

# Appendix 6.2: Assessment of Effects on Special Landscape Qualities for Hoy and West Mainland National Scenic Area

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# Appendix 6.2: Assessment of Effects on NSA

## **Introduction**

This Appendix contains the assessment of effects on the Special Landscape Qualities (SLQs) of the Hoy and West Mainland National Scenic Area (NSA). It follows guidance set out in Scottish Natural Heritage's (SNHs) Working Draft 11 entitled '*Guidance for Assessing the Effects on Special Landscape Qualities*' (November 2018). The guidance is aimed specifically at landscape professionals undertaking Landscape and Visual Impact Assessments (LVIA) for developments or land use changes with potential to impact on the SLQs of NSAs or National Parks (NP).

The following figures are of particular relevance to the assessment of effects on the NSA and have been used in the assessment process.

- Figure 6.3: Landscape Designations and Wild Land Area;
- Figure 6.8a and 6.8b: Landscape Designations and Wild Land Area with ZTV;
- Figure 6.15: Viewpoint 1: Knap of Trowieglen;
- Figure 6.18: Viewpoint 4: A961 OS Viewpoint, South Ronaldsay;
- Figure 6.21: Viewpoint 7: Clestrain;
- Figure 6.24: Viewpoint 10: Ward Hill; and
- Figure 6.29: A961, Burray.

The draft guidance presents an approach that is intended to be '*proportionate to the scale and stage of the development, be clear and transparent so that the reasoning that informs judgements can be tracked and convey the complexity of effects*'. It sets out a four-step approach presented in the associated Pro Forma under the following four headings;

- Step 1: The Proposal – Gain as full an understanding of the proposal as possible.
- Step 2: Definition of the Study Area and Scope of the Assessment - identifying the area likely to be affected.
- Step 3: The Analysis of Impacts and Effects on SLQs.
- Step 4: Summary of Impacts on the SLQs, implications for the NSA/NP and possible future effects on SLQs and recommendations for mitigation.

## **Role of NSAs**

National Scenic Area (NSA) is a conservation designation used in Scotland and administered by Scottish Natural Heritage (SNH). The designation's purpose is to identify areas of exceptional scenery and to protect them from inappropriate development. NSAs were first established in 1980, under planning legislation, by order of the Secretary of State. Part 10 of the Planning etc. (Scotland) Act 2006 gave NSAs a statutory basis. The Town and Country Planning (National Scenic Areas) (Scotland) Designation Directions 2010 then brought this into force. In December 2010, NSAs were designated under this new legislation.

Scottish Planning Policy (SPP) is a statement of Scottish Government policy on how nationally important land use planning matters should be addressed. With regard to National Designations, SPP states that:

*“Development that affects a National Park, National Scenic Area, Site of Special Scientific Interest or a National Nature Reserve should only be permitted where:*

- *the objectives of designation and the overall integrity of the area will not be compromised; or*
- *any significant adverse effects on the qualities for which the area has been designated are clearly outweighed by social, environmental or economic benefits of national importance.”*

The role of this assessment is to provide an appropriate level of information to enable decision makers and consultees to reach a conclusion regarding the potential effects on the qualities of the Hoy and West Mainland NSA.

This assessment is carried out with specific reference to the effect that the Proposed Development may have on the ‘special qualities’ of the NSA. Special qualities are defined as ‘the characteristics that individually, or when combined together, make an NSA special in terms of landscape and scenery.’ The special qualities of the Orkney – Hoy and West Mainland NSA are documented in two reports: ‘Scotland’s Scenic Heritage’ (Countryside Commission for Scotland, 1978), and ‘Special Qualities of the Orkney – Hoy and West Mainland NSA (SNH, 2010), which supersedes the 1978 report.

## ***Step 1: The Proposal***

The aim of Step 1 is to ‘*gain as full an understanding of the proposal as possible*’ by setting out the key aspects of the proposal that have potential to affect the SLQs.

The Proposed Development is located on Hoy, the second largest of the Orkney Islands. Hoy lies to the south-west of the Mainland of Orkney and is most famous for the dramatic cliffs around its western coast, including the famous stack ‘The Old Man of Hoy’. Hoy is the hilliest of the Orkney Islands, with the Rugged Hills LCT in the north rising to high points of 479 m and 433 m AOD. Moorland Hills LCT covers the central and southern inland area of the island, with the hills gradually falling in height from high points of 399 m AOD in the north to 101 m AOD in the south. The Proposed Development is located in the south-east of the island, on a low hill named Wee Fea (173 m AOD). It lies to the west of the village of Lyness, albeit still relatively close to the eastern coastal edge.

The Proposed Development comprises six turbines, each with a blade tip height of up to a maximum of 149.9m. Access into the site will be from the B9047 in Lyness, at a point to the immediate north of the junction with the B9048 connecting to the ferry terminal. It follows an existing track that runs to the south of Lyness Naval Cemetery and then on the north side of the broad tree belt on the eastern flank of Wee Fea (173 m). From this point, there is a single access track which loops around Wee Fea to provide access to all six turbines, with some sections of the track constructed on embankment, the most notable being between T1 and T2. Each turbine has a foundation and hard standing area to enable construction, and cuttings into the hillside are required to accommodate the flat platform required. A temporary construction compound will be situated to the south-east of the access track prior to arrival at T1. There will also be a permanent substation at the north-eastern end of the Site and meteorological mast at the western end.

