Appendix 2D Gatecheck Report









Stornoway Wind Farm Limited

Stornoway Wind Farm

Gatecheck Report





Report for

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Doc Ref. 40001CGos0321R

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Document revisions

No.	Details	Date
1	Draft Report	28/03/2019
2	Final Report	18/04/2019

Executive summary

Purpose of this report

This report has been produced to provide the Scottish Government Energy and Consents Unit (ECU) with an outline of the work that has been undertaken as part of the Environmental Impact Assessment (EIA) for the proposed Stornoway Wind Farm (the Proposed Development) to demonstrate that the EIA Report would comply with the scoping opinion issued by the ECU (**Appendix 2A: Scoping Report** of the EIA Report).

This Gatecheck Report has been produced by Wood Environment & Infrastructure Solutions UK Limited (Wood E&IS) on behalf of Stornoway Wind Farm Limited (SWL), which is a subsidiary of Lewis Wind Power Holdings Ltd (the Applicant). Lewis Wind Power is a joint venture between EDF Renewables and Amec Project Investments Ltd in partnership with the Stornoway Trust.



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1. Introduction

- This Gatecheck Report has been prepared by Wood Environment & Infrastructure Solutions UK Ltd (Wood E&IS) on behalf of Stornoway Wind Power Limited (SWL). The purpose of this report is to provide the Scottish Government Energy and Consents Unit (ECU) with an outline of the work that has been undertaken as part of the Environmental Impact Assessment (EIA) of the proposed Stornoway Wind Farm (the hereafter referred to as the 'Proposed Development'), since the Scoping Report was submitted in July 2018.
- This report outlines how comments on the Scoping Report (**Appendix 2A**: **Scoping Report** of the EIA Report) from statutory and non-statutory consultees have been accounted for in the design and EIA of the Proposed Development.

Stornoway Wind Farm

- Section 36 consent and deemed planning permission was granted in September 2012 to construct and operate 36 wind turbines and ancillary infrastructure on a site to the south west of the town of Stornoway on the Isle of Lewis (the 'Development Site'). In May 2015, an application was made under the Electricity Act 1989 to amend this consent and the deemed planning permission, with regard to the layout, output and size of the turbines (up to 145m to tip) and amendments to certain aspects of the ancillary infrastructure, with this being granted on 22 March 2016 (hereafter referred to as the 'Consented Development'). Stornoway Wind Farm currently has a consented maximum generating capacity of 180MW. A further direction to extend the commencement of development date to 06 September 2020 was granted in June 2017 (hereafter referred to as the '2017 Direction').
- SWL has prepared a new application for a revised project at the Development Site. The Proposed Development would comprise of 35 turbines, with a radius of up to 150m, and associated infrastructure. 25 turbines have proposed heights of up to 180m to blade tip, whilst the remaining ten turbines would have a tip height of up to 156m. The Proposed Development would have a combined generating capacity of 196MW. The Proposed Development also includes:
 - External transformers located at the base of each turbine;
 - Crane hardstanding for each turbine;
 - Wind farm tracks;
 - Five borrow pits;
 - Water crossings;
 - Temporary construction compounds;
 - A grid connection;
 - Three substations and underground cabling;
 - Battery storage facilities; and
 - Decommissioning after 25 years of operation.
- Consideration has been given to overall turbine height with regards to key visual receptors, with the design development comprising two wind turbine heights to be used. The Proposed Development is situated approximately 1.5km west of Stornoway on the Isle of Lewis. The topography of the area varies between 50 150m Above Ordnance Datum (AOD), with three



hillocks within its northern, central and southern areas. Access to the Development Site would be via the A859, which runs along the northern and partly along the western boundary and the A858, which runs through the Development Site in an east / west alignment and then along the western boundary. The Proposed Development area is approximately 1,700 hectares.

- Druim Dubh is the closest property and is situated approximately 3km from the centre of the Development Site. This property is owned by the Applicant and is currently vacant, with no intention to occupy the property as a residential unit. Potential uses of the property are being considered and would be subject to a separate planning application. The closest occupied residential property to the Development Site is within Marybank, located 1.8km from the nearest turbine (T20). The remainder of the surrounding area is boggy, undeveloped peatland.
- The Development Site itself is predominantly boggy, undeveloped peatland. There are no international or national environmental designation on the Development Site. There is a large area designated as a Ramsar Site, a Special Protection Area (SPA) and a Special Area of Conservation (SAC) due to its blanket bog habitats and bird population located to the west of the Development Site. The Development Site is currently used for grazing, forestry, angling and peat cutting. An operational wind farm (Beinn Gredaig) consisting of 3 wind turbines is located in the western part of the Development Site. This wind farm became operational in May 2015 and is not connected to the Applicant's proposal. There is also Bennadrove landfill site and recycling point located directly to the north of the Development Site.

1.1.8 There are a number of wind farm developments in the local area. These include:

- Beinn Ghrideag 3 turbines;
- Pentland Road 6 turbines:
- Arnish Moor scheme 3 turbines;
- Creed 1 turbine:
- Bridge Cottages Newmarket 1 turbine;
- Horshader 1 turbine;
- Baile au Truseil 3 turbines;
- North Tolsta 1 turbine;
- Monan Community 3 turbines;
- Muaitheabhal (Beinn Mhor) 33 turbines;
- Druim Leathann 14 turbines;
- Muaitheabhal (East Extension) 6 turbines;
- Muaitheabhal (South Extension) 6 turbines.
- Figures 1.2 and 4.1 of the EIA Report illustrate the Development Site location in its regional context and the Development Site boundary respectively. Extracts of these figures are set out below.

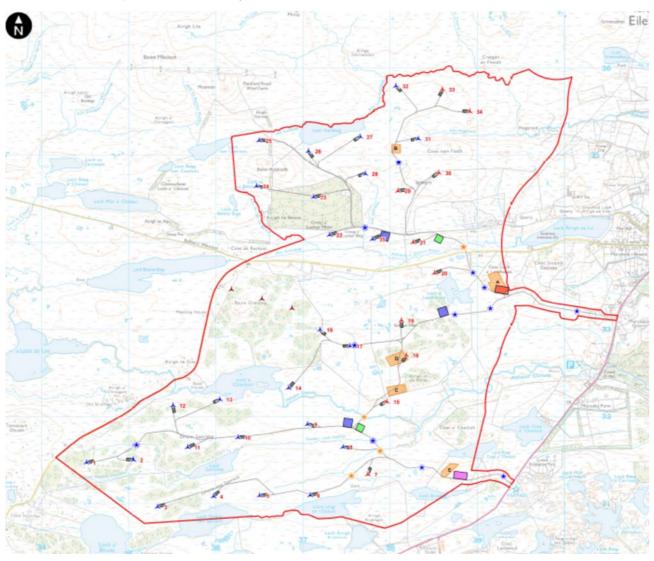


Illustration 1 Wider Context





Illustration 2 Development Site Boundary



2. Consultation

Scoping Opinion

- A Scoping Report was prepared by Wood E&IS on behalf of the Applicant in July 2018 and sent to both statutory and non-statutory consultees. **Appendix A** of this report contains a list of these consultees for the scoping stage, whilst **Appendix B** lists the consultees who it is proposed to consult in relation to the EIA Report. In September 2018 the ECU issued the Stornoway Wind Farm Scoping Opinion (**Appendix 2B**: **Scoping Opinion** of the EIA Report).
- The key issues that were highlighted in the Scoping Opinion, and how they are addressed within the EIA Report for the Proposed Development, are summarised within **Table 2.1**. Note that some responses are of relevance to more than one discipline and have been addressed under the discipline considered most appropriate.
- The EIA Report that is to be submitted to accompany the section 36 application is an independent and standalone document and covers four volumes:
 - Volume 1 Non-Technical Summary;
 - Volume 2 EIA Report;
 - Volume 3 Figures;
 - Volume 4 Appendices.
- All consultation responses received should be considered in full, as advised in the ECU Scoping Opinion. Unless stated to the contrary in the Scoping Opinion, the Scottish Ministers expect the EIA report to include all matters raised by the consultees. The consultee responses and the EIA Report sections that address the responses are set out in **Table 2.1**.
- 2.1.5 The Scoping Opinion highlighted the following requests:
 - Comhairle nan Eilean Siar (CnES) requested that a scale drawing showing a comparison between the dimensions of the proposed and consented turbine designs. CnES also requested a map to illustrate the location of the proposed turbines and associated infrastructure in relation to the consented development. This is illustrated in Figure 9 in Appendix 1 of the Planning Statement;
 - CnES requested that consideration should be given to extending the ZTV study area from 35KM to 45km to include the Wild Land areas of NW Harris-Uig Hills and Scarp. This is discussed in Chapter 6: Landscape and Visual of the EIA Report;
 - CnES requested the inclusion of several viewpoints to further inform the visual amenity assessment for Greater Stornoway. These are provided in Volume 3: Figures and Appendix 6C: Residential Visual Amenity Assessment of the EIA Report);
 - CnES advised that if there is scenario where the Proposed Development could be partially
 developed alongside Sandwick East Community or Sandwick North Street developments then
 consideration should be given to scoping these into the assessment. Chapter 6: Landscape
 and Visual of the EIA Report addresses this point;
 - Historic Environment Scotland (HES) raised concerns regarding heritage assets being grouped for assessment where they are considered to be related as, in some instances, related assets can have differing impacts. Chapter 7: Historic Environment sets out details of the methodology employed to assess potential impacts on heritage assets;



- HES recommended that potential mitigation is explored for the scheduled monument known as
 Druim Dubh, stone circle, as the proposed scheme has the potential to increase impacts
 considerably on the monument. Chapters 3: Scheme Need, Alternatives and Iterative
 Design Process and 7: Historic Environment address this point;
- Scottish Natural Heritage (SNH) and RSPB recommended that two years' worth of field data should be gathered to inform impacts upon the site, in accordance with SNH guidance due to the proximity of the Lewis Peatlands SPA. SNH also highlighted the developer would need to justify how a shorter survey period could provide a sufficiently robust basis to inform the EIA.
 Chapter 8: Ornithology addresses this matter;
- Scottish Ministers requested that the Applicant investigates the presence of any private water supplies that may be impacted by the Proposed Development and if any supplies are identified, an assessment of the potential impacts, risks, and any mitigation should be provided. illustrated in the EIA Report. Chapter 11: Geology, Hydrology and Hydrogeology addresses this point.



Table 2.1 Summary of Consultation Responses

Key Issues / Points Raised	How Points / Issues Raised have been taken into Account in the EIA Report
Comhairle nan Eilean Siar (CnES)	
Description of the Development The EIA Report should identify the number of turbines of each respective height and generating capacity and their OS Grid coordinates in 6 figures (Eastings Northings). The maximum total MW of the development as proposed is stated as 200MW (from the energy consents website).	Details of the proposed number of turbines, dimensions and the generating output of the Proposed Development are set out in Chapter 4: Project Description of the EIA Report. Figures 4.1 – 4.4 illustrate typical turbine details and the layout of the Proposed Development.
Consented Development The consented development was assessed under the Outer Hebrides Local Development Plan 2012 and Wind Energy Supplementary Guidance 2013 while the proposed new application is likely to be assessed against the Outer Hebrides Local Development Plan 2018 and Wind Energy Development Supplementary Guidance 2018 (subject to further review into 2019). CnES and the Scottish Government are supportive in principle of redesigned sites which maximise efficiency and return, but a presumption of approval of an application for a material change in turbine height and scale cannot be assumed. The application will be assessed within the planning policy framework on its own merit, with contribution to energy targets balanced against environmental impacts and site-specific circumstances and due regard given to relevant material planning considerations.	All relevant national and local planning policy has been detailed in Chapter 5: Planning and Energy Policy Context of the EIA Report and a detailed assessment against key planning policy and other material considerations is included in the separate Planning Statement which accompanies the Section 36 application.
The layout and details proposed for the proposed development are different to those of the extant section 36 consent (e.g. turbine / road layout, turbine height etc) and the character, scale, and environmental / cumulative impacts of the development need to be assessed accordingly.	A comparative appraisal of the Consented and Proposed Development, which includes a series of wireline figures, is provided in Appendix 1 of the Planning Statement.
The EIA baseline for re-powering is that of 'no windfarm' (or in the case of a developed windfarm, a restored site – reference SNH consultation draft guidance – June 2018). While the difference in tip height between a former and current scheme is not the basis of the EIA assessment it would be useful to provide in supporting information a scale drawing showing a comparison between the dimensions of the proposed turbine design (height and scale) versus the turbine design forming the consented scheme.	



Key Issues / Points Raised	How Points / Issues Raised have been taken into Account in the EIA Report
The Proposed Development Please note that there was an error in a previous map version which has caused some confusion over the classification of the Pentland Road, this single-track road is unclassified, and is not the A858, this classified road is to the South and is outside the site boundary. Please ensure that the most recent versions of Ordnance Survey (OS) Mapping are used for the assessment. The 250,000km road map has been revised recently.	The most recent OS Mapping has been used to produce all figures which can be found in Volume 3 Figures .
It would be useful to have a computer generated virtual reality demonstration showing what the proposed development will look like on approach from the ferry route, through the town (Bayhead) and on the A859 showing the different layout and turbine heights. This additional information would provide laypersons with a useful impression of the development and may also be a tool to aid in the assessment of the impact of the development.	Visual impacts affecting transport routes have been assessed in the visual impact section of Chapter 6 . Where appropriate, they have been assessed and illustrated via sequential route analysis (see Figures 6.21 a-k, 6.22 a-e and 6.23 a-e in Volume 3 Figures .
Policy Context Regards should be afforded to the relevant provisions of National Planning Framework (NPF3), Scottish Planning Policy (SPP), as well as other relevant national policy guidance; the provisions of the Outer Hebrides Local Development Plan (to be adopted 2018) and the statutory Supplementary Guidance for Wind Energy Developments (Wind Energy SG). It should be noted that the Wind Energy SG is anticipated to be revised in 2019.	All relevant national and local planning policy has been detailed in Chapter 5: Planning and Energy Policy Context of the EIA Report and a detailed assessment against key planning policy and other material considerations is included in the separate Planning Statement which accompanies the Section 36 application.
Scottish Government Onshore Wind Policy Statement and Scottish Planning Policy The Scottish Government states that repowering can take several forms but is simply an application for a new onshore wind development on a site where onshore wind represents the established land use or forms part of the planning history of the site. The Scottish Government's position in the 2017 Onshore Wind Policy Statement (OWPS) remains one of clear support in principle for repowering at existing sites. The OWPS states that established land use will be a material consideration in determination of any application for a repowering proposal. New wind farms, including on repowered sites, need to continue to be sited and designed to ensure environmental impacts are minimised and to protect residential amenity and every repowering application should continue to be assessed on its own merits. The Scottish Government would encourage developers to renegotiate community benefits and/or shared ownership arrangements, or introduce new discussions on these aspects, at an early stage or any repowering application or decision, and to do so in line with these good practice principles.	All relevant national and local planning policy has been detailed in Chapter 5: Planning and Energy Policy Context of the EIA Report and a detailed assessment against key planning policy and other material considerations is included in the separate Planning Statement which accompanies the Section 36 application. Details of the community benefit fund and opportunities for community ownership are set out in Chapter 14: Socio-Economics of the EIA Report.



