



TOWN AND COUNTRY PLANNING ACT 1990
PROPOSED GROUND MOUNTED SOLAR PV DEVELOPMENT
LAND AT AEROSPACE BUSINESS PARK, LLANMAES, ST ATHAN, CF62 4QN
VISUAL IMPACT ASSESSMENT



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1.0 Introduction

Cenin Renewables Ltd (Cenin) has prepared this visual impact assessment in association with the proposed development of a new ground mounted solar PV farm (proposed development). This visual impact assessment has been prepared to consider the landscape and visual impact of the development on the surrounding context. As such, photographs from key vantage points have been taken and assessed in this document. This document should be considered in combination with the appendices attached with the planning application submission.

1.1 Application Documents

This document forms part of the planning application submitted to The Vale of Glamorgan Council. The following documentation has been submitted to the Council as part of this application:

1. 2019005DA Covering Letter
2. 2019005DA Application Forms
3. 2019005DA Planning Statement
4. 2019005DA Visual Impact Assessment (This Document)
5. 2019005DA Visual Impact Assessment Appendices
6. 2019005DA Proposed Site Location Plan
7. 2019005DA Proposed Block Plan
8. 2019005DA Proposed Elevation Plans
9. 2019005DA Existing Block Plan
10. 2019005DA Substation Plan
11. 2019005DA Inverter Station Detail
12. 2019005DA Ecological Assessment

Note: This Visual Impact Assessment should be read in conjunction with the Visual Impact Assessment Appendices document.

2.0 Site Analysis

The application site (Figure 1) is located within the Community Council District of Llanmaes, Vale of Glamorgan (Figure 1). This area of land is north east of Llantwit Major, North of St Athan and approximately 6 km west of Cardiff Airport. The B4265 connects Cardiff Airport to Bridgend along the south and west coast of the Vale whilst St Athan Road to the east and Llantwit Major Road to the west provides a main access from St Athan to Cowbridge and the A48. Between these cross-County roads is Picketston which includes several country lanes, agricultural fields, camping site, residential properties and the Aerospace Business Park.

2.1 Site Context

The application site is situated amongst large green aircraft hangers which were previously utilised by MOD St Athan. This area of land is known as Picketston Business Park consisting of commercial businesses focused on aviation and aircraft maintenance. The scheme is split into two separate brownfield plots with plot one enclosed by hardstanding and a hanger and plot two by hardstanding, the same hanger and a hedgerow. The land on both sites is flat and turfed with monoculture grass (Figure 2). There is a hamlet consisting of a few residential properties and a farmstead to the south-east.

Figure 1: The map below displays the proposed site location (outlined in red).