## ***Step 2: Definition of the Study Area and Scope of the Assessment***

The aim of Step 2 is to identify the extent of the area likely to be affected through consideration of the location of the NSA relative to the Proposed Development, the extent to which the Proposed Development will alter the NSA, in this case as a result of its visibility only, and how it will affect people’s experience of the NSA from, both, within and outwith the boundaries.

### **Location of the NSA relative to the Proposed Development**

The Orkney – Hoy and West Mainland NSA covers the northern half of the Island of Hoy and the south-western corner of the Mainland of Orkney, with the designated area extending out to cover the island of Graemsay, as well as the surrounding seascapes. Hoy is famous for the dramatic Coastal Cliffs LCT, which lines the western edge of the island and the Rugged Hills and Moorland Hills LCTs, which form the upland backdrop. While the

Coastal Cliffs LCT occurs also along the western coast of West Mainland, the inland landscapes comprise a mix of the Coastal Hills and Heath LCT, east of which lies the large Loch Basin LCT associated with the Loch of Stenness and Loch of Harray (Figure 6.2a).

The Proposed Development lies a minimum distance of approximately 5.2 km from the closest southern edge of the NSA. The Proposed Development will, therefore, have no direct effects on the NSA. The ZTVs in Figure 6.8a, 6.8b and 6.10a (15km radius at A1) and 6.10b (15km radius at A0), show the extent of theoretical visibility across the NSA. Through visibility, the Proposed Development will have an indirect effect on the NSA, as it will be seen from within the designated area, despite its location outwith the designated area. It may also have an effect on the setting of the NSA, in views from outwith the NSA, when looking towards the NSA with the Proposed Development visible in the views.

Guidance set out in SNH's 'Visual Representation of Wind Farms Version 2.2' (February 2017), indicates that an area with a radius of 40 km from the nearest turbine is appropriate for turbines of the size proposed (149.9m).

The Hoy and West Mainland NSA is contained within the 40km study area but extends beyond the northern edge of the 15 km radius. It is unlikely that significant effects will arise in the West Mainland part of the NSA owing to a combination of its separation distance from the Proposed Development, the limited extent and levels of visibility of the Proposed Development across this area and the strong influences from existing human artefacts and land uses within and around this area. Despite this, this assessment considers the effects of the Proposed Development on the Hoy and West Mainland NSA as whole, in order to reflect the sensitivity of this designated area and to demonstrate the variable effects that will be experienced across its extents. The assessment also considers the effects on the setting of the NSA as experienced in views from the Mainland of Orkney to the north-east and Burray and South Ronaldsay to the east. This draws the study area out to an approximate 25 km radius around the Proposed Development.

The following description of the Hoy and West Mainland NSA is taken from Scotland's Scenic Heritage 1978. It highlights the importance of the high hills and the west coast cliffs of North Hoy in wider range views, as well as the strong visual relationship between North Hoy and West Mainland. No reference is made to the relationship between North Hoy and the south of the island where the site of the Proposed Development is located.

*"The great ice-rounded eminences of the hills of North Hoy dominate the Orkney scene with a power that is scarcely in tune with their modest height (479 metres). Their bold shape, fine grouping, soaring cliffs and headlands, including the famous stack of the Old Man of Hoy, are almost as important to the Caithness scene as they are in that of Orkney.*

*North Hoy has a particularly strong visual inter-relationship with the south-west mainland of Orkney, the pastoral character of which around the shores of the Loch of Stenness makes a good foil for the bold hills of Hoy. The basin of this loch is enclosed by low rolling hills of lush grassland, some arable land, scattered farm steadings and stone dykes with a noticeable lack of trees, giving a very open landscape, the character of which is enlivened by the abundant remains of ancient occupation.*

*This landscape culminates in the west in cliffed headlands like a rampart against the sea, which breaks through at Hoy Sound in a tidal race of impressive swiftness. The stone-built settlement of Stromness rising steeply out of its harbour further enhances the character of the area."*

The southern part of the nationally designated Hoy and West Mainland NSA overlaps with the northern part of Hoy WLA, which is not a landscape designation but a mapped interest indicating the particular wildness qualities of that area. A detailed assessment of the effects on Hoy WLA is covered in Appendix 6.3.

### **General visibility of the Proposed Development from the NSA**

In order to inform the assessment of effects on the special landscape qualities of the NSA, it is important to understand the geographical extent to which the Proposed Development will be visible across the NSA, the

distance from which the Proposed Development will be visible and the extent to which the proposed turbines will be visible. The ZTVs illustrate theoretical, bare ground visibility and in the case of the landscape of much of the NSA this will translate as actual visibility due to the general lack of tree cover and built form that might otherwise screen visibility.

The Hoy part of the NSA is the part most likely to be significantly affected owing to it being the closest to the Proposed Development. The Hoy part of the NSA is largely focussed on the Rugged Hills LCT in the north and the Cliffs LCT along the north-west coast, it also includes the U-shaped valley to the south of the hills. In order to mark the enclosure of the U-shaped valley, the northern part of the Moorland Hills LCT which lies to the south of the valley is also included in the designated area. This southern boundary appears relatively arbitrary owing to its straightness, irrespective of the variable landform of hills and valleys over which it passes.