Key Issues / Points Raised	How Points / Issues Raised have been taken into Account in the EIA Report
SPP introduces a presumption in favour of development that contributes to sustainable development. SPP also requires that planning authorities through their Development Plans (should seek to ensure an area's full potential for electricity and heat from renewable sources is achieved, in line with national climate change targets, giving due regard to relevant environmental, community and cumulative impact considerations".	
Outer Hebrides Local Development Plan and Wind Energy Supplementary Guidance The following key policies of the Outer Hebrides Local Development Plan and Wind Energy Supplementary Guidance should be added to table 4.2 (p.38): Policy PD1: Place-Making and Design; Policy PD6: Compatibility of Neighbouring Uses; Policy ED1 Economic Development; Policy ED5 Minerals; Policy EI2 Water and Waste Water; Policy EI9 Transport Infrastructure; Policy EI12 Developer Contributions; Policy NBH3 Trees and Woodlands; Policy NBH4 Built Heritage (esp. relevant re setting of War Memorial etc). The developer should be aware that any subsequent application will be assessed under the LDP 2018. The current revised Wind Energy SG (2016) will be re-adopted with minor changes only in 2018 but is due for more extensive revision in 2019. The SG has the same statutory basis as the LDP and is read in conjunction with the LDP when determining wind energy applications. Policy EI8: Energy and Heat Resources states that the type, scale and size of the proposed development will have a significant effect on the way the Comhairle will consider an application and the level of accompanying information that will be required. The Local Development Plan (LDP) Energy SG 'Repowering' policy states that applications for repowering will be assessed against the policies of the Wind Energy Supplementary Guidance and that the current use of a site as a wind farm will be a significant material consideration in the assessment of applications for repowerings for repowering should make use of existing infrastructure and limit he need for additional footprint and that in determining applications for repowering the reasons for any change to the existing infrastructure will require to be justified by the developer. We would expect the ER to be able to demonstrate consideration of these points. The proposed development is located 'outwith settlement' (policy DS1) and is classed as a 'wind farm' and falls within an 'Area of Constraint' (with potential in certain circ	All relevant national and local planning policy has been detailed in Chapter 5: Planning and Energy Policy Context of the EIA Report and a detailed assessment against key planning policy and other material considerations is included in the separate Planning Statement which accompanies the Section 36 application.
The Site The EIA (or at least supporting information) should include a map to illustrate the location of the proposed turbines and associated infrastructure in relation to the consented development. As it appears that the wind farm redesign has relocated a number of the turbines / infrastructure it will be important to understand the extent of the variation in layout between the consented and the proposed.	A comparative appraisal of the Consented and Proposed Development, which includes a series of wirelines figures, is provided in Appendix 1 of the Planning Statement .



Key Issues / Points Raised	How Points / Issues Raised have been taken into Account in the EIA Report
Site Access The ER should indicate whether the new or improved transport infrastructure and traffic management measures will utilise a sustainable design system to deal with surface water.	Figure 4.7 in Volume 3 illustrates the incorporation of swales in the construction of excavated access tracks.
CnES Technical Services should advise on road safety in relation to the position of the access road off the A859.	The roads department at CnES were consulted in November 2018 to seek personal injury accident data and traffic survey data on the A859. Available traffic data from CnES was superseded by available DfT counts on the A859 therefore, this information was used. Crashmap was used to collect records of personal injury accident data.
The ER should provide plans of the proposed road infrastructure and indicate if the dimensions of the access routes will be changed due to increased size of turbines.	It is expected that turbines would be shipped to the port of Arnish approximately 4km to the south east of the Development Site. Abnormal loads would route long the Arnish Point Access Road before reaching the priority junction with the A859. Upgrades to the Arnish Point Access Road may occur in future, and a small section of new road may also be built. Any alterations to the Arnish Point Access road would be the subject of a separate planning application and are not considered in the section 36 application.
Landscape and Visual Assessment Please ensure the finalised Zone of Theoretical Visibility reflects the turbine parameters accurate.	The ZTVs presented in Figures 6.2-6.5 in Volume 3 reflect the correct parameters (156m and 180m to tip height).
Wild Land Given that there are areas of wild land (North West Harris-Uig Hills / Scarp) within the ZTV between 35-45km, consideration should be given to extending the study area from 35km to 45km or include these isolated sites within the cumulative study area. We would defer to SNH for their position but consideration should be given to potential for cumulative impact with the consented Muaitheabhal Beinn Mhor and Extension wind farms and whether a detailed Wild Land Assessment should be scoped into the EIA.	SNH have confirmed in their scoping opinion (22 August 2018) that a Wild Land Assessment is not required. SNH make no comments to extending the study area which is therefore deemed to be appropriate as set out in the scoping report – the wider 35km and detailed 15km study areas are considered in this assessment.



Key Issues / Points Raised	How Points / Issues Raised have been taken into Account in the EIA Report
With regard to limiting assessment of landscape character type (LCT) to 15km, consideration should be given to the impact on LCT within Wild Land area outside 15km, for example mountain massif 1 and 2 within Eisgein wild land areas. Areas of low landscape capacity should be included in the landscape assessment.	Landscape Character Types (LCTs) within the 15km Study Area that overlap with the areas of low landscape capacity on Map 2 are included in the landscape assessment.
As well as the two National Landscape designations scoped in, the study should take account of the local Historic Area designation, the Callanish Sensitive area; this is mapped in the new LDP and mentioned in the new LDP NBN 6 Historic Area. The EIA Report should also take account of the Calanais Standing Stones: Setting Document, which was prepared by HES in consultation with the Comhairle.	The Calanais Standing Stones: Setting Document has been referenced directly and incorporated into the indirect impact assessment set out in Section 7.11 of Chapter 7: Historic Environment of the EIA Report.
Visual Receptors – Viewpoint Selection We suggest removing VP19: Pairc: Mullach Breac Mhalasgair from the selection. It appears to be a random high point but unlikely to be of interest to visual receptors.	This viewpoint has been excluded from the assessment.
Due to the scale of the base map underlying the ZTV it is difficult to properly determine which areas of the town of Stornoway from which you will be able to see or not able to see the turbines. A supplementary ZTV of hub and turbine height within 10km buffer should be provided based on a more detailed scale of base map. This is also the case of Callanish area.	Detailed ZTV maps illustrating the visibility from Stornoway are provided in Figure 6.20a-c in Volume 3 .
The following additional viewpoint locations have been selected in order to aid assessment of the impact of the development upon the visual amenity of the settlement of greater Stornoway being an area we might expect representations on the grounds of visual impact. If a wireframe demonstrates visibility, then visualisations produced to SNH adopted standards would be welcomed for these additional viewpoints: Upper Newvalley 141398E 935135N; Newmarket 141902E 935745N; Oliver's Brae at NGR 143870E 942660N; Stornoway Co-op Car-park (beside recycling bins before you enter rear Service yard); Any point within vicinity of Stornoway Ferry Terminal. 	Following further discussion with CnES, viewpoints have been included in the assessment at: Upper Newvalley (VP24) Newmarket (VP25) Oliver's Brae (VP26) On Approach to A859 from B897 (VP27) Iolaire Memorial (VP28)
These additional viewpoints are requested as representative of the approach to Stornoway. If a wireframe demonstrates visibility then visualisations produced to SNH adopted standards would be welcomes for these additional viewpoints: Pentland Road Hebridean Way / Airidh shieling cluster at NGR 134015E 931308N; On approach to A859 from Grimshader Road B897 (commuter route from North Lochs) from close to Scottish Water depot (at NGR 139452E 928473N a spot where the development site and existing built turbines in the vicinity can be viewed) or at a point further towards A859; Gress to Tolsta Road at NGR150108E 943385N.	Additional visualisations, as agreed with CnES, are also provided for the following in Appendix 6E: Additional Viewpoints in Volume 4 Appendices : Stornoway Co-op car park (VPA) Stornoway Ferry Terminal (VPB) Gress to Tolsta Road (VPC)
These additional viewpoints are requested on grounds of impact on cultural sensitivity Lolaire memorial site 144493E 930524N; Achmore Stone circle at NGR 131735E 929262N.	With regards to Pentland Road / Hebridean Way, Viewpoints 1 and 13 are representative of views from Pentland Road and the Hebridean Way.



Key Issues / Points Raised	How Points / Issues Raised have been taken into Account in the EIA Report
	However, a viewpoint between viewpoints 1 and 13 is included as part of the sequential assessment for Pentland Road / Hebridean Way (Figure 6.23c-d).
	With regards to Achmore Stone Circle, this is included as a heritage viewpoint within Chapter 7 (Figure 7.5).
Cumulative Assessments Consideration should be given to adding some additional locations to the cumulative sequential assessments From a residential and cultural heritage point of view Newmarket / Newvalley, War Memorial; Gallows Hill; The "Barvas Moor' viewpoint used for Druim Leathann windfarm 141009E 938427N	The sequential assessment includes all cumulative wind farms within 35km. Additional Angle of View (AoV) illustrations have been provided for Newmarket (VP25), Lewis War Memorial (VP2), and Barvas Moor (VP7) and included in the viewpoint assessment in Appendix 6B: Viewpoint Analysis in Volume 4.
With regard to light pollution impacting on nearby communities, such as the villages of Maryhill / Newvalley / Newmarket / Bennadrove; the points above also apply to any proposed night time visualisations / photomontages.	The night time assessment considers the night time effects on views from the nearby villages of Maryhill / Newvalley / Newmarket / Bennadrove in Chapter 6 and Appendix 6D: Night time assessment in Volume 4 .
Cumulative Impact (neighbouring developments) Developers should be aware of the recent EIA scoping opinion request from Sandwich East Community Wind Farm (18/00278/SCO_L) for 16 turbines on a portion of the Stornoway Wind Farm, as well as the Sandwick North St Community Wind Turbine 17/00043/PPW which is pending consideration. If there is any scenario where both the Stornoway Wind Farm proposed wind farm could be partially developed alongside the Sandwick East Community or Sandwick North Street applications, consideration should be given to scoping these developments into the assessment.	The Proposed Development is a re-design of the Consented Development. The Sandwich East Community Wind Farm would be located on the site of the some of the turbines from the Consented Development. It would not be possible to have both the Consented Development (or a portion of it) and the Proposed Development concurrently. Therefore, taking a pragmatic approach, these schemes are scoped out of the cumulative assessment.
	A Cumulative Landscape and Visual Impact Assessment (CLVIA) in relation to the Proposed Development is set out in Chapter 6: LVIA . Table 6.4 lists the other wind energy developments that are included in the assessment and these are illustrated in Figure 6.8 in Volume 3 , this includes North Tolsta.



Key Issues / Points Raised	How Points / Issues Raised have been taken into Account in the EIA Report
Core Paths Policy 19 Energy Resources (current LDP) also mentions Core Paths. The Comhairle would expect the EIA to demonstrate that it complies with the following policy, Noise and Community Amenity in the Wind Energy SG, 'Turbines should be located at least a minimum distance equivalent to 10 times the blade diameter from any regularly occupied buildings not associated with the development and at least a minimum distance equivalent to the height of the turbine to blade tip plus 10% from public roads or paths identified in the Outer Hebrides Core Paths Plan'.	An assessment of the effects of the construction and operational phases of the Proposed Development on Core Paths and other paths / recreational routes is set out in Chapter 6: LVIA and Chapter 14: Socio-Economics . The distance of the nearest proposed turbine to the nearby roads / paths is as follows: A858 / Hebridean Way / Timeless Way - 142m Pentland Road is 843m Pentland Road is 843m A859 - 970m Core Path 6 - 2,218m It is acknowledged that the Proposed Development does not fully comply with the Wind Energy SPG in terms of distance to the A858 / Hebridean Way / Timeless Way. This is addressed further in the Planning Statement .
Local Recreational Routes Please take account of new LDP policy EI7 Countryside and Coastal Access, the promoted walk the Hebridean Way long distance walking route follows the Pentland road from Achmore into Stornoway along the west boundary of the development and cuts through the top third of the site. This route should not be obstructed by the development. The Hebridean Way is included spatially in NPF3 page 62; and mentioned on page 50. Route 780 of the National Cycling Network goes along the A858 Achmore Road, approximately 3km to the South of the proposed development site; the EIA assessment should consider any potential impacts from the development on the route. For the EIA, we would like to draw attention to the statutory SG for Wind Energy, and the nature of assessment required under Landscape and Visual Impact, pages 8 & 9: 'A proposal will also be assessed for its likely impact on: Areas of Low Landscape Capacity (Map 2); Areas of Low Landscape Capacity (Map 2);	An assessment of the effects of the construction and operational phases of the Proposed Development on Core Paths and other paths / recreational routes is set out in Section 6.8 in Chapter 6: LVIA and Chapter 14: Socio-Economics.
 Key characteristics of landscape character types; 2 Areas of Wild Land (SNH, 2014) http://www.snh.gov.uk/docs/A1323225.pdf; 3 Landscape Capacity Study for Onshore Wind Energy Developments in the Western Isles (SNH et all 2004); Settlements; Views from popular public viewpoints, transport routes, the core path network and recognised visitor locations; The site and setting of SAMs; Listed Buildings; Conservation Areas; and other historic sites as agreed with the Comhairle. 	



