

2. Approach to EIA

Introduction

- 2.1 This Chapter sets out the approach and methodology used to complete the assessment of likely significant environmental effects occasioned by the Project for Assessment.
- 2.2 This Chapter sets out the following:
- Adoption of best practice within the EIA process;
 - Scope of the EIA, including a summary of the EIA Scoping process and the technical topics 'scoped in' and 'scoped out' of the EIA / ES;
 - Consultation, including a summary of stakeholder and public engagement and how the key environmental issues identified have been addressed within the EIA / ES;
 - Approach to the assessment of likely significant effects, specifically covering: definition of the Project for Assessment, consideration of secondary effects, the extent of data collection, baseline data collection activities, consideration of future baseline, identification of sensitive receptors, Development Specification and supporting plans, information to inform assessment, construction material volumes / quantities, layout and turbine specification, operation, assessment scenarios, defining mitigation and how this will be controlled, use of micro-siting, reporting effect conclusions and limitations and assumptions; and
 - Impacts on designated ecological sites.
- 2.3 The methodology for the assessment of cumulative effects alongside a single co-ordinated assessment are presented in **Chapter 16: Assessment of Cumulative Effects**.

Adoption of Best Practice

- 2.4 As confirmed within **Chapter 1: Introduction**, this ES meets the requirements set out in Regulation 18, Paragraphs 3 – 4 and Schedule 4 of the EIA Regulations.
- 2.5 In addition, the EIA process (and therefore the ES) has been undertaken with due consideration of the following guidance documents:
- Ministry of Housing, Communities and Local Government and Department for Levelling Up, Communities and Housing, Planning Practice Guidance (PPG) [Online]¹; and

- Institute for Sustainability and Environmental Professionals (ISEP) Impact Assessment Guidelines: Implementing the Mitigation Hierarchy from Concept to Constructionⁱ².

Scope of the EIA

EIA Scoping

- 2.6 A request for a Scoping Opinion, together with an EIA Scoping Report (**Appendix 2.1ⁱⁱ**), was submitted to RMBC and RBC on 16th December 2024. The EIA Scoping Report was prepared in accordance with Regulation 15 of the EIA Regulations and set out the effects that are considered to be unlikely / not significant and those that are considered to be likely / significant alongside the proposed methodology for assessment. A summary of the technical topic breadth of the EIA, as reported in this ES, is provided below.
- 2.7 At the time of writing (June 2026), a Scoping Opinion has not been received from RMBC or RBC. However, responses to statutory consultees comments are provided in **Appendix 2.2** and those from non-statutory consultees are summarised in **Appendix 2.3**.

Technical Topic Breadth

- 2.8 The technical topics ‘scoped in’ and ‘scoped out’ are summarised below.

Technical topics ‘scoped in’

- Transport and access (**Chapter 6**);
- Noise and vibration (**Chapter 7**);
- Shadow flicker (**Chapter 8**);
- Ecology (**Chapter 9**);
- Ornithology (**Chapter 10**);
- Landscape and visual (**Chapter 11**);
- Built heritage (**Chapter 12**);
- Archaeology (**Chapter 13**);
- Hydrology, hydrogeology and peat (**Chapter 14**); and
- Climate change (**Chapter 15**).

ⁱ This guidance document replaces both ‘Shaping Quality Development’ and ‘Delivering Quality Development’ noted in the EIA Scoping Report (**Appendix 2.1**).

ⁱⁱ The full list of documents submitted with the EIA Scoping Report (**Appendix 2.1**) can be found on the Rochdale Borough Council planning portal:
https://account.rochdale.gov.uk/pr/s/detail/a0rSI00000e8FQGIA2?c_r=Arcus_BE_Public_Register

Technical topics ‘scoped out’

- Agricultural land;
- Air quality;
- Artificial lighting;
- Aviation and radar;
- Flood risk;
- Ground conditions, land contamination and minerals;
- Major accidents and / or disasters;
- Socio-economics and human health;
- Telecommunications; and
- Waste and resources.

Evolution of Scope / Reporting Significant Effects

EIA Scoping and 2025 ES

2.9 While the EIA Scoping Report in support of the 2025 ES sought to establish the overall framework for the EIA / 2025 ES, the following was undertaken prior to submission in December 2024:

- The design and strategies that underpin the Project for Assessment have been refined / developed further;
- Additional technical studies / surveys / analysis / evaluations have been completed; and
- Engagement with consultees has been undertaken.

2.10 The description presented in **Chapter 4: Development Specification** as part of the 2025 ES superseded that in the EIA Scoping Report (**Appendix 2.1**) and reflected the latest engineering design at the time of submission.

2.11 Where the scope of the assessment proposed within the EIA Scoping Report was altered or amended, this was clearly identified in the ‘Scope of Assessment’ section of **Technical Chapters 6 – 15**. This included additional evidence and / or rationale for the alterations to the scope of likely significant effects and / or receptors, where appropriate.

2.12 An iterative scoping process was applied to **Technical Chapters 6 – 15** of the 2025 ES, whereby the scope of effects / receptors deviates from that set out in the EIA Scoping Report with further clarification provided in the Chapters, where appropriate.

