

*Design & Access Statement*

*Jones Lang LaSalle Incorporated*

# *West Torrisdale Wind Farm*

**ESB Asset Development UK Limited**

# Contents

---

<b>1 Introduction</b>	<b>3</b>
1.1 Purpose of Design and Access Statement	3
1.2 Structure of Statement	3
<b>2 Project and Site Context</b>	<b>5</b>
2.1 Proposed Development	5
2.2 Site Location	5
2.3 Conclusion	6
<b>3 Policy and Guidance Context</b>	<b>7</b>
3.1 Introduction	7
3.2 Spatial Framework Approach	8
3.3 The Local Development Plan	8
3.4 Conclusion	9
<b>4 Consultation and Engagement</b>	<b>10</b>
4.1 Scoping	10
4.2 Post-Scoping Consultation	10
4.3 Pre-application Community Consultation	10
4.4 Summary of Consultation and Engagement	11
<b>5 Design Approach</b>	<b>12</b>
5.1 Introduction	12
5.2 Site Selection	12
5.3 Constraint Identification and Mapping	12
5.4 Design Process Stages	14
5.5 Overview of EIA Design Parameters	15
5.6 Summary of Design Approach	17
<b>6 Pedestrian and Vehicular Access</b>	<b>19</b>
6.1 Access from Public Roads	19
6.2 Site Access	19
6.3 Public Accessibility	20
6.4 Summary of Access Arrangements	20
<b>7 Conclusion</b>	<b>21</b>

# 1 Introduction

---

## 1.1 Purpose of Design and Access Statement

- 1.1.1 This Design and Access Statement (DAS) has been prepared by JLL on behalf of ESB Asset Development UK Limited ('the Applicant'). Its purpose is to support an application for Section 36 (S36) consent and deemed planning permission, under the terms of the Electricity Act 1989, for permission to construct, operate and decommission West Torrisdale Wind Farm (hereafter referred to as 'the Proposed Development'), on land located approximately 4 kilometres (km) southwest of Carradale, Argyll and Bute.
- 1.1.2 The DAS is one of a wider suite of reports and documents submitted with the S36 application for the Proposed Development. The S36 application ('the consent application') is supported by an Environmental Impact Assessment (EIA) Report (EIAR) as required by The Electricity Works (EIA) (Scotland) Regulations 2017 (herein referred to as 'the EIA Regulations').
- 1.1.3 The Application Boundary defines an area of approximately 391 hectares (ha), whereas the area within the Application Boundary where the wind turbines are located ('the Wind Turbine Array') covers an area of approximately 221 ha. The Proposed Development location is shown on **Figure 1.1** of the EIAR (Volume 3a) and the Application Boundary is shown on **Figure 1.2** of the EIAR (Volume 3a).
- 1.1.4 The principles and concepts which have shaped the Proposed Development's location, form scale and design are detailed through this DAS. These include relevant national and local policies; physical, environmental, and technical considerations; the appraisal methods for various stages of the design; and the consultation that has taken place throughout the design process.
- 1.1.5 It is not a requirement under the Electricity Act 1989 to produce a DAS for a S36 application, however it is valuable to demonstrate the detailed design process that the Proposed Development has undergone over several years in order to outline how the finalised design has been reached. It is additionally considered good practice, as it is a requirement of the Town and Country Planning (Development Management Procedure) (Scotland) Regulations 2013 for most types of major and national developments. Where relevant, consideration has therefore been given to Planning Advice Note 68: Design Statements<sup>1</sup> (PAN 68) which outlines the key principles and concepts to be considered. PAN 68 has shaped the scope of the DAS through the consideration of site context, design principles, reference to public involvement and an explanation of why the design solution was chosen.

## 1.2 Structure of Statement

- 1.2.1 This DAS is structured as follows:
- Chapter 2: Sets out the project background and the context of the Proposed Development;
  - Chapter 3: Details the national and local policy context which has shaped the design process;
  - Chapter 4: Sets out the overall design approach to the Proposed Development;

---

<sup>1</sup> Scottish Government, 2003. Planning Advice Note 68: Design Statements. Online. Available at: <https://www.gov.scot/publications/planning-advice-note-68-design-statements/> [28/03/2022]

- Chapter 5: Outlines how the consultation and engagement activities which the Applicant has undertaken has informed the design process;
- Chapter 6: Details site access both internally and from public roads; and
- Chapter 7: Provides overall conclusions with respect to design and access.

## 2 Project and Site Context

---

### 2.1 Proposed Development

2.1.1 Please refer to **Chapter 2** of the EIAR (Volume 2) and associated **Figures 2.1 – 2.10** of the EIAR (Volume 3a) for a full and detailed description of the Proposed Development. A summary is presented below:

- 9 wind turbines, each up to a maximum tip height of 149.9 m (of up to 6 megawatts (MW));
- Permanent foundations supporting each wind turbine;
- Associated crane hardstanding at each wind turbine location;
- An external transformer at each wind turbine location;
- A series of new on-site access tracks (approximately 4.9 km) with associated watercourse crossings where necessary, upgraded sections of existing access track (approximately 18.7 km) and a layover area;
- Underground electrical cabling within the Wind Turbine Array;
- A compound containing control building, substation (including transformer) a Battery Energy Storage System (BESS) (of up to 20 MW) and LiDAR compound;
- Temporary compounds including for construction, security, and materials handling; and
- Search areas for five borrow pits.

