7 Landscape and Visual Impact Assessment

7.1 Introduction

7.1.1 This Chapter of the Environmental Impact Assessment Report (EIAR) comprises the Landscape and Visual Impact Assessment (LVIA) of the Consented Development. The original assessment was undertaken by Axis PED Ltd, using a Chartered Member of the Landscape Institute (CMLI). Additional or updated paragraphs are underlined to allow this to be easily identified.

7.1.2 Since the Beaw Field Wind Farm was consented in 2017 there have been changes to the baseline environment that have been considered as part of this updated EIAR. These are:

- An increase to the tip heights of the consented Viking Wind Farm from 145m to 155m; and
- the addition of the now consented Energy Isles Wind Farm to the north of the Consented Development.

7.1.3 The majority of findings of the original LVIA are unaffected by these changes and remain valid. Where update has been required this has been undertaken by TNEI Services building on Axis PED's original assessment.

7.1.4 Landscape effects are distinct from visual effects, although the two are closely related and interlinked. As such, the assessments of the effects of the Consented Development upon the landscape and upon visual amenity have been carried out separately.

7.1.5 The assessment of landscape effects considers the potential effects of a project on the landscape as an environmental resource. Landscape effects are caused by physical changes to the landscape, which may result in changes to the distinctive character of that landscape and how it is perceived.

7.1.6 A visual assessment is concerned with the potential effects that may occur resulting from a project upon the population likely to be affected. It assesses the change in visual amenity undergone by specific receptors that would arise from any change in the nature of views experienced.

7.1.7 The LVIA aims to establish the following:

- A clear understanding of the Site and its context, in respect of the physical and perceived landscape and of views and visual amenity;
- An understanding of the Consented Development in terms of how this would relate to the existing landscape and views;
- An identification of likely significant effects of the Consented Development upon the landscape and upon views, throughout the life-cycle of the development, including cumulative interactions with other developments;
- Those mitigation measures necessary to reduce/eliminate any potential adverse effect on the landscape or views arising as a result of the Consented Development; and
- A conclusion as to the residual likely significant effects of the Consented Development taking in to account embedded mitigation measures.

7.1.8 The process follows a standard approach as advocated in the *Guidelines for Landscape and Visual Impact Assessment*[1], namely:

- The establishment of the baseline conditions, against which the effects of the Consented Development will be assessed;
- The determination of the nature of the receptor likely to be affected, i.e., its sensitivity;
- The prediction of the nature of the effect likely to occur, i.e. the magnitude of change; and
- An assessment of whether a likely significant effect would occur upon any receptor by considering the predicted magnitude of change together with the sensitivity of the receptor and then an assessment of any residual likely significant effect taking into account any proposed mitigation measures.

7.1.9 Further details on the specific methodologies of assessment and determination of significance are included in Appendix 7.1.

7.1.10 Residential Amenity Assessments are separate from but related to LVIA and as such an assessment of effects upon residential visual amenity is set out in Chapter 8.

7.1.11 The assessment of likely significant effects on cultural heritage features is not assessed in this chapter but has been undertaken as part of the Archaeology and Cultural Heritage Assessment (Chapter 9). This is distinct from the visual assessment that has been undertaken where a representative viewpoint may coincide with cultural heritage features.

The consented development

7.1.12 For a detailed description of the Consented Development, refer to Chapter 3. In summary, the Beaw Field Wind Farm would comprise a maximum of seventeen wind turbines, each with a maximum blade tip height of 145m above ground level and associated ancillary infrastructure.

7.1.13 The Zones of Theoretical Visibility (ZTV) and visualisations from representative viewpoints have been based on the candidate Senvion 3.4M wind turbine, which has a 104m rotor diameter and a hub height of 93m above ground level. This turbine is considered typical of the type of turbine that may be installed in terms of visual envelope and noise characteristics and represents a worst case scenario when balancing blade swept path and hub height. This turbine is illustrated in Figure 3.3.

7.1.14 The design of the Consented Development has followed an iterative process, with landscape and visual matters being a key consideration. Details of the design evolution are set out in Chapter 5. Best practice guidance in respect of wind farm design is published by NatureScot (previously SNH)[2] and has been followed where possible In addition, design guidance in the *Landscape Sensitivity and Capacity Study for Wind Farm Development on the Shetland Isles*[3] has also been considered.

Legislative framework

Statutory landscape designations

7.1.15 The Site is not subject to any statutory landscape designations. One National Scenic Area (NSA) divided into several distinct parts is located within the Study Area for the LVIA. NSAs were originally identified by the then Countryside for Commission for Scotland (now Scottish Natural Heritage). They

are protected under the auspices of the Planning etc. (Scotland) Act 2006[4]. This identifies that an NSA has:

- An outstanding scenic value in a national context; and
- Where any area is for the time being designated as a National Scenic Area, special attention is to be paid to the desirability of safeguarding or enhancing its character or appearance in the exercise, with respect to any land in that area, of any powers under this Act.

7.1.16 Refer to the Baseline section of this chapter (sub-heading Landscape Designations) for further details regarding the NSA.

European landscape convention

7.1.17 The UK Government is a signatory of the European Landscape Convention (ELC)[5], which became binding in March 2007. The Convention is aimed at the protection, management and planning of all landscapes and raising awareness of the value of a living landscape. It relates chiefly to public bodies and to the policies, plans and programmes produced by these. The LVIA is a development specific process which accords with Article 6C of the ELC. The LVIA is informed by extant Landscape Character Assessment studies (refer to the Baseline section of this Chapter, sub-heading Landscape Character Assessment), which more directly relate to the provisions of Article 6C.

National planning policy

7.1.18 National Planning Framework 4[6] is under preparation and will include all aspects of national planning policy as per the provisions of the Planning (Scotland) Act 2019. The NPF4 'Position Statement' was published in November 2020 and a consultation draft NPF4 was issued in autumn 2021.

7.1.1 Draft Policy 19 from the draft NPF4 sets out requirements in relation to Green Energy. Requirements relevant to onshore wind and landscape and visual impacts are:

d) Outwith National Parks and National Scenic Areas and recognising the sensitivity of any other national or international designations, development proposals for new wind farms should be supported unless the impacts identified (including cumulative effects), are unacceptable. To inform this, site specific assessments including where applicable Environmental Impact Assessments (EIA) and Landscape and Visual Impact Assessments (LVIA) are required.

k) Specific considerations will vary relative to the scale of the proposal and area characteristics but development proposals for renewable energy developments must take into account:

- *Impacts on communities and individual dwellings, including visual impact, residential amenity, noise, and shadow flicker;*
- *Landscape and visual impacts, including effects on wild land;*
- *Public access, including impact on long distance walking and cycling routes and scenic routes; and*
- *Impacts on tourism and recreation.*

7.1.2 Further information on draft NPF4 is set out in the updates to chapter 4, planning and policy background.

7.1.3 Scottish Planning Policy[7] (SPP 2014) sets out Scotland-wide planning policies, including specific guidance in respect of preparing spatial frameworks for onshore wind in Scotland. SPP States that:

7.1.4 *[161] "Planning authorities should set out in the development plan a spatial framework identifying those areas that are likely to be most appropriate for onshore wind farms as a guide for developers and communities, following the approach set out below in Table 1".*

7.1.5 Table 1: Spatial Frameworks identifies three groups.

- Group 1: Areas within which wind farms will not be permitted includes National Parks and National Scenic Areas.
- Group 2: Areas of significant protection (within which wind farms may be appropriate in some circumstances) includes: National and International designations (e.g. SSSI, Ramsar, World Heritage Sites, National Nature Reserves, Sites on the inventory of Gardens and Designed landscapes or Historic Battlefields); other nationally important mapped interests (e.g. wild land areas designated on the 2014 NatureScot (previously SNH) map and deep peat) and any established community separation area, which can be up to 2km from settlements identified on the local plan.
- Group 3: Areas with potential for wind farm development: Beyond groups 1 and 2, wind farms are likely to be acceptable, subject to detailed consideration against identified policy criteria. SPP also identifies a number of development management considerations and those relevant to the LVIA are referenced below:

7.1.6 *[169] "Proposals for energy infrastructure developments should always take account of spatial frameworks for wind farms and heat maps where these are relevant. Considerations will vary relative to the scale of the proposal and area characteristics but are likely to include:*

- *…cumulative impacts…;*
- *impacts on communities and individual dwellings including visual impact, residential amenity, noise and shadow flicker;*
- *landscape and visual impacts, including effects on wild land…*"

7.1.7 In respect of valuing the natural environment SPP states that:

7.1.8 *[194] "The planning system should:*

- *facilitate positive change whilst maintaining and enhancing distinctive landscape character…"*

7.1.9 *[196] "International, national and locally designated areas and sites should be identified and afforded the appropriate level of protection in development plans. Reasons for local designation should be clearly explained and their function and continuing relevance considered when preparing plans. Buffer zones should not be established around areas designated for their natural heritage importance. Plans should set out the factors which will be taken into account in development management. The level of protection given to local designations should not be as high as that given to international or national designations".*

7.1.10 *[197] "Planning authorities are encouraged to limit non-statutory local designations to areas designated for the local landscape or nature conservation value:*

- *the purpose of areas of local landscape value should be to:*

- *safeguard and enhance the character and quality of a landscape which is important or particularly valued locally or regionally; or*
- *promote understanding and awareness of the distinctive character and special qualities of local landscapes; or*
- *safeguard and promote important local settings for outdoor recreation and tourism..."*

7.1.11 *[200] "Wild land character is displayed in some of Scotland's remoter upland, mountain and coastal areas, which are very sensitive to any form of intrusive human activity and have little or no capacity to accept new development. Plans should identify and safeguard the character of areas of wild land as identified on the 2014 SNH map of wild land areas".*

7.1.12 *[202] "The siting and design of development should take account of local landscape character. Development management decisions should take account of potential effects on landscapes and on the natural and water environments, including cumulative effects. Developers should seek to minimise adverse impacts through careful planning and design, considering the services that the natural environment is providing and maximising the potential for enhancement"(emphasis added).*

7.1.13 *[212] "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".*

Local planning policy

7.1.14 The Shetland Islands Local Development Plan[8] was adopted in September 2014 and replaced the previous Structure Plan and Local Plan. The Local Development Plan (LDP) contains numerous policies to guide and control development. Those relevant to the landscape and visual effects of the Consented Development are summarised below:

- GP2 General Requirements for All Development: "*a) Developments should not adversely affect the integrity or viability of sites designated for their landscape and natural heritage value*";
- GP3 All Development: "*Layout and Design All new development should be sited and designed to respect the character and local distinctiveness of the site and its surroundings*";
- NH1 International and National Designations: "*Development that affects a National Scenic Area (NSA), … will only be permitted where: It will not adversely affect the integrity of the area or the qualities or protected features for which it has been designated, or any such adverse effects are clearly outweighed by social, environmental or economic benefits of national importance*"
- NH4 Local Designations: "*Development that affects a Local Nature Conservation Site or Local Landscape Area will only be permitted where: It will not adversely affect the integrity of the area or the qualities for which it has been identified; or Any such effects are clearly outweighed by social, environmental or economic benefits*";
- HE5 Gardens and Designed Landscapes: "*Development affecting gardens and designed landscapes should protect, preserve and enhance such places and should not impact adversely upon their character, upon important views to, from and within them, or upon the site or setting of component features that contribute to their value*";

7.1.15 In addition, the LDP contains specific policies in respect of Renewable Energy and cross references supplementary guidance that is relevant to the consideration of landscape and visual effects, namely:

- Supplementary Guidance: Onshore Wind[9], and
- Landscape Sensitivity and Capacity Study for Wind Farm Development on the Shetland Islands[10].

7.2 Methodology

7.2.1 This Section outlines the methodology used for the LVIA. It summarises the professional guidance that has been considered when undertaking the LVIA. The full methodology can be found in Appendix 7-1.

7.2.2 The LVIA has been informed by both desk and field-based studies and seeks to establish the following:

- A clear understanding of the Consented Development and its context, in respect of the physical and perceived landscape and of views and visual amenity;
- An understanding of the Consented Development in terms of how this would relate to the existing landscape and views;
- An identification of likely significant effects of the Consented Development upon the landscape and upon views, throughout its life-cycle, including cumulative interactions with other developments;
- Those mitigation measures necessary to reduce/eliminate any potential adverse effect on the landscape or views arising as a result of the Consented Development; and
- A conclusion as to the residual likely significant effects of the Consented Development.

7.2.3 The process follows a standard approach, namely:

- The establishment of the baseline conditions, against which the effects of the Consented Development will be assessed;
- The determination of the nature of the receptor likely to be affected, i.e. its sensitivity;
- The prediction of the nature of the effect likely to occur, i.e. the magnitude of change; and
- An assessment of whether a likely significant effect would occur upon any receptor by considering the predicted magnitude of change together with the sensitivity of the receptor and then an assessment of any residual likely significant effect taking into account any proposed mitigation measures.

7.2.4 The sensitivity of a landscape or visual receptor is determined by its susceptibility to the proposed change and its value. Sensitivity is expressed on a three point scale of high, medium or low. Where appropriate, intermediate levels such as medium/high or low/medium are used to refine the assessment. A reasoned narrative is set out in Appendix 7.3 and 7.6 in order to justify the particular sensitivity assessed for each receptor, so that it is clear how each judgement has been made.

7.2.5 The nature of the effects that would occur as a result of the Consented Development are summarised below in Tables 7.1 and 7.2 for landscape and visual effects respectively.

