

APPENDIX 7.10 TRANSPORT AND PUBLIC RIGHTS OF WAY ASSESSMENT

1 INTRODUCTION

- 1.1.1 Users of the Public Right of Way network are likely to have a high sensitivity as their attention is likely to be focused on the landscape and views of the landscape will be an important contributor to their experience.
- 1.1.2 As the Visual impact assessment (Appendix 7.4) finds, it is unlikely that there will be any significant visual effects beyond an approximate 10km radius of the Site. Where the proposed development is theoretically visible, it is considered that available views of the proposed development will be distant, and the proposed development is likely to be a minor feature. It is also likely to be viewed in the context of other man-made elements, particularly operational wind farm development. Where visible, the magnitude of impacts has been assessed as no more than medium to low. The significance of any effects will, when combined with the high sensitivity of receptors, be moderate to slight adverse and not significant.
- 1.1.3 The appendix should be read in combination with drawings 040, 044 and 063, illustrating the extent of landscape designations at national and local levels.

2 PUBLIC RIGHTS OF WAY

- 2.1.1 As described in section 7.4.29 to 7.4.32 of the main report, there are a number of PRoW passing through or running adjacent to the Site.
- 2.1.2 The visual amenity of users of these PRoW's will be strongly influenced by the presence of the proposed turbines and solar farm. The proposed development will be viewed in combination with the operational turbines at Pen Bryn Ore and Penygarnddu Industrial Estate. On completion, views of the proposed development will be available from the whole length of the onsite and adjacent footpaths due to the proximity and lack of any notable intervening vegetation. At year 15, once the proposed mitigation planting has matured, the solar farm elements will be almost entirely screened from view from the northern footpaths, but only partially screened from the southern footpaths due to their elevation and 'looking into the site' nature. The wind turbines would become a dominating feature within the views from all of these PRoW's due to the close and direct nature of the views. Therefore, the magnitude of effects has been assessed as High from these PRoWs.

- 2.1.3 Combined with the high sensitivity of users, significance of effects would be **substantial adverse and significant overall**, as although the proposed development would be dominate, it would not be wholly out of character.

Cumulative Assessment

- 2.1.4 Although sections of these footpaths pass through the site, they do not pass through the turbines or solar farm. None the less, the visual amenity of users will be notably influenced by the presence of the proposed development due to its proximity. The proposed development will be viewed in combination with the operation turbines at Pnengarnddu Industrial Estate, Pen Bryn Oer and Tafaranabach Industrial Estate amongst other more distant wind turbines.
- 2.1.5 The consented Pangarddu Industrial Estate and Valley Heights Filling Station are both located near the routes. These developments will increase the influence of wind farm development along these routes, although impacts will primarily be from the proposed development, which will be a dominating feature. When considering to proposed development in addition to the cumulative scenario, the proposed scheme would notably increase the influence of wind farm and solar development. The sensitivity of the receptors on the footpath is considered to be high and the magnitude of cumulative impacts is considered to be high as the footpaths pass in close proximity to the proposed development. The significance of cumulative effects are assessed as **substantial adverse and significant** level of effect.

3 NATIONAL RAILS/LONG DISTANCE FOOTPATHS

3.1 Rhymney Valley Ridgeway Walk

- 3.1.1 The northern most section of this route extends across the open upland of Cefn y Brithdir and will pass through the proposed development therefore the visual amenity of users will be strongly influenced by both the turbine and solar elements of the proposed development.
- 3.1.2 The proposed development will be viewed in combination with the operational turbines at Pen Bryn Ore and Penygarnddu Industrial Estate. On completion, theoretical views of the proposed development will be available from the northern most stretch of the footpath between Capel y Brithdir to the south and the A469 where the footpath starts/ends to the east of the site. Viewpoint 4 illustrate the predicted view from the footpath near Fochriw to the south. Open and clear views

of the proposed development would be available from the northern most part of the footpath as it passes to the east of the site.