- 2.13 The use of an iterative approach was set out in the EIA Scoping Report and is considered to be in accordance with paragraph 038 of the PPG which states: “...*where it becomes evident during the assessment process...that a particular environmental factor is absent or unlikely to be significantly affected by a proposed development, there should be no need for further assessment of that factor even if it was identified in the scoping process...*”
- 2.14 Where relevant, **Volume 2: Technical Appendices to the Primary Report** and other documents and plans submitted alongside the Applications (RMBC Ref: 25/00680/FUL³ and RBC Ref: 2025/0267⁴) provide further detail on technical topics / effects that are considered to be unlikely / not significant. However, where considered pertinent, effects that are unlikely / not significant have been reported in **Volume 1: Primary Report and Supporting Graphics** to ensure that there is transparent responses to issues raised through stakeholder and public engagement (see ‘Consultation’ below).

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- 2.15 Since the submission of the 2025 ES, the design of the Project for Assessment has evolved in response to technical and environmental constraints as well as taking into consideration consultation comments that have raised during this period.
- 2.16 The Project Team have reviewed these comments and where relevant to the ES, these comments have been summarised, alongside responses and where further information can be found within the ES and other Application documents here relevant in **Appendix 2.4**.
- 2.17 In light of the above, the scope of effects and receptors subject to assessment and presented as part of the 2025 ES were reviewed by the Project Team where relevant to take into consideration the above and any changes to the scope presented within the 2025 ES are documented within the ‘Scope of Assessment’ sections of **Technical Chapters 6-15**.

Consultation

- 2.18 In addition to the EIA Scoping process outlined above, in some instances, the Project Team have undertaken technical consultation with relevant consultees to inform the scope, assessment methodology / approach and the outputs of baseline data collection activities. The specifics of technical consultation are reported in **Technical Chapters 6 – 15**, where undertaken.
- 2.19 Briefing sessions (online) were held with planning and other technical specialist officers from RBC and RMBC, as well as consultees, to provide an overview of the Project for Assessment and the approach to assessment within the Applications in January 2025. These provided officers and consultees the opportunity to provide comments and ask questions which have been taken on board in the preparation of the Applications.
- 2.20 A range of non-technical stakeholders have also been contacted to obtain more informed feedback to inform the EIA process and raise awareness of what the Applicant and technical team are aiming to assess and achieve as part of the Applications. Such stakeholders include:

- Councillors at RMBC and RBC;
- Councillors and officers at nearby local authorities, such as Lancashire County Council;
- Local Members of Parliament;
- Business groups, such as Greater Manchester Chamber of Commerce and East Lancashire Chamber of Commerce;
- Primary and secondary schools;
- Further education facilities; and
- Community groups, such as the Norden Neighbourhood Forum.

2.21 Two phases of consultation with the community and wider audiences were held as follows.

Phase one consultation – 5th to 26th November 2024

2.22 Phase one ran from 5th to 26th November 2024 and was intended to introduce the principles of the project and communicate the need for new renewables development in the area (including site suitability) and the provision of a Community Wealth Fund for the benefit of the local area. As part of this phase, the following methods were used:

- A dedicated project website was set up (scoutmoor2.co.uk);
- A community information line was established;
- Social media adverts to alert local communities to the consultation;
- Leaflet drops to residents and businesses;
- Press release to local and regional news outlets and TV interview on BBC Look North; and
- Four public exhibitions at venues local to the Assessment Boundary.

Phase two consultation – 25th March to 29th April 2025

2.23 Phase two ran from 25th March to 29th April 2025 and was intended to provide an update on the proposals following design evolution and cover more information on matters during the first phase of consultation, such as moorland restoration. As part of this phase, the following methods were used:

- The dedicated project website was maintained and updated with the latest news stories and information related to the submission of the EIA Scoping Report;
- The community information line was maintained;
- Social media adverts to alert local communities were issued;

- Leaflet drops to residents and businesses;
- Press releases to local news outlets;
- Five public exhibitions at venues local to the Assessment Boundary;
- Three technical webinars, covering noise and shadow flicker, protecting peatland and delivering moorland restoration and access and infrastructure; and
- Provision of educational material to local education providers to discuss the project with pupils in Years 9 – 11.

2.24 Further details on the above are provided within the **Statement of Community Involvement** submitted alongside the Applications.

2.25 The key environmental related comments raised and where these are considered within the ES are summarised in **Table 2.1**.

Table 2.1: Summary of where key environmental aspects raised are addressed

Environmental aspect	Relevant technical chapter(s)
Access and recreational impacts	Chapter 6: Transport and Access as well as the Outdoor Access Management and Enhancement Plan submitted alongside the Applications
Operational noise and shadow flicker impacts	Chapter 7: Noise and Vibration and Chapter 8: Shadow Flicker and their appendices
Changes in views	Chapter 11: Landscape and Visual and its appendices
Peatland and moorland restoration	Chapter 9: Ecology and Chapter 14: Hydrology, Hydrogeology and Peat and their appendices, as well as the Moorland Restoration and Management Plan and Habitat Management and Monitoring Plan submitted alongside the Applications
Heritage impacts	Chapter 12: Built Heritage and Chapter 13: Archaeology and their appendices
Potential water contamination	Chapter 14: Hydrology, Hydrogeology and Peat and its appendices

2.26 As outlined above under ‘*Evolution of Scope / Reporting Significant Effects*’, consultation comments received since submission of the 2025 ES have been taken into account, where relevant to the ES. The Project Team has provided corresponding responses, with signposting to where further information can be found within **Appendix 2.4**.

