

Euchanhead Renewable Energy Development

Additional Environmental Information
Chapter 3: Description of Development



Table of Contents

Abbreviations	3
3. Description of Development	4
3.1. Introduction	4
3.2. Design Amendments to the Proposed Development	4
3.3. Wind Turbines	5
3.4. Site Access Tracks	6
3.5. Summary of Key Components of the Proposed Development	6

Abbreviations

Additional Environmental Information	AEI
Environmental Impact Assessment	EIA
Section 36 (of The Electricity Act 1989)	S36

3. Description of Development

3.1. Introduction

Chapter 3: Description of Development, of the Environmental Impact Assessment (EIA) Report sets out the components of the proposed Development for which Section 36 consent is being sought and which have been assessed in the EIA Report.

This Additional Environmental Information (AEI) Chapter sets out the changes to the proposed Development. All the information in **Chapter 3** of the EIA Report remains valid unless stated otherwise in this AEI Chapter.

3.2. Design Amendments to the Proposed Development

The amendments to the proposed Development are detailed in **AEI Chapter 2** and set out in **Table 3:1** below.

Table 3:1 - Overview of Changes to Site Infrastructure from EIA Report to AEI

Site Infrastructure	Summary of Changes from EIA Report to AEI
Turbine No. 20 (and associated crane pad)	Removal of Turbine No. 20 and its associated crane pad.
Turbine No. 21 (and associated crane pad)	Removal of Turbine No. 21 and its associated crane pad.
Access track to Turbine No. 20	Removal of approximately 1,130.72m of proposed access track.
Access track to Turbine No. 21	Removal of approximately 1,231.85m of proposed access track.
Turbine No. 9	Reduction in blade tip height of Turbine No. 9 from 230m to 200m.
Turbine No. 10	Reduction in blade tip height of Turbine No. 10 from 230m to 200m.
Turbine No. 11	Reduction in blade tip height of Turbine No. 11 from 230m to 200m.
Turbine No. 18	Reduction in blade tip height of Turbine No. 18 from 230m to 200m.
Turbine No. 19	Reduction in blade tip height of Turbine No. 19 from 230m to 200m.

No other changes to the proposed Development, other than those set out in **Table 3:1** above, are proposed.

AEI Figure 3.1: Proposed Site Layout, shows the amended Site Layout (incorporating the changes set out in **Table 3:1**) of the proposed Development.

3.3. Wind Turbines

Due to the reasons set out in **AEI Chapter 2**, two wind turbines (Turbines No.20 and No.21) along with their associated crane pads and access track, have been removed from the proposed Development. Further to this, five wind turbines (Turbines No.9, No.10, No.11, No.18 and No.19) have had a reduction in blade tip height from 230m to 200m.

There are no other changes to any turbine locations or turbine specifications (including hub height and tip height) from what was presented in the EIA Report, with the exception of an update to the Aviation Lighting proposed (see **AEI Technical Appendix 15.4: Reduced Aviation Lighting**).

Table 3:2 provides the list of wind turbines, their coordinates and their specifications that now form the proposed Development. All remaining wind turbines have the same coordinates as were presented in the EIA Report, however Turbines No.9, No.10, No.11, No.18 and No.19 have had a reduction in blade tip height from 230m to 200m and consequently a reduction in hub height from 155m to 125m.

All wind turbines (set out in **Table 3:2**) are in excess of three times rotor diameter distance (450m) of the nearest wind turbines of any neighbouring wind farm schemes, with most well in excess of 600m or four times the rotor diameter.

Table 3:2 – Turbine Coordinates and Specifications

Turbine No.	Easting	Northing	Blade Tip Height	Hub Height
1	268456	606531	230m	155m
2	268000	606036	230m	155m
3	267494	605259	230m	155m
4	267071	604688	230m	155m
5	266509	604256	230m	155m
6	267749	603314	230m	155m
7	266646	602924	230m	155m
8	267942	602664	230m	155m
9	266175	602607	200m	125m
10	266848	602093	200m	125m
11	267381	601757	200m	125m
12	269104	601408	230m	155m
13	269707	601291	230m	155m
14	269225	600793	230m	155m
15	269933	600718	230m	155m
16	270156	600193	230m	155m
17	269348	599928	230m	155m
18	270724	599799	200m	125m
19	269363	599239	200m	125m



Each wind turbine foundation is approximately 28m in diameter, which equates to 2,463m². The crane hardstandings (and their laydown areas) that are associated with Turbines No.20 and No.21 have also been removed as a result of the deletion of these two wind turbines from the Site layout. The footprint of each crane hardstanding is approximately 3,000m², and the footprint of each laydown area approximately 80m².

Therefore, the deletion of Turbines No.20 and No.21, their associated crane hardstandings and laydown areas, reduces the footprint of the proposed Development by approximately 11,086m².

AEI Chapters 7 to 15 consider the removal of Turbines No. 20 and 21, and the reduction in blade tip height of Turbines No.9, No.10, No.11, No.18, and No.19 and if there are any changes to the effects as predicted in the EIA Report.

3.4. Site Access Tracks

Due to the reasons outlined in **AEI Chapter 2**, two wind turbines that were part of the 2020 S36 application have been removed. As a result of this, the track going to these wind turbines has also been removed.

The updates to the access tracks proposed are as follows:

- Removal of approximately 1,130.72m of proposed access track leading to Turbine No. 20; and
- Removal of approximately 1,231.85m of proposed access track leading to Turbine No. 21.

The amended track layout proposed is shown on **AEI Figure 3.1: Proposed Site Layout**.

Table 3:3 details the changes in terms of overall proposed track length when comparing the previous (EIA Report) and amended (AEI) track layouts.

Table 3:3 – Proposed Track Length Comparison

Previous (EIA Report) Length of Proposed Track		Amended (AEI) Length of Proposed Track	
Upgraded Track	19.8km	Upgraded Track	19.8km
New Track	32.6km	New Track	30.3km
Floated Track	3.6km	Floated Track	3.6km
Total New and Upgraded Track	52.5km	Total New and Upgraded Track	50.1km

3.5. Summary of Key Components of the Proposed Development

The key component parts of the proposed development, following the updates to the Site layout as presented in this AEI chapter, are detailed in **Table 3:4**.

Table 3:4 – Proposed Development Key Components

Key Component	Detail
Wind Turbines (including foundations)	19 wind turbines, five which are up to 200m Blade tip height, and 14 which are up to 230m Blade tip height.
Crane Hardstandings	19 crane hardstandings adjacent to each wind turbine.
Access Tracks	Approximately 50.1km of new and upgraded Access track.
Underground Cabling	The majority of the underground power cables would run along the side of the access tracks in trenches to the proposed control building compound. The cables would be buried to a depth of approximately 1m.
Substation Compound	Compound containing substation, control building and energy storage facility. Energy storage facility, likely to be containerised battery units.
Borrow Pits	Search areas for up to seven borrow pits.
Temporary Construction Compounds	One main site construction and maintenance compound, two secondary construction compounds, one laydown area and a security compound.
Meteorological Mast	A permanent lattice construction meteorological mast, up to 149.9m high.

AEI Chapters 7 to 15 consider the amended site layout and if there are any changes to the effects as predicted in the EIA Report.