- 3.1.3 Sections of the routes to the south of the site are increasingly constrained by intervening vegetation and landform. Visibility of the proposed development reduces with distance and increasing intervening landform and vegetation to the south. From locations further to the south the proposed development will occupy only a small part of the overall view, where visibility is possible. Overall, the proposed development will influence only a small section of the route, and the integrity of the route along its length would remain. Where the proposed turbines are in proximity to the route, the magnitude is predicted to be to high but elsewhere it would vary from medium through to negligible. Combined with the high sensitivity of users, significance of effects will range from **substantial adverse, (significant), through substantial to moderate adverse, (significant)** and reducing to minor (not significant).

Cumulative Assessment

- 3.1.4 Although sections of this footpath pass through the site, it does not pass through the turbines or solar farm. However, the visual amenity of users will be notably influenced by the presence of the proposed development due to its proximity. The proposed development will be viewed in combination with the operation turbines at Pnengarnddu Industrial Estate, Pen Bryn Oer and Tafaranabach Industrial Estate amongst other more distant wind turbines.
- 3.1.5 The consented Cwmbargoed Disposal Point, Pangarddu Industrial Estate and Valley Heights Filling Station and in planning Pen March and Manmole developments are all located near the northern end of this route. These developments will increase the influence of wind farm development along the northern end of the route, although impacts will primarily be from the proposed development and the path nears its northern most extent. When considering the Proposed Development in addition to the cumulative scenario, the Proposed Scheme would be perceived as an extension to the Pen March scheme from several sections of this footpath and would be a dominating feature along the path's northern extents.
- 3.1.6 The cumulative magnitude of change is considered to be high as it passes the proposed development to medium through to negligible from more southern locations. The significance of effects will range from **substantial to moderate and significant** through to imperceptible (not significant).

3.2 Sirhowy Valley Walk

- 3.2.1 As shown in the ZTV, Figure xx sections of the route extending across the open upland landscape of Cefn Manmoel would be subject to views of the proposed development. The visual amenity of users will be influenced by the presence of the proposed development, particularly the wind turbine elements. The proposed development would be viewed in conjunction with several other existing turbine developments, particularly the turbines at Rassau Industrial Estate, Pen Bryn Ore and Cruglwyn and several communication masts. The proposed development will be seen in open panoramic views to the west.
- 3.2.2 Sections of the route to the north of Mountain Air, and broadly to the south of Manmoel, are, typically constrained by intervening vegetation, including plantation forestry to the north and a network of hedges and trees to the south. Visibility of the proposed development therefore reduces north and south along the route. The turbines will be completely screened from view as the route drops down into the Sirhowy Valley near the Cruglwyn turbines. From locations where the proposed development will be perceptible, it will occupy only a small part of the overall view. Overall, the proposed development will only be perceptible from a relatively short section of the overall route, with the existing main focus of the views remaining.
- 3.2.3 The magnitude of effects is predicted to be medium to low through to negligible. Combined with the high sensitivity of users, significance of effects will range from moderate to slight, (not significant), through to slight and imperceptible (not significant).

Cumulative Assessment

- 3.2.4 Sections of the route extending across the open upland landscape of Cefn Manmoel will have views of the proposed development in conjunction with several operational wind turbines such as Rassau Industrial Estate, Tafaranabach Industrail Estate and Pen Bryn Ore.
- 3.2.5 Sections of this route will pass through the in planning Manmole development and the visual amenity of users will be strongly influenced by the presence of its turbines.

- 3.2.6 These developments will increase the influence of wind farm development along this route, especially within the northern sections. Within the northern section of this route, impacts will primarily be from the in-planning development rather than the proposed development which will be viewed in the distance and obliquely to the direction of travel.
- 3.2.7 When considering the Proposed Development in addition to the cumulative scenario, the proposed development would be perceived as a distant addition to the view and would only very slightly increase the influence of wind turbine development. The cumulative magnitude of change is considered to be low to negligible.
- 3.2.8 The combined high sensitivity and low to negligible magnitude of change will result in slight adverse and not significant cumulative effect.

