Douglas West Wind Farm

Revised Scheme

DESIGN & ACCESS STATEMENT

October 2017

3R Energy Wind • Biomass

BLUE ENERGY

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Design and Access Statement

Contents

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1. Introduction and Background

1.1 Background

1.1.1 This Design and Access Statement (DAS) describes the design process and the resultant development proposals for the Douglas West Wind Farm (the Revised Development), located 11 km south west of Lanark, 1.6 km north of Douglas and 1.3 km south of Coalburn in rural South Lanarkshire. The DAS accompanies the planning application submitted to South Lanarkshire Council (SLC) seeking permission to construct and operate the Revised Development. The Revised Development brings together a number of proposed revisions to the Consented Development (ref. CL/15/0273 - comprising of 15, 3 MW turbines) at Douglas West to maximise energy production from the site, within acceptable limits, to ensure that the project is viable subsidy-free. Further details on the Revised Development are included at paragraph 1.5 below.

1.1.2 The purpose of this DAS is to provide information on the principles and approach that have guided the design process. This DAS demonstrates how the site and its surroundings have been fully assessed to ensure that the final design solution is the most suitable for the site. It describes the starting point for the Revised Development design, and subsequent alterations to the layout that were made in response to the issues that were identified through the appraisal process. Details are also provided on the access arrangements to the site, including disabled access.

1.1.3 This DAS should be read in conjunction with the *Environmental Statement* (ES), which also contains information on the design strategy (Chapter 2), predicted landscape and visual effects (Chapter 6), traffic and access related effects (Chapter 12), and includes an Outline Access Strategy (Appendix 3.1).

1.1.4 SLC's Design and Access Statement's planning guidance states that the DAS should:

- explain the design approach and how the design policies of the SLC development plan have been taken into account
- demonstrate how the design of the development takes account of its context in relation to its proposed use; and
- state what consultation, if any, has been undertaken on design issues and what account has been taken of the outcome of that consultation.

1.1.5 Full-size versions of the plan extracts in this Statement are available in Volume 2 of the ES.

1.2 The Applicant

1.2.1 The Applicant, Douglas West Wind Farm Ltd, is a partnership between 3R Energy Solutions Ltd and Blue Energy Projects Holdings Ltd. The Applicant is committed to working with the local community in Douglas and Coalburn to develop a successful project at the site which delivers significant and tangible benefits for the surrounding communities.

1.2.2 3R Energy Solutions Ltd was established in 2009 to help farms and rural businesses reduce their energy costs, with the mainstay of the business being farm sized wind turbines, CHP and biomass systems. The Revised Development represents an exciting next step in the development of the business into larger-scale renewables which builds on 3R Energy's existing skills and current customer offering, and helps to grow and diversify the business for the future.

1.2.3 Blue Energy Projects Holdings Ltd (Blue Energy) is a leading investor in renewable energy infrastructure, with a commitment to long-term investment in the sector. Blue Energy have been brought into the project as 3R Energy's funding partner and bring with them a strong track record in delivering onshore wind development in the UK.

1.2.4 The site is in the ownership of Mitchell Energy Ltd and William Mitchell & Sons Ltd of Hazelside Farm, Glespin (hereafter referred to as the Landowner), with the exception of part of the access road from the M74 motorway which is owned by Hargreaves Surface Mining Ltd.

1.3 Planning History

1.3.1 The Landowner was approached by a number of wind farm developers in and around 2008/9 regarding the potential to develop a wind farm on their part of the former Dalquhandy Opencast Coal Site. In 2009 the Landowner agreed to enter into an Option Agreement with Community Windpower Limited (CWP) who initially proposed to develop a 17 turbine wind energy project on the site (previously referred to as Douglas West Community Wind Farm) and to work with the local communities in Coalburn and Douglas to develop a community benefit package for both villages.

1.3.2 A Scoping Report for a 15 turbine wind farm was issued by CWP in 2012 and it is understood that initial discussions were held with the Local Authority, statutory and non-statutory consultees and both communities at that time. A Scoping Opinion was subsequently issued by SLC in June 2012.

1.3.3 The project did not progress any further at that point due to protracted negotiations with Scottish Coal over the access road of which that company previously owned part. In 2013, the Landowner acquired 3R Energy and decided to develop the project at Douglas West & Dalquhandy independently and to work with the local communities in Douglas and Coalburn to deliver tangible benefits to the local area through the Revised Development.

1.3.4 A planning application was submitted in July 2015 for a renewable energy development (the Consented Development), comprising 15 wind turbines, up to 126.5 m blade tip height, and a Wood Fuel Drying Facility. Consent for the application was granted in February 2016 (ES Appendix 1.1) and two subsequent Non-Material Variation Submissions to increase the tip height to 131 m and rotor size to 113m (CL/15/0273/1), and relocate the substation and construction compound (CL/15/0273/2) have also been consented (ES Appendix 1.2).

1.3.5 Following the submission of the 2015 Application the UK Government announced it would end all financial support for onshore wind generation in the UK. As a result, projects which could not become commercially operational by 31 March 2017 would be reliant solely on electricity generated and sold to the wholesale power market. Consequently, the Applicant has sought to optimise the Consented Development to maximise energy production, within acceptable limits, to ensure that the Revised Development is viable subsidy-free.

1.4 Site Search

1.4.1 The initial site selection process was undertaken by CWP as part of a UK wide search and assessment of potential wind farm sites to progress and develop into operational wind farms. The search process involved an initial desk-based assessment being undertaken to identify potential areas for wind farm development.

