

# Cwmafan Proposed Broiler Unit

## **Landscape and Visual Appraisal**

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### INTRODUCTION

1. This report presents the findings of a landscape and visual appraisal that has been undertaken to identify the likely effects of the proposed broiler unit on the landscape character and visual amenity of the locality.
2. The assessment has concentrated on a 3.0km radius study area for landscape character, landscape designations and visual amenity, which is considered sufficient to identify all likely impacts on landscape character and visual amenity given the limited height and extent of the proposed development (see **Figure LV 1** for the extent of the study area).
3. The assessment is illustrated by **Figures LV 1 – 3, Appendices 1 and 2 and by Viewpoints 1 - 5.**

### METHOD OF ASSESSMENT

#### Appraisal Approach

4. The appraisal is a high level study identifying the key views towards the proposed development and describing how these views could change as a result of the proposal. In addition, the appraisal identifies the landscape character of the site and surroundings and sets out the potential changes to landscape character that could occur as a result of the proposal. This appraisal is not a Landscape and Visual Impact Assessment, but instead is an appraisal of the potential visibility of the proposed development in the context of its local surroundings.
5. The methodology used in this study conforms to the Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3). GLVIA3 recommends that the assessment should be proportionate to the scale of the project and the nature of its likely effects.

#### Good Practice Guidance and Data

6. As mentioned above, the appraisal has utilised guidance set out within the GLVIA3. Photographs illustrating views from each viewpoint have been taken in October 2019 using a Canon EOS 6D digital camera using a fixed lens with a 50mm focal length. Single frame images illustrate each viewpoint within this report and then within a separate A3 document these viewpoints are reproduced at a set viewing distance of 500mm. The viewpoint images are provided for information purposes and are labelled with relevant notes and should not be considered as a substitute to visiting a viewpoint in the field.

#### Appraisal Process

7. The appraisal has involved information review, fieldwork observations and photography, and has been undertaken in several stages, as presented in the following sections of this report:

- Predicted effects and mitigation – a review of the visual characteristics of the proposed development to identify the aspects with the potential to give rise to visual effects and a description of the measures incorporated into the design to mitigate these effects.
- Landscape and visual context – a review of the existing landscape and visual baseline of the study area, to identify landscape character, landscape designations and visual receptors in the study area.
- Viewpoint description – to illustrate typical local views and to discuss the changes to views as a result of the proposed development from a selection of viewpoints that represent the main visual receptors in the study area.
- Landscape and visual summary – a discussion of the potential effects of the proposed development on the landscape character and visual amenity of receptors in the study area.

#### PREDICTED EFFECTS AND MITIGATION

8. A detailed description of the proposed development and information on the installation of the various components of this proposed development are provided in **the Design and Access Statement** of the Planning Application.
9. It is the visual appearance of the proposed development and associated activities and any proposed changes to the existing landscape fabric of the site that are the main aspects of the development with the potential to affect landscape and visual amenity and these are summarised below.
10. The main elements of the proposed development that would be visible would be:
  - Built form: – two broiler units measuring 24.4m by 101.87m each (totalling 57.3m by 101.87m when positioned adjacent to each other in the proposed layout). Each broiler unit would have a roof ridge height of 5.99m and an eaves height of 2.48m, with a series of 11 fans on the roof ridgeline (to a height of approximately 6.5m). Four silos would be located between the two broiler units and within the southern half of the development, and would be of a height of up to 8.5m. The building, roof and silos/hoppers would all be slate grey (or similar) in colour. (Final colours to be agreed with the Council).
  - Access track – an access track would enter through the existing farm access from the local road and would run east of the slurry bed for a distance of approximately 100m until it reaches the hardstanding area surrounding the two broiler units. This hardstanding area measures approximately 145m x 75m in total. The main site access

from the local road would require some limited alterations to the roadside hedgerow in order to provide a suitable visibility splay onto the public highway.

- Deliveries to and from the site (as set out within the Design and Access Statement).
- Landscape enhancement proposals – a detailed planting scheme would be submitted post permission. **Figure LV3** indicates the broad proposed landscaping measures such as the new native woodland block to the north and the new hedgerows along existing field boundaries to the west and southeast. These measures are proposed to aid in the integration of the proposal into the area as well as adding enhancements to local landscape fabric.

11. From a landscape and visual perspective, the number of visual elements present has been minimised by the suggested slate grey colour for the broiler units to link in with the surrounding built form, the position of the site proximate to existing built form, the good levels of mature vegetation within the local landscape and the proposed landscape enhancements associated with the application.