2.27 In addition, more detailed responses are set out within the **Applicant’s Responses to Statutory and Non-Statutory Consultee Comments**, which address matters beyond the

ES as part of the wider FEI Submission. A separate **‘You Said, We Heard, We Acted’** document is also provided, summarising the Applicant’s response to public consultation feedback.

Approach to Assessment

Overview

- 2.28 This Section outlines the approach to the assessment of likely significant effects adopted in the EIA process and reported in this ES.
- 2.29 The methodologies for the assessment of likely significant effects of the Project for Assessment during the construction, operational and decommissioning stages vary across the technical topics considered within the EIA process, largely due to technical specific guidance and best practice. Therefore, each of **Technical Chapters 6 – 15** set out the specific technical assessment methodologies. However, there are several aspects to the approach which require consistency across the ES. These aspects are discussed below with the aim of identifying any nuances and how these have been accommodated with the approach.

Definition of the Project for Assessment

- 2.30 To accord with case law and best practice, consideration was given to appropriately defining the ‘project’ for the EIA process from the outset.
- 2.31 In the EIA Scoping Report (**Appendix 2.1**), it was stated that the ‘Project for Assessment’ included the following components:
- The wind farm and associated infrastructure and access, moorland restoration and works on the Common Land (collectively termed the ‘Proposed Scheme’); and
 - Electrical connection infrastructure that is required to connect the wind farm to the Rossendale Bulk Supply Point (BSP) (the ‘Electrical Grid Connection’).
- 2.32 Since the submission of the EIA Scoping Report it has been confirmed that the Electrical Grid Connection and the associated infrastructure will be delivered by the Applicant and forms part of the Applications. The overall terminology of ‘Project for Assessment’ has not changed and a description of the above components is provided in **Chapter 4: Development Specification**.
- 2.33 It is noted that the works at the Rossendale BSP will be undertaken by the District Network Operator (DNO) and not the Applicant. To ensure appropriate consideration of these works alongside the Project for Assessment and any ‘combined environmental effects’, the cumulative (in-combination) effects are reported in **Chapter 16: Assessment of Cumulative Effects**.

Consideration of Secondary Effects

- 2.34 In the EIA Scoping Report (**Appendix 2.1**), it was stated that no off-site improvements / mitigation have been identified through the EIA process, as such, no consideration of secondary effects arising from such improvements or mitigation is anticipated to be required.

- 2.35 Since the EIA Scoping Report, it has been identified that there may be works off-site associated with the Project for Assessment to mitigate adverse impacts. These include:
- Provision of short-term alternative parking along construction routes (e.g. in Edenfield) where Traffic Regulation Orders may be implemented and therefore parking spaces temporarily removed; and
 - Works along the route from Liverpool (as Port of Entry) to the Assessment Boundary, including trimming of vegetation and temporary removal of bollards and laydown of additional hardstanding at junctions.
- 2.36 It is considered appropriate that such mitigation does not need to be within the Assessment Boundary as they would be undertaken by a third party and any impact will be assessed and controlled as part of a separate approval process for such works, which will be subject to its own protocols to understand any environmental impacts.
- 2.37 Nonetheless, there will be (secondary) effects associated with the implementation / delivery of such mitigation off-site. However, such works will be limited in nature, temporary and short-term. In addition, a limited number of receptors (such as pedestrians, cyclists and vehicles drivers / occupants using the local road network) would likely be affected. Therefore, significant effects are unlikely to arise.

The Extent of Data Collection

- 2.38 For all technical topics, baseline data has been collected for the Assessment Boundary, as defined in **Figure 1.1**. This represents the maximum extent of direct permanent and temporary works associated with the components of the Project for Assessment.
- 2.39 Where appropriate, additional baseline data has been collected for surrounding areas (i.e. technical study areas) dependent on specific / best practice guidance relevant to the technical topic / likely significant effect. The technical study areas utilised in the EIA process are set out in **Technical Chapters 6 – 15**.
- 2.40 For the Electrical Grid Connection, a more high-level set of technical baseline data has been collected compared to the remainder of the Assessment Boundary. This is due to the below-ground nature of permanent works, the extent of such works (i.e. largely within an existing highway corridor) and the limited likely significant effects associated with this component.

Baseline Data Collection Activities

- 2.41 Schedule 4, Paragraph 3 of the EIA Regulations states that an ES should include:
- “A description of the relevant aspects of the current state of the environment (baseline scenario).”*
- 2.42 Likely significant effects have largely been described in the ES in relation to the deviation from the baseline environment within the Assessment Boundary and / or relevant technical study areas (where this is not the case this is explained below under ‘Assessment Scenarios’). As such, to inform the technical assessments, it has been necessary to establish the relevant baseline conditions at the Assessment Boundary and technical study areas.

- 2.43 Baseline data has been collected through the following means (where relevant / required):
- Desk-based studies;
 - Site visits and surveys;
 - Review of existing site-specific information or public literature;
 - Modelling;
 - Review of relevant national and local planning policies; and
 - Consultation with relevant statutory and non-statutory consultees and the public during the EIA process.
- 2.44 The studies / surveys / analysis / evaluations that informed **Technical Chapters 6 – 15** are summarised in **Table 2.2**.

