



Dalfad Wind Farm

Environmental Impact Assessment Report

Technical Appendix 4.4: Residential Visual Amenity Assessment

Technical Appendix 4.4 Landscape and Visual Impact Assessment - Residential Visual Amenity Assessment

Introduction

1. This Residential Visual Amenity Assessment (RVAA) has been undertaken in accordance with Landscape Institute Technical Guidance Note (TGN) 2/19: Residential Visual Amenity Assessment (15 March 2019). The TGN states that:

"The purpose of carrying out a Residential Visual Amenity Assessment (RVAA) is to form a judgement, to assist decision makers, on whether a proposed development is likely to change the visual amenity of a residential property to such an extent that it becomes a matter of 'Residential Amenity'."
2. And further that:

*"Changes in views and visual amenity are considered in the planning process. In respect of private views and visual amenity, it is widely known that, no one has 'a right to a view.' ...

It is not uncommon for significant adverse effects on views and visual amenity to be experienced by people at their place of residence as a result of introducing a new development into the landscape. In itself this does not necessarily cause particular planning concern. However, there are situations where the effect on the outlook / visual amenity of a residential property is so great that it is not generally considered to be in the public interest to permit such conditions to occur where they did not exist before."*
3. This assessment considers only what the resident may see from a property. Views or 'visual amenity' are just one component of residential amenity and the two should not be confused. The latter is a planning matter and may also include aspects such as noise, air quality, traffic, etc., in addition to residential visual amenity. This RVAA considers the visual amenity aspects of residential amenity. Where necessary, other aspects are considered in the relevant chapters of the EIA Report and it is for decision makers to weigh all these aspects, and documents/assessments relating to them, in determining the acceptability of a proposal.
4. Overall residential amenity is discussed within the Planning Statement accompanying the application for the Proposed Development.
5. This assessment, and the process of RVAA, seeks to identify where effects on residential visual amenity are of such a nature or magnitude that they may need to be considered in the overall balance of 'Residential Amenity' or 'Living Conditions'. The point at which this happens is referred to as the Residential Visual Amenity (RVA) Threshold.

Methodology

Study Area

6. There are no standard criteria for defining the RVAA study area and this is determined on a case by case basis. The guidance note identifies that for large structures, such as wind turbines, a preliminary study area of 1.5-2km radius may be appropriate to begin identifying properties for inclusion within RVAA, but for other developments the study area would be much reduced in proportion to their size. In this case, a study area of 2km has been agreed with consultees as summarised in Appendix C of the Pre-Application Consultation Report that was submitted as part of the application for Section 36 consent.
7. Properties are usually assessed individually but may be considered in groups where the outlook or views are essentially the same; for example, a row of houses that all share an open outlook towards the site. Where properties are grouped for assessment, this will be clearly identified and reasons for grouping described.

Approach

8. TGN 2/19 advocates a four-step process to RVAA with the first three falling broadly within the scope of LVIA where the magnitude and level of visual effects is assessed. It follows the same general approach as that of the LVIA and may draw on its findings, supplemented by other information (ZTVs, visualisations, fieldwork) as required. The first three steps of the process can be summarised as:
 - Preliminary review;
 - Evaluation of baseline visual amenity; and
 - Assessment of the likely change to visual amenity.
9. The fourth step involves a further assessment of the change to visual amenity of individual properties identified as *"having the greatest magnitude of change"* (i.e. Large magnitude within this assessment) and identifying whether the RVA threshold is reached. Where a magnitude of change is identified that is less than Large, this final step is not required as the effects would not reach the RVA threshold.

Preliminary Review and Evaluation of Baseline Visual Amenity

10. The first step considers whether a property requires more detailed assessment or if effects are *"judged unlikely to occur or so insignificant that it is not essential to consider them further"* (GLVIA3, para. 3.19), for example, where properties are outside of the ZTV or would experience such limited views that the change to the outlook would be negligible. These properties are identified, and a brief summary is provided but no further consideration is given to these within the assessment. Properties that are financially involved with the Proposed Development are also identified at this stage as, typically, it is understood that those with such a vested interest would be content with any consequential change to their living conditions.
11. Where it is identified that notable effects may arise at a property, the existing baseline visual amenity is described. This is done 'in the round' and considers both views from the dwelling itself, garden areas and driveways and views experienced when arriving or leaving the property. This step is informed by desk study and field surveys from nearby publicly accessible locations.

Assessment of the Likely Change to Visual Amenity

12. The changes to views and visual amenity as a result of the Proposed Development is described for each property, and a judgement on the magnitude of change and level of effect¹ likely to be experienced is provided. This involves consideration of the following factors:
 - Distance between the property and Proposed Development and their relative locations (e.g. up/down hill);
 - Nature of available views (e.g. panoramic, enclosed) and the effect of daily or seasonal variations;
 - Direction of view or aspect of property affected;
 - Extent to which the Proposed Development may be visible from various parts of the property (e.g. dwelling, rooms, access, garden);
 - Scale of change to views, including the proportion of view occupied by the Proposed Development;
 - Compositional changes (e.g. loss/addition of landscape features such as woodland);
 - Contrast or integration of new features with the existing views;
 - Any uncertainties inherent to the design of the Proposed Development (e.g. micro-siting allowances); and
 - Duration and nature of changes (e.g. temporary/permanent, intermittent/continuous).
13. This stage may be supported by a range of visual aids as required including maps, ZTV studies, photography and visualisations. The choice of visual aids is determined on a case by case basis and may be informed by

¹ Note that in considering the level of effect, all residential receptors are treated as being of High sensitivity (high susceptibility and high value) as directed by TGN 02/19 para. 4.23

consultation. In line with best practice guidance² the type of visualisation should be proportionate to the nature of the Proposed Development and assessment stage.

RVAA Judgement

14. This final stage is concerned with identifying “*whether the predicted effects on visual amenity and views at the property are such that it has reached the Residential Visual Amenity Threshold, therefore potentially becoming a matter of Residential Amenity*”. This is the key concern of RVAA and judgements on the RVA threshold are set out clearly and unambiguously for those properties where detailed assessment has identified the property or group of properties as likely to experience the greatest magnitude of change (Large) ‘such that the Residential Visual Amenity Threshold may be engaged’³.

Cumulative Developments

15. The RVAA is undertaken against the baseline and future baseline as set out within the LVIA (Chapter 4 of the EIA Report) and includes consideration of any pertinent, consented developments unless there is clear reason to believe that they would not be built. Future, unconsented, cumulative development is generally not a RVAA consideration and is not included within this assessment.

Distances/Directions

16. Where distances and directions are given within the assessment, these are distances between the house and the nearest turbine, unless explicitly stated otherwise. Distances given are rounded to the nearest 10m to account for the level of accuracy available in techniques used to measure (usually based on aerial photography within a GIS).

