

Hagshaw Energy Cluster Western Expansion | Phase 1

Landscape & Visual Impacts

It is acknowledged from the outset that, in common with almost all commercial wind energy developments, some landscape and visual effects would occur as a result of the proposals, including some significant effects.

A key principle of the European Landscape Convention is that all landscapes matter and should be managed appropriately. It is also acknowledged that landscapes provide the surroundings for people's daily lives and often contribute positively to the quality of life and economic performance of an area.

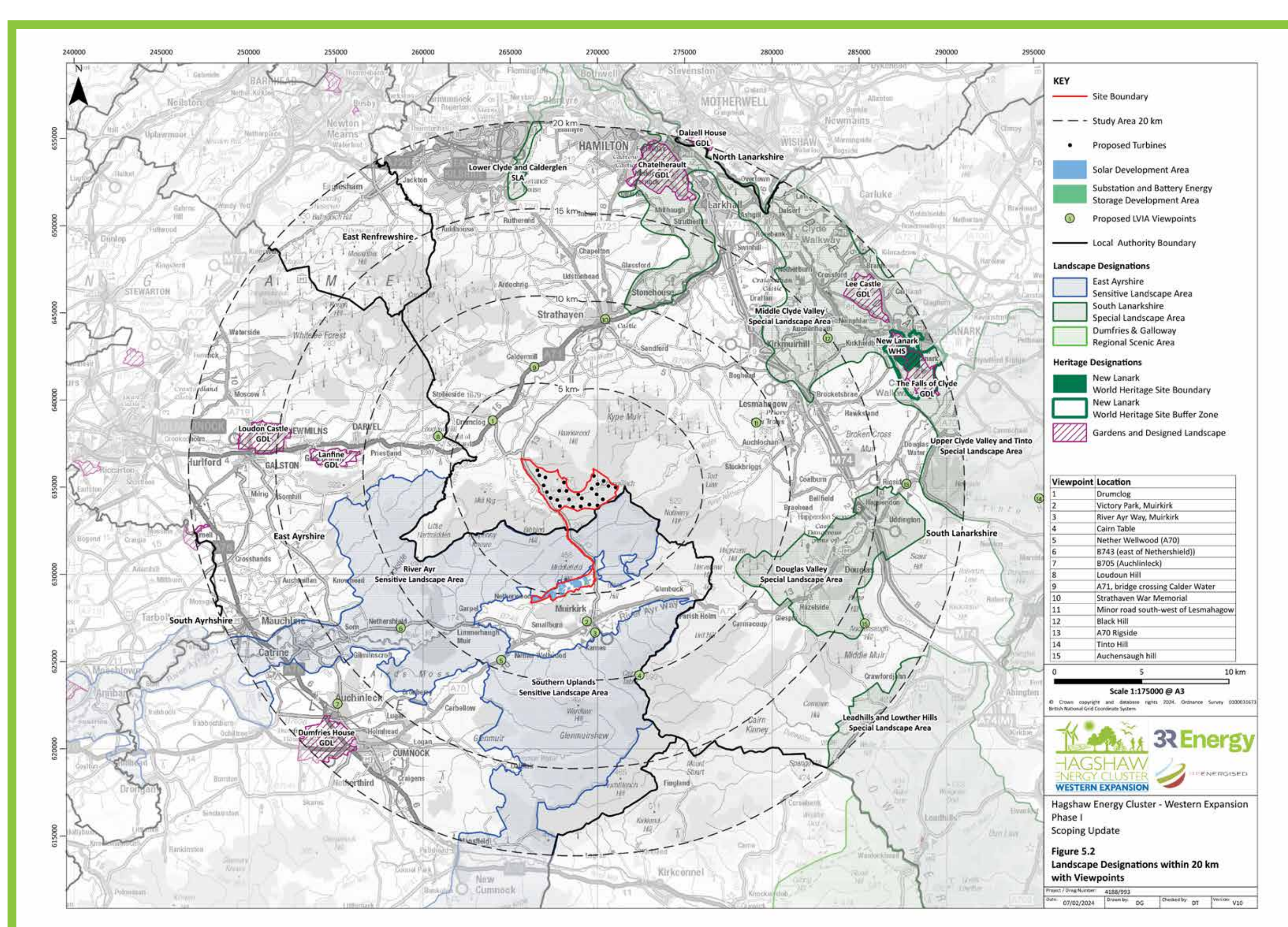
The EIA will therefore consider what impacts there will be on the local landscape and key viewpoints from the proposed development.

Study Area Landscape Character

The Proposed Development site is split into two main development areas, with the wind turbines located within the northern development area (Dungavel Forest), and the solar, BESS and substation located within the southern development area (Netherwood).

The northern development area of the Proposed Development comprises areas of commercial coniferous plantation and lies within the Plateau Moorlands – Glasgow & Clyde Valley Landscape Character Type (LCT 213). The southern development area comprises rough grassland principally used for silage and grazing cattle and sheep, with woodland fringes and lies within the Plateau Moorland – Ayrshire Landscape Character Type (LCT 78).

The site is not located within any of the identified Special Landscape Areas in South Lanarkshire or East Ayrshire, but does lie adjacent to the River Ayr Sensitive Landscape Area in East Ayrshire. Landscape designations within 20 km of the site are shown on the figure above.

