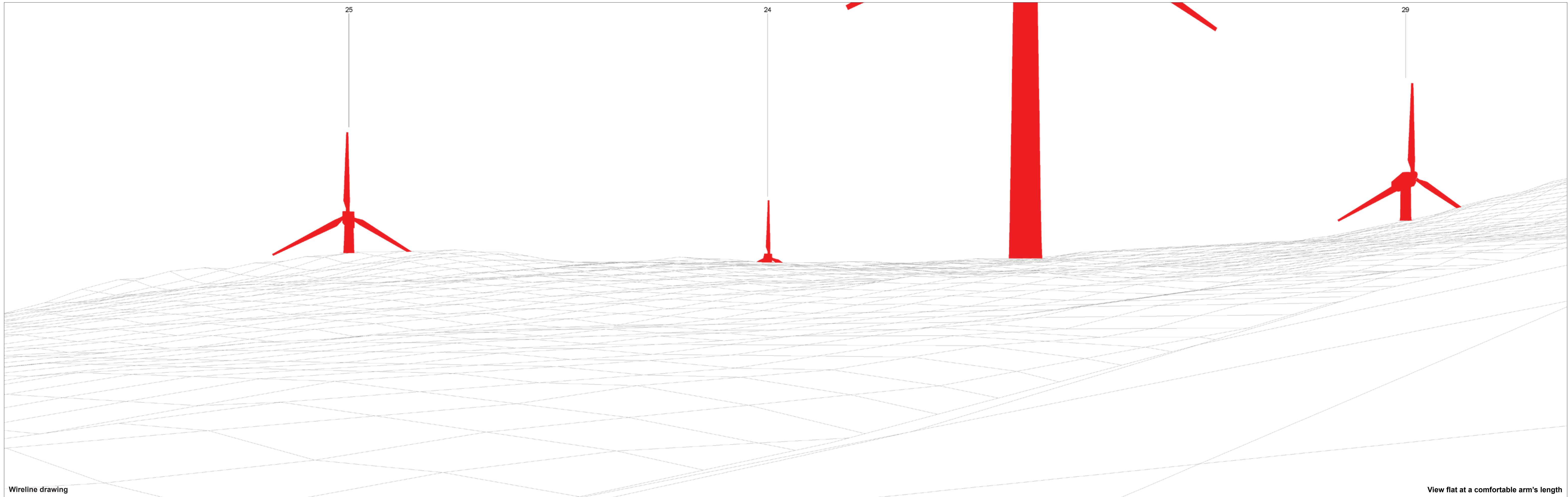
View flat at a comfortable arm's length

OS reference: 314170 E 598735 N
 Eye level: 220.5 mAOD
 Direction of view: 355°
 Nearest turbine: 538 m

Horizontal field of view: 53.5° (planar projection)
 Principal distance: 812.5 mm
 Paper size: 841 x 297 mm (half A1)
 Correct printed image size: 820 x 260 mm

Camera: Canon EOS 6D
 Lens: Canon EF 50mm f/1.4
 Camera height: 1.5 m
 Date and time: 20.03.2020 15:35

Figure: 9.10I
 Cultural Heritage Viewpoint 5: SM12721: Laverhay Cottage, enclosure 480m NNE of
 Scoop Hill



Wireline drawing

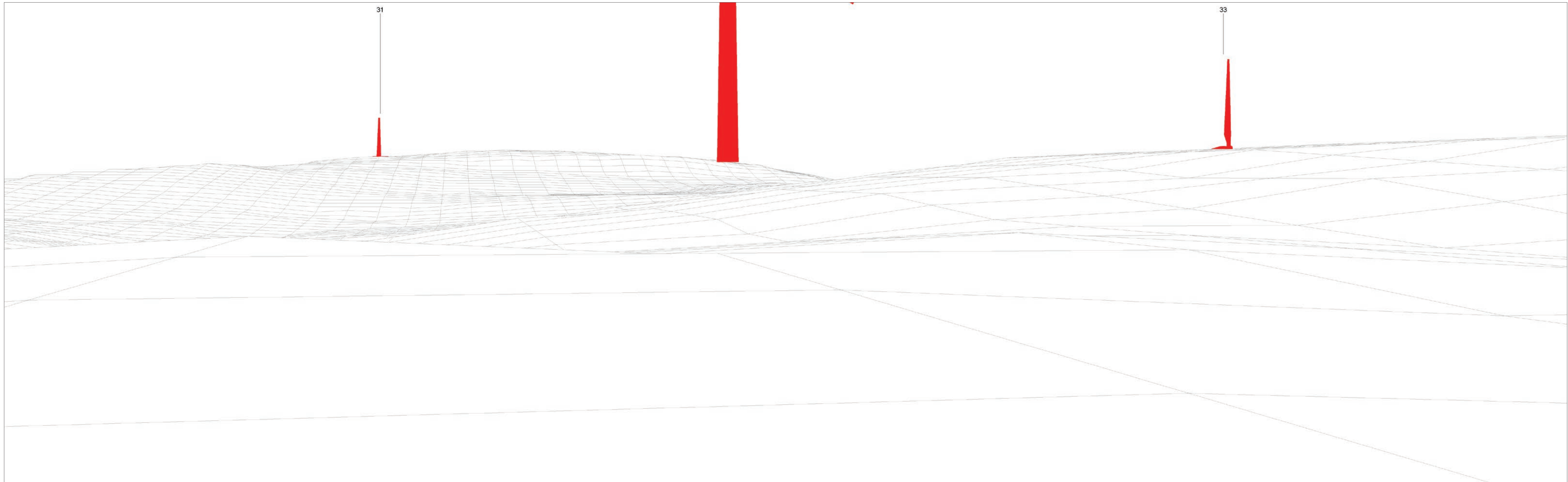
View flat at a comfortable arm's length

OS reference: 314170 E 598735 N
 Eye level: 220.5 mAOD
 Direction of view: 48.5°
 Nearest turbine: 538 m

Horizontal field of view: 53.5° (planar projection)
 Principal distance: 812.5 mm
 Paper size: 841 x 297 mm (half A1)
 Correct printed image size: 820 x 260 mm

Camera: Canon EOS 6D
 Lens: Canon EF 50mm f/1.4
 Camera height: 1.5 m
 Date and time: 20.03.2020 15:35

Figure: 9.10m
 Cultural Heritage Viewpoint 5: SM12721: Laverhay Cottage, enclosure 480m NNE of
 Scoop Hill