Table 7.1: Magnitude of landscape change criteria

Magnitude	***Description***
Large	A substantial change in landscape characteristics and/or over extensive geographical area and/or which may result in an irreversible landscape impact for the long term.
Medium	A moderate change in landscape characteristics and/or which may be over a large geographical area, and/or which may be reversible over a long duration of time.
Small	A small change in landscape characteristics and/or which may be over a relatively localised geographical area, and/or which may be reversible over a short duration of time.
Negligible	A barely perceptible change in landscape characteristics and/or which is focused on a small geographical area, and/or which is almost or completely reversible.

Table 7.2: Magnitude of visual change criteria

Magnitude	***Description***
Large	A change affecting a large proportion of a view, which may be seen across an extensive area or experienced from a long section of a route, and/or a longer-term effect, and/or contrasting with the existing view.
Medium	A change affecting a moderate proportion of a view, which may be seen across a wider area or experienced from a section of a route, and/or a medium-term effect, and/or broadly compatible with the existing view.
Small	A change affecting a smaller proportion of a view, which may be seen from a limited area or experienced from a short section of a route, and/or a shorter-term effect, and/or compatible with the existing view.
Negligible	A change which is barely perceptible in the view, and/or which is only glimpsed from a route.

7.2.6 The purpose of Environmental Impact Assessment (EIA) is to determine the likely significant effects of a development proposal. Not all landscape and visual effects arising as a result of a particular proposal will be significant. Furthermore, a significant effect does not necessarily mean that such an effect is unacceptable to decision-makers. This is a matter to be weighed in the planning balance alongside other factors. What is important is that the likely effects of any proposal are transparently assessed and described in order that the relevant determining authority can bring a balanced and well-informed judgement to bear as part of the decision-making process.

7.2.7 Sensitivity and magnitude are combined to identify the level of effect upon a receptor. This assessment is guided by a level of effects matrix as presented in Figure 5.1 of Appendix 7.1. However, the final assessment of the level of effect and whether this is significant is one of professional judgement.

7.2.8 Where magnitude of change is identified as negligible, then effects are automatically considered not to be significant due to the minimal level of change from the baseline situation. The judgement for this particular assessment is that greater than moderate effects are more likely to be significant. This is because they would generally result from larger magnitudes of change on higher sensitivity receptors. This does not preclude a moderate effect or lower being significant or a greater than moderate effect not being significant as this judgment will depend on the specific circumstances being considered.

Current Guidance

7.2.9 This LVIA has been based on the published best practice guidelines set out in *Guidelines for Landscape and Visual Impact Assessment*[11], hereafter referred to as 'the GLVIA'.

7.2.10 Further specific guidance for particular aspects of the assessment has also been followed, and this is referenced at appropriate locations in the chapter, as necessary.

The Study Area

7.2.11 Best practice guidance produced by Scottish Natural Heritage[12] recommends that, where proposed turbines have a blade tip height between 131m and 150m, the ZTV should extend for a 40km distance from the nearest turbine. Therefore, the ZTVs prepared for the project have been extended to 40km and representative viewpoints have been selected from within the area defined by these ZTVs.

7.2.12 Effects on landscape character diminish with distance and a clear distinction needs to be drawn between effects on the key characteristics of an area that influence its local distinctiveness and effects on specific viewpoints within that character area. A change in view does not necessarily lead to an accompanying change in underlying character, particularly where the turbines are more distant from the viewpoint. The character of a landscape is derived from the interaction of a number of factors, of which the views available are just one. As set out in the scoping study, and based on the assessor's previous experience of wind farm developments in a variety of landscapes, the assessment of effects on landscape character has focussed on that part of the study area lying within approximately 10km of the turbines and which is within the blade tip ZTV for the Consented Development.

7.2.13 Guidance published by NatureScot (previously SNH) in respect of cumulative effects[13] recommends that other wind farm sites within 60km from the proposed turbines are mapped, and that the study area for the cumulative assessment should typically extend to at least 35km from the proposed turbines. The NatureScot scoping response required cumulative schemes with a tip height in excess of 50m to be considered. Due to the limited number of cumulative sites in excess of 50m to blade tip all of those schemes above this height and within 60km from the Consented Development have been included within the cumulative assessment. The ZTV for each site considers was set to 60km, but is generally truncated within this distance by the curvature of the earth.

7.2.14 It is however important to recognise that the Environmental Impact Assessment (EIA) process seeks to identify likely significant effects (as opposed to all effects) and that a proportionate approach to LVIA and cumulative assessment is required, as advocated in the GLVIA.

Significance of Effects

7.2.15 The purpose of EIA is to determine the likely significant effects of a development proposal. Not all landscape and visual effects arising as a result of a particular proposal will be significant. Furthermore, the identification of a significant effect does not necessarily mean that such an effect will be considered

unacceptable by decision-makers. This is a matter to be weighed in the planning balance alongside other factors. What is important is that the likely effects of any proposal are transparently assessed and described in order that the relevant determining authority can bring a balanced and well-informed judgement to bear as part of the decision-making process.

7.2.16 Refer to Appendix 7-1 for further details regarding significance of effect, and how judgements relating to significance have been made in this LVIA. Sensitivity and magnitude are combined to identify the level of effect upon a landscape or visual receptor. This assessment is guided by a level of effects matrix as presented in Figure 5.1 of Appendix 7.1. However, the final assessment of the level of effect and whether this is significant is one of professional judgement.

7.2.17 The judgement for this particular assessment is that greater than moderate effects are more likely to be significant. This is because they would generally result from larger magnitudes of change on higher sensitivity receptors. This does not preclude a moderate effect or lower being significant or a greater than moderate effect not being significant as this judgment will depend on the specific circumstances being considered.

7.2.18 Whilst people have a range of responses to wind farm development the LVIA has adopted a precautionary approach which considers all effects to be adverse in nature unless otherwise stated. The paragraphs below provide further discussion in respect of the nature of effects.

Nature of effects - Landscape

7.2.19 Landscape assessment is primarily concerned with the assemblage of components that together make up the landscape. Wind farms are built structures that are introduced to an existing setting and, in the majority of cases, will not be seen as a positive addition. In general, landscape effects brought about by wind farms will be adverse. Exceptions may occur in settings that are already degraded, or where existing wind farms are an established component. In these cases, effects may be neutral or even beneficial.

7.2.20 Where adverse effects occur, site-specific factors may influence the degree of harm (and possible acceptability). These could include the scale of the landscape and the mitigation provided by landform and/or vegetation. For example the effects of a wind farm in an undeveloped landscape will in general be more harmful than effects upon a landscape that has clearly been modified by other human influences (including agriculture, forestry and infrastructure).

Nature of effects - Visual

7.2.21 Since visual assessment is about effects upon the people who are experiencing views of a landscape, a greater degree of subjectivity applies. In making assessment judgements, the factors under consideration will include the context within which the development is seen and the degree to which the nature of the existing view is changed. As with landscape assessment, in the majority of instances, the introduction of large scale built structures into a view will be considered to be adverse.

7.2.22 The harm brought about by adverse effects may be ameliorated in some cases by the way development fits the setting, the composition of the wind farm in the view and the presence or otherwise of existing human influences. As with landscape effects, the effects brought about to an already man modified view will in general be less harmful than effects upon a more natural vista.

7.3 Scoping and consultation

7.3.1 Scoping responses in respect of the LVIA were received from Scottish Natural Heritage, Shetland Islands Council (Planning and Outdoor Access) and The Scottish Rights of Way and Access Society in April and May 2015. Considerations raised by consultees during scoping included:

- Use of the Landscape Sensitivity and Capacity Study for Wind Farm Development on the Shetland Islands (2009) to inform the baseline assessment;
- Consideration of views from Core Paths and Access Routes, and
- Inclusion of an access plan to promote connectivity with existing routes and wind farm access tracks.

7.3.2 Further details of the scoping consultation responses, comments and action taken are provided in Appendix 1 of the Gate Check Report.

7.3.3 Since, the initial scoping responses were provided further consultation with NatureScot (previously SNH) and Shetland Islands Council has been undertaken to refine and agree the final representative viewpoint list.

Assumptions, constraints and data limitations

7.3.4 The visualisations illustrate the assumed location of a telecommunications mast that will be required to mitigate potential impacts on telecommunication links. The definitive position and form had not been confirmed at the time of the assessment and as such the position may vary within the 50m micro-siting allowance from that shown. This is not considered material to the assessment as the mast will be a minor element in the context of the much taller and more numerous wind turbines. In addition, telecommunication masts are already a sporadic feature in the existing landscape across the Shetland Islands.

7.3.5 The design flexibility in respect of the number and size of turbines has been constrained by the financial viability requirements of the project. Due to the high development costs associated with grid connection infrastructure and other associated infrastructure in this case, the proposed 17 turbine layout represents the optimum balance between financial viability and minimising landscape and visual effects.

7.4 Baseline

The site and its surroundings

7.4.1 The Site is located towards the south-eastern corner of the island of Yell, set on an area of peatland between the communities of Burravoe (to the south) and Gossabrough (to the north). The B9081 runs north-south, through the Site and forms the eastern route from the ferry at Ulsta to the settlement of Mid Yell before joining the A968 and continuing on to the ferry crossing to Unst at Gutcher.

7.4.2 Landform is varied, with the ground elevations of the proposed turbines varying between approximately 50m AOD at the head of Green Burn and 120m AOD at Atli's Hill. The Site is drained by a series of small watercourses that run towards the sea to the south, east and northeast. Notably a series of small lochs are located towards the east of the Site, of which Horse Water is the largest. Further larger lochs are located to the south at Kettlester and Littlester

7.4.3 Land cover within the Site is predominantly peatland, crossed by the B9081 and with occasional tracks leading off from this road. There is evidence of former extraction in the vicinity of Moss Houll and Mossy Hill and this degradation is highly visible from the B9081. The Site is unsettled and with the exception of the B9081 and associated access track other built features are generally not present. There is evidence of some fly tipping of vehicles and other waste on the peatland areas. Many areas are disturbed by peat cutting and natural erosion channels which create numerous peat hags across the Site.

7.4.4 North of the Site a single telecommunications mast punctuates the skyline near the Hill of Reafrith. The Site is bordered to the west and northwest by extensive areas of peatland which cover the majority of the interior of Yell, away from the more settled coastal areas or rugged coastlines. The highest point in Yell, the Hill of Arisdale (210m AOD), is located northwest of the site and in combination with the Ward of Otterswick and Hill of Canisdale visually separates the Site from the majority of Yell. The promoted Ward of Otterswick Walk takes in these hills and is illustrated on Figure 6.3. To the west of this ridgeline is the incised valley of Aris Dale. With the exception of a small area near the B9081 where traffic and evidence of former settlement is visible, Aris Dale is a wild remote landscape that is enclosed by the higher peatlands to the east and west and has limited views out. A memorial to the WW2 Catalina aeroplane crash is located towards the head of Aris Dale and can be accessed via a promoted walk along a track leading northwards from the B9081 and then by following periodic marker posts along the valley side. The route of the Catalina Memorial Walk is illustrated on Figure 6.3. The crash site is marked at the roadside and is also commemorated and promoted by the museum at the Old Haa in Burravoe. As such the valley is likely to attract a number of walkers to this area.

7.4.5 To the east, the Site borders the rugged coastal zone formed by cliffs, inlets and distinct geological features that vary in height between 20m and 50m. Further north, the coast is lower and less rugged in places with small settlements at Gossabrough and Otterswick. Gossabrough overlooks a sandy beach and the Wick of Gossabrough. A long history of settlement is evidenced by the remains of a nearby Broch overlooking the bay an open sea, as well as a number of derelict older buildings. The beach at Otterswick is smaller and Otters Wick has a rugged coastline with rock outcrops in the bay. The 'White Wife' at Otterswick, is a memorial to the sinking of a ship on one of these rock outcrops in the 1920s.

7.4.6 To the south the Site borders the community of Burravoe which includes traditional and more modern crofts, terraced housing, a church, school, museum and tea room, fishing pier, a small marina and camping area with wash house. Further settlement is scattered along B9801 between Hamnavoe. The geology above Houlland and Littlester is steep and rugged and there is a former quarry excavated in to this landform that separates the two areas of settlement.

7.4.7 In the wider context, Yell is one of the most northerly of the Shetland Islands. It is also the second largest after Mainland. Yell Sound separates the island from Mainland to the south and southwest. The coast of Mainland is very indented and has several peninsulas which stretch out towards Yell. The two islands are connected by regular ferries between Toft and Ulsta. Smaller islands to the south of Yell include Whalsay and the Out Skerries. Islands to the east include Hascosay and Fetlar which are separated from Yell by the Colgrave Sound. To the northeast is the island of Unst the most northerly inhabited island in the United Kingdom (UK). In addition to its scenic quality and unique status in the UK Unst has a number of tourist attractions and other developments including tea rooms, replica Viking long ships and halls, a brewery and historic monuments/buildings. These tend to be focussed north of Baltasound and away from Unst's coastline with Yell.

Landscape designations

NSAs

7.4.8 The nearest part of the Shetland National Scenic Area (NSA) to the Consented Development is located approximately 13km north-west of the Beaw Field Wind Farm site on the Fethaland Peninsula. The Shetland NSA is subdivided into seven geographically separate areas. The locations of the National Scenic Areas are illustrated on Figure 7.1. This illustrates that only the Fethaland Peninsula is materially within the ZTV for the Consented Development site. As such, the effects on this area are considered later in this Chapter.