#### LANDSCAPE AND VISUAL CONTEXT

12. The proposed development would be situated within a pasture field to the north of a local road which runs west from the B4358. The site field is a medium sized pasture field of broadly rectangular shape and bounded mainly by post and wire fencing with a short section of hedgerow and a small existing deciduous woodland block. The proposed development is approximately 50m north of Cwmafan farmyard which comprises three farm buildings.
13. A series of woodland and forestry blocks are also located nearby to the west and south, as well as some conifer tree belts along the local road to the south.
14. The nearest residential properties to the proposed building are a single storey property at Cwmafan, approximately 125m to the southeast of the proposed development, Cwmfadog (approximately 250m to the southwest), Glanesgob (approx. 500m to the south), a series of properties within Pentre-llwyn-llwyd (approx. 600m to the south), Bwlchciliau (approx. 800m to the northwest), Gwern-y-mynach (approx. 700m to the north), properties in Llanafan-fawr (approx. 600m to the northeast), Tyrysgol (approx. 500m to the northeast), and Lletherddu (approx. 800m to the southeast). Beyond this individual properties are scattered throughout the landscape at distances of over 1.0km from the proposal.
15. Within the study area as a whole, the landform undulates within central and eastern areas between approximately 150m AOD and 350m AOD with a generally irregular but small to medium scale field pattern. Within western and far northern parts of the study area the landform rises more dramatically to form upland landscapes and some fringe areas to the

Cambrian Mountains where topography rises to up to 460m AOD, with a larger and more open scale. Vegetation levels are good throughout the study area with some large conifer plantations and smaller woodland blocks and tree belts, mature hedgerows and numerous hedgerow trees.

16. The nearest public right of way (PRoW) to the site is a footpath running southwest from the local road to Cwmfadog and on to Pentre-llwyn-llwyd, approximately 100m from the proposal at its closest point. Beyond this, a bridleway to the west runs between the local road and Llanafan-fawr, at a distance of approximately 250m from the proposed development at its closest point, and a further bridleway runs south from the local road at approximately 700m from the site.

### Landscape Character

17. Natural Resources Wales (NRW) has produced a landscape character map for the whole of Wales, with 48 national landscape character areas (NLCAs). NRW has also provided detailed descriptions of each NLCA (NRW, 2014). The proposed development would be entirely located within NLCA 27 – Vales of Irfon and Ithon.
18. The NRW NLCA describes the key characteristics of the Vales of Irfon and Ithon as:
- **Undulating lowland vale surrounded by adjacent upland areas** - Silurian shales, siltstones and mudstones, with a band of older, Ordovician shales of the Llanvirn Series to the west, shaped by a south east flowing glacier, alluvial deposits found along the Wye.
  - **Crossed by the gently flowing River Wye** –flowing into the area from the north-west and out in the south-east. Joined by tributaries flowing along the vale, the Rivers Ithon and Irfon. Alluvial deposits associated. The A470 road also crosses following the Wye.
  - **Some blocks of coniferous forestry.**
  - **Patchwork of medium sized, regular fields** – pastures with sheep and dairy.
  - **Thick hawthorn hedges and hedgerow trees.**
  - **Riparian (riverside) habitats**, including the River Ithon - valued for key wetland habitats and species e.g. submerged aquatic plants, fringing woodland and populations of otter.
  - **Archaeology** - Roman fort at Castell Collen, the Roman marching camps on Llandrindod Common and prehistoric ritual monuments.
  - **Spa towns** - The area is famous for its spa towns, which first developed in the late 18th century. Llan wrtyd, Llandrindod and Builth Wells are the largest settlements.
  - **Smaller villages and hamlets** - located at river crossing points or along transport routes.