Assessment

17. **Figure 4.4.1** illustrates the location of individual and groups of properties within the 2 km RVAA study area. The assessment is provided in the table below and is supported by further detailed illustrations and visualisations for individual properties/groups, as required, in Annexes A and B. In most cases, photowire visualisations have been provided in Annex A for those properties identified as likely to experience the highest magnitude effects. Full NatureScot format visualisations have been provided for two properties in Annex B (P20 and P22) to ensure that rising landform in the foreground of the view is more accurately modelled.
18. The following properties are not considered in detail, for the reasons set out below:
 - P18: Wallacetown Farm – this property is shrouded by trees and woodland in all directions and would have no visibility to the proposed turbines.
 - P19: High Glenmuir Farm, P23: Whiteholm Farm and P25: Dornal Farm – these three properties are financially involved in the Proposed Development.
 - P28: Chestnut Cottage, P29: Moorfoot Cottage, P30: Dalblair Bungalow and P31: Low Dalblair Farm – visibility from these properties would be screened by topography and woodland.

² Landscape Institute Technical Guidance Note 06/19: Visual Representation of Development Proposals

³ TGN 02/19 – Figure 1 RVAA Process

Property	Assessment
P1: Boghead Farm (0.98 km, north)	This 1.5 storey property is encompassed within a series of connected farm buildings which are set around a farmyard to the southeast of the house. The front elevation faces northwest and provides the primary outlook, looking through trees surrounding the property and across the Bellow Water valley and away from the Site. The rear elevation faces southeast and looks out over the enclosed farmyard, with views beyond constrained by farm buildings and mature trees surrounding the property. The garden area is situated to the front of the property, located between the house and the A70, and is surrounded by trees and hedges. There is unlikely to be any notable visibility of the Proposed Development from within the house itself. T1 would be likely to be visible at a distance of around 980 m from parts of the yard and garden area and may also be seen obliquely from the dormer window upstairs on the rear elevation. Where visible, it would be partly screened by the nearby farm buildings and/or filtered through vegetation surrounding the property, particularly in summer. Other turbines may also be seen beyond T1 but would be more distant and similarly filtered through the surrounding vegetation. At night, visible aviation lights would be largely screened from view by the intervening buildings, vegetation and landform. Medium scale changes to views would occur from a Localised extent of the property. The magnitude of impact would be Medium and effects would be major/moderate and adverse. As the magnitude of effect would be less than Large, there is no potential for the RVA threshold to be exceeded at this property.
P2: Dalvene Cottage (0.92 km north)	The front of this single storey cottage faces northwest and provides the main outlook across the Bellow Water valley, though it has windows on all façades with open views to the west and south. Trees and buildings at Boghead Farm partly contain views to the north and east. The main garden is located to the front of the property on the northwest side of the house and there is a parking area to the rear. The closest turbine (T1) would be visible from the two windows on the southwest facing elevation, the front garden and the parking area at around 920 m; there may also be very oblique views possible from the windows on the southeast side of the house which look across the parking area. Other turbines would also be seen more distantly beyond T1. At night, the closest aviation light on turbine 5 would be visible low on the dark skyline to the rear of the property, just over 2 km away, and would be seen in the context of vehicle lights travelling on the A70 from windows on the southwest side of the property. The other aviation lights would be screened by intervening topography and trees. Changes to views would be Large scale and would occur from an Intermediate extent of the property. The magnitude of impact would be Large and effects would be major and adverse. RVA Assessment: Turbine 1 would be set back beyond the trees which border the farmland adjacent to the property and forms its immediate context in views to the south-west. This would provide a sense of separation from the Proposed Development and the closest turbine would not appear of such a scale that it would be viewed as overbearing; the outlook across the Bellow Water valley from the front of the property would also be unaffected by views of turbines. Considered in the round it is judged that the RVA threshold would not be exceeded.

Property	Assessment
P3: Stonebriggs Farm (0.83 km north-west)	This two-storey property is incorporated within a series of large commercial buildings, warehouses and yards which together comprise the operational premises of a haulage company. It has a north-west facing frontage which looks over the Bellow Water valley, providing the main amenity value in outlooks from property, and is adjoined by large commercial buildings at either side, with the rear façade looking southeast over a yard flanked by commercial buildings toward the Site. A small strip of woodland borders the yard to the south-east in the direction of the Site. The closest turbine (3) would be visible above the strip of woodland in channelled views from windows on the rear of the house, with other the other close turbines to either side (1 and 6) likely screened partially or wholly by farm buildings. Turbine 4, would be visible directly beyond turbine 3, sitting lower on the skyline. At night, the closest aviation light on turbine 5 would be visible just above the tree belt to the rear of the property, just over 2 km away, and would be seen in the context of lighting within the haulage yard and commercial buildings. Changes to views would be Large/medium scale and would occur from a Limited extent of the property, recognising the limited contribution views across the haulage yard make to the amenity of the property. The magnitude of impact would be Large/medium and effects would be major and adverse. As the magnitude of effect would be less than Large, there is no potential for the RVA threshold to be exceeded at this property.
P4: Westbriggs (0.84 km north-west)	This single storey cottage has a northwest facing frontage looking over the Bellow Water valley, and a parking area to the rear wrapped around by a garden with small trees on the boundary to the south-west. Beyond the garden lies a haulage yard and there are associated commercial buildings situated immediately east and southeast of the property which contain views in these directions. The Proposed Development would be visible from windows on the rear of the house over the garden fence to the south with the closest turbine (3) seen in direct and relatively open view, albeit the lower part of the tower would be screened by intervening landform. Turbine 4 would be seen directly behind, appearing slightly smaller due to the increased distance, and other turbines would be seen more distantly beyond. The adjacent commercial buildings would largely screen the other closer turbines (2 and 3) although the upper parts of blades may be seen turning above these, particularly from the garden. At night, the aviation light on turbine 5 in direct views from the rear of the property, set against a generally dark background. Aviation lights on other turbines may also be visible but would be notably more distant and a more peripheral feature of night-time views. Changes to views would be Large scale and would occur from an Intermediate extent of the property. The magnitude of impact would be Large and effects would be major and adverse. RVA Judgement: Turbine 3 would be seen in direct view, but the slight sense of separation provided by the haulage yard and nearby rising ground, along with the lower height of the turbine would mean it would not appear overbearing. The main outlook across the Bellow Water valley from the front of the property would also be unaffected by views of turbines and, on balance, it is judged that the RVA threshold would not be exceeded.