7.4.9 The generic special qualities attributable to all areas of the Shetland NSA are defined by NatureScot (previously SNH)[14], and are summarised below (refer to Appendix 7.2, for an extract from the NatureScot document setting out full details):

- The stunning variety of the extensive coastline;
- Coastal views both close and distant;
- Coastal settlement and fertility within a large hinterland of unsettled moorland and coast;
- The hidden coasts;
- The effects and co-existence of wind and shelter;
- A sense of remoteness, solitude and tranquillity;
- The notable and memorable coastal stacks, promontories and cliffs;
- The distinctive cultural landmarks; and
- Northern light.

7.4.10 In addition, to these generic qualities Fethaland is identified for notable and memorable coastal stacks, promontories and cliffs such as Ramna Stacks, a group of skerries seen off the Point of Fethaland.

Non-Statutory landscape designations

7.4.11 Shetland Council currently maintains a local-level, non-statutory landscape designation referred to as Local Landscape Areas (LLA). The LLA designation is supported by local planning policy and a supporting technical study underpinning the LLA designation[15]. The LLAs were initially identified in a separate study dating back to 2011[16]. LLAs are illustrated on Figure 7.1 and only two LLA are located largely within the ZTV for the Consented Development as follows:

- Ronas Hill (c.15km from nearest turbine); and
- Lunna Ness & Lunning (c.6km from nearest turbine),

7.4.12 The detailed description of these two LLAs is provided at Appendix 7.2. As illustrated by Figure 7.1 other LLAs are either wholly outside the ZTV for the Consented Development or theoretical visibility is limited and views towards the Consented Development do not contribute to the overall quality and value of the respective LLA due to their costal location and focus on views out to sea and away from the Consented Development.

Landscape character assessment

Landscapes of Scotland

7.4.13 At a Scotland-wide level, the *Landscapes of Scotland* study, undertaken by NatureScot (previously SNH) (and available via the NatureScot website),[17] divides the whole of Scotland into seventy-nine distinct areas, which share a common character. The study complements, but does not replace, more detailed landscape character assessments undertaken at a regional/local authority level (see below).

7.4.14 The Consented Development (and the whole of the Study Area) is located within Landscape 1: Shetland, described as:

7.4.15 "*An elongated group of islands, whose character is accentuated by the north-south trend of the hills and ridges. The dramatic coastlines are highly varied, with fjords, arches, stacks, beaches and tombolos (sand bars). The seas are busy with boat and ferry traffic. The coast is where most of the settlement is located, including the distinctive capital of Lerwick with its narrow flag-stoned streets. The islands are mostly tree-less, while sea-birds throng the coasts and cliffs. Frequent winds sweep over landscapes with long hours of summer light and winter darkness, and a strong sense of Nordic culture. The landscape is rich in exceptionally well preserved archaeological remains. This includes a high proportion of nationally important sites, such as, at Mousa, the best preserved broch in Scotland, and extensive Norse remains in Unst*".

Landscape character

7.4.16 Pre-application discussions with the Shetland Islands Council and NatureScot (previously SNH) confirmed that the most appropriate document to inform the landscape character baseline for the LVIA is the *Landscape Sensitivity and Capacity Study for Wind Farm Development on the Shetland Isles*[18], hereafter referred to as 'the Capacity Study'. The Capacity Study draws from and expands upon previous landscape character assessment work undertaken during the 1990s[19].

7.4.17 The Capacity Study subdivides Shetland into a series of Landscape Character Areas (LCA). The Consented Development would be located entirely within LCA B1: Yell Peatland, which is identified in the Capacity Study as having a moderate sensitivity to wind energy development associated with the large scale expansive nature of this landscape with a reduced sense of remoteness in proximity to the roads and coastal settlements. The Yell Peatland is an extensive LCA and covers the majority of the island, with the exception of coastal areas. The landscape character of the coastal areas is more varied and sensitive to wind farm development. The Site would also be located close to the boundaries with LCA F5: Scattered Settlement/Crofting and Grazing Land, and LCA G: Coastal Edge, both of which are identified as having a higher sensitivity. LCAs located within approximately 10km of the Consented Development are illustrated on Figure 7.2a and the sensitivity levels set out the Capacity Study for each LCA are illustrated on Figure 7.2b. This information is summarised below and detailed descriptions from the Capacity Study are provided at Appendix 7.3:

- LCA B1: Yell Peatland – Moderate Sensitivity;
- LCA B2: Rounded Moorland Hills – Moderate Sensitivity;
- LCA C3: Lunna Ness and Dragon Ness -Moderate Sensitivity;
- LCA E3: Coastal Crofting and Grazing Land - Higher Sensitivity;
- LCA F2: Nucleated Settlements - Higher Sensitivity;

- LCA F5: Scattered Settlement/ Crofting and Grazing Land - Higher Sensitivity and
- LCA G: Coastal Edge - Higher Sensitivity.

7.4.18 The Capacity Study groups LCAs into more extensive 'Visual Compartments', which reflect issues of intervisibility between LCAs. These give an understanding of the way topography affects potential visibility across wider areas. The Visual Compartments are used to inform indicative landscape capacity, potentially suitable development types and landscape design guidance. The development types considered in the Capacity Study are as follows:

- A. Single turbine to a small group – a development of 1 turbine to a group of up to about 6 turbines, or with an installed capacity of less than 20MW;
- B. Medium group – a development of approximately 7-12 turbines, and/or with an installed capacity of up to 20MW;
- C. Medium-large group – a development of approximately 13-25 turbines, and/or with an installed capacity of 20-50MW, and
- D. Large-very large group – a large development of approximately 25 or more turbines and/or an installed capacity in excess of 50MW.

7.4.19 The capacity study was prepared in 2009 and wind turbine technology has evolved significantly since that time. The number of wind turbines required to reach the capacity levels identified above is significantly less than would have been previously required. For example the Consented Development of 17 turbines would exceed the 50MW capacity threshold for Category D, but would also fall clearly into Category C. From an LVIA perspective it is the number and scale of turbines that is key in respect of landscape capacity and as such the Consented Development is considered to represent a Medium –Large Group (Category C).

7.4.20 The Consented Development would be located in Visual Compartment D: Colgrave Sound, close to the boundary with Visual Compartment E: Yell Sound and South Yell. Both of these Visual Compartments are identified as having a moderate sensitivity to wind energy development due to their large scale and simple landform.

7.4.21 The landscape capacity for Visual Compartment D: Colgrave Sound is stated as 'several small wind farms, or one medium wind farm', with development types A & B considered potentially suitable. The landscape capacity for Visual Compartment E: Yell Sound and South Yell is stated as 'several small wind farms, or one medium-large wind farm', with development types A, B and C considered potentially suitable. As such at 17 turbines the Consented Development would exceed the capacity threshold stated in the 2009 Capacity Study. (Refer to Appendix 7-3 for extracts from the Capacity Study Visual Compartment D: Colgrave Sound).

7.4.22 However, the Capacity Study is intended as a tool to assist planning officers and developers and does not have the status of being part of the development plan. The Capacity Study itself clearly states that the bandings and capacities are an approximate guideline, giving an idea of the size of commercial wind developments that can be accommodated within each visual compartment rather than setting out exact numbers that prescribe a policy limit. As set out above it is pertinent to note that advances in turbine technologies since the preparation of the Capacity Study in 2009 have resulted in more MW per turbine being achievable and as such the installed capacity thresholds are considered outdated.

7.4.23 The GLVIA is clear in respect of existing Sensitivity and Capacity Studies and states that:

7.4.24 [5.41] "*The assessment may take place in situations where there are existing landscape sensitivity and capacity studies, which have become increasingly common. They may deal with the general type of development that is proposed, in which case they may provide useful preliminary background information for assessment. But they cannot provide a substitute for the individual assessment of the susceptibility of the receptors in relation to change arising from the specific development proposal*".

7.4.25 As such, the LVIA makes a project-specific judgement as to the sensitivity of LCAs guided by the methodology set out in Appendix 7-1 and the conclusions of the Capacity Study.

Wild Land Areas

7.4.26 In 2014, NatureScot (previously SNH) published a new map identifying Wild Land Areas (WLAs)[20], which are considered to be important in a national context. The mapping is the result of a two-stage study. Phase 1 of this work mapped relative wildness; Phase 2 identified and defined Core Areas of Wild Land more precisely. In a document collating consultation responses to Phase 1[21], NatureScot (previously SNH) responded to a series of comments regarding the visibility of wind farms, stating that:

7.4.27 "*the mapping of viewsheds up to 30km does not mean that areas from which turbines are visible cannot be considered as wild land*".

7.4.28 There is a single WLA within the study area as illustrated on Figure 7.1. This is WLA 42: Ronas Hill and North Roe, located approximately 15.8km west of the nearest proposed turbine. Ronas Hill is the highest summit on Shetland and affords panoramic views across Shetland. Approximately two thirds of the WLA would be outside of the ZTV for the Consented Development and would experience no change to its visual context. Views towards the Site would be available from the east facing slopes of Ronas Hill. The visual context of these views is already influenced by large scale telecommunications masts at the edge of the WLA, views to the more distant Sullom Voe Oil Terminal and the more settled coastal landscapes to the east. As such the Consented Development would not introduce manmade features into the visual context of the WLA where these are currently wholly absent.

7.4.29 Given the distance between the WLA and the proposed turbines (in excess of 15.8km), the existing visual context of manmade features to the east and the limited extent of visibility from the wilder areas of the WLA to the north and west it is considered that significant effects upon wild land character would not occur and that a more detailed assessment of effects upon wild land is not required.

Future Landscape Change

7.4.30 Due to the exceptional wind resource that is available in the Shetland Isles wind farms could make a significant contribution to achieving renewable energy targets in Scotland. As such, the most relevant future landscape trend in consideration of the Consented Development will be the development of the Viking and Garth Wind farms.

Visual baseline

Zone of theoretical visibility

7.4.31 Zone of Theoretical Visibility (ZTV) maps have been used to determine the overall extent of theoretical visibility of the Consented Development. Refer to Appendix 7-4 for details of the methodology followed in the production of ZTVs. The ZTVs also show the locations of representative Viewpoints (see below), Core Paths, Designed Landscapes and a selection of relevant Access Routes and Promoted Walks.

7.4.32 The ZTVs enable an understanding of the visual context of the project and to identify where visual receptors are likely to experience views of the Consented Development.

7.4.33 The ZTVs are prepared using a digital model of the Consented Development and an Ordnance Survey bare earth digital terrain model (DTM). The DTM includes landform only and takes no account of other elements in the landscape such as vegetation, buildings or built up areas. As such, the resultant ZTV represents a maximum and worst-case scenario of potential visibility.

7.4.34 In order to provide a more detailed understanding of the extent of visibility of the proposed turbines, the following ZTVs have been prepared:

- Hub ZTV; and
- Blade Tip ZTV.

7.4.35 The hub ZTV identifies areas from which any part of the main tower of the turbine may theoretically be seen. The ZTV uses shading in different colours to identify areas from which different numbers of turbines would be theoretically visible. The hub ZTV for the Consented Development is shown on Figures 7.3a & b.

7.4.36 The blade tip ZTV identifies areas from which any part of a whole wind turbine from the base of the tower to the tip of the upright blades could theoretically be seen. The blade tip ZTV for the Consented Development is shown on Figures 7.4a & b. Again, shading is used to illustrate the number of turbines theoretically visible.

7.4.37 The blade tip ZTV represents a worst case scenario in respect of the extent of visibility, but needs to be read in conjunction with the hub height ZTV to gain a greater understanding in respect of the nature of theoretical visibility. For example are the turbine hubs and blade movements both visible or are only blade tips visible above a skyline. In general, where the assessment refers to the ZTV it is the blade tip ZTV that is being referenced unless stated otherwise.

7.4.38 In addition, further ZTVs have been prepared for the following:

- Borrow Pit ZTVs (Figures 7.6a-d illustrate the indicative visibility of outer edge of each of the borrow pits and 5m high stone stockpiles along the shallowest most exposed edges of the borrow pit);
- Site Compound ZTV (Figure 7.7 illustrates the theoretical visibility of the site construction compound adjacent to the B9081, based on plant and offices of up to 5m in height);
- Substation Compound ZTV (Figure 7.8 illustrates the indicative visibility of the substation compound based on a perimeter height of 2.4m and a building height of 11m; and
- Telecommunications Mast ZTV(Figure 7.8 illustrates the indicative visibility of the Telecommunications Mast based on a height of 20m).

7.4.39 A separate ZTV for the anemometry mast has not been produced as this feature is located wholly within the wind turbine array and would always be seen in the context of the taller more prominent wind turbines.

Representative viewpoints

7.4.40 A provisional list of 19 viewpoints was provided as part of the Scoping Report. Following consideration of consultees' responses, further viewpoints were included in the LVIA and the final list (23) was agreed

in dialogue with NatureScot (previously SNH) and Shetland Islands Council following site visits. In accordance with the guidance set out in GLVIA, each viewpoint falls into one (or more) of three broad categories as follows:

- Representative viewpoints (which represent the experience of different types of receptors in the vicinity of the viewpoint);
- Specific viewpoints (a particular view, for example a well-known beauty spot); and
- Illustrative viewpoints (which illustrate a particular effect/issue, which may include limited/lack of visibility).

7.4.41 In order to assist with understanding the visual effects of the project from each viewpoint, a series of photomontages and wireframes have been generated which superimpose a computer-generated model of the Consented Development onto a photograph of the existing view. These are shown on Figures 7.5 a-w and have been prepared in accordance with the current best practice guidance published by NatureScot (previously SNH)[a]. Refer to Appendix 7.4 for further detail regarding the production of visualisations.