Wireline drawing

View flat at a comfortable arm's length

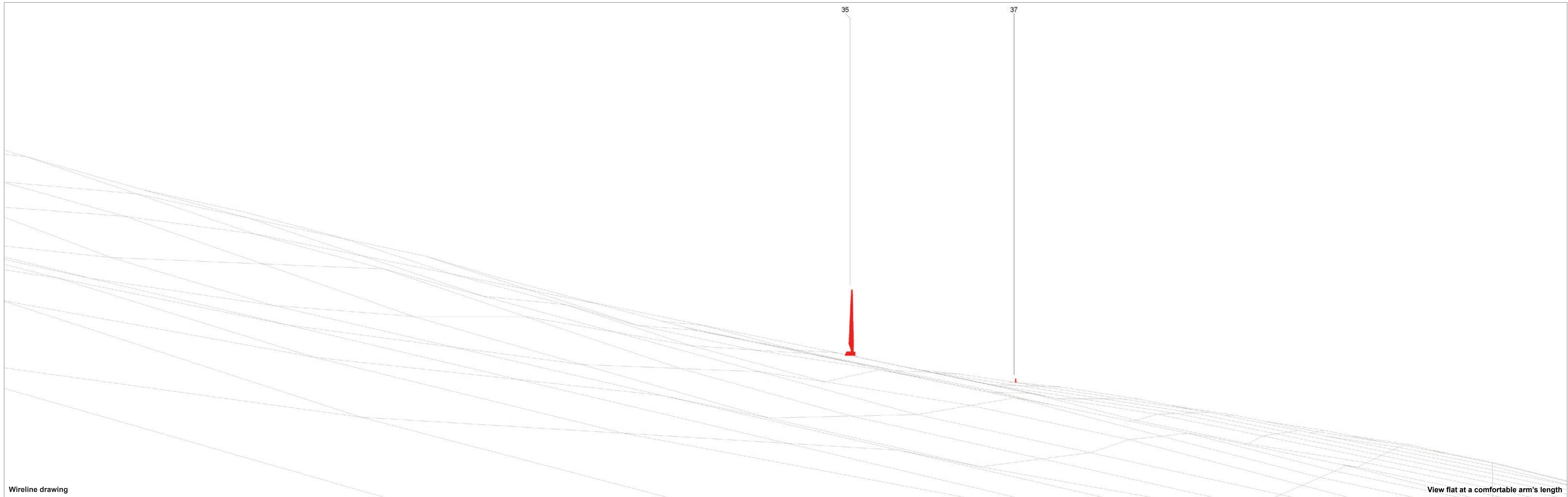
OS reference: 314170 E 598735 N
 Eye level: 220.5 mAOD
 Direction of view: 102°
 Nearest turbine: 538 m

Horizontal field of view: 53.5° (planar projection)
 Principal distance: 812.5 mm
 Paper size: 841 x 297 mm (half A1)
 Correct printed image size: 820 x 260 mm

Camera: Canon EOS 6D
 Lens: Canon EF 50mm f/1.4
 Camera height: 1.5 m
 Date and time: 20.03.2020 15:35

Cultural Heritage Viewpoint 5: SM12721: Laverhay Cottage, enclosure 480m NNE of
 Scoop Hill

Figure: 9.10n



Wireline drawing

View flat at a comfortable arm's length

OS reference: 314170 E 598735 N
 Eye level: 220.5 mAOD
 Direction of view: 155.5°
 Nearest turbine: 538 m

Horizontal field of view: 53.5° (planar projection)
 Principal distance: 812.5 mm
 Paper size: 841 x 297 mm (half A1)
 Correct printed image size: 820 x 260 mm

Camera: Canon EOS 6D
 Lens: Canon EF 50mm f/1.4
 Camera height: 1.5 m
 Date and time: 20.03.2020 15:35

Cultural Heritage Viewpoint 5: SM12721: Laverhay Cottage, enclosure 480m NNE of
 Scoop Hill

Figure: 9.10o



Photomontage: Proposed Development

View flat at a comfortable arm's length

OS reference: 314170 E 598735 N	Horizontal field of view: 53.5° (planar projection)	Camera: Canon EOS 6D	Figure: 9.10p Cultural Heritage Viewpoint 5: SM12721: Laverhay Cottage, enclosure 480m NNE of Scoop Hill <small>© Crown copyright, All rights reserved (2019). Licence number 0100031673</small>
Eye level: 220.5 mAOD	Principal distance: 812.5 mm	Lens: Canon EF 50mm f/1.4	
Direction of view: 248°	Paper size: 841 x 297 mm (half A1)	Camera height: 1.5 m	
Nearest turbine: 538 m	Correct printed image size: 820 x 260 mm	Date and time: 20.03.2020 15:35	



Photomontage: Proposed Development

View flat at a comfortable arm's length

OS reference: 314170 E 598735 N
Eye level: 220.5 mAOD
Direction of view: 301.5°
Nearest turbine: 538 m

Horizontal field of view: 53.5° (planar projection)
Principal distance: 812.5 mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

Camera: Canon EOS 6D
Lens: Canon EF 50mm f/1.4
Camera height: 1.5 m
Date and time: 20.03.2020 15:35

Figure: 9.10q
Cultural Heritage Viewpoint 5: SM12721: Laverhay Cottage, enclosure 480m NNE of
Scoop Hill

© Crown copyright. All rights reserved (2019). Licence number 0100031673



Photomontage: Proposed Development

View flat at a comfortable arm's length

OS reference:	314170 E 598735 N	Horizontal field of view:	53.5° (planar projection)	Camera:	Canon EOS 6D
Eye level:	220.5 mAOD	Principal distance:	812.5 mm	Lens:	Canon EF 50mm f/1.4
Direction of view:	355°	Paper size:	841 x 297 mm (half A1)	Camera height:	1.5 m
Nearest turbine:	538 m	Correct printed image size:	820 x 260 mm	Date and time:	20.03.2020 15:35

Figure 9.10r
Cultural Heritage Viewpoint 5: SM12721: Laverhay Cottage, enclosure 480m NNE of Scoop Hill

© Crown copyright. All rights reserved (2019). Licence number 0100031673



Photomontage: Proposed Development

View flat at a comfortable arm's length

OS reference: 314170 E 598735 N
Eye level: 220.5 mAOD
Direction of view: 48.5°
Nearest turbine: 538 m

Horizontal field of view: 53.5° (planar projection)
Principal distance: 812.5 mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

Camera: Canon EOS 6D
Lens: Canon EF 50mm f/1.4
Camera height: 1.5 m
Date and time: 20.03.2020 15:35

Figure: 9.10s
Cultural Heritage Viewpoint 5: SM12721: Laverhay Cottage, enclosure 480m NNE of Scoop Hill

© Crown copyright. All rights reserved (2019). Licence number 0100031673



Photomontage: Proposed Development

View flat at a comfortable arm's length

OS reference:	314170 E 598735 N	Horizontal field of view:	53.5° (planar projection)	Camera:	Canon EOS 6D
Eye level:	220.5 mAOD	Principal distance:	812.5 mm	Lens:	Canon EF 50mm f/1.4
Direction of view:	102°	Paper size:	841 x 297 mm (half A1)	Camera height:	1.5 m
Nearest turbine:	538 m	Correct printed image size:	820 x 260 mm	Date and time:	20.03.2020 15:35

Figure: 9.10t
Cultural Heritage Viewpoint 5: SM12721: Laverhay Cottage, enclosure 480m NNE of Scoop Hill

