

Craiginmoddie Wind Farm

Environmental Impact Assessment Report Chapter 7: Cultural Heritage and Archaeology

December 2020

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7 CULTURAL HERITAGE AND ARCHAEOLOGY

Introduction

- 7.1 This Cultural Heritage and Archaeology chapter considers the likely significant effects on archaeology and built heritage interests (heritage assets) resulting from the construction and operation of the Proposed Development. The 'historic environment' is referred to in accordance with the definition provided in Scottish Planning Policy (2014) (SPP) and Historic Environment Policy for Scotland 2019 (HEPS). This definition considers elements of cultural heritage, including standing buildings, earthwork monuments, industrial features, sub surface archaeological remains and artefact scatters. It also considers historic landscapes and their constituent features identified as having cultural significance.
- 7.2 The specific objectives of this chapter are to:
- Describe the archaeological and cultural heritage baseline;
 - Describe the assessment methodology and significance criteria used in completing the impact assessment;
 - Describe the likely significant effects, including direct, indirect and cumulative effects;
 - Describe the mitigation measures proposed to address likely significant effects; and
 - Assess the residual effects remaining following the implementation of mitigation.
- 7.3 The chapter should be read in conjunction with the development description provided in Chapter 3: Project Description & Construction Methods and with respect to relevant parts of Chapter 6: Landscape & Visual Impact Assessment.
- 7.4 This chapter has been prepared by Wood's historic environment team. Alex Kerr (Consultant) was the primary author, with support and technical review provided by Principal Consultant Dr Tori Park (ACIFA).

Legislation and policy context

- 7.5 The sub-sections below summarise the legislation, planning policy and technical guidance relevant to the historic environment.

Legislative Context

- 7.6 Certain assets that are deemed to be of particular importance are given legal protection. The importance of heritage assets and the protection of these and their settings is recognised in legislation as well as national, regional and local planning policy. The following legislation is relevant to the assessment of the effects on historic environment receptors:
- The Ancient Monuments and Archaeological Areas Act 1979 (AMAAA) provides for a schedule of monuments which are protected and sets out measures for the protection and management of these;

- The Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997 provides for the definition and protection of a list of buildings and areas of architectural and historical interest, including conservation areas. The Act sets out a requirement to have special regard to the desirability of preserving the integrity and setting of listed buildings and conservation areas in considering any proposed development; and
- Historic Environment (Scotland) Act 2014, which further amended provisions of the above Acts and established Historic Environment Scotland.
- The Town and Country Planning (General Development Procedure) (Scotland) Order 1992 requires that planning authorities should consult with the Secretary of State where development proposals may affect a historic garden or designed landscape, a scheduled monument or its setting, or a category A listed building or its setting. The Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997 places a general duty in the exercise of planning functions to pay special attention to the desirability of preserving or enhancing the character or appearance of Conservation Areas.

Planning Policy Context

National policies

- 7.7 Relevant national planning policies are contained within Scottish Planning Policy (SPP) and the National Planning Framework 3 (NPF3), both of which were published on 23 June 2014. In addition, relevant national policies are contained within the Historic Environment Policy for Scotland 2019 (HEPS) and advice relating to archaeological matters is detailed within Planning Advice Note (PAN) 2/2011 Planning and Archaeology (July 2011) and Historic Environment Scotland's (HES) Managing Change in the Historic Environment guidance note series. Relevant policies are summarised in Table 7.1.

Local Plan policies

- 7.8 Relevant local policy is contained within the South Ayrshire's Local Development Plan, adopted in September 2014. A summary of the relevant planning policies relating to the historic environment are provided in Table 7.1.

Table 7.1: Planning Policy Issues Relevant to the Historic Environment

Policy Reference	Policy Issue
National Planning Policies	
SPP	Paragraph 169 identifies a number of considerations which are likely to be relevant when determining proposed energy infrastructure developments, including <i>"impacts on the historic environment, including scheduled monuments, listed buildings and their settings"</i> .
SPP: Valuing the Historic Environment Subject Policy (paragraphs 135-151)	Paragraph 137 states that planning should <i>"promote the care and protection of the designated and non-designated historic environment"</i>. Paragraph 140 required the siting and design of proposed developments to take account of <i>"all aspects of the historic environment"</i>. In relation to listed buildings, paragraph 141 states that <i>"where planning permission and listed building consent are sought for development to, or affecting, a listed building, 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. The layout, design,</i>

	<i>materials, scale, siting and use of any development which will affect a listed building, or its setting should be appropriate to the character and appearance of the building and setting".</i> In relation to scheduled ancient monuments, paragraph 145 states <i>"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"</i>. In relation to gardens and designed landscapes, paragraph 148 states that <i>"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"</i>. In relation to archaeology, paragraph 150 states that <i>"planning authorities should protect archaeological sites and monuments as an important, finite and non-renewable resource and preserve them in situ wherever possible. Where in situ preservation is not possible, planning authorities should, through the use of conditions or a legal obligation, ensure that developers undertake appropriate excavation, recording, analysis, publication and archiving before and/or during development"</i>. In relation to historic assets which are not afforded statutory protection, paragraph 151 states that <i>"planning authorities should protect and preserve significant resources as far as possible, in situ wherever feasible"</i>
PAN 2/2011 Planning and Archaeology (July 2011)	This document provides advice to planning authorities and developers on dealing with archaeological remains.
Historic Environment Policy for Scotland (HEPS)	The document is designed to support and enable good decision-making about changes to the historic environment. HEPS sets out a series of principles and policies for the recognition, care and sustainable management of the historic environment.
South Ayrshire's Development Plan Policies	
ENV 1: Listed Buildings	Protection of listed buildings as well as non-listed buildings with conservation areas.
ENV2: Scheduled Monuments and Archaeological Resources	Protection of archaeological heritage assets.
ENV 3: Conservation Areas	Protection of conservation areas and their settings.
ENV4: Gardens and Designed Landscapes	Protection of gardens and designed landscapes, including Inventory and Non-Inventory lists.
ENV5: Historic Battlefields.	Protection of conservation areas and their settings.

Technical Guidance

- 7.9 In the consideration of planning applications affecting the historic environment, planning authorities are directed to the Historic Environment Policy for Scotland 2019 (HESP), Historic Environment Circular 1, Planning Advice Note (PAN) 2/2011 and the *Managing Change in the Historic Environment* guidance note series. The most relevant of the *Managing Change* series to this assessment are *Managing Change in The Historic Environment: Setting* (2016) and *Managing Change in The Historic Environment: Gardens and Designed Landscapes* (2016).
- 7.10 The assessment has been carried out in accordance with the principles laid down in the Chartered Institute for Archaeologists (CIfA) *Standard and Guidance for Historic Environment Desk-Based Assessments* (CIfA 2017). Historic Environment Scotland's 2018

Environmental Impact Assessment Handbook was also taken into account during the assessment.

Assessment Methodology and Significance Criteria

Study Area

- 7.11 To establish the baseline for the assessment of direct effects, data was collected for both designated and non-designated heritage assets for an area extending to a 2 km radius from the Site boundary, referred to as the 'study area'. This included Category C Listed Buildings and any undesignated assets of local importance which have wider landscape settings that contribute substantively to its cultural significance. The study area included the area around the proposed new off-site access track (south of Dailly) which fell outside the main Site boundary.
- 7.12 A wider study area of 5 km radius from the Site boundary was used to initially collect data on heritage assets of regional or potentially national importance together with designated sites which had the potential to be indirectly affected by the Proposed Development (referred to as the 'wider study area'). This included Scheduled Monuments, Category A and B Listed Buildings, Conservation Areas, Gardens and Designed Landscapes, Historic Battlefields and undesignated assets of more than local importance.
- 7.13 For an 'extended study area' up to 20 km from the proposed turbines, any asset which is considered exceptionally important, and where long-distance views from or towards the asset are considered to be particularly sensitive, were initially considered for inclusion within the assessment of indirect effects.

Data Gathering

- 7.14 For the purpose of establishing the historic environment baseline, the following sources have been consulted:
- National and County-based registers of known archaeological and historical sites;
 - Cartographic and historic documents;
 - Aerial photographs;
 - Historic Land Use Assessment (HLA) mapping;
 - Geological mapping;
 - Hadyard Hill Extension Wind Farm: Environmental Statement (2015);
 - Published sources; and
 - Internet sources.
- 7.15 These sources were obtained from the following organisations:
- The West of Scotland Archaeology Service (WoSAS) Historic Environment Record (HER), accessed via their online website and Canmore;
 - Historic Environment Scotland;
 - The National Archives of Scotland;

- National Library of Scotland Map Library; and
- The British Geological Survey (BGS).

7.16 The gathering of baseline data was carried out in accordance with the principles of Standard and guidance for historic environment desk-based assessments (ClfA, 2014).

Survey Work

7.17 A site visit was undertaken between 4th – 6th November 2020, by an archaeologist from Wood. Previously identified archaeological features within the Site were visited to confirm ground conditions and to identify possible hitherto unrecorded heritage assets. Following design freeze and the production of the final zone of theoretical visibility (ZTV), visits were also made to all the designated assets considered within the settings assessment.

Desk Based Assessment

7.18 In order to gauge the potential for the Proposed Development to affect the historic environment, a desk based assessment has been undertaken in accordance with the principles set out in Standard and guidance for historic environment desk-based assessments (ClfA, 2014).

7.19 In completing a desk-based assessment of the effects of any development on the historic environment, it is important to consider a number of factors as follows:

- Development can not only have direct effects upon heritage assets (e.g. land take), but also indirect effects, such as harm to the setting of heritage assets. The assessment subject of this submission follows the Managing Change in the Historic Environment: Setting (HES, 2016) definition of a perceptual and experiential relationship between an asset and the specific values which contribute to the importance of that asset;
- Desk based assessment involves a review of current information only and there may be further features within the development site that are not yet known. The potential for this may be assessed from ground conditions, aerial imagery where appropriate, features within the wider area and the history of land use within and around the development site;
- Not all heritage assets are considered of equal importance and it is important to identify the importance of these assets with reference to legislation, policy guidance and professional judgement.

Indirect effects

7.20 The scope of assessment of indirect effects is confined to those assets which were initially identified through data searches of an area up to 5 km from the Site and exceptionally important assets out to 20km with consideration given to the predicted ZTV. These were initially set out in the Scoping Report and the final scope of the assessment also took account of further consultation with key stakeholders. A full list of heritage assets within the extended 5 km study area is provided in Appendix 7A, and their locations are shown on Figure 7.1.

7.21 The baseline setting of each relevant heritage asset was characterised on a case-by-case basis. Characterisation of the setting of an asset was based upon its properties and location, and took into account the factors identified in guidance issued by HES (2016). The baseline setting of each asset was characterised principally in terms of the:

- Archaeological / historical context of the asset;
- Current perceptual, primarily visual, surroundings of the asset;
- Aesthetic and experiential properties of the asset within its surroundings; and
- Such factors as: the location and orientation of the asset; important views of and from principal facades; the importance, if applicable, of designated settings, and any obvious views or vistas.

