Photomontages

Section 10

10.1 Photomontages

Whilst it is possible for any residential dwelling with a view toward the project turbines to be potentially affected (with a resultant high, moderate or low impact), it is not feasible or practical to prepare a photomontage for each and every residential dwelling within the project viewshed.

A total of 12 photomontage locations were selected to represent uninvolved residential dwellings and public view locations from surrounding road corridors. The photomontages locations are illustrated in **Figure 16** and are presented in **Figures 17** to **44**.

10.2 Photomontage preparation

The photomontages have been prepared with regard to the general guidelines set out in the Scottish Natural Heritage (2006) Visual representation of windfarms: good practice guidance and British Landscape Institute Advice Note 01/11 (March 2011) Photography and photomontage in landscape and visual impact assessment.

Photography for the photomontages was undertaken by GBD using tripod mounted Nikon D700 a digital single-lens reflex (SLR) camera. A 50 mm focal length prime lens was attached to the Nikon D700 and D90 SLR cameras.

The Nikon D700 has a full frame image censor (36 x 23.9 mm Nikon FX format), and when mounted with a 50mm lens results in a single photographic image with a view angle equivalent to a 35 mm SLR camera with a 50 mm lens. The 50 mm lens is commonly utilised, and cited in landscape and visual assessment manuals and guidelines, for the preparation of landscape and visual assessment photomontages. Following site photography the photomontages were generated through the following steps:

- a digital terrain model (DTM) of the project site was created from a terrain model of the surrounding area using digital contours;
- the site DTM was loaded in the G-L Garrad Hassan 'WindFarmer' software package;

- the layout of the wind farm and 3D representation of the wind turbine was configured in WindFarmer;
- the location of each viewpoint (photo location) was configured in WindFarmer – the sun position for each viewpoint was configured by using the time and date of the photographs from that viewpoint;
- the view from each photomontage location was then assessed in WindFarmer. This process requires accurate mapping of the terrain as modelled, with that as seen in the photographs. The photographs, taken from each photomontage location were loaded into WindFarmer and the visible turbines superimposed on the photographs;
- the photomontage were adjusted using Photoshop CS3 to compensate for fogging due to haze or distance, as well as screening by vegetation or obstacles; and
- the final image was converted to JPG format and imported and annotated as the final figure.

Table 17 identifies the eleven photomontage locations, property names (where relevant), corresponding reference number identified in the residential view matrix (**Table 16**) as well as the status of each photomontage location.