© Crown copyright. All rights reserved (2019). Licence number 0100031673



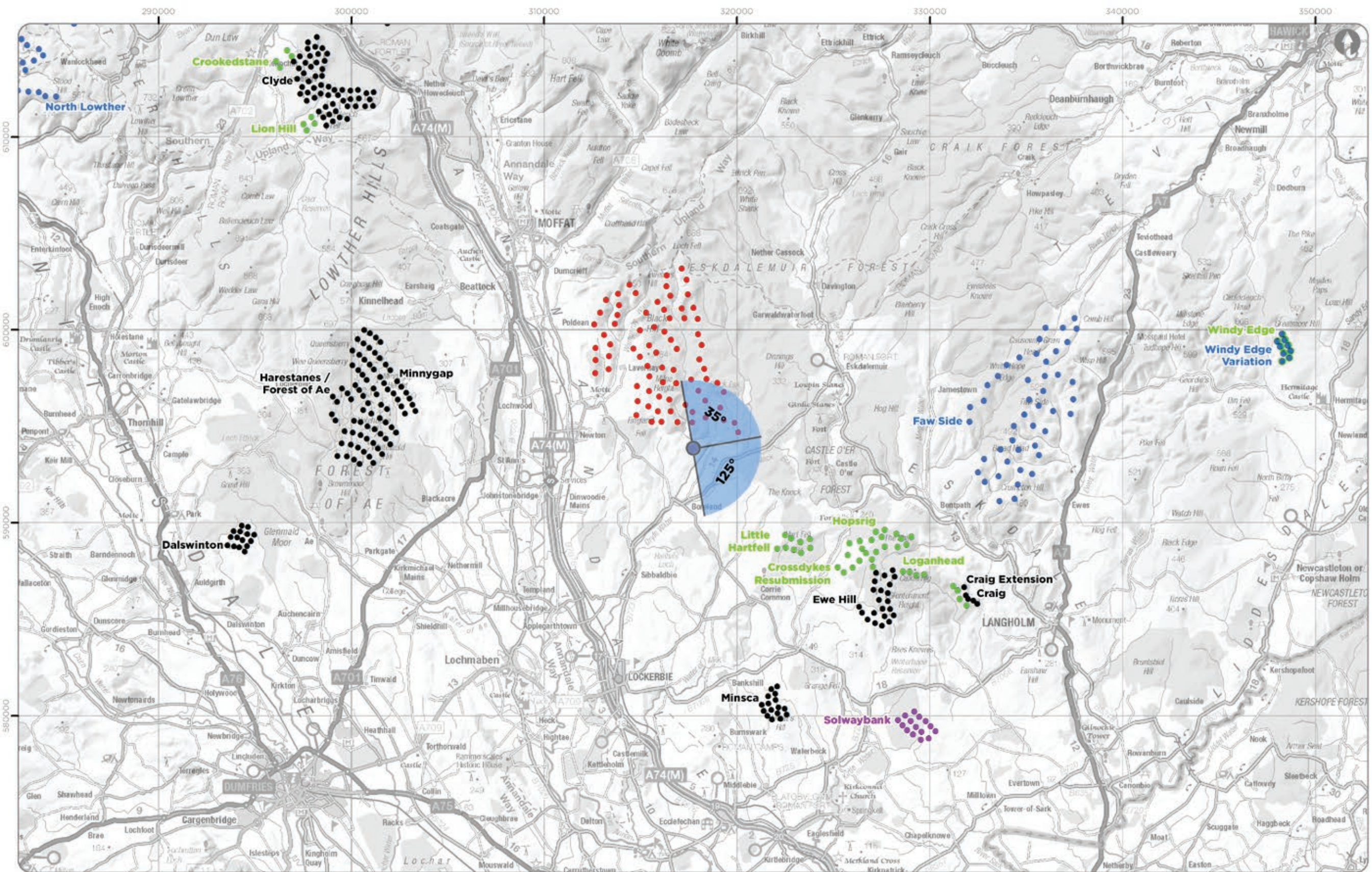
Photomontage: Proposed Development

View flat at a comfortable arm's length

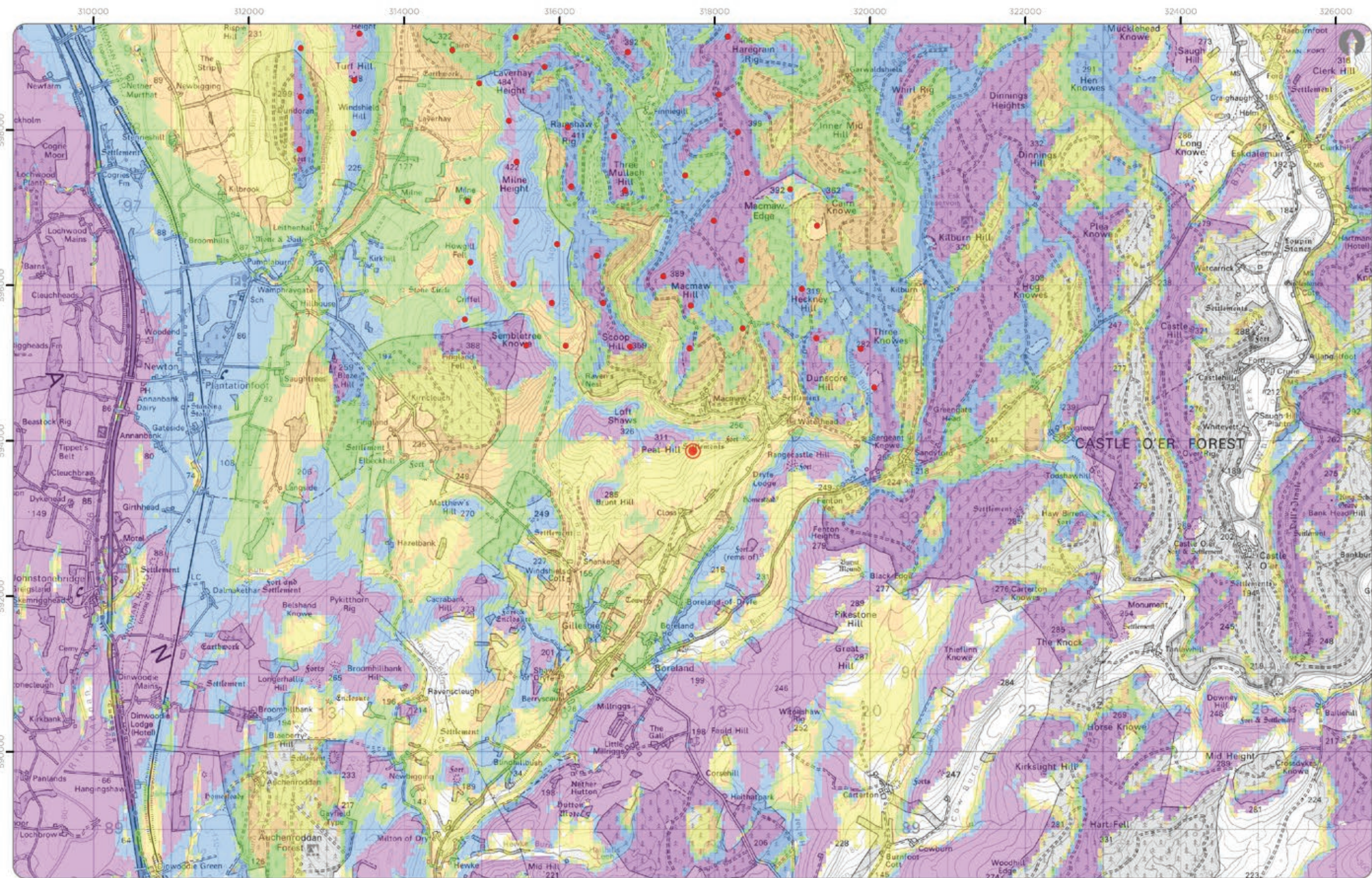
OS reference:	314170 E 598735 N	Horizontal field of view:	53.5° (planar projection)	Camera:	Canon EOS 6D
Eye level:	220.5 mAOD	Principal distance:	812.5 mm	Lens:	Canon EF 50mm f/1.4
Direction of view:	155.5°	Paper size:	841 x 297 mm (half A1)	Camera height:	1.5 m
Nearest turbine:	538 m	Correct printed image size:	820 x 260 mm	Date and time:	20.03.2020 15:35

Figure: 9.10u
Cultural Heritage Viewpoint 5: SM12721: Laverhay Cottage, enclosure 480m NNE of Scoop Hill

© Crown copyright, All rights reserved (2019). Licence number 0100031673



Viewpoint Location Plan Baseline Panorama (90 Degree View)
Scale: 1:200,000
0 2.5 5 10 Km



Viewpoint Location Plan (53.5 Degree View)
Scale: 1:50,000
0 0.5 1 2 Km

Note:
1. ZTV: Created using ESRI ArcGIS 10.7.1 software using the following data and parameters:
Blade tip height: 180 / 200 / 225 / 250m
DTM Data: OS Terrain 50 DTM
Observer height: 2m
No surface features, such as buildings or trees, were included in the analysis.
Earth curvature and light refraction have been included in the calculations.
2. © Crown copyright and database rights 2020 Ordnance Survey 0100031673.