7.4.42 The viewpoints considered in this visual assessment are set out in the Table 7.1 below and the locations are illustrated on the Hub and Blade Tip ZTVs (Figures 7.3 and 7.4 respectively).

Table 7.3: Viewpoint locations

Viewpoint	***Figure***	***British national grid co-ordinates***	***Viewpoint type***
1. White Wife	7.5a	452905, 1185278	*Specific* view from interest feature and Core Path
2. Burravoe Old Haa	7.5b	452012, 1179510	*Representative* of the views available to local residents and to museum visitors
3. B9081 at Whirly	7.5c	449093, 1180610	*Representative* of the views available to local residents and road users
4. Ulsta	7.5d	446417, 1180498	*Representative* of the views available to local residents
5. B9081 at South Ward Reafirth	7.5e	451253, 1187938	*Representative* of the views available to local road users
6. Mossbank	7.5f	445087, 1175105	*Representative* of the views available to local residents and Core Path

[a] *Scottish Natural Heritage, (2014). Visual Representation of Windfarms Good Practice Guidance. Version 2.1.*

Table 7.3: Viewpoint locations

Viewpoint	*Figure*	*British national grid co-ordinates*	*Viewpoint type*
7. Lunna Ness near Outrablister	7.5g	450993, 1172520	*Representative* of the views available to local residents, Core Path and road users
8. A698, near Basta	7.5h	451050, 1194294	*Representative* of the views available to local road users
9. Brough Lodge, Fetlar	7.5i	457975, 1192583	*Specific* view from designed landscape and point of interest
10. Road above Ollaberry	7.5j	435802, 1180824	*Representative* of the views available to local residents
11. Track to Gerda Water	7.5k	449021, 1165842	*Representative* of the views available to local road users
12. North Roe Church	7.5l	436632, 1189591	*Representative* of the views available to local residents and to walkers in the nearby NSA
13. Ronas Hill	7.5m	430587, 1183420	*Specific* view from hill summit within Wild Land Area
14. Tittynans Hill	7.5n	452074, 1200009	*Representative* of the views available to hill walkers in northern Yell
15. Belmont House, Unst	7.5o	456584, 1200864	*Specific* view from designed landscape
16. Gardisfauld, Uyeasound	7.5p	459224, 1201074	*Specific* view from the jetty, and also *representative* of views available to local residents
17. Standing Stone, Unst	7.5q	460604, 1200701	*Specific* view from landscape and cultural heritage feature
18. Whalsay Golf Club	7.5r	459314, 1166623	*Illustrative* of the views available from north facing coasts of Whalsay
19. B9075, North Nesting	7.5s	447007, 1158453	*Representative* of the views available to local road users and hill walkers
20. Gossaborough Beach	7.5t	452896, 1183329	*Representative* of the views available to local residents and to visitors to the beach

Table 7.3: Viewpoint locations

Viewpoint	*Figure*	*British national grid co-ordinates*	*Viewpoint type*
21. Hill of Arisdale	7.5u	449457, 1184169	*Representative* of the views available to hill walkers in southern Yell
22. Access Route ARY06, Neapaback, Burravoe	7.5v	452715, 1180277	*Representative* of the views available to walkers and elevated on the edge of Burravoe
23. Core Path CPPF02, Fetlar	7.5w	465758, 1187921	*Representative* of the views available to walkers on Fetlar

Cumulative baseline

7.4.43 In addition to the landscape and visual assessment for the Consented Development, a cumulative assessment has also been undertaken. Details of the methodology followed can be found in Appendix 7-1.

7.4.44 A cumulative assessment considers the cumulative impacts of multiple schemes upon the landscape fabric, landscape character and visual amenity of an area. There are a number of small to medium scale turbines across the Shetland Islands. However, following scoping responses the cumulative assessment focusses on those schemes with a blade tip height exceeding 50m.

7.4.45 The cumulative assessment considers sites that are operational, under construction, consented or which are the subject of a current planning application or appeal, when the baseline was fixed.

7.4.46 The location of cumulative schemes included in the assessment is shown on Figure 7.10 and the schemes are also listed below in Table 7.2. The list of schemes was initially agreed with the planning case officer at Shetland Islands Council in September 2015 and was confirmed in November 2015. Subsequent to Beaw Field Wind Farm being granted consent, the Energy Isles Wind Farm was submitted to the ECU in April 2019. It has since been subject to layout iterations and Table 7.4 shows the current proposal.

Table 7.4: Cumulative schemes

Site	*Number of Turbines*	*Maximum blade tip height*
Operational		
Burradale	5	3 no @ 67.5m 2 no @ 69m
Luggies Knowe	3	121m
Consented		

Culter Field[b]	3	67m
Garth	5	70m
Viking	103	145m
Awaiting a Decision		
Energy Isles	18	200m

7.4.47 It should be noted that at the time of the site visits only one turbine of the Luggies Knowe turbines had been erected. There are two turbines at Ollaberry (one erected and one consented). However, whilst it would appear that taller turbines were originally considered planning conditions limit the height of both turbines to c. 40m to blade tip. As such the two turbines at this location have been excluded from the cumulative baseline

7.4.48 Cumulative ZTV figures have been produced to illustrate the likely extent of cumulative effects experienced as a result of the Consented Development in combination with other sites. Figure 7.11a illustrates the cumulative visibility of the proposed turbines at Beaw Field, together with operational schemes. Figure 7.11b and 7.11c illustrates the cumulative visibility of the proposed Beaw Field turbines, together with consented schemes. At the time of agreeing the cumulative baseline there were no other schemes in the planning system. However, as discussed above, the Energy Isles Wind Farm (see Figure 7.10) has since been submitted under S.36 of the Electricity Act.

7.4.49 The viewpoint visualisations illustrated on Figures 7.5a-w (as discussed above) display cumulative schemes in a series of wireframes from the viewpoint to assist in interpreting the cumulative ZTVs and nature of cumulative effects. These do not include the proposed Energy Isles scheme, but assessment is included within Section 7.7 below.

7.5 The influence of the weather and the seasons

7.5.1 Changing weather patterns and local climatic conditions will significantly influence the visibility of wind turbines in the Shetland Isles.

7.5.2 Changing weather and light conditions can affect the distance over which wind turbines are visible, the apparent colour of the turbines and the degree to which they will stand out or be absorbed into their background. There will be periods of low visibility (fog, sea mist, low cloud, and bright sunny conditions accompanied by the haze of temperature inversions), as well as periods of high visibility in clear weather. In some weather conditions and at some times of day, turbines may be 'back-lit' (i.e. appearing darker in colour during sunset/sunrise and periods of pale or white blanket cloud) and in other circumstances may appear to be 'up-lit' (e.g. during stormy periods that combine dark clouds and bright sunshine). This high variability in visibility was highlighted during the site visits undertaken for the assessment and the viewpoint photography.

7.5.3 The consequence is that at different times of day and in different atmospheric conditions, the appearance of the Consented Development may vary considerably. Whilst this assessment is based on the worst case scenario of good visibility, it should also be recognised that there will in reality be

[b] Since the cumulative baseline was agreed with Shetland Island Council the Culter Field planning consent expired on the 2/1/15. However, a new application has been submitted for an identical scheme.

natural mitigation of effects by virtue of these climatic factors, particularly in views from adjacent islands. This was clear during the field work for the LVIA with the extent of visibility varying considerably throughout the day.

Assessment of impacts

Construction and decommissioning effects

7.5.4 It is anticipated that the construction process would be approximately twenty-four months in duration. During this time there would be considerable activity at the site and new temporary features would be introduced to facilitate construction. The effects of any decommissioning process would be similar to the construction effects in this respect but over a much shorter duration.

7.5.5 A description of the key elements of the construction and decommissioning process for the Consented Development is set out in Chapter 3: Project Description. An assessment of the likely significant landscape and visual effects that may result from aspects of this construction activity is provided below.

7.6 Landscape fabric: construction and decommissioning

7.6.1 Changes arising from construction would affect the physical landscape of the Site, where existing landscape elements would be lost or altered. These direct construction effects on the landscape fabric of the site would be associated with the following activities:

- Access track construction, crane hardstandings, turbine foundations, substation footprint, cable trenches, anemometry mast foundations and telecommunications mast foundations would result in the loss of areas of commonly occurring open peatland during the life of the Consented Development. In addition, there would be modifications to the local landform to accommodate appropriate gradients and cross falls which will extend the impact on the landscape fabric of the site temporarily until these areas are reinstated following construction. Due to the ubiquitous nature of the peatlands on Yell and the relatively small extent that will be lost overall effect on the landscape fabric is not considered significant. It should also be noted that access tracks would utilise the existing track network wherever possible, and that the substation compound has been located in an area of peatland heavily degraded by peat cutting. The exploitation of such degraded areas would limit the effect on the surrounding undisturbed peatland areas.
- Excavation of up to four borrow pits for the winning of stone would have further temporary impacts on the peatland landscape fabric and local topography of this part of Yell. Evidence of previous extraction sites are visible adjacent to the B9081 but are absent from the currently inaccessible parts of the peatland area. Again, due to the ubiquitous nature of the peatlands on Yell and the relatively small extent of this element that will be lost as a result of the borrow pits, effects on the overall landscape fabric are not considered significant.
- Construction of a temporary construction compound would take place in the vicinity of Moss Houll. This area was selected as it is currently a significantly degraded area of peatland with good access to the B9081. The temporary construction compound is proposed within an area of limited remaining peat cover, a consequence of overgrazing and peat cutting. Whilst there are small areas of intact peat, underlying bedrock has been exposed in many areas. Following the construction period there is the potential to restore the compound area using surplus peat arising from construction elsewhere across the Site. This has potential for long term beneficial effects on the landscape fabric of this particular part of the Yell Peatlands.

7.6.2 It can be seen that the landscape fabric of the Site, which would be affected during construction, comprises peatland which is a commonly occurring element of the wider landscape. As such the loss of relatively small areas is assessed as not being a likely significant effect in the context of the overall landscape resource.

Landscape character and visual effects: construction and decommissioning

7.6.3 Whilst the main likely significant effects on landscape and visual amenity would occur during the operational period it is considered that some temporary effects would be unique to the construction and decommissioning stages of the Consented Development.

General construction activity

7.6.4 In respect of landscape character, the key change to Landscape Character Area B1: Yell Peatlands during construction and decommissioning would be associated with the increased levels of activity. This LCA has been assessed as having medium sensitivity and construction staff, earth moving machinery, cranes and large construction vehicles would be visible across the open areas of the Site and the noise and movement associated with this activity would significantly reduce the sense of remoteness during this stage of the project. This would have a large magnitude of effect on a localised part of this LCA and result in moderate to major landscape effects on the Yell Peatlands in the vicinity of the construction works. This would result in likely significant effects in a localised part of the LCA for the duration of construction. Effects on the wider extent of the Yell Peatlands would not be significant as views of construction activity would be limited by the screening effects of the ridge between the Hill of Arisdale and Ward of Otterswick.

Turbine erection

7.6.5 Central to the construction of the proposed turbines would be the use of cranes, which by their nature would be visible for some distance. Cranes would be present in limited numbers and for a limited duration at each turbine location, during the erection of the proposed turbines. Whilst short term, significant visual effects would result from the presence of cranes and activity associated with the erection of turbines. This would generally occur for visual receptors in the south east corner of Yell where construction activity would be most visually prominent.

Borrow pits

7.6.6 Whilst the Borrow Pits 2 and 3 would introduce new features into those parts of the LCA; Borrow Pits 1 and 4 would not be uncharacteristic elements as former small extraction sites are often found adjacent to the existing roads. Following completion of construction, all 4 borrow pits would be restored to more natural profiles and would appear as minor topographical/geological changes in the landscape.

7.6.7 The ZTV for the borrow pits illustrated on Figures 7.6a-d show the potential visibility of construction activity associated with the excavation and crushing and screening of stone based on 5m high stockpile mounds and the perimeter of the borrow pit excavation at each location. The visual effects of each borrow pit are considered below:

- Borrow Pit 1 would be clearly visible from the B9081 due to its proximity to the carriageway. It would also be visible from the lower part of Aris Dale and north east facing slopes beyond Hamna Voe. There would be no visibility from the representative viewpoints on Yell. This would result in some very localised significant visual effects from a short section of the B9081 and for walkers accessing

the route to the Catalina Memorial, the Ward of Otterswick and the shores of Hamna Voe in the immediate vicinity of the borrow pit whilst extraction and processing work is being undertaken. These impacts would be short term and would occur at the beginning of the construction programme when access tracks are being formed. Once the necessary stone has been extracted the landscape and visual effects would not be significant as former extraction sites adjacent to roads occur across the Shetland Islands. To mitigate the effects of the construction activity the borrow pit would be regraded and restored. Whilst there would be some residual long term effects associated with a change to the landform and ground cover this impact is assessed as not being a significant effect.

- Borrow Pit 2 would not be clearly visible from the B9081 or nearby residential properties due to the screening effects of topography. The main visual effects associated with the excavation, crushing and screening of stone would occur in the area to the north of the Hamars of Houlland, above the existing quarry accessed from the B9081. Whilst the theoretical visibility extends beyond this area the borrow pit and activity would not be prominent in views. As such there would be no significant visual effects on the sensitive receptors on the lower lying landscape to the south and east. The visual impacts for walkers in the vicinity of the borrow pit would be short term and would occur at the beginning of the construction programme when access tracks are being formed. During this period the visual effects for walkers in the immediate vicinity of the borrow pit would be significant associated with the quarrying and crushing and screening activity. However, this would affect a limited number of people. Once the necessary stone has been extracted and processing activity ceases the landscape and visual effects would not be significant. The borrow pit would be regraded and restored to a more gentle profile and revegetated where appropriate. Whilst there would be some residual effects associated with a change to the landform this would be consistent with the topographical and geological variation found in this upland area. As such residual effects of this construction activity are not considered significant.