Table 2.2: Studies / surveys / analysis / evaluations that informed Technical Chapters 6 – 15

Technical topic	Activity	Date
Transport and access	Desk-based study	November 2024
	Automatic Traffic Counter (ATC) surveys	November 2024
	Abnormal Load Route Survey	January 2025
	Transport Assessment	May 2026
Noise and vibration	Baseline noise survey	December 2024 – February 2025
Shadow flicker	Desk-based review of inhabited properties within 10 times the rotor diameter of the proposed wind turbines	April 2025
	Assessment of window dimensions	April 2025
Ecology	Desk study	November 2024
	Preliminary bat roost survey	April 2023 and July – August 2024
	Bat static survey	April – October 2022, 2023 and 2024
	Great crested newt eDNA survey	May 2023 and April 2024
	Great crested newt population surveys	May – June 2024

Technical topic	Activity	Date
	National Vegetation Classification survey	July – August 2024
	UK Habitat Survey and Condition Assessment	July – August 2024
	Protected species surveys (badger, water vole and otter)	July 2022 and August 2023
	Biodiversity Net Gain (BNG) calculations	May 2026
	River Condition Assessment Surveys	April 2025
	UK Habitats Survey and Condition Assessment for option C Grid Connection Route and Laydown area	May 2026
Ornithology	Desk study	August 2023
	Vantage Point surveys	August 2024
	Breeding raptor walkover surveys	August 2024
	Breeding bird surveys	August 2024
	Ornithological technical reporting	May 2025
Landscape and visual	Landscape and visual site assessment survey	March 2025
	Desktop landscape and visual study	August 2024
	Site visits	July 2024 – April 2025
	Final site photographs	April 2025
	Figures and visualisations	May 2025
	Landscape and Visual Impact Assessment	Summer 2024 – Spring 2025
	Further on site analyses and photography for FEI	May 2026
Built heritage	Initial Heritage Appraisal	October 2024
	Heritage appraisal and assessment of the heritage significance of assets	October 2024 – April 2025
	Heritage Assessment	June 2026
Archaeology	Preliminary Archaeological Desk-Based Assessment	October 2024
	Phase 1 peat probing	April 2024
	Phase 2 peat probing	October 2024

Technical topic	Activity	Date
	Further Phase 2 peat probing Survey 2	December 2024 – February 2025
	Phase 2 – peat probing Survey 3	February 2025
	Phase 2 – peat probing Survey 4	March 2026
	Phase 2 – peat probing Survey 5	April 2026
	Hydrology assessment / review	Winter 2024 – Spring 2025
	Walkover Survey of Alternative Grid Connection and Turbine Laydown Area	May 2026
	Detailed Archaeological Desk-Based Assessment	May 2026
Hydrology, hydrogeology and peat	Phase 1 peat probing	April 2024
	Phase 2 peat probing	October 2024
	Further Phase 2 probing	February 2025 to April 2026
	Peat Landslide Hazard Risk Assessment walkover	February 2025
	Hydrology walkover	February 2025 and April 2026
	Peat condition assessment mapping	February 2025
Climate change	Carbon Calculator Input Data & Results	May 2026

- 2.45 Throughout the EIA, the origin of all third-party data, the dates of surveys and the dates when data sources have been accessed have been clearly outlined within the relevant **Technical Chapter 6 – 15** alongside any limitations or assumptions.
- 2.46 It is understood that the majority of the Assessment Boundary has been subject to a degree of ongoing land management, such as grazing, during baseline data collection activities outlined in **Table 2.2**. While such management practices directly influence the ‘baseline’ of the majority of the Assessment Boundary, there are unlikely to be any material influences on the overall prevailing environmental conditions due to the limited nature of such practices.
- 2.47 It is also noted that there have been quarry operations at Scout Moor Quarry, which lies adjacent to the western extent of the Assessment Boundary (albeit currently the quarry has been mothballed) and at Whitworth Quarry, situated close to the eastern extent of the Assessment Boundary. There are also a number of projects under construction in the vicinity of the Assessment Boundary during the collection of baseline data. These will contribute to / have influenced the overall baseline conditions, as recorded within the baseline data collected for the EIA process.

Consideration of Future Baseline

2.48 Schedule 4, Paragraph 3 of the EIA Regulations states that an ES should include:

“...an outline of the likely evolution thereof without implementation of the development as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of availability of environmental information and scientific knowledge.”

2.49 The future baseline scenario is addressed within each of the **Technical Chapters 6 – 15**. The qualitative discussions / appraisals under the ‘Future Baseline’ section are associated with potential changes to the Assessment Boundary and technical study areas assuming no further development and the continuation of the existing management regime.

2.50 A ‘do nothing’ scenario has also been discussed in **Chapter 5: Consideration of Alternatives** specifically with respect to the likely significant effects (both adverse and beneficial) that would not occur in the absence of the Project for Assessment.

2.51 As set out under ‘Baseline Data Collection’, the majority of technical assessments presented in the ES are based on the deviation from the existing baseline scenario and the predicted future baseline conditions are presented for information purposes only. However, predicted future baselines have been used in some technical assessments, for instance in respect to traffic flows in **Chapter 6: Transport and Access** and future carbon budgets have been used to evaluate GHG emissions as presented in **Chapter 15: Climate Change**. The baseline conditions utilised within the technical assessments are presented in **Technical Chapters 6 – 15**.

2.52 Separate consideration of a ‘future baseline’ scenario with and without Scout Moor Wind Farm has been undertaken for specific technical topics. Further details are provided under ‘Assessment Scenarios’ below.