Property	Assessment
P5: Cronberry Farm (1.84 km west)	This 1.5 storey house has main elevations facing north-west, and south-east facing over a farmyard and across the Bellow Water valley toward the Site. Barns and outbuildings are located adjacent to the house to the north-east and south-west and there is a woodland shelterbelt located along the access track to the south-west of the buildings. The Proposed Development would be visible from windows on the south-east side of the house and the yard that they look across. The closest turbines at the north-western edge of the array may be partly screened by the adjacent farm buildings but would be in more open view from some windows and parts of the yard. There would be a more direct view of the more distant turbines in the southern part of the array, turbine 7 and those further south, and the view of the Proposed Development would be similar to that illustrated by the nearby viewpoint 2. At night, all three aviation lights would be visible on the skyline, seen above vehicle lights travelling along the A70. Views north-west from the property looking across Airds Moss would be unaffected. Changes to views would be Large/medium scale and would occur from an Intermediate extent of the property. The magnitude of impact would be Large/medium and effects would be major and adverse. As the magnitude of effect would be less than Large, there is no potential for the RVA threshold to be exceeded at this property.
P6: Cronberry Farm Cottage (1.89 km west)	This single storey cottage is located just to the north-west of the house and farm buildings at Cronberry Farm. Northward views look out across open fields to Airds Moss beyond while southerly views are more constrained by the adjacent farm buildings and shelterbelt The upper parts of the nearest turbines along the north-western side of the array would be seen over the nearby farm buildings from the south-eastern side of the property and garden area. More distant turbines would be largely screened by the nearby buildings, along with intervening landform and vegetation. At night, the aviation light on turbine 12 may just be visible above the nearby farm buildings while lights on turbines 5 and 10 would likely be screened. Changes to views would be up to Large/medium scale and would occur from a Localised extent of the property. The magnitude of impact would be Medium and effects would be major/moderate and adverse. As the magnitude of effect would be less than Large, there is no potential for the RVA threshold to be exceeded at this property.
P7: Carbello Farm (1.12 km west) P8: Bellowbank (1.19 km west)	These two adjacent properties are located adjacent to the A70, set slightly below the level of the road. Carbello Farm has a single, 1.5 storey elevation facing south-east across the road towards the site while Bellowbank is single storey and has windows on both south-east and north-east facing elevations that look across and along the road. Both properties have garden areas to the front, adjacent to the A70. Both properties would have views of the Proposed Development from the front gardens and windows that look out across or along the road. The more direct views would be of the more distant turbines within the southern parts of the site which would be partially screened by nearby rising ground and trees, while turbines 6 and other closer turbines to the north would be seen more obliquely from within the houses. At night, the aviation light on turbine 12 would be visible just above the skyline. It would be seen openly from Bellowbank and filtered through a nearby row of trees from Carbello Farm. The other two aviation lights would be screened by intervening landform. Changes to views would be up to Large/medium scale from the open garden areas but the closer turbines would be less noticeable in views from windows. These would occur from an Intermediate extent of each property and the magnitude of impact would be Large/medium and effects would be major and adverse. As the magnitude of effect would be less than Large, there is no potential for the RVA threshold to be exceeded at this property.

Property	Assessment
P9: Cronberry Schoolhouse (1.29 km west)	This 2-storey house has small garden areas to the eastern and western sides of the house and a large driveway to the north, which leads to a large detached garage located to the north-east of the house. The gardens are bordered by a mix of evergreen hedges and close board fencing and there are mature trees within the garden and around the boundary. The shelterbelt shown to the north of the property on the aerial photo in Annex A has been felled and current tree cover is focussed around the property and along the field boundary to the southeast. Views towards the Site from downstairs windows and garden areas would be limited by perimeter garden vegetation, fences and the garage but more open views are possible from upstairs windows. Turbine 6 would be the closest and would be seen obliquely from upstairs windows on the north-east facing elevation, with the main views focussed up the Bellow Water valley and past the Site. Turbine 12 is the next closest and would be seen around 1.8 km away in more direct view from south-east facing windows, including the aviation light at night. The upper parts of more distant turbines would be visible beyond these with just blades of the more distant turbines to the south of the Site visible over intervening landform. Changes to views would be Large/medium scale from a Localised extent of the property. The magnitude of impact would be Large/medium and effects would be major and adverse. As the magnitude of effect would be less than Large, there is no potential for the RVA threshold to be exceeded at this property.
P10: 1-7 Sharif House (1.34 km west) P11: 5a/5b Field View (1.34 km west)	These properties comprise multiple sheltered accommodation units across two single storey buildings. The larger of these, Sharif House, is set beside the A70 and Field View is a smaller building set to the rear. They are wrapped around by driveways and parking areas and there are some lawned areas to the perimeter bounded by open fences and occasional small trees. More substantial vegetation is present along the north-eastern property boundary where it abuts Cronberry Schoolhouse and the garden vegetation here. Views towards the closest turbine (6) would be largely screened from Sharif House by the house and gardens at Cronberry Schoolhouse but more open views would arise from north-east facing windows at Field View and from the adjacent lawned area where it would be seen over rising ground, sometimes filtered through trees along the nearby field boundary. Turbine 12 is the next closest and would be seen around 1.8 km away in more direct view from south-east facing windows at Field View and Sharif House, including the aviation light at night. The upper parts of more distant turbines would be visible beyond these with just blades of the more distant turbines to the south of the Site visible over intervening landform. Changes to views would be up to Large/medium scale, they would occur over an Intermediate extent at Field View and a Localised extent at Sharif House. The magnitude of impact would be Large/medium and effects would be major and adverse. As the magnitude of effect would be less than Large, there is no potential for the RVA threshold to be exceeded at this property.
P13: 1-35 Riverside Gardens (1.89 km west) P12: 36-44 Riverside Gardens (1.83 km west)	Together, these properties make up the settlement of Cronberry which is assessed at section 4.7 of Chapter 4. Numbers 1-35 comprise two storey blocks of flats with south-east facing elevations looking out across communal gardens and parking areas towards the Site and numbers 36-44 comprise a newly built row of terraced houses with front elevations facing south-east looking across the road towards the Site. Views from here would be the same as those described in Chapter 4 and illustrated by viewpoint 2 and would give rise to Large/medium scale changes from an Intermediate extent of each property – views from north-west facing windows and the rear gardens of the terraced houses would be unaffected. The magnitude of impact would be Large/medium and effects would be major and adverse. As the magnitude of effect would be less than Large, there is no potential for the RVA threshold to be exceeded at this property.