- Borrow Pit 3 would be visible from similar areas to Borrow Pit 2, but with the addition of being slightly more visible from a section of the B9081 heading north from Burravoe. Views from this section of road are already influenced by an area which appears to have been quarried and an area that has been significantly degraded by peat removal and over grazing such that bedrock is exposed. In this context the magnitude of change to views introduced by the borrow pit would be small and visual effects would be short term and are not considered to be significant during construction. As with Borrow Pit 2 during the active quarrying period the visual effects for walkers in the immediate vicinity of the borrow pit would be significant associated with the quarrying and crushing and screening activity. However, this would affect a limited number of people. Once the necessary stone has been extracted and processing activity ceases the landscape and visual effects would not be significant. The borrow pit would be regraded and restored to a more gentle profile and revegetated where appropriate. Whilst there would be some residual effects associated with a change to the landform this would be consistent with the topographical and geological variation found in this upland area. As such residual effects of this construction activity are not considered significant.

- Borrow Pit 4 would be clearly visible from a section of the B9081 to the south of Gossabrough and to a lesser degree by hill walkers to the north. Views from this section of road are already influenced by an area which appears to have been significantly degraded by peat removal and over grazing such that bedrock is exposed. The effects would be significant in the immediate vicinity of the borrow pit during extraction and processing on minerals, but for the majority of receptors views would be fleeting due to the transient nature of people in this area and short term due to the limited duration of excavation works at the beginning of the construction period. Once the necessary stone has been extracted and processing activity ceases the landscape and visual effects would not be significant. The borrow pit would be regraded and restored to a more gentle profile and revegetated

where appropriate. Whilst there would be some residual effects associated with a change to the landform and ground cover this is not considered significant as similar examples of mineral extraction adjacent to roads on Yell are found across the island.

Temporary construction compound

7.6.8 The ZTV for the temporary construction compound is illustrated on Figures 7.7. This demonstrates that the temporary construction compound would be highly visible from a short section of the B9081 to the north of Burravoe where it passes immediately adjacent to the compound. This would result in some likely significant visual effects for road users and walkers on the adjacent hills, although effects would rapidly diminish with distance. The temporary construction compound is proposed in a part of the Site that is significantly degraded by peat cutting and overgrazing, such that bedrock is visible across the area. This diminishes the quality of existing views from this section the B9081. Following the completion of construction, the temporary compound would be restored and this provides an opportunity to improve the quality of views from this section of the B9081 by regularising the degraded areas and re-establishing a vegetative cover using surplus peat arising during construction. This has the potential for localised long term beneficial effects on landscape character and views from this particular part of the B9081 and would represent an improvement on the existing baseline condition of this part of the Site.

Lighting

7.6.9 Lighting during construction may be required to ensure the health, safety and welfare of those on site. In some instances, lighting may be required for work on elevated structures, including crane mounted lighting. Construction operations may require lighting during winter months when hours of daylight are limited. However, the main construction lighting would be limited to period of active construction and would be focussed on the working area through the use of cowls. In addition, lighting would be switched off when not required. As such, whilst there is potential for visual impacts at night due to the general lack of lighting in the surrounding landscape, construction lighting effects are not considered significant due to the temporary and irregular nature of the effects of lighting on the visual amenity of the area. Following construction these effects will be removed, with the exception of aviation lighting on nacelles of turbines. Due to the limited extent of lighting on top of the nacelle and the relative position of sensitive visual receptors significantly below the level of the turbines visual effects associated with lighting would not be significant.

Decommissioning

7.6.10 The effects of decommissioning would be very similar to construction, but over a much shorter duration. The made difference being that the excavation of borrow pits would not be required and access tracks would be retained in some areas subject to the requirements of the landowners for future access. Decommissioning would also involve the restoration of elements of the landscape fabric that were lost during construction process, as set out in Chapter 3. This has the potential for some landscape and visual benefits.

Landscape effects: operational

Landscape designations

Shetland National Scenic Areas

7.6.11 As set out previously the generic special qualities attributable to all areas of the Shetland NSA are defined by NatureScot (previously SNH)[22], and are summarised below (refer to Appendix 7.2, for an extract from the NatureScot document setting out full details):

- The stunning variety of the extensive coastline;
- Coastal views both close and distant;
- Coastal settlement and fertility within a large hinterland of unsettled moorland and coast;
- The hidden coasts;
- The effects and co-existence of wind and shelter;
- A sense of remoteness, solitude and tranquillity;
- The notable and memorable coastal stacks, promontories and cliffs;
- The distinctive cultural landmarks; and
- Northern light.

7.6.12 The only special qualities that could potentially be affected by the Consented Development are underlined above. In addition, Fethaland is identified for notable and memorable coastal stacks, promontories and cliffs such as Ramna Stacks, a group of skerries seen off the Point of Fethaland.

7.6.13 As illustrated by the Hub ZTV (Figures 7.3a & b) and Blade Tip ZTV (Figures 7.4a & b) coastal views towards the Consented Development from the NSA would generally be limited to more elevated east facing slopes. Views from the rugged coastline itself which contribute to the special qualities of the NSA would be more limited due to its lower elevation and the screening of the Consented Development by the intervening landform on Yell. The Hub ZTV illustrates that up to 4 turbine hubs would be theoretically visible from elevated east facing slopes in the NSA. At distances in excess of 13km these potential visual effects would not significantly influence the special qualities of the NSA related to coastal views. This is confirmed by the visualisation for Viewpoint 12: North Roe (Figure 7.5l) which illustrates how the Consented Development would be largely screened by landform on Yell from east facing coastlines on the Fethaland peninsula.

7.6.14 In respect of the special quality of the NSA that is particular to Fethaland the Consented Development would not impinge on any views towards coastal stacks, promontories and cliffs such as Ramna Stacks, a group of skerries seen off the north Point of Fethaland.

7.6.15 In conclusion, whilst theoretically visible from some limited parts of the NSA the visual effects would not significantly alter any of the special qualities of the NSA and there would be no likely significant effect.

Local landscape areas

Ronas Hill

7.6.16 The Ronas Hill LLA is located some c.15km from nearest turbine and is clearly separated from the Consented Development by Yell Sound. Key characteristics of this area defined in the Local Landscape Areas Supplementary Guidance are as follows:

- A Shetland landmark, the highest point of the islands;
- Distinctive red granite geology is clearly expressed;

- Largely empty, uninhabited hills and moors; and
- Rocky plateau, steep cliffs, and other rugged features.
- None of these key characteristics would be diminished by views of the Consented Development on a distant skyline. As illustrated by the visualisation for Viewpoint 13: Ronas Hill (Figure 7.5m) the turbines would be seen in a very small area of panoramic views beyond more prominent masts on Collafirth Hill and the tank farm at Sullom Voe Oil Terminal. These existing features are already a reminder of more modern human influences beyond the boundary of the LLA. In this context, it is considered that the Consented Development would not lead to a likely significant effect to any of the key characteristics of the Ronas Hill LLA.

Lunna Ness & Lunning

7.6.17 The Lunna Ness and Lunning LLA is located some c.6km from nearest turbine and is clearly separated from the Consented Developments by Yell Sound. Key characteristics of this area defined in the Local Landscape Areas Supplementary Guidance are as follows:

- Attractive settlements around Vidlin Voe, with a distinctive pattern and character;
- Long, narrow and remote headland of Lunna Ness;
- Rugged moorland hills around Lunning; and
- Historic features and associations at Lunna, including the ancient kirk and the Shetland Bus.

7.6.18 None of these key characteristics would be diminished by views of the Consented Development on a distant skyline to the north. However, the designation statement goes on to state that '*views are often contained within this medium-scale landscape, but on occasion these open out to take in panoramic views of surrounding islands and sounds, particularly from the northern end of Lunna Ness, which overlooks both Yell and Whalsay'.*

7.6.19 As illustrated by the ZTVs and visualisations for Viewpoints 7 and 11 the proposed turbines would be visible to varying degrees from north facing slopes within the LLA. However due to the varied topography further south and associated containment of views, significant visual effects would be limited to the northern extent of Lunna Ness (see Figure 7.5g for Viewpoint 7: Lunna Ness, near Outrablister). This change to the visual context of the northern part of the LLA would influence one aspect of the landscape character which contributes to the qualities of the LLA. However, existing key characteristics for the LLA are particularly strong and the overall value of the area would not be significantly diminished by this change and as such there would be no likely significant effect on the designated area as a whole.

Wild land areas

7.6.20 Ronas Hill and North Roe WLA is located approximately 15.8km west of the nearest turbine, as illustrated on Figure 7.1. Ronas Hill is the highest summit on Shetland and affords panoramic views across Shetland. The majority of the WLA would be outside of the ZTV for the Consented Development and would experience no change to its visual context. Views towards the Site would be available from the west facing slopes of Ronas Hill. The visual context of these views is already influenced by large scale transmission masts at the edge of the WLA, views to the more distant Sullom Voe Oil Terminal and the more settled landscape coastal landscapes to the east. As such the Consented Development would not introduce manmade features into the visual context of the WLA where these are wholly absent.

7.6.21 Given the distance between the WLA and the proposed turbines in excess of 15.75km, the existing visual context of manmade features to the east and the limited extent of visibility from the wilder areas of the WLA to the north and west it is considered that likely significant effects upon wild land character would not occur.

Inventory gardens and designed landscapes

7.6.22 There are four Inventory Gardens and Designed landscape in Shetland and the effects on the historic setting of these locations is considered in Chapter 9: Cultural Heritage. This section of the LVIA only considers the landscape and visual effect at these locations.

Lunna House

7.6.23 Lunna House Inventory Garden and Designed Landscape is situated at the isthmus[c] of the Lunna peninsula approximately 12km south of the Site. The landscape is laid out in characteristic Shetland style with garths, walled enclosures, eyecatchers and ancillary building although it is difficult to determine the full extent of the Designed Landscape, due to the rugged topography and rough grassland extending across the area. Lunna House is sited on high ground in the north of the designated area and follies and eyecatchers are situated on high ground, opposite to the south. From these highpoints there are extensive views over Lunna Sound to the west and Vidlin Voe to the east. Views north from the Designed Landscape are limited by rising ground.

7.6.24 The Blade Tip ZTV illustrates that the majority of the inventory area near Lunna Kirk and around West Lunna Voe would not afford views of the Consented Development. Whilst Lunna House is located on the very edge of the ZTV, in reality there would be limited visibility from the property due to rising topography obstructing views north. Where visible, turbines would be seen beyond the Lunna Ness peninsula and across Yell Sound. At a distance of over 12km the turbines would only be visible on clear days and would not influence the key designed sightlines to the east, west and south from the house to the follies. In addition, turbines would not be seen in relation to the house in views from the follies. As such the very limited theoretical visibility of turbines would not adversely affect the landscape and visual enjoyment of this designed landscape and there would be no likely significant effect.

Brough Lodge

7.6.25 Brough Lodge Inventory Garden and Designed Landscape lies on the summit and west-facing slopes of a low hill on the southwest coast of Fetlar. The Designed Landscape centres on The Tower, the site of an Iron Age broch. The parkland extends across the Ness of Brough, to the west of the Lodge. Brough Lodge and its associated grounds command views across the Colgrave Sound to the island of Hascosay and inland to Mid Yell to the east. Views southeast in the direction of the Site are more distant and peripheral but nevertheless extensive. Brough Lodge and its ancillary buildings form a distinctive landmark and are prominent in views from the B9088 to the southeast. Brough Lodge is listed as of outstanding scenic value in terms of both its siting and architectural impact. The site is prominent in the Fetlar landscape and is a major landmark emphasising continuity of settlement.

7.6.26 All 17 turbines would be visible at distances in excess of 11km as illustrated by the visualisation for Viewpoint 9: Brough Lodge (Figure 7.5i). The turbines would occupy a narrow angle of view but visual effects in clear weather conditions have been assessed as significant for Viewpoint 9. This is due to

[c] a narrow strip of land with sea on either side, forming a link between two larger areas of land

role that the skyline formed by Yell provides in defining the views available from this part of Fetlar. This was a finely balanced assessment due to the relatively large separation distances and narrow angle of view influenced. However, a precautionary approach was adopted in respect of the moderate effects predicted. The distinctiveness and prominence of this local architectural landmark and the internal relationship of elements would not be affected. The turbines would be seen beyond the immediate setting across the parkland element to the southwest of the Lodge. As such, whilst significant visual effects are possible due to the high sensitivity of the location and magnitude of change, the overall landscape and visual enjoyment of this designed landscape would only be slightly diminished and there would be.no likely significant effect on the key components of the designed landscape and its immediate setting.

Belmont House

7.6.27 Belmont House is situated at the south-west corner of Unst, Shetland's northernmost isle, north of the Yell-Belmont ferry terminal on the Wick of Belmont. The designed landscape occupies a south-facing slope, with its main outlook over the Wick of Belmont. There are also important views westwards to the Loch of Belmont. On a clear day, views from the house encompass the Wick and northern Yell. South of Belmont House there are three square courtyard gardens, each quartered by crosspaths. The central courtyard, south of the House, was separated from those to east and west by a low wall. The south wall of the central courtyard is low, allowing uninterrupted views to and from the House.