1.4.2 Following initial studies, areas were either selected for further examination or rejected as unsuitable. This process identified a large number of sites throughout Scotland as suitable for further investigation and potential development. These favoured sites were assessed against a list of selection criteria, any site failing to meet this selection criteria or which conflicts with the criteria in a way that could not be successfully resolved, were removed from the site selection process.

1.4.3 The Revised Development site was identified as one of the most appropriate and best locations for a wind energy development as it was positive and successful in relation to meeting the initial site selection criteria.

1.4.4 The Applicant has amended the Revised Development accordingly which now comprises a 13 turbine wind energy development on part of the former Dalquhandy Opencast Coal Site.

1.5 The Revised Development

1.5.1 The Revised Development comprises 13 wind turbines of up to a maximum blade tip height of 149.9 m when vertical, each being around 3.8 megawatt (MW) in power rating. A number of ancillary development components are also proposed, including a construction compound/concrete batching and turbine laydown area; hardstandings adjacent to the wind turbines for construction, maintenance and decommissioning cranes; access tracks; underground cables between turbines; an onsite substation and maintenance building with welfare facility; and a new permanent meteorological monitoring mast.

1.5.2 The total power output of the Revised Development would be around 49 MW. The electricity produced will be exported to the electricity network. The proposed point of connection to the network is via the 132 kV Coalburn substation to the north-east of the site. The grid connection is currently being progressed by the Applicant with both the local distribution and transmission licence holders. A proportion of the electricity produced at the site may also be used to provide power to new industry within the consented Industrial Area within the east of the site (Planning Reference: CL/17/0157), on the DP hardstanding and surrounding areas Figure 1 below provides a site layout of the Revised Development.

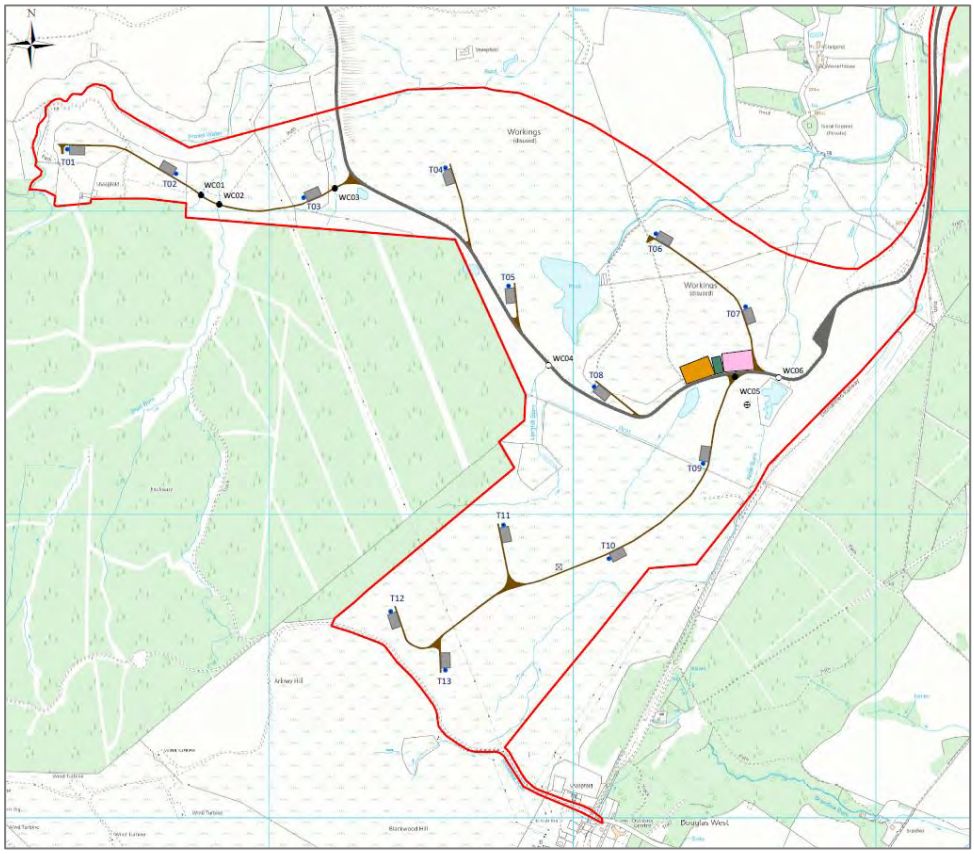

Figure 1 – Site Layout Plan

2. Site Description and Context

2.1 Site Description

2.1.1 The site is located approximately 11 km south west of Lanark, 1.6 km north of Douglas and 1.3 km south of Coalburn in rural South Lanarkshire. The site is part of a former surface coal mine and is therefore by its nature well located, remote from surrounding villages and isolated dwellings and benefits from direct access from the M74 motorway via Junction 11 (Poniel). The elevation of the site ranges from 220 metres (m) to 310 m above ordnance datum (AOD). The site occupies an area of 0.43 square kilometres (km^2) or 42.9 hectares (ha).

2.1.2 The site lies within an area of low grade agricultural land, with a large section of the site having been disturbed by the previous opencast operations and restored to a varying degree. There is also a large area of hardstanding to the east of the site where the former Dalquhandy Opencast Disposal Point (DP) was located. The aerial photograph below (Figure 2) from September 1990 shows the opencast operation being undertaken at the site and the coal processing plant that was on the DP hardstanding that remains on site today (Figure 3).

Figure 2 – Aerial photograph of the northern extent of the site and DP area (1990)

Figure 3 – Aerial photograph of the site including the CHP Plant (2017)

2.2 Residential Receptors

2.2.1 The closest settlements to the Revised Development are Coalburn and Douglas, approximately 1.3 km north and 1.6 km south, respectively. There are a number of individual properties to the north of the site, including, Westerhouse, Craigend, and West Toun and to the south, including, Station House, Blackwood Cottage, Scrogton and Broadlea.