Legend

- Proposed Turbine Location

Cumulative Wind Farm Status:
(December 2019)

- Operational
- Under Construction
- Consented
- Appeal / Application

Blade Tip Zone of Theoretical Visibility

No. of Theoretically Visible Turbines

- 1 - 15
- 16 - 30
- 31 - 45
- 46 - 60
- 61 - 75

Viewpoint:

- 90 Degree Field of View
- No 53.5 Degree Field of View

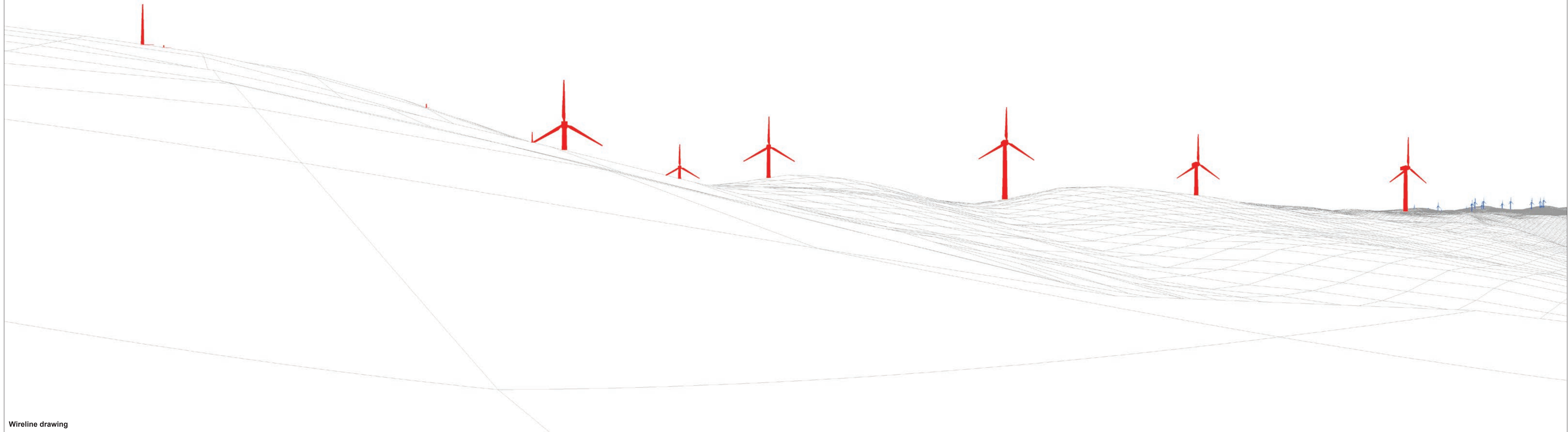
SCOOP HILL WIND FARM

Figure 9.11a
Viewpoint 6: SM10476: Peat Hill, fort and scooped settlement

Ref No: 160971	Created By: LA	Rev No: 2
	Drawing Size: A3	Date: 10/07/2020
Coordinate System: BNG OS GB 1936 Datum		

Proposed Development (1.3km)

Faw Side (14.4km)



Wireline drawing

OS reference: 317718 E 593864 N
Eye level: 254.6 mAOD
Direction of view: 35°
Nearest turbine: 1322 m

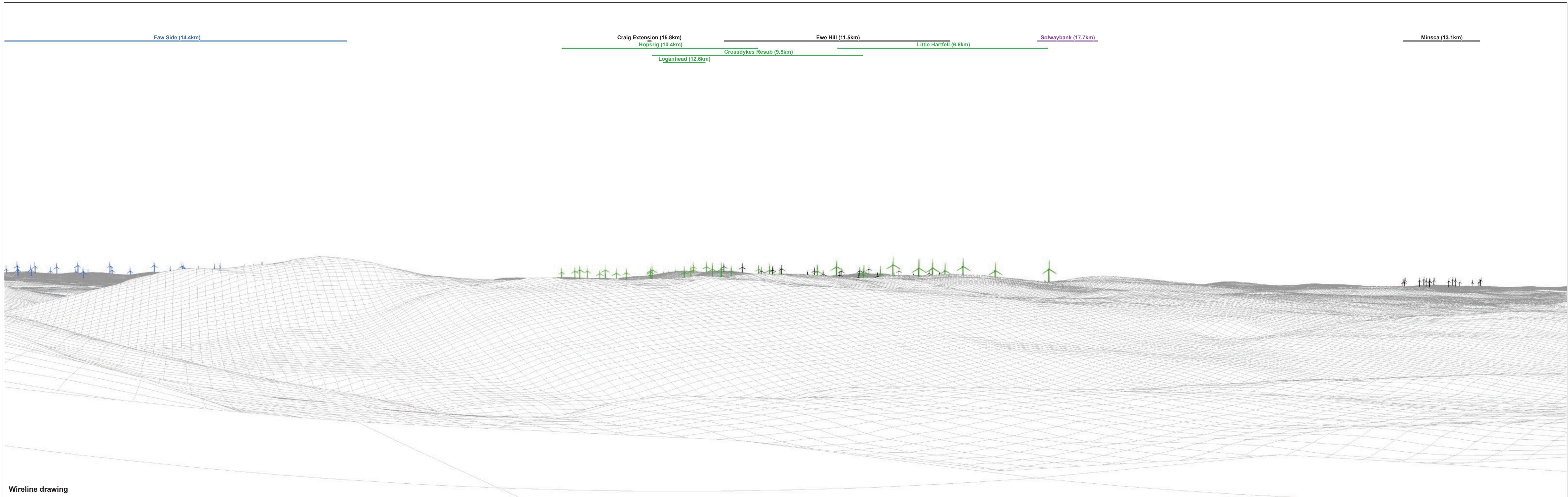
Horizontal field of view: 90° (cylindrical projection)
Principal distance: 522 mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

Camera: N/A
Lens: N/A
Camera height: 1.5 m
Date and time: N/A

Figure 9.11b
Cultural Heritage Viewpoint 6: SM10476: Peat Hill, fort and scooped settlement