7.6.28 South of the courtyard gardens is a large rectangular park, bounded by drystone dykes. The main approach would have been from the shore to the south along the central north-south design axis. However, the main vehicular entrance is now from the east, along the public road, which forms the boundary of the designed landscape. As such the house and gardens are designed to take advantage of views to the south in the general direction of the Consented Development but with the immediate setting comprising the Wick of Belmont and Loch of Belmont.

7.6.29 Views from this general location are illustrated by the visualisation for Viewpoint 15 (see Figure 7.5o). Whilst the turbines would be visible in clear weather conditions, they would occupy a narrow angle of view due to separation distances in excess of 18.5km and would be seen beyond the immediate setting of the designed landscape defined by the Wick of Belmont and Loch Belmont. The predicted visual effects are not considered significant, and the overall landscape and visual enjoyment of this designed landscape would not be significantly diminished and there would be no likely significant effect on the key components of the designed landscape and its immediate setting. It should be noted that the already consented Garth wind turbines would be far more prominent in the views to the west beyond the Loch of Belmont. The Beaw Field turbines would extend the influence of turbines in the view, and this would result in some minor cumulative effects. However, due to the significant distance to the Consented Development this would not result in a likely significant cumulative effect.

Gardie House

7.6.30 Gardie House is located nearly 40km from the Consented Development and would be outside the ZTV. As such there would be no likely significant landscape or visual effects at this designed landscape.

Effects on landscape character

7.6.31 The effects of the Consented Development upon LCAs within 10km of the nearest proposed turbine are set out in detail in Appendix 7.5 and these findings are summarised in Table 7.3 and following text.

Table 7.5: Summary of effects on landscape character

LCA	*Sensitivity*	*Magnitude*	*Significance of effect*
LCA B1: Yell Peatland	**Medium**	**Large**	**Major (localised to southeast corner of Yell)**
LCA B2: Rounded Moorland Hills	Medium	Small	Minor
LCA C3:Lunna Ness and Dragon Ness	Medium/High	Small	Minor to Moderate
LCA E3: Coastal Crofting and grazing Land	Medium/High	Negligible	Negligible
LCA F2:Nucleated Settlements	Medium/High	Small	Minor to Moderate (Burravoe Only)
LCA F5: Scattered Settlements/Crofting and Grazing Land	**Medium/High**	**Medium/Large**	**Moderate to Major (Gossabrough and Burravoe Only)**
LCA G: Coastal Edge	**High**	**Medium**	**Moderate to Major (Localised to parts of the coast between Burravoe and Gossabrough)**

7.6.32 Those LCA that are predicted to experience a likely significant change to their landscape character as a result of the Consented Development have been highlighted in bold within the Table. Due to the extensive nature of some of the Landscape Character Areas and the localised extent of likely significant effects, Figure 7.12 illustrates the general areas where significant landscape effects are predicted. These effects are discussed in more detail below for each LCA.

LCA B1: Yell Peatland

7.6.33 The LCA is defined by the open peatland that is typical of the majority of the island of Yell. Key components of character that have a higher susceptibility to landscape change include the lack of settlement and general absence of human influences which gives the area a sense of remoteness in places. This is particularly evident in the Aris Dale area where views out to adjacent landscapes and more distant islands are restricted by landform. The peatlands also form the backdrop to the settled coastal landscapes as well as the undeveloped coastlines. These higher susceptibility characteristics are balanced by the large scale of the LCA and the simple consistent pattern of elements across the majority of the island. It should also be noted that there are instances of unsympathetic peat cutting taking pace along the B9081 and erosion of peat in other areas which detract from the landscape quality. The peatlands are not designated for their landscape or scenic quality and are commonly occurring across Yell. Taking all of these factors into account the LCA is considered to have a medium sensitivity to landscape changes associated with wind farm development because the sense of remoteness could be diminished by such development and effects could extend to other LCAs to which the peatlands form a backdrop.

7.6.34 The Consented Development would be introduced directly into this Landscape Character Area. The proposed turbines would contrast with the surrounding peatland cover due to their height, colour, form and rotation. The proposed access tracks would also contrast with the peatland. Whilst existing tracks are present in some areas of the Site the proposed tracks would generally be wider and more prominent. In addition, the proposed substation would introduce a modern agricultural type building into this landscape where they are currently absent or located in the lower lying more settled edges of the Yell Peatlands. The influence of the turbines and ancillary infrastructure upon character would be felt most strongly in the south-eastern corner of the Yell Peatland LCA, where visibility would be relatively consistent at short and medium range.

7.6.35 A major level of effect would occur in a localised area to the south east of the Yell Peatlands defined by the coast to the east and south, Arisdale to the West and the rising land defined by the Hill of Arisdale and Ward of Otterswick to the north (see Figure 7.12 for an illustration of the extent of the likely significant effect). In this area the effects on the landscape character of the Yell Peatland would be significant. The Consented Development would form a clearly recognisable and very distinct new feature within what is an otherwise indistinct undesignated landscape. Whilst the sense of remoteness in this part of the Yell Peatlands is already diminished by traffic on the B9081, views of settlement and peat extraction this would be reduced further as a result of the Consented Development. A new localised landscape character area would be created in the southern corner of Yell due to the co-dominance of the wind farm with existing characteristics.

7.6.36 In the wider context of this extensive LCA, the scale and simplicity of the underlying landscape is such that the Consented Development could be accommodated without likely significant effects on the underlying character. Changes to the visual context would occur (i.e., Yell Peatlands with views of turbines) but the main character would remain largely unchanged.

LCA F5: Scattered Settlements/Crofting and Grazing Land

7.6.37 This LCA encompasses isolated groups of properties on the edge of Burravoe, Gossabrough, Hamnavoe, Houlland, Littlester and Copister. Scattered Settlements/Crofting and Grazing Land on the west coast of Yell would be largely outside the ZTV and similarly areas at Otterswick and Aywick would be largely screened by intervening topography. As such these areas would not experience any likely significant effects on their character and have not been considered further. Whilst visible from the Scattered Settlements/Crofting and Grazing Land near Brough and Lunna Ness there is clear separation provided by Yell Sound and distances in excess of 8km would limit likely effects to changes in the visual context rather than a fundamental change in character.

7.6.38 The key contributors to the LCA's 'character' that exhibit a higher susceptibility to change resulting from the Consented Development are: the small scale of the settlement pattern; the proliferation of scale indicators (buildings, overhead lines, small scale wind turbines etc) and the backdrop formed by the rising peatlands to the north and south for Burravoe and Gossabrough respectively. Whilst not designated, the landscape is likely to be locally valued. Overall, the LCA is considered to have a medium/high sensitivity to the Consented Development.

7.6.39 The proposed turbines would be clearly visible from parts of this LCA at Burravoe and Gossabrough. The turbines would be visible in landward views and would contrast with other features present in the landscape. However, the relationship of the LCA to the coast would not be affected by the presence of the turbines.

7.6.40 The magnitude of change on the landscape character of the areas surrounding Hamnavoe, Houlland and Littlester would be lower due to the screening effects of rising ground immediately to the north of these settlements which would limit views of the proposed turbines.

7.6.41 Turbines would be seen from the north facing slopes of Scattered Settlements/Crofting and Grazing Land at Copister. However, they would be at distances in excess of 3.5km and would be seen as a discreet visual element in views across Hamna Voe rather than a key characteristic defining the character of the area itself.

7.6.42 A moderate to major level of effect would occur at Gossabrough and the area north of Burravoe (see Figure 7.12 for an illustration of the extent of the likely significant effect). The Consented Development would result in wind turbines being clearly visible in landward views from the LCA across a wide angle of view. The turbines would be prominent and would define the landward boundary of this LCA when viewed from these settlements. Whilst characteristic coastal views would be unaffected a subtype of the Scattered Settlement/Crofting and Grazing Lands would be created where turbines would be a key characteristic that would define its landward edge.

LCA G: Coastal Edge

7.6.43 The Coastal Edge LCA comprises areas of undeveloped coast, often comprising cliffs and geological features with significant topographical variety. The influence of the sea is the predominant characteristic. Susceptibility to change is high, with most key characteristics exhibiting vulnerability to the presence of turbines. The coastal areas are highly valued with some areas on the western coast of Yell included in Local Landscape Areas. As such the coastal edge is considered to have a high sensitivity. The proposed turbines would be clearly visible in landward views from more elevated stretches of the coast between Burravoe and Gossabrough, and in views looking south-west over the Wick of Gossabrough from the north-east. This would have no appreciable influence upon the strong relationship with the sea that is the definitive component of character but would markedly change the context of landward views from some locations.

7.6.44 This would result in a moderate to major level of effect between Burravoe and Gossabrough where turbines would appear to define the landward extent of the LCA from some elevated coastal locations (see Figure 7.12 for an illustration of the extent of the likely significant effect). This would detract from the wildness and remoteness of a short section of the coastline between these two settlements.

7.6.45 Elsewhere in the LCA to the north of Gossabrough the Consented Development would be seen as a distinct visual element in views that is clearly separate from the LCA rather than a key characteristic of the area itself. As such, there would not be a likely significant effect on the character in these areas.

Visual effects: operational

Viewpoints

7.6.46 A detailed assessment of the visual effects experienced at each viewpoint is set out in Appendix 7.6, which is summarised below (refer to Figures 7.5a-w for visualisations from each viewpoint).

Table 7.6 Summary of Visual Effects

Viewpoint	*Figure*	*Distance*	*Sensitivity*	*Magnitude*	*Significance of Effect*
1. White Wife	7.5a	2.8km	High	Medium/Large	Major
2. Burravoe Old Haa	7.5b	1.8km	Medium/High	Medium/High	Moderate to Major
3. B9081 at Whirly	7.5c	2.5km	Medium/High	Medium	Moderate
4. Ulsta	7.5d	4.8km	Medium/High	Small/Medium	Moderate
5. B9081 at South Ward Reafirth	7.5e	4.6km	Medium/High	Small/Medium	Moderate
6. Mossbank	7.5f	9.0km	High	Small/Medium	Moderate to Major
7. Lunna Ness near Outrablister	7.5g	8.8km	High	Small	Moderate
8. A698, near Basta	7.5h	10.9km	Medium/High	Very Small/Negligible	Minor
9. Brough Lodge, Fetlar	7.5i	11.7km	High	Small	Moderate
10. Road above Ollaberry	7.5j	14.8km	Medium/High	Very Small	Minor to Moderate
11. Track to Gerda Water	7.5k	15.8km	Medium/High	Very Small	Minor
12. North Roe Church	7.5l	15.2km	High	Very Small/Negligible	Minor
13. Ronas Hill	7.5m	19.9km	High	Very Small	Minor to Moderate
14. Tittynans Hill	7.5n	16.7km	Medium/High	Very Small	Minor
15. Belmont House, Unst	7.5o	18.5km	High	Very Small	Minor to Moderate
16. Gardisfauld, Uyeasound	7.5p	19.7km	High	Very Small	Minor to Moderate
17. Standing Stone, Unst	7.5q	20km	High	Very Small	Minor
18. Whalsay Golf Club	7.5r	16.2km	High	Very Small	Minor to Moderate
19. B9075, North Nesting	7.5s	23.4km	Medium/High	Very Small/Negligible	Minor

Table 7.6 Summary of Visual Effects

Viewpoint	*Figure*	*Distance*	*Sensitivity*	*Magnitude*	*Significance of Effect*
20. Gossaborough Beach	7.5t	1.2km	High	Large	Major
21. Hill of Arisdale	7.5u	1.3km	High	Large	Major
22. Access Route ARY06, Neapaback, Burravoe	7.5v	1km	Medium/High	Medium /Large	Moderate to Major
23. Core Path CPPF02, Fetlar	7.5w	14.694	High	Very Small	Minor to Moderate

Pattern of visual effects

7.6.47 As illustrated by the visualisations presented in Figures 7.5a-w the Consented Development would introduce tall, engineered structures with moving blades into a landscape where such features are currently largely absent. By virtue of their height and blade movement, the proposed turbines would inevitably be visible over a wide area.

7.6.48 The theoretical visibility of the proposed turbines is illustrated by the ZTVs on Figures 7.3a, 7.3b, 7.4a and 7.4b. This illustrates that visibility extends over considerable distances to the east and south east across the sea to a number of the other Shetland Isles and beyond. Visibility to the north, west and southwest would be more fragmented due to the screening effect of landforms on Yell or the more varied foreground topography of Mainland. In these areas visibility would generally be limited to more elevated locations on Yell or hills and coastal edges facing the Site on Mainland. The general pattern of visibility and location of significant visual effects is discussed below.

Shorter-range views (up to approx. 5km from the proposed turbines)

7.6.49 The majority of representative viewpoints within 5km would experience significant visual effects as a result of the Consented Development. The exception would be Viewpoint 4: Ulsta due to the main focus of views at this location being away from the Consented Development across Yell Sound towards Mainland. There would also be no views from the ferry terminal or from the main A968 road on the west coast of the island. To the northwest of the ridgeline formed by the Hill of Arisdale and Ward of Otterswick there would be very limited if any visibility of the proposed turbines due to the screening effects of this landform. In addition, there would be no effect on the picturesque and remote Aris Dale or views from the Catalina Memorial and associated walk.

7.6.50 Along the southern coast of Yell views of the Consented Development would be varied due to the intervening effects of topography. The landform at Hamars of Houlland provides considerable screening from some areas and as a consequence the Consented Development would drop in an out of view as it is revealed or hidden by intervening landform. More open views would be possible from the area around Copister which is more elevated and less screened by intervening landform. In addition, views would be more open from Burravoe where the landform to the north is more gentle. In these areas the Consented Development would result in some significant visual effects as turbines would be very

prominent on the skyline of views to the north from the settlement Burravoe, crofts and Access Routes ARY06 and ARY07, as well as parts of Core Path CPPY02 on the south side of the Loch of Littlester.