Identification of Sensitive Receptors

2.53 Schedule 4, Paragraph 4 of the EIA Regulations states that an ES should include:

“A description of the factors specified in Regulation 4(2) likely to be significantly affected by the development: population, human health, biodiversity (for example fauna and flora); land (for example land-take), soil, (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions, impacts relevant to adaption), material assets, cultural heritage, including architectural and archaeological aspects, and landscape.”

2.54 In accordance with the EIA Regulations, the aspects of the environment likely to be significantly affected by the Project for Assessment have been identified and set out under ‘Scope of the Assessment’ in **Technical Chapters 6 – 15**.

2.55 Consideration has also been given to future sensitive receptors of the Project for Assessment (i.e. future public right of way (PRoW) users, etc.) where relevant in **Technical Chapters 6 – 15** and / or supporting appendices. This has ensured that the

likely significant effects of the Project for Assessment are considered throughout all stages.

- 2.56 The sensitive receptors considered in **Technical Chapters 6 – 15** are summarised in **Table 3.1** in **Chapter 3: Assessment Boundary Context**.

Development Specification and Supporting Plans

- 2.57 As set out in **Chapter 1: Introduction**, the Applications are detailed in nature.
- 2.58 This ES is required to provide sufficient information about the Project for Assessment, such that both RBC and RMBC can reasonably be satisfied that they have sufficient information to decide that they have full knowledge of the likely significant environmental effects of the Project for Assessment.
- 2.59 The technical assessments undertaken as part of the EIA and reported in this ES are based on **Chapter 4: Development Specification** and a suite of supporting plans. Together, the Development Specification and supporting plans are considered to provide the level of information required, in a single location, to inform a robust assessment of likely significant environmental effects as part of the EIA process undertaken and reported in this ES.
- 2.60 The Development Specification provides a written description of the construction and operational stages of the Project for Assessment alongside timescales. Decommissioning works are also set out at the end of the Chapter, where these differ from the description of construction stage activities / logistics (see 'Assessment Scenarios' below).
- 2.61 The supporting plans for which approval will be sought as part of the Applications are as follows:
- **Figure 4.1:** Infrastructure Layout;
 - **Figure 4.2:** Infrastructure Layout - Construction Phase;
 - **Figure 4.3:** Infrastructure Layout - Operational Phase;
 - **Figure 4.4:** Rooley Moor Road Crossing Plan View;
 - **Figure 4.5:** Rooley Moor Road Crossing Plan & Longitudinal Section;
 - **Figure 4.6:** Rooley Moor Road Crossing Construction Detail;
 - **Figure 4.7:** Scout Moor Quarries Access Design General Arrangement; and
 - **Figure 4.8:** Scout Moor Quarries Laydown Area and Junction General Arrangement.
- 2.62 The supporting plans for information comprise:
- **Figure 4.9:** Scout Moor Quarries Access Design Swept Path Assessment;

- **Figure 4.10:** Scout Moor Quarries Laydown Area and Junction Swept Path Assessment;
- **Figure 4.11:** Aviation Lighting Plan;
- **Figure 4.12:** Typical Turbine Elevation;
- **Figure 4.13:** Typical Turbine Foundation Detail;
- **Figure 4.14:** Typical Crane Hardstanding;
- **Figure 4.15:** Typical Cable Trench Detail;
- **Figure 4.16:** Indicative Onsite Substation Layout;
- **Figure 4.17:** Indicative Onsite Substation Elevation;
- **Figure 4.18:** Cable Route Options;
- **Figure 4.19:** Typical Construction Compound;
- **Figure 4.20:** Typical Compound Fencing;
- **Figure 4.21:** Typical Track Details;
- **Figure 4.22:** Typical Water Crossing Methods;
- **Figure 4.23:** Proposed Indicative Fencing Layout with Access Point Locations; and
- **Figure 4.24:** Infrastructure Layout - Indicative Decommissioning Plan.

2.63 The supporting plans for information comprise typical details of works for elements of the Project for Assessment. These have been used to inform the principles and assumptions underpinning the relevant sections of **Chapter 4: Development Specification** that inform the technical assessments.

2.64 It is also noted that the final wind turbines that will be installed as part of the Project for Assessment are subject to further engineering design work and a procurement exercise. As such, a 'candidate wind turbine specification' is shown, where relevant, in the above plans and has been used for the purposes of the technical assessments reported in this ES. The selected wind turbines will sit within the maximum parameters / description set out in **Chapter 4: Development Specification** and the supporting plans (e.g. with respect to height to tip of 180m) and therefore a 'worst-case' has been assessed.

2.65 At this stage, there are two options for the route of the Electric Grid Connection from the wind farm to Rossendale BSP. The boundaries associated with both route options are shown in **Figure 1.1**. For the Electrical Grid Connection and associated infrastructure, no specific plans other than the route options are available at this stage. However, a textual description of this infrastructure and associated construction works are provided in **Chapter 4: Development Specification**.

- 2.66 As noted under 'Defining the Project for Assessment' above, it is noted that the works at the Rossendale BSP will be undertaken by the DNO and not the Applicant and as such, these works are considered cumulatively with the Project for Assessment (see **Chapter 16: Assessment of Cumulative Effects**).

Information to Inform Assessment

- 2.67 The key aspects that have informed the technical assessments are outlined below.

Construction material volumes / quantities

- **Chapter 6: Transport and Access** – with respect to development-generated traffic flows and associated effects.