Visibility of the Proposed Development from the Hoy part of the NSA is limited to three patches; one small patch in the Rugged Hills LCT, centred on Ward Hill in the north; one large patch over the Moorland Hills LCT, centred around Kingie Lang (280 m) and Vow Randie in the south-east corner; and one very small patch in the Moorland Hills LCT, centred around Whitefowl Hill in the south-west corner.

Visibility on Ward Hill extends along the curved ridgeline between Howes of Quoyawa in the east, through Ward Hill (479 m) in the north and onto the head of Red Glen in the west. The view from Ward Hill is illustrated in Viewpoint 10: Ward Hill, Figure 6.24. Visibility of the Proposed Development extends south from the ridgeline to cover the upper slopes and occurs within a range between approximately 8 and 10 km. The geographical extent is limited such that the visual influence is relatively localised within this much wider Rugged Hills LCT. While the Rugged Hills LCT and the Moorland Hills LCT to the south are largely characterised by the natural and undeveloped landscape, there are influences in the wider landscapes and seascapes including the presence of rigs, ferries and other vessels out in Scapa Flow to the east and settlements and masts across West Mainland to the north.

The sensitivity of the area around Whitefowl Hill, relates to the limited influence of human artefacts and land uses in the baseline context of this part of the Moorland Hills LCT. While the Proposed Development will give rise to a degree of change, the magnitude of this change will be limited. The ZTV shows that low levels of visibility on Whitefowl Hill occur across a very small patch in this south-western corner of the NSA. A wireline representing this location is presented in Figure 6.34 and confirms that visibility will comprise only three blades set behind the intervening landform at a distance of approximately 6.5 km.

The ZTV shows a larger patch of high level visibility to occur around Kingie Lang (280 m) and Vow Randie in the south-east corner of the NSA. While there is no development in this part of the Moorland Hills LCT, its proximity to the eastern coast means that it is more readily influenced by the offshore artefacts such as the rigs, ferries and other vessels in Scapa Flow and the onshore features such as the single turbine and oil terminal on Flotta. Visibility will typically comprise all six turbines readily visible, seen set on or behind the intervening landform at a range of approximately 5 to 7 km.

From all three areas described above, it is the high hills of Hoy and the surrounding seascapes and island landscapes that characterises the setting of the NSA. In this context, the low moorland hills in the south of Hoy form part of the general setting but do not occur as a prominent or special landscape feature.

There is no visibility across the coastal waters within the NSA to the west, north and east of Hoy and practically no visibility across Graemsay, although low levels of visibility increase westwards from the east coast of Graemsay, across Clestrain Sound and Bring Deeps. This coincides with views that may be obtained from the ferry routes to the east of Graemsay en-route to Hoy. The Proposed Development would be seen in a different part of the view to the main features of the NSA in views from these routes.

On the West Mainland part of the NSA, visibility occurs principally as one large band, which extends from Clestrain Sound and the adjacent Inclined Coastal Pasture of Clestrain to the east, northwards across the Bay of

Ireland, Loch of Stenness, Brodgar and Loch of Harray. The range of visibility lies between approximately 10 and 25 km, such that the proposed turbines will be seen as medium to small scale elements occupying a small proportion of the wider views. The Proposed Development would be seen in a different part of the view to the main features of the NSA in views from these locations within the NSA. They will also be seen from a context in which the modification of the landscape is widespread through agricultural land uses and dispersed rural settlement. Larger scale developments are evident mostly as masts on surrounding high ground.

### **Potential for cumulative effects**

The potential for cumulative effects to arise is very limited owing to the limited presence, size and proximity of cumulative developments in this area. The only developments within 10 km of the Proposed Development are the Ore Brae turbine to the immediate south-east of the site and the West Hill turbine on Flotta, approximately 6 km to the east. In the 10 to 20 km radius, there are two further single turbines under-construction; Akla on the Mainland of Orkney and Berriedale on South Ronaldsay and also the five consented Hesta Head turbines on South Ronaldsay.

### **How the NSA is used and experienced by people**

The Hoy and West Mainland NSA is used and experienced by people in different ways. This is in relation to the different attractions on offer, with some attracted by the natural landscape, and some attracted by historic and cultural sites. People visit Hoy and West Mainland, not only to enjoy the contrasting island landscapes and seascapes, but also the Neolithic remains that have led to the World Heritage Site Designation. The NSA largely coincides with the southern part of the 'Heart of Neolithic Orkney World Heritage Site Sensitive Area' as shown on Figure 6.8b.

There is a stark contrast between the landscape character of Hoy and West Mainland largely as a result of their varied underlying geology. Hoy is largely characterised by uninhabited uplands surrounded by large bodies of sea, while West Mainland is characterised by settled and cultivated lowlands where there is a complex relationship between the land areas and small sections of sea and lochs that are key to its character. While there is settlement in both parts of the NSA, on Hoy it is relatively sparse and limited to the coastal edges, while on West Mainland, settlement is widespread, with a mix of concentrated settlements, such as the town of Stromness and other nucleated villages, as well as dispersed settlement across most of the landscape.