7.22 The potential for change to the setting of heritage assets is most likely to occur as a result of intervisibility or direct views between the asset and the Proposed Development. Change to views of an asset from a third viewpoint, even where there is no direct intervisibility between the development and asset, may also be relevant. In addition to purely visual considerations, other effects of wind turbines, such as noise or the movement of turbines, may also affect the setting of an asset, although this is normally only relevant for assets in relatively close proximity to turbines. Factors which may be of relevance in the assessment of the change to the setting of a heritage asset include:

- The scale of a development, its layout and appearance;
- The extent, scale and / or prominence of the asset in relation to the development;
- The distance between the development and a given asset;
- The presence of any intervening buildings, vegetation or local topography, which may affect the visibility and prominence of the development from an asset;
- The proposed duration of the development or potential effect resulting from it.

7.23 Change to the setting of a heritage asset may be harmful, value neutral or positive and may bring about enhancement, depending on the qualities of the setting and how these contribute to the importance of the asset (HES, 2016). Changes should be understood in terms of the relationship of the asset with its current setting rather than any conjectured 'historic setting', although the extent to which the current setting of the asset reflects a perceived original or designed setting should be considered.

Significance Evaluation Methodology

7.24 The levels of effect upon a heritage asset, for either direct or indirect effects resulting from the Proposed Development, largely depend upon its level of sensitivity and the potential magnitude of change. Tables 7.2-7.4 provide details on how the historic environment assessment establish these qualities, which then inform the conclusion as to the level of impact upon the asset.

7.25 The rationale contained within Table 7.2 is predominantly based on information provided within the SPP (Scottish Government 2014) and the associated supporting documents; HEPS and the Historic Environment Circular 1, Planning Advice Note (PAN) 2/2011. Note

that the categorisation of the relative importance of those assets which are of less than national importance generally relies on professional judgement.

Table 7.2: Categorisation of Sensitivity

Sensitivity	Rationale
High	World heritage sites are designated on the basis of 'Outstanding Universal Value' and would normally be considered of international importance. By legal definition, scheduled monuments are considered as being of very high sensitivity. As the process of scheduling is ongoing and as scheduling is a representative designation, there are further assets which are not scheduled but which may be of equivalent sensitivity. HES describes Category A listed buildings as buildings of national or international importance (high sensitivity), either architectural or historic; or fine, little-altered examples of some particular period, style or building type. The SPP states that sites identified within the Inventory of Historic Battlefields and the Inventory of Gardens and Designed Landscapes are of high sensitivity. Conservation areas rated by HES as of Outstanding quality (where such appraisals have been made) could be considered as being of high sensitivity.
Medium	These include archaeological sites which do not merit scheduling, but which are nevertheless of interest or which could make a substantial contribution to established regional research agendas. HES describes Category B listed buildings as buildings of regional or more than local importance (medium sensitivity); or major examples of some particular period, style or building type, which may have been altered. The principles of selection for designation of conservation areas do not explicitly include valuations of national, regional or local importance, although most examples would be of importance on a regional level. Designed landscapes that are recognised by local authorities but not included within the Inventory of Gardens and Designed Landscapes would usually be considered to be medium sensitivity.
Low	The majority of non-designated assets would normally be considered of local importance, or low sensitivity. HES describes Category C listed buildings as buildings of local importance (low sensitivity); lesser examples of any period, style or building type, as originally constructed or moderately altered; and simple, traditional buildings that group well with other listed buildings.
Lesser	These include those features which are no longer extant, where there are no further known or surviving remains (e.g. locations of previous archaeological work), or where assets may have minimal importance, such as modern quarries.

Table 7.3: Potential Magnitude of Change

Magnitude	Definition
Substantial	Total or substantial change to an asset or complete alteration of the characteristics of an asset's setting.
Moderate	Partial alteration of an asset. Substantial change to the key characteristics of an asset's setting, or a more total alteration which is temporary and/or reversible. Significant alteration to those elements of the setting which directly contribute to the understanding of the cultural value of the asset.
Slight	Minor alteration of an asset. Changes to a setting which do not affect the key characteristics, or which is short term and/or reversible. Insignificant alteration to those elements of the setting which directly contribute to the understanding of the cultural value of the asset.
Negligible	Minor alteration of an asset. Minor and short term or very minor and reversible changes to its setting which do not affect the key characteristics.

7.26 Based on Tables 7.2 & 7.3, the methodology for determining effects is applied as detailed in Table 7.4 below:

Table 7.4: Significance Matrix

Magnitude of change	Sensitivity of Receptor				
		<i>High</i>	<i>Medium</i>	<i>Low</i>	<i>Lesser</i>
	<i>Substantial</i>	Major	Major/Moderate	Moderate	Moderate/Minor
	<i>Moderate</i>	Major/Moderate	Moderate	Moderate/Minor	Minor
	<i>Slight</i>	Moderate	Moderate/Minor	Minor	Minor/Negligible
	<i>Negligible</i>	Moderate/Minor	Minor	Minor/Negligible	No Effect

Consultation

7.27 A consultation response to the Scoping Report (EK 2020) was received from Historic Environment Scotland on 26th June 2020. **Table 7.5** provides a summary of the issues that have been raised by consultees in their Scoping Opinion and in further consultation discussion. A summary of Wood's response to the issues raised is also provided.

Table 7.5: Summary of issues raised during consultation regarding the Historic Environment

Issue Raised	Consultee(s)	Response
Scope of Assessment – agreed. HES are content with extent of assessment study areas and the review of cultural heritage assets identified in the Scoping Report (EK 2020). Requested that Maxwellston Hill Fort be included within the assessment	Historic Environment Scotland (HES)	Maxwellston Hill Fort has been scoped in as per HES request.
Recommend ZTV used to identify potential setting impacts. Agree a finalised list of assets to be assessed for indirect effects.	HES	ZTV used (Figure 7.1) to establish potential setting impacts, the assessment also considered that even when ZTV indicates no visibility, the potential may remain for turbines to appear in the background of key views. Additional consultation with HES regarding the scope of potential indirect effects and final list of assets was undertaken via mail in November 2020. List provided at paragraph 7.69-7.71
Provision of suitable visualisations.	HES	HES were consulted further and a list of visualisations agreed alongside the final list of scoped in assets via email in November 2020. Photomontage and wireframe views used where appropriate to illustrate views from the asset towards the Proposed Development, and views towards the asset with the development in the background. Viewpoints with a predicted significant impact to be illustrated with a photomontage.
Inclusion of cumulative impacts	HES	Cumulative impacts of the development addressed (starting at paragraph 7.157 onwards).
No response received to date (December 2020).	West of Scotland Archaeological Service (WoSAS) on behalf of SAC	

Limitations of this assessment

- 7.28 Due to Covid 19 related restrictions at the time of undertaking the assessment (November 2020) it was not possible to access Historic Environment Record data from WoSAS directly. HER records for the 2 km study area were therefore gained from online sources including PastMap and the WoSAS online mapping facility. Additional sources included the data collected for the Hadyard Hill Extension ES in 2015, which had an overlapping boundary with the Proposed Development Site boundary, although was much larger. The Site is smaller and lies within the northern part of the earlier Hadyard Hill Extension Site boundary. Historic mapping, documentary sources and the site walkover were also used to develop an understanding of the archaeological potential within the Site.
- 7.29 Given the nature of the area of the Proposed Development, and the results of previous archaeological investigations, it is unlikely that any unidentified sources would provide additional information which would alter the conclusions of this assessment.

Baseline Conditions

Current Baseline

Site Description and Geology

- 7.30 The Site is located within South Ayrshire and consists predominantly of extensive areas of plantation forestry and open moorland.
- 7.31 The Site lies along an undulating ridge adjacent to the 52 turbine Hadyard Hill Wind Farm, which has been operational since 2006. The Site is situated in the Carrick Hills in the south-east of South Ayrshire, north of the Stinchar Valley and south of the Girvan Valley in an upland area comprising low to medium sized hills,
- 7.32 The Site is located in a Landscape Character Type (LCT) classified as 'Foothills with Forest and Wind Farms' LCT as identified in the South Ayrshire Landscape Wind Capacity Study (Carol Anderson Landscape Associates 2018). This combines a subdivision of the broader Foothills with Forest LCT with a subdivision of the Foothills LCT as identified in the original Ayrshire Landscape Character Area study and reflects the change in character through the introduction of the Hadyard Hill Wind Farm. The LCT comprises a mix of improved grassland, unimproved grassland and commercial forestry plantations.
- 7.33 The local area is relatively sparsely populated, with a number of small settlements, hamlets and dispersed individual dwellings. The nearest settlements (and approximate distances) are: Barr (4 km south-west), Dailly (4 km north-west), Crosshill (6.5 km north), Straiton (7.5 km north-east) and Maybole (9 km north). The nearest town is Girvan, located 10.5 km to the west.
- 7.34 The superficial deposits within the Site, where recorded, are till, Devensian - Diamicton. In the northern and eastern areas, the bedrock geology comprises Swanshaw Sandstone Formation, a sedimentary bedrock formed approximately 393 to 427 million years ago in the Devonian and Silurian Periods. In the southern and western areas, the bedrock geology is Greywacke Conglomerate Formation, another sedimentary bedrock formed approximately 393 to 433 million years ago in the Devonian and Silurian Periods, and an unnamed igneous intrusion of Late Silurian to Early Devonian era.

Existing Historic Environment Baseline

Designated Assets

- 7.35 The locations of the designated assets are illustrated on Figure 7.1 and listed in Appendix 7A.
- 7.36 There are no designated heritage assets located within the Site boundary.
- 7.37 There are three Category A Listed Buildings and 14 Category B Listed Buildings within the 5 km wider study area. Most of these designated buildings are located in the villages of Barr, on the south-western edge of the wider study area, and Kilkerran, on the north-western

edge of the wider study area. There are no Category C Listed Buildings within the 2 km study area.

- 7.38 There are no Historic Battlefields or World Heritage Sites within 5 km of the Site.
- 7.39 Seven scheduled monuments, two designated Garden and Designed Landscapes (GDL) and Barr Conservation Area (CA80) are located within 5 km of the Site. The designated Blairquhan GDL (GDL00063) is located c. 6.5 km to the north-east of the Site boundary.
- 7.40 The closest designated heritage assets to the Site are the scheduled Mote Knowe (SM2863) and Knockinculloch enclosure (SM3357), situated c. 1.5 km to the north-west and north-east, respectively. The scheduled chambered cairn at Bencallen Hill (SM3890) is sited approximately 2.3 km to the south-east of the Site boundary.

Non-Designated Assets

- 7.41 The locations of non-designated assets are illustrated on Figure 7.2 and listed in Appendix 7B.
- 7.42 There are two non-designated HER records located within the Site boundary (12031; 12025). There are 69 additional non-designated HER records within the 2 km study area. The records largely comprise features relating to late medieval and post-medieval agricultural activity (e.g. structure and buildings) and livestock management (e.g. sheepfolds and enclosures).
- 7.43 Historic mapping and the 2015 Hadyard Hill Extension Wind Farm ES note a further five non-designated heritage assets within the Site boundary, comprising boundary markers (250, 306), sheepfolds (248, 250) on Doughty Hill, as well as a record of a Toll Road running from Wigton to Maybole (300) passing to the eastern edge of the Site.
- 7.44 No previously unknown features of archaeological significance were observed during the site walkover within the vicinity of the Proposed Development infrastructure locations.