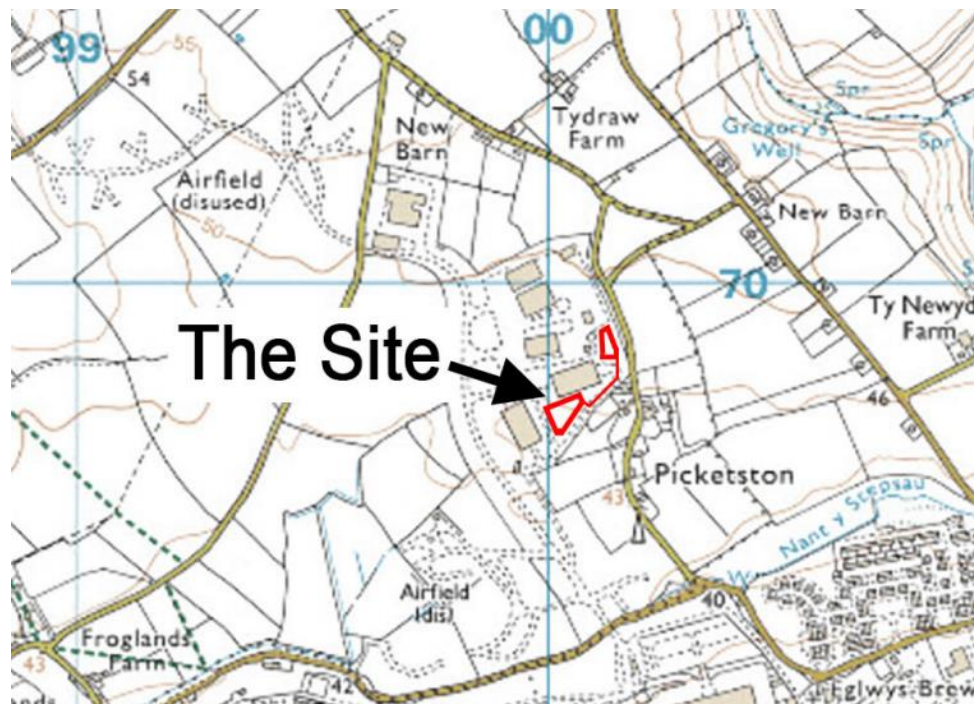


Figure 2: The proposed site is show below in the aerial photographs. (Sources: Google Maps).



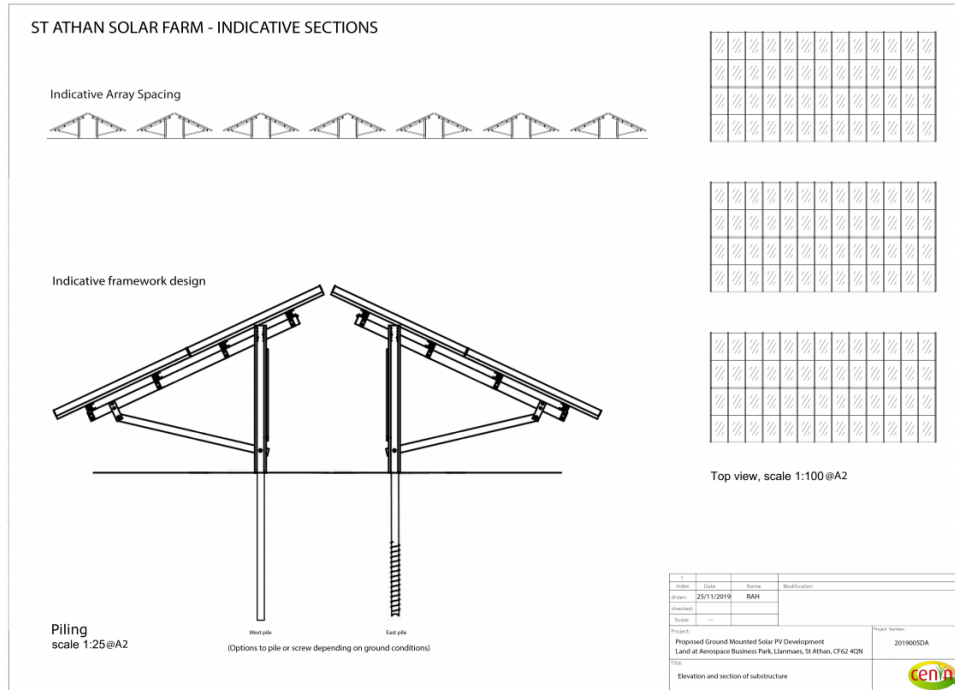
3.0 Proposed Development

This full planning application proposes the development of 1.46MW of decentralised low-carbon energy generation through the installation of a ground mounted photovoltaic (PV) solar array on brownfield land at the Aerospace Business Park, St Athan. (Figure 3 and Figure 4). The proposed scheme would involve the development of two small parcels of land, in close proximity to each other, where fixed east-west solar panels would be erected along with a small substation and inverter. The scheme would cover a total land area of 0.975 hectare and would be connected by power cable indicated on drawing reference 2019005DA Proposed Block Plan. It is intended that this scheme would supply locally generated low-cost renewable energy to local businesses & Industries within the Aerospace Business Park.