Levels of accessibility are also very different between these two parts of the NSA. West Mainland is highly accessible owing to the fine network of A roads, B roads, minor roads and tracks which crosses most of the landscape. In the Hoy part of the NSA, while access is more limited, vehicular access is still provided by the B9047 on the east coast, by the minor road through the U-shaped valley leading onto the west coast and by the minor road extending onto the north coast. These roads open up opportunities for walkers to explore further into the coastal and upland landscapes, however, access and routes within the upland areas themselves are very limited.

Formal footpaths act to concentrate walkers in specific areas. From Rackwick a footpath wraps around the south side of Moor Fea (304 m AOD), then north along the west coast to the landmark feature of the Old Man of Hoy. Also, from Rackwick a path extends north through Glens of Kinnaird to the north coast. While there are no paths to the summits of the hills in this area, there is a short path from the minor road in the U-shaped valley to the Dwarfie Stane chambered tomb. There is no visibility of the Proposed Development from any of these paths.

The hills to the north and south of the U-shaped valley are challenging owing to the steepness of the slopes and the depth of the vegetation. The higher and more dramatic profile of Ward Hill (479 m) and the Cuilags (433 m) appear to make them more popular with hill walkers than the more indistinct Moorland Hills to the south, particularly as it is advertised that from Ward Hill it is possible to see all the islands of Orkney with the exception of Rysa Little. Approaching from the Rugged Hills LCT to the north, the steep climb is rewarded with expansive views in all directions and there is a sense of remoteness, albeit contained within the upland area, with human influences visible beyond.

The hills to the south of the U-shaped valley appear less well frequented, possibly owing to the combination of the lower and more rounded hill profiles, the absence of paths and the difficulty of the terrain. The latter two features contribute to the sense of remoteness, which intensifies in the Moorland Hills towards the west coast, where there are fewer human influences. On the east coast, the closer association with small scale rural development and land uses, including the B9047 and more notably, the oil terminal and single turbine on Flotta and rigs, ferries and other vessels out on Scapa Flow.

### **Step 3: The Assessment of Effects on the NSA**

Step 3 sets out the assessment of effects on the NSA that will potentially arise as a result of the Proposed Development. Within Step 3, the following four key considerations are made;

- identify those SLQs with potential to be affected;
- establish the key landscape characteristic that underpin the SLQs;
- assess the effects of the Proposed Development on the relevant SLQs; and
- consider the potential for mitigation and determine the level of effect.

Table A6.1.1 sets out a preliminary assessment to identify those SLQs with potential to be affected by the Proposed Development. Table A6.1.2 then establishes the key characteristics that underpin the SLQs with reference to SNH’s NSA citation and Landscape Character Assessment and are supplemented with the experiences of the assessor gained through site work. Table A6.1.2 also sets out the effects that all relevant SLQs would undergo as a result of the Proposed Development and determines the potential level of effect. While SNH’s draft guidance requests mention of mitigation measures, no such measures are included as part of the Proposed Development, although the iterative design process has mitigated, as far as is practically possible, the potential landscape and visual effects, with particular reference to valued landscapes such as the NSA, through consideration of the layout of the turbines and the other infrastructure, as described in Section 6.8 of the LVIA chapter.

#### **Sensitivity of the Hoy and West Mainland NSA**

The value of the Hoy and West Mainland NSA is high. This is because it is a national designation, applied in this area to signify the national importance of the scenic landscape.

The susceptibility of the NSA to the effects of the Proposed Development is medium to high. Not only is the minimum distance between the closest turbine and the closest boundary of the NSA approximately 5.2 km, there is also a ridgeline of moorland hills dividing these two separate parts of the island. The lack of direct association between these two landscapes, combined with the much wider and stronger association of the NSA with the surrounding seascapes and island landscapes, moderates the susceptibility of this closest part of the NSA to the effects of the Proposed Development.

The combination of the value of this NSA and its susceptibility to the effects of the Proposed Development results in an overall **high** sensitivity.

#### **Preliminary assessment to identify SLQs with potential to be affected**

**Table A6.1.1: Preliminary assessment to identify SLQs with potential to be affected**

Special Landscape Quality	Potential for SLQ to be affected by the Proposed Development
<b>A palimpsest of geology, topography, archaeology and land use.</b>	The location of the Proposed Development outwith the NSA and the fact that this SLQ is not affected by impacts on the setting of the NSA, means that it will have no effect on this special quality.