2.2.2 Hargreaves Surface Mining Ltd renewed in 2014 an outline planning permission for the development of housing at Gunsgreen, on the southern outskirts of Coalburn (Ref. CL/13/0334). The proposed housing development is located approximately 0.90 km north of the closest proposed infrastructure.

2.2.3 There are no residential properties located within the Planning Application boundary.

2.3 Landscape Context

2.3.1 The Revised Development lies within two landscape character types (LCT); the Plateau Farmland Open Cast Mining LCT and the Rolling Moorland LCT. The site of the Revised Development is composed of low grade agricultural land, much of which has been disturbed by previous opencast operations. Figure 2 shows the extent of the mining operations which are largely concentrated to the north of the existing access road, used for transporting coal from the site to market.

2.3.2 There are significant redundant building foundations located to the east of the main site where the coal Disposal Point (DP) was situated, and current CHP plant is located, and also a property ruin towards the western extent of the site.

2.3.3 The Revised Development is located within an area that already hosts wind energy development (and the site itself already has permission for 15 wind turbines; the Consented Development), hence would not result in the introduction of turbines to a 'new' landscape area free from wind turbines. Furthermore, the Revised Development turbines would exert limited effect on the views experienced by receptors located to the west as they would be located beyond the Hagshaw Hill, Nutberry Hill, Cumberhead and Galawhistle turbines.

2.3.4 The southern part of the Revised Development site is located within the Douglas Valley Special Landscape Area (SLA).

2.3.5 The undulating landform and existing woodland within the local area has the potential to provide screening from many vantage points.

2.4 Transport and Access

2.4.1 Access to the site of the Revised Development is to be taken from the existing private road serving the former open cast coal mining site, connecting to the public road network at the western dumbbell roundabout of Junction 11 of the M74.

2.4.2 The surrounding area is served by a number of important and minor class roads, which are well spread out across the area, although less dense to the west of the Revised Development. These include the M74, which links Glasgow to Carlisle, to the east of the Revised Development site, the A70, which links Ayr to Edinburgh, to the south and the B7078, which links Lesmahagow to Uddington to the west.

2.5 Public Access and Pathways

2.5.1 There are at least 5 Core Paths that either cross or are adjacent to the Revised Development site and the neighbouring Hargreaves' wind energy development (the Dalquhandy Wind Farm), as well as a number of 'Aspirational Core Paths' and 'Wider Network Paths' (as designated in the South Lanarkshire Core Paths Plan) (Figure 4 below). Many of these paths have been re-routed in the past through previous mining activities at the site.

