

Appendix 4.3 – Residential Visual Amenity Assessment

1.1. Approach and Methodology

GLVIA (3rd edition) confirms at paragraph 6.17 that the assessment of effects on residential property is “*separate from LVIA*” and subject to “*specific requirements*”.

When dealing with effects on residential properties, the outlook from a private property is essentially a private matter. This basic principle is firmly established in Scottish Planning Series Circular 3/2013 in paragraph 6 of Annex A:

“The planning system operates in the long term public interest. It does not exist to protect the interests of one person or business against the activities of another. In distinguishing between public and private interests, the basic question is whether the proposal would unacceptably affect the amenity and existing use of land and buildings which ought to be protected in the public interest, not whether owners or occupiers of neighbouring or other existing properties would experience financial or other loss from a particular development.”

The South Lanarkshire guidance SPG10: Renewable energy, sets out the requirements and consideration for Residential Visual Amenity Assessment as follows:

“6.62 For all wind turbine proposals of more than 15 metres the Council will expect an assessment to identify the likely significant effects of the proposals on residential visual amenity. The need for a Residential Visual Amenity Survey (RVAS) requires to be determined on a case by case basis. The survey of residential visual amenity may vary but can extend up to 5km from the proposed development site.

6.63 The residential visual amenity survey is in addition to the consideration of particular viewpoints that have been assessed under the Landscape and Visual Impact Assessment. Consideration should also be given to the cumulative impacts of wind farm and wind turbine developments within the area as experienced from residential properties (see section on cumulative impacts).

6.64 At present there is no published guidance on the extent of study areas for residential amenity surveys. However, the potential effects of wind turbine developments on residential amenity and living conditions has been examined in detail at recent public inquiries. Taking account of this it is considered that the residential visual amenity survey area is required if the impact on residential visual amenity could potentially be so great as to materially affect the living conditions of the occupiers.

Requirements for Residential Visual Amenity Survey

The residential visual amenity survey should assess the impact of the proposal from the following parameters:

- *distance of the property from the development*
- *extent of the development in the view from the property*
- *angle of view in relation to orientation of the property*
- *proportion of the view from the property occupied by the development*
- *local context in which the development is seen extent of other built development visible from the property, in particular vertical elements*
- *screening effect of intervening landscape elements such as local landform and vegetation (woodland tree cover and hedges).*

The residential visual amenity survey and assessment should be undertaken in accordance with best practice guidance: ‘Guidelines for Landscape and Visual Assessment, 3rd Edition’.

6.65 The approach taken by reporters in Scotland and inspectors in England confirms that no individual has a legal right to a particular view. However, there may be circumstances where the proximity, size and scale of a wind energy development would render a residential property 'so unattractive a place to live' - albeit not uninhabitable - that planning permission should be refused. This may be the case where turbines affect visual amenity in a way that is 'unpleasantly overbearing' or where they are 'inescapably dominant and overwhelming'.

6.66 The appropriate distance from residential properties should, therefore, be determined by the size and proximity of the turbines, orientation of views, local topography, the position of buildings, vegetation and trees and the spread or extent of the turbines. The turbine/s should not have an overbearing presence or dominate adjacent residential buildings.”

This assessment follows the approach set out in the SPG10 guidance. In this instance, a study area of 2.5 km has been covered in detail with the area between 2.5-3km also described, based on scoping discussions with South Lanarkshire Council.

Each property within the agreed study area has been assessed on site and via a review of aerial photography, so that the orientation of windows and gardens towards the proposed Development and the degree of screening from intervening buildings and vegetation can be taken into account, along with the extent and nature of fenestration, in forming a judgement as to whether the visual amenity will be affected to the degree that “*as an unattractive (rather than simply less attractive, but not necessarily uninhabitable) place in which to live*”.

1.2. Assessment

All supporting Figures to this Appendix are included in Volume 2 of the EIAR.

Properties included within the assessment are illustrated on Appendix 4.3 Figure 1.

Properties where no visibility was indicated by the ZTV studies and/or the presence of screening vegetation was verified by a review of aerial photography were generally not visited, and therefore limited detail is included within the assessment. For those where visibility is indicated by the ZTV study, a site visit was undertaken and the properties assessed from the nearest publicly accessible location. Distance and direction are given from the nearest turbine to the dwelling and are accurate to the nearest 50m.