3.3 Taf Trail

- 3.3.1 Only a small section of the Taf Train falls within the ZTV, as it rises out of the Taf Valley north-west of Merthyr Tydfil and heads into the forest area of Penmoelallt. Views of the proposed development would only be available for users heading in a southern direction and would be viewed in conjunction with several other existing wind turbines and man-made features such as pylons and communication masts. Views would be distant, and the proposed development would only occupy a very small proportion of the view. Overall the magnitude has been assessed as slight adverse and not-significant, reducing to imperceptible.

Cumulative Assessment

- 3.3.2 In addition to the proposed development and operational schemes that are visible, the in-planning Pen March and Manmole, consented Rassau Industrial Estate and Cwmbargoed Disposal Plant and scoping Abertillery schemes would be visible within the same field of views as the proposed Development. Other operational and cumulative schemes are at such a distance that they appear as insignificant features. The Proposed Development would be viewed in front of the operational Pen Bryn Oer.
- 3.3.3 The introduction of the cumulative schemes, particularly Pen March, would notably intensify the influence of wind farm development in the view due to its visibility. When considering the Proposed Development in addition to the cumulative scenario, the Proposed Scheme would be partially visible in the background of the view.

- 3.3.4 The cumulative magnitude of change is considered to be low to negligible. The combined high sensitivity and low to negligible magnitude of change will result in slight adverse and not significant cumulative effects.

3.4 Cambrian Way

- 3.4.1 Due to the nature of the BBNP landform only a few short stretches of this PRoW fall within the ZTV. Although, where the proposed development is visible, the proposed development would be a notable feature within the view. Viewpoint 14 illustrates the typical view from the short stretch of this footpath with views of the proposed development to the north of the site.
- 3.4.2 Only the wind turbines would be perceptible from this footpath and would be viewed in conjunction with several other existing wind turbines and man-made features such as pylons and communication masts. The proposed development would only occupy a very small proportion of the view. Overall, the magnitude has been assessed as medium to low and **moderate adverse, significant**, for the short section of the footpath where the turbines are perceptible, reducing to moderate to slight, through to imperceptible with distance.

Cumulative Assessment

- 3.4.3 The wireline for Viewpoint 14, illustrates that in addition to the proposed development and operational schemes that are visible, the in-planning Pen March and consented Abergorki, Upper Ogmere, Cwmbargoed Disposal Pont, Lleyncelyn Farm and Land at Graig Yr Hufen would be visible within the same field of views as the proposed Development from the short sections of route that fall within the ZTV. The scoping Mynydd Y Glyn and Twyn Hywell Energy Park would also be visible in the same field of view.
- 3.4.4 There would be successive views of the in planning Manmole, Mynydd Carn Y Cefn and Silent Valley Wate turbines, consented Rassau Industrial Estate and scoping Mynydd Maen, Mynydd Llanhileth, Abertillery and West Monmouthshire Golf Course turbines in a separate oblique field of view. Other operational and cumulative turbines are at such a distance that they appear as insignificant features.
- 3.4.5 The introduction of the cumulative schemes, particularly the Pen March would notably intensify the influence of wind farm development in a view already influenced by wind turbine development. When considering the Proposed Development in addition to the cumulative scenario, the Proposed Scheme would be

perceived as a standalone development and would be located in the middle ground of the view. Only the upper tower, hubs and blades of the proposed development will be visible due to intervening landform. Pen March would be the slightly more promenade scheme due to it being located closer to the viewpoint.

- 3.4.6 The cumulative magnitude of change is considered to be Medium to low for the sections of the route where the turbines are perceptible, reducing to low, through to negligible with distance.
- 3.4.7 The combined high sensitivity and medium to low magnitude of change will result in **Moderate adverse and significant** cumulative effect, reducing to Moderate to slight (not significant) through to imperceptible (not significant).