Scoop Hill

© Crown copyright, All rights reserved (2019). Licence number 0100031673

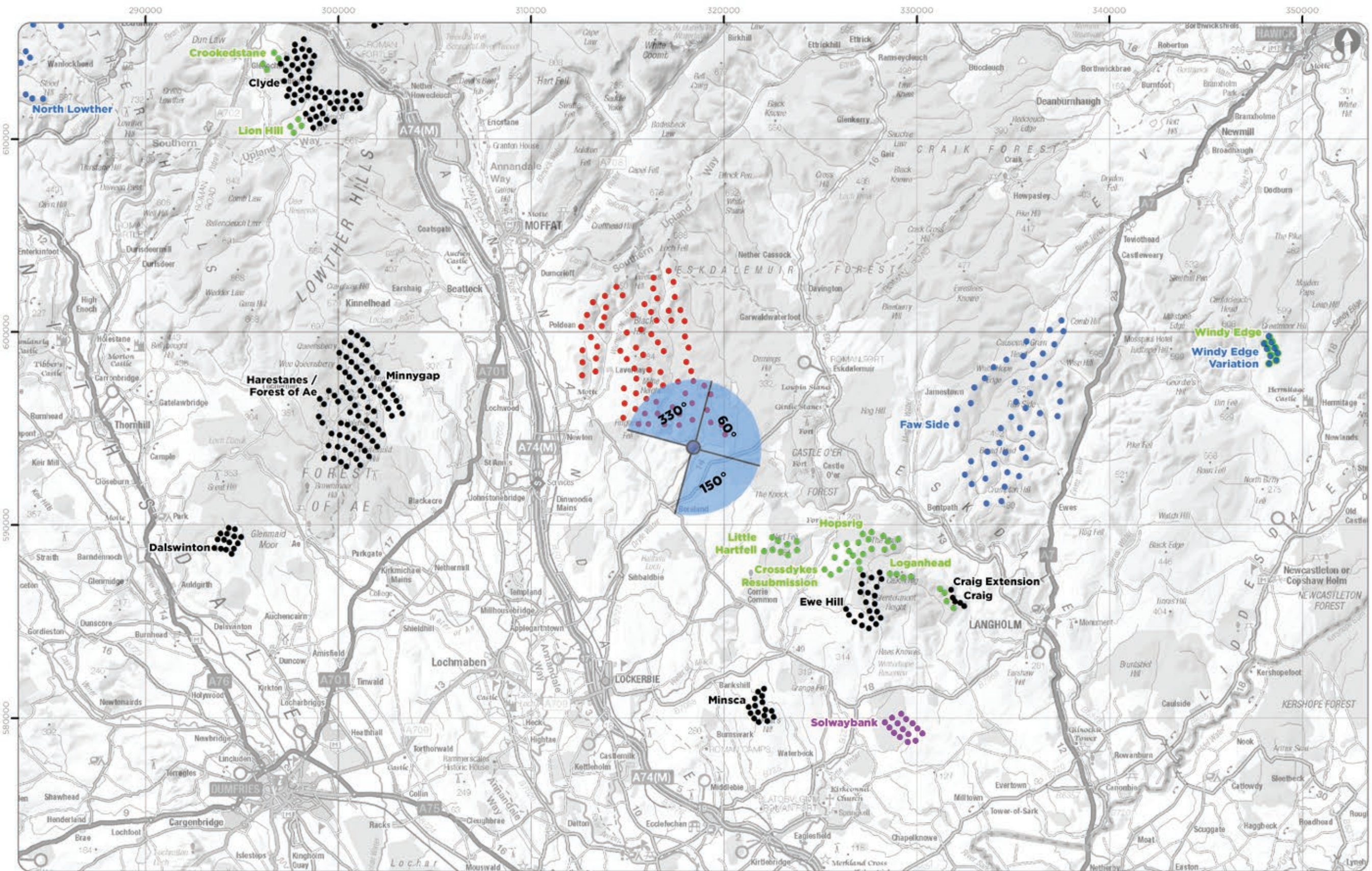


Wireline drawing

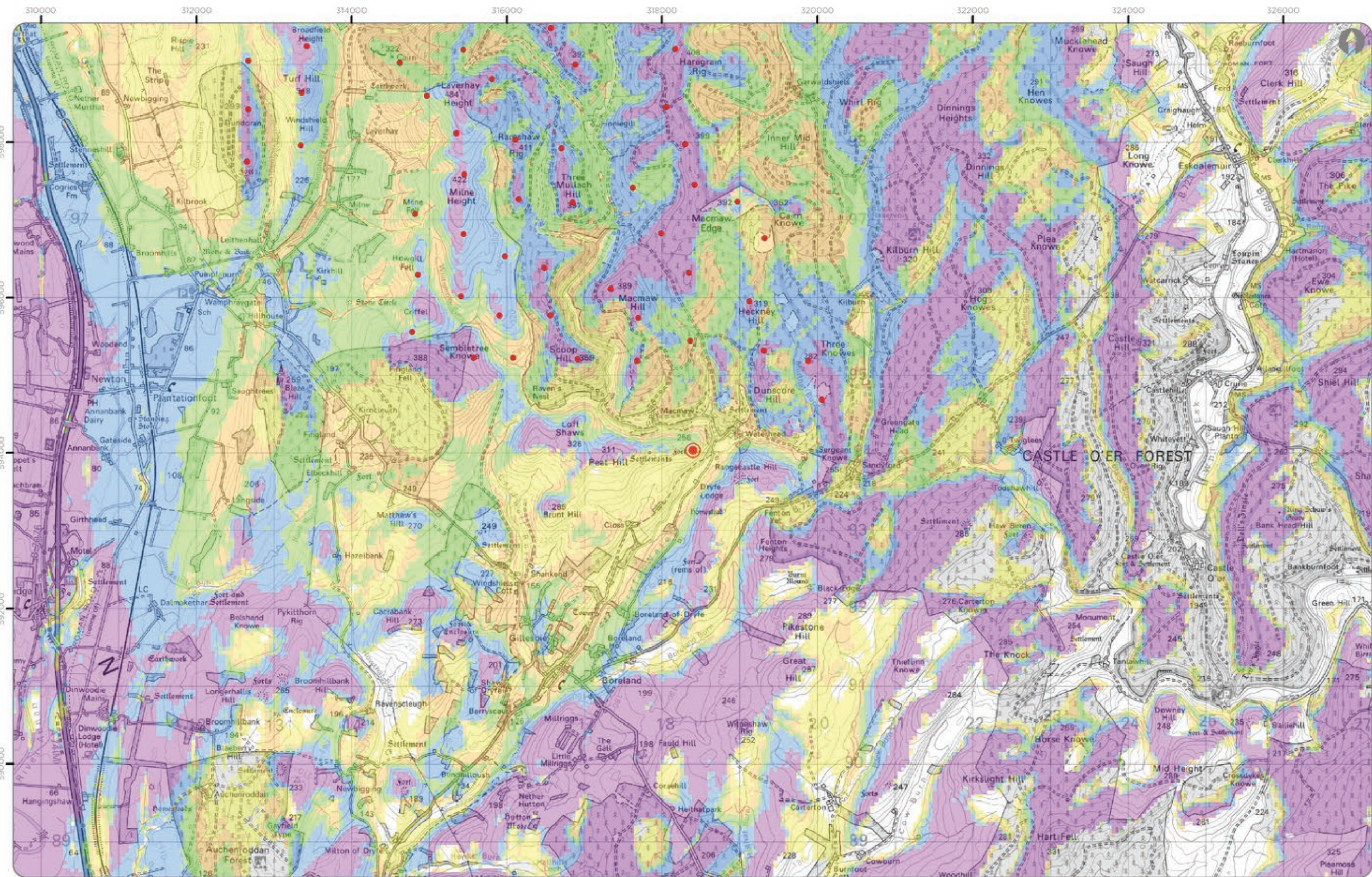
OS reference:	317718 E 593864 N	Horizontal field of view:	90° (cylindrical projection)	Camera:	N/A
Eye level:	254.6 mAOD	Principal distance:	522 mm	Lens:	N/A
Direction of view:	125°	Paper size:	841 x 297 mm (half A1)	Camera height:	1.5 m
Nearest turbine:	1322 m	Correct printed image size:	820 x 260 mm	Date and time:	N/A

Figure: 9.11c
 Cultural Heritage Viewpoint 6: SM10476: Peat Hill, fort and scooped settlement
 Scoop Hill

© Crown copyright. All rights reserved (2019). Licence number 0100031673



Viewpoint Location Plan Baseline Panorama (90 Degree View)
 Scale: 1:200,000
 0 2.5 5 10 Km



Viewpoint Location Plan (53.5 Degree View)
 Scale: 1:50,000
 0 0.5 1 2 Km

Note:
 1. ZTV: Created using ESRI ArcGIS 10.7.1 software using the following data and parameters:
 Blade tip height: 180 / 200 / 225 / 250m
 DTM Data: OS Terrain 50 DTM
 Observer height: 2m
 No surface features, such as buildings or trees, were included in the analysis.
 Earth curvature and light refraction have been included in the calculations.
 2. © Crown copyright and database rights 2020 Ordnance Survey 0100031673.