Meanings of terms are as follows:

- Partial for windows indicates views seen between obstructions such that the view is partially screened;
- Partial within gardens indicates where turbines will be visible from some parts of the properties' gardens, but not others;
- For windows – Direct views are those which would be seen looking directly out of the window, oblique indicates views seen to one side, but still likely to be visible. Very oblique views where it would be necessary to open the window and look out, or stand unnaturally close to the window are not recorded as visible; and
- The arc of view is given (to the nearest degree) as the *theoretical maximum* arc of view which might be occupied by the turbine blades if facing towards the property with the full arc of the blades seen and no local screening.

The assessment of each property is provided in the table below.

Property/Group	Distance, Direction	Storeys	Visibility	Max. Theoretical Angle of View	Assessment
Properties within 2km of the turbines					
Only Kype Dam Lodge (Kype Lodge) lies within 2km of the turbines – as illustrated by viewpoint 1 and by Technical Appendix 7.4 Figure 6 in the Original ES, it would have no visibility of the turbines and effects on the approach would typically be Negligible due to the limited visibility of the turbines in contrast with the proximity and visibility of both Auchrobert and Kype Muir wind farms. This property is not considered in detail.					

Property/Group	Distance, Direction	Storeys	Visibility	Max. Theoretical Angle of View	Assessment
Properties within 2-2.5km of the turbines					
<p>These dwellings are all located in a group to the north of the site and are approached and accessed via the B743 and a local dead-end road – Lambhill Road. Effects on the B743 are discussed within the main EIAR chapter and are assessed to be of Moderate and Adverse significance.</p> <p>Effects approaching the houses will be similar to those for viewpoint 2 – i.e. Large Medium scale and Adverse, with the turbines seen above nearby hedgerows ahead of the driver for much of the approach apart from occasional screening by trees and houses. The combination of the proposed Development with Dungavel and existing Kype Muir wind farms would result in up to 139° of the view being occupied by turbines within 3km. The proposed Development would be more distant than those at Kype Muir and Dungavel. These Long-term effects would be of Intermediate extent along this short route and would be of High-Medium magnitude and taking into account the High-Medium sensitivity of the local residents would be of Major-Moderate and Adverse significance.</p>					
1-12 Lambhill Steadings	2.25km, N	1-2.5	Varied – see assessment	59°	<p>This is a group of 12 dwellings arranged in a close group as shown on Figures 1 and 2 to this Appendix. The properties are mostly aligned so that facades face either towards other nearby properties; away from the site or towards the nearby woodland to the south. In each of these cases, views of the proposed Development will be screened, apart from potentially some views of the proposed Development from top floor windows of 2.5 storey dwellings, looking out over the houses opposite and woodland to the south.</p> <p>Properties on the southwestern side (Nos. 3-6), with facades facing southwest may have oblique views of the proposed Development. This will be a more restricted view than from viewpoint 2, with woodland screening most, if not all, of the turbines, as illustrated by Figure 2 to this Appendix.</p> <p>As discussed above, effects approaching the houses would be of Major-Moderate and Adverse significance.</p> <p>The proposed Development would result in localised significant effects from the road approaching these dwellings, but views from the houses and gardens would be very limited. The proposed Development would not result in effects on these properties that would be considered oppressive or overbearing.</p>

Property/Group	Distance, Direction	Storeys	Visibility	Max. Theoretical Angle of View	Assessment
Lambhill Farm	2.30km, N	1	Partial views from garden only	58°	<p>This bungalow is situated close to Lambhill Steadings (described above) as shown on Figures 1 and 3 to this Appendix. The property is aligned such that the gable end and garage face towards the site with the main facades facing away to the east and west. There is a window in the gable end facing towards the site, but views out are screened by mature hedgerow and trees on the south side of the driveway. As a result there would not be views of the turbines from windows.</p> <p>There may be some visibility of the proposed Development from parts of the garden, where they would be seen through garden vegetation and looking out over Lambhill Steadings and the woodland beyond, as illustrated by Figure 3 to this Appendix.</p> <p>As discussed above, effects approaching the house would be of Major-Moderate and Adverse significance.</p> <p>The proposed Development would result in localised significant effects from the road approaching this dwelling, but views from the house and gardens would be very limited. The proposed Development would not result in effects on these properties that would be considered oppressive or overbearing.</p>