- **Rural, inland, sheltered, quiet** - reasonably tranquil away from main roads and towns, with views to the surrounding remote uplands which frame the area.
  - **Royal Welsh Show** – Wales’s national agricultural show is held at Builth Wells.
19. This NLCA covers the majority of the 3km radius study area. NLCA 21 – Cambrian Mountains covers the western side of the study area. The boundary of these two NLCAs is shown on **Figure LV2**.
20. However, the NLCA for the site covers a large and varied area of landscape well beyond the study area. Information within the NLCA has been incorporated and noted within this assessment. LANDMAP is the background information base for the NLCA identifications and so the five separate LANDMAP layers have also been considered and identified covering the site as follows (evaluation levels are outstanding (nationally important), high (regional or county importance), moderate (local importance) and low (little or no importance)) :
- Cultural – Powys Rural Hinterlands (overall evaluation – moderate). [*Description: This very extensive area is principally given over to agriculture and forestry... Its terrain consists of highland and lowland, with mixed sizes of farms, field boundaries, afforestation, minerals extraction and communications... It is not possible to classify it without further detailed research at Level 4 other than as ""Other rural""... The area is sparsely populated and abuts many of the Aspect Areas studied in greater depth.*]
  - Geological – Llanafan-fawr (overall evaluation – moderate), [*Description: Lower ground of upland plateau in E to SE dipping Lower Silurian mudstones, dissected by shallow E-W fault controlled tributary valleys and by deeper NW-SE Chwefri valley. Boulder clay on plateau and in valleys, some peat, alluvium and alluvial fans along river. N-S tributary to Irfon along ridge to W.*]
  - Historic – Dyffryn Irfon (overall evaluation – high), [*Description: Extensive area of mixed fieldscape occupying the valleys and interfluvial spurs of the Duhonw, Irfon and Chwefri rivers and their tributaries bounded on north and south by the converging upland blocks of northern Brecknock (Abergwesyn Common/Carnau and Mynydd Epynt) and on the east by the Wye valley. This dramatically undulating landscape contains a range of, predominantly post medieval, farms and farmsteads, small medieval settlements (most notably Llanwrtyd), numerous small blocks of woodland, and a complete set of Welsh archaeological sites - from mesolithic finds modern buildings.*]
  - Landscape Habitats – Irfon North (overall evaluation – moderate). [*Description: Improved agricultural land within the undulating foothills south of the Elenydd and dissected by northern tributaries of the Irfon. Although improved grassland habitat dominates, the area*

*is punctuated by semi-natural habitats including small fragmented woodlands (often associated with watercourses) and isolated marshy and neutral grassland fields. The semi-natural grasslands are sometimes associated with the more marginal land of steeper slopes.]*

- Visual and Sensory – Cambrian Mountains southern fringes (overall evaluation – high). [Description: A varied, dissected landscape of steep sided round topped hills and narrow valleys running down from the Cambrian Mountains. Elevation ranges from 500mAOD to 200mAOD. Some hills, such as Garth Bank, are outliers of the upland massif and stand isolated in the Irfon Valley. Higher hills are open and clothed in moorland vegetation of rough grasses, bracken and encroaching scrub. Others are topped with enclosed pasture or woodland. The latter adds to the drama and height of the landform. Woodland is mixed with a high proportion coniferous on hillsides and most riparian vegetation being deciduous. Hedgerows are a mixture of trimmed and outgrown. Valley bottom pasture is often marshy in flatter areas. Settlement is fairly sparse, consisting of scattered farmsteads on lower valley sides.] The visual and sensory aspect areas covering the study area are indicated on **Figure LV2** and the data sheets for each of the five LANDMAP Aspect Areas covering the site are included in **Appendix 1**.

### Landscape Designations

21. There are no national or local landscape designations in the 3.0km radius study area.

### Visual Receptors

22. The visual receptor locations within the 3.0km radius study area include:
  - Settlements –the hamlets of Llanafan-fawr and Pentre-llwyn-llwyd.
  - Individual residential properties – scattered cottages and farmsteads.
  - Local public rights of way – footpaths, bridleways and byways open to all traffic (BOATs).
  - Public highways – including the B4358 and a network of minor roads.
23. The Countryside and Rights of Way (CRoW) Access Lands Maps on the NRW website have been checked and show several areas of access land within 3.0km of the site, the closest of which covers conifer plantation areas to the west, approximately 300m from the proposal at its closest point.

### VIEWPOINT DESCRIPTION

24. **Figure LV1** is a zone of theoretical visibility (ZTV) for the proposed development, indicating the locations within a 3.0km radius where topography would theoretically allow visibility of the

proposal. This has been based on the highest points of the proposed building; the ridge of the roofline (Points A and B). These points have been used at a height above ground level relating to the height of these built elements within the design. The ZTV has been generated using a computer-based intervisibility package and the Ordnance Survey Digital Terrain Model (DTM) with height data at 50m intervals.