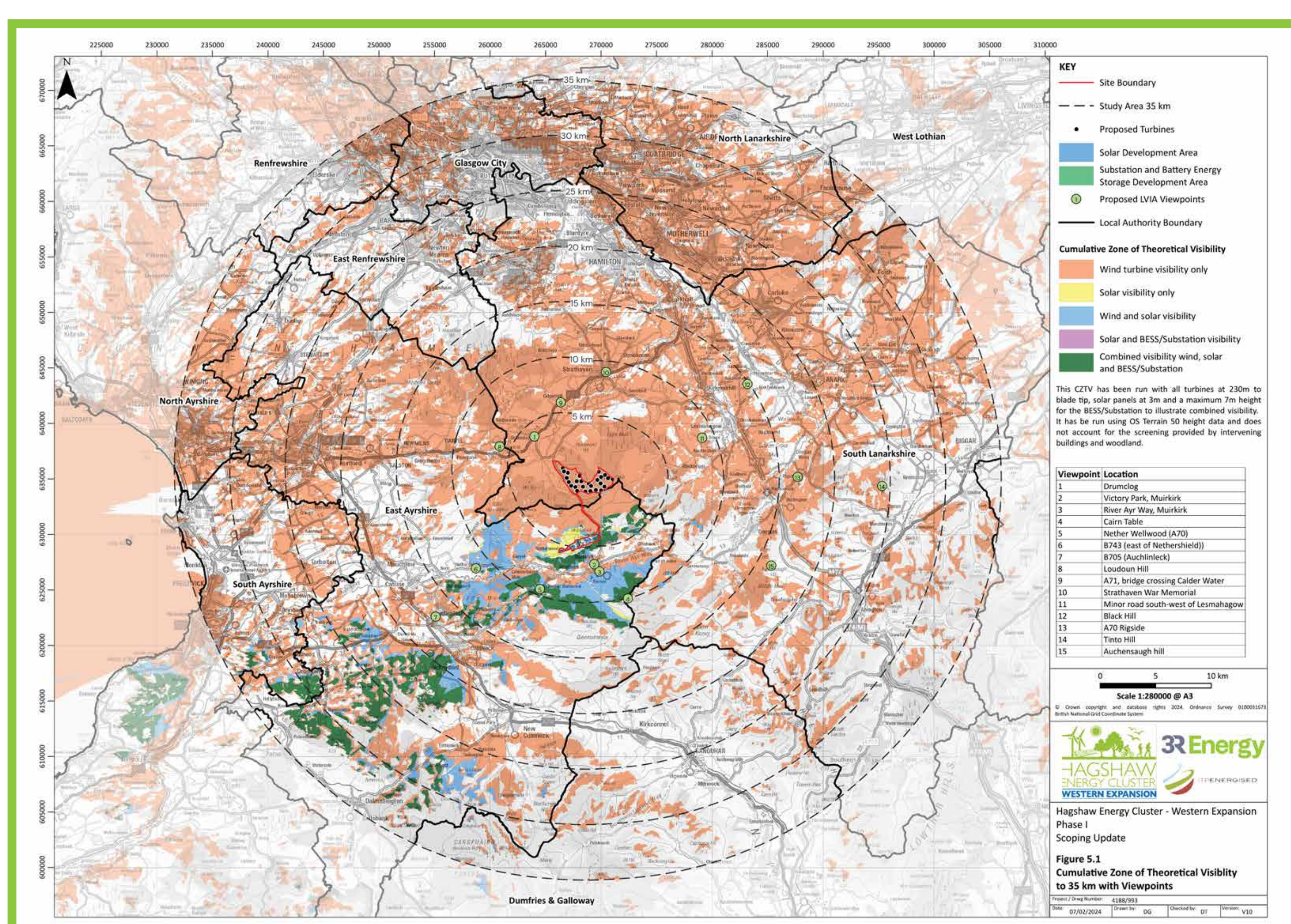


Selected Viewpoint Locations & ZTV

A series of key representative viewpoint locations around the local area have been identified and will be agreed with the Scottish Government Energy Consents Unit, South Lanarkshire Council, East Ayrshire Council and NatureScot for use in the landscape and visual assessment.

A zone of theoretical visibility (ZTV) map was created as a starting point to illustrate the geographical area within which views of development on site are theoretically possible. The ZTV is based on a 'bare-earth' scenario, whereby the screening effects of areas of existing vegetation, or built features in the landscape are not taken into consideration. The ZTV was modelled using the proposed max turbine tip height of 230 m.

The ZTV and selected viewpoint locations are shown on the figure to the right.



Turbines over 150 m are required by the Civil Aviation Authority to be fitted with visible aviation warning lighting. The Landscape & Visual Impact Assessment (LVIA) will therefore also include an assessment of the effects which would arise from this during low light conditions.

Design Iteration

Although the final specification of the turbines is not known at this time, they are likely to be up to 230 m maximum tip height, each with a generating capacity of up to approximately 7.2 MW. The design and consultation process is still ongoing and the final layout of the proposed development will be confirmed through further consultation, both with stakeholders and the local community.

A series of visualisations have been prepared to show how the proposed development layout (shown on the figure on the Proposed Development Board) would look from the following locations:

- Viewpoint 1: Drumclog
- Viewpoint 3: The River Ayr Way (south of Muirkirk)
- Viewpoint 9: A71, bridge crossing Calder Water
- Viewpoint 10: Strathaven War Memorial

3R Energy

Hidden Area