Table 17 – Photomontage details

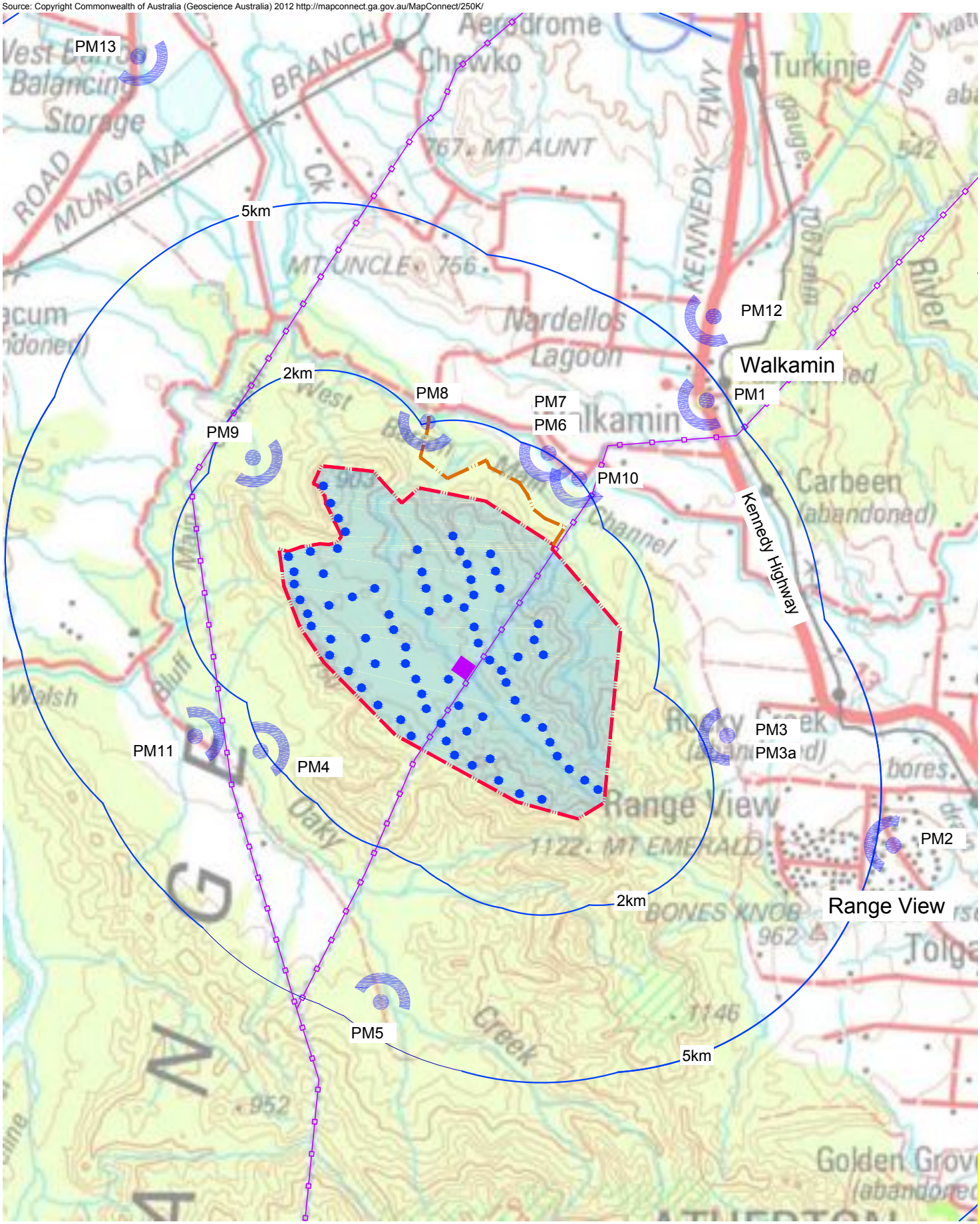
Photomontage Location	Figure Reference	Status: Residential (uninvolved) Road corridor
M4 Hibiscus Street, Walkamin	**Figure 17** and **18**	Local road corridor adjoining dwellings
M15 Moffat Drive, Range View	**Figure 19** and **20**	Local road corridor adjoining dwellings
M16 Allawah Retreat (from road)	**Figure 21** and **22**	Local road corridor
M16 Allawah Retreat (from road) with wireframe model	**Figure 23** and **24**	Local road corridor
M30 Cascade Camp	**Figure 25** and **26**	Local road corridor
M34 Oaky Valley Road	**Figure 27** and **28**	Local road corridor

Photomontage Location	Figure Reference	Status: Residential (uninvolved) Road corridor
M42a Residential dwelling R32	**Figure 29** and **30**	Residential
M44 Residential dwelling R30	**Figure 31** and **32**	Residential
M52 Residential dwelling R78, from wind farm access track	**Figure 33** and **34**	Local road corridor
M53 Springmount Waste Management Facility	**Figure 35** and **36**	Access road
M63 Residential dwelling from local road	**Figure 37** and **38**	Local road corridor
M29 Oaky Valley Road	**Figure 39** and **40**	Local road corridor
M3 Kennedy Highway	**Figure 41** and **42**	Highway corridor
M66 Burke Developmental Road	**Figure 43** and **44**	Highway corridor

The horizontal and vertical field of view within the majority of the photomontages exceeds the parameters of normal human vision. However, in reality the eyes, head and body can all move and, under normal conditions, the human brain would 'see' a broad area of landscape within a panorama view. Each of the Mount Emerald photomontage panoramas indicates the extent of a single photograph within the full extent of the panorama.

Whilst a photomontage can provide an image that illustrates a photo realistic representation of a wind turbine in relation to its proposed location and scale relative to the surrounding landscape, this LVIA acknowledges that large scale objects in the landscape can appear smaller in photomontage than in real life and is partly due to the fact that a flat image does not allow the viewer to perceive any information relating to depth or distance.

The British Landscape Institute states that '*it is also important to recognise that two-dimensional photographic images and photomontages alone cannot capture or reflect the complexity underlying the visual experience and should therefore be considered an approximate of the three-dimensional visual experiences that an observer would receive in the field'.*



Legend

- Proposed Mount Emerald wind turbine (indicative layout)
- Distance from proposed Mount Emerald wind turbine
- Existing transmission line
- Proposed substation (indicative location)
- Indicative site boundary
- Proposed access track
- Photomontage location

0km 1km 2km

Figure 16
Photomontage locations

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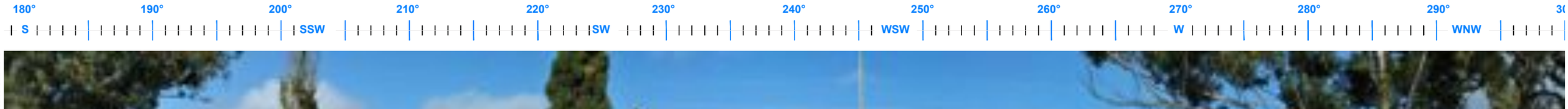
MOUNT EMERALD WIND FARM

Photomontage Location M4 Hibiscus Street, Walkamin. Existing view south to west north west.