Site Chronology

Prehistoric Periods

- 7.45 There are no known prehistoric features within the Site boundary.
- 7.46 Within the 5 km wider study area, the prehistoric period is represented by the scheduled remains of Mote Knowe (SM2863), a possible dun of potential prehistoric date. It is located c. 1.5 km from the Site, above the southern bank of the Dobbingsstone Burn. The natural mound was first identified in 1893, and has 'ramparts' relating to it. A low mound of rubble, measuring 9.5 m x 6 m lies within a wall, also reduced to a low mound of rubble 3.8 m thick, atop the mound. This has been interpreted as the remains of a probable dun, of Iron Age date.
- 7.47 The scheduled remains of a series of enclosures (SM3357) are sited on the south-east flank of Knockinculloch, 1.5 km north-east of the Site. The monument comprises a large enclosure which contains eight or nine smaller enclosures. Although considered of

antiquity, the enclosures cannot be assigned with confidence to any particular prehistoric or medieval date. The remains, thought to relate to the penning of animals, suggest that this area hosted early pastoral activity.

- 7.48 The remains of three prehistoric burial cairns have been identified at sites along the River Stinchar valley, some 2.3 km south-east of the Site. This includes the scheduled 'Druid's Grave' (SM3890) at Shiel Bridge, a chambered cairn which has been incorporated into the northern perimeter wall of a sheepfold. The visible remains comprise two pairs of side stones and possibly three capstones. The 'Bargrennan-type' cairn is thought to date to the early Bronze Age.
- 7.49 The scheduled Maxwellston Hill Fort (SM2201), stands 4 km to the west of the Site. Presumably of late prehistoric date, the fort is oval-shaped and consists of two non-concentric earthen ramparts with external quarry ditches, it is possible that the fort was left unfinished.
- 7.50 The HER contains non-designated records of a ring ditch (HER14536) at Brownford Bridge, 2.7 km to the north of the Site, a hut platform (HER12754) on the western spur of The Pilot, immediately north of the Site, and a hut circle located on Wee Knockinculloch (HER12753), c. 1.7 km north of the Site). This implies a focus of late-prehistoric small-scale, agricultural settlement in the near vicinity of the Site.

Medieval Period

- 7.51 No remains dating to this period are known within the Site, although remains of shieling¹ groups have been identified at Delamford (HER52005), in conjunction with the remains of a turf-walled sheepfold (HER52006), and at Wee Knockinculloch (HER12752), though these may also be of a later post-medieval date.
- 7.52 Cultivation remains, evidence of planting and arable agriculture within the uplands, also from the late Middle Ages onwards are recorded within the wider study area at Braker Hill (HER12031). a probable medieval or early post-medieval head dyke and drying kiln are recorded to the north-east of the Site at Knockinculloch. Remains of ridge-and-furrow cultivation has been recorded at Daljedburgh Hill (HER12034), to the west of the Site, and at Doughty (HER11673) immediately east of the Site boundary.
- 7.53 The scheduled remains of Old Dalquharran Castle (SM316) currently survive as substantial standing structures and as buried archaeology, located c. 300m south-east of the late 18th century Category A listed castellated mansion, also called Dalquharran Castle (LB125). Dalquharran Castle was first recorded in a 1474 charter of Crossraguel Abbey. It is described in its listing as an 'excellent example of a castellated house', occupying a strong position guarded by the Water of Givan, marshlands and a former moat. It was enlarged and converted into a 'stately castle' in 1679.
- 7.54 The Category B Listed ruins of Kilkerran Castle (LB126) stands c. 2 km west of the Site, alongside the Dobbingsstone Burn. The castle's listing description is brief, noting that the

¹ Shieling huts, small upland shelters used by pastoral farmers whilst grazing livestock on the high pastures were sited across Scotland from the late Middle Ages onwards. Their remains are common, often being found in clusters next to watercourses.

ruins are a 'fragment of the original castle of the Fergusson's of Kilkerran – probably 15th century and has been a good specimen of the period, but unfortunately is now fast crumbling away'.

Post-Medieval Period

- 7.55 Two HER records dating to the post medieval period are known within the Site; the cultivation remains and farmstead 'Braker' (HER12031) and 'Daliedburgh' comprising hut(s) (HER 1202). Additional remains on the Site identified through historic mapping and the Hadyard Hill Extension ES comprise boundary markers and sheepfolds also dating to this period. The post-medieval occupation of the 2 km study area appears to be primarily related to pastoral activity, as demonstrated by further records of sheepfolds, such as at Shiel Burn (HER41988) and enclosures, such as those recorded at Corphin Hill (HER40397).
- 7.56 The part of Ayrshire where the Site is located was historically known as 'Carrick'. Early maps are schematic; Blaeu's map of 1654 shows small settlements to the south along the banks of the River Stinchar and its tributaries, and to the west along the banks of the Water of Girvan, although their names cannot be related to modern places. Blaeu includes depictions of the two prominent castles – Kilkera (Kilkerran) and Dahvharra (Dalquharran) Castles – located to the west of the Site.
- 7.57 Moll's map of 1745 is also highly schematic although it does record buildings at Dalchairn (Dalquhairn), Dalwyn (Dalwyne), Dobbingstoun (Dobbingstone) and Dallomphart (Delamford), as well as a further building at Stornrygait, which cannot be related to a modern place name. The mid-18th century map also illustrates the presence of Kilkerra Castle and names Dalcharn (Dalquhairn) Hill.
- 7.58 William Roy's survey of the Lowlands of 1752-55 (not illustrated), prepared for the Board of Ordnance, records farmsteads at Delamford, Dalwyne, Doughty and Jerburgh (Daljedburgh), which surround the 'Craigmmody Hills'. Roy depicts Kilkerran House with a formal walled garden to the south-west, a 'patten d'oe' planting to the north and a fairly extensive landscape of mostly tree-lined enclosures, with additional woodland to the south and east.
- 7.59 The early mapping therefore demonstrates that the handful of small farmsteads that currently exist in the vicinity of the Site, such as at Dalwyne (HER42385) and Dalquhairn (HER42384), both located immediately south of the Site boundary, predate the mid-18th century.
- 7.60 Armstrong's map of 1775 is more detailed, showing both the ridges of Barony Hill and Cairn Hill, and the peat bogs to their south, while smaller hills are also sketched in. The unnamed track running north to south past the eastern boundary of the Site is labelled as 'Foggy Road'. Armstrong also depicts the farmstead and accompanying grounds at 'Dalwharn' (Dalwyne), as well as the ornamental grounds of Kilkerran House.
- 7.61 Subsequent pre-Ordnance Survey mapping, such as Thomson's map of 1821 shows no further change at the Site. The local area continues to stay relatively sparsely populated throughout the 19th century, characterised by open moorland and dispersed individual dwellings. The presence of several ruined huts, such as those on Daljedburgh Hill

(HER12033), attest to pastoral activity, while intermittent examples of cultivation dated to the medieval period may have persisted into the 18th and 19th centuries. Thomson records the unnamed track running along the eastern edge of the Site boundary; simply labelled as 'old road very hilly'.

- 7.62 The first edition Ordnance Survey (OS) mapping (1858-59) covers the Site on multiple sheets. It is the first record of the post-Improvement landscape. The Site itself remains characterised as predominantly uncultivated moorland, with occasional small farmsteads, sheepfolds and enclosure walls. A number of comparatively minor sites can be identified on the 1st edition map, such as the 'Lannielane Lime Works (HER6142), on Barony Hill, 1.1 km north of the Site, comprising quarries and spoil tips, with an associated draw kiln and rectangular building. Settlement appears constrained to the western edge of the 5 km study area, close to the Water of Girvan, along which the 'Maybole and Girvan Railway' was constructed in 1860, and which incorporated the villages of Dailly and Kilkerran.
- 7.63 There is relatively little change to the land within the Site boundary until the introduction of forestry in the 20th century. No modern heritage assets, designated or otherwise, are recorded on the Site and none are shown on current maps.

Future Baseline

- 7.64 In the absence of the Proposed Development, there would be no change to the baseline condition of the Site.
- 7.65 Any alteration to the baseline condition of the heritage assets within the Site would likely relate to slow encroachment of peat growth and deterioration of upstanding structures due to natural weathering. Changes in forestry cultivation, most notably the felling, restocking and growth of forestry plantations, also have the potential to influence the survival of remains at the Site. However, future baselines (without the Proposed Development) would largely be expected to mirror the current baseline.

Identification and evaluation of effects

Likely Significant Effects

Potential Receptors of Direct Effects

- 7.66 Direct effects would arise during the construction phase and would be permanent and irreversible. Operation and decommissioning of the Proposed Development are not anticipated to result in additional ground disturbance and therefore direct effects would not arise during these phases.
- Direct Effects:
 - Previously recorded archaeological heritage assets within the Site; and
 - Previously unrecorded non-designated heritage assets within the Site.

Potential Receptors of Indirect Effects

- 7.67 Indirect effects arising during the construction phase would be short-lived. Indirect effects are therefore more appropriately considered as operational effects. Removal of the proposed wind turbines at the end of the operational period would result in the effective reversal of any change to setting. However, in line with SPP, the effects as a result of the Proposed Development are considered in perpetuity and the ability to reverse any adverse change to setting has not been considered within this assessment.
- 7.68 In its response to the Scoping Report request, HES highlighted the potential for impacts upon the settings of the following designated assets:
- 7.69 Scheduled Monuments:
- Mote Knowe (SM2863);
 - Knockinculloch Enclosures (SM3357);
 - Bencallen Hill Chambered Cairn (SM3890);
 - Old Dalquharran Castle (SM316); and
 - Maxwellston Hill Fort (SM2201).
- 7.70 Category A Listed Buildings:
- Dalquharran Castle (LB9125);
 - Bargany House (LB1171); and
 - Kilkerran House (LB1114).
- 7.71 Inventoried Garden and Designed Landscape
- Bargany (GDL00047); and
 - Kilkerran (GDL00238).
- 7.72 The assets for inclusion were subsequently reviewed in light of the final ZTV for the design freeze layout (Figure 7.1) and consulted upon further with HES. Those assets listed that are not within the ZTV, and are located at a significant distance from the Site, and have not been assessed further. The ZTV mapping indicates that there would be no visibility of the Proposed Development from Kilkerran House and Blairquhan House, as well as elements of both of the Inventoried Gardens and Designed Landscapes that they sit within. The settings of Kilkerran House and Blairquhan House are nevertheless considered in the context of the designed landscapes within which they stand.
- 7.73 Barr Conservation Area (CA80) was also originally considered for inclusion within the assessment. However, situated c.5.2 km south-west of the nearest proposed turbine it lies almost entirely outside the final ZTV. Visibility within the historic core of the conservation area would be largely, if not entirely, blocked by intervening trees, topography and buildings. Visibility of the Proposed Development would only be possible from the extreme northern extent of the village, where a row of cottages front Windy Row. The settings of these assets are typically defined by their close relationship to adjacent heritage assets and built environment. Long views make minimal contribution to the importance of the

asset and Barr Conservation Area was therefore not considered further within the assessment.