<b>Special Landscape Quality</b>	<b>Potential for SLQ to be affected by the Proposed Development</b>
<b>An archaeological landscape of World Heritage Status.</b>	While the location of the Proposed Development outwith the NSA means that it will have no direct effect on this special quality, there is potential for indirect effects to arise in respect of the setting of the archaeological landscape, especially in North Hoy.
<b>The spectacular coastal scenery.</b>	The Proposed Development is not located on or close to the coastal scenery of the NSA. The ZTV in Figure 6.8b shows that there will be no visibility of the Proposed Development from the coastal edges of Hoy that lie within the NSA. The Proposed Development will, therefore, have no effect on the coastal scenery of the Hoy part of the NSA. The ZTV does, however, show visibility from the coastal edge of West Mainland along Clestrain and around the Bay of Ireland, and although the coastal scenery is more distant from the influences of the Proposed Development, there is potential for this SLQ to be affected in this location.
<b>Sandstone and flagstone as an essence of Orkney.</b>	The location of the Proposed Development outwith the NSA and the fact that this SLQ is not affected by impacts on the setting of the NSA, means that it will have no effect on this special quality.
<b>A long settled and productive land and sea.</b>	The location of the Proposed Development outwith the NSA and the fact that this SLQ is not affected by impacts on the setting of the NSA, means that it will have no effect on this special quality.
<b>The contrast between the fertile farmland and the unimproved moorland.</b>	The location of the Proposed Development outwith the NSA and the fact that this SLQ is not affected by impacts on the setting of the NSA, means that it will have no effect on this special quality.
<b>A landscape of contrasting curves and lines.</b>	Although the Proposed Development will have no direct effect on the curves and lines of the landform within the NSA, there is the potential that it could affect views of this special quality from within the NSA looking out.
<b>Land and water in constantly changing combinations under the open sky.</b>	The location of the Proposed Development outwith the NSA and the fact that this SLQ is not affected by impacts on the setting of the NSA, means that it will have no effect on this special quality.
<b>The high hills of Hoy.</b>	Although the Proposed Development will have no direct effects on the high hills of Hoy, its visibility from localised parts of these hills means that it will give rise to indirect effects as experienced from within the NSA as well as effects on the setting of the high hill of Hoy as experienced from the Mainland of Orkney, Burray and South Ronaldsay.
<b>The townscape of Stromness, its setting and its link with the sea.</b>	The Proposed Development will have no effect on this special quality as it will not be seen in views to or from Stromness and will not affect its setting within wider views.
<b>The traditional buildings and crofting patterns of Rackwick.</b>	The Proposed Development will have no effect on this special quality as it will not be seen in views to or from Rackwick and will not affect its setting within wider views.

The findings of the preliminary assessment are that four of the 11 SLQs have the potential to be affected by the Proposed Development and, therefore, require more detailed assessment. The majority of the SLQs will not be affected, largely owing to the fact that the Proposed Development will be located outwith the NSA boundary, at distances greater than 5 km, and many of the SLQs are not susceptible to indirect effects or effects arising in respect of the wider setting. The four SLQs assessed in detail, have potential to be indirectly affected either from within the NSA, or from outwith the NSA, whereby the setting of the NSA as seen within the wider landscape and seascape context could be affected.

The four SLQs are assessed in detail in Table A6.1.2 below. In the left hand column, the descriptions of the SLQs are presented in bold text, while ‘further information’ is not in bold text.

In respect of the assessment of ‘An archaeological landscape of World Heritage Status’ SLQ, the WHS and the WHS Buffer are defined by UNESCO. UNESCO guidance states that buffer zones should include the immediate setting of the inscribed Site, important views, and other areas or attributes that are functionally important as a support to the Site and its protection. The WHS Sensitive Area is not statutorily protected and is not an official landscape designation. The Sensitive Area extends beyond the buffer zones and has been defined by HES (outlined in the 2014-19 WHS management plan (HES 2016)) to encompass an area in which largescale or tall development outwith the buffer zone has the potential to impact adversely on the sensitive setting of the WHS.

### Detailed Assessment

Table A6.1.2: Assessment of the effects of the Proposed Development on the SLQs

Underpinning landscape characteristics to inform detailed SLQ descriptions	Impacts of the proposal on underpinning key characteristics and the effects on SLQs
<b>SLQ: An archaeological landscape of World Heritage Status.</b>	
<p><b><i>“By their location, shape and vertical presence, the Neolithic monuments of the Ring of Brodgar, the Stones of Stenness and the grass-covered tomb of Maes Howe, are distinctive landmarks of international renown. They lie within a landscape of low-lying farmland, which has been farmed for millennia. Wilder moors and hills rise to the east, and the Hills of Hoy form the backdrop to the south. Unusually for Orkney, there are few clear views of the open sea. The area feels enclosed, in the middle of a vast lowland amphitheatre of glistening loch and fertile pasture. The Neolithic monuments of central Orkney comprise the Heart of Neolithic Orkney World Heritage Site and have become</i></b></p>	<p>The Proposed Development will be located a minimum of approximately 18 km to the south of the WHS, albeit approximately 16 km from the southern edge of the WHS Buffer Zone and approximately 4 km from the southern edge of the WHS Sensitive Area. The ZTV in Figures 6.8a and 6.8b show a band of visibility extending from Clestrain Sound and the adjacent Inclined Coastal Pasture of Clestrain to the east, northwards across the Bay of Ireland, Loch of Stenness, Brodgar and Loch of Harray. There will be no visibility of the Proposed Development from three of the four sites included in the WHS, namely, Stones of Stenness, Maes Howe and Skara Brae.</p> <p>There will be visibility of the Proposed Development from the Ring of Brodgar. While the wireline from this location shows that all six of the proposed turbines will be visible, at a range of approximately 19 km they will appear small in scale and with the full extents screened by intervening landform, such that only two will be visible to just above their nacelles and the remaining four will be seen as blades. The sea is not visible from this location and the location of the proposed turbines set behind the intervening landform of the Mainland of Orkney, with the high hills of Hoy set to the right, means that the Proposed Development, set on lower lying and more distant landform does not appear associated with Hoy but instead with the West Mainland. This is of importance in respect of the reference in the citation to the backdrop which the Hills of Hoy form in relation to the WHS. The proposed turbines will be offset to the left of this important landform feature, albeit still present in this sector of the view. They will be seen in the context of a settled and cultivated landscape in which modern artefacts already have an influence, including masts on surrounding hill tops and small-scale single turbines.</p> <p>The WHS Buffer Zone and Sensitive Area extend to define a wider area around the WHS. To the north of the WHS, visibility of the Proposed Development will become more distant and its influence will be diluted by wider influences from the wider landscape context. To the south, while the separation distance will reduce, the Proposed Development will be seen in the opposite direction to the WHS and will, therefore, have a limited effect on its wider setting.</p> <p>There will be no visibility from Dwarfie Stone nor the path leading up to it, owing to its location in a well concealed u-shaped valley.</p>