Key Issues / Points Raised	How Points / Issues Raised have been taken into Account in the EIA Report
The spatial policy is that wind farms should be located at a distance of at least 2km from settlements. As part of the consented windfarm is within the 2km buffer the EIA should include a list of residential properties which fall within 2km of the development site and undertake a residential amenity study upon these as a minimum.	A detailed Residential Visual Amenity Assessment has been undertaken for all properties within 2km of the Proposed Development. The approach of the assessment was agreed with CnES on 5 February 2019. The RVAA is reported in Appendix 6.C in Volume 4 .
Potential Landscape and Visual Effects Please update Table 5.2 to record that the North Tolsta turbine exists.	A Cumulative Landscape and Visual Impact Assessment (CLVIA) in relation to the Proposed Development is set out in Chapter 6: LVIA . Table 6.4 lists the other wind energy developments that are included in the assessment and these are illustrated in Figure 6.8 in Volume 3 , this includes North Tolsta.
Historic Environment Pre-application discussion with Historic Environment Scotland is essential in order to identify any potential impact on Historic Environment assets and their settings early in the design process and to ascertain what level of assessment will be appropriate. CnES recommends that the developer consult LDP policies on the Historic Environment regarding assessment of development proposals. The 2015 application figure 6.1 'Heritage Assets within the Proposed Development Area' identifies a number of heritage assets within the site area. There are clusters to the north and east and while the 2015 turbines largely avoided these assets, the 2018 redesign positions a number of turbines (e.g. turbines 18, 30, 23, 16, 15) in direct proximity to these sites. Archaeology should advise on whether sufficient information is proposed in the EIA to be able to assess the impacts of this variation. It appears from the ZTV that the proposed wind farm will be visible from most of the Stornoway Conservation Area, from the Harbour and Town Centre and the Residential Area. The western edge of the conservation area, where Lewis Castle is located is approximately 1.2km from the north entrance to the development site. The site lies to the west of the Lews Castle and Lady Lever Park Inventory Garden and Designated Landscape. Lewis Castle is also Listed (LB19206) Category A along with the boundary walls bounding policies of Lews Castle (Lady Lever Park). Creed Lodge (LB18816) and Marybank Lodge (LB18817) are Category C Listed and are located on the boundary wall perimeter adjacent to the A859. Siting and design of development should take into account the setting of listed buildings, Stornoway Conservation Area and Lews Castle and Lady Lever Park. The Comhairle is aware of a scheduled monument (SM5504), the stone circle at Druim Dhubh outside the South boundary of proposed development site and there is also a scheduled monument (SM4355), Achmore Stone Circle which is to the South of the	Heritage Environment Scotland have been engaged in the development of the Proposed Development from an early stage through involvement pre-scoping and the design process. LDP on the historic environment have been consulted and are referenced in Table 7.1 in Chapter 7: Historic Environment. The rationale behind asset inclusion is set out in the methodology in Section 7.9 of Chapter 7. Direct effects on heritage assets are considered with reference to previous assessments, field surveys and CnES data in Section 7.7 and 7.10 of Chapter 7. An assessment of the indirect effects of the Proposed Development on Stornoway Conservation Area is set out in Section 7.11 of Chapter 7. An assessment of the indirect effects of the Proposed Development on Lews Castle and Lady Lever Park Inventory GDL is set out in Section 7.11 of Chapter 7.



Key Issues / Points Raised

We would expect the EIA Report to consider non-scheduled archaeology and to consult the Comhairle archaeologist regarding the assessment of this resource, including the Sites and Monuments Record (SMR); and records of recent finds arising, much of this being potential archaeology lying beneath the surface of the peat.

The Calanais Standing Stones: Setting Document (2014) has been updated and will be included online when the new LDP is adopted. The Historic Resources policy of the Wind Energy SG states the following in relation to the Callanish Complex, and the developer should work with Historic Environment Scotland to ascertain the level of assessment that will be required in relation to this:

"If a wind energy proposal breaks the skyline at sensitive ridgelines when viewed from the component parts of the Calanais complex or is to be sited in another location where it has the potential to impact on the setting of the complex, it will be only be supported if it can be demonstrated that the proposal will not have a significant negative impact on the setting of the Calanais complex. The assessment requirements will be judged on a case by case basis. More prominent developments will be subject to more detailed assessment in terms of impact on the setting of Calanais".

Please include reference to the other scheduled Neolithic stone circles within the Calanais Sensitive Area in the EIA Report. A list of these is included in the Calanais Standing Stones: Setting document.

Ornithology

All survey work requested by SNH should be carried out by the developer, to ensure it is up to date and robust for the EIA Report. SNH and RSPB should be closely consulted on all aspects of the assessment with regard to impacts on ornithology. It is noted that the site includes a number of wooded areas and subject to SNH advice it may be advisable to subject these areas to a minimum of fresh walk over surveys to rule out new nest sites.

How Points / Issues Raised have been taken into Account in the EIA Report

Effects on the stone circle at Druim Dubh have been considered in **Section 7.11** of **Chapter 7** as a result of the proximity of the asset to the Proposed Development and the clear views into the Development Site that can be had from the asset. An assessment of the indirect effects on Achmore stone circle is also set out in **Section 7.11**. Contact was made with Kevin Murphy, CnES Archaeologist by email and telephone prior to heritage asset visits, setting out key concerns and rationale and inviting feedback.

The Calanais Standing Stones: Setting Document has been referenced directly and incorporated into the indirect impact assessment set out in **Section 7.11** of **Chapter 7: Historic Environment** of the EIA Report.

Chapter 7: Historic Environment considers the indirect effects of the Proposed Development on the Calanais group of monuments, which comprise a number of prehistoric stone-built ceremonial features located in the areas around Calanais and Breasclete townships in addition to the Garynahine Lodge.

SNH, RSPB and the Lewis and Harris Raptor Study Group was kept informed of all significant survey findings, and support was provided to the LHRSG during ringing operations of hen harrier chicks.

All wooded areas within the field survey area were thoroughly surveyed.

Reference should be made to **Appendix 8B, 8C** and **8D** within **Volume 4**.



Key Issues / Points Raised

Ecology

The Comhairle agrees with the developers undertaking to carry out surveys of otter at the substation and access track locations and agrees that further work may be required depending on the initial findings of this work and on the advice of SNH.

Designated Sites

The Stornoway Castle Woodlands Site of Special Scientific Interest (SSSI) and the Loch Orasay SSSI have been declassified and are no longer designated. Therefore these two may be scoped out of the assessment for the EIA. Please ensure that the data sets you are using for the assessment are up-to-date.

Species and Habitats of Conservation Concern

We agree that the potential impact and potential effects of the proposed development on biodiversity, specifically blanket bog, marshy grassland, acid flush, dry heath, wet heath acid grassland, (GWDTEs) and watercourse habitats and on otters should be fully considered. The SNH website has a summary of development considerations for otters under the Habitat Regulations.

The Comhairle is supportive of strategies to reduce negative effects and mitigate against predicted habitat and biodiversity loss. We would advise the developer to consult with SEPA and SNH for specialised advice and guidance on habitat restoration and on increasing biodiversity on the proposal site. For example, planting native woodland to increase biodiversity, create bird habitat and to offset carbon emissions.

The SNH website has a summary of development considerations for European Protected Species (EPS) under the Habitat Regulations.

How Points / Issues Raised have been taken into Account in the EIA Report

Otter surveys have been carried out over 2018/19 and a report is included as a confidential appendix - **Appendix 9C: Otter Survey 2018/19** in **Volume 4**.

Loch Orosay and Stornoway Castle SSSI have been scoped out of further assessment. The rationale for the scope of the assessment set out in **Chapter 9** is discussed in **Appendix 9E: Scoping of the Assessment**.

A scoping assessment has been undertaken for all species and habitats of conservation concern and this is presented in **Appendix 9E**. Ecological features have been scoped in for further assessment where they occur within a ZOI of the Proposed Development. The effects of the Proposed Development on habitats and species are considered in **Chapter 9: Ecology and Aquatic Ecology**. The effects of the Proposed Development on the water conditions supporting habitats are considered in **Chapter 11: Geology, Hydrology and Hydrogeology**.

Habitat reinstatement and compensatory habitat restoration is discussed in **Chapter 9**. Calculations of habitat loss and disturbance are set out in **Appendix 9G**. Measures to address effects on sensitive blanket bog habitats and compensatory planting in specific areas to address forestry removal are set out **Appendix 9I**: **Outline Habitat Management Plan**. Measures appropriate for birds are discussed in **Chapter 8**: **Ornithology**. All habitat restoration proposals would be conducted in agreement with SNH.



Key Issues / Points Raised	How Points / Issues Raised have been taken into Account in the EIA Report
Fisheries SNH will advise but consideration should be given to scoping fisheries into the EIA due to the changes in turbine / infrastructure layout and the proximity to water courses.	An assessment of the effects of the Proposed Development on fish is discussed in Chapter 9: Ecology and Aquatic Ecology of the EIA Report.
It is recommended that consideration of the impact of electromagnetic fields on migratory fish should also be included in the assessment and that consideration should be given to locating turbine bases and power cabling away from water courses.	The effects of electromagnetic emissions from turbines and cabling on freshwater fish are considered in Chapter 9 of the EIA Report.
For the purposes of the assessment, the developer should consult with the Western Isles Fisheries Trust (WIFT) and the Stornoway Angling Association who fish on the Creed River. Alternative access to fisheries may be required during construction; the operational phase may bring opportunities for improving access to the river system for angling purposes. Please consult LDP Policy EI3 Water Environment for the scope of the required planning assessment.	All relevant national and local planning policy has been detailed in Chapter 5: Planning and Energy Policy Context of the EIA Report and a detailed assessment against key planning policy and other material considerations is included in the separate Planning
	Statement which accompanies the Section 36 application.
Geology, Hydrology and Hydrogeology The proposed development has potential for negative effects on surface and ground water which may lead to flooding and pollution. We would expect the EIA to address these concerns and prepare mitigation strategies to reduce risk.	The assessment of effects including flooding and pollution are presented in Section 11.10 and Section 11.13 of Chapter 11: Geology, Hydrology and Hydrogeology . Schedules of mitigation are presented in Section 11.8 (embedded) and Section 11.12 (additional).
Consideration should be given to locating turbine bases and power cabling away from water course. Current best practice in wind farm development includes the use of 50m buffer strips to the water environment and the ER should demonstrate if this has been achieved and if not, identify the locations where it is breached.	The schedule of embedded mitigation is presented in Section 11.8 of Chapter 11 and includes adherence to 50m watercourse buffers throughout.
The EIA should clarify that the proposed land based activities are located above an acceptable risk of flooding. If the Flood Risk Assessment (FRA) is separate to the EIA, the EIA should contain sufficient synopsis of the FRA and detail how the development has been designed to mitigate any identified flood risk constraint through sustainable flood management measures.	Design flows are presented in Section 11.5 , and an assessment of flood effects is provided in Section 11.10 and Section 11.13 . Schedules of mitigation are presented in Section 11.8 (embedded) and Section 11.12 (additional, including watercourse crossing types).



Key Issues / Points Raised	How Points / Issues Raised have been taken into Account in the EIA Report
The northern access is located in an area of localised flooding and waterlogging which is prone to flooding and in period of heavy rainfall floods the main A859. Technical Services – Roads should be consulted on the information requirements for the ER in this respect.	The assessment of local watercourse and wider flood effects is presented in Section 11.10 and Section 11.13 . The risk this existing flood risk presents to the Proposed Development can be covered in the eventual CEMP.
We advise that the developer takes account of new LDP Policy EI1 Flooding; EI2 Water and Waste Water; EI3 Water Environment and EI5 Soils. We recommend that the developer consults with SEPA to inform the assessment on these optics for the EIA.	Key guidance is referenced in Section 11.3 , including these LDP policies. The assessment of effects is presented in Section 11.10 and Section 11.13 .
Traffic and Access	
It is agreed that potentially significant effects from construction related traffic be scoped into the EIA. CnES request that it's Technical Services – Roads Department are consulted as part of the assessment for Traffic and Access.	The roads department at CnES were consulted in November 2018 to seek personal injury accident data and traffic survey data on the A859.
The EIA Report should include full details of the transportation route, projected transport movements, details of the potential impact from the transportation and the associated mitigation to be implemented. A Traffic Management Plan should be included.	An assessment of the potential environmental effects of the traffic and transport arising as a result of the Proposed Development is included in Chapter 13: Traffic and Transport of the EIA Report.
Detailed drawings should be submitted showing the relevant access points onto the A859; this will allow visibility splay to be assessed.	This information would be provided by condition should consent be granted for the Proposed Development.
Noise	
Environmental Health note condition 47 of the main previous consent (11/00333/CONSG) refers to night hours 43 dB and quiet waking hours of 35dB. It is not clear if this has been superseded in subsequent amendments. The current levels applied to new applications are 38 dB night (between 23:00 and 07:00) and 35dB daytime (between 07:00 and 23:00), rather than quiet waking hours. If not already clear the developer should be using these levels in their proposed assessment referred to in item 12.4.3 of the scoping report.	An assessment of the potential noise impacts associated with the Proposed Development is set out in Chapter 12: Noise of the EIA Report.
The following information must be provided in the ER to allow the Comhairle to consider likely noise impacts: A 6 figure eastings and northings grid reference for the exact turbine(s) location and the distance between this point and the nearest noise sensitive location; The mast tower height and rotor diameter of the turbines;	This information is set out in Chapter 4: Project Description .
The Comhairle will require details on the extent of construction works, taking account of the length of construction period, proposed times, details of any borrow pit blasting and proximity to existing noise receptors. Proposals should take account of BS5228 2009 Parts 1 and 2. Where it is believed that construction noise will be significant then a site specific noise impact assessment will be required.	Construction noise and vibration is discussed in Section 12.7 of Chapter 12 . Details of borrow pit blasting are not available at this time but would be appropriately mitigated via a Blasting Management Plan.



Key Issues / Points Raised How Points / Issues Raised have been taken into Account in the EIA Report Socio-economics. Tourism and Recreation Some of the data referred to in the scoping report is at least three years old; the Comhairle recommends that for this scoping topic Chapter 14: Socio- Economics of the EIA Report assesses the study uses the most recent available data and visitor surveys to produce a robust assessment for the EIA. the potential socio-economic, tourism and recreation effects associated with the Proposed Development. The The EIA should include a socio-economic impact assessment which includes an 'assessment of the net economic impacts' of the chapter includes discussion of the effects of the Proposed development, in line with the Economic Impacts and Benefits policy of the Wind Energy SG. Development on tourism and recreation assets including festivals, trails, activities and accommodation. Tourism and recreation assets should include: horse riding (Lochside Arena); angling; walking; cycling; karting; trail-biking. **Section 14.5** provides up to date baseline information. The assessment should have more recent figures to present a representative view of the local economy in 2018. We recommend the assessment includes reference to the Lewis Castle and Museum & Archive, as a key visitor attraction opened two years ago. Please ensure that any data on key visitor attractions is up-to-date. Please ensure any tourism accommodation referred to is still operational and include new additions if considered relevant to the assessment. **Public Access** The Comhairle supports countryside access and notes the reference to Core paths which are near and the Hebridean Way which Discussion on the effects of the Proposed Development passes through the proposed development. The assessment should consider the physical impacts on these and indirect impacts during construction and operation on public access and such as views from these recreational trails as people using the trails will be subjected to specific visual effects caused by the recreational trails is discussed in Chapter 14: Sociodevelopment. **Economics.** Chapter 6: LVIA also assess the effects on recreational routes from a landscape and visual amenity The Comhairle considers that the proposed development has the potential to open up the provision of public recreational access: perspective. there may be potential positive effects on public health for example an extension to the existing cycle trail / recreational trail network in the Lews Castle Grounds completed this year and the development of multi-use trails suitable for horse riding and Once operational, appropriately 28.7km of new tracks and walking throughout the development site. We refer to new LDP Policy EI7 Countryside and Coastal Access and to Policy EI12: 13 watercourse crossings which would be created through Developer Contributions and to the Chapter on Planning Obligations, page 16 of the Wind Energy SG (2016). the Development Site, thereby providing a new network of publicly accessible routes across the site. This is discussed in Chapter 14. The Comhairle agrees with the point that at the moment there is limited recreational walking within the site. The Comhairle welcomes the fact that the study will refer to guidance on public access and consider wind farm good practice documents with a view to incorporating countryside access, multi-use trails within the scheme design to provide alternative public access during the construction phase and to provide access during operation.