Assessment of Effects

Assessment of Direct (Construction) Effects on the Historic Environment

Previously Recorded Heritage Assets

- 7.74 Two non designated heritage assets within the WoSAS HER fall within the Site boundary. The remains of eight non-designated huts of unknown date (HER12025) and a small, abandoned farmstead, named as 'Braker' (HER12031). These are both of low (local) sensitivity. Both lie at the southern edge of the Site, away from the Proposed Development infrastructure and no direct effects are anticipated.
- 7.75 Historic mapping and the 2015 Hadyard Hill Extension ES note a further five non designated heritage assets within the Site boundary, comprising boundary markers (250, 306), sheepfolds (248, 250) on Doughty Hill, as well as a record of a Toll Road running from Wigton to Maybole (300) passing to the eastern edge of the Site. Of these, all are considered of low to lesser sensitivity either because they are no longer extant, or as they are considered to have minimal importance. Of these assets, only asset 306 (boundary marker) lies in close proximity to the Proposed Development infrastructure (within 50 m). There is the potential for a moderate to substantial magnitude of change to the asset due to disturbance as a result of construction activities, particularly when the 100 m micro-siting allowance is considered. This would result in a moderate/minor adverse effect at most, which would be not significant. The potential works along the road at the point required for the abnormal load alignment falls adjacent to an area of five huts (11565) recorded as non designated assets within the HER. Whilst little further information is available as to their nature or date, the WoSAS HER record notes that these are potentially of national (High-Medium) importance. As a result, any disturbance as a result of proposed works at their location or within the vicinity could result in a moderate to substantial magnitude of change depending on the extent of disturbance to the group. This could result in a major/moderate level of effect which would be significant. Any potential effects could be mitigated to a not significant level by the adoption of a scheme of archaeological work agreed with WoSAS and imposed as a planning condition. This may comprise measures to ensure avoidance of assets or a watching brief depending on the nature of the works required, to allow recording and information on their nature to be retained
- 7.76 No known assets are within the vicinity of the off-site proposed access route just south of Dailly and no direct effects are anticipated at this location (Figure 7.2).

Previously Unrecorded Heritage Assets

- 7.77 The potential for previously unknown archaeological remains, particularly those from the prehistoric, medieval or post-medieval periods, being encountered during construction cannot be discounted, but the likelihood is considered to be low.

- 7.78 There is evidence for prehistoric settlement and activity around the Site, including the scheduled dun at Mote Knowe, chambered cairn at Bencallen Hill, Iron Age hillfort at Maxwellston, and possible prehistoric enclosures at Knockinculloch. Non-designated assets of a probable prehistoric date are recorded close to the Site, including a ring ditch at Brownford Bridge and hut circle at Wee Knockinculloch. These remains imply a focus of late-prehistoric small-scale agricultural settlement and activity in the near vicinity of the Site, although there is no direct evidence for remains of this date within the Site. Should hitherto unknown buried archaeology remains survive within the Site, these would most likely be related to post medieval agricultural activity in the area and would be considered to be of low (local) sensitivity.
- 7.79 Experience has demonstrated that it is highly unlikely that any remains will survive within dense commercial plantations like those that characterise a large majority of the Site. This is due to the extensive drainage and earthmoving works which proceed such forestry planting destroying any remains which may have once been present. For these reasons, it is considered unlikely that buried archaeology remains will survive within the forestry plantations.
- 7.80 There is a greater possibility of survival within the upland moorland areas where turbines are also proposed. However, masking deposits of peat may obscure evidence in some areas. For example, peat depth of up to 2m may be encountered on the western slope of Doughty Hill, in between proposed turbines. In general, any unknown remains buried beneath the Site in areas of undeveloped moorland would be expected to survive relatively undisturbed. These could be subject to potential direct effects. Depending on the extent of disturbance, this could lead to moderate to substantial magnitude of change which would result in a moderate/minor adverse effect which would be not significant.
- 7.81 Any potential effects would be mitigated by the adoption of a scheme of archaeological work agreed with WoSAS and imposed as a planning condition. This may comprise measures to ensure avoidance of assets or a watching brief in more open moorland areas to safeguard preservation by record. This would reduce the potential magnitude of effect and consequently, no significant adverse effects are anticipated.

Indirect (Operational) Effects on the Historic Environment

- 7.82 The guidance note on setting, 'Managing Change in the Historic Environment' (HES 2016), has been used to inform setting assessments in the section below. A summary of the predicted indirect effects upon the settings on the designated assets is provided in a Summary Effects table, presented in Appendix 7B.

Knockinculloch, Enclosures (SM3357)

Importance and Present Setting

- 7.83 The heritage asset comprises the scheduled remains of a series of enclosures (SM3357) located approximately 1.3 km north-east of the Site. The asset comprises a single large

enclosure, sub-rectangular in plan, measuring 125 m by 95 m, encompassing eight or nine smaller enclosures. All features share the same orientation (north-west to south-east). The enclosures are defined by a series of earthen banks, approximately 1m wide and 0.4m high. Understanding of the complex of features has changed little since it was first recorded in 1892. Although it is difficult to ascribe a date to the asset, it is judged to represent an early example of stock penning, and as a scheduled monument is considered of national significance (high sensitivity).

- 7.84 As an example of stock penning, the asset's key importance relates to its function. However, the monument is also sited at the head of a valley, on the south-east flank of Knockinculloch and its location affords views focused to east and south-east, towards Black Fell and Glenalla Fell, with the asset overlooking the low land of Keelie Brae and the Glenalla Farmstead and Watermill (169875). This provides a context for understanding its historical role and its relationship to the surrounding areas.
- 7.85 The current setting of the monument is defined by modern forestry plantations on Knockinculloch, bounding the scheduled enclosures to the north and west, and on the Black Hill of Garleffin, bounding the monument to the south. The forestry detracts by representing an entirely modern and incongruous context in terms of density of tree cover and species mix, by altering any historic access routes and by precluding pre-existing visual relationships to the landscape. The asset's current setting between two areas of commercial plantation obscures to a degree the viewer's ability to understand or interpret its original landscape setting. However, the ability to understand the archaeological and historical functional value of the enclosures remains.

Change to Setting

- 7.86 The ZTV (Figure 7.1) indicates that up to 14 turbine blade tips would be visible from the scheduled enclosure remains. The nearest turbine will be positioned c.1.60 km to the south-west. However, as noted above, commercial forestry would currently partially screen views to the west and south-west, precluding some visibility of proposed turbines (Figure 7.3).
- 7.87 Turbines in the northern parts of the Site, while potentially visible from the asset in views looking west and west-south-west would be hidden by forestry plantation (Figure 7.3). A channelled gap in the surrounding forestry, running westwards from the asset, would allow views of elevated areas of the Site in this direction allowing closer turbines to be visible, although turbines further to the western edge of the Site would have slightly reduced visibility as a result of the forestry plantation.
- 7.88 The orientation of the asset on an exposed south-east facing slope, encourages long views across the lowlands below as well as to the east and south-east across the Keelie Brae valley and towards the hill opposite. These are views in which the Proposed Development would not intrude upon.

Significance of Effect

- 7.89 The presence of turbines in views to the south-west would alter views west and west-south-west from the asset, being relatively dominant features in the foreground in this direction.

There is a degree of screening at present, although views of the turbines may become more prominent should tree felling occur in this vicinity during the duration of the Proposed Development. The key views focused east and south-east away from the Proposed Development across the valley below and will not be affected by the visibility of the proposed turbines; the ability to understand the archaeological and historical functional value of the enclosures would also remain.

- 7.90 The Proposed Development would result in a slight magnitude of change, which would give rise to a moderate adverse effect, which is considered not significant.

Bencallen Hill, Chambered Cairn (SM3890)

Importance and Present Setting

- 7.91 The scheduled chambered cairn, or 'Druid's Grave', at Bencallen Hill (SM3890) is located approximately 2.3 km south-east of the Site. It is considered of national importance (high significance), primarily for its ability to inform study of prehistoric burial practices. It has been identified as a Bargrennan-type cairn, although its current condition is poor due to severe disturbance caused by the incorporation of a sheepfold at its northern perimeter wall. The surviving portion of the chamber, comprising two pairs of side stones and two or three capstones, still retains its roof. A line of upright slabs which extends from the side of the chamber is probably an original feature.
- 7.92 The monument is located on the steep south-west slope of Bencallen Hill. This siting is likely deliberate with views to the immediate valley and those which surround it forming a deliberate part of its setting. Prevailing views are of Balloch Hill directly to the west, overlooking the Balloch Burn valley directly below. There are also long views afforded along the valley to the south-east as well as to the north and north-west. Although the monument is in poor condition, the orientation of the cairn is perceived to be largely north-south, with a probable entrance located to the north, suggesting that key aspect of the cairn's setting is Shiel Burn and views up the Balloch Valley to the south, providing a background when approaching the monument from the north. It was likely intended to be a visible feature in the landscape, however its current condition means that this aspect is now lost.
- 7.93 Pinbreck Hill cairn lies to its south, and the Stinchar valley cairns to the north. It is possible that these are broadly contemporary prehistoric burial cairns and possess a deliberate spatial connection to each other, contributing to the setting of the asset.
- 7.94 In addition to its potential relationship to nearby cairns, the chambered cairn's current setting makes a positive contribution towards its understanding and appreciation by providing a sense of remoteness and the absence of discernibly modern elements in the immediate surroundings of the asset that accord with contemporary perceptions of time-depth.

Change to Setting

- 7.95 The ZTV (Figure 7.1) demonstrates that proposed turbines will be visible from the scheduled chambered cairn at Bencallen Hill. Wireframe (Fig 7.4) demonstrates that turbines at the

Site would appear in aspects of long views to the north and north-west from the asset within the hills to the northern part of the valley and would also be visible as a background element when approaching the cairn from the south. The closest proposed turbine is at 4.5 km.

- 7.96 While turbines would appear in views northwards and north-westwards from the asset's location, intervening local topography means that proposed turbines would appear along and behind the ridge to the far side of the valley to the north, rather than encroaching into the immediate valleys. They would therefore be perceived as more distant elements of the landscape rather than in the foreground. The clearance of trees immediately surrounding the monument affords the asset long views from its elevated hillside position, although tree cover further upslope on Balloch Hill may at present, partially impede extreme right hand views of the turbines.
- 7.97 The monument's south-west facing hillside location also affords views focused to the west and south-west, across the Balloch Burn, towards Balloch Hill opposite, which will be unaffected by the Proposed Development.
- 7.98 The Site is not located between the group of cairns noted above and would not therefore affect their spatial relationship.

Significance of Effects

- 7.99 Several of the views which comprise key aspects of setting, including those across to the west and the approach to the monument from the north, will not be affected by the visibility of the Proposed Development. While aspects of the Proposed Development will be visible in mid-range views looking north, the ability to understand its historical and archaeological importance, as well as its connection to the landscape, would be largely unaffected.
- 7.100 The presence of the Proposed Development would therefore result in a slight magnitude of change, which would give rise to a moderate adverse effect, which is considered not significant.

Old Dalquharran Castle (SM316) & Dalquharran Castle (LB125)

Importance and Present Setting

- 7.101 Heritage assets in this group include the scheduled remains of the 15th century Old Dalquharran Castle (SM316) and the Category A listed 18th century mansion, also called Dalquharran Castle (LB125), sited approximately 4.4 km west of the Site. Both are of national importance and therefore of high sensitivity.
- 7.102 The remains of the scheduled Old Dalquharran Castle (SM316), comprise substantial surviving structures and buried archaeology together with an area enclosing the outer defences, set on the northern bank of the Water of Girvan. The monument is located within a wooded area, on a distinctive S-shaped bend in the river, on the northern outskirts of the village of Dailly. Originally a rectangular 15th century keep, the structure was enlarged and converted into a 'stately castle' in 1679, including gardens laid out within the ground north

to south away from the castle. Part of the northern boundary wall contains the remains of an ornate 17th century gateway, which was linked to the nearby 18th century mansion by a tree-lined avenue. A scarp to the west of the main tower may represent the line of an enclosing moat.