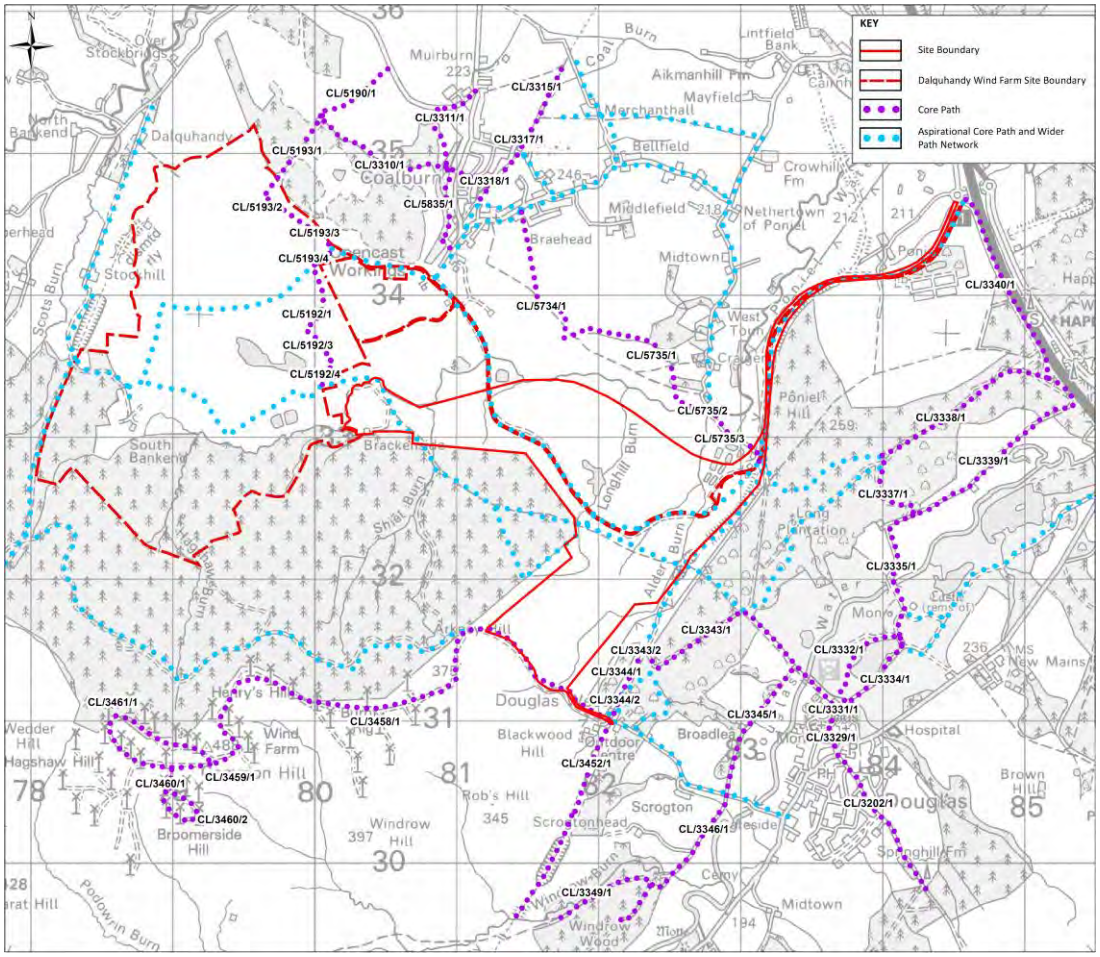

Figure 4 – Existing path network at the site

3. Planning Policy Context

3.1 Landscape Designations

3.1.1 The Revised Development straddles two Landscape Character Types/Landscape Character Sub Types described in the South Lanarkshire Landscape Character Assessment (2010), namely: LCST 5B – Plateau Farmland Opencast Mining and LCT 7 – Rolling Moorland. The 4 most north-western turbines lie within LCT 5B; the remaining 9 turbines, and the other main ancillary features of the development lie within LCT 7.

3.1.2 The host landscape (spanning these two character types and other surrounding areas) has seen considerable change in the past 30 years and continues to evolve dramatically and rapidly as a result of further opencast mining, forestry activities, windfarm development, industrial development and changes in agricultural practices.

3.1.3 The following landscape designations are noted:

- World Heritage Sites - Located just over 10 km to the north-east of the site is the New Lanark World Heritage Site. The World Heritage Site lies outside of the Zones of Theoretical Visibility (ZTV).
- National Parks - There are no national landscape designations covering the site. The nearest National Park is the Loch Lomond and Trossachs National Park, which is located approximately 65 km to the north-west of the site.
- Regional Scenic Area - The closest regional scenic area is the South Clydeside RSA, which extends to within approximately 7 km of the Revised Development in an easterly direction from the site.
- Special Landscape Areas - There are four Special Landscape Areas (SLAs) within the South Lanarkshire Council area which fall within 10 km of the Revised Development site. The southern extent of the Revised Development site boundary falls within the very northern part of the Douglas Valley SLA, but only the four most southerly turbines in the Revised Development fall within this SLA. It is also recognised that the Middle Clyde Valley SLA, Upper Clyde Valley and Tinto SLA and the Leadhills and Lowther Hills SLA all lie between 5 km and 10 km of the Revised Development. It is also noted that two sensitive landscape areas (identified within the East Ayrshire administrative area) also fall approximately 6.5 km and 7 km to the west of the Revised Development site.
- Conservation Areas - There are three conservation areas within 10 km of the Revised Development site. These are: Douglas, located approximately 1.6 km to the south-east, Lesmahagow located approximately 6.2 km to the north, and New Lanark, located approximately 9 km to the north-east.
- Registered Parks and Gardens - There is one registered Historic Gardens and Designed Landscapes within 10 km of the site namely, the Falls of Clyde located approximately 9.9 km to the north-east of the Revised Development. This landscape however, lies outside of the ZTV.

3.1.4 Guidance from the Scottish Government and Scottish Natural Heritage (SNH) has been used in the siting and design iteration of the Revised Development site. This includes:

- Guidelines for Landscape Character Assessment, (2002) Countryside Agency and Scottish Natural Heritage (SNH);

- Landscape Character Assessment Guidance for England and Scotland: Topic Paper 6: Techniques and Criteria for Judging Capacity and Sensitivity, (2002) The Countryside Agency and Scottish Natural Heritage (SNH);
- Assessing the Cumulative Impact of Onshore Wind Energy Developments (March 2012) SNH;
- Siting and Design of Wind farms in the Landscape, Version 3 (2017) SNH;
- Visual Representation of Wind farms – Version 2.2 (February 2017), SNH.

3.1.5 In addition, South Lanarkshire Council has produced a number of supporting documents relating to landscape character, renewable energy and wind farm developments which have been referenced.

- South Lanarkshire Supplementary Guidance 10 Renewable Energy (2015).
- South Lanarkshire Landscape Capacity Study for Wind Farms (2016).
- South Lanarkshire Local Development Plan (2015).
- South Lanarkshire Landscape Character Assessment (2010).
- South Lanarkshire Validating Local Landscape Designations (2010).

3.2 Ecological Designations

3.2.1 There are no ecological designations within the site. Within 5 km of the site boundary the relevant designations are as follows:

- one Special Area of Conservation (SAC), Coalburn Moss SAC; and
- two Sites of Special Scientific Interest (SSSI), namely Coalburn Moss and, Miller's Wood.

3.2.2 Between 5 and 10 km of the site boundary the relevant designations are as follows:

- one Special Protection Area (SPA), namely Muirkirk & North Lowther Uplands;
- two SACs, namely Clyde Valley Woods and Red Moss; and
- seven SSSIs, including Muirkirk Uplands and North Lowther Uplands.

3.2.3 Between 10 and 15 km of the site boundary the relevant designations are as follows:

- 15 SSSIs, including Tinto Hills and Upper Nethan Valley Woods
- one SAC, namely Clyde Valley Woods;
- one Special Protection Area (SPA), namely Muirkirk & North Lowther Uplands; and
- a number of areas of Ancient Woodland.

3.2.4 The main habitats within the site include wet heath and marshy grassland. Potential Ground Water Dependent Terrestrial Ecosystems (GWDTEs) were also identified within the southern extent site (according to SEPA, 2014a and 2014b guidance); however, following assessment it was considered that they had low or no groundwater dependency. Bat activity on site is considered to be low. Otter and badger were recorded within the site. Trout species recorded in 2012 showed low numbers in Shiel Burn and Poniel Water only and this status is not expected to have changed significantly in the intervening period. No other protected species are recorded on site.