Property	Assessment
P14: Dunena Cottage (1.97 km west)	This 1.5 storey cottage is located at the southern end of Cronberry. There is a large garage to the rear of the property, along with a garden area, and the plot is largely surrounded by mature trees (including a high proportion of evergreen species) although the rear garden is slightly less enclosed. Turbine 6, the closest at just under 2 km from the house, would be seen from the rear garden and in very oblique views from rear windows, and would be partly screened or filtered through garden vegetation. The upper parts of other more distant turbines, including up to two of the aviation lights at night, would also be visible over nearby rising ground and filtered through nearby vegetation. Changes to views would be Medium scale and would occur from a Localised extent of the property. The magnitude of impact would be Medium/small and effects would be moderate and adverse. As the magnitude of effect would be less than Large, there is no potential for the RVA threshold to be exceeded at this property.
P15: Sunnybrae (1.53 km west)	This single storey cottage is located on high ground between the Bellow Water valley and the Site. The cottage is set within a small, fenced garden with a driveway and garage to the east of the house and small trees within the garden to the north and south. The main elevations face broadly north-south although there are windows on all sides with a view over the Bellow Water valley to the north-west. Turbines in the northern part of the array would be seen from the rear garden and obliquely from some rear windows. Turbine 7 would appear the most prominent, seen in open view just under 2 km away, while the closer turbine 6 (c. 1.5 km away) would be less prominent given its lower height and that it would be partly screened by intervening landform. Other turbines to the north-east would be more distant and some partly screened by intervening landform. From the driveway and the windows looking over it, turbines in the southern part of the array would be visible looking out over Sunnyside Farm and across the former opencast workings. Turbine 12, the closest in this direction at c 1.5 km away, would be seen filtered through the nearby trees on the track that leads to the farm along with the turbines directly beyond it as illustrated by the visualisation in Annex A, and would be largely screened when the trees are in leaf. At night, all three proposed aviation lights would potentially be visible although those on turbines 12 and 10 would be heavily filtered or screened by the trees. Changes to views would be Large scale and would occur from an Intermediate extent of the property. The magnitude of impact would be Large and effects would be major and adverse. RVA Judgement: The distance, partial screening and/or filtering of the nearest turbines, the lower height of turbine 6 and the sense of separation provided by the intervening topography would mean no turbines appear overbearing and while the Proposed Development would be seen to the rear and one side of the property, views to the west across the Bellow Water valley and from the front of the property would be largely unaffected. Considering these factors, it is judged that the RVA threshold would not be exceeded.

Property	Assessment
P16: Sunnyside Farm (1.39 km west)	This house is set on the western side of a complex of large barns and farm buildings. The front of the house, the domestic garden and its primary outlook is to the north-west and away from the Site. Windows to the rear of the house are on a single storey and look out across a yard formed by the farm buildings, across which there is a narrow, channelled view between the buildings south-east towards the southern part of the Site. The Proposed Development would be seen from the parking area and side entrance on the northern side of the house where turbines would be seen in easterly directions, looking across a localised valley landform; at night this would include aviation lights on turbines 5 and 12, with the light on turbine 10 hidden behind the buildings. The intervening landform, along with woodland to the far side of the valley which screens turbine bases, provides a sense of separation from the Proposed Development which appears outside the immediate landscape context of the property. Channelled views of a small number of turbines would also arise from the northern side of the yard and window that looks along the yard access. These would include the light on turbine 12 at night, with the other lights screened by buildings around the yard. Changes to views would be Large scale and would occur from a Localised extent of the property. The magnitude of impact would be Large/medium and effects would be major and adverse. As the magnitude of effect would be less than Large, there is no potential for the RVA threshold to be exceeded at this property.
P17: Duncanziemere (0.99 km west)	This house forms part of the south-eastern side of a complex of farm buildings that enclose a yard in the centre. The front of the house and main outlook is oriented south-east and looks out from an elevated position across a flooded former mining void and the Glenmuir Water valley beyond. There is no defined garden area but the field and rough areas of hardstanding immediately in front of the house, and the yard to the rear offer some amenity space. A small area of woodland to the south-west of the farm buildings constrains views in this direction, and gently rising ground and a nearby shelterbelt curtail longer distance views to the north and north-east. The Proposed Development would be visible from windows on the front of the house where turbine 12, the closest at around 1 km away, would be seen off to one side looking across the mining void and those turbines to the east and south of this would be visible more distantly beyond. Aviation Lights on turbines 12 and 10 would also be visible at night. The field and hardstanding immediately in front of the house has a more open view, as illustrated by the visualisations in Annex A, and the turbines further north in the array would be seen more distantly and most would be partly screened by the nearby shelterbelt. There would be no visibility of turbines from the yard area or rear windows that look over this. Changes to views would be Large scale and would occur from an Intermediate extent of the property. The magnitude of impact would be Large and effects would be major and adverse. RVA Judgement: The Proposed Development would be introduced into an elevated and expansive view from the front of the property and the sense of separation between the property and the closest turbine afforded by the mining void prevent this from appearing overbearing. Views from within the house would generally be restricted to the six turbines at the southern end of the array and these would not impinge on the longer distance views across the mining void and valley beyond, while the greater extent of turbines to the north would only be seen from the field and hardstanding to the front. Considering these factors it is judged that the RVA threshold would not be exceeded.

Property	Assessment
P20: Laigh Glenmuir Farm (0.94 km west)	This property comprises an L-shaped 1.5 storey house with the main frontage (including the only upstairs windows) and garden area are to the south and the outlook from this side of the property is onto nearby woodland that runs along the Glenmuir Water. Sharply rising ground to the east of the house and garden constrain views in this direction. There are adjoining farm buildings to the north which form a yard to the rear of the house which contains views here and there are further, separate barns located just to the northwest. There would be no notable visibility of the Proposed Development from windows to the front of the house, the yard area or windows looking onto this. There may be some visibility of the upper blades on the closest turbines from ground floor windows on the short, easterly façade and parts of the garden but turbines would be largely screened by the sharply rising ground adjacent to the house and none of the aviation lights would be visible at night. The view would be much more restricted than from the road just north of the property as illustrated in Annex B. Changes to views would be Small scale and would occur from a Limited extent of the property. The magnitude of impact would be Small and effects would be moderate/minor and adverse. As the magnitude of effect would be less than Large, there is no potential for the RVA threshold to be exceeded at this property.
P21: Darmalloch Farm (1.70 km south-west)	This property comprises a 2 storey house with a main outlook, and garden areas, to the south. There are adjoining farm buildings to the east, west and north forming a yard to the rear of the house and there are further separated farm buildings to the north and west. The property is surrounded by tall, mature trees and woodland (including evergreen species) which largely restrict outward views although there is a gap in these to the north-west of the property. Views towards the Site are almost entirely screened by the surrounding buildings and woodland, although oblique views of more distant turbines to the north of the array, seen through or over nearby trees, may be possible from upper storey windows to the rear. Changes to views would be Medium/small scale at most and would occur from a very Limited extent of the property. The magnitude of impact would be Small and effects would be moderate/minor and adverse. As the magnitude of effect would be less than Large, there is no potential for the RVA threshold to be exceeded at this property.