Layout and turbine specification (e.g. heights)

- **Chapter 7: Noise and Vibration** – associated with construction noise;
- **Chapter 9: Ecology** – with regard to habitat loss, modification and enhancement of habitats alongside injury, mortality and disturbance to species of conservation concern;
- **Chapter 10: Ornithology** – with respect to mortality and displacement of bird species;
- **Chapter 11: Landscape and Visual** – with regard to effects on landscape character and views;
- **Chapter 12: Built Heritage** – in relation to harm to heritage significance of assets through their setting;
- **Chapter 13: Archaeology** – in relation to the loss / disturbance of buried archaeological remains; and
- **Chapter 14: Hydrology, Hydrogeology and Peat** – with regard to changes in hydrology and hydrogeology as well as the loss, degradation and disturbance of the peat resource.

Operation

- **Chapter 7: Noise and Vibration** – with regards to disturbance from operational noise;
- **Chapter 8: Shadow flicker** – in relation to shadow flicker experienced by receptors; and
- **Chapter 15: Climate Change** – in relation to carbon savings.

Assessment Scenarios

- 2.68 In accordance with the EIA Regulations the likely significant effects arising from the Project for Assessment, taking account of construction, operational and decommissioning stages, have been identified, assessed and reported in this ES.

Primary scenarios

- 2.69 The following primary scenarios have been assessed in the EIA and are reported on in this ES, where relevant to each technical topic / likely significant effect:
- **Baseline vs peak construction** – this varies across technical topics and has not been attributed to a specific year. Instead, it has been determined at what point the worst-case effect could occur. This has been defined in the technical assessments reported in this ES (i.e. in **Technical Chapters 6 – 15**); and
 - **Baseline vs operation** (from 2030) – likely significant effects associated with the full operation of the Project for Assessment. The duration of this stage is assumed to be 40 years.

Decommissioning

- 2.70 Decommissioning will only apply to the wind farm and associated infrastructure of the Project for Assessment and will include the shutdown of plant / equipment and removal of above ground structures at the end of its operating life. It is assumed that below-ground structures will be removed to a depth of 1.5m below ground level. The moorland restoration proposals will remain.
- 2.71 As stated in the EIA Scoping Report (**Appendix 2.1**), due to the lack of information available on the exact activities / process of the decommissioning stage, the technical assessments for the construction stage undertaken as part of the EIA and reported in this ES have been used as a proxy (worst-case) for the decommissioning stage and represent a reasonable worst-case assessmentⁱⁱⁱ.
- 2.72 Where differing / additional activities are likely to occur during the decommissioning stage to that during the construction stage, these are set out at the end of **Chapter 4: Development Specification** and have informed this analysis.
- 2.73 It is assumed that decommissioning works would be controlled by a Decommissioning Environmental Management Plan (DEMP). This will be informed by the construction related mitigation identified in this ES set out in **Volume 3: Environmental Management Plan**.

Further assessment scenarios

- 2.74 Additional assessment scenarios that have been considered for specific technical topics / likely significant effects in the ES are set out below.
- 2.75 It should be noted that the assessment scenarios set out are for purposes of the EIA only. For a number of standalone technical assessments, alternative or additional scenarios have been considered and / or required.

Construction stage traffic assessment

- 2.76 The assessment of construction stage effects in **Chapter 6: Transport and Access** utilises a future baseline of 2027 (when initial site works are anticipated to commence).

ⁱⁱⁱ With the exception of Transport and Access for which no consideration of decommissioning activities will be undertaken.

- 2.77 To establish the future baseline conditions, the National Road Traffic Forecast (NRTF) low growth factor was applied to the 2023 obtained from the Department for Transport (DfT) database in order to estimate future year flows for 2024 so that a common base year could be made with the ATC survey data obtained in 2024 (see **Table 2.2**). The NRTF low growth from 2023 to 2024 is 1.005. Then a NRTF low growth factor for 2024 to 2027 of 1.016 was applied. The variance between the existing and future baseline is limited so has no influence on the overall assessment outcomes.

Consideration of existing operational wind farm schemes

- 2.78 Due to specific technical guidance^{iv}, for noise and landscape and visual the existing operational wind farm schemes have been considered ‘cumulatively’ rather than as part of the baseline conditions. Specific consideration of Scout Moor Wind Farm is dealt with below.
- 2.79 The assessment of operational noise effects has in part utilised a ‘cumulative’ scenario due to relevant guidance (see **Chapter 7: Noise and Vibration**). The noise immissions from the Project for Assessment have been considered alongside existing noise immissions from Scout Moor Wind Farm and Sheepfold turbines collectively at selected receptors. These overall noise immissions have been considered relative to the Total Noise Limit (i.e. the ‘noise budget’) in line with relevant guidance⁵. Where appropriate, performance against Site Specific Noise Limits, a portion of the Total Noise Limit applicable to the Project for Assessment only, has been used to identify the effects for other selected receptors. Further details are provided in **Chapter 7: Noise and Vibration**.
- 2.80 The assessment of operational effects for landscape and visual has considered the existing and operational wind farm schemes within the relevant search area as part of the baseline conditions and the main assessment reported in **Chapter 11: Landscape and Visual** and not separately as a cumulative (in-combination assessment). Further details are provided in **Chapter 11: Landscape and Visual**.