Key Issues / Points Raised	How Points / Issues Raised have been taken into Account in the EIA Report
The Economy The assessment should comply with the development policy in the Wind Energy SG, Economic Impacts and Benefits (page 8).	The economic benefits during the construction and decommissioning phases, together with the proposed community benefit fund, are discussed in Chapter 14 . Section 14.10 assesses the net economic impacts.
We recommend that the most recent statistical information and evidence is used for the review to be conducted.	
The developer's intention to submit detailed projected impacts on the economy, tourism, recreation and public access as part of a detailed EIA at a later date is noted. The range of socioeconomic areas identified within the request for a Scoping Opinion, for detailed analysis in the EIA, seems reasonable.	
The revisions outlined in the request for a Scoping Opinion – deletion of three turbines and tip heights increasing to 187m for 24 turbines and to 155m for the remaining 9 turbines – will be designed to increase the overall efficiency of the scheme and to maximise the Renewable Energy yield from these turbines based on the latest turbine technology.	
An analysis was undertaken of the developer's submitted socioeconomic impact projections in 2011. The latest proposal, outlined in the request for a Scoping Opinion, involves the deletion of three turbines coupled with an increase in turbine height. The employment impacts in construction and then in operation are likely to be broadly similar to those identified for the consented project. A more detailed analysis can be undertaken once the developer's actual socioeconomic impacts for the latest scheme are submitted as part of the EIA.	
Shadow Flicker The EIA should include evidence that proposals have been assessed and found to have no unacceptable significant adverse impact on community amenity in relation to shadow flicker.	Chapter 15: Shadow Flicker of the EIA Report has considered the potential effects that may arise from shadow flicker as a result of the Proposed Development. No predicted shadow flicker effects have been identified therefore no mitigation measures would be required.
In line with the Community Amenity policy in the Wind Energy SG the EIA should demonstrate that turbines are located at least at a minimum distance equivalent to 10 times the blade diameter from any regularly occupied buildings not associated with the development and at least a minimum distance equivalent to the height of the turbine to blade tip plus 10% from public roads or paths identified in the Outer Hebrides Core Paths Plan.	
Minerals	
The supporting information in the ER should contain sufficient detail of the project to allow a full assessment to be made of the likely effects of mineral extraction, together with appropriate control, mitigation and monitoring measures.	Details of the proposed borrow pits are set out in Chapter 4: Proposed Development of the EIA Report and an assessment of need is provided within the Planning Statement . The location of the proposed borrow pits is indicated on Figure 4.1 in Volume 3. Figures 4.12a-e in Volume 3 are detailed drawings of the borrow pits with indicative restoration profiles and an associated drainage plan.
To accord with our policy requirements, please consult policy MD5 Minerals for the EIA assessment. A map of all proposed borrow pits must be submitted along with a site specific plan of each borrow pit detailing the requirements set out in Borrow Pits policy of the LDP Wind Energy SG.	



Key Issues / Points Raised	How Points / Issues Raised have been taken into Account in the EIA Report
Recycling The application should detail space to accommodate the provision of recycling facilities during the construction phase.	The requirement for a Site Waste Management Plan to be prepared in advance of the commencement of works is identified in Chapter 4: Project Description of the EIA Report. This would be submitted to the relevant bodies for approval and would set out procedures for handling all waste arising from the Proposed Development.
Design Principles The principles to be adopted in the design process should be made explicit in the EIA and the EIA Report should provide design details such as: turbine layout, construction materials, turbine design and surface treatments, lighting, signposting, landscaping and the incorporation of any proposal natural features in the design and access statement.	The design principles applied to the Proposed Development are set out in Chapter 4: Scheme Need, Alternatives and Iterative Design Process and Chapter 6: Landscape and Visual of the EIA Report.
Phasing and Decommissioning Details of the proposed phasing of the project should be included in the EIA. A decommissioning statement will be required to be submitted in supporting of a planning application.	This is provided in Chapter 4: Project Description of the EIA Report
Existing Infrastructure, Telecommunications and Broadcast Services We recommend that for the purposes of the investigation into existing infrastructure in the environs and on the site, the developer to consult with Scottish Water on drinking water and waste water utilities.	An assessment of the impacts of the Proposed Development on existing infrastructure, telecommunications and broadcast services is set out in Chapter 10: Telecommunications and Aviation of the EIA Report. The design process, as described in Chapter 3 , and Figure 3.1 and 3.2 , ensures that wherever possible, turbines are located in areas where there would be no effects on existing infrastructure and telecommunications interests.
Air Safeguarding We agree with the approach suggested to safeguarding and direct the developer to LDP Policy EI11 Safeguarding on this topic for the EIA	An assessment of the Proposed Development against relevant national and local planning policies, including LDP Policy EI11, is included in a separate Planning Statement which accompanies the Section 36 application.



Key Issues / Points Raised	How Points / Issues Raised have been taken into Account in the EIA Report
Emission of Pollutants We advise that the developer consult with SEPA on this. All mitigation should be detailed within a suitably robust schedule of mitigation, which should be supported by site specific plans. The schedule of mitigation should include reference to best practice pollution prevention and construction techniques and regulatory requirements. It should set out the daily responsibilities of the Ecological Clerk of Works (ECoW), how site inspections will be recorded and acted upon and proposals for a planning monitoring enforcement officer. Please refer to SEPA's Guidance for Pollution Prevention (GPPs).	A summary of the mitigation and enhancement measures proposed for the construction and operation of the Proposed Development as set out in each of the technical chapters is provided in Chapter 16: Summary of Mitigation Measures of the EIA Report. Chapter 4: Project Description also details the environmental, construction and individual mitigation plans, which would be produced should the Proposed Development be granted consent. These include a Construction Environmental Management Plan, Construction Method Statement, a Transport Management Plan, a Water Management Plan and a Habitat Management Plan.
Night-time Lighting Assessment We agree with the developer's proposal to follow SNH guidance and prepare a Night-time Lighting Assessment (NLA) taking into account to the height of the proposed turbines.	An assessment of the night-time effects of turbine lighting is providing in Appendix 6D: Night Time Assessment in Volume 4 .
Population and Human Health We would recommend an assessment is undertaken as part of the EIA and consideration is given to ways in which the proposal can improve and protect health and well-being. We advise that for the purposes of this EIA assessment the developer should consult with Dr Margaret Watts, the Director of Public Health in the Outer Hebrides, NHS Western Isles.	Wood has consulted with Dr Margaret Watts over the scope of any health issues which should be considered in the assessment. Section 14.2 of Chapter 14 assess the health effects from the Proposed Development.
Climate The Comhairle supports renewable energy development in the Outer Hebrides, provided it complies with development policy and does not have significant negative effects on community amenity. We refer the developer to the LDP Development Strategy (DS1); to Policy EI8 Energy and Heat Resources; and to the policies in the Wind Energy SG, particularly on Soil Resources (2016).	An assessment of the Proposed Development against relevant national and local planning policies, including LDP Policy EI11, is included in a separate Planning Statement which accompanies the Section 36 application.



Key Issues / Points Raised	How Points / Issues Raised have been taken into Account in the EIA Report
Soil Resource Where there is evidence of peat or other carbon rich soils at a proposed development site, applicants will be required to utilise the Carbon Calculator to determine the net impacts or benefits of the proposed development.	A carbon balance assessment has been carried out. This I located in Appendix 9H: Peat Management Plan
Developers will be required to undertake peat (depth) surveys for their development proposals, and subsequent mitigation and micro-siting.	Peat surveys have been conducted in line with the relevant up to date legislation and good practice guidance.
Developers should investigate the scope to utilise piled foundations on areas of deep peat or carbon rich soil in order to minimise disturbance and the generation of waste material. We concur with the approach suggested for the EIA.	Detailed geotechnical investigations would be undertaken during the enabling works to establish the nature of the formation condition at each turbine location. It is anticipated that foundations would be a rock anchor foundation system. Where this is not possible, the traditional, gravity foundation design would be implemented. This approach would minimise peat removal and significantly reduce the amount of concrete required, thereby minimising environmental impact as much as possible.
Sustainable Resource Use The Comhairle agree with the approach in Item 15.7.2, particularly restoration measures to minimise the loss of soil and peat resource, which is compliant with policy EI5 Soils.	A peat slide risk assessment is included in Appendix 9H .
Major Accidents and Disasters The potential for peat slide is a concern for this type of development, the Comhairle agrees with the suggested approach for the EIA Report.	A peat slide risk assessment is included in Appendix 9H .
Summary of Scope The following topics are not specifically identified as chapters but should be incorporated to provide evidence that the development has been assessed and found to have no acceptable significant adverse impacts on community amenity. This is in line with the Community Amenity policy of the Wind Energy Supplementary Guidance (SG) Electromagnetic interference Phasing Commissioning and decommissioning Public access Ancillary development and infrastructure	This information is provided in the EIA Report as follows: Chapter 10: Telecommunications and Aviation Chapter 4: Project Description Chapter 4: Project Description Chapter 14: Socio Economics Chapter 10: Telecommunications and Aviation



Key Issues / Points Raised	How Points / Issues Raised have been taken into Account in the EIA Report	
NATS Safeguarding		
Based on our preliminary technical findings, the proposed development does conflict with our safeguarding criteria. Accordingly, NATS (En Route) plc objects to the proposal. We will notify you within 4-6 weeks of the results of our operational assessment. Only if this assessment shows the impact to be acceptable will we be able to withdraw our objection.	The NATS response primarily relates to a telecommunications link which traverses the Development Site; this issue was considered under the Consented Development and a condition was attached to require the link to the re-directed.	
Highlands and Islands Airports Limited (HIAL)		
The development falls within the safeguarded areas for Stornoway Airport. It is considered that the turbines would present a significant infringement to this area. The Civil Aviation Authority (CAA) require HIAL to provide evidence that the safety of Air Traffic Provision would not be compromised or degraded by a development. A safety case / full assessment would need to be submitted to the CAA. Costs associated with this would be passed onto the developer of a project. This process was undertaken for the previous consent. However due to the change in layout and significant increase in turbine height, a separate safety case will be required. Due to the height of the proposed development, as a minimum, aviation warning lights of 200 candela would be required at the hub height of all turbines. HIAL would work with the developer towards a resolution. However, HIAL would object to this proposal until a conclusion can be reached with the CAA.	Discussions continue with HIAL regarding the impact of the Proposed Development on the Airport and associated communications systems. New flight procedures were agreed with HIAL in order to accommodate the Consented Development. If necessary the Applicant would work with HIAL to agree suitable mitigation if the larger turbines as currently proposed lead to additional effects.	
Defence Infrastructure Organisation		
The MOD has no objection to the proposal. In the interests of aviation safety, the MOD requests that the cardinal turbines (turbines 1, 8, 10, 16 and 20) are fitted with MOD accredited combination 25 candela omni-directional red lighting and infrared lighting with an optimised flash pattern of 60 flashes per minute of 200ms to 500ms duration at the highest practicable point. The remaining perimeter turbines should be fitted with 25 candela omni-directional lighting or infrared lighting to the same specification as previously stated. The principal safeguarding concern of the MOD with respect to the development of wind turbines relates to their potential to create a physical obstruction to air traffic movements and cause interference to Air Traffic Control and Air Defence radar installations.	An assessment of the night-time effects of turbine lighting is providing in Appendix 6D: Night Time Assessment in Volume 4 .	



Key Issues / Points Raised	How Points / Issues Raised have been taken into Account in the EIA Report
Defence Infrastructure Safeguarding wishes to be consulted and notified of the progression of planning applications and submissions relating to this proposal to verify that it will not adversely affect defence interests.	
Scottish Natural Heritage (SNH)	
 Landscape and Visual Impact The key sensitivities that need to be considered through LVIA, including design of the windfarm are: The position of the wind farm in relation to both the town of Stornoway and the interior peatlands. It will be important that the windfarm does not seem to impinge upon and / or surround the settlement when seen from key viewpoints within and approaching the town, including from the ferry route. It will also be important that the windfarm does not seem to diminish the characteristic sense of wide-open space across the interior peatlands; for example, by being associated with Stornoway yet being seen from the north coast, thereby seeming to reduce the sense of wide open expanse that currently seems to separate these areas. The varying local landscape character over the windfarm site. This may mean that the character of the windfarm could also vary over the site and thus create a confusing image with sub-groups. The irregular nature of the landform. This may limit the number and position of wind turbines in order to create a simple windfarm image, avoiding variable elevation, spacing, outliers and overlapping of wind turbines within views. The location of roads through the windfarm site along which the receptor sensitivity will be high and the scale of the wind turbines would be emphasised at close proximity to high number of receptors. Impacts would be limited significantly if the windfarm development could be restricted to one site of key routes. The impact of existing and consented windfarms within the area. The proposal will need to relate to these in character and location to avoid conflicts of design, including wind turbine size. The relationship between wind turbine height and the scale of existing features within the landscape. It will be important that the wind turbines do not seem to dominate the prominence of existing	Each of the six sensitivities listed by SNH have been considered in detail in the LVIA through a number of design iterations set out in Chapter 3 of the EIA Report. The design evolution and principles from the Consented Development has been reviewed against the current SNH and landscape capacity guidance and certain modifications have been made in setting the deign objectives for the Proposed Development. Chapter 3 sets out the design evolution of the Proposed Development whilst Section 6.5 in Chapter 6 of the EIA Report summaries the landscape design evolution.
We agree with the recommendation to scope out impacts on Wild Land Areas. We consider the proposed list of viewpoints to be suitable representative and comprehensive.	Noted.
Ornithology The Report asserts that the 2011 ES found no significant effects on ornithological receptors. However, SNH's August 2011 response to that consultation highlights adverse impacts on the integrity of the Lewis Peatlands SPA, attributable to effects on golden eagles and red-throated divers. The Report notes the ongoing correspondence between the developer and SNH over the extent and scope of bird survey work. In view of the proximity of the Lewis Peatland SPA and potential usage of the site by the qualifying species of the SPA, we recommend two years' worth of field data should be gathered to inform impacts upon the site, in accordance with our guidance.	



Key Issues / Points Raised

Between the 2011 application and the current proposal, the only known population of hen harrier in Lewis and Harris has become established within the development site. This represents an important material change in conditions on the site. The latest information on the 2018 breeding season makes clear that the northern part of the development site is not necessarily the most sensitive with respect to hen harriers, with nesting attempts being recorded across the whole area.

This reinforces the importance of having adequate and up to date information upon which to base assessment of impacts, and to inform the development of the layout. For this reason too, we recommend that two years of data gives the best chance of capturing a dataset robust enough to make a sound impact assessment.

Alternatively, the developer would need to justify how a shorter survey period could provide a sufficiently robust basis upon which to inform impact assessment for these highly sensitive receptors, especially the SPA species and the recently established hen harrier breeding population.

Impacts on the North Harris Mountains SPA and Loch Laxvat SSSI can be scoped out due to lack of connectivity with the development proposal. We agree with the list of the most likely occurring species of conservation concern.