Figure 3: The proposed site layout.



Figure 4: The proposed east-west design would be a maximum height of 2.5 metres, maximum depth of 2 metres and maximum panel angle of 27 degrees. The panels will be mounted on metal struts that will either be piled or screwed into the ground.



4.0 Visual Analysis

Photographs have been taken from key points surrounding and within the proposal site (Figure 5). The assessment will analyse the visual impact of the proposed development from these key points and rate their significance on the existing landscape context.

4.1 Visual Context

The current site by virtue of its former use as an RAF base does not have any footpaths in the immediate vicinity of the site. Consequently, with the land south of the site existing as agricultural use there are no relevant public views from the south. In respect of the unclassified road to the east of the site, which runs between MOD St Athan and Pickeston, there are limited views of the site, and as such views of the ground-based photovoltaics would be insignificant.

Figure 5: The below image is an extract from page three of the Visual Impact Assessment Appendices showing key vantage points. (Source: Google Maps 2019).



4.2 Visuals 1 and 2

The first and second vantage points (Photograph 1 Appendix 1) would be on the section of road east of the site facing south. In both images the proposal site would be situated to the left on the other side of the thick boundary hedgerow. From both of these points, the scheme would have an insignificant visual impact given its very limited visibility through the dense vegetation. This is compounded by the nature

of the road as a narrow country lane, meaning that it is unlikely to be utilised by pedestrians and more by low levels of traffic, further reducing visual exposure time.

4.3 Visuals 3, 4 and 5

Photographs 3, 4 and 5 have been taken from the access of farmstead to the south east which also consists of a Grade II listed building. From angle 3 the roadside foliage, trees and equestrian buildings completely obscure the proposal site looking north-west. Vantages 4 and 5 provide a slightly improved field of view towards the development site, however, the development at such a distance would not have a significant visual impact especially when considering the height of the panels and hangers in the backdrop. It should further be noted that these images were taken at 1.8 metres from ground level, meaning that for the majority of motorists utilising the road, the scheme would not be visible as the roadside vegetation would obscure vision at most motorist levels.

4.4 Visuals 6 and 7

Viewpoints 6 and 7 are taken approximately 120m and 150m south east of the site on the road east of the site location. The main obstruction for views from image 6 depicts the dense roadside bushes that surround the access point of a nearby paddock. This point of reference was considered important as the paddock would likely see the most pedestrian use due to the activities associated with a paddock. The visual impact at this access point is not considered to be significant and therefore not detrimental to the visual amenity of the area. Image 7 has been taken from outside a residential property looking north toward the site location. The field of view onto the site is blocked partially by the boundary vegetation of the nearby paddock and most of the site is blocked by a topographical rise shown in figure 5.

Figure 6: The images below shows where the land level rises which obscures views onto the development site. (Source: Google Maps 2019).



4.5 Visuals 8, 9, 10 and 11

The proposed development is situated within the Picketston Aerospace Business Park which is gated and fenced off with access into the site located to the south. Vantage points 8, 9, 10 and 11 were taken from the approach road. This straight and wide approach is situated on relatively flat open land with little vegetation.

Approaching the Business Park northbound the proposal site is located north-east approximately 250m from viewpoint 9 and 150m from 11. The relatively dense vegetation boarding the Business Park on its South boundary obscures where the proposed photovoltaic panels would be situated, however, the scheme would be broadly visible from points 10 and 11. While the scheme would be visible in these locations, the Business Park's boundary fencing, one of the hangers, associated structures and scrap storage within the site would detract from any significant or dominant landscape visual impact that the scheme could have. Therefore, the proposed development would have an insignificant visual impact on the approach to the Aerospace Business Park.