Consideration of Scout Moor Wind Farm

- 2.81 To the east of the Assessment Boundary is the existing Scout Moor Wind Farm^v. This existing wind farm comprises 26 turbines, each with a blade tip height of 100m and an installed capacity of 2.5MW per turbine (65MW total). Scout Moor Wind Farm began exporting electricity in 2008. The consent is temporary for a period of 25 years. Therefore, the wind farm is required to be decommissioned by July 2033.
- 2.82 As Scout Moor Wind Farm is within the western extents / adjacent to the Assessment Boundary and it is due to be decommissioned three years after the start of the operational stage of the Project Assessment (i.e. in 2030), the following assessments are considered to be potentially influenced by this decommissioning:
- **Chapter 11: Landscape and Visual;** and

^{iv} e.g. NatureScot (2021) Assessing the Cumulative Landscape and Visual Impact of Onshore Wind Energy Developments.

^v Section 36 reference: GBDC/003/00005c-02.

- **Chapter 12: Built Heritage.**

- 2.83 To account for this, the relevant technical assessments related to the above two technical topics for the Project for Assessment will consider two ‘future baseline’ scenarios – with and without Scout Moor Wind Farm in situ. This ensures that an assessment is provided both against the existing baseline (in line with the EIA Regulations) while also taking into consideration that the majority of the lifespan of the Project for Assessment (approximately 37 of the 40 year operational lifespan) will be without Scout Moor Wind Farm.

Greenhouse gas emissions

- 2.84 The assessment of greenhouse gas (GHG) emissions has considered the whole lifecycle of emissions associated with both the construction, operational and decommissioning stages of the Project for Assessment, as far as reasonably possible. GHG savings / reductions resulting from the operation of the Project for Assessment relative to energy generation from standard fossil fuels have also been considered. This approach has enabled the net GHG effect of the Project for Assessment to be established in accordance with the latest guidance on assessing GHG emissions in EIA⁶. The emissions have also been compared with baseline emissions targets as well as to relevant future carbon budgets. Only conclusions on the overall significance of the net GHG emissions effect have been reported. Further details are set out within **Chapter 15: Climate Change**.
- 2.85 The wind turbine specification and output as detailed in **Chapter 4: Development Specification** includes a total of 12 turbines, with an output of up to 84MW. However, a 68.4MW output is assessed in **Chapter 15: Climate Change** on the reasonable worst-case assumption that each turbine has a power rating of 5.7MW.

Defining Mitigation and how this will be Controlled

- 2.86 Schedule 4, Paragraph 7 of the EIA Regulations states that an ES should include:
- “A description of the measures envisaged to avoid, prevent, reduce, or if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description should explain the extent, to which significant adverse effects on the environment are avoided, prevented, reduced or offset, and should cover both the construction and operational phases.”*
- 2.87 Regulation 26 (1) (d) states that when determining a planning application consideration should be given to “...whether it is appropriate to impose monitoring measures” including the parameters to be monitored and the duration of the monitoring.
- 2.88 In accordance with the guidance noted in ‘Adoption of Best Practice’ above and the EIA Scoping Report (**Appendix 2.1**), the three types of mitigation have been identified and used within the EIA process comprise:
- **Primary:** Modifications to the location or design of the Project for Assessment made during the pre-application stage that are an inherent part of the project;

- **Secondary:** Actions that will require further activity in order to achieve the anticipated outcome; and
 - **Tertiary:** Actions that would occur with or without input from the EIA feeding into the design process. These include actions that will be undertaken to meet other existing legislative requirements or actions that are considered to be standard practices used to manage commonly occurring environmental effects.
- 2.89 The design process has been informed by studies / surveys / analysis / evaluations so that potential effects are well understood and the design has evolved to take account of the environmental constraints and opportunities within the Assessment Boundary and technical study areas. Such evolution, as defined above, constitutes primary mitigation. Primary mitigation is provided as part of the description in **Chapter 4: Development Specification**.
- 2.90 Standard practices are considered to constitute tertiary mitigation (e.g. adoption of standard environmental management measures that can be controlled via a Construction Environmental Management Plan (CEMP)). Tertiary mitigation is provided both within the description in **Chapter 4: Development Specification** and **Technical Chapters 6 – 15**.
- 2.91 **Technical Chapters 6 – 15** have considered relevant primary and tertiary mitigation for both the construction and operational stages (as well as decommissioning, where relevant) prior to undertaking their assessment of likely significant effects. Following the conclusion of effects based on the Project for Assessment (inclusive of primary and tertiary mitigation), any further mitigation measures or monitoring arrangements have been identified as secondary mitigation or enhancement measures in **Technical Chapters 6 – 15** and this has informed the residual effects reported.
- 2.92 There are deviations from this approach for:
- **Chapter 9: Ecology**, where a ‘pre mitigation scenario’ (i.e. excluding primary and tertiary mitigation) effect is presented. The moorland restoration works outlined in **Chapter 4: Development Specification** are treated as ‘secondary mitigation’ as these represent ‘compensation’ measures under the specific technical guidance. This approach aims to provide transparency in the assessment to stakeholders; and
 - **Chapter 10: Ornithology**, where only residual effects are reported.
- 2.93 The application of secondary and tertiary mitigation is only considered appropriate if there is a high level of confidence (>90%) in the mechanism for implementation by the Applicant or a third party.
- 2.94 Where appropriate, consideration has been given to effects arising from secondary mitigation or enhancement measures alongside the likelihood and confidence of implementation and this has factored into determining the residual effect.