4 NATIONAL CYCLE ROUTES (NCR'S)

4.1 NCR 468

- 4.1.1 As shown on the ZTV (drawing 008 and 009) the majority of this NCR between the A465 and New Tredegar has some theoretical visibility of the proposed development. In reality intervening vegetation and built form will limit visibility from a significant proportion of the NCR. Where open and clear views of the proposed development are available, such as Viewpoint 11 (drawing 90) the wind turbine elements will introduce new man-made features to the view. Overall, the magnitude of effects has been assessed medium, quickly reducing to medium to low through to negligible.
- 4.1.2 The combined high sensitivity and medium magnitude of change will result in a **Substantial adverse and significant** level of effect, reducing to moderate adverse through to imperceptible (not significant).

Cumulative Assessment

- 4.1.3 The wireline for Viewpoint 11 illustrates that in addition to the proposed development, only the in-planning Pen March wind farm would be visible within the same field of view as the proposed Development from the south.
- 4.1.4 The wireline for Viewpoint 1 illustrates that in addition to the proposed development and operational scheme that are visible, only the tip of the consented Cwmbargoed Disposal Point turbine will be visible within the same field of views as the proposed Development in views from the north end of this route.

- 4.1.5 There will also be oblique views of the operational Pen Bryn Oer and in planning Pen March from the northern end of the route. Other operation turbines are at such a distance that they appear as insignificant features.
- 4.1.6 The introduction of the cumulative scenario would notably intensify the influence of wind farm development in the available views, however, when considering the Proposed Development in addition to the cumulative scenario, the Proposed Scheme would be perceived as a standalone development and would only be viewed alongside Pen March from a distance.
- 4.1.7 The cumulative magnitude of change is considered to be Medium to Low, reducing to negligible.
- 4.1.8 The combined high sensitivity and medium to low magnitude of change will result in Moderate to slight adverse and not significant cumulative effects, reducing to imperceptible.

4.2 NCR 469

- 4.2.1 The proposed development would be visible from a stretch of this NCR as it passes between Fochriw and Parc Cwm Darren to the south of the site. The proposed development would only be perceptible in views northwards towards Fochriw due to the location of the site. Only the wind turbine elements of the proposed development would be perceptible as intervening landform would screen the solar farm from view. The majority of views from this NCR would be limited to glimpsed views above and between intervening vegetation and built form. From the more elevated and open locations along this NCR, views of the turbines are assessed as a maximum of medium to low, reducing to low through to negligible.
- 4.2.2 The combined high sensitivity and medium to low magnitude of change will result in moderate to slight adverse and not significant effects, reducing to imperceptible with distance.

Cumulative Assessment

- 4.2.3 In addition to the proposed development and visible operation turbines, it is likely that only the in-planning Pen March development would be perceptible. The Pen March development would be viewed behind the proposed development from a very limited distant proportion of this route. Most views are heavily screened by intervening vegetation and built form.

- 4.2.4 The introduction of the cumulative scenario would slightly increase the influence of wind farm development in the available views, however, when considering the Proposed Development in addition to the cumulative scenario, the Proposed Scheme would only be viewed alongside the Pen March from a distance.
- 4.2.5 The cumulative magnitude of change is considered to be Low, reducing to negligible.
- 4.2.6 The combined high sensitivity and low magnitude of change will result in slight adverse and not significant cumulative effects, reducing to imperceptible.

4.3 NCR 46

- 4.3.1 Almost the whole section of this NCR between Merthyr Tydfil and Brynmawr to the east, falls within the ZTV. As the user heads west, views of the proposed development will vary due to intervening vegetation and built form, views beyond approximately 4km are limited further again. Open views of the proposed development will generally be limited to a short stretch of the NCR north of the site, on the opposite side of the A465. Viewpoint 9 illustrates the typical view from this location.
- 4.3.2 At most, all three turbines would be clearly visible above the skyline, along with the northern most part of the Solar Farm. In year 15, the proposed landscape mitigation measures around the Solar farm will have matured, screening part of the solar elements from the view. That being said, the proposed wind turbines will remain a very prominent feature within the view.
- 4.3.3 The Proposed Development would not be incongruous in the view due to the existing presence of wind turbines, although it would only occupy a notable proportion of the overall view. Therefore, the magnitude of change has been assessed as high at most, reducing to medium through to negligible with distance.
- 4.3.4 The combined high sensitivity and high magnitude of change will result in **substantial to moderate adverse and significant** effects, reducing to **moderate adverse (significant)** through to imperceptible (not significant).