Underpinning landscape characteristics to inform detailed SLQ descriptions	Impacts of the proposal on underpinning key characteristics and the effects on SLQs
<p><i>recognisable landmarks of West Mainland.</i></p> <p><i>The solid carved boulder block of the Dwarfie Stane on Hoy lies within the NSA (although not in the World Heritage Site)."</i></p>	<p>The magnitude of change that the Proposed Development will give rise to in respect of this SLQ will be low. While visibility of the Proposed Development will extend through the central part of the WHS, its influence will be moderated by the separation distance between the WHS and the Proposed Development, the limited influence of a relatively small, compact and partly screened, group of turbines and the existing influence of closer range masts and single turbines as well as other forms of development. The effect on this SLQ will be not significant.</p>
<p><b>SLQ: The spectacular coastal scenery.</b></p>	
<p><b><i>"With their towering red cliffs, the Atlantic coastline creates a spectacular scene, enhanced by the presence of the Old Man of Hoy, the highest sea stack in the British Isles. These vertical structures of red sandstone, home to numerous seabirds are both a landmark and an iconic image of the Orkney Islands, especially for those arriving by sea from across the Pentland Firth.</i></b></p> <p><b><i>In comparison, the sheltered waters and gentle topography of the western approaches to Scapa Flow contrast with the Atlantic-battered western seaboard."</i></b></p>	<p>The ZTVs in Figure 6.8a and 6.8b show that there will be no visibility of the Proposed Development on those sections of the Hoy coast which lie in the NSA boundary including the notable cliffs and stacks. The ZTVs show that there would be no visibility of the Proposed Development in views of the west coast from those parts of the North Atlantic to the west and north-west. The location of the Proposed Development closer to the eastern coast, means that where visibility arise to the south-west of the NSA, the turbines would be seen set behind intervening landform and this would reduce their influence on views of the northern section of the west coast of Hoy.</p> <p>The closest coastal point where visibility will occur, outwith the NSA boundary, is at Green Head. Levels of visibility here are low and the assessment of effects on Regional Coastal Character Areas have found that significant effects will only occur on the eastern coast, south of Ruberry, from where the Proposed Development will be seen in almost the opposite direction to the NSA.</p> <p>The only section of the NSA coastline from which the Proposed Development will be visible occurs along the eastern side of Clestrain Sound and around the Bay of Ireland. The Proposed Development will not affect views of the coastal scenery in these areas but will be seen from there in the wider setting. The coastline along the Sound of Clestrain and around the Bay of Ireland is relatively low lying with a mix of shingly beaches and rock outcrops. The scenery does not match the spectacular scenery of the west coast of Hoy. It does, nonetheless, form part of the NSA.</p> <p>The Proposed Development will be seen from this coastal edge at a range of distances between approximately 9 to 17 km. All six of the proposed turbines will be visible, albeit partly screened by the intervening landform. They will be clearly associated with the island of Hoy, although seen set in the lower moorland hills in the south-east of the island, apart from the high hills of Hoy to the north. And while they will introduce a small to medium scale wind farm development into the wider setting where currently there are only single turbines and masts, there are sufficient existing influences from human influences to moderate this effect. The magnitude of change will be low and the effect on this SPQ will be not significant.</p>
<p><b>SLQ: A landscape of contrasting curves and lines</b></p>	
<p><b><i>"The combination of curves and lines is a defining feature of this landscape. The pattern of the landform is</i></b></p>	<p>The Proposed Development had potential to affect this SLQ by introducing new features beyond 5 km of the southern boundary, but which will be visible from within parts of the NSA. The area most likely to be affected will be the southern parts of the high hills of Hoy. From here, the smoothly rounded profile of the landform presents gentle curves which contrast with the vertical lines of the</p>