7.6.51 The greatest visual effects would be experienced from a c. 3.5km section of the B9081 to the north of Burravoe as it passes through the turbine array. This would be due to the prominence of turbines in the views available due to the proximity of this route to the Consented Development. Significant visual effects would also be experienced by walkers in the coastal area to the east of the site due to turbines becoming the most prominent feature in landward views. Whilst these effects would be significant, they would be limited in extent and would only occur between Burravoe and Gossabrough when foreground landform does not screen views.

7.6.52 To the north of the Site likely significant visual effects would be experienced from locations in and around Gossabrough as well as the south facing slopes above Otters Wick which includes Core Path CPPY05 and the White Wife, both of which are likely to attract visitors due to the ease of access, historic connections and coastal scenery.

7.6.53 To the northwest walkers accessing the Ward of Otterswick and Hill of Arisdale would experience likely significant visual effect due to the prominence of the Consented Development in the views to the south and southeast which would disrupt views to the more distant isles from this location. The promoted Ward of Otterswick Walk[23] takes in this area and offers a circular walk that would pass through the proposed turbine array. Whilst the visual effects would be significant for walkers on the route the access tracks on the Site could be used to improve the accessibility of this route. Improvements to access routes in the vicinity of the wind farm are illustrated and discussed in the Socio Economic Chapter of the IAR.

7.6.54 Ancillary infrastructure such as access tracks, substation building, anemometry mast and telecommunications mast would also be clearly visible within these short range views in combination with the proposed turbines.

7.6.55 The access track leading towards the Site would be clearly visible at various locations from the B9081 between the Hill of Ulsta and Borrow Pit 1 as it leaves the existing road and rises towards Beaw Field. However, there are existing tracks which lead off the B9081 and whilst representing a change to the existing visual context the track would not appear out of character. As such visual effects would not be significant. Access tracks would also be clearly visible from the B9081 near Moss Houll where the access tracks cross the carriageway and would be visible on both sides of the road. There is already a network of existing tracks in this area and the proposed access tracks would be seen as an extension /rationalisation of these routes seen within a currently degraded landscape. As such visual effects associated with the tracks from this section of the B9081 are not considered significant in the context of the wider effects of the wind farm at this location.

7.6.56 Access tracks and hardstandings within the wind farm layout would be most clearly visible from elevated locations on the Hill of Aris Dale ridge to the northwest. However, from these location access tracks would always be seen as an integral part of the wind farm which would define views to the southeast.

7.6.57 As illustrated by the Substation ZTV presented on Figure 7.8 the substation would be clearly visible from the land above Burravoe and would also be perceptible from more distant highpoints to the southwest (Hill of Ulsta), northwest (Hill of Arisdale) and northeast (Hill of Queyon). The substation would be enclosed by a modern agricultural type and would always be seen in the context of the wind farm. The full substation building, and compound would only be visible from the upland area immediately surrounding its location. More distant viewpoints would only be able to see the upper parts

of the building within the overall turbines array. Whilst introducing a new feature into the landscape this would not be seen on prominent skylines and the location for the substation was selected to limit its wider visibility. Figure 7.9 illustrates the theoretical visibility of the proposed radio communications mast that is required to mitigate potential effects on EMI interference. This illustrates that the mast would be theoretically visible from locations on the east side of Yell and coastal areas of the surrounding islands. However, as illustrated by the visualisations presented in Figures 7.5a-w the telecommunications mast would be a very minor element of the changes to the views available and would be seen in the same context as the much larger turbines. As such, its contribution to the overall change in the views available would be negligible and not lead to a likely significant.

Middle-range views (approx. 5km to approx. 10km from the proposed turbines)

7.6.58 Between 5-10km from the Consented Development the main extent of visibility would be from the sea and as such would be limited to boat users in Colgrave Sound and Yell Sound. This would include the ferry crossing between Toft and Ulsta. These receptors could experience significant visual effects as the Yell skyline is one of the main components of views from these marine areas.

7.6.59 In addition, there would be some likely significant visual effect from north and east facing coastlines on Mainland where Yell forms a key component of views on the horizon in the middle distance. This would be the case for the hills above Brough, the area around Toft Ferry terminal, the settlement at Mossbank (see Figure 7.5f: Viewpoint 8) and the northern tip of Lunna Ness (see Figure 7.5f: Viewpoint 7). Elsewhere, visual effects would not be likely to be significant due to the screening effects of landform.

7.6.60 On Yell itself the majority of the island within this distance band would be outside of the blade tip ZTV and as such would not experience any likely significant effects as a result of the Consented Development. This is due to the screening effects of the ridgeline formed by the Hill of Arisdale and Ward of Otterswick.

Long-range views (approx.10km to approx. 20km from the proposed turbines)

7.6.61 Beyond 10km from the Consented Development the ZTV becomes fragmented due to the varied topography on Mainland and the northern part of Yell. Again, the main extent of visibility would be from the sea and Colgrave Sound. This would include the ferry crossings from Belmont and Gutcher to Fetlar. However, the turbines would be a minor component of views seen beyond the island of Hascosay and the coastline of northern Yell in the middle distance. As such it is assessed that there would be no likely significant visual effect. Similar, but slightly more distant views are illustrated by Viewpoints 15, 16 and 17 on the southern coast of Unst.

7.6.62 From the southwest coastline of Fetlar the island of Yell forms the skyline of main views as illustrated by the visualisation for Viewpoint 9: Brough Lodge (Figure 7.5i). Whilst the turbines would occupy a narrow angle of view and would be located at distances of c.10-12km from this area, visual effects in clear weather conditions have been assessed as being likely significant. This is due to the role that the skyline formed by Yell provides in defining the views available from this part of Fetlar. This was a finely balanced assessment due to the large separation distances and narrow angle of view influenced. However, a precautionary approach was adopted in respect of the moderate effects predicted. Moderate effects can be considered significant or not significant depending on the individual circumstances at a particular location. It should be noted that these likely significant visual effects would only be experience during periods of good visibility when the island of Yell is prominent in views from Fetlar. As such, these effects would only be experienced periodically and not by all visitors to this location throughout the year.

7.6.63 Elsewhere on Fetlar the likely visual effect of the Consented Development would not be significant due to the screening effects of the landform that forms the southwest coast of the island (Lamb Hoga). This feature limits views from much of the remainder of the island, including the impressive Tresta beach. Views would be available from higher ground to the north and the eastern tip of Fetlar at Funzie Ness. However, the likely effects would not be significant due to separation distances generally in excess of 15km and the strong influence of foreground landforms in defining the views available from these locations. As illustrated by the visualisation for Viewpoint 23 on Core Path CPPF02 (see Figure 7.5w) the Consented Development would be seen on a distant skyline, beyond the immediate setting of the viewpoint which is strongly influenced by skylines in the middle distance. This is distinctly different to the situation at Viewpoint 9: Brough Lodge (see Figure 7.5i) where Yell and Hascosay form the distant skyline without any intervening landform forming an intermediate horizon.

7.6.64 Long distance views would also be experienced from the northern coast of Whalsay. However, at distances in excess of 16km the angle of view occupied by the Consented Development would be very small (c. 3.7° which constitutes approximately 2% of the available outward views). Whilst clearly visible in good conditions the turbines would be a minor addition to the overall views available which would remain primarily influenced by the surrounding large expanses of sea. Whilst a small part of the overall view available would likely be affected by turbines the effects at receptors on the north coast of Whalsay are not considered significant.

7.6.65 In this distance band the Consented Development would be visible from the ferry crossing from Vidlin to both Whalsay and the Out Skerries. The initial part of both ferry journeys through Vidlin Voe would not have any views of the proposed turbines due to the screening effects of the Lunna Ness peninsula. The impact on the views from the Whalsay ferry would be limited due to the screening effects of Lunna Ness and the relatively short duration of the crossing within the ZTV for the Consented Development. In contrast, the visual impact on the ferry crossing to the Out Skerries would be more prolonged and in closer proximity (c.11.7km at its closest point). At this distance ferry users could experience some likely significant visual effect associated with changes to views to the north for much of the crossing.

7.6.66 As referenced previously the ZTV on Mainland to the southwest of the Consented Development is fragmented due to the varied topography. Views are often curtailed by foreground topography and as illustrated by the visualisation for Viewpoint 11 (see Figure 7.5k), when visible, the turbines would often be seen as a minor distant feature beyond the foreground features that define the view. As such likely visual effects from these areas are not considered significant.

7.6.67 Views from the north of Mainland towards the Site would largely be restricted to east facing hillsides above the coast, with the visibility of turbines diminishing from lower lying coastal areas due to the screening effects of the topography on Yell. From the elevated hillsides, (see Viewpoints 10 (see Figure 7.5j) and 13 (see Figure 7.5m) respectively), the proposed turbines would be visible on a distant horizon beyond Yell Sound. The turbines would be clearly visible in good conditions and would represent a simple wind farm image, seen in the context of other large scale development at Sullom Voe Oil Terminal and transmission masts on Collafrith Hill. The Consented Development would occupy a very small proportion of the available views at distances generally in excess of 15km. Whilst a distinct new feature in views the change is not considered significant due to the existing composition of the views available, and the very small area of skyline influenced. From lower lying coastal areas and the Fethaland peninsula views would be limited to a small number of blade tips periodically visible above the distant Yell skyline as illustrated in the visualisation for Viewpoint 12 (see Figure 7.5l). At distances in excess of 14km these likely effects are not considered significant.

Long Distance Views (more than approx. 20km from the proposed turbines)

7.6.68 Beyond 20km the visibility of the Consented Development would be very limited due to the screening effects of intervening landform in the foreground and middle distances. To the south this would be limited to north facing hillsides of North Nesting (see Figure 7.5s: Viewpoint 19) and the narrow ridgelines formed by the landforms of West Kame and Mid Kame. At distances in excess of 20km the likely visual effects from these areas would be minor and extremely limited in extent. To the north views would be limited to south facing slopes on Unst (see Figure 7.5q: Viewpoint 17) and at distance in excess of 20km the likely visual effects are not considered significant due to the narrow angle of views influenced and the fragmented nature of any visibility.

7.7 Cumulative impacts

Existing wind farms

7.7.1 The effects of the Consented Development in a context where existing wind farms are present are considered in the main LVIA above. All existing operational large scale wind turbines (Burradale and Luggies Knowe) are located on Mainland at distances in excess of 35km from the Consented Development. As illustrated by the Cumulative ZTV for the Consented Development and existing sites presented in Figure 7.11a there are limited areas of combined visibility with the exception of views from the sea and the very highest vantage points in the Shetland Isles. Due to the significant separation between the existing site and the Consented Development no significant cumulative effects are predicted.

7.7.2 To accord with current best practice guidance regarding cumulative effects published by NatureScot (previously SNH)[24], a cumulative assessment typically considers two further development scenarios.

7.7.3 First, the cumulative effects of the Consented Development are assessed against a baseline where existing and consented wind farms are present. Second, the cumulative effects of the Consented Development were assessed against into a baseline where existing, consented and other proposed wind farms (which are the subject of a valid planning application) are present. At the time of the original EIA, there were no other proposed schemes in planning when the cumulative baseline was defined[d] and as such this cumulative assessment only considered already consented schemes, namely Viking, Garth and Culter Field. However, Culter Field is located more than 45km from the Consented Development and to the south of the existing schemes at Burradale and Luggies Knowe. As such there is very little scope for cumulative effects to occur with the Beaw Field turbines. This is confirmed by the cumulative ZTV presented in Figure 7.11c. As such this scheme has been discounted from further consideration.

Since the original LVIA for the Consented Development, tip heights have increased at the Viking Wind Farm from 145m to 155m. The S.36 variation application to make that change included an updated LVIA which considered cumulative effects with the Consented Development. That assessment found that the increased tip height would result in no change to the levels of landscape or visual cumulative

[d] Since the cumulative baseline was originally agreed with Shetland Island Council the Culter Field Wind Energy Development has been granted permission twice and is pending consideration at the time of updating this EIAR. The most recent application that has been submitted is for an identical scheme.

effects. Therefore, the Viking LVIA found that there would continue to be significant cumulative effects on the following landscape receptors:

- Weisdale candidate Local Landscape Area (cLLA);
- Gietness & Skellister cLLA;
- A2 East and West Kame LCA;
- D1a Farmed & Settled Inland Valleys: Weisdale LCA;
- D2 Crofting & Grazing Inland Valleys: Cuckron LCA;
- D4a Peatland & Moorland Inland Valleys: Kergord and Petta Dale;
- E3 Coastal Crofting & Grazing Lands;
- F3 Farmed Land; and
- F5 Scattered Settlements/Crofting & Grazing Land.

7.7.4 It also found that there would continue to be localised significant visual effects assessed as being at viewpoints at Vidlin, Whalsay (Clate) and on the A970 at Kames.

7.7.5 The Energy Isles Wind Farm is currently under consideration by Scottish Government. That Consented development is located approximately 17km north of the Consented Development at the closest turbine. The LVIA submitted within the EIA for the Energy Isles scheme considered the Consented Development as part of its cumulative assessment and has been updated as its scheme design has changed. This is discussed below.

7.7.6 The location of all cumulative schemes is illustrated on Figure 7.10 and cumulative ZTVs are illustrated on Figures 7.11a-c. The visualisations presented in Figures 7.5a-w also include information in respect of cumulative site, and this has been used to inform the cumulative assessments for representative viewpoints presented in Appendix 7.6.