- 2.95 Mitigation identified at the EIA Scoping stage was documented in the Preliminary Environmental Management Plan (PEMP) and presented as part of the EIA Scoping Report (**Appendix 2.1**).
- 2.96 The primary, tertiary and secondary mitigation measures identified through the EIA process (including mitigation set out in the EIA Scoping Report / PEMP and **Technical Chapters 6 – 15**) are set out in **Volume 3: Environmental Management Plan**. This document can be extracted by RMBC and RBC to support the preparation of any planning conditions and / or obligations attached to any planning permission, where necessary.

Use of Micrositing

- 2.97 A micrositing allowance of 50m is proposed to allow flexibility in the locations of the wind turbines and other infrastructure as these are subject to further engineering design work.
- 2.98 Alongside these micrositing allowances there are a series of identified environmental constraints which preclude the wind turbines and associated infrastructure from being located within certain areas of the micrositing allowances where these overlap. Therefore, there are limits / controls on where wind turbines and other infrastructure can be located.
- 2.99 Where appropriate to the technical topic / effect being assessed, the influence of the micrositing allowance and the environmental constraints has been considered. This is reported in **Technical Chapters 6 – 15**.

Reporting Effect Conclusions

- 2.100 In defining / determining effects, the focus is on whether the residual effect is 'Significant' or 'Not Significant' and this is concluded for every effect reported in **Technical Chapters 6 – 15**.
- 2.101 In addition to this, where relevant to the technical topic / effect being assessed, effects have been considered based on the following:
- The sensitivity (or value, importance, etc.) of a receptor / receiving environment to change, which includes aspects such as adaptability, tolerance to change or recoverability from change. A range of scales have been used across the ES to accord with specific technical guidance; and
 - The magnitude of change (or impact), which has been determined as the change from the baseline conditions and / or against prescribed thresholds / criteria. The assignment of magnitude of change or impact has incorporated aspects such as probability, likelihood of occurrence, geographical extent, complexity, duration, frequency and reversibility (i.e. temporary or permanent). As with sensitivity, a range of scales have been used across the ES to accord with specific technical guidance.
- 2.102 Where considered appropriate, in line with specific technical guidance, sensitivity and magnitude have been combined and used to assign a level of effect. Where matrices

have been used as a tool to inform this, alongside professional judgement, these are provided within **Technical Chapters 6 – 16**.

- 2.103 Where relevant, other factors such as feedback from stakeholders, relevant legislation, international / national / regional / local standards and guidance and the inter-relationship between effects (both cumulatively and in terms of potential effect interactions) have also been considered in defining the effects, where appropriate.
- 2.104 For each effect, a binary judgement has been made as to whether the effect is 'Significant' or 'Not Significant'. This determination has been based on professional judgement and / or relevant guidance and standards, where applicable.
- 2.105 This enables the conclusions of the different technical assessments across the ES to be understood for the decision-making process, along with allowing robust analysis and appraisal as part of the assessment of cumulative effects (see **Chapter 16: Assessment of Cumulative Effects**).
- 2.106 **Technical Chapters 6 – 15** provide a summary of effects table, which outlines whether the residual effect is 'Significant' or 'Not Significant'. These effects are also collated in **Chapter 17: Summary**.
- 2.107 Where relevant, effects have also been described in line with the requirements of the EIA Regulations (i.e. as direct or indirect, short / medium / long-term and temporary or permanent). The duration of the effects relevant to each topic are discussed in each of the **Technical Chapters 6 – 15**.

Limitations and Assumptions

- 2.108 Schedule 4, Paragraph 6 of the EIA Regulations states that an ES should include:

"...details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved."
- 2.109 Where the assessments undertaken in connection with **Technical Chapters 6 – 15** have encountered difficulties in compiling the required information or are based on assumptions these difficulties and assumptions and the main uncertainties involved have been clearly identified within the relevant Chapter.

Impacts on Designated Ecological Sites

- 2.110 As stated in the EIA Scoping Report (**Appendix 2.1**), effects on the South Pennines Moors Phase 2 Special Protection Area (SPA) / Special Area of Conservation (SAC) and Rochdale Canal SAC were 'scoped out' of the assessment within the EIA process as no likely significant effects were identified. Further details are provided within **Chapter 9: Ecology** and **Chapter 10: Ornithology**, where considered appropriate.

References

¹ Planning Practice Guidance (PPG) – Guidance: Environmental Impact Assessment, Paragraph: 002 Reference ID: 4-002-20140306. Available at:

<https://www.gov.uk/guidance/environmental-impact-assessment> [Accessed: 02/06/2026].

² Institute of Environmental Management and Assessment (IEMA) Impact Assessment Guidelines: Implementing the Mitigation Hierarchy from Concept to Construction August 2024.

³ RMBC Planning Application: 25/00680/FUL. [online] Available at:

https://account.rochdale.gov.uk/pr/s/detail/a0rSI00000e8DY8IAM?c_r=Arcus_BE_Public_Register (Accessed: 18 May 2026)

⁴ RBC Planning Application: 2025/0267. [online] Available at:

<https://publicaccess.rossendale.gov.uk/online-applications/applicationDetails.do?keyVal=SZ0U9GND05V00&activeTab=summary> (Accessed: 18 May 2026)

⁵ The Working Group on Noise from Wind Turbines (1997) The assessment and rating of noise from wind farms (ETSU-R-97).

⁶ IEMA (2022) Assessing Greenhouse Gas Emissions and Evaluating their Significance (2nd edition).