Property	Assessment
P22: Glenview Cottage (0.64 km south-west)	This single storey cottage is set below the adjacent road with a steep driveway traversing the sharp embankment to the east of the house. The front windows look out onto the driveway and embankment which curtail views in this direction. The driveway wraps around the south of the house to a parking area and yard to the rear, overlooked by a conservatory, and there are numerous outbuildings and a polytunnel scattered around the southern sides of the property. As illustrated by the visualisations in Annex B, the upper parts of the closest turbines would be visible from the parking area to the rear of the house above the nearby embankment. The hubs on turbines 11-13 would sit just above the skyline to the north with only the blades of a few other turbines seen to the east. Turbines 11 and 12 are also likely to be visible from the conservatory, but would be seen filtered through the vegetation adjacent to the house. A similar view is possible from the driveway to the front of the house although views from the front facing windows would be notably more constrained. Turbines 11 and 12 are unlikely to be visible from within front facing rooms and turbine 13 would only be seen very obliquely from windows to the front, filtered through adjacent trees. There would be a more direct view of the blade tips on turbines 10 and 14 turning above the nearby embankment although these are only likely to be noted when stood/sat close to the windows and not from further back in the rooms. At night, the light on turbine 12 would be seen from external areas and the conservatory but is unlikely to be visible elsewhere from within the house. Changes to views would be up to Large scale and would occur from an Intermediate extent of the property, primarily from external areas. The magnitude of impact would be Large and effects would be major and adverse. RVAA Judgement: The turbines would be seen as an incongruous feature turning above the skyline of the embankment but the most prominent turbines would only be openly visible from external areas and views from within the house would be much more restricted. None of the turbines would appear overbearing and it is judged that the RVA threshold would not be exceeded.
P24: Low Garleffan Farm (0.76 km south-west)	This two storey farmhouse is set in an elevated position looking across the Glenmuir Water valley with farm buildings located nearby to the north and west of the house. The front of the house looks out across the valley to the east while views in other directions are more constrained by farm buildings and nearby trees. The house is wrapped around by driveway and yard areas and there is no apparent garden space. From the property, turbines 10 and 14 would be seen slightly obliquely from front facing windows and would be in open view on the rising ground on the opposite side of the valley. Turbine 13, along with the more distant turbines beyond and the substation and BESS compounds, would be visible from the windows on the northern gable end of the house and adjacent parking area but partly screened and/or filtered through the stand of tall evergreen trees that are adjacent, as illustrated by the visualisation in Annex A. At night, all three aviation lights would be seen across the dark valley from external areas, but only that on turbine 10 would be notable from front facing windows and those on turbine 12 and 5 would be visible from those on the northern gable end but filtered through the nearby trees. Changes to views would be Large scale and would occur from a Wide extent of the property. The magnitude of impact would be Large and effects would be major and adverse. RVAA Judgement: Only turbine 14, and to a lesser extent turbine 10, would be prominent in the main cross valley outlook from the front of the property with the wider extent of the Proposed Development seen as more peripheral and partly screened and/or filtered by trees around the property. The reduced tip height of the closest turbine and the sense of separation afforded by the intervening valley would avoid any turbines appearing as overbearing and the RVA threshold would not be exceeded.

Property	Assessment
P26: Nether Guelt Farm (0.97 km south-east)	This one and two storey farmhouse is set amongst trees and extensive outbuildings, along with attached farm buildings, in the bottom of the Glenmuir Water valley. There are yard and parking areas between the buildings to the east of the house and a garden area to the west, wrapped round by the access track. Turbine 14, and some of those directly beyond, would just be visible beyond the house and nearby trees from parts of the garden but peripheral to the more open view along the valley to the west. Tall, mostly evergreen trees immediately north of the house are likely to screen views of the Proposed Development from within the house itself although in winter some heavily filtered views may be possible from the north facing windows. Whilst potentially visible at night, aviation lights on turbine 10 and 12 are likely to be heavily filtered. Changes to views would be up to Large/medium scale from a very Limited extent of the property. The magnitude of impact would be Medium and effects would be major/moderate and adverse. As the magnitude of effect would be less than Large, there is no potential for the RVA threshold to be exceeded at this property.
P27: Nether Guelt Cottage (1.48 km south-east)	This single storey cottage is located on the roadside on the southern side of the Glenmuir Water valley. Windows on the front of the house look out to the north-west across the road and over gently rising ground towards the Site. Turbine 14 would be seen c. 1.5 km away in relatively open view directly out of the front windows while the other turbines would be behind a row of mature trees which form a prominent field boundary directly across the road from the house. These along with more distant woodland that is seen along the skyline would partly screen or filter views of other turbines in the Proposed Development, including the aviation lights at night, and particularly in summer when trees are in full leaf. Changes to views would be Large/medium scale and would occur from an Intermediate extent of the property. The magnitude of impact would be Large/medium and effects would be major and adverse. As the magnitude of effect would be less than Large, there is no potential for the RVA threshold to be exceeded at this property.
P32: Springhill Farm (1.15 km east)	This 1.5 storey house is set in an elevated and exposed position on the northern side of the Glenmuir Water valley. The main façades are oriented north and south with the front of the property taking in expansive views out across the valley, away from the Site, and the rear looking across a garden and rising ground beyond which curtails views. The main driveway and parking area is located to the western side of the house, also wrapping part way round the front and rear, and there are no windows on the gable end of the property facing towards the Site. From the rear garden and driveway, the hubs and upper rotors of turbines 8-13 would be seen above rising ground to the north-west, including aviation lights on turbines 10 and 12 at night, but are unlikely to be particularly notable from within the house given the very oblique angle they would be at in views from rear windows. Turbine 14 would be the closest to the property and would be seen in more open view looking down along the access track west of the property with only the base of the tower screened by an intervening shelterbelt. This would be seen from the garden, driveway and entrance porch of the house but would not be seen from internal rooms given no windows face this direction. Changes to views would be Large scale and would occur from a Localised extent of the property (largely the external areas). The magnitude of impact would be Large/medium and effects would be major and adverse. As the magnitude of effect would be less than Large, there is no potential for the RVA threshold to be exceeded at this property.

Summary and Conclusions

19. The aim of the RVAA seeks to identify where effects on residential visual amenity are of such a nature or magnitude that *"the effect on the outlook / visual amenity of a residential property is so great that it is not generally considered to be in the public interest to permit such conditions to occur where they did not exist before."*
20. There are 32 individual and groups of residential properties within the 2 km RVAA study area, of which six would experience Large magnitude impacts – Dalvene Cottage, Westbriggs, Sunnybrae, Duncanziemere, Glenview Cottage and Low Garleffan Farm. In each case, the set back and sense of separation, and/or localised screening provided by the intervening landscape would be sufficient that the turbines would not be experienced as overwhelming or overbearing and the RVA threshold would not be exceeded.

Annex A - Aerial Views and Visualisations

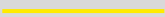
- P1: Boghead Farm & P2: Dalvene Cottage (aerial view)
- P2: Dalvene Cottage (photowire)
- P3: Stonebriggs Farm & P4: Westbriggs (aerial view)
- P4: Westbriggs (photowire)
- P5: Cronberry Farm & P6: Cronberry Farm Cottage (aerial view)
- P7: Carbello Farm & P8: Bellowbank (aerial view)
- P9: Cronberry Schoolhouse, P10: 1-7 Sharif House & P11: 5a/5b Field View (aerial view)
- P12: 36-44 Riverside Gardens (aerial view)
- P13: 1-35 Riverside Gardens & P14: Dunena Cottage (aerial view)
- P15: Sunnybrae & P16: Sunnyside Farm (aerial view)
- P15: Sunnybrae (photowire)
- P17: Duncanziemere (aerial view)
- P17: Duncanziemere (photowire)
- P20: Laigh Glenmuir Farm (aerial view)
- P21: Darmalloch Farm (aerial view)
- P22: Glenview Cottage (aerial view)
- P24: Low Garleffan Farm (aerial view)
- P24: Low Garleffan Farm (photowire)
- P26: Nether Guelt Farm (aerial view)
- P27: Nether Guelt Cottage (aerial view)
- P32: Springhill Farm (aerial view)