2.1.2 A summary of the permanent and temporary land take associated with the Proposed Development is summarised in Table 2.2 within Chapter 2 of the EIAR (Volume 2).

### 2.2 Site Location

2.2.1 The Wind Turbine Array is located west of the A83 and east of the B834 approximately 4 km southwest of Carradale, on Kintyre, Argyll and Bute (approximate Ordnance Survey British National Grid (OS BNG)). **Chapter 2** of the EIAR (Volume 2) provides a description of the site, however a summary of the key physical and land use constraints is presented below:

- Open moorland is located immediately north and west of the Wind Turbine Array, with the Lephincorrach Burn forming the southern boundary and the Torrisdale Water to the north. Open moorland and smaller areas of plantation forestry bound the Wind Turbine Array to the east. The Kintyre Way passes through the forestry to the south and enters the south-eastern corner of the Wind Turbine Array before heading east towards Torrisdale Bay and then north towards Carradale. Beinn an Tuirc (BaT) is located to the west of the Proposed Development.
- Vehicular access to the Wind Turbine Array would be from the A83 to the west, utilising the existing access track for the operational BaT Wind Farm and recently constructed forestry track east of the BaT Extension Wind Farm substation.

- As illustrated on **Figure 2.11** of the EIAR (Volume 3a), Beinn an Tuirc (454 m Above Ordnance Datum (AOD)) is located to the west of the Wind Turbine Array and overlooks the existing Beinn an Tuirc, Beinn an Tuirc extension and Beinn an Tuirc Phase 3 Wind Farms.
- The Torrisdale Water originates in the moorland to the west of the Wind Turbine Array, ultimately discharging into Torrisdale Bay approximately 2 km from the eastern part of the Application Boundary. The watercourse flows east through the northwest corner of the Wind Turbine Array, and two tributaries originating within the Wind Turbine Array flow north into the Torrisdale Water at this location. Three tributaries of the Lephincorrach Burn also originate within the Wind Turbine Array and flow south discharging into the burn in the southeast corner. The Beinn an Tuirc Distillery is located to the east with an associated water supply and is powered by a small hydroelectric scheme which utilises water from the Lephincorrach Burn.
- There are no residential properties within the Application Boundary. Individual residential properties are located at Lephincorrach to the southeast of the Wind Turbine Array and in Glen Torrisdale within the Torrisdale Estate to the northeast. The closest property, at Lephincorrach, is approximately 1.5 km east of the closest proposed wind turbine (T9).

## 2.3 Conclusion

2.3.1 This section has outlined the description of the Proposed Development and the site context.

## 3 Policy and Guidance Context

---

### 3.1 Introduction

- 3.1.1 This Chapter summarises policies relating to wind farm design which have been considered over the project life cycle. These are generally high-level policy documents which focus on the factors which may influence the siting of a wind farm within a landscape and the typical constraints which must be considered.
- 3.1.2 A full assessment of the Proposed Development's response to key land use planning, energy and climate policy is included within the Planning Statement which is submitted in support of the consent application.

### 3.2 Spatial Framework Approach

- 3.2.1 Scottish Planning Policy (2014) has been superseded by the adoption of National Planning Framework (NPF) 4 (2023). However, SPP has informed the Applicant's design approach throughout the development life cycle and the relevant policy objectives are considered below.
- 3.2.2 Paragraph 161 of SPP referred to the need for planning authorities to set out in their development plans a spatial framework identifying those areas that are likely to be most appropriate for onshore wind farms.
- 3.2.3 Table 3.1 of SPP stated that areas where wind farms will not be acceptable include National Parks and National Scenic Areas. Areas of significant protection (where wind farms may be appropriate in some circumstances, however further consideration on potential significant effects will be required to protect the qualities of these areas) included national and international designations, nationally important environmental interests, and community separation for considering visual impact. Areas with potential for wind farm development (where wind farms are likely to be acceptable subject to detailed assessment) are also identified.
- 3.2.4 The majority of the Proposed Development is within Group 3 of the hierarchy set out in Table 3.1 of SPP (Areas with potential for wind farm development). There are areas within the Wind Turbine Array which comprise carbon rich soils, deep peat and priority peatland habitat classed as Group 2 (Areas of significant protection). However, areas of deep peat have been avoided through design as far as practical and a site-specific peat landslide and hazard risk assessment has been prepared to inform the design evolution. As such, whilst it is no longer policy, SPP's spatial framework has driven the site selection and informed the design development of the project from the outset.
- 3.2.5 The Argyll and Bute Spatial Framework for Wind Energy (adopted 2016) which forms part of the Local Development Plan (LDP) (adopted 2015) reflects the aspirations and approach of SPP and identifies the Proposed Development as being located within Group 3: Development here onshore wind is likely to be acceptable<sup>2</sup>.

---

<sup>2</sup> Argyll and Bute Council. Local Development Plan. Supplementary Guidance 2 – Windfarm map 1. [https://www.argyllbute.gov.uk/sites/default/files/Unknown/spatial\\_framework\\_a0\\_small.pdf](https://www.argyllbute.gov.uk/sites/default/files/Unknown/spatial_framework_a0_small.pdf).