Cumulative effects on landscape character

7.7.7 The Viking turbines would be located some 20km south of the Consented Development and would be located within a distinctly different Landscape Character Area to the Consented Development. As such there would be no cumulative effects on the landscape character of either host landscapes as a result of the Consented Development.

7.7.8 The Garth turbines would be located some 16.9km north of the Consented Development and would be within the same Yell Peatland Landscape Character Area as the Consented Development. However, due to the extensive separation distances involved and the localised nature of the Consented Development's effects on landscape character there would be no cumulative effects on the wider landscape character of the Yell Peatland greater than the effects of each individual scheme.

7.7.9 The Energy Isles Wind Farm lies within the same landscape character area (Yell Peatlands LCA). The LVIA for Energy Isles took account of the Consented Development in its assessment of effects on landscape character. It found that significant effects as a result of the addition of Energy Isles to a baseline that already included the Consented Development would be limited to being locally significant within 3km of the Energy Isles site. Therefore, no significant cumulative effects on landscape character are predicted.

Cumulative visual effects

7.7.10 The cumulative visual effects from representative viewpoints are presented in Appendix 7.6 and are summarised below. Of the twenty three viewpoints considered there would be no visibility of cumulative schemes from Viewpoints 1, 2, 6, 12 and 20.

7.7.11 For the remaining Viewpoints the cumulative visual effects would not be significant due to the wide separation distances between the three schemes and distances from the viewpoint locations. Cumulative effects would fall into a number of distinct categories.

7.7.12 Viewpoints within 5km and to the south of the Consented Development would only have visibility of the Beaw Field turbines in succession with the Viking scheme on a distant horizon some 20km to the south. This is illustrated by the original visualisations for Viewpoints 3 (Figure 7.5c), 4 (Figure 7.5d) and 22 (Figure 7.5v) which demonstrates that the likely cumulative effects would not be significant. This remains the case taking into account the increase in tip heights at Viking as described above.

7.7.13 Elevated viewpoints within 5km to the north of the Consented Development would afford visibility of the Consented Development turbines in succession with both the Garth turbines and the Viking scheme on a distant horizon, albeit in opposite directions. Views would be panoramic in nature and the other cumulative sites would be minor elements in the view compared to the Consented Development's turbines in the foreground, as illustrated by the original visualisations for Viewpoints 5 (Figure 7.5e) & 21 (Figure 7.5u). These demonstrate that the likely cumulative effects would not be significant, and this remains true taking into account the increased tip heights for Viking. Lower lying areas such as Gossabrough and Otterswick would not have any views of the Viking or Garth turbines.

7.7.14 Further, to the north as illustrated by the original visualisations for Viewpoints 8 (Figure 7.5h), 14 (Figure 7.5n), 15 (Figure 7.5o), 16 (Figure 7.5p) & 17 (Figure 7.5q) the Consented Development would be a minor component of views. Taking into account the increased Viking tip heights, there would continue to be no likely significant visual effects alone or in combination with the Viking scheme which would be seen in the same area of skyline and beyond those at Beaw Field. In this area the Garth turbines would be more prominent in views and would be seen in succession with those at the Consented Development and Viking on a distant horizon.

7.7.15 Further to the south, as illustrated by the original visualisations for Viewpoints 7 (Figure 7.5g), 11 (Figure 7.5k) & 19 (Figure 7.5s), the Garth turbines would generally not be visible. The Consented Development would be a minor component of views to the north and would be seen in succession to the Viking turbines which would be very prominent/dominant from many viewpoints on Mainland north of Lerwick. Due to the separation distances, prominence of the Viking turbines and minor contribution of the Consented Development to the view cumulative visual effects would not be significant.

7.7.16 From north Mainland neither the Garth or Viking turbines would be visible from Viewpoint 12 (Figure 7.5l). From higher ground such as the hills above Ollaberry the Viking turbines would be seen in succession with the Consented Development at distances in excess of 19km. However, from even higher ground such as Ronas Hill both the Garth and Viking turbines would be seen in succession with those at Beaw Field. Whilst the Consented Development would increase the frequency of wind farms on the distant horizon there would be no coalescence of schemes and each scheme would remain a distinct feature on the distant horizon. As such cumulative effects, taking into account the tip height increases at Viking, would not be significant.

7.7.17 From the sea to the east and the south west coast of Fetlar the Consented Development would be seen in succession with turbines at Garth and either in succession or combination with the Viking scheme depending on the viewers position relative to the site. However, due to considerable separation distances to Garth and Viking cumulative effects would not be significant.

7.7.18 The most recent LVIA for the Energy Isles proposal, submitted as part of the 2021 SEI, found that the assessment of cumulative effects had not been altered by the changes to the Energy Isles proposal. The original assessment remained valid, and this had found that visual receptors located between the Consented Development and the proposed Energy Isles Wind Farm will see the Consented Development to their south, and view Energy Isles as a similar sized wind farm to the north. The differences in turbine scale, due to separation distance would not lead to significant effects. Visual receptors to the east on Unst will see the Consented Development as well as Energy Isles by looking in different directions.

7.7.19 The Energy Isles LVIA concluded that there will also be some locations where that development will be seen in combined or successive views with the Consented Development. However, due to the separation distance these cumulative views will be limited. The Consented Development and Energy Isles will appear similar (a relatively large group of large scale three bladed modern wind turbines) and a direct comparison between turbine size was found not to be possible at that separation distance.

7.7.20 The Energy Isles LVIA found that it's addition in views, to a baseline that included the Consented Development along with Viking and Garth wind farms, would lead to significant cumulative effects on the Belmont House and Brough Lodge Gardens and Designed Landscapes (GDLs). For Belmont House GDL the assessment noted that the Consented Development will contribute weakly to the overall cumulative effect with Garth Wind Farm having a stronger influence.

Cumulative sequential visual effects

7.7.21 As illustrated by the ZTVs presented on Figures 7.3b and 7.4b there would be limited visibility of the Consented development from 'A' classified roads within Shetland and as a consequence sequential effects of the scheme on its own or with other schemes would not be significant from these routes.

A970

7.7.22 From the A970 north of Lerwick there would be very limited theoretical visibility of the Consented Development. This would be limited to three short sections of the route that are long distances apart as follows:

- c. 700m near Green Ward (west of Sullom);
- c.1.2km at Colla Frith, and
- c.1.2km at North Roe

7.7.23 Given the limited extent of visibility from this route likely cumulative sequential effects with other schemes would not be significant.

A971

7.7.24 This route would be outside the Blade Tip ZTV and as such the Consented Development would have no effects on this route.

A968

7.7.25 The A968 on Mainland would only have views of the Consented Development where it passes over the shoulder of the Hill of Swinster (c.900m). There would also be possible visibility from the final 2km approach to the ferry terminal at Toft.

7.7.26 On Yell there would only be approximately 600m where turbines would be theoretically visible from this route after leaving the ferry, until passing over the Hill of Basta to the north of Mid Yell, some 11km north of the Consented Development. Beyond the Hill of Basta there would be no further views of Beaw Field turbines from this route. The main visibility being the wind farm at Garth. At the Hill of Basta, travellers heading south would have passes Energy Isles having had visibility of all turbines from the start of the A968 at Gutcher. Heading north, travellers would not have had views of the Consented Development as the A968 lies outwith the ZTV. No significant sequential cumulative effects have been identified in the Energy Isles LVIA.

7.7.27 Given the limited extent of visibility from this route likely cumulative sequential effects with other schemes would not be significant.

B9081

7.7.28 As discussed previously the B9081 would likely experience significant visual effects as a result of the Consented Development. This will include some sequential visual effects due to the wind farm coming in and out of views particularly along the southern coast. However, there would be no significant cumulative sequential effects along this route with other schemes including the now proposed Energy Isles Wind Farm.

7.8 Mitigation measures

7.8.1 The embedded landscape and visual mitigation measures integrated into the design layout included:

- Reducing the overall number of turbines [from 65 to 17] to be more consistent with the guidance in the Capacity Study in respect of the number of turbines within a medium-large group which is more appropriate to the Yell Peatlands LCA;
- Ensure a compact layout and simple wind farm composition from sensitive viewpoints where possible having regard to other environmental and technical constraints; and
- Increasing separation distances to residential properties and settlements from c.500m to c.900m.

7.8.2 In addition, secondary mitigation would include restoration of the borrow pit to create more natural landforms following excavation and to re-establish vegetation cover where appropriate. Further mitigation measures would include the restoration of the currently degraded area associated with the temporary construction compound, using material excavated during the construction period.

Residual effects

7.8.3 The landscapes and visual mitigation measures are integrated into the design layout and as such residual effects would be the same as those assessed above.

Monitoring

7.8.4 Monitoring of restoration works to borrow pits, the temporary site compound and edges of access tracks following construction will be important to ensure that these elements and sympathetically integrated into the surrounding landscape. Due to the nature of vegetation that would be established it is suggested that this should be monitored for c. 3 years.

7.9 Summary and conclusions

Designated landscape

7.9.1 Due to significant separation distances and limited extent of visibility there would be no likely significant effects on National Scenic Areas, Wild Land, Local Landscape Area or Designed Landscape. If and to the limited extent it is visible in good conditions, the Consented Development would be a minor component of views from these areas.

Landscape character

7.9.2 Seven Landscape Character Areas (LCA) have been considered within 10km of the Consented Development. Only three of these LCA would experience likely significant changes to their key characteristics as follows:

- B1: Yell Peatlands;
- LCA F5: Scattered Settlements/Crofting and Grazing Land, and
- LCA G: Coastal Edge.

7.9.3 In all cases the likely significant effects on landscape character would occur in a localised area c.2.5km from the proposed turbines in the southeast corner of the island of Yell, as illustrated on Figure 7.12. In this area the proposed wind farm and associated infrastructure would redefine a localised area of each LCA, with turbines becoming a key characteristic. These effects would influence a relatively small area of Yell due to the screening effects of topography to the north west of the Site.

Visual effects

7.9.4 Of the twenty three viewpoints considered the assessment has determined that there would potentially be likely significant visual effects at ten of these viewpoints. Significant visual effects would generally be experienced by people within 5km of the Consented Development on the island of Yell. In addition, there is potential for some significant visual effects from coastal areas on adjacent islands within c.12km, where the landform of Yell forms the key component of the views available. This would also include the ferry crossing from Toft to Ulsta and the ferry crossing from Vidlin to the Out Skerries, as well as the northern tip of Lunna Ness, southeast coast of Fetlar and the coastal area between Mossbank and Toft.

Cumulative effects

7.9.5 Due to the extensive separation distances between the small number of existing and consented schemes is the Shetland Islands the likely cumulative landscape and visual effects as a result of the Consented Development would not be significant.

7.9.6 Due to the very limited nature of the visibility of the Consented Development from the main 'A' classified roads north of Lerwick sequential likely cumulative effects from these routes as a result of the Consented Development would not be significant.

Capacity study

7.9.7 Due to advances in turbine technology the installed capacity figures used in the Capacity Study, to define the scale of developments, are no longer consistent with the number of turbines required to achieve the megawatts stated. As such the LVIA considers that the number of large scale turbines is the main consideration when defining the scale of the Consented development in the context of the Capacity Study. The number of wind turbines required to reach the capacity levels identified in the Study is significantly less than would have been previously required. From an LVIA perspective it is the number and scale of turbines that is key in respect of landscape capacity and as such the Consented Development is considered to represent a Medium–Large Group.

7.9.8 The Capacity Study states that the bandings and capacities are an approximate guideline, giving an idea of the size of commercial wind developments that can be accommodated within each visual compartment rather than setting out exact numbers that prescribe a policy limit. The landscape assessment has concluded that the landscape and visual effects associated with the scale of development proposed would be localised within a relatively small area in the southeast corner of Yell, the sea to the south and east of the Site and some adjacent coastlines where the Site forms a key component of views.

7.9.9 The Capacity Study indicates that the Visual Compartment to the east of Site has a greater landscape capacity. However, development in this area has greater potential to be more prominent from the following locations:

- A-roads on Yell and Mainland;
- the National Scenic Area;
- Ronas Hill Wild Land Areas;
- Local Landscape Areas on the west coast of Yell; and
- Aris Dale and the Catalina memorial.

7.9.10 This is because this area does not benefit from the significant screening afforded by the ridge formed by the Hill of Arisdale and Ward of Otterswick. This topographical feature confines the significant effects of the Consented Development largely to the south east corner of Yell and as such the Site is considered preferable to other areas on the island.

7.10 Glossary

- Landscape Character: the distinct, recognisable and consistent pattern of elements that makes one landscape different from another. Determined by a combination of physical and perceptual factors.
- Landscape Fabric: physical elements (and combinations of these) that make up the landscape. For example, a hedgerow.
- Landscape and Visual Impact Assessment (LVIA): the process of identifying, describing and assessing the effects of a development on the landscape and upon views. Usually part of a wider EIA.

- National Scenic Area: a statutory landscape designation, protected under the auspices of the Planning etc. (Scotland) Act 2006.
- Photomontage: a computer-generated image, superimposing a Consented development onto a photograph of an existing view.
- Wild Land Area: an area identified by Scottish Natural Heritage, the wildness of which is important in a national context. Wild Land Areas are not statutory designations and are not protected by statute.
- Wireframe: a computer generated outline image of a Consented development and the underlying terrain.
- Zone of Theoretical Visibility (ZTV): a computer-generated model indicating potential visibility of a development or other feature. Typically produced using a 'bare-earth' model which does not consider buildings or vegetation.

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