Photowires – key

Green turbines – 149.9 m

Blue turbines – 200 m

Inset plans – key

Legend	
	Extent of turbines
	Nearest turbine

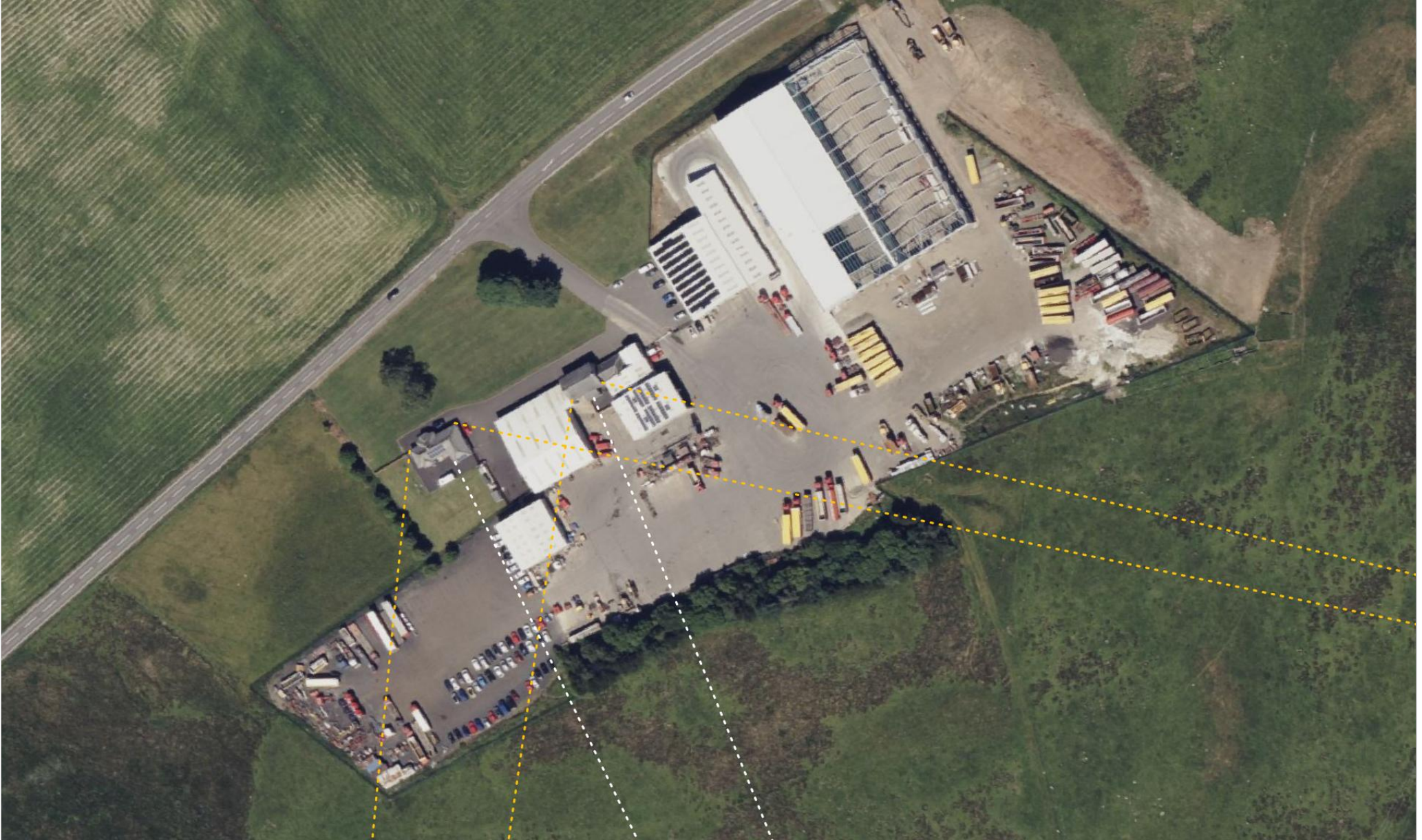
P1: Boghead Farm & P2: Dalvene Cottage – Aerial View



P2: Dalvene Cottage – Photowire



P3: Stonebriggs Farm & P4: Westbriggs – Aerial View



P4: Westbriggs – Photowire



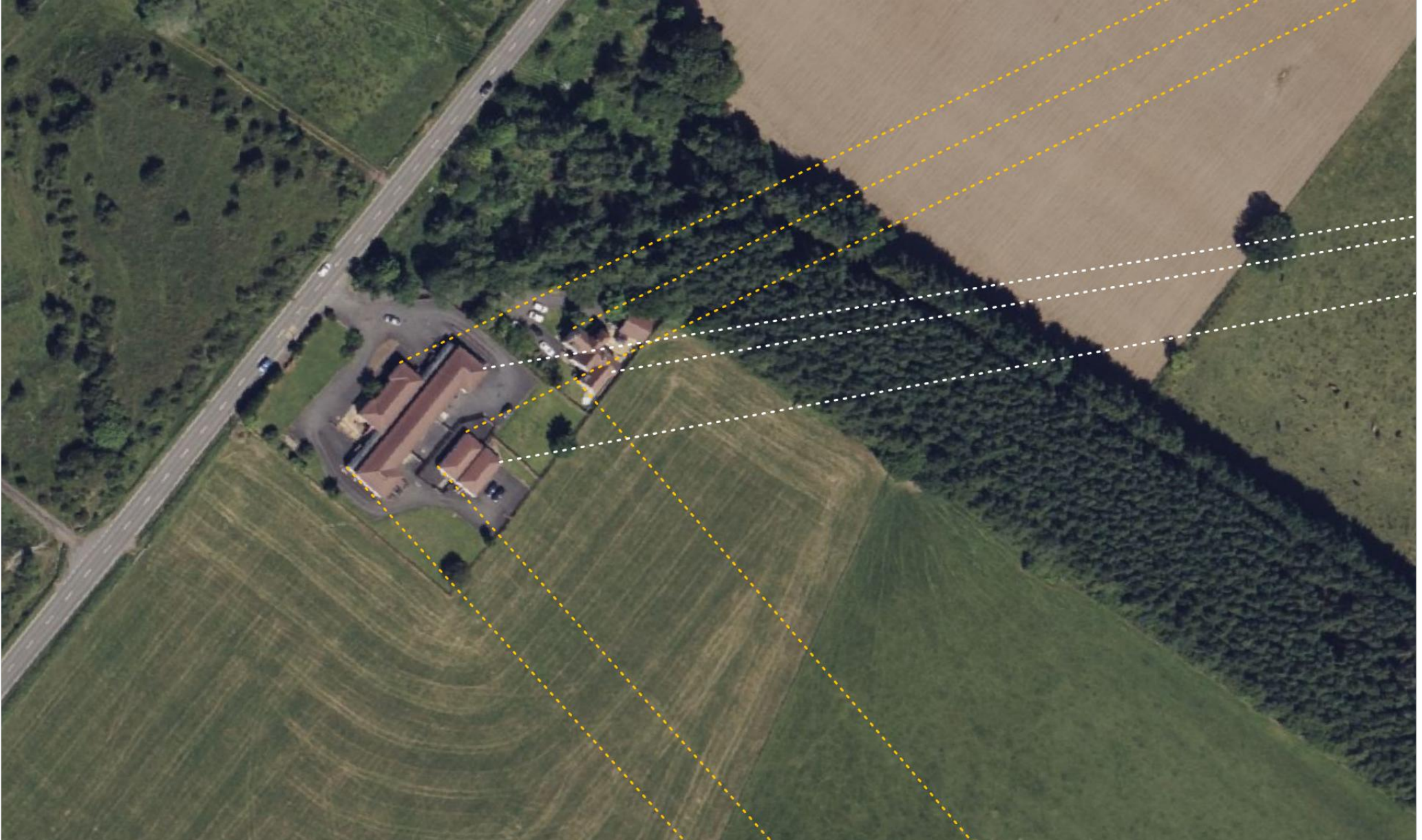
P5: Cronberry Farm & P6: Cronberry Farm Cottage – Aerial View