- 3.2.6 Paragraph 169 of SPP provided a list of other considerations to take into account in addition to a spatial framework. These potential constraints are largely reflected in NPF 4 and have been considered through the EIA process.
- 3.2.7 Overall, therefore, despite now being superseded, the spatial framework approach promoted as part of SPP and reflected in the LDP Supplementary Guidance did inform the site selection and design process and has led the Applicant to pursuing a development solution in this locality where renewables development is broadly supported in principle.

### 3.3 The Local Development Plan

3.3.1 The current Local Development Plan relevant to the Proposed Development comprises:

- National Planning Framework 4 (NPF4) (adopted 13<sup>th</sup> February 2023).
- The Argyll and Bute Local Development Plan 2 (LDP2) (adopted 20<sup>th</sup> November 2023)

#### NPF4

- 3.3.2 NPF4 was formally adopted by the Scottish Government on 13<sup>th</sup> February 2023. NPF4 sets out the national spatial strategy for Scotland outlining spatial principles, regional priorities, national developments, and national planning policy. NPF4 replaces NPF3 and SPP.
- 3.3.3 NPF4 now forms part of the statutory development plan and highlights the Scottish Government’s commitment to net zero and tackling climate change. ‘Policy 1 Tackling the climate and nature crises’ encourages, promotes and facilitates development that addresses the global climate emergency and nature crisis.
- 3.3.4 ‘Policy 11 Energy’ of NPF4 is of most relevance to the proposed wind farm development. Policy 11 seeks to encourage, promote, and facilitate all forms of onshore renewable energy development, stating, “*Development proposals for all forms of renewable, low-carbon and zero emissions technologies will be supported. These include: i. wind farms*”. The principle of the Proposed Development draws strong support from NPF4.
- 3.3.5 NPF4 removes the Spatial Framework for Onshore Wind Farms and replaces it with a strategic policy strategy which focuses upon addressing the climate and nature crises. Policy 11 stating that proposals for all forms of renewable energy, including onshore wind farms “*will be supported*”.
- 3.3.6 Moreover, within NPF4, onshore electricity generation from renewables over 50 MW is now classed as ‘national development’. The NPF4 Statement of Need notes that “*a large and rapid increase in electricity generation from renewable sources will be essential for Scotland to meet its net zero emissions targets*”. It further goes on “*Additional electricity generation from renewables...of scale is fundamental to achieving a net zero economy and supports improved network resilience in rural and island areas.*”
- 3.3.7 The adoption of NPF4 and its new status as part of the development plan, has been carefully considered by the Applicant throughout the design process of the Proposed Development. As noted, NPF4 provides strong support for new renewable energy development which helps to tackle the climate emergency crises in Scotland.
- 3.3.8 The Proposed Development had strong support through the spatial framework approach outlined in SPP and that support is re-enforced through the renewed emphasis on the climate and nature crises



brought forward through NPF 4. Indeed, the Proposed Development now has national status significance through this policy implementation.

- 3.3.9 Despite the flux in policy position through the design process therefore, the Proposed Development responds favorably in principle to national government land use policy.

### Argyll and Bute LDP

- 3.3.10 LDP2 as noted above has just recently been adopted on 20<sup>th</sup> November 2023, and replaces the Local Development Plan which was adopted in 2015. The Supplementary Guidance, which was part of the previous Local Development Plan, including the Argyll and Bute Landscape Wind Energy Capacity Study (September 2017), will no longer be in place following the adoption of LDP2.
- 3.3.11 Notwithstanding the adoption of LDP 2, the Council's previous spatial framework guidance which was contained within Supplementary Guidance 2: Wind Farm Map 1 and Map 2 (adopted December 2016) did inform the early site selection and sequential feasibility process. The Proposed Development was identified as being located within Group 3 ('likely to be acceptable') and therefore was recognised early in design feasibility as being a site capable of facilitating renewable energy development in principle.
- 3.3.12 LDP 2 **Policy 30 The Sustainable Growth of Renewables** re-iterates NPF 4 support in principle for developments of this nature, supporting sustainable renewable energy development subject to no significant adverse effects on a range of environmental criteria.
- 3.3.13 The Proposed Development, in this specific location, therefore, has had 'in principle' policy support from the early design and site selection process through to the adoption of LDP 2 which reflects national priorities for clean energy provision.

## 3.4 Conclusion

- 3.4.1 This Chapter has demonstrated how policy has influenced the site selection of the Proposed Development. The spatial frameworks presented within SPP and the Argyll and Bute's spatial framework for onshore wind have informed the initial site selection and design focus. NPF4 and LDP 2 provide strong support for new renewable energy developments which help to tackle the climate and nature crises. This is further demonstrated by the accompanying **Planning Statement** which provides a full policy assessment of the Proposed Development concluding that on balance, the Proposed Development accords with national and local energy, climate change, environmental and land use policies.