We agree with the approach to Habitats Regulations Appraisal, subject to the advice above about North Harris Mountains SPA.

The ornithology chapter hasn't included plans for post-construction monitoring or carcass searches – it would be appropriate to propose a suitable programme to cover both of these areas post-construction.

How Points / Issues Raised have been taken into Account in the EIA Report

The results of a desk study and field surveys from October 2017 – September 2018 have been used to determine the baseline context of this EIA. In addition to this, survey activity surveys were conducted in 2010/11 as part of the Stornoway Wind Farm 2012 application and surveys were carried out over 2015 - 2016 in the north-western area of the Development Site. Field data collected during this period (pertinent to this assessment) included breeding and non-breeding bird surveys. Reference should be made to **Appendix 8A, 8B, 8C** and **8D** in **Volume 4: Appendices**. The findings of surveys have identified that all baseline has remained the same or similar for all species other than hen harrier and red throated diver.

In terms of hen harrier, they have colonised the Development Site since 2015, having no record of them before that time. Hen harriers are known to move around, from year to year. Designing a wind farm based on known nest, roosting and foraging territory would not necessarily benefit the species. Instead, mitigation through the retention of a much stunted woodland would provide further habitat for the birds.

In terms of red throated diver, they have been present on the Development Site since before 2011. However, their numbers have substantively increased since the Consented Development. Because of this, the design of the wind farm has incorporated corridors to allow gaps in the turbine locations for red throated divers to travel from the SPA, the Development Site, and out to the coast.

The North Harris Mountains SPA and Loch Laxvat SSSI were scoped out of the assessment process as detailed in **Appendix 8E: Scoping** in **Volume 4: Appendices**.

A Habitats Risk Assessment has been carried out as is reported in **Appendix 8H: HRA.**



Key Issues / Points Raised	How Points / Issues Raised have been taken into Account in the EIA Report
	The monitoring of operational effects on ornithology is identified in Table 8.23 in Chapter 8: Ornithology of the EIA Report via an Ornithological Monitoring Plan as a Planning condition.
Ecology We agree that the data previously collected will suffice for assessment of impacts upon freshwater pearl mussel and freshwater invertebrates.	Previously collected data on freshwater pearl mussel and freshwater invertebrates are used to inform the assessment. See Appendix 9A: Ecological Desk Study and Appendix 9E: Scoping of Assessment in Volume 4.
Both Loch Orosay and Stornoway Castle Woodlands SSSI has been denotified since the 2011 application, so need not be considered further. Achmore Bog SSSI is, in our view, at a distance beyond which we would not expect there to be connectivity with the development.	Loch Orosay and Stornoway Castle Woos SSSI have been scoped out of further assessment (see Appendix 9E).
We agree with the identification of habitats and species of conservation concern to be scoped in.	
We note that the now-consented development was considered unlikely to have significant effects on the Lewis Peatlands SAC qualifying habitats. We would expect the proposed HRA screening for the current proposal to arrive at the same conclusion.	Appendix 8H: Habitat Regulations Assessment provides Habitat Regulations Screening.
Historic Environmental Scotland	
Scope of Assessment We are content with the area of search identified and the scope of assessment. However, we would advise that impacts on heritage assets not within the ZTV should not be immediately ruled out. It is possible for significant effects to arise from impacts on views of heritage assets, and this should be considered when decided whether or not impacts require further assessment. Further details on this are given in our Setting guidance. We strongly recommend that further pre-application consultation is undertaken as the design of the proposals develop. We would welcome the opportunity to comment on revisions and draft assessment and supporting details.	The Scope of assessment has been expanded and is set out in Section 7.7 of Chapter 7: Historic Environment . Heritage Environment Scotland have been engaged in the development of the Proposed Development from an early stage through involvement pre-scoping and the design process.
Methodology We are concerned that heritage assets will be grouped for assessment where there are considered to be related. It is not clear how big or broad these groupings would be. In some instances, such as Lewis Castle, which is a listed building, and Lew Castle and Lady Lever Park (a garden and designed landscape) while there is a clear relationship, impacts may be very different. It would be helpful to refer to our Managing Change guidance on Gardens and Designed Landscapes for further guidance on assessing these impacts.	Direct effects are considered for previously recorded archaeological heritage assets within the Development Site and previously unrecorded non-designated heritage assets within the Development Site.



Key Issues / Points Raised

If assets are to be grouped in this way, we would appreciate the opportunity to see these groupings and comment before the full assessment is undertaken.

The report states that assets which 'do not have clear access' would not be visited for assessment. Without further information on what exactly this means, we cannot comment on whether or not this is adequate for our interests. However, we would advise that lack of public access or advertised access may not be sufficient justification for lack of a site visit.

In the categorisation of importance of assets, there is no reference to Inventory gardens and designed landscapes, or Inventory battlefields. We would consider these assets to be nationally important for the purposes of assessment.

The criteria given for magnitude of change should be reviewed. We recommend that 'high' magnitude impacts are re-stated in terms of impacts on the cultural significance, or key characteristics, of a heritage asset. We also note the statement for 'medium' magnitude identifies impact on setting that 'changes the key characteristics of an asset's setting'. We would consider an impact of this type to have the potential to be of greater magnitude than that stated. We would also ordinarily consider any impact which affects the cultural significance of a heritage asset to be significant, and therefore require mitigation to be explored.

How Points / Issues Raised have been taken into Account in the EIA Report

Indirect effects are considered on key assets, which were identified through consultation and scoping, and whilst referred to under group headings, they are considered individually with relationships between assets discussed where necessary.

We endeavoured to visit all designated heritage assets where it was anticipated that there would be an indirect effect. Owing to the absence of safe access or uncertainty of permitted access to land a number of key assets were assessed with reference to predicted ZTVs and wireframe views, aerial photography and ordnance survey mapping. Where possible, site visits were undertaken to viewpoints where the asset was visible and from where views of the Proposed Development could be compared to those available from these assets. These key assets are listed in **Section 7.2** of **Chapter 7: Historic Environment** which discusses the limitations of the assessment.

Reference in included in Table 7.3 in Chapter 7.

The assessment methodology is set in **Section 7.9** of **Chapter 7**.

Potential Impacts

Based on information available at this stage, it is likely that our key interest in this case will be the impacts on the setting of the scheduled monument known as Druim Dubh, stone circle, which is deliberately placed in the landscape, on a high ridge. Wind turbine development in close proximity to the monument has the potential to impact on our understanding and appreciation of this element of its setting.

The consented Stornoway wind farm scheme will have a significant impact on the setting of this monument, which is already affected to some degree by modern infrastructure. However, the proposed scheme has the potential to increase these impacts considerably. If this is the case, it would increase an impact which we consider to be significant and adverse.

The greatest impact of the consented Stornoway wind farm on the stone circle is that of turbines 28 and 30. The currently proposed scheme include two turbines, 7 and 8, which are closer to the stone circle.

During the design process, consideration was given the effects on the stone circle at Druim Dubh as a result of the proximity of the asset to the Proposed Development and the clear views into the Development Site that can be had from the asset. The principal amendment here was to move the proposed turbine T8 and T9 from the scoping layout, which had appeared as outliers in views from the asset and had contributed to increasing the lateral spread of the Proposed Development, and by moving turbine T7 slightly downslope from the scoping layout, reducing its apparent height.



Key Issues / Points Raised How Points / Issues Raised have been taken into Account in the EIA Report They also have a greater height to tip, and sit on higher ground. These factors combined mean that it appears likely that these An assessment of the effects of the Proposed Development turbines will increase the adverse impact on the stone circle's setting. on Druim Dubh is set out in Section 7.11 and recommendations for mitigation are set out in **Sections** We therefore strongly recommend that potential mitigation is explored, aiming to reduce this impact to a level, where it is not 7.14 and 7.16 of Chapter 7: Historic Environment. considered significant. It appears likely that a considerable reduction in this impact could be achieved by the removal of turbines 7 and 8 from the scheme, or their relocation elsewhere within the development boundary. It would be helpful if we had the opportunity to comment on the scheme layout as it evolves through the design process. We would Heritage Environment Scotland have been engaged in the like to comment on possible reductions in the impact on Druim Dubh stone circle. In order to do this, draft visualisations would development of the Proposed Development from an early probably be necessary. We would welcome any further pre-application consultation from the developer, particularly if they could stage through involvement pre-scoping and the design provide these details to us. process. We also consider it likely that there will be significant impacts on the Inventory garden and designed landscape known as Lewis Viewpoint 4 Cnoc na Croich (Gallows Hill) illustrates an Castle and Lady Level Park. We recognise that the consented Stornoway wind farm scheme will have an adverse impact on the elevated view of Lews Castle and Lady Lever Park as designed landscape. We would welcome further pre-application consultation on whether the altered scheme will increase this discussed in Chapter 6: LVIA. impact significantly, including visualisations where possible. The developer should seek to reduce these impacts where possible, and we recommend that the setting of the designed landscape should be considered as a key consideration in the overall design of the scheme There is the potential for other impacts on our interests to be significant, and we welcome the undertaking in the scoping report to The rationale behind asset inclusion is set out in the agree a finalised list of assets for assessment with us. methodology in Section 7.9 of Chapter 7.

Forestry Commission Scotland

There are areas of woodland, located mainly in the western part of the proposed development's site. Proposed turbine layout (as per Figure 2.2 - Site Layout Plan) indicates that up to 8 turbines are to be located either within or immediately adjacent to the woodland areas. Understandably, the Scoping Report doesn't provide detailed information regarding design of the proposed development, hence the scale of tree felling required to accommodate the wind turbines and supporting infrastructure (e.g. a borrow pit or an access track) is difficult to predict. The impact on woodland asset is similarly difficult to assess, for which reason FCS would welcome inclusion of a dedicated Forestry chapter within the EIA Report for the proposed development.

The scale of woodland removal (both temporary, to accommodate construction, and permanent – for infrastructure, and potentially, as a result of future habitat management proposals) needs to be clearly stated within the EIA Report. FCS expects to see information on areas that are to be replanted post construction on-site, and areas of permanent woodland loss, for which compensatory planting might be required. Any compensatory planting would be subject to The Environmental Impact Assessment (Forestry) (Scotland) Regulations 2017.

Coniferous plantation woodland has been scoped into the ecology assessment and the extent, baseline and future condition assessed in light of potential effects (such as direct habitat loss) resulting from the Proposed Development. A dedicated forestry chapter has not been included in the EIA Report, however **Appendix 9J: Forestry Note** in **Volume 4** sets out the forestry position for the EIA.

The assessment presented in **Chapter 9: Terrestrial and Aquatic Ecology** considers both permanent and temporary habitat loss.



Key Issues / Points Raised	How Points / Issues Raised have been taken into Account in the EIA Report	
Woodland removal may result in a requirement for compensatory planting for an area yet to be determined. FCS will seek that this was a condition of approval and that compensatory planting had to be in place prior to construction commencing. FCS would be happy to work with the developers as plans progress so that a Compensatory Planting Plan, if required, can be developed.	Compensatory planting on the Development Site is not proposed as part of the EIA as afforestation of high quality peat bog is considered to result in a net reduction in nature conservation value (see Appendix 9J). The Outline Habitat Management Plan presented in Appendix 9I provides for some native planting in more appropriate areas such as along watercourses.	
Scottish Environment Protection Agency (SEPA)		
Advice to the planning authority The following key issues must be addressed in the EIA process. To avoid delay and potential objection, the information outlined below and in the attached appendix must be submitted in support of the application. a) Map and assessment of all engineering activities in or impacting on the water environment including proposed buffers, details of any flood risk assessment and details of any related The Water Regulations (Controlled Activities) (Scotland) Regulations 2011 (CAR) applications. b) Map and assessment of impacts upon Groundwater Dependent Terrestrial Ecosystems (GWDTE) and buffers). c) Map and assessment of impacts upon groundwater abstractions and buffers. d) Peat depth survey and table detailing re-use proposals e) Map and table detailing forest removal f) Map and site layout of borrow pits g) Schedule of mitigation including pollution prevention measures h) Borrow Pit Site Management Plan of pollution prevention measures i) Map of proposed surface water drainage layout j) Map of proposed water abstractions including details of the proposed operating regime. k) Decommissioning statement	 This information is provided in the EIA Report as follows: a) All engineering activities with potential to impact the water environment are considered and assessed fully within Chapter 11: Geology, Hydrology and Hydrogeology. Figure 11.10 in Volume 3 illustrates the hydrological and hydrogeological constraints; an assessment of impacts of the Proposed Development on the water environment and details of the approach to Flood Risk Assessment and CAR authorisation requirements are set out in Chapter 11. b) An assessment of impacts upon GWDTEs is set out within Chapters 9 and 11 of the EIA Report. Maps, including buffers, are shown on Figures 11.1 and 11.9a-e in Volume. A GWDTE risk assessment is presented in Appendix 11f in Volume 4. c) See Figure 11.8 in Volume 3 illustrating abstractions; an assessment of impacts is set out in Chapter 11. d) Peat depth details and the proposals for reuse are set out in Appendix 9H: Peat Management Plan in Volume 4. 	



Key Issues / Points Raised		w Points / Issues Raised have been taken into count in the EIA Report
	e)	Chapter 9: Terrestrial and Aquatic Ecology considers forestry removal and presents the extent of permanent or temporary habitat loss. Proposed environmental measures relating to woodland removal are presented in Appendix 9I: Outline Habitat Management Plan in Volume 4, which would be developed and implemented in consultation with CnES and SNH.
	f)	The location of the proposed borrow pits is indicated on Figure 4.1 in Volume 3. Figures 4.12a-e in Volume 3 are detailed drawings of the borrow pits with indicative restoration profiles and an associated drainage plan.
	g)	A summary of mitigation measures in included in Chapter 16 .
	h)	This is discussed in Chapter 4 of the EIA Report.
	i)	This is to be included in a Construction Method Statement which would be prepared following the grant of consent.
	j)	Existing water abstractions are detailed in Chapter 11 and are shown on Figure 11.8 .
	This	s is discussed in Chapter 4 of the EIA Report.



Key Issues / Points Raised

How Points / Issues Raised have been taken into Account in the EIA Report

Site Specific Comments

Turbines and other infrastructure should be located to ensure a suitable buffer between the top of the banks of watercourses and lochs and excavations; this is usually a minimum of 50m. In relation to the layout outlined in the scoping report the following modifications would be required:

- Turbine 9 should be relocated to ensure a suitable buffer to the top of the bank of the Feadan Loch Lochan;
- Turbine 14 should be relocated to ensure a suitable buffer to the top of the bank of Allt Hogaraid;
- Turbine 28 will need to avoid the local bog pools;
- Turbine 29 may need to be relocated further away from the Allt Greidaig to ensure that there are no high risk
 excavations in the functional flood plain.