3.3 Historic Environment

3.3.1 There are no Scheduled Monuments or Listed Buildings within the site boundary. Within 5 km of the site boundary the relevant designations are as follows:

- two Scheduled Monuments (SM), Thorril Castle and St Bride's Chapel;
- two A-listed buildings and sixteen B-listed buildings; and
- one Conservation Area, Douglas.

3.3.2 Between 5 and 10 km from the site boundary the relevant designations are as follows:

- New Lanark World Heritage Site and Conservation Area, including several listed buildings and structures within; and
- three A-listed Buildings and several B-listed Buildings.

3.3.3 Between 10 and 15 km from the site boundary there are a number of listed structures, SMs and Conservation Areas.

4. The Design Process

4.1 Introduction

4.1.1 As part of the EIA process design iterations were prepared and considered for the turbine locations and on-site infrastructure, including access tracks and the construction compound and substation locations. In order to propose a development layout which is considered to represent the most appropriate design; potential environmental impacts and their effects, physical constraints, health and safety considerations, and project economics were taken into account. Information was collated from desktop information, field surveys, scoping opinions, local planning policy, planning conditions attached to the Consented Development and recent case law. This information provided the baseline from which site issues and sensitivities could be identified and highlighted for further detailed assessment and given priority in influencing the layout iterations of the Revised Development. The design evolution process is described in detail below.

4.2 Site and Area Appraisal

4.2.1 As part of the Environmental Impact Assessment (EIA) process detailed site investigations were undertaken of the baseline conditions at the site in order to identify any constraints to development. Findings were collated and mapped within a comprehensive Geographical Information System (GIS) model to define areas suitable for development.

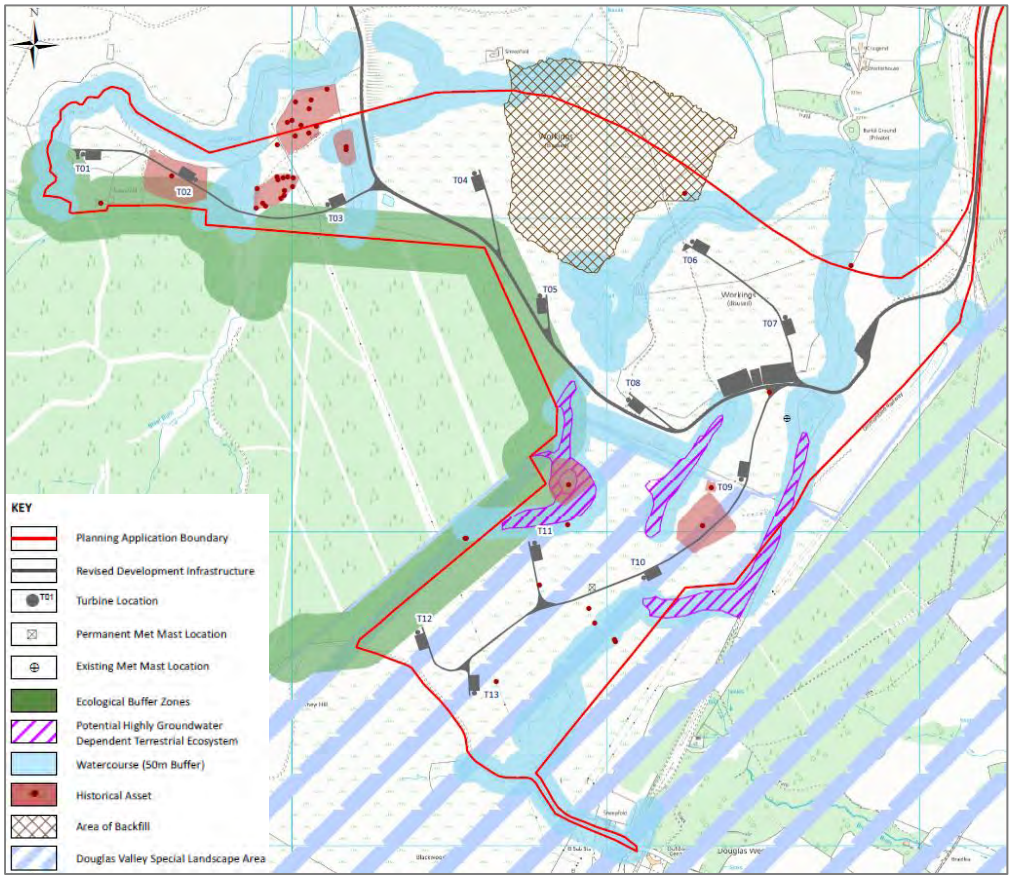

Figure 5 – Local site constraints

4.3 Design Principles

4.3.1 Current best practice guidance provides a framework for the consideration of key design issues including turbine size, layout composition, wind farm design in relation to landscape character and designing for multiple wind farms (SNH, 2014).

4.3.2 The following principles were adopted during the design iterations made by the Applicant since taking on the project to ensure that the final design of the Revised Development was the most suitable for the site whilst remaining capable of delivery in a subsidy-free market:

- the Revised Development should avoid inconsistent turbine spacing, such as relatively large gaps, outliers or excessive overlapping turbines to minimise visual confusion and ensure a balanced / compact array from key views;
- the careful positioning of turbines to ensure coherent connection with the consented Dalquhandy Wind Farm (and ensure that the turbines appear as a continuous array / 'one development');
- the turbines remain set-back from the northernmost edge of the site, and do not come any closer to the settlement of Coalburn than the Consented Development turbines or the adjacent Dalquhandy Wind Farm;
- the turbines remain set-back from the eastern edge of the site that borders the Douglas Water Valley;
- retain spatial separation from the closest isolated residential dwellings in the surrounding area;
- the establishment of a formal footpath network linking Douglas and Coalburn through the site, maximising the benefit from the existing infrastructure on site; and
- other environmental constraints and associated buffers are to be respected.