Underpinning landscape characteristics to inform detailed SLQ descriptions	Impacts of the proposal on underpinning key characteristics and the effects on SLQs
<p><i>smooth, with gentle curves, but the land itself often ends spectacularly in vertical cliffs and a horizontal horizon of sea.</i></p> <p><i>There are no trees to soften the regular outlines of the farm buildings that stand proud on the undulating pasture, and the ancient monuments can be a combination of the linear and the circular: upstanding stones within a circular surround."</i></p>	<p>cliffs and horizontal line of the seascape in views to the west. To the north, east and south, the seascape is enclosed by islands such that a distinctly linear horizon does not occur. The Proposed Development would be seen in views to the south where the contrast between curves and lines is not as readily evident as in views to the west. Furthermore, the Proposed Development would form a relatively compact group that would only affect a small proportion of the wider area across which the contrast between curves and lines would be experienced. The magnitude of change will be low and the effect on this SLQ will be not significant.</p>
<p><b>SLQ: The high hills of Hoy</b></p>	
<p><i>"The high, rounded hills of Hoy form a spectacular backdrop to much of West Mainland. With their corries, deep U-shaped valleys and patterned ground, these rugged, moorland hills reflect their glacial history.</i></p> <p><i>Within a sheltered gully in these hills lies the small Berriedale birchwood, the most northerly native wood in Britain.</i></p> <p><i>Glaciated landforms on Hoy include distinctive U-shaped valleys, moraines, including a terminal moraine at Rackwick, and corries, the most northerly in Britain.</i></p> <p><i>Post-glacial features include patterned ground on the summit of Ward Hill (Hoy) and raised beaches. In contrast to Hoy,</i></p>	<p>The high hills of Hoy form a backdrop to West Mainland in views from the northern parts of the NSA, from north-east, across the Bay of Ireland, Loch of Stenness and Loch of Harray, and views from the east, across Clestrain and Houton. In the views from the north-east to the south-west, the high hills of Hoy are prominent owing to their large scale, dramatic profile and relatively close proximity. The Proposed Development will be visible in the same sector of some views from these locations, albeit located to the south. It will, however, be seen at a more distant range such that it will occur more towards the background of the view, rather than the middle ground where the high hills of Hoy are located. The proposed turbines will be seen from ranges between approximately 16 and 23 km making them relatively small scale feature in views.</p> <p>Clestrain and Houton are closer in range such that views of the Proposed Development will occur from approximately 9 to 16 km. While this means that the proposed turbines will appear as slightly larger scale features in these views, this increase is moderated by the fact that views of the high hills of Hoy are drawn westwards from this area, such that the location of the Proposed Development to the south lies outwith this sector and this reduces its prominence in these views.</p> <p>In respect of both of these areas, there is a close-range human influence evident in the extent of farmland and dispersed rural settlement. There is also evidence of larger structures in the form of masts, wind farms and single turbines, albeit often seen on distant skylines. While these human influences moderate the potential effects of the Proposed Development, it will nonetheless be seen as an addition to the extent of development within the wider background landscape. In respect of both of these areas the magnitude of change on this SLQ will be low and the effect will be not significant.</p> <p>The other part of West Mainland with potential to be affected by the impact of the Proposed Development on the setting of the NSA, occurs along the coast, east of Houton to Kirkwall. While this area lies outwith the NSA, the NSA is visible from the south coast between Houton and Greenigoe. There are,</p>

Underpinning landscape characteristics to inform detailed SLQ descriptions	Impacts of the proposal on underpinning key characteristics and the effects on SLQs
<p><i>Mainland is a drowned coast without raised beaches.”</i></p>	<p>however, a couple of factors that prevent the SLQ from being significantly affected from this area, the first being that the coastline is orientated to the south-east, while the high hills of Hoy are located to the west and the Proposed Development to the south-west. This not only means that the Proposed Development does not fall within the natural draw of views, but also that the high hills of Hoy are not such a prominent feature as they are often tucked behind the rising landform of West Mainland. The ZTV in Figure 6.8a shows that visibility from this area will be fullest around Orphir and then intermittent further east, with the Proposed Development seen between a range of approximately 10 to 18 km. The magnitude of change of the Proposed Development on the setting of the NSA from this area will be low and the effect will be not significant.</p> <p>There is also the potential that the setting of the High Hills of Hoy may be affected when viewed from areas of Scapa Flow or on the East Mainland, Burray or South Ronaldsay, owing to the introduction of the Proposed Development at the southern end of the island of Hoy. Whilst set at the more distant ranges between 12 and 22 km, the coastal edges of East Mainland and the islands to the south, views are often drawn westwards over Scapa Flow towards Hoy, making it the focus of these views. The ZTV in Figure 6.8a shows that visibility of the Proposed Development will be mostly continuous along the western edges of these areas and the intervening sea. The Proposed Development will be seen associated with the island of Hoy, albeit located in the lower moorlands in the south-east of the island and separated from the high hills of Hoy in the north by the intervening medium scale moorland hills. While the Proposed Development will form an apparent addition that will appear at variance with the overall character of Hoy and will detract from the contribution the lower southern hills make to the overall setting, this effect will be moderated by the separation distance, which will ensure that the proposed turbines will be seen as distant and relatively small-scale features, and the baseline influence from single turbines and more distant wind farms, as well as rigs in Scapa Flow and ferries and other vessels on the water. The magnitude of change of the Proposed Development on the setting of the NSA from this area will be low and the effect will be not significant.</p> <p>There is also the potential that the Proposed Development will have an effect on the high hills of Hoy as experienced from within this area but with views of the Proposed Development looking out. The ZTV in Figure 6.8b shows that there will be a concentrated patch of visibility over Kingie Lang and Vow Randie in the Moorland Hills LCT on the southern edge of the NSA at a range of 5 to 7 km, and patchier, more localised visibility across Ward Hill in the Rugged Hills LCT to the north at a range of 8 to 10 km. The experience of the glaciated landforms will be affected by the external presence and influence of the Proposed Development owing to its contrasting modern appearance and dynamic nature. While the influence on the Ward Hill area will be moderated by the greater separation distance and localised extent of the effect, there will be a greater influence on the Kingie Lang and Vow Randie area where visibility will be slightly closer range and extensive. The magnitude of change will be low and not significant across the Ward Hill area and medium to low and significant across the Kingie Lang and Vow Randie area.</p> <p>There will be no effect on the Berriedale Birchwood owing to the lack of visibility in this sheltered gully.</p>