Due to the change in layout from the existing consent then more peat probing data will be required prior to determination. The peat probing information should be used to ensure that the scheme that comes forward minimises impacts on deep peat; this should include reassessing aspects of the scheme layout which already has consent. Once it has been demonstrated that the layout minimises impacts on peat as much as possible mitigation measures such as floating track and piling should be implemented (and all shown on a plan). The application should include peatland restoration proposals to help compensate for the peat disturbance caused by the development; this could include for example, restoration of local peat cuttings, if they do not have a cultural or historic interest. This could form part of the proposed Habitat Management Plan, a draft of which should be included in the submission.

Careful consideration will need to be given to the layout of the tracks that connect the turbines as these can have just as significant an effect on the aspects of the environment in which we have an interest as the turbines. The track should be demonstrated to be as short as possible and we are unlikely to support excessive use of spurs for example.

We are content with the proposal that no new National Vegetation Classification data is collected but that the presentation of the data will take into consideration our updated GWDTE guidance. We welcome the proposal for this information to form a separate appendix.

In relation to flood risk we welcome the commitment that all crossings will be oversized to accommodate at least the 1 in 200 year flood event. In most cases we will be content for this element to be conditioned, however the EIA Report should include a flood risk assessment for the larger crossings such as the Abhainn Ghrioda and Abhainn a Ghlinn Mhoir, accompanied by supporting drawings of the proposed structures and approaching tracks, so the full scale of the engineering works required is understood.

This is discussed in **Section 11.8** of **Chapter 11**. Turbine locations and numbers have been revised since scoping and all SEPA turbine location concerns have been addressed.

Further peat surveys have been conducted in line with the relevant up to date legislation and good practice guidance. Avoidance of deep peat is a key embedded mitigation measure described in **Section 11.8** of **Chapter 11**. Turbine foundation design and track design is discussed in **Chapter 4**. See also **Figure 4.3** and **4.4**, **Appendix 9H: Peat Management Plan** and **Appendix 9I: Outline Habitat Management Plan** in **Volume 4**.

Embedded mitigation such as minimising track length is presented in **Section 11.8** in **Chapter 11**.

An updated GWDTE description is presented in **Section 11.5** in **Chapter 11**, with the new GWDTE risk assessment presented in **Appendix 11f: GWDTE Risk Assessment**.

Subsequent discussions between SEPA and Wood confirmed that SEPA is content with a high-level assessment at this EIA Report stage, looking at design flows and undertaking downstream impact assessment and mitigation, including advising suitable crossing types. SEPA assumes a commitment to accommodate 1 in 200 year flood event, and the Applicant agrees and proposes that this requirement is conditions.



Key Issues / Points Raised	How Points / Issues Raised have been taken into Account in the EIA Report
Turbine 12 and 33 are in close proximity to Bennadrove Landfill site. The EIA Report should include an assessment of the potential impacts of the development on the landfill and in particular on groundwater flows and pollutant pathways in this area, if necessary outlining proposed mitigation and monitoring. The council can provide information on operation and historic use and on request we can provide information in relation to our licencing of the site. Due to our involvement with the landfill site we are aware of very deep peat in the vicinity of Turbine 33, and if this is the case where infrastructure is proposed then it should be relocated. Information should be provided on the bunding and drainage proposals from the battery storage facilities. We would welcome further pre-application discussion with the developer on this project prior to the application being submitted. We would especially welcome consultation on layout proposals and assessment results in relation to GWDTE and peat.	Within Chapter 11, design flows are presented in Section 11.5, assessment of effects are in Section 11.10 and Section 11.13, and watercourse crossing types proposed in Section 11.12. Turbine locations and numbers have been revised since scoping, and the new Turbines 21 and 30 are both further away from the landfill. The assessment of potential effects including on Bennadrove Landfill is presented in Section 11.10 of Chapter 11. Embedded mitigation is presented in Section 11.8. Furthermore, battery storage would be located in the proposed primary substation building, details of which would be required by planning conditions (see Figure 4.10a). Consultation has taken place with consultees over a number of months, and the design of the scheme has changed as a result of the meeting in November 2018.
Regulatory requirements Authorisation is required under The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR) to carry out engineering works in or in the vicinity of inland surface waters (other than groundwater) or wetlands. Inland water means all standing or flowing water on the surface of the land (e.g. rivers, lochs, canals, reservoirs). Management of surplus peat or soils may require an exemption under The Waste Management Licensing (Scotland) Regulations 2011. Proposed crushing or screening will require a permit under The Pollution Prevention and Control (Scotland) Regulations 2012. Consider if other environmental licences may be required for any installations or processes. A CAR construction site licence will be required for management of surface water run-off from the construction site. Site design may be affected by pollution prevention requirements and hance we strongly encourage the applicant to engage in pre-CAR application discussions with a member of the regulatory services team in your local SEPA office.	This is noted and the required licences would be sought in advance of construction.



Key Issues / Points Raised

How Points / Issues Raised have been taken into Account in the EIA Report

Engineering activities which may have adverse effects on the water environment

The site layout must be designed to avoid impacts upon the water environment. Where activities such as watercourse crossings, watercourse diversions or other engineering activities in or impacting on the water environment cannot be avoided, then the submission must include justification of this and a map showing all proposed infrastructure overlain with all lochs and watercourses; a minimum buffer of 50m around these water bodies, with all breaches identified on a plan with an accompanying photograph, key dimensions and a drawing of the engineering works; and a detailed layout of all proposed mitigation. With respect to the site layout outlined in the Scoping Report, the positions of Turbines 9, 14, 28 and 29 are likely to need relocating to ensure suitable buffers are in place.

If water abstractions or dewatering are proposed, a table of volumes and timings of abstractions and related mitigation measures must be provided.

Further advice and best practice guidance are available within the water engineering section of the SEPA website (https://www.sepa.org.uk/regulations/water/engineering/). Guidance on the design of water crossings can be found in the SEPA Construction of River Crossings Good Practice Guide (https://www.sepa.org.uk/media/151036/wat-sq-25.pdf).

Refer to Appendix 2 of SEPA's Standing Advice for advice on flood risk (https://www.sepa.org.uk/media/136130/sepa-standing-advice-for-planning-authorities-and-developers-on-development-management-consultations.pdf). Watercourse crossings must be designed to accommodate the 0.5% Annual Exceedance Probability (AEP) flows, or information provided to justify smaller structures. If it is thought that the development could result in an increased risk of flooding to a nearby receptor then a Flood Risk Assessment (FRA) must be submitted. Reference should be made to relevant SEPA guidance, including

https://www.sepa.org.uk/media/162602/ss-nfr-p-002-technical-flood-risk-guidance-for-stakeholders.pdf and https://www.sepa.org.uk/media/94134/car-flood-risk-standing-advice-for-engineering-discharge-and-impoundment-activities.pdf.

SEPA welcomes the commitment to the oversizing of the crossings but maintains that a FRA is required for the larger crossings such as of the Abhainn Ghrioda and Abhainn a' Ghlinn Mhòir, accompanied by supporting drawings of the proposed structures and approaching tracks, so that the full scale of the engineering works is understood.

The assessment of effects is presented in **Section 11.10** and **Section 11.13**.50m watercourse buffers are discussed in **Section 11.8**. Turbine locations and numbers have been revised since scoping, and all SEPA turbine location concerns have been addressed.

The Applicant proposes that this requirement is conditioned should it be required as part of the construction works associated with the Proposed Development.

Key guidance such as the SEPA Construction of River Crossings Good Practice Guide is referenced in **Section 11.3**.

Key guidance such as SEPA flood risk guidance is referenced in **Section 11.3**. Subsequent discussions between SEPA and Wood confirmed that SEPA is content with a high-level assessment at this EIA Report stage, looking at design flows and undertaking downstream impact assessment and mitigation, including advising suitable crossing types. SEPA assumes a commitment to accommodate 1 in 200 flood event, and the Applicant agrees and proposes that this requirement is conditioned. Design flows are presented in **Section 11.5**, assessment of effects is in **Section 11.10** and **Section 11.13**, and watercourse crossing types proposed in **Section 11.12**.

Disturbance and re-use of excavated peat and other carbon rich soils

The layout must be designed to minimise disturbance of peat and consequential release of carbon dioxide and outline mitigation measures to avoid significant drying or oxidation of peat due to construction. There should be a detailed map of peat depths with all the built elements (including peat storage areas) overlain, and a table which details the quantities of acrotelmic, carotelmic and amorphous peat which would be excavated, and how it would be kept wet and where it would be reused during reinstatement. Advice is provided in https://www.scottishrenewables.com/publications/guidance-assessment-peat-volumes-reuse-excavated/ and https://www.sepa.org.uk/media/287064/wst-q-052-developments-on-peat-and-off-site-uses-of-waste-peat.pdf.

More peat depth data has been acquired, see **Section 11.5** and **Appendix 9H** and the layout has been amended to further minimise effects on areas of deep peat.

Key guidance, including the SR and SEPA guidance, is referenced in **Section 11.3**.

Turbine locations and numbers have been revised since scoping, and the Turbine 33 location no longer used.



Key Issues / Points Raised	How Points / Issues Raised have been taken into Account in the EIA Report
The issue of a full Peat Management Plan (PMP) should be considered. More peat probing information than that presented in the Scoping Report will be required, and because of very deep peat Turbine 33 may need to be relocated.	
Disruption of Groundwater Dependent Terrestrial Ecosystems (GWDTE) A map must be provided demonstrating that all GWDTEs and existing groundwater abstractions are outwith a 10 0m radius of all excavations shallow than 1 m and outwith 250 m of all excavations deeper than 1 m and proposed groundwater abstractions (https://www.sepa.org.uk/media/144266/lups-gu31-guidance-on-assessing-the-impacts-of-development-proposals-on-groundwater-abstractions-and-groundwater-dependent-terrestrial-ecosystems.pdf). If these minimum buffers cannot be achieved, detailed site specific qualitative and/or quantitative risk assessment will be required. SEPA welcomes the intent to append a separat GWDTE assessment.	
Forest Removal and Forest Waste 'Key holing' should be used to minimise large scale forestry clearance and refer to and comply with the current Forest Plan is one exists. Clear felling may be acceptable only in cases where planting took place on deep peat and it is proposed through a HMP to reinstate peat-forming habitats. Appropriate forestry maps must be provided (https://www.sepa.org.uk/media/143799/use of trees cleared to facilitate development on afforested land sepa snh fcs guidance april 2014.pdf).	Tree planting has taken place on areas of deep peat, and the HMP (Appendix 9I) identifies mitigation to support areas of peatland loss.
 Borrow Pits In accordance with https://www.gov.scot/Publications/1996/10/17729/23424, a Site Management Plan should be provided setting out the following information for each borrow pit: a) A map showing the location, size, depth and dimensions. b) A map showing any stocks of rock, overburden, soils and temporary and permanent infrastructure including tracks, building, oil storage, pipes and drainage, overlain with all lochs and watercourse to a distance of 250 metres. You need to demonstrate that a site-specific proportionate buffer can be achieved. On this map, a site-specific buffer must be drawn around each loch or watercourse proportionate to the depth of excavations and at least 10m from access tracks. c) A justification for the proposed location of borrow pits and evidence of the suitability of the material to be excavated for the proposed use, including any risk of pollution caused by degradation of the rock. d) A ground investigation report giving existing seasonally highest water table including sections showing the maximum area, depth and profile of working in relation to the water table. e) A site map showing cut-off drains, silt management devices and settlement lagoons to manage surface water and dewatering discharge. Cut-off drains must be installed to maximise diversion of water from entering quarry works. f) A site map showing proposed water abstractions with details of the volumes and timings of abstractions. 	Five borrow pits are proposed and their location are indicated on Figure 4.1 in Volume 3. Figures 4.12a-e in Volume 3 are indicative drawings of the borrow pits with indicative restoration profiles and an associated drainage plan. The typical activities involved in aggregate extraction from borrow pits are discussed in Chapter 4 of the EIA Report and indicative borrow pit volumes are set out in Table 4.2. The Applicant proposes that the requirement for a Site Management Plan is conditioned.



Key Issu	es / Points Raised	How Points / Issues Raised have been taken into Account in the EIA Report
g)	A site map showing the location of pollution prevention measures such as spill kits, oil interceptors, drainage associated with welfare facilities, recycling and bin storage and vehicle washing areas. The drawing notes should include a commitment to check these daily.	
h) A site map showing where soils and overburden will be stored including detail of the heights and dimensions of each sotre, how long the material will be stored for and how soils will be kept fit for restoration purposes. Where the development will result in the disturbance of peat or other carbon rich soils then the submission must also include a detailed map of peat depthswith all the built elements and excavation areas overlain so it can clearly be seen how the development minimises disturbance of peat and the consequential release of CO2.		
i)	Sections and plans detailing how restoration will be progressed including the phasing, profiles, depths and types of material to be used.	
j)	Details of how the rock will be processed in order to produce a grade of rock that will not cause siltation problems during its end use on tracks, trenches and other hardstanding.	
A schedu best pra- (http://w pollution	n prevention and environmental management ule of pollution prevention supported by site specific maps and plans must be submitted. These must include reference to actice pollution prevention and construction techniques and regulatory requirements www.netregs.org.uk/environmental-topics/pollution-prevention-guidelines-ppgs-and-replacement-series/guidance-for-in-prevention-gpps-full-list/, and should set out the daily responsibilities of Ecological Clerk of Works (ECoWs), how site ons would be recorded and acted upon and proposals for a planning monitoring enforcement officer.	This is to be included in a Pollution Prevention Plan which would be prepared in advance of any construction activities.
Proposa https://v	ension, repowering and decommissioning Is for life extension, repowering and/or decommissioning must demonstrate accordance with SEPA guidance www.sepa.org.uk/media/219689/sepa-guidance-regarding-life-extension-and-decommissioning-of-onshore-windfarms.pdf. ust be no discarding of materials that are likely to be classified as waste.	Key guidance, including the SEPA decommissioning guidance, is referenced in Section 11.3 . A decommissioning statement is provided in Chapter 4: Project Description of the EIA Report.
Marine	Scotland Science (MSS)	
We welcome the intention of the development to carry out up to date electrofishing and hydrological surveys; we recommend such site characterisation surveys to include fully quantitative electrofishing which can provide an accurate enumeration of fish populations and can therefore be used for temporal and spatial comparisons, we further recommend a suite of hydrochemical parameters to be measured over a range of flows e.g. pH, alkalinity, ANC, DOC, nitrates, phosphates, aluminium (particularly if the area is prone to acidification), turbidity and flow data.		The assessment set out in Chapter 9: Ecology and Aquatic Ecology of the EIA Report is informed by fully quantitative electrofishing surveys, which are included in Appendix 9D: Freshwater Fish Survey 2018 in Volume 4 .