Legend

- Proposed Turbine Location

Cumulative Wind Farm Status:
 (December 2019)

- Operational
- Under Construction
- Consented
- Appeal / Application

Blade Tip Zone of Theoretical Visibility

No. of Theoretically Visible Turbines

- 1 - 15
- 16 - 30
- 31 - 45
- 46 - 60
- 61 - 75

Viewpoint:

- 90 Degree Field of View
- No 53.5 Degree Field of View

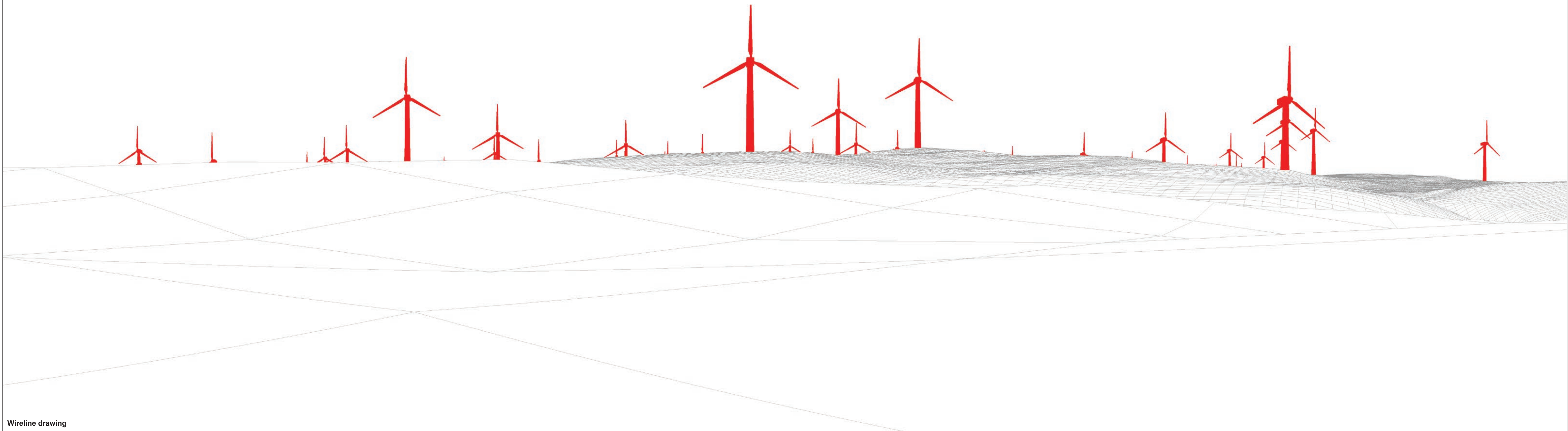
SCOOP HILL WIND FARM

Figure 9.12a
 Viewpoint 7: SM649: Carthur Hill, fort, Boreland

Ref No: 160971	Created By: LA	Rev No: 2
	Drawing Size: A3	Date: 10/07/2020

Coordinate System: BNG OS GB 1936 Datum

Proposed Development (1.4km)



Wireline drawing

OS reference: 318395 E 594036 N
Eye level: 250.1 mAOD
Direction of view: 330°
Nearest turbine: 1356 m

Horizontal field of view: 90° (cylindrical projection)
Principal distance: 522 mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

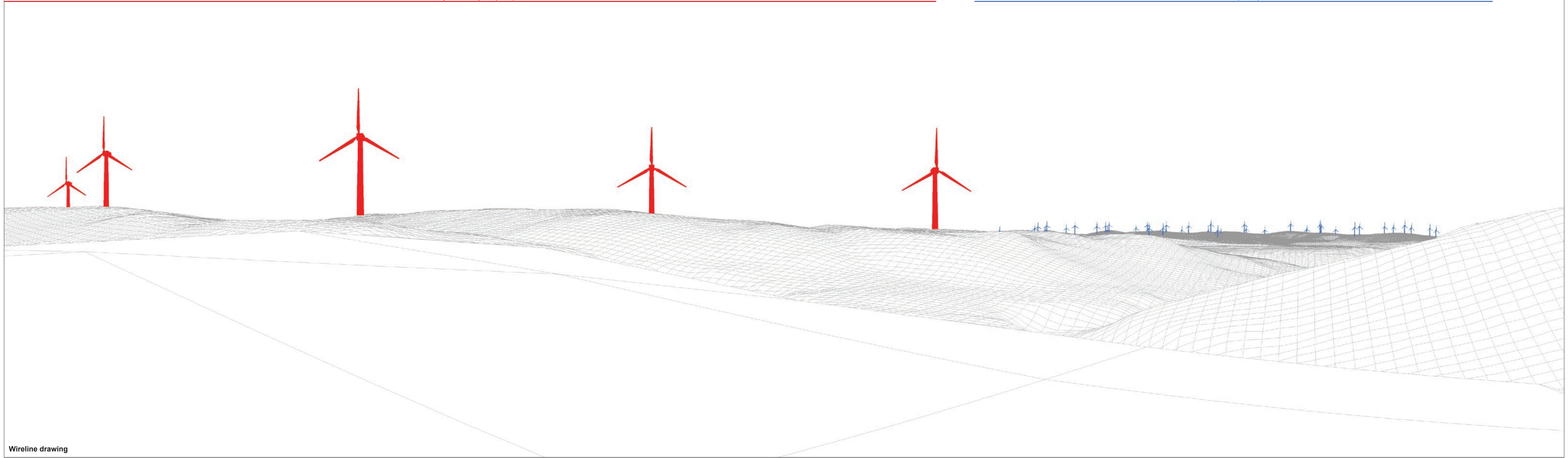
Camera: N/A
Lens: N/A
Camera height: 1.5 m
Date and time: N/A

Figure: 9.12b
Cultural Heritage Viewpoint 7: SM649: Carthur Hill, fort, Boreland
Scoop Hill

© Crown copyright, All rights reserved (2019). Licence number 0100031673

Proposed Development (1.4km)

Faw Side (13.7km)



Wireline drawing

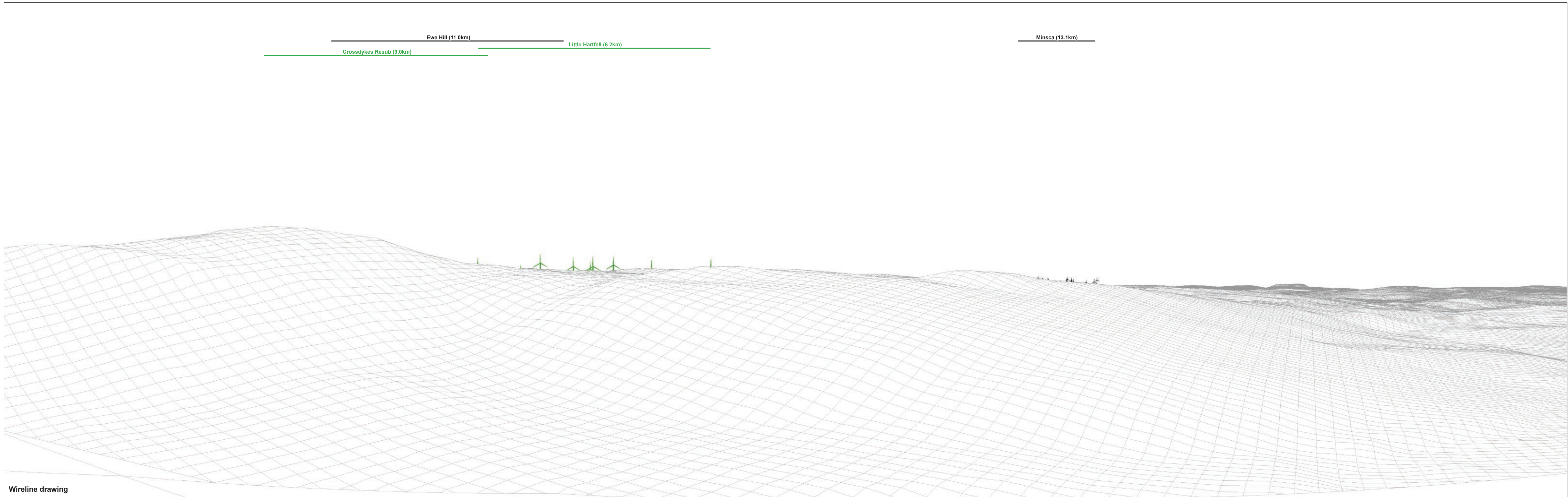
OS reference: 318395 E 594036 N
Eye level: 250.1 mAOB
Direction of view: 60°
Nearest turbine: 1356 m