25. The ZTV is based on bare terrain topographical data only. It does not take into account the screening effects of minor topographic features, vegetation such as woodland and hedgerows and built structures and therefore tends to over-emphasise the extent of visibility in this type of well vegetated landscape, providing a worst case scenario. In reality, these surface features would fragment and reduce the extent of most of these zones of theoretical visibility, and may also reduce the amount/proportion of the proposed development visible from any given location.
26. However, due to the undulating nature of the landform within the study area, the ZTV indicates that the proposed development is expected to be screened by existing topography from several parts of the study area including most of the northern, northwestern and western regions.
27. The ZTV does not illustrate the decrease in the scale of the proposed built development with increased distance from the site which is better illustrated by viewpoints. The ZTV has aided in the identification of viewpoints. These viewpoints are intended to illustrate typical visibility of the proposal from the local area and have been located in positions where the ZTV has suggested that potential visibility of the proposed development may be available.
28. Five viewpoints were selected to illustrate this appraisal, each located on publicly accessible locations representing some of the most open and/or proximate locations or receptors within the study area. Each viewpoint is illustrated by a single photograph within the report and then separately in **Appendix 2** by A3 versions of these individual frames, produced to a set viewing distance and also by panoramic photographs stitched together from each viewpoint (with no set viewing distance ascribed). The locations of all five of these viewpoints are shown on **Figures LV1 and LV2**.
29. It is important to note that the viewpoint panoramas cover varying horizontal widths of view and so no set viewing distance should be ascribed to those individual views, although a 500mm viewing distance should be used when viewing the A3 sized individual frame views. The viewpoint images are provided for information purposes and are labelled with relevant notes and should not be considered as a substitute to visiting a viewpoint in the field.



<b>VP</b>	<b>Viewpoint location</b>	<b>NGR</b>	<b>Approximate distance from site</b>
<b>1</b>	Public bridleway west of site	296010 255530	200m
<b>2</b>	B4358 east of site	296635 255240	400m
<b>3</b>	B4358 Llanafan-fawr by the church	296870 255745	700m
<b>4</b>	Junction of bridleway and footpath north of Bwlch-chwyrn	295500 255190	750m
<b>5</b>	Local road near Bwlchgarth	298495 255780	2.2km

*Viewpoint 1 – Public bridleway west of site*



30. This viewpoint is located approximately 200m west of the proposed development on the public bridleway which follows a route through local agricultural fields just south of the nearby conifer plantation. The viewpoint is positioned at approximately 300m AOD and illustrates the potential visibility of the proposal in the context of the existing built form at the farm. This is one of the closest and most open sections of this bridleway to the proposed site and indicates

that the proposal would be visible in short range views as part of panoramic and long distance views.