## 4 Consultation and Engagement

---

### 4.1 Scoping

- 4.1.1 The Applicant submitted a request for a Scoping Opinion to the Energy Consents Unit (ECU) in February 2021. This request was accompanied by a Scoping Report, prepared by Ramboll on behalf of the Applicant, which set out a summary of the proposals; identified the potential significant environmental effects, and summarised the proposed scope and approach to the EIA.
- 4.1.2 A Scoping Opinion was received from the ECU on 26<sup>th</sup> April 2021. The contents of this and other consultation responses received are summarised in the EIA **Technical Appendix 1.1** of the EIAR (Volume 4), along with a list of all bodies consulted during the scoping exercise.

### 4.2 Post-Scoping Consultation

- 4.2.1 A meeting was held with the ECU, ABC, NS and SEPA on 7<sup>th</sup> December 2021 in order to discuss the evolution of the Proposed Development since submission of the Scoping Report, provide an update on key constraints following field surveys, and gain feedback from all involved parties.
- 4.2.2 Over the course of the meeting the key parties shared their feedback and any questions they had regarding the Proposed Development.
- 4.2.3 The Applicant has sought to take on board feedback from key stakeholders in the design evolution of the proposal as follows:
- Machrie Moor Scheduled Monument (SM 90207) was added to the cultural heritage assessment to assess any possible impacts following discussions with HES (Historic Environment Scotland).
  - In response to discussions with Argyll and Bute Council and Transport Scotland, no construction traffic is proposed to use the B842, with all access via the A83 (T). Transport Scotland has been consulted as part of this assessment process.
  - Following discussions with Scottish Forestry, infrastructure will be keyholed into the crop where possible to reduce scale of felling to facilitate development.
  - Recommendations to add new viewpoints to the landscape and visual impact assessment and include detailed surveys for specific species and habitats.
  - All the turbines originally on Class 2 Peatland have been moved off this category of peat to Class 5.

### 4.3 Pre-application Community Consultation

- 4.3.1 In line with relevant local authority and government guidance, the Applicant has undertaken community consultation both online and in person for the Proposed Development.
- 4.3.2 The consultation stage included the following elements:
- Distribution of information postcards to local residents and businesses;

- Dedicated consultation website [www.esbenergy.co.uk/west-torrisdale-wind-farm](http://www.esbenergy.co.uk/west-torrisdale-wind-farm);
- A dedicated email address: [westtorrisdale@esb.ie](mailto:westtorrisdale@esb.ie);
- Meetings with the two local Community Councils and the local energy group; and,
- Two public information days held on 9<sup>th</sup> December 2021 in Glenbarr and 10<sup>th</sup> and 11<sup>th</sup> December 2021 in Carradale.

- 4.3.3 Local residents and other interested parties were invited to attend the open days. These were publicised through an information postcard, sent out to over 750 surrounding households and businesses, and promoted through editorial and advertising in the local newspaper as well as on the local community council's social media page.
- 4.3.4 At the public information days members of the development team were on hand to explain the proposals, discuss the wider issues of climate change and energy security and demonstrate landscape impact via photomontages. The Applicant has written to all local residents who raised questions or concerns via the various feedback mechanisms. Consultation is on-going and will continue post submission.
- 4.3.5 A summary of the representations received during the public exhibitions is provided in the **Statement of Community Consultation Report** which accompanies the consent application.
- 4.3.6 Feedback from the local community and key stakeholders alongside detailed environmental investigation by the project team has resulted in the evolution of the scheme. As discussed above, a major change in the design has been the reduction in the number of turbines from 13 to 9 alongside the reduction in the infrastructure footprint which has resulted in less new access tracks and less water crossings.

## 4.4 Summary of Consultation and Engagement

- 4.4.1 The Applicant has engaged with the local community and key stakeholders throughout the design process to gather feedback on the proposals. Responses received through the consultation process have led to key changes to design of the Proposed Development including the reduction in the number of turbines from 12 to nine.

## 5 Design Approach

---

### 5.1 Introduction

- 5.1.1 This Chapter presents the design approach adopted by the Applicant in the design evolution of the Proposed Development.
- 5.1.2 As fully detailed in the accompanying **Planning Statement**, the Proposed Development directly contributes to addressing the impacts of climate change through renewable energy generation in a sustainable manner, whilst also contributing to energy security. Onshore wind also has a key role to play in meeting the UK and Scotland's ambitious energy and climate change targets which are of a time-critical nature. As discussed fully below, the location of the Proposed Development has been carefully selected as it is capable of delivering a crucial clean energy source with limited significant environmental or land use impact.

### 5.2 Site Selection

- 5.2.1 The location of the Proposed Development was considered to be suitable for renewable energy development early in the site selection process for the following reasons:
- It has a high wind resource;
  - It is in close proximity to the existing electricity grid network at the Carradale Substation;
  - It is located in an area with established access for the delivery of wind turbine components;
  - There are no statutory or non-statutory environmental designations within the Wind Turbine Array area, however the proposed wider site area which covers the access tracks do overlap with the Kintyre Goose Roosts Special Protection Area (SPA), Ramsar, Important Bird Area (IBA) and Site of Special Scientific Interest (SSSI).
  - It is located out with national and international statutory designations for landscape conservation sites.
  - It is an appropriate distance from residential receptors and the nearest settlement (Carradale) is approximately 2 km northeast of the Proposed Development site; and,
  - The Argyll and Bute Spatial Framework for onshore wind energy developments identifies the location as being situated outwith Group 2 ('area of significant protection') and within Group 3 ('likely to be acceptable')<sup>3</sup>.
- 5.2.2 Overall, the Proposed Development is considered to be in a suitable location which is capable of accommodating a wind farm development.