- 7.103 Old Dalquharran Castle (SM316) is noted with the scheduling information as being of national importance due to the fact it represents the well preserved remains of a castellated residence, with a potential to enhance understanding of the development from castle to mansion. Its setting is defined by its fortifiable location, protected by the river, surrounding marshlands and a moat. The asset was intended to survey the valley in which it sits. Recent felling and planned forestry works intend to open up the views from the monument to the south and are designed to re-create the connection between the asset and the river valley. As the purpose of the castle changed over time, so did its setting and its conversion into a stately castle, its grounds and gardens, and a closer woodland environment became a key aspect of its setting. A sense of being enclosed, by both the adjacent river and the mature woodland surrounding the building remains. The immediate surroundings of the castle are noted as having the potential to provide archaeological information on the infrastructure and remains of formal gardens of these periods.
- 7.104 Dalquharran Castle, a Category A listed building (LB125), is located c. 300 m north-west of the scheduled castle remains. Designed in c. 1790 by Robert Adam, the mansion was built in a crenellated gothic style around a central round tower or rotunda, with a low stable range featuring prominently opposite the building's main entrance to the north-west. The mansion stands north of Dailly on the south-facing slopes of the Girvan Valley, and was built as a replacement of the earlier 15th century castle (SM316), the remains of which survive to its south-east. The castle was modified in the later 19th century, with the addition of the two wings added to the side of the castle, altering the original architect's composition. The mansion is currently in ruins meaning while it is publicly accessible, there is limited access to the upper floors.
- 7.105 Adam placed the 19th century mansion prominently on a hill overlooking the Girvan Valley, clearly with the intention of making it appear conspicuous and visually dominant when viewed from the south and south-east. On this basis, it could be considered therefore that views from the direction of the B741 contribute to its 'public setting'.
- 7.106 The south-east elevation, structured around the central four-storey circular rotunda, has open views out across the Girvan Valley, across the intervening farmland, towards the hills opposite. The setting makes a positive contribution to its understanding and appreciation by providing a locally prominent situation within a landscape.
- 7.107 There is also a spatial relationship with the nearby scheduled castle (SM316). While the site walkover determined that visibility between the two castles is currently limited by tree planting, partial views are afforded of the 19th century mansion from the scheduled castle remains via the alignment of a ruined arch. Taken together the two structures form a historical sequential group, and each contribute greatly to the immediate setting of the other in a south-east alignment. A contemporary north-west facing view of Dalquharran (Cocking, 1789, not illustrated) shows the two castles standing together within the designed landscape.

Changes to Setting

- 7.108 The scheduled Old Dalquharran Castle (SM316) sits within the ZTV (Figure 7.1), although this does not consider intervening ground coverage. The site visit determined that views to the east towards the Proposed Development are largely screened at present due to existing woodland bounding the river's edge, hemming in the ruined asset. Although this planting is intermittent in parts, particularly to the south due to recent felling and woodland maintenance, the scheduled archaeologically sensitive areas identified outside the remains of the main tower are largely screened from the Proposed Development by the tree coverage that extends along all parts of the river fronting the monument's southern and eastern boundaries. The introduction of the turbines will therefore only have limited visibility from the scheduled Old Dalquharran Castle at present. Should views open up further at different times of year due to lack of leaf cover, the Proposed Development infrastructure at a distance of nearly 5 km may be visible in longer views to the south-east beyond the immediate valley in which it sits. However, its defensible location and connection to the river valley to the south would remain unaffected as would its connection to its immediate setting; the ability to appreciate the archaeological and historical importance and changing function would remain.
- 7.109 Fourteen turbine blade tips would be visible in views south-east from the Category A listed Dalquharran Castle (LB125) (Figure 7.5), although the nearest turbine would be 5 km away. Overgrown vegetation in front of the south-east elevation currently impedes visibility out from the rotunda area at ground level, and the close setting in which the asset can currently be appreciated remains largely unaffected. Turbines would theoretically be more visible from all the upper floors within the south-east elevation, however the current ruined nature of the asset and the inaccessibility to these floors means that these views are presently unobtainable.
- 7.110 The criteria laid out in Table 7.3 attaches weight to 'those elements of the setting which directly contribute to the understanding of the cultural value of the asset'. The core elements of Dalquharran Castle (LB125) are defined as its relationship with the crenellated stable courtyard to its north-west, which form its curtilage, its visual relationship with the 15th scheduled castle and the remnants of the designed landscape which intertwined them. Given that the mansion was designed to be visually prominent, views of the rotunda from the south and south-east over the Water of Girvan also directly contribute to the understanding and appreciation of the asset. These key aspects and views towards the asset would remain unaffected, and it is only in longer range views out from the asset out to the south-east where the Proposed Development would be visible. The proposed turbines would form new features within those views looking south-east, although they would not obscure the view of the immediate designed landscape nor the ability to appreciate its location and connection to the surrounding context including Old Dalquharran Castle (SM316). The Proposed Development, while visible, would be set within the wider panorama of the hills which extend southwards and eastwards from the Girvan Valley. Therefore, while present within this key aspect of its setting, the Proposed Development would not form a major focus of views outwards.

Significance of Effects

- 7.111 In the present context, there would be a limited adverse effect on the scheduled remains of Old Dalquharran Castle (SM316), as views to and from the Site are largely precluded by the intervening mature woodland located along the Water of Girvan. The Proposed Development will therefore not affect the key characteristics of the setting or the understanding of the asset. This would give rise to a negligible magnitude of change, which would result in a moderate/minor adverse effect which would be not significant.
- 7.112 The Proposed Development would not affect key elements of the immediate setting and designed landscape of the Category A Dalquharran Castle (LB215), its relationship to Old Dalquharran Castle (SM316), nor the ability to understand and appreciate its historical and architectural aspects. The Proposed Development would however appear at a distance of c.5 km in wider landscape views which contribute to its setting; although the ruined condition of the castle mean that these views outwards, particularly from the upper levels, are less readily appreciated. Nonetheless, on a precautionary basis, the potential magnitude of change is considered to be moderate. This would result in a major/moderate adverse effect, which is significant.

Maxwellston Hill Fort (SM2201)

Importance and Present Setting

- 7.113 Maxwellston Hill Fort (SM2201) is a scheduled monument and a heritage asset of national importance. It is therefore considered to be of high sensitivity. The asset comprises the oval remains of hill fort situated on Maxwellston Hill. Thought to be late prehistoric in date, the monument is defended around most of the circuit by two ramparts with external ditches, typically 4.5m in width, and 0.7m in height. There are entrances on the north-eastern and western sides, and the interior is featureless. The hill fort is of importance as an example of a prehistoric defensive fort, and its setting is characterised by its prominent siting on the summit of Maxwellston Hill - extensive views outward from the summit in all directions allow the surrounding landscape to be surveyed.
- 7.114 The main approach east to west is along a track leading from Craig Farm along a ridge of hills. Approaching the monument from the east, affords key views of the monument with background views of the Lauchian Burn valley below. Key views also comprise open views focused north and north-west from the asset, down a steep slope, taking in pastoral farmland along the Water of Girvan valley, and Bargany GDL.

Change to Setting

- 7.115 Maxwellston Hill Fort is located at the edge of the ZTV (Figure 7.1). The Proposed Development would result in the presence of turbines in views east-north-east and north-east from the asset (Fig 7.6). The nearest turbine would be located over 4 km away, and the Proposed Development would therefore comprise background elements in longer-distance views in a less prominent direction from the fort. Other views from the monument to the west and north towards the Girvan valley would remain unaffected as would short-distance views in all directions. The views to the west and north could be considered to represent the key views out from the asset given its location on a western facing hill and

providing a backdrop to the current approach to the monument and over Water of Girvan valley.

Significance of Effects

- 7.116 The presence of turbines at a distance of over 4 km in views to the east-north-east and north-east would appear in the wider landscape level panoramic views from the monument but would not affect the majority of key views from the asset, nor from its approaches. The ability of the viewer to understand and appreciate its historic significance and its deliberate siting within the landscape would remain. The magnitude of change is therefore considered to be slight giving rise to a moderate adverse effect which would be not significant.

Bargany Garden and Designed Landscape (GDL00047), and Bargany House (LB1171)

Importance and Present Setting

- 7.117 Bargany (GDL00047) is an inventory garden and designed landscape (GDL) that contains the Category A listed Bargany House (LB1171) and is of high sensitivity. The asset lies 4 km west of the Site. The park is located on the original site of the 16th century Bargany Castle Estate on the south bank of the Water of Girvan, some 3 km south-west of the village of Daily. The designed landscape was subject to a series of alterations and improvements over the course of 18th and 19th centuries. The park evident today was the work of W. S. Gilpin from c. 1826, including the creation of the walled garden between 1808 and 1833. Woodland and rock gardens were created between c. 1910 and 1939.
- 7.118 Bargany House (LB1171), for which the designed landscape was created, is an unfortified mansion of the late 17th century, comprising three storeys and attic. The structure was augmented by two single storey pedimented additions in the mid-18th century, with further alterations begun around 1840. The Category B listed Bargany House Bridge (LB1172) was built c. 1776, and the Category B listed 17th century remains of Brunstone Castle (LB6705), stand in the east of the park, on the northern shore of the Water of Girvan.
- 7.119 The inventory listing for Bargany GDL states that the asset is important for its outstanding value of artistic, architectural and historic interest, as well as having outstanding value for its scenic properties. As a result, the inventory garden and designed landscape and the associated listed buildings have been considered as a coherent group of assets of national importance.
- 7.120 The GDL is situated on a low-lying floodplain in the Water of Girvan valley, overlooked by Craighead Hill and Blawearry Wood to the north, and Maxwellston Hill, Hadyard Hill and Craig Hill to the south. Trees around the perimeter of the GDL are largely coniferous, while the majority of the trees surrounding the house and walled garden are deciduous providing key features and boundaries to the various parts of the landscape.
- 7.121 Specific aspects of the designed landscape which contribute to an artistic and scenic value, rated by Historic Environment Scotland as outstanding, are:

- Bargany's contribution of woods and parks to the surrounding scenery;
 - Views gained from the south looking across the park, whilst from the north, significant views are afforded from the B741, the B734 and the railway, looking south; and
 - Bargany's outstanding value as a work of art in its present form, being an excellent example of the work of W. S. Gilpin.
- 7.122 Contributing factors to the architectural value of the asset, rated by Historic Environment Scotland as outstanding, are:
- The Category A listed Bargany House; and
 - The setting of Bargany House provided by the Bargany GDL.
- 7.123 Contributing factors to the historical value of the asset, rated by Historic Environment Scotland as outstanding, are:
- The park's 350 year association with the Hamiltons of Bargany; and
 - The park being an excellent example of 19th century park and garden design, with documentary evidence of earlier periods²

Change to Setting

- 7.124 The ZTV (Figure 7.1) indicates that no turbines will be visible from the listed Bargany House itself, due to intervening natural topography rising immediately to the south and south-east of the asset. Maxwellston Hill, Hadyard Hill and Craig Hill all rise sharply adjacent to the asset, precluding long views beyond them in an arc from south to east.
- 7.125 The ZTV (Figure 7.1) indicates that seven of the proposed turbines may be visible from the western core of Bargany GDL. A wireframe (Figure 7.7) demonstrates the visibility from this edge would be limited by the intervening topography screening much of the southern part of the Proposed Development.
- 7.126 Turbines would not be visible in views which contribute to the architectural and historical value of the asset as expressed in the inventory description detailed above. The natural topography to the south and south-east, the presence of dense deciduous tree planting encompassing Bargany House, the walled garden, as well as coniferous tree planting along the banks of the Water of Girvan and along much of the asset's boundary, would largely filter background visibility of the turbines.
- 7.127 While the density of the immediate planting around the house and walled garden would vary with the season, it would still provide a degree of screening and any visibility of the Proposed Development would still only be glimpsed through the bare branches rather than being clearly visible even in winter. It is also not predicted that turbines would affect the primary orientation of views looking out from the Category A listed Bargany House's front elevation (south-west) and out of the building's rear elevation (north-east), across the open parkland.