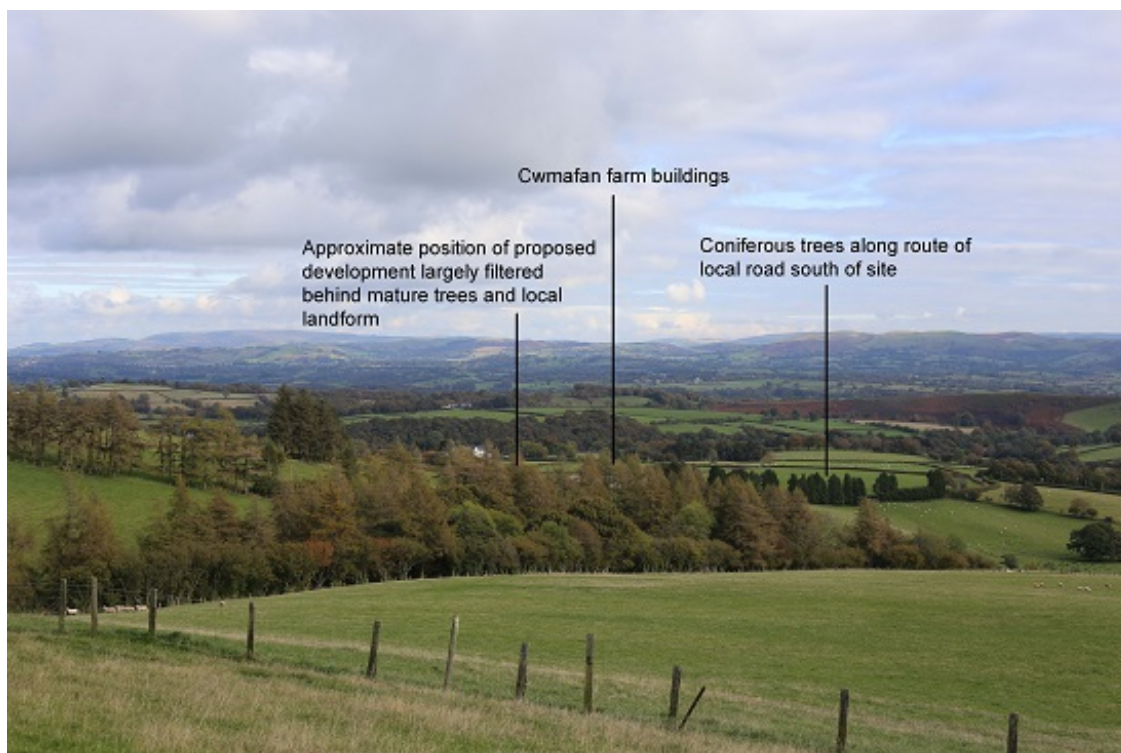
*Viewpoint 2 – B4358 east of the site*



31. This viewpoint is located approximately 400m east of the proposed development on the main road through the study area at one of the closest parts of the route to the site. The viewpoint is positioned at approximately 235m AOD and illustrates the potential visibility of the proposal. This is one of the most open views towards the site that is available from the B4358 and therefore illustrates the worst case visibility of the proposal from this route. The proposal would be seen backgrounded by higher land to the rear, and the proposed new woodland block and new hedgerow on the field boundary to the west would be discernible in the view although these proposals would not alter the visibility of the proposal from this viewpoint.

*Viewpoint 3 – B4358 Llanafan-fawr by the church*

32. This viewpoint is located by the junction of the B4358 and a local road, next to the church in Llanafan-fawr at approximately 230m AOD and 700m northeast of the proposed development. At this location mature trees in the intervening landscape would largely screen the proposed development from view, although in winter months the view would be slightly more open where filtered visibility of some parts of the proposal would be discernible, although in the context of the existing farm complex.

*Viewpoint 4 – Junction of local bridleway and footpath north of Bwlch-chwyrn*

33. This viewpoint is located at the junction of a local bridleway and footpath to the west of the site at approximately 320m AOD and approximately 750m west of the proposed development. A bank of mature trees around Cwmfadog can be seen in the middle distance and these trees almost entirely screen the existing Cwmafan farm buildings from view. The ZTV indicates that part of the proposed development would be screened from view due to the intervening sloping landform and therefore it is expected that only very partial visibility of the proposal would be available, in a similar way to the existing farm buildings.

*Viewpoint 5 – Local road near Bwlchgarth*

34. This viewpoint is located on a local road within the northeast of the study area at approximately 240m AOD and 2.2km from the proposed development. At this location the intervening vegetation dips to allow some unusually longer distance views. The existing farm buildings at Cwmafan are discernible and the proposed development would also be discernible, seen in association with the existing farm complex. Some of the proposed planting associated with the application would also be discernible from the viewpoint; mainly the new hedgerow to the west, although this would not alter the visibility of the proposed buildings.

## LANDSCAPE AND VISUAL SUMMARY

35. The ZTV, fieldwork and the viewpoints have indicated that the proposed site is located within a moderately vegetated landscape with gently undulating topography where the proposed development would predominantly be seen in association with existing farm buildings. The ZTV has illustrated that the higher landforms within the west of the study area would result in very limited potential visibility of the proposal from most western, northwestern and northern areas. Fieldwork has provided further information regarding the potential visibility of the proposal from the remainder of the study area, suggesting that intervening vegetation would recurrently at least partially screen the proposal from view from these areas. Beyond areas immediate to the site, fieldwork has indicated that the proposal would regularly be screened or partially screened, as indicated by Viewpoints 3 – 5. The existing farm buildings at Cwmafan are of a

- similar height to the proposal and are regularly screened from much of the surrounding area, giving a good indication of the extent of potential visibility of the proposal that can be expected.
36. In general, visual receptor views of the proposal would be extremely limited, as the viewpoints indicate, with nearby views from local public rights of way and local roads at times screened by intervening topography and/or vegetation.
37. In terms of landscape character, this type of built form is not uncharacteristic within the local landscape. The buildings have been designed to a height, style and colour in keeping with those within the nearby Cwmafan farm complex so that this proposal would be seen as an extension to the current farm. The site sits within the Cambrian Mountains Southern Fringes Aspect Area of the Visual and Sensory layer of LANDMAP and the ZTV indicates that from the vast majority of this Aspect Area the proposal would be entirely screened from view by intervening topography. The Irfon Forest extends down within 250m of the site (to the west) and provides further screening within this Aspect Area. The area is described as *“A varied, dissected landscape of steep sided round topped hills and narrow valleys running down from the Cambrian Mountains”* and the proposal would not affect any of these characteristics. The proposal would be intermittently visible from the landscape to the east of the site, within the Irfon Valley East Aspect Area (Visual and Sensory), but this would often be at a greater distance from the site where views would be fleeting and often partial (as illustrated by Viewpoints 3 and 5) where the proposal would not become a defining characteristic of the landscape.
38. In summary it is considered that, in landscape character and visual amenity terms, the proposed development would be a suitable fit within the context of its immediate surroundings and would result in limited changes to views and landscape character within the local area as illustrated by the viewpoints associated with this study.