### 5.3 Constraint Identification and Mapping

- 5.3.1 The design process leading to the finalised 'design freeze' layout of the Proposed Development has been led by a technical design team with significant experience of delivering complex renewable

<sup>3</sup> Argyll and Bute Council Local Development Plan. Supplementary Guidance 2 – Windfarm map 1. [https://www.argyllbute.gov.uk/sites/default/files/Unknown/spatial\\_framework\\_a0\\_small.pdf](https://www.argyllbute.gov.uk/sites/default/files/Unknown/spatial_framework_a0_small.pdf).

energy projects. The key design objective from the outset was to maximise the energy generation potential of the Wind Turbine Array, whilst having regard to the protection of sensitive environmental receptors. A sequential and collaborative design process was established that included the following parameters:

- Constraints mapping and analysis which included baseline studies, analysis and risk identification and design guidance;
- Consultation with the local community and key stakeholders;
- Scoping Opinion Request (for a 12 turbine Layout);
- Design refinement and Design Workshop 1;
- Phase 2 Peat Probing and Peat Slide Hazard Risk Assessment;
- Design refinement followed by consultation with the Scottish Environment Protection Agency (SEPA) on the proposed infrastructure layout (including inputs from public exhibitions and Gatecheck 1 for a 9 turbine layout);
- Design Workshop 2 (design chill);
- Engineering walkover and final evaluation; and
- Design Freeze and incorporation of design mitigation.

5.3.2 A design brief was agreed with the Applicant to set out the key parameters for the Proposed Development. The technical design parameters subsequently set the scope for constraint mapping. The brief included:

- Minimum of nine turbines (up to 54 MW) and associated BESS (up to 20 MW);
- Minimum acceptable turbine spacing and acceptable slope/gradient for tracks;
- Details of land ownership boundaries and constraints;
- Requirements for turbine foundations, construction compounds, substation, access track geometry and crane hardstanding geometry;
- Road running width to be between 4.5 m and 7 m depending on gradient and bends;
- Road to have vertical grade no higher than 16 %; and
- Turning areas to be provided allowing loaded or unloaded blade transports (as required).

5.3.3 Following agreement of the design brief, the technical design team was instructed to undertake all necessary desktop studies and field work to identify key environmental receptors and constraints (including cumulative constraints) of relevance to the design and assessment of the Proposed Development.

5.3.4 Key issues and constraints for consideration in the design process were established through a combination of desk-based research, extensive field survey and consultation (through the Scoping process). The design process considered the following issues:

- Landscape character and visual, recreational and tourism amenity within a 20 km study area;

- Cultural heritage, including mapping all known assets within and around the Application Boundary, including all designated heritage assets within 5 km and nationally important designated assets within a 10 km study area of the Site to assess the potential for visibility and setting effects;
- Sensitive fauna, with the mapping of the presence of European Protected Species;
- Sensitive habitats, particularly peat forming habitats (supported by habitat and peat probing surveys) and habitats dependent on groundwater;
- Ornithology, including surveys for bird flight activity and breeding bird activity within the Application Boundary;
- Hydrology and hydrogeology, including identifying all sensitive surface water features;
- Traffic and transport, including all trunk roads and local roads that are likely to experience increased traffic flows;
- Cumulative operational noise levels;
- Proximity of nearby residential properties, with specific regard to visual amenity, noise and shadow flicker;
- Aviation and telecommunications assessments; and,
- A forestry study area which included all woodlands within the Application Boundary.

## 5.4 Design Process Stages

5.4.1 There have been four principal design iterations of the Proposed Development, which have been developed at different stages in the project design process and have been refined through the EIA process and based on feedback received from key stakeholders and statutory consultees. These comprise:

- Layout 1: Pre-Scoping Layout 2020;
- Layout 2: Scoping Layout;
- Layout 3: Design Workshop 1 Layout; and
- Layout 4: Gatecheck / Design Freeze Layout.

5.4.2 These layout plans are shown in Appendices 1-4 and discussed further below:

- **Layout 1: Pre-Scoping Layout 2020** - The Pre-Scoping Layout 2020 (Figure 3.1 of the EIAR (Volume 3a) and Appendix 1) considered the potential for accommodating up to 13 turbines with a maximum blade rotor diameter of up to 136 m.
- **Layout 2: Scoping Layout** - The first major design iteration (**Figure 3.2** of the EIAR (Volume 3a) and Appendix 1) was made in January 2021 before submitting the Scoping Report (Planning Ref: 21/00341/SCOPE). The change in layout was primarily driven by landscape and visual analysis, with one turbine removed and several turbines repositioned to avoid stacking from key viewpoints and provide a more cohesive layout. Turbine T3 was moved to pull it outwith a 50 m watercourse buffer.