² <http://portal.historicenvironment.scot/designation/GDL00047> accessed 23 October 2020

7.128 The Proposed Development will not affect the scenic and artistic values identified by the inventory description. Specifically:

- The contribution of the asset's woods and parkland to the surrounding landscape will not be affected;
- The designed landscape will not be directly affected and turbines will not intervene in views to, or from, viewpoints intended to provide specific views of the estate; the composition and integrity of designed landscape will not therefore be affected;
- The proposed turbines would not be visible from the artistic elements of the designed landscape. Consequently, the viewer's ability to understand and appreciate the asset would remain.

7.129 Views of the Proposed Development, from Bargany House, will be precluded by the elevated natural topography immediately to the south and south-east. Trees will also block visibility from the western core of the GDL, including Bargany House. The eastern part of the GDL, where visibility is predicted to some extent by the ZTV and wireframe (Figures 7.1 and 7.7), now contains a golf course, holiday chalet park, modern housing and a road network, and thus has low relative sensitivity within the landscape as a whole.

Significance of Effect

7.130 The ZTV shows no theoretical blade-tip visibility from Bargany House while the site visit and wireframe (Fig. 7.7) confirmed large parts of Bargany GDL are screened from eastern views by dense mature coniferous planting around its perimeter, in addition to more seasonal screening provided by the deciduous trees around the house. Furthermore, intervening topography limits the number of turbines visible in many views. Consequently, any glimpsed visibility of the Proposed Development as the viewer moves around the Garden and at different times of year is considered to be a negligible magnitude of change, which would result in a moderate/minor adverse effect which would be not significant.

Kilkerran Garden and Designed Landscape (GDL00238), and Kilkerran House (LB1114)

Importance and Present Setting

7.131 Kilkerran (GDL00238) is an inventory garden and designed landscape (GDL) that contains the category A listed Kilkerran House (LB1114) and is an asset of high sensitivity. The park is located in the valley of the Water of Girvan, some 3 km north-east of Dailly. The closest part of the Site lies 2 km from the asset (the closest turbine at 2.8 km)

7.132 The park was designed around the site of a 14th century tower house, which was the home of the Fergusson's until the 18th century. The mansion was rebuilt in 1729 as a large, symmetrical elongated H-plan house with giant pilasters on the north front. By the end of the 18th century, extensive alterations had been carried out on the house, including a new entrance in the west front. The sunken garden and west front lawn were added in the late 19th century, with many of the parkland trees planted at this time.

- 7.133 Lady Glen flows south-east to north-west through the eastern parts of GDL. It is so called after the remains of the scheduled Lady Chapel (SM3358) on its west slope. Paths cross the burn by four bridges, while a drive was built to take carriages up to a nearby waterfall.
- 7.134 The Kilkerran GDL and Category A listed building are both situated on low-lying floodplain in the Water of Girvan valley. The river runs through the estate and is joined by several tributaries flowing down from the hills to the south, including the Toddy Burn. The GDL and listed building are both overlooked by moorland hills to the south and south-east which rise to c. 300 m (Barony Hill and Cairn Hill).
- 7.135 The inventory listing for Kilkerran GDL states that the asset is important for its outstanding value of artistic, architectural and historic interest, as well as having outstanding value for its scenic properties. As a result, the inventory garden and designed landscape, and the associated listed building, are considered as a coherent group of assets of national importance.
- 7.136 Aspects of the designed landscape which contribute to an artistic and scenic value, rated by Historic Environment Scotland as outstanding, are:
- The layout of the parks and Lady Glen;
 - The extensive key views along the valley, east and west, across the open parkland; and
 - The contribution to the surrounding scenery by virtue of its valley setting and quality of parkland trees.
- 7.137 Contributing factor to the architectural value of the asset, rated by Historic Environment Scotland as outstanding, is:
- The GDL provides the setting for the Category A listed Kilkerran House.
- 7.138 Contributing factors to the historical value of the asset, rated by Historic Environment Scotland as outstanding, are:
- The long association with the Fergusson family; and
 - The wealth of estate records and plans which are kept at the house.

Change to Setting

- 7.139 Kilkerran House lies outside the ZTV. Only the far south-east and south-west corners of the GDL lie within the ZTV (Figures 7.1) due to the intervening rising natural topography immediately to the south and south-east of the asset. Barony Hill and Cairn Hill both rise sharply up to c. 300 m adjacent to the asset in an arc from south to east-south-east, precluding long views beyond them. While there would be views towards the Proposed Development from the far south west as shown in Figure 7.8, these would appear beyond the hills, rather than in the foreground of views. The presence of the Proposed Development would not affect the key views noted above, particularly the extensive key views east and west along open parkland, nor the ability to appreciate and understand the historic value of the asset.

- 7.140 Turbines will not be visible in views which contribute to the architectural and historical value of the asset as expressed in the inventory description. The elevated natural topography to the south and south-east, as well as the presence of tree planting encompassing Kilkerran House and several pockets of dense woodland (e.g. Cockston Wood, Glengee Wood, Chapleton Wood) screen any background visibility of the turbines in views of the historic assets. Views across the asset towards the Proposed Development from the A741 may be possible at times as a viewer moves along the road, however this would be intermittent and not detract from the ability to appreciate the GDL within its wider landscape setting.

Significance of Effect

- 7.141 No effects are predicted with respect to Kilkerran House as a result of the Proposed Development.
- 7.142 Views of the Proposed Development from the Bargany GDL will be precluded by intervening tree planting, woodland and the elevated natural topography of moorland hills immediately to the south and south-east. There would be visibility turbines in the far south-west and south-east corners of the GDL and at times as a viewer passes along the B741. The Proposed Development is not anticipated to affect the scenic and artistic values identified by the inventory description. Specifically:
- The contribution of the asset's parkland and the Lady Glen to the surrounding landscape will not be affected;
 - Turbines would not appear in the key views identified along the valley, east and west, from the assets;
 - The proposed turbines would not be visible from the artistic elements of the designed landscape.
- 7.143 The presence of the Proposed Development, while visible from some parts of the Garden and designed landscape beyond the immediate surroundings would therefore not affect the viewer's ability to understand and appreciate its key values. It would result in a negligible magnitude of change which would give rise to moderate/minor adverse effect on setting, which will not be significant.

Blairquhan Garden and Designed Landscape (GDL00063)

Importance and Present Setting

- 7.144 Blairquhan (GDL00063) GDL is situated in upland country to the west of the village of Straiton, approximately 6.3 km north-east of the Site. The GDL contains the Category A listed early 19th century Blairquhan Castle (LB19094), located on the southern escarpment of the Water of Girvan which meanders through a wide valley defining the area.
- 7.145 Blairquhan GDL is of importance for its outstanding value of architectural and historical interest, as well as having high value for its artistic and scenic properties. The designed landscape is also described as making a significant contribution to the local scenery. As a result, the inventory garden and designed landscape and the associated listed building are considered as a coherent group of assets of national importance and of high sensitivity.

- 7.146 The surrounding landscape is largely agricultural with some afforestation. Moorland hills dominate views to the south. The key views are instead across the river valley to the north and east.

Change to Setting

- 7.147 The ZTV (Figure 7.1) shows that the proposed turbines will not be visible from the core areas of Blairquhan GDL (including Blairquhan Castle) due to the intervening rising topography immediately to the south and south-west of the asset. In the 6.5 km between the asset and the Site, several hills rise to 300 m, including Black Hill of Knockgardner, Clauchrie Hill, Glenalla Fell, Knockinculloch and The Pilot. The ZTV illustrates that only on the north-eastern and north-western edges of the GDL will turbine blade-tips be visible above this intervening upland topography. Here, the garden follows the route of the river which provides a focus, and large parts are wooded. The visibility is illustrated on the wireframe (Figure 7.9). Any views of the Proposed Development from these more northern aspects of the asset would be at a distance of over 8 km to the nearest turbine. Turbines would appear amongst the more distant landscape, rather than in the foreground of any views and would not be a distracting element in the setting.

Significance of Effect

- 7.148 The ZTV shows no theoretical blade-tip visibility from the most sensitive parts of Blairquhan GDL where views will be precluded by the intervening elevated natural topography of moorland hills immediately to the south and south-west of the asset. Where the turbines are visible, they would appear as distant elements in the wider landscape rather than within its immediate setting and would not significantly detract from the ability to appreciate and understand the Garden's historic and designed value. Consequently, any change is considered to be of negligible magnitude resulting in a moderate/minor adverse effect which would be not significant.

Mote Knowe (SM2863)

Importance and Present Setting

- 7.149 Mote Knowe (SM2863) is a scheduled monument and asset of national importance (High Sensitivity) primarily for its potential to inform study of the prehistoric period. The asset comprises a natural mound, its height varying between c. 5 m on the eastern side and c. 14 m on the western side. The summit was probably occupied by a prehistoric dun, surrounded by a wall, now reduced to a low mound of rubble.
- 7.150 It is located approximately 1.5 km to the west of the Site. The monument is sited on the south bank of the Dobbingsstone Burn, where it merges with the Delamford Burn to form the Lindsayton Burn. The monument is surrounded by marshy ground, located at the head of a valley, fringed by deep, water-eroded channels and associated upcast banks. It is located on a north-west-facing slope that leads up from the banks of two burns.
- 7.151 Mote Knowe has a setting that makes a positive contribution to its understanding and appreciation through providing a perceptually remote and tranquil location which accords with modern perceptions of an appropriate setting for a ruinous prehistoric

structure. Key views arise behind the asset, up the slope to the south-east, looking north-west down the Dobbingstone Burn and wooded valley, towards the medieval ruins of Kilkerran Castle, encompassing aspects of this natural, remote landscape. The asset itself is best appreciated from short-medium distance views, mainly restricted to the south or south-east, as the remains are largely enclosed to the north and west by trees fronting the two burns, and the hillslope to the east.

Change to Setting

- 7.152 The ZTV (Figure 7.1) indicates that the asset, situated in a low-lying area within a valley bottom overlooked by an adjacent north-west-facing hillslope, has theoretical views of a small number of turbine blade tips, with the remainder screened by the natural topography to the east (Figure 7.10). The immediate landscape context of the asset, confined by the two burns and the adjacent hillslope that create the perception of its remote and tranquil location, would remain unchanged. The Proposed Development would also not affect key views from upslope, behind the asset to the south-east, looking north-west, with the Dobbingstone Burn valley framing the prehistoric monument.

Significance of Effect

- 7.153 The Proposed Development is not anticipated to affect any key views of or from the asset, or intrude upon the monument's perceptually remote location within a small valley surrounded by burns and undeveloped hillslopes. It would not affect the viewer's ability to understand and appreciate the historical context of the monument.
- 7.154 Change resulting from the proposed turbines would be of a negligible magnitude. This would result in a moderate/minor adverse effect, which would be not significant.