Key Issues / Points Raised How Points / Issues Raised have been taken into Account in the EIA Report Information from these site characterisation surveys will allow an assessment of the presence and abundance of fish species and the Site specific mitigation measures outlined in **Chapter 9** and water quality from which appropriate site specific mitigation measures can be drawn up and to establish a robust integrated will be incorporated into a Construction Environmental hydrochemical, macroinvertebrate and fish population monitoring programme to monitor water quality and fish populations at sites Management Plan (CEMP). likely to be impacted throughout the development period. Control site, where an impact is unlikely, should also be selected, thereby allowing potential impacts associated with the development to be differentiated from non-developmental impacts e.g. climatic. The A commitment to monitoring is made in Section 11.12 of monitoring programme should be carried out at least 12 months prior to construction commencing, during construction and for at Chapter 11. least 12 months after construction is complete. The latter time period is dependent on the results collected during the construction phase. Further sampling may be required one to two years prior to decommissioning taking place. The potential cumulative impact on water quality and fish populations as a result of the present proposal and adjacent A cumulative impact assessment on water quality is developments e.g. wind farms, fish hatchery / harvesting station (operational and proposed) should be considered, particularly in the presented in **Section 11.12** of **Chapter 11**. A cumulative selection of control sites. impact assessment on fish populations is presented in Chapter 9. The developer should ensure that the movement of fish is included in the design of all watercourse crossings and that The Forests Key guidance is referenced in **Section 11.3**, including the and Water UK Forestry Standard Guidelines is consulted should felling be carried out. Forestry Standard. Watercourse crossing types are proposed in **Section 11.12**. **Fisheries Management Scotland (FMS)** No response was received from the Outer Hebrides Fishery The proposed development falls within the catchments relating to the Outer Hebrides Fishery Trust. It is important that the Trust. Wood E&IS invited the Trust to carry out an proposals are conducted in full consultation with the Trust. We have also copied this response to the Trust. electrofishing survey but they were unable to do so due to other commitments. This survey was subsequently carried Due the potential for such developments to impact on migratory fish species and the fisheries they support, FMS have developed, in out by Mhor Ecology and the results are presented in conjunction with Marine Scotland Science, advise for DSFBs and Trusts in dealing with planning applications. We would strongly Chapter 9: Ecology and Aquatic Ecology and Appendix recommend that these guidelines are fully considered throughout the planning, construction and monitoring phases of the 9D: Freshwater Fish Survey 2018. proposed development. Royal Society for the Protection of Birds (RSPB) We note that the previous bird survey work covering the entire development areas which was presented in the environmental The results of a desk study and field surveys from October statement for the original application was undertaken in 2009 and 2010. Whilst this data forms a useful background reference to 2017 – September 2018 have been used to determine the inform surveys for the proposed development, the previous survey findings are now out of date and we are aware that there have baseline context of this area. In addition to this recent been several significant changes in bird use and distribution over the site since this survey work was undertaken. survey activity surveys conducted in 2010/11 as part of the



Key Issues / Points Raised	How Points / Issues Raised have been taken into Account in the EIA Report	
SNH guidance states that extensions or revisions of previous proposals should be treated in exactly the same was a new proposals with regards to assessing the impact on birds and that data used to inform EIA should have been collected within the last 5 years. The same guidance also recommends that a minimum of two years of survey work should be carried out, particularly in sensitive bird areas and where there is a risk that developments could have an impact on designated sites. Several of the species of conservation concern listed as being present on the site in paragraph 7.3.14 of the scoping report are known to use alternative nest sites between years that can be several kilometres apart and therefore the usage of a given area can vary significantly between years. Taking into account the number of species of conservation concern using the site, known changes in usage since 2010, the size of the site, its proximity to the Lewis Peatlands Special Protection Area and the age of the existing data, we strongly consider that two full years of survey work across the whole site should be required. We note that new survey work was undertaken in 2015/16 but this only covered part of the site and there was a break in survey between August 2016 and October 2017 when survey work resumed across the entire site. We recommend that this survey work continues for a full two years, so until September 2019.	Stornoway Wind Farm 2012 application and surveys carried out over 2015 - 2016 in the north-western area of the site. Field data collected during this period (pertinent to this assessment) included breeding and non-breeding bird surveys.	
Changes in bird use and distribution across the site since 2010 The significant changes that we are aware of since 2010 are the colonisation of the site by a breeding and wintering hen harrier population, a significant increase in the white-tailed eagle population across Lewis, and an increase in the Lewis golden eagle population, with one pair nesting approximately 1km from the site boundary in 2016.	Noted	
EIA survey methods, mitigation and monitoring With the exception of the duration of the surveys proposed, the survey methods described in the Scoping Report appear to be appropriate and sufficient in order to assess impacts on ornithology. However, it is particularly important to ensure focal watches are undertaken at hen harrier breeding areas during the early breeding season period (April and May), when they are prospecting and engaging in display flight at height. It is during this period when they are likely to be most susceptible to collisions and when all Scottish hen harrier collisions to date have been recorded.	Focal watch surveys commenced in April 2018, and covered the full breeding season through May, June and July, by which time all chicks had fledged. Breeding bird surveys undertaken between April – September 2018 are included in Appendix 8C and a breeding bird confidential report is included in Appendix 8D .	
The EIA Report should also consider and detail mitigation measures (such as exclusion or re-siting of proposed turbines, habitat restoration and creation of compensatory or offsetting habitat) to avoid or minimise impacts on birds. For hen harrier, eagle species and diver species, two years of data are likely to show patterns in activity around breeding sites, foraging areas and roost sites and these findings should be used to inform the locations and number of turbines and identification of mitigation to minimise impacts. For hen harrier, turbine shut-down for periods in areas where birds are particularly susceptible to collisions early in the breeding season (April – May) should also be considered to minimise collision risk. Buffers around nest sites, free of turbines and other infrastructure, should also be considered and proposed in order to prevent displacement of birds. Whitfield et al advise a disturbance free buffer of 500-750m around hen harrier nest sites. Several proposed turbine locations shown in Figure 2.2 of the Scoping Report are within a few hundred meters of hen harrier nest sites. The potential effects, such as rabbits colonising the edges of access tracks and attracting golden eagles to forage close to turbines, are carefully considered so that impacts on birds are minimised and mitigated where possible.	As part of an overarching Construction Environmental Management Plan (CEMP), a Bird Protection Plan would be developed and agreed, in consultation with the Project Ecologist and the relevant consultees, in advance of construction works commencing. Method Statements (MSs) would be developed to detail the mitigation approach for all bird receptors. These would cover the site and receptor specific requirements of the embedded mitigation as outlined in Table 8.9 in Section 8.29 and discussed in Sections 8.27 and 8.8 in Chapter 8: Ornithology of the EIA Report.	



Key Issues / Points Raised	How Points / Issues Raised have been taken into Account in the EIA Report Whilst SNH (2017) does recommend this, it also acknowledges that on a practical level it can be difficult to find suitable sites. Hence a control site was not included in field surveys from October 2017 – September 2018. This is	
Timing of construction should also be considered and detailed in the EIA Report to avoid disturbance during the breeding season. RSPB Scotland would be happy to discuss potential mitigation with the applicant / consultant. The EIA Report should detail monitoring that would be undertaken during construction and operation in order to verify the		
predictions of the EIA, ensure compliance with conditions, and so that further mitigation measures can be identified if necessary.	discussed in Section 8.26 of Chapter 8 .	
The methods for collision risk are based on assumed avoidance rates for which there is little empirical evidence. It is important the developers contribute to increasing the certainty with which impacts can be predicted for future developments. The SNH 2014 guidance recommends that for wind farms over 50MW, a comparable control or reference site should be selected and surveyed at the time of the initial surveys, to allow post construction monitoring.	Cumulative assessment has been undertaken in line with SNH (2018) guidance.	
The cumulative impact assessment must take full account of the new SNH (2018) guidance on "Assessing the cumulative impacts of onshore wind farm developments on birds". The cumulative impact assessment should consider displacement and barrier effects as well as collision risk, in line with SNH guidance.		
Scottish Water		
Scottish Water has no objection to this planning application.	An assessment of the effects of the Proposed Developmen	
There is currently sufficient capacity in the North Lochs Water Treatment Works and Stornoway Waste Water Treatment Works. However, please note that further investigations may be required to be carried out once a formal application has been submitted to us.	on the water environment is set out in Chapter 11 : Geology, Hydrology and Hydrogeology.	
According to our records, the development proposals impact on existing Scottish Water assets. The applicant must identify any potential conflicts with Scottish Water assets and contact our Asset Impact Team directly. The applicant should be aware that any conflict with assets identified may be subject to restrictions on proximity of construction.		
There are no Scottish Water drinking water catchments or water abstraction sources, which are designed as Drinking Water Protected Areas under the Water Framework Directive, in the area that may be affected by the proposed activity.		
Scottish Water will not normally accept any surface water connections into our combined sewer system. Where a surface water discharge into our combined sewer system is anticipated, the developer should contact Scottish Water at the earliest opportunity with strong evidence to support the intended drainage plan prior to making a connection request.		



Key Issues / Points Raised

How Points / Issues Raised have been taken into Account in the EIA Report

British Telecom (BT)

We have studied your wind farm proposal with respect to EMC and related problems to BT point-to-point microwave radio links. The conclusion is that Turbines 7, 9, 10 & 12, 23, 28 will affect the following radio links:

Turbines 7, 9 & 10 will affect the same 8 x radio links between Maaruig Gormal (NGR- NB1865006975) to Stornoway BT RS (NGR- NB4007034570)

Turbines 12, 23, 28 all affect the same 4 x radio links between Eitshal RS (NGR- NB3055030340) to Stornoway BT RS (NGR- NB4007034570)

We would object to future development of this wind farm development if it strongly interfered with the existing BT radio links. BT require ideally 100m minimum clearance from blade tip to the link path.

Account in the EIA Report

An assessment of the impacts of the Proposed Development on existing infrastructure, telecommunications and broadcast services is set out in **Chapter 10: Telecommunications and Aviation** of the EIA Report. The design process, as described in **Chapter 3**, and **Figure 3.1**, ensures that wherever possible, turbines are located in areas where there would be no effects on existing infrastructure and telecommunications interests.

Joint Radio Company (JRC) on behalf of UK Energy Industry

JRC objects to the proposed wind farm on behalf of the Local Electricity Utility due to the turbines affecting microwave links.

The Energy Industry considers that any wind energy development within:

1000m of a link operation below 1GHz; or

500m of a link operating above 1GHz, requires detailed coordination.

For turbines with a blade diameter of 32m or less this distance is reduced to:

500m for links below 1GHz; and

300m for links above 1HGz before a detailed coordination is required.

There is an exclusion zone around most Base Station sites of 500m (i.e. no development permitted).

Part (or all) of the Proposed Development breaches one or more of these limits. (Turbines 1 to 33). As a consequence JRC objects to the proposed wind turbine / wind warm on behalf of The Local Electricity Unit and itself.

JRC are willing to work with developers to clear as many turbines as possible. Until analysis shows no issues; when a satisfactory coordination has been achieved and the zone of protection implemented; or when appropriate mitigation options have been agreed with the local electricity utility HRC will maintain its objection.

An assessment of the impacts of the Proposed Development on existing infrastructure, telecommunications and broadcast services is set out in **Chapter 10: Telecommunications and Aviation** of the EIA Report. The design process, as described in **Chapter 3**, and **Figure 3.1**, ensures that wherever possible, turbines are located in areas where there would be no effects on existing infrastructure and telecommunications interests.



Key Issues / Po	oints Raised	How Points / Issues Raised have been taken into Account in the EIA Report
Transport Sco	tland (TS)	
The Scoping Report indicates that turbine components will be transport to the site by sea to the Arnish Point Dockyard. Given the location of the revised development and its remoteness from the truck road network, Transport Scotland accepts that the development will not give rise to any significant traffic or related Environmental Impacts on the Trunk Road Network. We can confirm that Transport Scotland does not require any further assessment of environmental impacts on the trunk road network.		An assessment of the potential environmental effects of the traffic and transport arising as a result of the construction, operation and decommissioning of the Proposed Development is included in Chapter 13: Traffic and Transport of the EIA Report.
British Horse S	Society (BHS)	
BHS recommer used, by horse	Blade movement, particularly when blades start to turn within a horse's sight line, or blades which come into view at eye level; Moving shadows cast by blades, which some horses may perceive as a threat to their safety, exacerbated by the fact that the object casting the shadow may not be obvious to the horse. Blade shadows are not a problem if the turbine is north of the track or path; Sun or light flicker off blades; Noise from turbines, particularly erractic noise during start-up or deceleration; Risk of snow and ice shedding off blades; Risk of electrocution (particularly during lightning strike); Risk of injury or fright resulting from structural failure, breakage or collapse of the tower, blades or other constituent parts of turbines. and that no anemometer should be situated closer than fall over distance plus 10% from any track used, or likely to be riders or carriage drivers, and that no associated cables should be situated any closer than 30m from an equestrian ables may be difficult to see, especially by a startled horse.	
for developme	rbine siting and wind farm development plans to respect all existing equestrian access, and to consider opportunities nt of further access wherever possible. This includes access within, across, through and adjacent to sites. Scope to constructed to enable turbine election to link other routes outwith the site is encouraged. BHS's standard guidance is that there should be a separation distance of at least four times the overall height of turbines (i.e. to tip of blade) for core paths, nationally promoted routes such as Scotland's Great Trails and other promoted riding routes, as these are most likely to be used by equestrians unfamiliar with turbines.	Effects on PRoWs / bridleways / footpaths have been considered in Chapter 6: LVIA and Chapter 14: Socio-Economics in the EIA Report.



Key Issues / Po	oints Raised	How Points / Issues Raised have been taken into Account in the EIA Report
•	BHS recommends a target of three times overall height between turbines and all other routes which pre-date wind farm development or turbine erection, including roads. BHS recommends a minimum separation distance of 200m between turbines and core paths, rights of way or promoted riding routes.	
Traffic during a	nd after development:	At construction stage appropriate measures will be put in
•	Drivers of all vehicles visiting the site should be alerted to where they are most likely to meet horses.	place to manage traffic appropriately and ensure safety of
•	All vehicles should be required to slow down or stop when meeting walkers, cyclists and particularly horses. Where construction traffic has to cross an equestrian route, this should be at right angles to the path or track, with warning notices for both vehicle drivers and horse riders / carriage drivers. Construction traffic should give way to recreational users.	all users undertaking recreational activities in the surrounding area.
•	A Temporary Traffic Regulation Order should be in place before closure of any core path or promoted route which may be necessary during transportation of large components.	
•	Traffic movement which may impact on equestrian access should be planned to allow horse riders and carried drivers to continue to ride safely in the early morning, evening, at the weekend and on bank holidays.	
•	All drivers of large vehicles should follow BHS' guidance to minimise risk to horse riders and carriage drivers.	
•	Where there is no alternative to using the line of a core path or promoted route as an access track during the construction phase, the route should be widened, and a fence erected to segregate vehicles from horses using the route.	
BHS recognises	that from a developer's perspective, the first priority in constructing tracks providing access to turbines is capacity to	
support require turf. As a matte	d vehicular access, which usually involves stone surfacing, whereas the ideal surface for horses is firm, well drained	
• Tan. 75 a mate	Where wind farm development or turbine erection results in loss of previously unsurfaced, firm beaten earth tracks enjoyed by horse riders and carriage drivers, SNH expects developers to provide substitute routes of similar length, gradient and character;	
•	BHS encourages developers to identify in their proposals what, if any action is proposed to ameliorate the surface of construction tracks on completion of construction. Where traffic movement and natural consolidation with earth or mud is insufficient to blind sharp stone, dressing with when dust or similar material may be necessary; and	
•	BHS does not expect paths or tracks with a past history of multi-use or intended for future multi-use to be surfaced with tarmac, but accepts that developers may agree to bound surfacing of specific routes for the benefit of walkers and cyclists in some instances.	