- **Layout 3: Design Workshop 1 Layout** - The second major design iteration (**Figure 3.3** of the EIAR (Volume 3a) and shown in Appendix 3.) occurred in response to a review of key environmental constraints including geology, peat and forestry, as well as landscape and visual, and engineering constraints including slope and wind resource. Wind turbines T9 and T7 were repositioned to avoid sensitive blanket bog habitats (Annex 1 habitat) and Class 2 Peatland habitats. Feedback as a result of submission of the Scoping Report and subsequent consultation responses were also considered. As a result, the number of turbines was reduced from 12 to 9 in order to minimise potential impacts and to ensure the layout worked from a wind resource and engineering perspective. Proposed access tracks and infrastructure elements were also developed following route assessments and a full topographical survey of the Access Corridor. It was concluded that the most practicable route to the Wind Turbine Array was to upgrade the existing forestry access track between the BaT Extension Wind Farm substation and the Wind Turbine Array rather than creating a new route. This, therefore, avoided impacts on the surrounding habitat including peatlands. This layout was presented at the public consultation events held in East and West Kintyre Community Council areas in December 2021, the details of which are outlined in the **Statement of Community Consultation** accompanying this Section 36 consent application.
- **Layout 4: Gatecheck / Design Freeze Layout** - The final major design iteration **Figure 3.4** of the EIAR (Volume 3a) and shown in Appendix 4 followed Design Workshop 1 where the layout was reviewed against all environmental constraints, consultation feedback and updated information gathered during site walkovers. The Design Workshop 2 focused on finalising the turbine positions taking into account peat, geology, hydrology, Phase 1 Habitat Survey data, National Vegetation Classification (NVC), Groundwater Dependent Terrestrial Ecosystems (GWDTEs), Ornithology and Private Water Supplies (PWS). Turbine positions were altered to accommodate the preliminary optimisation of earthworks for access tracks and crane hardstandings (based on a 3D model), while also positioning them to avoid sensitive habitats and areas of deeper peat. This layout was consulted on through the Gatecheck Report submitted to the Energy Consents Unit (ECU) in October 2022, but no specific feedback was received.

## 5.5 Overview of EIA Design Parameters

### Minimising Landscape, Seascape and Visual Effects

- 5.5.1 **Chapter 4** of the EIAR (Volume 2) in relation to Seascape, Landscape and Visual Amenity (SLVIA) details how the potential landscape and visual effects associated with the Proposed Development, particularly when considered cumulatively with existing operational windfarms, have been considered and addressed where possible from the outset.
- 5.5.2 The key development parameters which have informed site selection and design development from a landscape and visual perspective are detailed in Chapter 4 of the EIAR and comprises:
- Locating the Proposed Development within the 'areas with potential for wind farm development' as illustrated in the Council's Landscape and Wind Energy Capacity Study<sup>4</sup>;

<sup>4</sup>Argyll and Bute Council Landscape wind energy capacity study (2017). <https://www.argyll-bute.gov.uk/planning-and-building/planning-policy/landscape-wind-energy-capacity-study>

- Locating the Proposed Development at an appropriate distance from settlement and individual dwellings to minimise potential impacts from visual amenity, noise and shadow flicker;
- Locating the Proposed Development away from distinctive landscape features that the form and scale of the Proposed Development could compromise;
- Positioning the Proposed Development with appropriate consideration of the adjacent Beinn an Tuirc and Beinn an Tuirc Extension Wind Farms and where possible seeking to use topography to minimise the cumulative landscape and visual effects ;
- Minimising the extent to which the Proposed Development would be seen without the context of the operational BaT Wind Farms;
- The overall fit of the Proposed Development is consistent with the emerging cumulative pattern of development with larger turbines on the plateau and smaller turbines on the transitioning slopes of the upland fringe landform;
- The careful consideration of topography ensures that the maximum blade tip elevation of the Proposed Development’s wind turbines would be level or lower than the smaller wind developments of the BaT Wind Farms. This relationship is evidenced in the Visualisations (**Figures 4.11a- 4.11j** of the EIAR (Volume 3b)). Whilst the Proposed Development would be similar in scale and spacing to Beinn an Tuirc Phase 3, the vertical scale of the Proposed Development would not overshadow the smaller Beinn an Tuirc, Beinn an Tuirc Extension and Blary Hill operational wind farms; and
- Minimising the amount of site infrastructure and ancillary elements required, and carefully position these to take full advantage of the local topography undulations in order to screen such elements from receptors outwith the Proposed Development.

5.5.3 Table 4.6 in **Chapter 4** of the EIAR (Volume 2) provides further detail on the cumulative wind farm context and **Figure 2.10** (Volume 3a) shows the location of the cumulative wind farms within the study area.

5.5.4 By taking this overall approach the Proposed Development has been designed to minimise the visual complexity that could occur when wind farms of varying sizes are located within close proximity to one another.

### **Minimising Wider Environmental Effects**

5.5.5 Other primary development sensitivities which have directly influenced the scale, layout, and spatial extent of the finalised design of the Proposed Development comprise:

- Cultural heritage: **Chapter 5** of the EIAR (Volume 2) presents the results of a desk-based assessment and field survey, and digitised as GIS data, showing the locations (and where relevant, the extent) of heritage assets. The layout of the Proposed Development, including the positioning of proposed wind turbines and the siting of other infrastructure, has subsequently been designed to avoid direct effects to cultural heritage assets within the Application Boundary and to minimise as far as possible effects on the settings of cultural heritage assets outwith the Application Boundary. The Proposed Development layout therefore embeds design mitigation into the siting of the proposed wind turbines and the ancillary infrastructure.