Photomontage Location M4 Hibiscus Street, Walkamin. Proposed view south to west north west.

MT. EMERALD WIND FARM

Refer Figure 16 for Photomontage Location.

Individual panorama photos taken with a Nikon D700 digital SLR camera with 50 mm prime lens.

Photo coordinates: Easting 332643 Northing 8105315 (MGA 94z55H).
Approximate distance to nearest visible turbine 4.8 km

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MOUNT EMERALD WIND FARM

Image Source GBD 2013

Photomontage Location M4 Hibiscus Street, Walkamin

Indicative extent of single frame photo
(refer detail below)

Image Source GBD 2013

Photomontage Location M4 - Single frame photo detail, proposed view

Figure 18
Photomontage PM 1 Sheet 2

Refer Figure 16 for Photomontage Location

Individual panorama photos taken with a Nikon D700 digital SLR camera with 50 mm prime lens.

Photo coordinates:
Easting 332643
Northing 8105315 (MGA 94z55H)

Approximate distance to nearest visible turbine 4.8 km

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Photomontage Location M15 Moffat Drive, Range View. Existing view south west to north.

Photomontage Location M15 Moffat Drive, Range View. Proposed view south west to north.

MT. EMERALD WIND FARM

Refer Figure 16 for Photomontage Location.

Individual panorama photos taken with a Nikon D700 digital SLR camera with 50 mm prime lens.

Photo coordinates: Easting 335350 Northing 8097827 (MGA 94z55H).
Approximate distance to nearest visible turbine 5.7 km

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MOUNT EMERALD WIND FARM

Image Source GBD 2013

Photomontage Location M15 Moffat Drive, Range View

Indicative extent of single frame photo
(refer detail below)

Image Source GBD 2013

Photomontage Location M15 - Single frame photo detail, proposed view

Figure 20
Photomontage PM 2 Sheet 2

Refer Figure 16 for Photomontage Location

Individual panorama photos taken with a Nikon D700 digital SLR camera with 50 mm prime lens.

Photo coordinates:
Easting 335350
Northing 8097827 (MGA 94z55H)

Approximate distance to nearest visible turbine 5.7 km

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Image Source GBD 2013

Photomontage Location M16 Allawah Retreat, Marnane Road. Existing view south south east to north west.

Image Source GBD 2013

Photomontage Location M16 Allawah Retreat, Marnane Road. Proposed view south south east to north west.

MT. EMERALD WIND FARM

Refer Figure 16 for Photomontage Location.

Individual panorama photos taken with a Nikon D700 digital SLR camera with 50 mm prime lens.

Photo coordinates: Easting 333131 Northing 8098739 (MGA 94z55H).
Approximate distance to nearest visible turbine 2.5 km