Horizontal field of view: 90° (cylindrical projection)
Principal distance: 522 mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

Camera: N/A
Lens: N/A
Camera height: 1.5 m
Date and time: N/A

Figure 9.12c
Cultural Heritage Viewpoint 7: SM649: Carthur Hill, fort, Boreland
Scoop Hill

© Crown copyright. All rights reserved (2019). Licence number 0100031673



Wireline drawing

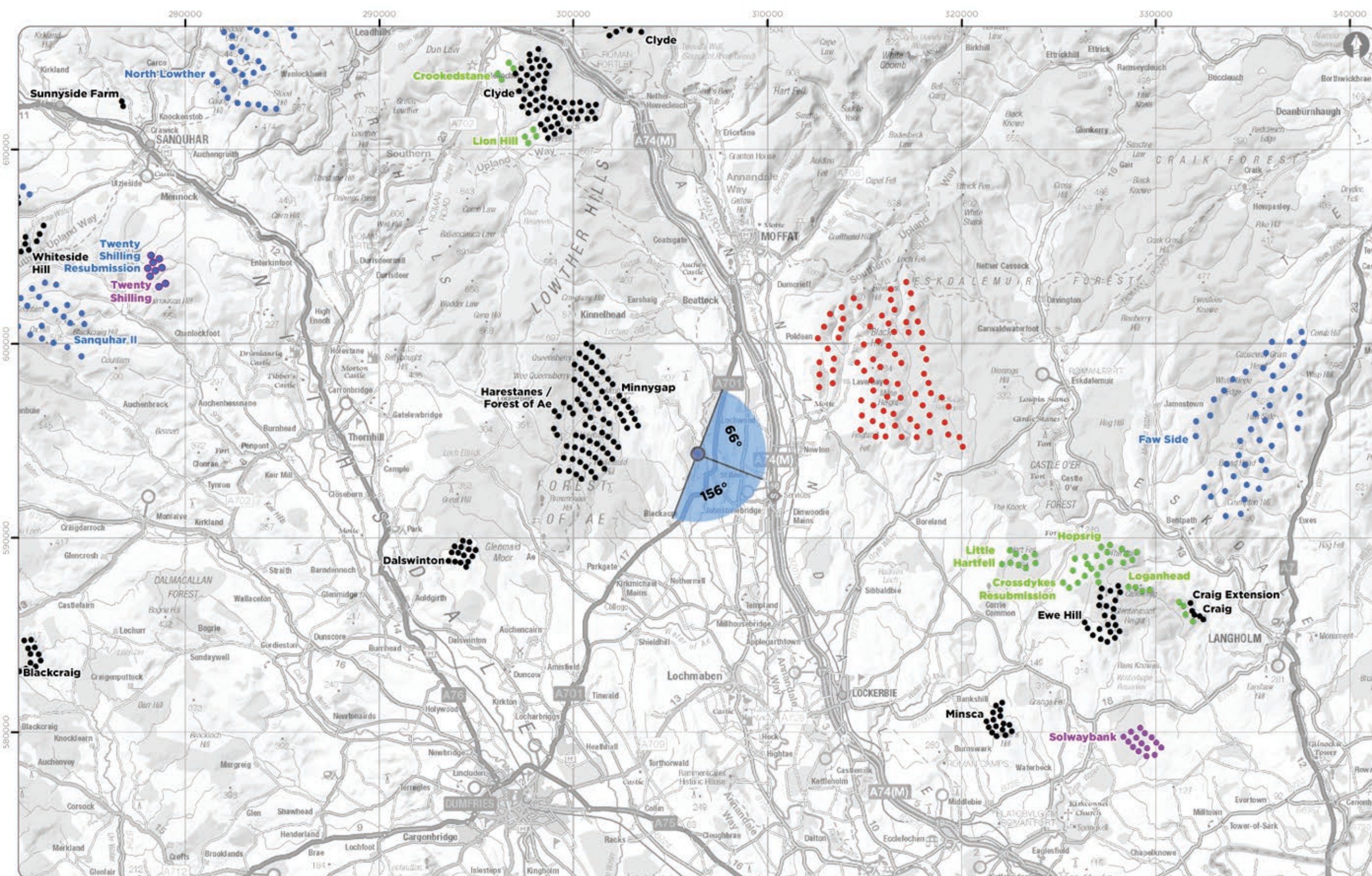
OS reference: 318395 E 594036 N
 Eye level: 250.1 mAOD
 Direction of view: 150°
 Nearest turbine: 1356 m

Horizontal field of view: 90° (cylindrical projection)
 Principal distance: 522 mm
 Paper size: 841 x 297 mm (half A1)
 Correct printed image size: 820 x 260 mm

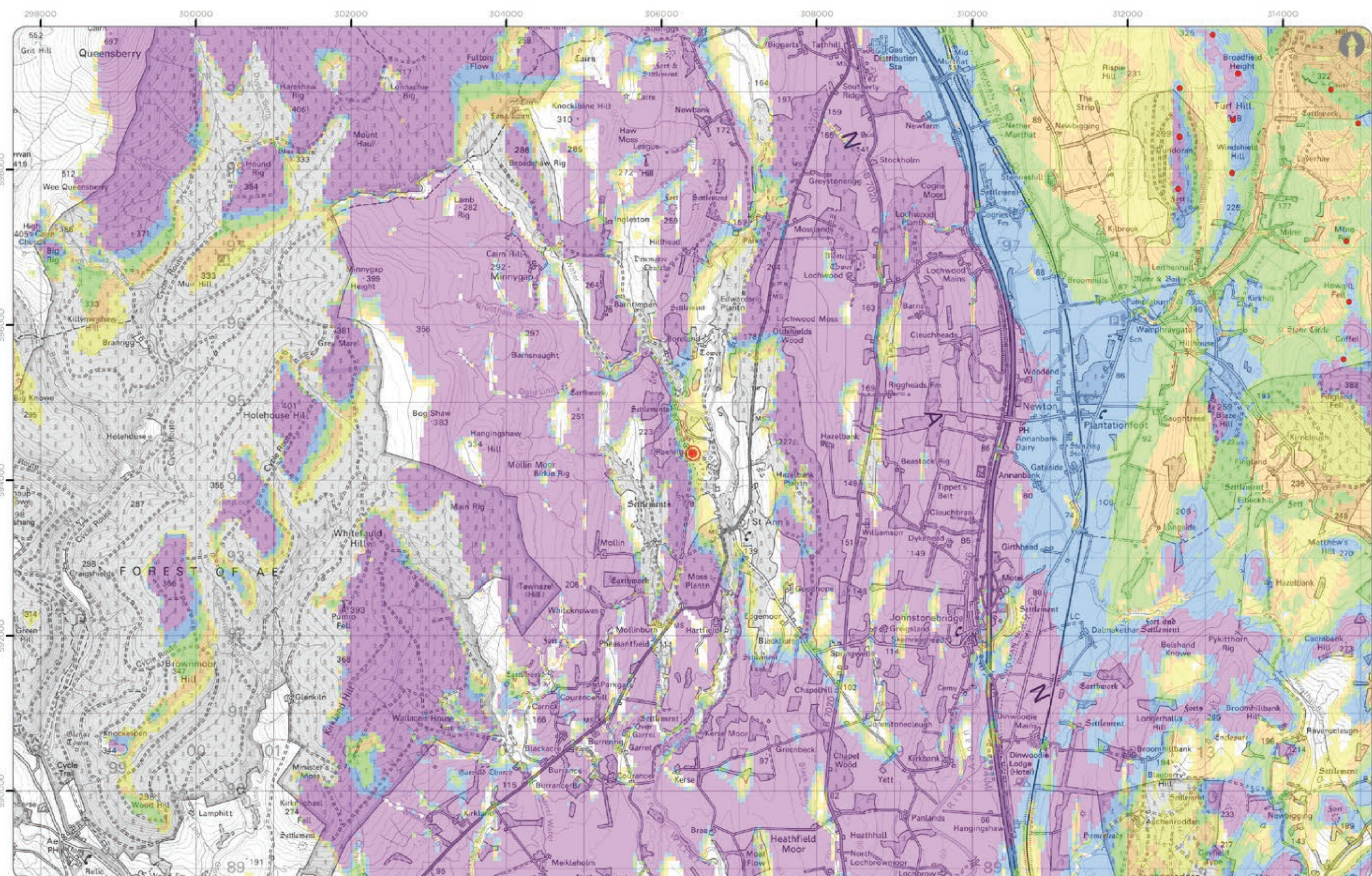
Camera: N/A
 Lens: N/A
 Camera height: 1.5 m
 Date and time: N/A