Cumulative Assessment

- 4.3.5 This NCR runs broadly parallel with the A465 Heads of the Valley Road, to the north of the site. Residential Viewpoint 2 is located along this route and illustrates a typical close-up view of the proposed development from this route. This also illustrates the worse case view as it is close and open, with clear views of the site.

- 4.3.6 There are several operational wind turbines visible along this route, concentrated between Beaufort to the east and Merthyr Tydfil in the west. All of which strongly influence views from this stretch of the route. The consented Rassau Industrial Estate, Valley Heights Filling Station and Pengarddu Industrial Estate wind turbines are also located within this area. The in-planning Pen March and Manmole are also along with the scoping West Monmouthshire Gold Glub turbine are also located in this area.
- 4.3.7 These consented, in planning and scoping cumulative schemes would further increase the influence of wind turbines within views from this NCR. Wind turbines would be visible in almost all direction from this NCR, with the exception of areas screened by intervening vegetation and built form. The relatively short section of this route that passes the proposed development lends itself to close open views of the proposed development and as a result this section of the route, will primarily be impacted by the proposed development as well as the in planning turbines of Pen March rather than submitted developments located further to the east and west.
- 4.3.8 The sensitivity of the receptors on the footpath is considered to be high and the magnitude of cumulative impacts is considered to be high as it passes north of the site, reducing to Medium through to negligible from locations further way. The significance of effects will range from **substantial to moderate (significant)** through to imperceptible (not significant).

5 MAIN A ROADS

- 5.1.1 The vast majority of road and rail users will be locals and/or commuters, although there will be some leisure drivers/tourists due to the proximity of the BBNP. Locals and commuters using the main A roads to get from A to B are likely to have a low sensitivity as their attention or interest will include some views of the wider landscape but where there is tolerance of change. Tourists' attention or interest is more likely to be focused on the landscape, where tolerance to change is likely to be low, resulting in a high sensitivity. Overall road and rail users are assessed as having a medium sensitivity.
- 5.1.2 The ZTV illustrates that beyond 10 km there will be no or very intermittent theoretical visibility of the proposed development. Where theoretical visibility is available, it is considered that views of the proposed development will be fleeting distant glimpses where foreground elements including road-side or rail-side vegetation and built form allow. In these instances, the magnitude of impact will be

low through to negligible. The significance of any effects will, when combined with the medium sensitivity of receptors, will be moderate to slight through to imperceptible (not significant).

5.2 A465

- 5.2.1 The A465 Heads of the Valleys Road, extending broadly between Brynmawr to the east and Merthyr Tydfil to the West passes through the open and expansive upland plateau where the proposed development will be intermittently visible beyond embankments, cuttings and roadside vegetation. Views will be oblique to the direction of travel and the proposed development will be viewed in combination with other man-made vertical elements including pylons, operational wind farms, buildings and roadside infrastructure. There is a short stretch of the A465 where it passes in close proximity to the proposed development. See Viewpoint 9 (drawing 88). Here the magnitude of impacts will be high and when combined with a medium sensitivity the significance of effects in visual amenity will be **moderate adverse, significant**. From elsewhere the magnitude of impacts will be variable, ranging from medium to low or negligible and when combined with medium sensitivity, the significance of effects on visual amenity will range from moderate to slight, to slight through to imperceptible (not significant in all cases).