4.4 Revised Development Layout Iterations

Turbine Layout Iterations

4.4.1 Within the 2015 EIA process, there were seven main design iterations to the layout of the Consented Development that are described within the 2015 ES.

4.4.2 Changes made to the Consented Development layout were undertaken in the context of maintaining a financially viable development proposal when considered against the financial backdrop that existed for onshore wind developments in the UK at that time.

4.4.3 In the same way, and alongside considering all relevant environmental constraints shown in Figure 5 above, technical advice from wind analysts and turbine manufacturers have been a material consideration in arriving at the Revised Development layout, with regards to turbine spacing and placement, ensuring optimum wind energy production at the site and financial viability at today's wholesale price of electricity.

4.4.4 The principal changes to the Consented Development have been an increase in the proposed turbine dimensions, to achieve an increase in the power output of each turbine, and an increase in the amount of electricity generated by each turbine. This has as a result meant a decrease in the overall number of turbines from 15 to 13, due to the increase in generating capacity of each machine and a new turbine layout has been designed to take account of the increase in turbine separation distances required.

4.4.5 In the context of the revised layout, it is noted that at the time of design-freeze for the Consented Development the MoD were understood to be requiring a low flying corridor between wind farms which sterilised the southern part of the Consented Development site boundary. This is no longer required by the MoD, therefore, there is no longer any technical constraint to turbines being located within this part of the site.

4.4.6 In addition, minor changes to the siting of turbines occurred throughout the 2017 design process as new environmental and/or technical information was made available to the design team.

4.4.7 As part of the re-design process, landscape advice has been sought to mitigate the landscape and visual effects of the Revised Development as far as is possible, by avoiding inconsistent turbine spacing, large gaps, outliers or excessive overlapping turbines to minimise visual confusion and ensure a balanced / compact array from key views.

4.4.8 The different design iterations are presented in Table 1, and Figure 6 overleaf illustrates the layout iteration process.

Table 1 – Turbine Layout Iterations

Design Iteration	Description	Design Principles / Reasons for Change from Previous Iteration
Under the control of Douglas West Wind Farm Ltd		
A (April 2017)	13 Turbines	Optimised layout based on a 130 m rotor dimeter and 5 x 3 rotor dimeter separation distance between turbines, looking at maximising turbine performance within the Revised Development layout whilst observing environmental constraints. Turbine number reduced from 15 to 13.
B (May 2017)	13 Turbines	Alternative optimised layout based on a 130 m rotor dimeter and 5 x 3 rotor dimeter separation distance between turbines, looking at maximising turbine performance within the Revised Development layout whilst observing environmental constraints. Turbine number remains at 13, potential for additional turbine within the southern extent of the site.
C (May 2017)	13 Turbines	Decision taken to move forward with the 130 m rotor diameter layout (Layout A). Layout amended to increase stand-off distance between proposed turbine locations and local residential receptors, in particular turbines T06, T09 T10 and T13.
D (June 2017)	13 Turbines	Final optimisation of turbine layout to account for infrastructure and construction constraints, following a site visit by construction engineer.

On-site Infrastructure Layout Iterations

4.4.9 Following the evolution of the turbine layout design, the design of the access tracks, construction compounds and substation was undertaken. The infrastructure required on the site was designed and arranged in such a way as to avoid the main on-site environmental constraints identified.

4.4.10 It was recognised that there was good highway access to the site which would negate the need for lengthy and visually intrusive new access tracks through the landscape. Additional stretches of access track to reach outlying turbines were designed to:

- minimise the number of water crossings;

- avoid more sensitive habitats;
- avoid cultural and archaeologically designated features; and
- minimise the length of new access track by using existing on-site infrastructure.

4.4.11 The substation, construction compound and laydown area locations have been designed to avoid watercourses and sensitive habitats. All are positioned on land disturbed as part of previous opencast mining activities (refer to ES Figure 3.1) and located close to the consented Industrial Area within the eastern extent of the site and site entrance, so as to concentrate the more functional elements of the proposal in one location. The general location for the substation and construction compound have been previously agreed under Non-Material Variation approval ref. CL/15/0273/2.

4.4.12 The substation is required to be located on the eastern side of the site to enable the Revised Development's connection to the wider grid network and the Industrial Area (ES Figure 3.2), as a potential end user of the electricity produced by the Revised Development.