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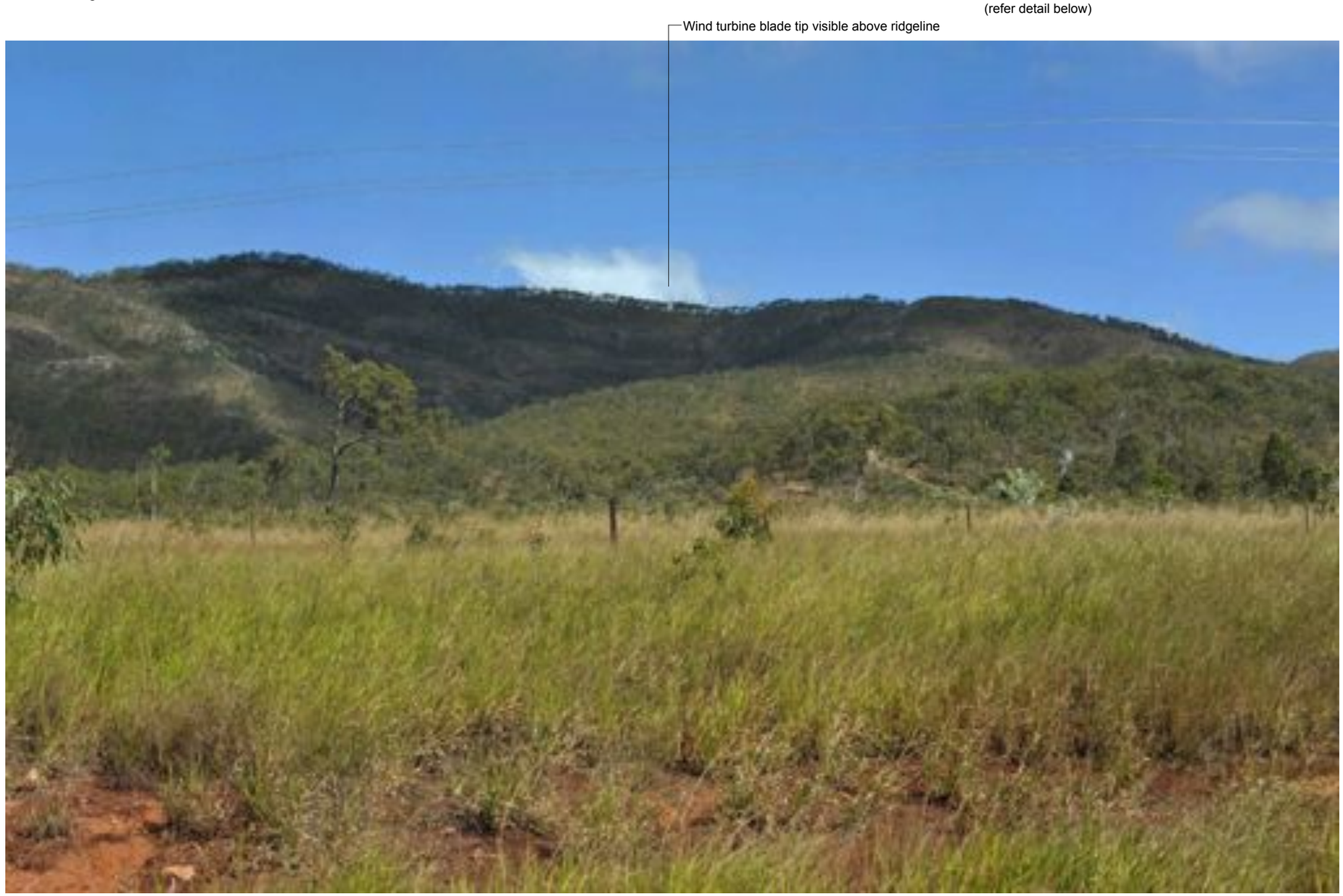
MOUNT EMERALD WIND FARM

Image Source GBD 2013

Photomontage Location M16 Allawah Retreat from Marnane Road

Image Source GBD 2013



Photomontage Location M16 - Single frame photo detail, proposed view

Figure 22
Photomontage PM 3 Sheet 2

Refer Figure 16 for Photomontage Location

Individual panorama photos taken with a Nikon D700 digital SLR camera with 50 mm prime lens.

Photo coordinates:
Easting 333131
Northing 8098739 (MGA 94z55H)

Approximate distance to nearest visible turbine 2.5 km

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Image Source GBD 2013

Photomontage Location M16 Allawah Retreat, Marnane Road. Existing view south south east to north west.

Image Source GBD 2013

Photomontage Location M16 Allawah Retreat, Marnane Road. Proposed view south south east to north west.

Note - Photomontage PM 3A includes a digital terrain overlay (in green) to illustrate the location of proposed wind turbines beyond the foreground hills and ridgeline. A view would extend toward the blade tips of the southern most wind turbine, however all other wind turbines illustrated in PM 3 would not be visible from this view location.

MT. EMERALD WIND FARM

Refer Figure 16 for Photomontage Location.

Individual panorama photos taken with a Nikon D700 digital SLR camera with 50 mm prime lens.