P7: Carbello Farm & P8: Bellowbank – Aerial View



P9: Cronberry Schoolhouse, P10: 1-7 Sharif House & P11: 5a/5b Field View – Aerial View



P12: 36-44 Riverside Gardens – Aerial View (image pre-dates construction of houses)



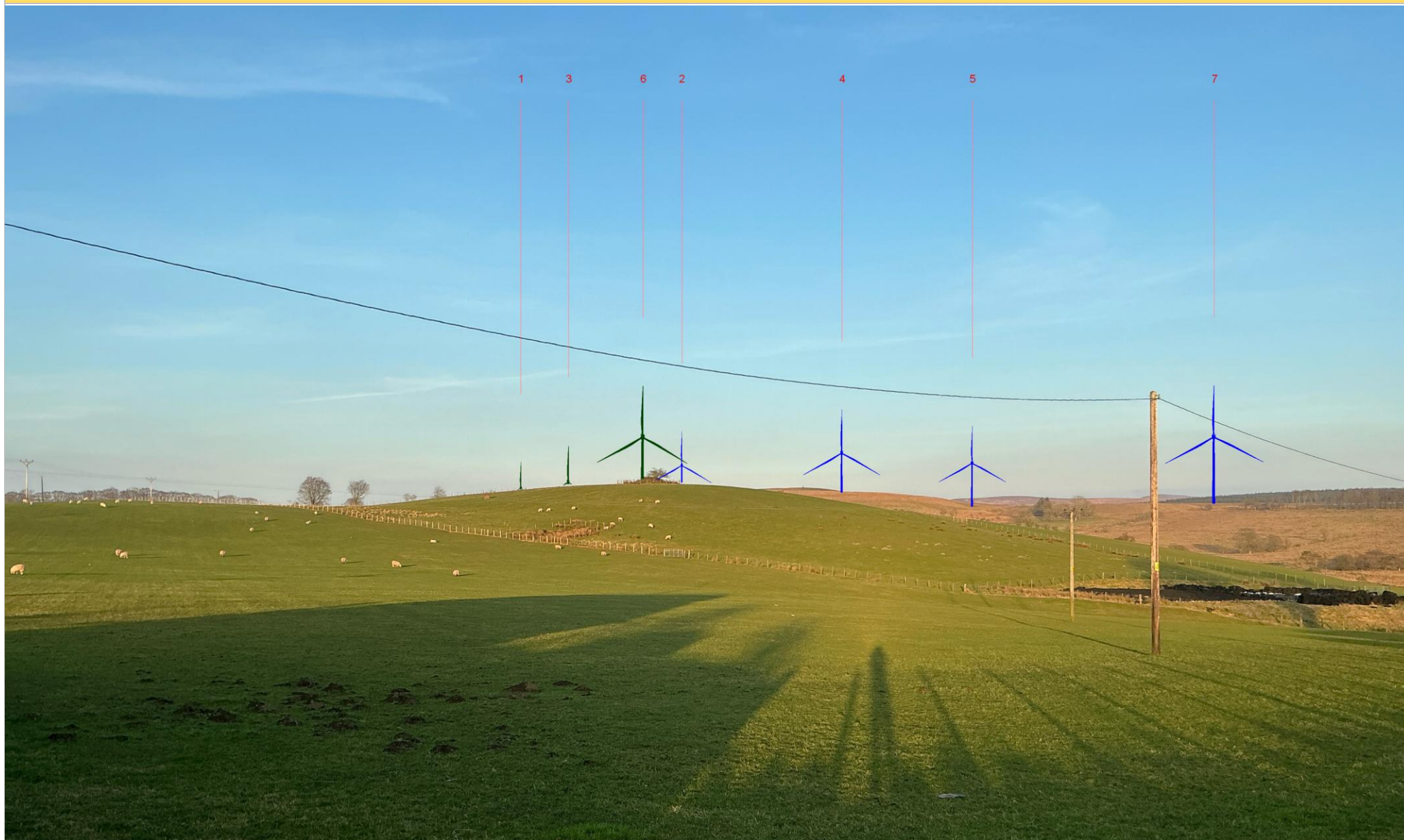
P13: 1-35 Riverside Cottage & P14: Dunena Cottage – Aerial View