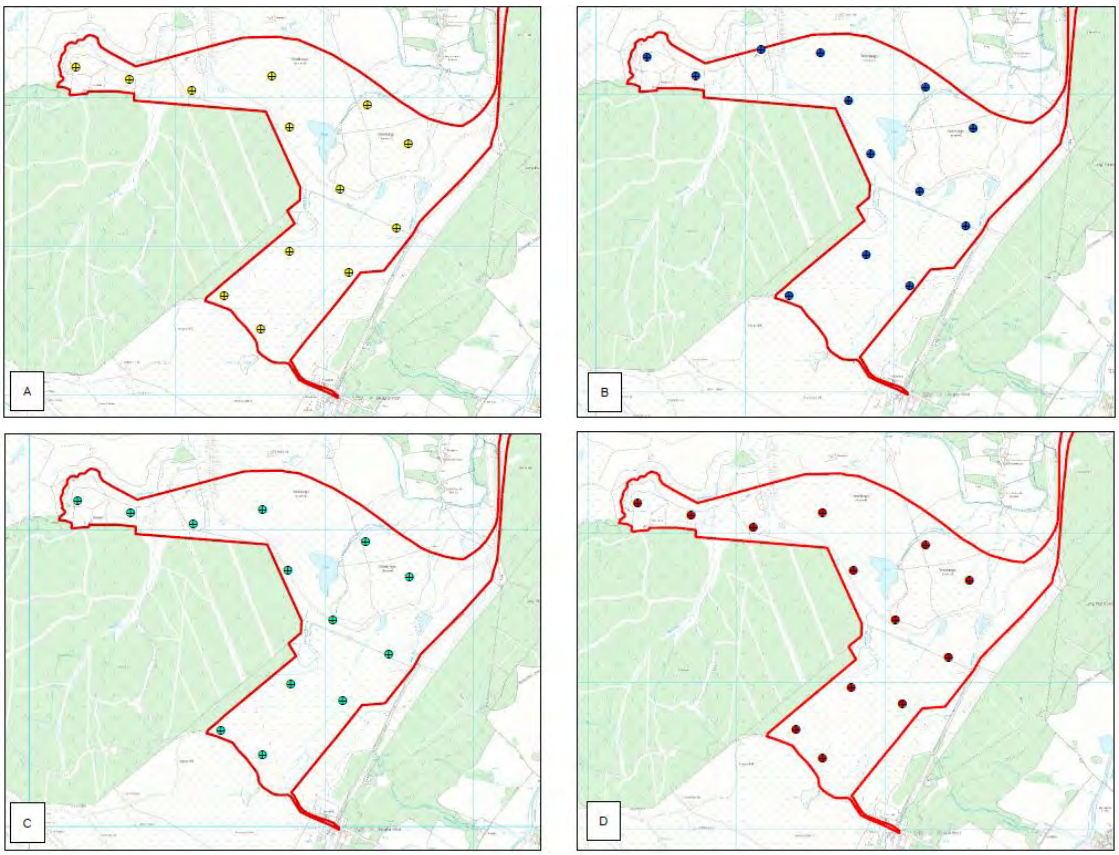

Figure 6 – Turbine layout iterations 2017

5. Access

5.1 Vehicular Access

5.1.1 The proposed access route for the turbines will be from the King George V Port in Glasgow. The route will follow the M8 and then onto the M74, exiting at junction 11 (Poniel) where there is direct access to the site via a private haul road.

5.1.2 The final layout for the Revised Development, involves the re-use of the exiting tarmac surfaced coal haul road that runs from junction 11 of the M74 motorway through the centre of the site. This asset significantly reduces the amount of new roadway required to construct the Revised Development.

5.1.3 Onsite access tracks will be required to link the various turbines to the existing tarmac spine road that runs through the site. Any new access tracks have been designed to avoid any sensitive environmental receptors and have a typical running width of approximately 5 m, with an average stone thickness of 500 mm.

5.1.4 The total length of roads for the Revised Development is approximately 10.26 km and can be sub-divided into two main categories, as detailed in Table 2 below.

Table 2 – Access track composition

Type	Description	Length (km)	Percentage of Total
Existing Road	The Existing tarmac spine road which serves the development and is the main artery running through the site from the M74 motorway. This requires minimal upgrading or repair.	5.36 (total length to J11)	52 %
New Track	New spur roads that will serve either individual turbines or small groups of turbines.	4.90	48 %
	Total	**10.26**	**100 %**

5.2 Access Strategy

5.2.1 To maximise the potential benefit to the local area an Access Strategy has been prepared for the Revised Development site, and is presented within Appendix 3.1 of the ES. The formalisation of a network of paths across the site as part of the Revised Development will build on and enhance the existing path network in the local area which is already well used.

5.2.2 There is much history in and around the Revised Development site and it is proposed to develop a Heritage Trail to mark points of interest on the site and adjoining land (subject to the agreement of adjoining landowners where necessary). The development of this path network creates more opportunities to attract those from further afield to use the path networks around Douglas and Coalburn through the creation of further linked walkways and the development of features of interest in the local area.

5.2.3 As the area is already well used, it is important that public access is maintained during the construction phase. A co-ordinated approach between the Applicant, local communities and adjoining landowners will be taken to agree the exact final route of the Heritage Trail once the physical path improvements

(within the Applicant's control) are agreed and an interpretive strategy prepared as part of the Detailed Access Strategy to be submitted to, and approved by, SLC prior to commencement. Further details on the Outline Access Strategy are included within Appendix 3.1 of the ES.