Property/Group	Distance, Direction	Storeys	Visibility	Max. Theoretical Angle of View	Assessment
Lambhill Lodge and Auchengilloch	2.40km, N	1	Partial views from garden Potential partial oblique views from rear windows	58°	<p>These two bungalows are situated close to Lambhill Steadings (described above) as shown on Figures 1 and 4 to this Appendix. The properties are aligned such that the rear facades and a gable end face towards the proposed Development. Neither of the houses have windows in the gable end which faces the site. Rear windows may have oblique views towards the more westernmost turbines, though these would be seen through the mature vegetation which lines the gardens, which is likely to provide almost complete screening in summer, and filtered views in winter.</p> <p>There may be some visibility of the proposed Development from parts of the garden, where they would be seen through garden vegetation and looking out over Lambhill Steadings and the woodland beyond., as illustrated by Figure 4 to this Appendix.</p> <p>As discussed above, effects approaching the houses would be of Major-Moderate and Adverse significance.</p> <p>The proposed Development would result in localised significant effects from the road approaching these dwellings, but views from the houses and gardens would be very limited. The proposed Development would not result in effects on these properties that would be considered oppressive or overbearing.</p>

Property/Group	Distance, Direction	Storeys	Visibility	Max. Theoretical Angle of View	Assessment
Properties within 2.5-3km of the site					
These dwellings lie in various directions around the site. In line with the scoping discussion, they are not considered individually in detail, but a broad assessment of effects is provided.					
South Kirkwood Cottage	2.6km, N	1	Similar to viewpoint 2, partially screened by trees in summer.	N/A	<p>This property is near to Auchengilloch and Lambhill Lodge (described above) as shown on Figures 1 and 5 to this Appendix. The house is surrounded by a number of mature trees, which break up outward views in summer, but offer little screening in winter. Its rear façade faces south towards the proposed Development as shown by Figure 5 to this appendix and there would be direct views from both the windows and garden – similar to those shown for viewpoint 2 which is located nearby.</p> <p>The proposed Development would result in localised significant effects from the road approaching this dwelling, and this house would be the most affected by the proposed Development. The proposed Development would add to the impacts arising from the existing Kype Muir and Dungavel wind farms, but would not result in effects on this property that would be considered oppressive or overbearing.</p>

Property/Group	Distance, Direction	Storeys	Visibility	Max. Theoretical Angle of View	Assessment
Kirkwood House and 1-2 Kirkwood Gate	2.9km, N	2	Similar to viewpoint 2, but more distant; partially screened by trees in summer.	N/A	<p>This group of three houses is near to South Kirkwood Cottage (described above) as shown on Figure 1 to this Appendix. The houses are surrounded by a number of mature trees, which break up outward views in summer, but offer less screening in winter. The houses are oriented such that one of the corners faces towards the site and windows would have oblique views of the proposed Development where they are visible through the trees. Some parts of the gardens are more open and would have direct views of the turbines - similar to those shown for viewpoint 2, but more distant.</p> <p>The proposed Development would result in localised significant effects from the road near these houses, although tending more towards Medium scale given the greater distance compared to viewpoint 2. The proposed Development would add to the impacts arising from the existing Kype Muir and Dungavel wind farms, but would not result in effects on this property that would be considered oppressive or overbearing.</p>
Hawkwood Farm and Hawkwood Cottage	2.7km, N	2	Similar to viewpoints 2 and 22,; partially screened by trees in summer.	N/A	<p>Hawkwood Farm forms part of a group of buildings set around a yard. The main house is two-storey and has the front façade facing out across the garden looking away from the site. Single storey buildings lie nearby between the main house and the proposed Development, and some oblique views of the turbines are likely to be available from the southeast facing upstairs windows, looking above the nearby buildings. In this context, the closer and more directly visible Kype Muir turbines would remain dominant.</p> <p>Hawkwood Cottage is a small dwelling set in a localised low point in the landform, views towards the proposed Development are interrupted by nearby trees and Hawkwood Farm. Some of the proposed turbines are likely to be visible from windows in the rear façade.</p> <p>These houses which are accessed via a private driveway from the B743, and effects approaching the houses along the driveway will be slightly greater than for viewpoint 22, but less than for viewpoint 2 – i.e. tending to be Medium scale. The proposed Development would not result in effects on this property that would be considered oppressive or overbearing.</p>