Decommissioning Effects

- 7.155 The decommissioning of the Proposed Development would effectively reverse any indirect effects of the scheme and would not give rise to any adverse changes. Any temporary increase in the magnitude of change resulting from the visibility of decommissioning activities would be similar in nature to those identified during construction, but for a shorter timescale.
- 7.156 Any change as a result of the decommissioning of the Proposed Development would therefore be negligible, resulting in effects which would be not significant.

Cumulative Indirect Effects and Interaction of Effects

- 7.157 The potential effects of the Proposed Development cannot be considered in isolation. There are a number of operational, consented or proposed wind energy developments in the area around the Site. In order to consider the effects of the Proposed Development when taken in combination with other wind energy developments, the cumulative baseline established for the LVIA (Chapter 6) has been used with consideration given to the study area distances for indirect effects on the historic environment.

- 7.158 Consideration has been given as to whether any of the historic environment receptors that have been taken forward for assessment in this chapter are likely to be subject to cumulative indirect effects in combination with other developments. Other sites set out within the LVIA have been considered, in particular Hadyard Hill Wind Farm, located 0.7 km to the south-west of the Site, and Carrick Wind Farm, 0.6 km to the east (Figure 6.2). Cumulative effects are summarised in Appendix 7B.
- 7.159 Those assets where it was determined that there was no change, or that the effect of the Proposed Development would be negligible, have not been considered within the cumulative assessment.

Knockinculloch, Enclosures (SM3357)

The Proposed Development would appear in views north-west from the asset (Figure 7.3). Carrick Wind Farm would theoretically be visible extending round to the west and south west from the Proposed Development, although the current forestry would offer a degree of screening particularly to more southern parts. The forestry also provides a degree of disconnect in this direction compared to the original setting of the asset. The key views are focused east and south-east away from the Proposed Development across the valley below and will not be affected by the visibility of the proposed turbines; the ability to understand the archaeological and historical functional value of the enclosures would also remain.

Overall, it is therefore considered that the cumulative effects of the Proposed Development in combination with other wind farm schemes in the wider landscape would be no greater than that of the Proposed Development in isolation and would not be significant.

Bencallen Hill, Chambered Cairn (SM3890)

- 7.160 The location of Bencallen Hill, Chambered Cairn on a steep hillside in a north-west to south-east aligned valley means the Proposed Development is visible in views to the north. Hadyard Hill and Carrick Wind Farms would sit to the west and east of the Proposed Development potentially increasing the arc in which the turbines are visible in views in this direction (Figure 7.4). However, the shoulder of the hill the asset sits on as well as hills on the opposite side of the valley would limit this arc of turbines, particularly by screening most of the Carrick Wind Farm. Hadyard Hill Wind Farm would be visible, but at a much greater distance, and would appear beyond further hills. No other views from, or encompassing, the asset in other directions would be affected. Overall, it is therefore considered that the cumulative effects of the Proposed Development in combination with other wind farm schemes in the wider landscape would be no greater than that of the Proposed Development in isolation and would not be significant.

Dalquharran Castle (LB125)

Wireframe (Figure 7.5) indicates that Hadyard Hill Wind Farm is not readily visible from the asset, with only theoretical visibility of the top of a very small number of blade tips beyond the hill. Carrick Wind Farm would appear behind the Proposed Development and would

therefore be largely lost within views of the proposed turbines. The view as demonstrated by the wireframe (Figure 7.5) indicates that only one turbine would appear outside the arc of the Proposed Development. The presence of the Proposed Development would therefore not increase the arc in which turbines would be visible in views to this direction. As a result, the cumulative effect of the Proposed Development in combination with other wind farms is anticipated to be no greater than in isolation and no increase in magnitude of change is predicted. This would remain a major/moderate adverse effect which would be significant.

Maxwellston Hill Fort (SM2201)

- 7.161 In the case of the scheduled Maxwellston Hill Fort, a low magnitude of change was identified in this assessment, which would not give rise to a significant adverse effect. The asset lies c. 4 km to the west of the Proposed Development, on the western spur of Hadyard Hill.
- 7.162 The existing turbines at Hadyard Hill Wind Farm occupy a continuous arc of visibility from the south to the east from Maxwellston Hill Fort and the addition of the proposed turbines in the southern half of the Proposed Development would appear behind these and not result in any additional perceptual visual intrusion (Figure 7.6). However, the turbines in the northern half of the Site would be visible in conjunction with the turbines of the Hadyard Hill Wind Farm, the closest of which is c. 750m to the south-west of the asset.
- 7.163 The Proposed Development would appear in front of Carrick Wind Farm and while it would serve to bring the part of the view occupied by turbines closer, it would not increase the arc of view in which turbines are visible in long views north-east from the scheduled monument (as this arc would be occupied by Hadyard Hill and Carrick Wind Farms).. This would not affect key views from the asset (to the west and north) nor its approaches. The ability of the viewer to understand and appreciate its historic significance and location of the asset within the landscape would remain.
- 7.164 As a result, the presence of the Proposed Development in combination with the existing Hadyard Hill and Carrick Wind Farms would not increase the magnitude of change, which would ultimately result in a moderate adverse effect on the setting of Maxwellston Hill Fort, which is considered not significant.

Mitigation Measures

- 7.165 Any potential direct effects will be mitigated by the adoption of a scheme of archaeological work agreed with the WoSAS Archaeologist which may comprise measures to ensure avoidance of assets (e.g. boundary marker) or watching briefs in more open moorland areas to ensure preservation by record. Consequently, no significant adverse effects are anticipated.
- 7.166 As it is very difficult to provide effective mitigation for change to setting, mitigation of these effects has focused on detailed design of the Proposed Development to rule out significant adverse effects as far as it possible.

Residual Effects

- 7.167 Table 7.6 sets out the residual effects assuming implementation of proposed mitigation. In the case of direct effects, these are proposed to be mitigated by the adoption of an agreed written scheme of investigation.
- 7.168 For indirect effects detailed design has sought to minimise the effects on setting to avoid significant adverse effects.

Table 7.6: Residual Impacts

	Description	Pre-Mitigation Significance	Post-Mitigation Significance
Construction	Direct effects on known heritage assets Mitigation would be provided in the form of an archaeological WSI setting out measures such as avoidance or watching briefs.	Moderate/Minor (Not significant)	Minor/Negligible (Not significant)
	Direct effect on as yet unknown heritage assets. Direct effect on five huts (11656) There is the possibility that unknown buried archaeological remains could be present in areas of the Site. These assets will likely be of local or low importance, and any direct effect would therefore not be significant. Potential direct effects on 11656 . Mitigation would be provided in the form of an archaeological WSI setting out measures such as avoidance or watching briefs.	Major/Moderate (Significant)	Minor/Negligible (Not significant)
Operational	Mote Knowe (SM2863) – potential indirect effects as a result of change to setting.	Moderate /minor (Not significant)	Moderate /minor (Not significant)
	Knockinculloch, Enclosures (SM3357) - potential indirect effects as a result of change to setting.	Moderate (Not significant)	Moderate (Not significant)
	Bencallen Hill, Chambered Cairn (SM3890) - potential indirect effects as a result of change to setting.	Moderate (Not significant)	Moderate (Not significant)
	Old Dalquharran Castle (SM316) - potential indirect effects as a result of change to setting.	Moderate/Minor (Not significant)	Moderate/Minor (Not significant)
	Dalquharran Castle (LB125) - potential indirect effects as a result of change to setting.	Major/Moderate (significant)	Major/Moderate (significant)
	Maxwellston Hill Fort (SM2201) - potential indirect effects as a result of change to setting.	Moderate (Not significant)	Moderate (Not significant)
	Bargany Garden and Designed Landscape (GDL00047), and Bargany House - potential indirect effects as a result of change to setting.	Moderate/minor (Not significant)	Moderate/minor (Not significant)

	Description	Pre-Mitigation Significance	Post-Mitigation Significance
	Kilkerran Garden and Designed Landscape (GDL00238), and Kilkerran House (LB1114) - potential indirect effects as a result of change to setting.	Moderate/minor (Not significant)	Moderate/minor (Not significant)
	Blairquhan Garden and Designed Landscape (GDL00063) - potential indirect effects as a result of change to setting.	Moderate/minor (Not significant)	Moderate/minor (Not significant)
Decommissioning	None	-	-

Summary

- 7.169 This assessment identified two HER assets of low (local) importance dating to the post-medieval period within the Site as well as a further five assets noted during the assessment and in the previous Hadyard Hill Extension Wind Farm ES. However, the Proposed Development layout and infrastructure largely avoids any direct impacts on these known sites. Within the Site, only asset 306 (boundary marker) lies in close proximity to the Proposed Development infrastructure (within 50 m). There is the potential for a substantial to moderate magnitude of change to the asset due to disturbance as a result of construction activities particularly when micro-siting is considered. This would result in a minor adverse effect at most which would be not significant.
- 7.170 There is a possibility that hitherto unknown buried archaeological remains survive within the Site. However, given the density of planting coupled with the drainage associated with commercial plantations, such as those that characterise much of the Site, it is unlikely that any previously undetected remains will survive within the forested areas. Parts of the Site comprise undeveloped moorland and thus any unknown remains buried beneath these parts of the Site would be expected to survive relatively undisturbed. Given the identification of known prehistoric, medieval and post-medieval assets in the vicinity of the Site, there is a possibility that hitherto unknown buried archaeology remains survive within the Site; these could be subject to potential direct effects although these would be of a level that would be not significant.
- 7.171 The potential works along the road at the point required for the abnormal load alignment falls adjacent to an area of five huts (11565) recorded as non-designated assets within the HER. Whilst little further information is available as to their nature or date, the WoSAS HER record notes that these are potentially of national (High-Medium) importance. While not anticipated, any disturbance as a result of proposed works in the vicinity could result in a moderate to substantial magnitude of change depending on the extent of disturbance to the group. This could result in a major/moderate level of effect which would be significant. Any potential effects will be mitigated by the adoption of a scheme of archaeological work agreed with the WoSAS Archaeologist which may comprise measures to ensure avoidance of assets or watching briefs in more open moorland areas to ensure preservation by record. Consequently, no significant adverse effects are anticipated.

- 7.172 This assessment has identified seven Scheduled Monuments, three Category A Listed Buildings, two Inventoried Gardens and Designed Landscapes and the Barr Conservation Area within 5 km of the Site boundary. There are no Category B or Category C Listed Buildings within 2 km of the proposed turbines. No Inventoried Battlefields fall within the 5 km of the Site boundary.
- 7.173 The Proposed Development would not affect key elements of the immediate setting and designed landscape of the Category A Listed 18th century Dalquharran Castle, nor the ability to understand and appreciate its historical and architectural aspects. The Proposed Development would however appear at a distance of c.5 km in wider landscape views which form part of its design; although the current poor condition of the castle mean that these views outwards, particularly from the upper levels, are less readily appreciated at present. Nonetheless, on a precautionary basis, the potential magnitude of change is considered to be moderate. This would result in a major/moderate adverse effect, which is significant.
- 7.174 Indirect effects on the settings of all other statutory designated heritage assets included for assessment heritage study areas were found to be not significant.
- 7.175 The potential for cumulative indirect effects resulting from the effects of the Proposed Development, in combination with other operational, consented or proposed wind farms has also been considered. The assessment predicted a moderate and significant effect to the setting of the 18th century Dalquharran Castle, resulting from the Proposed Development alone. The assessment of cumulative effects, concluded that there would be no increase in the magnitude of change, with the level of effect remaining moderate, and therefore significant. No other significant indirect effects are predicted as a result of the Proposed Development or as a result of cumulative effects.