## ***Step 4: Summary of effects on Special Landscape Qualities of Hoy***

The assessment has considered the effect of the Proposed Development on the four relevant Special Qualities of the Orkney – Hoy and West Mainland NSA. The finding is that the effects on these SLQs will not be significant, with the exception of a localised significant effect on the SLQ of the high hills of Hoy, as experienced from the southern edge of the NSA. All other SLQs relating to other parts of the NSA and their setting, will not be significantly affected. The Proposed Development lies outwith the NSA, at a distance of over 5 km to the south, such that there will be no direct effects on the NSA, only indirect effects associated with its visibility. The ZTVs in Figures 6.8a and 6.8b illustrate the relatively limited extent of visibility across the wider NSA, whilst also highlighting the closer range concentration which occurs close to the southern boundary.

Seven of the 11 SLQs will not be affected by the Proposed Development, in most cases owing to the location of the Proposed Development more than 5 km to the south of the NSA, especially in the case of those SLQs which are not susceptible to indirect effects. The four remaining SLQs with potential to be affected include an archaeological landscape of World Heritage Status, special coastal scenery, a landscape of contrasting curves and lines, and high hills of Hoy all of which will be indirectly affected through visibility of the Proposed Development either in views from, or towards the NSA.

Table A6.1.2 presents the findings of the assessment on these four SLQs, which are that the effects will not be significant on an archaeological landscape of World Heritage Status, special coastal scenery and a landscape of contrasting curves and lines. These findings relate chiefly to a combination of the limited extents of visibility in those parts of the NSA where the SLQs are experienced, the separation distances from those areas where visibility will occur and the existing influences from surrounding modern artefacts and contemporary land uses. The high hills of Hoy is the SLQ with greatest potential to be significantly affected owing to this area being the closest part of the NSA to the Proposed Development and the lack of modern artefacts and contemporary land uses which occur in this area.

The Hoy and West Mainland NSA covers only the northern part of the island of Hoy, recognising the greater scenic value of the high hills of Hoy compared to the lower moorland hills found in the centre and south of the island. These moorland hills form the setting to the high hills of Hoy, with the higher and closer range central hills having more of a presence and influence than the lower hills to the south. The association between the high hills of Hoy and Wee Fe where the Proposed Development is situated is relatively weak, especially in the context of the much wider and more dramatic panoramic views available from those areas where visibility of the Site occurs. The exception occurs in a relatively localised area on the southern boundary of the NSA which is closer to the Proposed Development and over which a broader extent of visibility will occur. Here the magnitude of change will be medium and the effect will be significant on the SLQ of the high hills of Hoy. There are a number of existing human influences acting on this area including the oil rigs, ferries and other vessels on Scapa Flow, as well as the oil terminal and single turbine on Flotta, which combine to moderate the effect.

In respect of the potential impact on the setting of the NSA as experienced from views on the north-eastern, eastern and south-eastern sides of Scapa Flow, the North Atlantic to the west and the Pentland Firth to the south, the Proposed Development will be seen associated with the island of Hoy and will add a new feature that will alter the character of these views. The effect will not, however, be significant owing to a combination of the following factors. Firstly, the Proposed Development will be seen at the opposite southern end of the island, where the hills are low and separated from the high hills to the north by the central moorland hills. This means that there will be no direct impingement on the feature of the high hills in the north. Secondly, the Proposed Development will be seen at distances between 10 and 20 km which will mean that it will appear as a relatively distant and medium to small scale feature, although with closer views occurring from the surrounding seas. While it will form a readily apparent addition, the small number of turbines will mean that it will occupy a small

proportion of the much wider views. Thirdly, the Proposed Development will be seen in a context in which modern artefacts are part of the baseline character. In Scapa Flow, rigs are often present, along with the regular movement of ferries, oil tankers, fishing boats and other vessels, and although also distant, the West Hill turbine and oil terminal flare are also visible from these areas. These are, however, all relatively low-lying while the Proposed Development would be introducing development into a more upland and undeveloped area. Fourthly, East Mainland, Burray, South Ronaldsay and Mainland Scotland are all settled and cultivated, with the modification of the landscape widespread and readily evident. This presents a context which moderates the further effects of human influence, compared to a context which itself has scenic or wildness qualities.

While the Proposed Development will have effects on four of the SLQs of the NSA, the effects will be not significant, with the exception of a very localised significant effect over Kingie Lang and Vow Randie in the Moorland Hills LCT on the southern boundary of the NSA. Within this area, there is an existing influence from small scale rural development and land uses, including the B9047 and more notably, the oil rigs, ferries and other vessels on Scapa Flow, as well as oil terminal and single turbine on Flotta. These are localised effects on only a small part of the south east corner of the NSA, where there are also existing human influences. These factors would moderate the effect of the Proposed Development on the overall integrity of the NSA.

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