Figure: 9.12d
 Cultural Heritage Viewpoint 7: SM649: Carthur Hill, fort, Boreland
 Scoop Hill

© Crown copyright, All rights reserved (2019). Licence number 0100031673



Viewpoint Location Plan Baseline Panorama (90 Degree View)
Scale: 1:200,000
0 2.5 5 10 Km



Viewpoint Location Plan (53.5 Degree View)
Scale: 1:50,000
0 0.5 1 2 Km

Note:
1. ZTV: Created using ESRI ArcGIS 10.7.1 software using the following data and parameters:
Blade tip height: 180 / 200 / 225 / 250m
DTM Data: OS Terrain 50 DTM
Observer height: 2m
No surface features, such as buildings or trees, were included in the analysis.
Earth curvature and light refraction have been included in the calculations.
2. © Crown copyright and database rights 2020 Ordnance Survey 0100031673.

Legend

- Proposed Turbine Location

Cumulative Wind Farm Status:
(December 2019)

- Operational
- Under Construction
- Consented
- Appeal / Application

Blade Tip Zone of Theoretical Visibility
No. of Theoretically Visible Turbines

- 1 - 15
- 16 - 30
- 31 - 45
- 46 - 60
- 61 - 75

Viewpoint:

- 90 Degree Field of View
- No 53.5 Degree Field of View

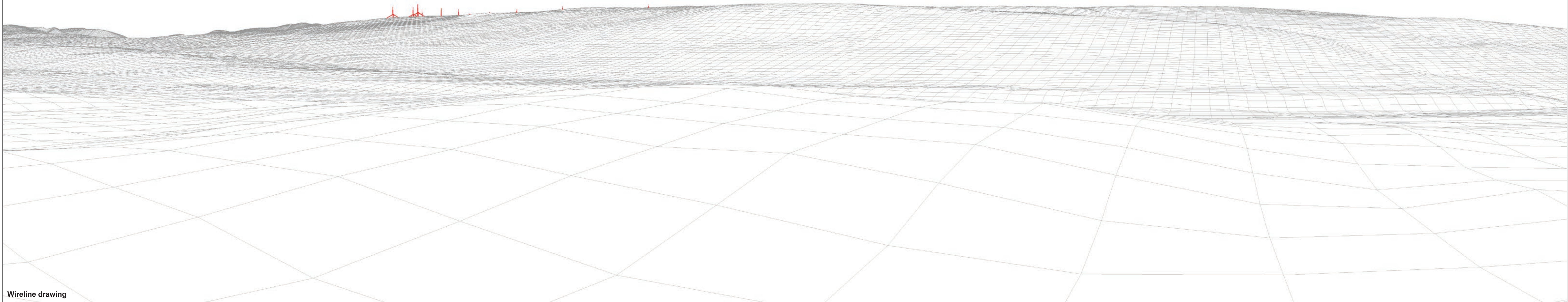
SCOOP HILL WIND FARM

Figure 9.13a
Viewpoint 8: LB9898, GDL322: Ræhills House

Ref No: 160971	Created By: LA	Rev No: 2
	Drawing Size: A3	Date: 10/07/2020

Coordinate System: BNG OS GB 1936 Datum

Proposed Development (7.1km)



Wireline drawing

OS reference: 306401 E 594344 N
Eye level: 150.9 mAOD
Direction of view: 66°
Nearest turbine: 7117 m

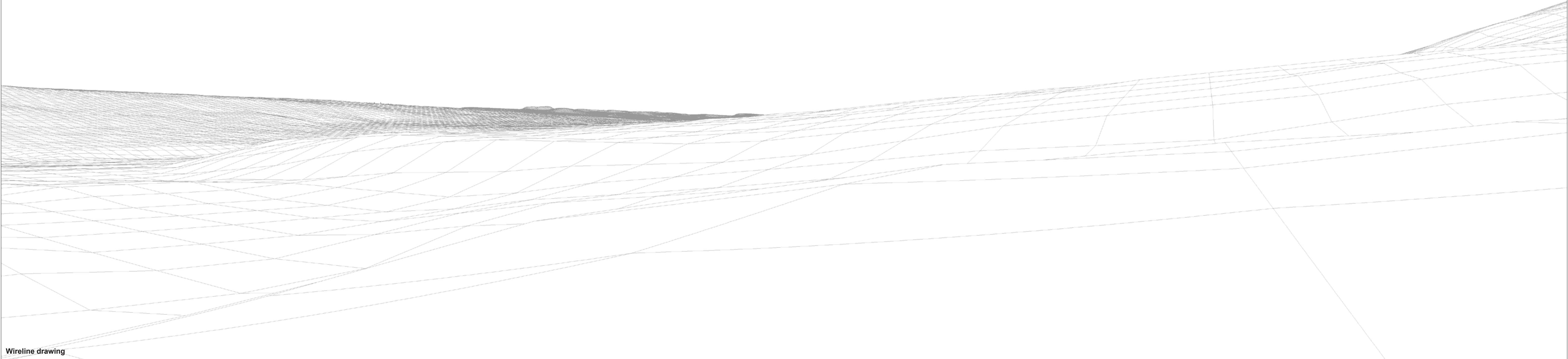
Horizontal field of view: 90° (cylindrical projection)
Principal distance: 522 mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

Camera: N/A
Lens: N/A
Camera height: 1.5 m
Date and time: N/A

Figure: 9.13b
Cultural Heritage Viewpoint 8: LB9898, GDL322: Raehills House
Scoop Hill

© Crown copyright. All rights reserved (2019). Licence number 0100031673

Minsca (20.1km)



Wireline drawing

OS reference: 306401 E 594344 N
Eye level: 150.9 mAOD
Direction of view: 156°
Nearest turbine: 7117 m

Horizontal field of view: 90° (cylindrical projection)
Principal distance: 522 mm
Paper size: 841 x 297 mm (half A1)
Correct printed image size: 820 x 260 mm

Camera: N/A
Lens: N/A
Camera height: 1.5 m
Date and time: N/A

Cultural Heritage Viewpoint 8: LB9898, GDL322: Raehills House
Scoop Hill

Figure: 9.13c