3. Design Iterations

Design Iterations

- The design evolution for the Proposed Development commenced with the consented 36 turbine Stornoway Wind Farm in 2012, but with a technical objective of utilising larger and more efficient turbines that reflected the latest technological advances for turbine manufacture and design.
- The Applicant and its consultants have undertaken a number of discussions with statutory and non-statutory consultees, the local community and the landowners, with the accumulated findings all having an influence over the evolution of the design and the scope of the EIA process.
- A number of queries and issues applicable to the Proposed Development have been raised throughout the community engagement process and these are addressed in more detail within the Preapplication Consultation (PAC) Report in **Volume 6** of the application submission. Comments received relating to location, design and wind farm developments generally covered:
 - Chapter 6: Landscape and visual effects;
 - Chapter 8: Ornithology;
 - Chapter 9: Ecology;
 - Chapter 11: Hydrology including peat; and
 - Cumulative effects (included in each chapter).
- Table 3.1 sets out the primary design iterations, and Illustration 3 illustrates the iterations within the Development Site.

Table 3.1 Design Iterations

Design Number	Layout Details	Design Rationale / Comments
Layout 1	This layout served as a starting point for consideration of the	The Consented Development was the start point for the design process. This comprised 36 turbines to a height of 145m. The number of turbines was
Consented 36 Turbine Layout	Proposed Development.	reduced prior to the scoping exercise to 33 turbines, and the turbine heights increased to 187m. (See (Appendix 2A). This was the initial concept layout
	The turbine locations remained	that was examined by all technical and environmental disciplines involved
March 2018	the same but larger, 187m high turbines were used instead of the consented 145m turbines.	with the project. This was followed by the creation, exploration and analysis of a series of iterative layouts responding to a range of technical and environmental constraints.
		Turbines were located too close together to allow for an efficient design
		from a wind energy perspective due to the increased rotor diameter size. Survey data identified an increase in some bird activity that had the potentia to cause a barrier to birds using the SPA and the sea. There was also some turbine overlapping in a number of key views including Viewpoints 2, 4, 8, 2, and 25.
Layout 2	This iteration was the outcome of a further landscape and visual	Turbine numbers and some turbine heights were reduced to account for increased wake requirements for larger turbines. Hydrological, ecological
S6 Layout	focused feasibility exercise,	and geological constraints, communication links and residential standoff
30 turbines	which used a mixture of turbine heights to explore various layout	buffers were considered in this layout design and all others going forward.
July 2018	options.	The extent of the wind farm in the landscape remained largely the same as the consented layout, with the exception of the north-western part of the Development Site.





Design Number	Layout Details	Design Rationale / Comments
	The key driver behind this layout was landscape and visual composition, taking into account known technical and environmental constraints.	The consented development had no turbines here due to bird activity, but the subsequently operational Pentland Road wind farm appeared to have influenced bird activity on the Development Site and this formerly sensitive area appeared less constrained.
Layout 3 S9 Layout (Design Day) 35 turbines October 2018	This iteration was the result of the Design Day held in October 2018, whereby all known technical and environmental constraints were considered. Several iterations were produced during this session exploring various options and this iteration was the final outcome. Constraints which influenced the design included sensitive NVC habitats, watercourses, communication links, peat depths, topography and separation distances from Beinn Greidaig Wind Farm.	Further design refinement was undertaken on the layout following further energy yield assessment which allowed the turbine separation to be reduced from 6x4 rotor diameter to 5x3 rotor diameter) and for additional turbines to be incorporated into the same envelope.
Layout 4 S11 Layout 32 turbines November 2018	This iteration was developed following the provision of additional survey information. A number of turbines were relocated in order to address potential ornithological issues, and three turbines were removed from the western part of the site. A number of turbines were relocated to move them away from deeper peat – T10 and T26 moved out of deep peat. T7 was moved further north west (into shallower peat) to reduce impact on a cultural heritage feature.	Following on from updated ornithological surveys, two 500m corridors were created to accommodate diver flight routes between lochs and feeding grounds. Where possible turbines were removed from these areas entirely, or were located on the periphery of the buffer areas. In addition, larger buffers were applied to Raptor nests, resulting in the removal of one turbine, as well as maintaining bugger zones for water courses where possible and avoiding areas of deepest peat (in excess of 6m).
Layout 5 S12 Layout 34 turbines December 2018	This iteration contained relatively minor tweaks to turbine locations to address stacking from certain viewpoints, as well as further amendments regarding bird corridors. T30 was relocated into shallower peat.	To remove turbines from identified diver flight corridors and to avoid areas of deepest peat (reduced to deep peat areas of 3m).
Layout 6 Design Freeze EIA Layout 35 turbines January 2019	This iteration took into account updated peat survey data and sought to avoid areas of deep peat where possible. In addition, a space for an additional turbine was identified following design review.	Full peat surveys had been ongoing during the design process. Additional peat probing was carried out during January and February 2019 at specific turbine locations to identify peat depths and potential alternative locations.

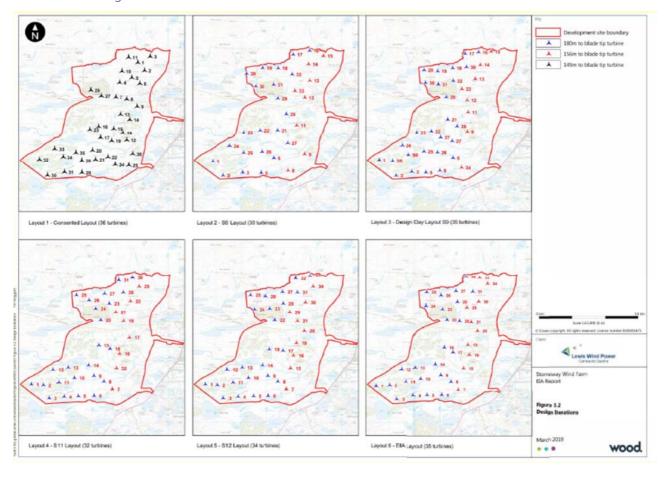




Design Number	Layout Details	Design Rationale / Comments
	T17, T24, T32 and T34 were all relocated taking into account the updated peat survey data into shallower peat locations.	

Figure 3.2 of the EIA Report sets out the three key design iterations between the scoping layout and the application submission layout and illustration 3 is an extract of **Figure 3.2**.

Illustration 3 Design Iterations



April 2019 Doc Ref. 40001CGos0321R **52** © Wood Environment & Infrastructure Solutions UK Limited



4. Submission Timescale

Submission Timescale

- 4.1.1 When submitted, the EIA Report will comprise 4 Volumes:
 - Volume 1: Non-Technical Summary;
 - Volume 2: EIA Report;
 - Volume 3: Figures;
 - Volume 4: Appendices.
- The EIA Report will form part of the application submission, and the application submission will be accompanied by the following documents:
 - Application letter;
 - Volume 5: Planning Statement;
 - Volume 6: Pre-application Consultation report.
- As shown in **Table 3.1**, a final layout has been reached for Stornoway Wind Farm. The draft EIA Report is submitted with this Gatecheck report for consideration.
- 4.1.4 It is anticipated that submission of the application will occur in April 2019.

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Appendix A Scoping Consultation List

Comhairle nan Eilean Siar

Scottish Environment Protection Agency

Scottish Natural Heritage

Historic Environment Scotland

Scottish Water

Marine Scotland

Transport Scotland

Fisheries Management Scotland

ВТ

Civil Aviation Authority - Airspace

The Crown Estate

Defence Infrastructure Organisation

Joint Radio Company

Mountaineering Scotland

RSPB Scotland

John Muir Trust

Scottish Wildlife Trust

Nuclear Safety Division

Scotways

OFCOM

Visit Scotland

AM Geomorphology

Highlands and Islands Airport

Forestry Commission Scotland

British Horse Society

Stornoway Angling Association

Garden History Society in Scotland

Airwave Solutions

Arquiva



The Lewis and Harris Raptor Study Group

Outer Hebrides Fisheries Trust

Western Isles District Salmon Fisheries Board

Western Isles Tourist Board

North Lochs Community Council

Kinloch Community Council

Point Community Council

Sandwick Community Council

Pairc Community Council

Tong Community Council



Appendix B EIA Report Consultation List

B2 © Wood Environment & Infrastructure Solutions UK Limited



						Hard Copy	EIA Report	
Consultee							DVD (sent by Wood)	Notifed by
Statutory Consultees to be Consulted	by the Scottish Government							•
							2 (1 high res	
Comhairle nan Eilean Siar	Council offices	Sandwick Road	Stornoway	Isle of Lewis	HS1 2BW	2	/ 1 low res)	Υ
SEPA	2 James Square	James Street	Stornoway	Isle of Lewis	HS1 2QN		1	Υ
							2 (1 high res	
SNH	32 Francis Street	Stornoway	Isle of Lewis		HS1 2ND	1,	/ 1 low res)	Υ
HES	Rm 3 Heritage Planning Unit	Longmore House	Salisbury Place	Edinburgh	EH9 1SH	1	/ 1 10W 165)	Y
Non-Statutory Consultees to be Consultees	9 9	Longinoro Frodoo	canobary r lace	Lambargii	2110 1011	П,	1'	<u> </u>
ion-statutory Consultees to be Const	unted by the Scottish Government		1	<u> </u>	1	1	1	т —
	Strategic Planner, EIA Development	The Bridge Buchanan Gata	1					
Scottish Water	Planning & Liaison Team	Business Park	Cumbernauld	Stepps	G33 6FB		I.	Υ
Marine Scotland	Freshwater Laboratory	Faskally	Pitlochry	Perthshire	PH16 5LB	╂	1	Y
Fransport Scotland	Buchanan House	58 Port Dundas Road	i iliociii y	Glagow	G4 0HF	╂	1	Y
isheries Management Scotland	11 Rutland Square	38 FOR Dulidas Road		Edinburgh	EH1 2AS	╂	1	Y
BT	•	ht com		Lamburgii	LIII ZAG	╂	1	Y
) i	By Email - radionetworkprotection@bt.com Safety and Airspace Regulation						+	1
Civil Aviation Authority - Airspace	Group	Civil Aviation Authority	45 - 49 Kingsway	London	WC2B 6TE		1	Υ
Crown Estate Scotland (Interim		,	3			1	†	<u> </u>
Management)	6 Bells Brae			Edinburgh	EH4 3BJ		1	Υ
Defence Infrastructure Organisation	Safeguarding G8	Kingston Road	Sutton Coldfield	West Midlands	B75 7RL	1	1	Υ
Joint Radio Company	Dean Bradley House	52 Horseferry Road		London	SW1 2AF	1	1	Υ
NATS Safeguarding	Mailbox 27	4000 Parkway	Whiteley	Fareham	PO15 7FL	1	1	Υ
Mountaineering Scotland	The Old Granary	West Mill Street		Perth	PH1 5QP	1	1	Υ
RSPB Scotland	Ground Flooor	2 Lochside View	Edinburgh Park	Edinburgh	EH12 9DH		1	Υ
John Muir Trust	Tower House	Station Road	-	Pitlochry	PH16 5AN	1	1	Υ
Scottish Wildlife Trust	Harbourside House	110 Commercial Street	Edinburgh		EH6 6NF		1	Υ
Nuclear Safety Division	ND3E Siting & Land Use Planning	Building 4S2, Redgrave Court	Merton Road, Bootle	Liverpool	L20 7HS		1	Υ
Scotways	24 Annandale Street	, ,	,	Edinburgh	EH7 4AN		1	Υ
						1		
DFCOM	Windfarm Enquiries, Desk 02-59	Riverside House	2A Southwark Bridge	London	SE1 9HA		1	Υ
/isit Scotland	Ocean Point One	94 Ocean Drive	Edinburgh		EH6 6JH		1	Υ
ronside Farrar	Notified by ECU only	-	•	-	-	1		Υ
lighlands and Islands Airport	Inverness Airport			Inverness	IV2 7JB		1	Υ
orestry Commission Scotland	Silvan House	231 Corstorphine Road		Edinburgh	EH12 7AT	1	1	Υ
British Horse Society	BHS Scotland	Woodburn	Crieff	Perthshire	PH7 3RG	1	1	Υ
Stornoway Angling Association	1 Goathill Crescent	Isle of Lewis			HS1 2TA		1	Υ
Airwave Solutions	Suite 3B	Skypark 5	45 Finnieston Street	Glasgow	G38JU		4	V
an wave conditions	Oute 3D	οπγραίτιο	-0 1 11111651011 311661	Ciasyow	43000	II	11	l I

							EIA Report	
Consultee							DVD (sent by Wood)	Notifed by ECU
Arquiva	By email - enquiries@arquiva.con	1						Υ
The Lewis and Harris Raptor Study Group								Υ
Outer Hebrides Fisheries Trust	The Sawmill	Marybank	Isle of Lewis	Outer Hebrides	HS2 0DD		1	Υ
Western Isles District Salmon Fisheries Board	The Sawmill	Marybank	Isle of Lewis	Outer Hebrides	HS2 0DD		1	Υ
Western Isles Tourist Board	By email - ian@outerhebridestour	ism.org		•	•			Υ
Community Councils								
North Lochs Community Council	5 Grimshader	Isle of Lewis			HS2 9NH		4	Υ
Kinloch Community Council	11 Keose Glebe	Lochs	Isle of Lewis		HS2 9JX		4	Υ
Point Community Council	Achnaha	Garrbost	Point	Isle of Lewis	HS2 0PN		4	Υ
Sandwick Community Council	25 North Street	Stornoway			HS2 0AD		4	Υ
Pairc Community Council	4 Lon Ban	Lemreway	Isle of Lewis		HS2 9RF		4	Υ
Tong Community Council	Broomhill	32B Newvalley	Isle of Lewis		HS2 0DW		4	Υ
For Public Consultation								
Scottish Government Library	Library	G-D 41	Victoria Quay	Edinburgh	EH6 6QQ	1	1	N
Stornoway Library	19 Cromwell Street	Isle of Lewis			HS1 2DA	1	1	N
Comhairle nan Eilean Siar	Council offices	Sandwick Road	Stornoway	Isle of Lewis	HS1 2BW	1	1	N
Lewis Wind Power Stornoway Office	9 Harbour View	Cromwell Street Quay	Stornoway		HS1 2DF	1	1	N

wood.