- Ecology: **Chapter 6** of the EIAR (Volume 2) highlights that the layout of the Proposed Development has, as far as possible, been designed to avoid the habitats of highest ecological importance and with the highest sensitivity to impacts, particularly active peatlands and deep peat. This is re-iterated in **Chapter 9** of the EIAR (Volume 2) which has considered geological constraints and has influenced the design approach by minimising effects on areas of deep peat and potential slope instability.
- Hydrology: **Chapter 8** of the EIAR (Volume 2) demonstrates that the layout of the Proposed Development has been set out such that the number of new watercourse crossings is minimised. Furthermore, design of new watercourse crossings would maintain hydraulic connectivity and allow the free passage of fish and other wildlife beneath.
- Impact on residential receptors: The Proposed Development has been sited and designed to have minimal effects on residential receptors. There are no residential properties within the Application Boundary. Individual residential properties are located at Lephincorrach and Ifferdale to the south of the Wind Turbine Array and in Glen Torrisdale within the Torrisdale Estate to the northeast. The closest property, at Lephincorrach, is approximately 1.5 km east of the closest wind turbine (T9). As detailed in **Chapter 11** of the EIAR (Volume 2) and **Chapter 14** of the EIAR (Volume 2) there will be no significant impact on residential amenity in terms of noise or shadow flicker.
- Forestry and Woodland: As detailed in **Chapter 13** of the EIAR (Volume 2), the Wind Turbine Array is set within privately owned and managed woodlands. As discussed in **Chapter 13** and **Chapter 6** of the EIAR (Volume 2), a 3.1 ha (100 metre (m) radius) ‘keyhole’ approach to turbine construction has been adopted around wind turbines, whereby felling taking place during construction would be replanted back to the 100m radius buffer. This approach, with due consideration of wider felling and re-stocking plans has minimised the potential effects on forestry resulting from the Proposed Development.
- As detailed in **Figure 2.1** (EIAR Volume 3a), the substation compound and battery energy storage system (BESS) is located in a central location and appropriate materials will be employed to ensure the visual effects are minimised as far as possible.

## 5.6 Summary of Design Approach

- 5.6.1 As detailed above, there were a number of environmental and land use constraints and opportunities which had to be considered in the design approach and these have been effectively balanced through a coordinated and logical iterative design approach.
- 5.6.2 It is clear from the conclusions of the EIA that potential environmental impacts from the Proposed Development have been appropriately minimised while optimising the energy output of the Proposed Development.
- 5.6.3 Through the detailed design process and pre-application consultation discussions, the number of turbines was reduced from 13 to 9, the infrastructure footprint has been iteratively designed to avoid areas of deep peat, minimise overall track length and the number of new watercourse crossings required.

- 5.6.4 These environmental and land use constraints have been addressed in a manner which does not compromise the overall landscape and visual effects of the Proposed Development This is exemplified in **Chapter 4** EIAR (Volume 2) which demonstrates that significant landscape and visual effects are minimal and localised. Cumulative, in-combination visual effects have been carefully considered with respect to existing surrounding development, particularly the Beinn an Tuirc, Beinn and Tuirc Extension and Beinn an Tuirc Phase 3, that form part of the central cluster of wind energy development in this locality.
- 5.6.5 Consequently, it can be clearly demonstrated that likely significant effects have been avoided or minimised as far as reasonably practicable through the design process.

## 6 Pedestrian and Vehicular Access

---

### 6.1 Access from Public Roads

- 6.1.1 Access and other transport issues are fully addressed in **Chapter 10** of the EIAR (Volume 2).
- 6.1.2 Access to site would be taken from the existing Beinn an Tuirc Wind Farm access track. The proposed route to the Wind Turbine Array from the A83 is shown in **Figure 2.1** of the EIAR (Volume 3a).
- 6.1.3 For the purposes of construction, the port of entry would be Campbeltown Harbour. This port has previously been used for turbine imports for, for example, BaT, Allt Dearg, Tangy, A'Chruach, and Carraig Gheal Wind Farms. The proposed route to Proposed Development site would be as follows:
- Loads would exit Campbeltown Harbour and continue north on the A83;
  - Loads would turn right into the existing site access junction and tracks towards the BaT Extension Wind Farm;
  - Loads would continue beyond the BaT Extension substation and proceed on a section of existing forestry track into the Application Boundary; and,
  - Loads would finally proceed to turbine locations on specifically constructed private access tracks.
- 6.1.4 Only minor interventions are required to the public road network between the harbour and the proposed wind farm access track. The Proposed Development during both construction and operation will be accessed via the existing Beinn an Tuirc Wind Farm access junction on the A83 (T), located approximately 3 km to the south of Glenbarr.