Acronyms

CIFA – Chartered Institute for Archaeologists

SAC – South Ayrshire Council

HEPS – Historic Environment Policy for Scotland 2019

HER – Historic Environment Record

HES – Historic Environment Scotland

HLA – Historic Landuse Assessment

PAN - Planning Advice Note

SPP- Scottish Planning Policy

WoSAS – West of Scotland Archaeology Service

ZTV – Zone of Theoretical Visibility

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Appendix 7A Gazetteer of Heritage Assets

See **Figures 7.1 & 7.2** for reference.

Designated Assets within Site Boundary

N/A

Designated Assets within 5km Wider Study Area

Category A & B Listed Buildings

List Entry	Name	Grade	Easting	Northing
LB125	Dalquharran Castle	A	227055	602161
LB1114	Kilkerran House	A	230464	603051
LB1119	Drumburle	A	228946	603089
LB126	Kilkerran Castle	B	229313	600512
LB1024	Alton Albany	B	227197	593733
LB1029	Stinchar Bridge, River Stinchar, Barr	B	227340	594053
LB1031	Gregside, 4 Stinchar Road, Barr	B	227603	594083
LB1031	Burnlea, 4A Stinchar Road, Barr	B	227593	594083
LB1034	Gregholm, 7 Changue Road, Barr	B	227746	593993
LB1116	Woodside And Neighbouring Cottages, Kilkerran	B	229641	603221
LB1117	Drumginnan Bridge	B	230580	604201
LB1118	Aird Bridge	B	229321	603332
LB1120	Gigmagog	B	229230	603162
LB1139	Churchyard, Dailly Parish Church, Main Street, Dailly	B	227067	601591
LB1139	Dailly Parish Church, Main Street, Dailly	B	227041	601615
LB1140	Parish Manse, Dailly	B	227241	601712
LB6705	Brunston Castle	B	226083	601181

Scheduled Monuments

List Entry	Name	Easting	Northing
SM5387	Drummochreen, House	227975	602621
SM3357	Knockinculloch, Enclosures on E slope of, 600m NW of Glenalla	234264	600518
SM3358	The Lady Chapel, 640m NE of Kilkerran	231118	603280
SM2863	Mote Knowe, Kilkerran	229799	600203
SM3890	Bencallen Hill, chambered cairn	233773	594392
SM316	Dalquharran Castle (Old Castle)	227234	601874
SM2201	Maxwellston Hill Fort	225960	598969

Inventoried Gardens & Designed Landscapes

List Entry	Name	Easting	Northing
GDL00238	Kilkerran	230511	603044
GDL00047	Bargany	225042	600778

Conservation Areas

List Entry	Name	Easting	Northing
CA80	Barr Conservation Area	227606	594128

Designated Assets within 20km Extended Study Area

Inventoried Gardens & Designed Landscapes

List Entry	Name	Easting	Northing
GDL00063	Blairquhan	236452	606128

Non-Designated Assets within Site Boundary

Non-Designated Assets within Site Boundary

WoSAS HER ID	MON Type	Name	Easting	Northing
12031	Cultivation Remains & Farmstead	Braker	230330	597465
12025	Hut(s)	Daljedburgh	232450	597150

Non-Designated Assets

Non-Designated Assets

WoSAS HER ID	MON Type	Name	Easting	Northing
1014	Archaeological Event Record	An Archaeological Survey At Blair, Kyle And Carrick	233284	600867
5262	Archaeological Event Record	Archaeological Survey: Scotland - Northern Ireland Interconnection (Ayrshire)	233400	594830
5442	Stones	Knockrochar	229615	600370
6142	Lime Works; Quarry	Barony Hill / Lannielane / Toddy Burn	231220	601700
6142	Lime Works; Quarry	Barony Hill / Lannielane / Toddy Burn	231310	601890
6142	Lime Works; Quarry	Barony Hill / Lannielane / Toddy Burn	231280	601820
6147	Enclosures	Knockinculloch	234230	600500
6149	Enclosure; Field Banks	Knockinculloch	234420	600375
6152	Farmstead (possible)	Dobbingstone	230780	600200
6152	Farmstead (possible)	Dobbingstone	230850	600250
11565	Huts	Delamford	228450	598650
11565	Huts	Delamford	228450	598650
11565	Huts	Delamford	228450	598750
11565	Huts	Delamford	228550	598650
11570	Farmstead	Milton	229345	595940
11575	Cultivation Remains	Milton Hill	229550	596450
11577	'Fort'	Glengennet	228875	595895

WoSAS HER ID	MON Type	Name	Easting	Northing
11578	Cairn (possible)	Milton Burn	229320	597550
11579	Church (possible)	Pynannot	229450	595850
11672	Enclosure; Cultivation Remains	Daljedburgh Hill	231000	596625
11673	Enclosure; Cultivation Remains	Doughty	232805	597705
11674	Bridge	South Balloch Bridge	232925	595520
11675	Cairn	Bencallen	233405	594835
12021	Cairn	Dalquhairn	232030	596065
12022	Motte (possible)	Daljedburgh	230720	596160
12023	Cairn	Knockeen	230600	595520
12024	'Dun' / 'Homestead' / Cairn	Pinvalley	233135	595250
12026	Farmstead	Sally Pollocks Bridge	232950	596650
12027	Farmstead	South Balloch / Pinmullan	232764	595399
12029	Bronze Axe	Dalquhairn	232130	596270
12030	Building; Rig	Auchengairn	233150	597150
12032	Farmstead; Cultivation Remains	Daljedburgh / Jerburgh	230720	596380
12033	Huts	Daljedburgh Hill	231750	596650
12034	Cultivation Remains	Daljedburgh Hill	230111	596542
12034	Cultivation Remains	Daljedburgh Hill	230350	596550
12035	Enclosure	Daljedburgh Hill	231600	596680
12751	Shieling-huts	Wee Knockinculloch / Blair	233755	601595
12751	Shieling-huts	Wee Knockinculloch / Blair	233805	601505
12751	Shieling-huts	Wee Knockinculloch / Blair	233645	601765
12751	Shieling-huts	Wee Knockinculloch / Blair	233615	601775
12752	Shieling-huts	Tam Mckain / Blair	232785	601255
12753	Hut-circle (possible)	Wee Knockinculloch / Blair	233155	601425
12754	House-platform	The Pilot / Blair	231995	600355

WoSAS HER ID	MON Type	Name	Easting	Northing
12755	Peat Diggings	Knockinculloch / Blair	234205	600705
12755	Peat Diggings	Knockinculloch / Blair	233505	600605
12755	Peat Diggings	Knockinculloch / Blair	233385	600605
12755	Peat Diggings	Knockinculloch / Blair	233350	600950
12755	Peat Diggings	Knockinculloch / Blair	233350	600950
12756	Quarry	Knockinculloch / Blair	234055	600825
12757	Shieling-huts	Tam Mckain / Blair	232490	601210
12757	Shieling-huts	Tam Mckain / Blair	232490	601210
22372	Structures	Milton Burn	229280	597370
40395	Sheepfold	Craig Hill	229040	599880
40397	Structures; Sheepfolds; Enclosures	Corphin Hill	229290	597380
40398	Building (possible); Sheepfold	Corphin	228180	596610
41984	Farmsteading	Toddy Burn / Whitefaulds	230870	602300
41985	Structure	Toddy Burn	231050	602300
41986	Structure (possible); Sheepfolds	Glenmartin Burn	232760	602140
41987	Field	Shiel Burn	233400	601600
41988	Sheepfold	Shiel Burn	233910	601470
41989	Industrial; Farmsteading; Watermill (possible)	Glenalla	234680	600200
42019	Structure	Lainsdayton Wood	229000	600140
42382	Farmstead	Knockeen / Balshaig	230200	595870
42383	Farmstead	Clashgulloch Cottage	231750	595630
42384	Farmstead	Dalquhairn	232150	596250
42385	Farmstead	Dalwyne	232210	596290
42386	Building; Enclosure	South Balloch / Pinvalley Castle	232990	595450
42387	Farmstead	South Balloch	232870	595500

WoSAS HER ID	MON Type	Name	Easting	Northing
51492	Horse Engine; Threshing Machine	Glengennet / Miljoan	228649	595968
52005	Building	Penbleath / Delamford	229770	599670
52006	Sheepfold	Delamford	229760	599490
52153	Sheepfolds	Glenmartin Burn	232640	602130

Appendix 7B Significance of Effects

Summary of Effects upon the Setting of Designated Heritage Assets Considered by the Assessment

List Entry	Name	Designation	No. of Turbine Tips Visible (based on ZTV analysis)	Distance to Nearest Turbine	Current Factors Affecting Visibility	Sensitivity	Magnitude of Change	Level of Effects (*Significant Effect)
SM2863	Mote Knowe	Scheduled Monument	1	1.8 km	Hillslope to asset's east	High	Negligible	Moderate/Minor
SM3357	Knockinculloch Enclosures	Scheduled Monument	14	1.6 km	Commercial forestry partially screening views to south-west	High	Slight	Moderate
SM3890	Bencallen Hill Chambered Cairn	Scheduled Monument	14	4.4 km	Tree cover may partially impede views of the far right of the Site	High	Slight	Moderate
SM316	Old Dalquharran Castle	Scheduled Monument	14	4.8 km	Ruins sit within dense stand of mature trees	High	Negligible	Moderate/Minor
LB125	Dalquharran Castle	Category A Listed Building	14	5.1 km	Trees/vegetation will partially screen views from ground level	High	Moderate	Major/Moderate*
SM2201	Maxwellston Hill Fort	Scheduled Monument	14	4.5 km	Existing turbines of Hadyard Hill wind farm may block some of the proposed turbines	High	Slight	Moderate
GDL00047	Bargany	Garden & Designed Landscape	7 (from western core)	4.8 km	Trees will block visibility from western core; eastern part of GDL contains more visibility but is Low Sensitivity	High	Negligible	Moderate/Minor
GDL000238	Kilkerran	Garden & Designed Landscape	0 (across most of GDL); 12 in SW	2.8 km	Hills to the south-east, and vegetation,	High	Negligible	Moderate/Minor

			corner; 8 in SE corner		obscures views from most of GDL			
GDL00063	Blairquhan	Garden & Designed Landscape	14 (NW & Northern parts of GDL)	6.3 km	Most southern and core areas of GDL (including Blairquhan Castle) outside the ZTV due to hills to the south	High	Negligible	Moderate/Minor

Summary of Cumulative Effects upon the Setting of Designated Heritage Assets Considered by the Assessment

List Entry	Name	Designation	The Proposed Development Significance of Setting Effect	Sensitivity	Magnitude of Cumulative Change	Level of Cumulative Effect (*Significant Effect)
SM3357	Knockinculloch Enclosures	Scheduled Monument	Moderate	High	Slight	Moderate
SM3890	Bencallen Hill Chambered Cairn	Scheduled Monument	Moderate	High	Slight	Moderate
LB125	Dalquharran Castle	Listed Building	Major/Moderate	High	Moderate	Major/Moderate*
SM2201	Maxwellston Hill Fort	Scheduled Monument	Moderate	High	Slight	Moderate