P15: Sunnybrae & P16: Sunnyside Farm – Aerial View



P15: Sunnybrae – Photowire – view north-east



P15: Sunnybrae – Photowire – view east



P17: Duncanziemere – Aerial View



P17: Duncanziemere – Photowire – view north-east



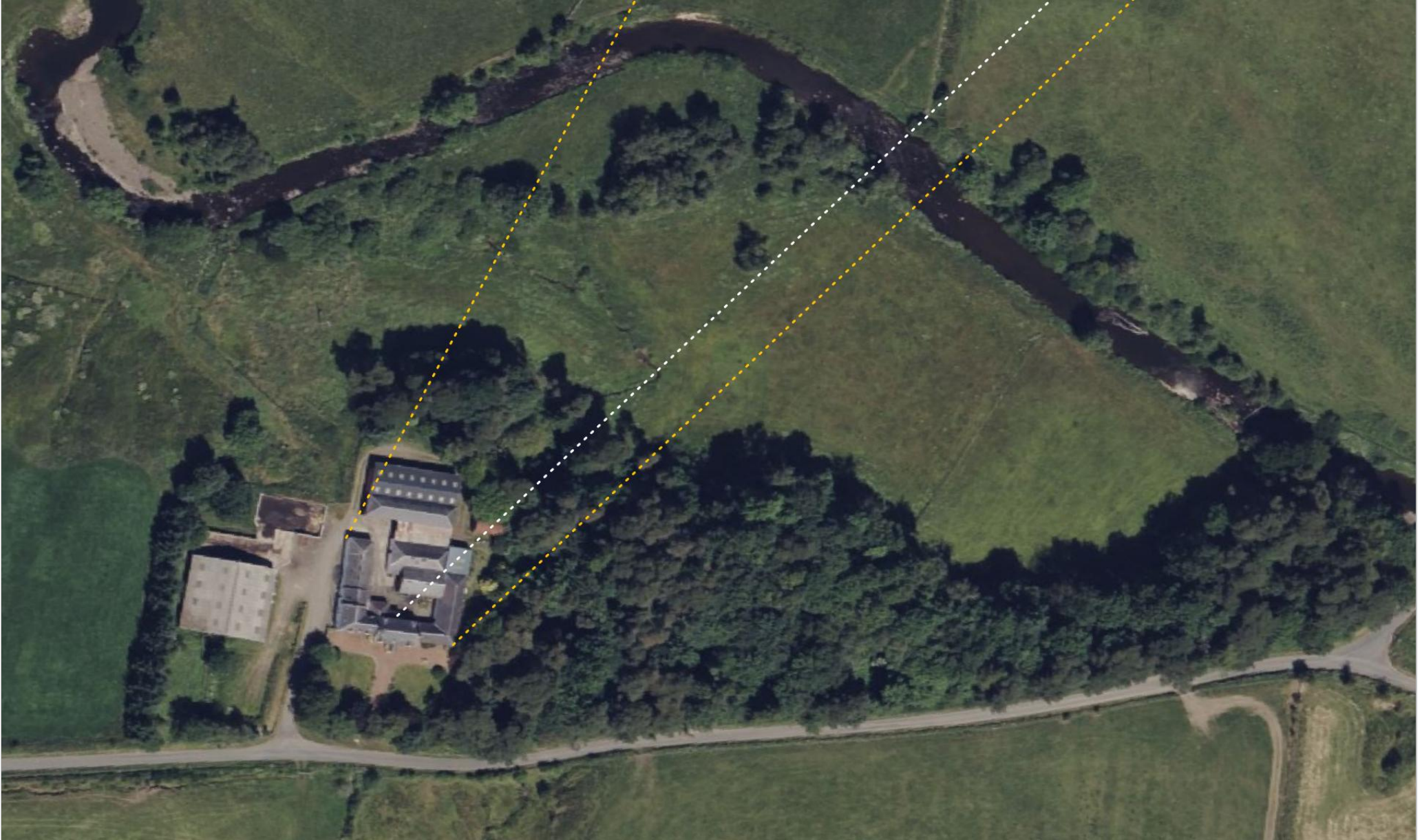
P17: Duncanziemere – Photowire – view east



P20: Laigh Glenmuir Farm – Aerial View



P21: Darmalloch Farm – Aerial View



P22: Glenview Cottage – Aerial View



P24: Low Garleffan Farm – Aerial View



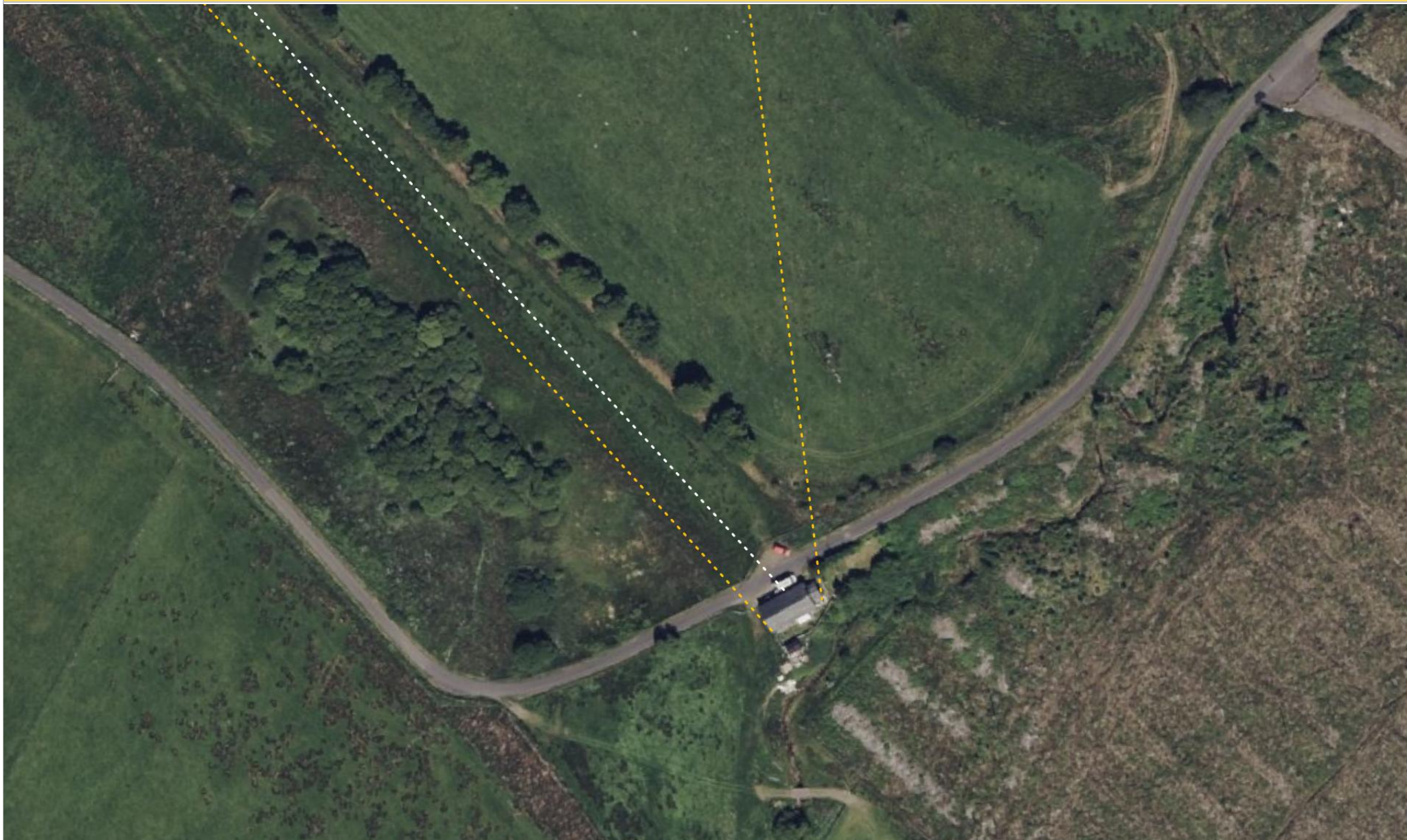
P24: Low Garleffan Farm – Aerial View



P26: Nether Guelt Farm – Aerial View



P27: Nether Guelt Cottage - Aerial View



P32 Springhill Farm – Aerial View



Annex B Figures and Photomontages

- Figure 4.4.1 – Residential Properties
- P20: Laigh Glenmuir Farm (photomontage)
- P22: Glenview Cottage (photomontage)