Property/Group	Distance, Direction	Storeys	Visibility	Max. Theoretical Angle of View	Assessment
Burnside Farm and High Dykes Farm	2.8km, NW	Up to 2	Similar to viewpoint 22	N/A	<p>These properties are illustrated by Technical Appendix 7.4, Figures 2 and 3 in the Original ES. Despite the removal of 3 turbines to form the 2016 Consented Layout, the arc of view illustrated on the original ES figures would be little changed, although the distance to the nearest turbine is greater. Direct, open views of part of the proposed Development would be available from the first floor rear windows of these houses, and partial views would be available from the ground floor rear windows of the house, and from the garden through intervening vegetation.</p> <p>The views would be similar to those illustrated by the visualisations for Viewpoint 22. These properties are approached and accessed via private tracks from the B743. Effects on this route are discussed within the main ES chapter.</p> <p>The proposed Development would not result in effects on these properties that would be considered oppressive or overbearing.</p>
Glengavel House	2.9km, W	N/A	None	N/A	The ZTV study indicates no visibility due to intervening terrain and forestry.
Logan Farm	2.7km, SE	N/A	Views limited /unlikely	N/A	<p>The main facade of this farm house faces southwards out over the gardens and away from the proposed Development. The yard lies to the north and is surrounded by a number of barns and outbuildings which will largely screen views towards the site, although some oblique views of the proposed Development may be possible where first floor windows look out above these buildings. The direct, closer views towards the turbines at Auchrobert are likely to be the more dominant effect in this context.</p> <p>The proposed Development would not result in effects on these properties that would be considered oppressive or overbearing.</p>

Property/Group	Distance, Direction	Storeys	Visibility	Max. Theoretical Angle of View	Assessment
Dunside	2.9km, E	N/A	Limited visibility	N/A	<p>The main facades of this house face north and south – away from the site - and a number of outbuildings and a large clump of trees lie on the eastern side of the house and would interrupt views towards the site. Where the proposed Development is visible the turbines would be seen looking along the reservoir and looking over the rising ground of Dunside Rig.</p> <p>The proposed Development would not result in effects on these properties that would be considered oppressive or overbearing.</p>
Hareshawhead Farm	2.8km, NE	N/A	Limited visibility	N/A	<p>Only 1-3 of the turbines would theoretically be visible from this dwelling which lies set within trees. In addition the proposed Development would be seen beyond the closer turbines at Kype Muir and would not add to the effects arising from that wind farm.</p>

1.3. Summary

The nearest property is Kype Dam Lodge, located just under 2km from the nearest turbine within the proposed Development, and this is the only property within 2km. It would not be notably affected by the proposed Development, with the turbines seen on the approach to the house in the context of the closer Kype Muir and Auchrobert turbines, and outward views in the direction of the site from the house and garden screened by forestry.

The properties most affected will be those to the north of the site – including Lambhill Steadings, Lambhill Farm, Lambhill Lodge, Auchengilloch and South Kirkwood cottage. Visual effects in the vicinity and on the approach to these houses would be significant and adverse. For the closer dwellings in this group, screening by other houses and/or vegetation will notably limit effects and the most affected property will be South Kirkwood Cottage which lies 2.6km from the turbines. Effects would be similar to those for viewpoint 2, albeit interrupted by trees.

The distribution and proximity of turbines would be the same as for the 2016 Consented Layout, and thus the principle of this group of houses having turbines occupying this arc of view at this proximity is already established as acceptable. The difference is that the turbines of the proposed Development would appear larger in the view - closer in scale to, but still smaller than, the nearer turbines within the existing adjacent wind farms. This is a minor difference to the effects and would not make the combination of the three wind farms notably more oppressive or overbearing.

In light of the above assessment, none of the properties will be affected to the extent that the addition of the proposed Development, in the context of the existing wind farms, would be sufficiently “*oppressive*” or “*overbearing*” that the property would be rendered an unattractive place in which to live.

The effects of the aviation lighting fitted to the turbines within the proposed development are considered within Technical Appendix 4.4 – including at viewpoint 2 near the most affected properties. In terms of potential night-time effects on residential amenity, effects on indoor spaces, gardens and approaches to properties are considered below:

- Effects on the amenity of indoor space as a result of the aviation lighting are unlikely, given that most people close curtains and/or have lights on and/or are asleep during hours of darkness.
- The aviation lights are likely to be experienced as an adverse change to the view where garden spaces facing the proposed Development are being used in the evening, although none of the dwellings were noted as having outdoor patio or deck spaces oriented in this way, and such uses are therefore likely to be infrequent and opportunistic rather than an essential aspect of the amenity of a property.
- The aviation lights are also likely to be experienced as adverse on approach to properties, where drivers will be using unlit roads (walking or cycling is likely to be infrequent given that the houses in this study are mostly relatively remote from local amenities and situated along unlit roads). As noted by the night-time assessment; drivers will be focussed on the area revealed by their headlights, and concentrating on getting home safely - the lights will be background context.

On this basis it is considered that the aviation lights will have some adverse effects on residential amenity, but not to the extent that any property would be rendered an unattractive place in which to live.