Photo coordinates: Easting 333131 Northing 8098739 (MGA 94z55H).
Approximate distance to nearest visible turbine 2.5 km

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MOUNT EMERALD WIND FARM

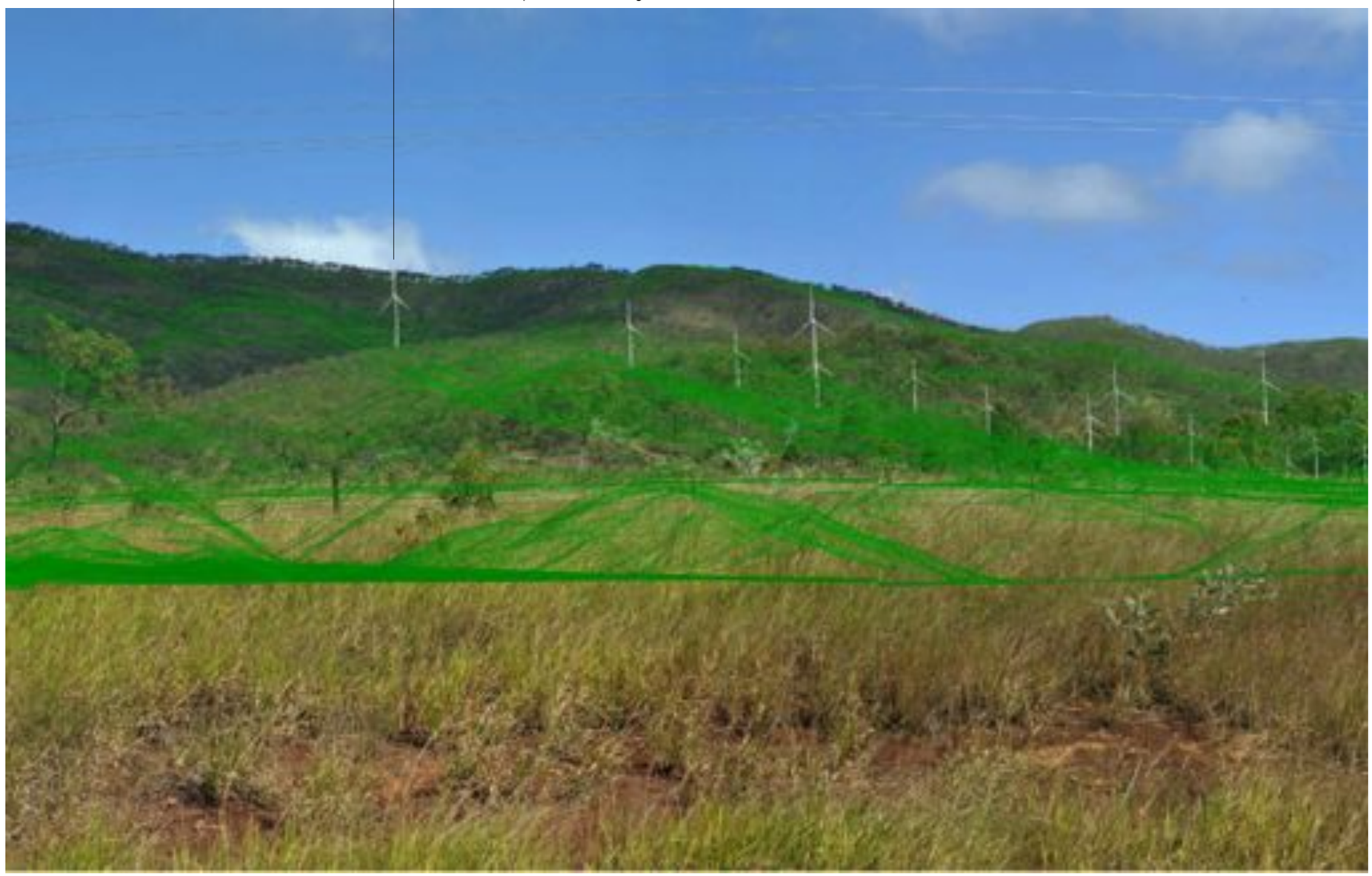
Image Source GBD 2013

Photomontage Location M16 Allawah Retreat from Marnane Road

Indicative extent of single frame photo
(refer detail below)

Wind turbine blade tips visible above ridgeline

Image Source GBD 2013



Photomontage Location M16 - Single frame photo detail, proposed view

Figure 24
Photomontage PM 3 Sheet 2

Refer Figure 16 for Photomontage Location

Individual panorama photos taken with a Nikon D700 digital SLR camera with 50 mm prime lens.

Photo coordinates:
Easting 333131
Northing 8098739 (MGA 94z55H)

Approximate distance to nearest visible turbine 2.5 km

Note - Photomontage PM 3A includes a digital terrain overlay (in green) to illustrate the location of proposed wind turbines beyond the foreground hills and ridgeline.

A view would extend toward the blade tips of the southern most wind turbine, however all other wind turbines illustrated in PM 3A would not be visible from this view location.

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