Cumulative Assessment

- 5.2.2 This road runs east west to the north of the site. Viewpoint 9 is located along this road and illustrates a typical close-up view of the proposed development from this road. This also illustrates the worst-case view as it is close and open, with clear views of the site.
- 5.2.3 There are several operational wind turbines visible along this road, concentrated between Beaufort to the east and Merthyr Tydfil in the west. All of which strongly influence views from this stretch of road. The consented Rassau Industrial Estate, Valley Hights Filling Station and Pengarddu Industrial Estate wind turbines are also located within this area. The in-planning Pen March and Manmole are also along with the scoping West Monmouthshire Gold Glub turbine are also located in this area.
- 5.2.4 These consented, in planning and scoping cumulative schemes would further increase the influence of wind turbines within views from this road. Wind turbines would be visible in almost all direction along this road, with the exception of areas

screened by road embankment, cutting, intervening vegetation and built form. The relatively short section of this road that passes the proposed development lends itself to close open views of the proposed development and as a result this section of the road, will primarily be impacted by the proposed development as well as the in planning turbines of Pen March to the north, rather than submitted developments located further to the east and west.

- 5.2.5 The sensitivity of the receptors using this road are considered to be medium and the magnitude of cumulative impacts is considered to be high as it passes north of the site, reducing to Medium through to negligible from locations further way. The significance of effects will range from **substantial to moderate (significant)** through to imperceptible (not significant).

5.3 A469

- 5.3.1 The A469, extends broadly south-east from Rhymney and passes the proposed development to its east. This road passes through a relatively open valley landscape where the proposed development will be intermittently visible beyond intervening landform and roadside vegetation, at distances of between 500m and 4.5 km. Available views will be in the direction of travel and the proposed development will be viewed in combination with other man-made vertical elements including pylons, operational wind farms, buildings and roadside infrastructure. The magnitude of impacts will be variable, ranging from high to low or negligible and when combined with medium sensitivity, the significance of effects on visual amenity will range from **substantial (significant)**, to moderate to slight through to imperceptible (not significant). The level of significance generally reduces as distance increases.

Cumulative Assessment

- 5.3.2 In addition to the proposed development and operational wind turbines already visible, only the in-planning Pen March and Pen Bryn Ore wind farm would be visible within the same field of view as the proposed Development from the northern most extents of this road due to the valley's landform.
- 5.3.3 Other operation turbines are at such a distance that they appear as insignificant features.
- 5.3.4 The introduction of the cumulative scenario would notably intensify the influence of wind farm development in the available views, however, when considering the Proposed Development in addition to the cumulative scenario, the Proposed Scheme

would be perceived as a standalone development and would only be viewed alongside Pen March or Manmole from a relatively short section of the road.

5.3.5 The cumulative magnitude of change is considered Medium to Low, reducing to negligible quite quickly as the route heads south.

5.3.6 The combined medium sensitivity and medium to low magnitude of change will result in **Moderate adverse and significant** cumulative effects, reducing to imperceptible.

5.4 A470

5.4.1 A small section of the A470 to the west of Merthyr Tydfil falls within the ZTV and therefore has theoretical visibility of the proposed development. Available views of the proposed development will be sporadic and limited by intervening landform and roadside vegetation. Available views will be oblique to the direction of travel and where visible, the proposed development will be viewed in combination with other man-made vertical elements including pylons, operational wind farms, buildings, and roadside infrastructure. The magnitude of impacts will be variable, ranging from low and negligible and when combined with medium sensitivity, the significance of effects on visual amenity will range from moderate to slight through to imperceptible (not significant). The level of significance generally reduces as distance increases.

Cumulative Assessment

5.4.2 In addition to the proposed development and operational wind turbines already visible, the in-planning Pen March and Pen Bryn Ore, consented Pengarddu Industrial Estate, Valley Heights Filling Station, and Cwmbargoed Disposal Point wind turbines would be visible within the same field of view as the proposed Development from the small section of the road due to the surrounding valley's landform.

5.4.3 Other operation turbines are at such a distance that they appear as insignificant features.

5.4.4 The introduction of the cumulative scenario would increase the influence of wind farm development in the available oblique views, however, when considering the Proposed Development in addition to the cumulative scenario, the Proposed Scheme would be perceived as a standalone development and would only be viewed from a relatively short section of the road.

- 5.4.5 The cumulative magnitude of change is considered to be Low, reducing to negligible quite quickly as the route heads north and south.
- 5.4.6 The combined medium sensitivity and low magnitude of change will result in moderate to slight adverse and not significant cumulative effects, reducing to imperceptible.