4.6 Visuals 12 and 13

Images 12 and 13 are taken from within the Business Park at two T-junctions leading to the proposed site location. Viewpoint 12 has limited views of the proposed development as the southern site is obscured by the two southern hangers while two hangers and ancillary structures partially block views onto the eastern development site. Vantage 13 would have the clearest vision of the southern development site where most of that site is visible, however, the visual impact is reduced when viewed in the context of the existing landscape with tall massed hangers and against the distant vegetation and buildings situated on the road to the east. When considering the height of the proposed panels and their context amongst the hangers, the visual impact from the access road within the Business Park would be insignificant.

4.7 Visual 14

As access to enable photographs from the perspective of one nearby resident to the south was not available, image 14 was taken from the east development site to establish fields of view and impact on residential properties. The north site would be approximately 60m from the nearest side elevation windows of one dwelling that forms a semi-detached pairing. There are two windows situated on the first floor of this residential property with one obscurely glazed and the other not. The window that is not obscurely glazed would have a significant view of the eastern development site. However, the proposed panels would be east-west facing, meaning that the visual impact of the scheme would be greatly reduced compared with a south-facing panel design that would create a block wall effect, jarring to a residential property. Instead, the east-west design, from the perspective of the dwelling window, would be characterised by the metal struts and glancing views of the panels. At a distance of 60m, the turfed ground would be largely visible underneath the north development which would further soften the development.

Whilst a significant viewpoint, the east-west design, distance and limited outlooks from the property at an elevated position would greatly reduce any adverse visual impact.

4.8 Visuals 15, 16 and 17

Viewpoints 15, 16 and 17 were taken to assess the viewpoints of the south east residential properties over the southern development site. There are four windows on the first-floor rear elevation located approximately 100m away from the southern development site. This would be a significant view of the development, however, there are some mitigating visual factors which reduce the impact. There is an area of hardstanding south of the adjacent hanger and east of the site which stores various motor vehicles and storage containers. Image 14 conveys the impact that this storage area has on obstructing views from the dwellings onto the development site. Furthermore, vantage 15 taken from within the development site shows how the windows are partially obscured due to vegetation from within the rear gardens. This means that views outside the curtilage are more difficult to obtain and visuals of the development would be reduced. This is especially important when considering earlier comments made under image 14 where the east-west design would not create a jarring wall of panels. In that situation, the side elevation window has a clear and unobstructed view onto the panels, whereas in images 15, 16 and 17 the panels would be sited west of the dwellings meaning that the panels would face the first-floor rear windows, though due to the storage area and vegetation, this view would be partially blocked. This point is further exemplified in vantage 17 where the photograph was taken from the west boundary of the southern development site and is only visible to a first-floor window approximately 190m away. Whilst a more significant, it is considered that the distance and partial obscurity of the field of vision from the dwellings would mitigate adverse impacts and this is further compounded when assessed against the scaled and massing of the existing adjacent hangers.

5.0 Summary

The proposed scheme would involve the development of two small parcels of land, in close proximity to each other, where fixed east-west solar panels would be erected along with a small substation and inverter. This report has assessed the potential visual impact on landscape, commuters and residents surrounding the development sites.

5.1 Main Issues

In summary, five key areas require assessment through vantage points around the development site. This can be broadly categorised into the unadopted road east of the site, the properties situated on this road, the access road approaching the Business Park, within the Business Park and the field of view to and from the residential dwellings south of the site.

5.2 Conclusion

Most of the vantage points within the site do not suffer any significant visualisation of the two development sites. These insignificant views mostly occur on the unadopted road east of the site and on the approach road to the Business Park. There are limited views onto elements of the development sites from within the Business Park (Images 12 and 13), but the existing hangers and ancillary buildings largely obstruct these visuals and their relative massing mitigates the perceived scale of the development. The most significant views are from within the site, though this is to be expected. However, there are two dwellings south east of the site that have potential visuals onto both development sites. After assessing the positioning of the windows, proposed panel design and obstructing vegetation and aspects of the site location, the scheme would have an insignificant overall visual impact on the landscape, surrounding highways and nearby residents.