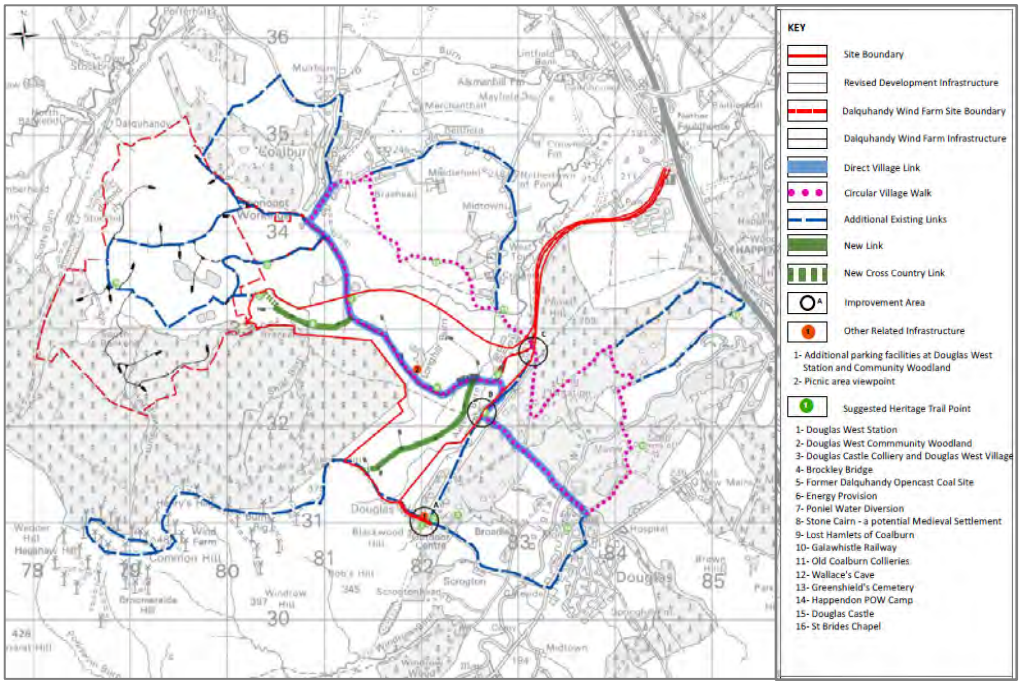

Figure 8 – Outline Access Strategy

5.3 Inclusive Access

5.3.1 It is anticipated that the site boundary will be accessible by people with disabilities via the existing access road and new access tracks around the wind turbines.

6. Public Consultation

6.1 Statutory Consultation

6.1.1 Consultation with key consultees and stakeholders was a central component in finalising the Revised Development layout.

6.1.2 An EIA Scoping Opinion was sought from the South Lanarkshire Council in 2012 and further consultation was carried out in 2015 and more recently by the Applicant in 2017. Further information on the scoping and consultation process is given in Chapter 4 of the Revised Development ES.

6.2 Public Consultation

6.2.1 A programme of pre-application community engagement has been undertaken by the Applicant and has included various meetings, correspondence, public exhibitions and other discussions with the communities closest to the Revised Development site.

6.2.2 The planning application is accompanied by a Pre-Application Consultation Report which details the findings of that work and illustrates the ways in which community engagement has helped identify potential issues arising from the emerging development proposal and, where appropriate, shape the final proposal which is now the subject of this planning application.

6.2.3 Two Public Exhibitions were held by the Applicant on 26 June 2017 in the St. Bride's Centre, Douglas (7 attended) and on the 27 June 2017 in the Coalburn Miners Welfare (7 attended). Visitors to the public events, aside from asking a member of the project staff a question directly, were also able to fill in a comments sheet on the day of the event or take it away and forward it to the Applicant at a later date.

6.2.4 On the whole, feedback from the two closest communities to the Revised Development, Douglas and Coalburn, has been neutral with both communities understanding the reasons for the changes proposed to the Consented Development. The pre-application consultation exercise has also helped identify potential issues arising from the emerging development proposal and, where appropriate, shape the final proposal which is now the subject of this planning application, notably the Access Strategy and Community Benefit proposals.

6.2.5 The Applicant confirms that the company will continue to liaise with the local community during the planning application process and during the construction, operational and decommissioning phases of the Revised Development.

7. Programme

7.2 Construction

7.2.1 The on-site construction period for the Revised Development is expected to be approximately 12 months and includes a programme to reinstate all temporary working areas, as shown in Table 3.

7.2.2 Normal construction hours will be between 07:00 and 19:00 Monday to Friday and 07:00 to 13:00 on a Saturday. These times have been chosen to minimise disturbance to local residents. A fully detailed construction programme will be provided in a Construction Environmental Management Plan (CEMP) prior to the commencement of construction.

Table 3 – Indicative Construction Programme

Task	Month Number											
	1	2	3	4	5	6	7	8	9	10	11	12
Mobilisation												
Access & Site Tracks												
Foundations												
On-site Cabling												
Crane Hardstanding												
Substation												
Off-site Cabling												
Turbine Delivery												
Turbine Erection												
Commissioning & Testing												
Site Reinstatement												

7.2.3 The Revised Development will be phased so that certain activities will take place concurrently.

7.3 Operation

7.3.1 The operational lifespan of the Revised Development would be 25 years, after which it would be appropriately decommissioned. It is expected that decommissioning would take approximately twelve months. If, after the operational lifespan of the Revised Development has expired there is potential for re-powering the development, for example by installing new nacelles, blades or other components, this would be subject to a new and separate application.

8. Conclusion

8.1.1 The final layout has been informed by a robust EIA and lengthy design iteration process, taking into account potential environmental impacts and their effects, physical constraints, and health and safety considerations. The information used to inform the design iteration process included consultation responses received, baseline data and the impact assessment undertaken.

8.1.2 The final turbine layout has been designed to effectively capture the energy from the wind in order to maximise the energy yield from the site, whilst minimising potential impacts on the environment wherever possible.

8.1.3 Consideration has been given to a range of design issues such as relevant planning policy, turbine locations as well as various environmental, ecological and technical requirements. Predicted environmental effects arising from the Revised Development have been mitigated as far as possible, if not eliminated during the iterative design process.

8.1.4 Overall the Revised Development is an appropriately designed, sensibly located, and completely sustainable development which is in line with policies in the local and strategic development plans and conforms to national policy. It will provide a valuable contribution towards the ambitious national targets for electricity generation from renewable sources, and contribute towards economic growth in South Lanarkshire and Scotland as a whole. The Applicant has sought to optimise the Consented Development to maximise energy production, within acceptable limits, to ensure that the Revised Development is viable subsidy-free.