### 6.2 Site Access

- 6.2.1 Approximately 4.9 km of new onsite access tracks and approximately 5.8 km of upgraded track would be required within the Wind Turbine Array to provide access to the wind turbines and associated development. Typical access track designs are shown on **Figure 2.7** of the EIAR (Volume 3a).
- 6.2.2 Tracks would have a typical 5 m running width with appropriate widening at bends, junctions and passing places.
- 6.2.3 In areas where the peat and topsoil are consistently less than 1 m deep, the vegetation and soil would typically be stripped to a suitable subsoil layer and the track (approximately 300 mm – 500 mm thick) would be constructed on the subsoil. The upper topsoil layer, together with turf, would be stored temporarily for use in landscaping and revegetating the track shoulders and track side drainage, where possible.
- 6.2.4 Once the soil has been removed, as described above, to a suitable founding layer, the road and running surface would be constructed by tipping and compacting aggregate the required shape and thickness. Cross-sections of the final road shape following reinstatement of the roadside slopes by replacing the layers of excavated material in the correct order are presented in **Figure 2.7** (EIAR Volume 3a).

- 6.2.5 The on-site track layout has been designed to minimise environmental disturbance and land take by wherever possible avoiding areas of deeper peat and steep slopes in excess of 12 degrees as well as, wherever possible, avoiding, or minimising the number of, watercourse crossings and areas of identified environmental sensitivity.

### 6.3 Public Accessibility

- 6.3.1 Public accessibility has been considered by the Applicant throughout the design process.
- 6.3.2 There are existing public access and recreational routes within proximity of the site including the Kintyre Way, a 161 km long-distance route used by walkers, runners, and cyclists, which passes through the east side of the site boundary. In addition, there is a pathway (ref. SA162) from Carradale to Beinn an Tuirc which crosses the application site, discussed further in the Scotways consultation response (March 2021).
- 6.3.3 Existing Core Paths would be appropriately re-routed to remain open as detailed in the Construction Transport Management Plan (CTMP). The Core Paths within proximity of the Proposed Development are shown in **Figure 4.7** of the EIAR (Volume 3a). Pedestrian access from Carradale to Beinn and Tuirc through the Proposed Development would be maintained throughout the operational phase of the Proposed Development.
- 6.3.4 The accompanying Socio-Economic and Tourism Impact report notes that the Proposed Development is not anticipated to negatively impact upon existing recreational trails within proximity of the Application Boundary (e.g., the Kintyre Way).

### 6.4 Summary of Access Arrangements

- 6.4.1 This Chapter has considered the vehicular and public access arrangements in place for the Proposed Development. The Applicant has sought to retain and where possible improve access to the site. Minor changes are required to the road network to facilitate vehicular access to the site for construction and maintenance purposes. No negative impacts are anticipated on the existing recreational tracks within proximity to the site and overall, pedestrian access to the site will be improved through the provision of new and upgraded access tracks.

## 7 Conclusion

---

- 7.1.1 The Proposed Development has been carefully considered from a design, layout and access perspective, accounting for key technical and environmental constraints alongside ongoing engagement with the local community and key stakeholders. The final design for the Proposed Development is the result of several design iterations which has allowed the layout and size of the Proposed Development to evolve, notably with the reduction in the number of turbines from 13 to 9. This is considered to be the most appropriate number of turbines which can be accommodated within this location, balancing both energy yield and contribution towards renewable energy generation targets, whilst minimising environmental impacts. Overall, potential significant effects have been avoided or minimised as far as reasonably practicable through the design process.
- 7.1.2 The Applicant has carried out meaningful engagement with the local community and key stakeholders throughout the design process which has been fully considered by the Applicant and helped to inform the final design.
- 7.1.3 Public accessibility has been considered by the Applicant throughout the design process with efforts made to retain and where possible improve public access to the site. No impacts are anticipated on popular recreational routes within the vicinity of the site including the Kintyre Way.
- 7.1.4 Overall, the Proposed Development would be fit for purpose with a generating capacity in excess of 50 MW of clean renewable energy, whilst also being sensitive to the environmental and landscape context with reference to siting, scale and use of materials.



### **7 Exchange Crescent**

Conference Square  
Edinburgh  
EH3 8LL

0131 225 8344

### **Fraser Blackwood**

Director

[fraser.blackwood@jll.com](mailto:fraser.blackwood@jll.com)

### **Sentinel**

103 Waterloo Street  
Glasgow  
G2 7BW

0141 248 6040

### **Leah Watton**

Senior Planner

[leah.watton@jll.com](mailto:leah.watton@jll.com)

### **About JLL**

JLL (NYSE: JLL) is a leading professional services firm that specializes in real estate and investment management. JLL shapes the future of real estate for a better world by using the most advanced technology to create rewarding opportunities, amazing spaces and sustainable real estate solutions for our clients, our people and our communities. JLL is a Fortune 500 company with annual revenue of \$16.6 billion, operations in over 80 countries and a global workforce of operations in over 80 countries and a global workforce of more than 91,000 as of December 31, 2020. JLL is the brand name, and a registered trademark, of Jones Lang LaSalle Incorporated. For further information, visit [jll.com](http://jll.com).

*[jll.co.uk](http://jll.co.uk)*

Jones Lang LaSalle

©2023 Jones Lang LaSalle IP, Inc. All rights reserved. All information contained herein is from sources deemed reliable; however, no representation or warranty is made to the accuracy thereof.