Appendix E

Detailed Dwelling Assessments

E1. **NAD_1** Dwelling Assessment

NAD_1 'Mountain View'			
209 Mountain View Road, Crawney			
Nearest visible turbine (km):*	*2.58km*	**Visibility Distance Zone:**	**Near Middle - ground (NM)**
Total number of visible turbines:*	*10*	**Viewer Sensitivity Level:**	**Level 2: Rural Dwelling**
Number of *visible* turbines within 3100m:*	**3**	**Landscape Character Unit:**	**LCU06: Crawney**
Number of theoretical 60º Sectors (Based on 2D Assessment):	*2*	**Scenic Quality Rating:**	**Moderate**
Number of 60º Sectors (Based on 3D Assessment):*	*1*	**Visual Influence Zone:**	**VIZ2**

***Based on an assessment of topography alone. Screening factors such as vegetation may reduce the potential visibility of the proposed turbines.**

Assessment Notes:

Based on a desktop assessment, the dwelling is sited at the northern most end of Mountain View Road, in a small valley associated with Perrys Creek. Views surrounding the property are largely contained by steep topography and vegetation. 3D Assessment based on topography alone identified up to 10 WTGs would be visible to the NNE. Three (3) visible turbines are within 3100m. Aerial imagery indicates intervening vegetation between the dwelling and the direction of the visible turbines which is likely to reduce the potential number of visible turbines.

Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Three (3) visible turbines are located within the 'black line' of visual magnitude. It is likely views to these turbines would be limited due to intervening vegetation.

Multiple Wind Turbine Effects: The Project will be visible in up to one 60º sector (based on topography alone). This is deemed acceptable for a Level 2: Viewer (Rural Dwelling).

Landscape Scenic Integrity: The proposed turbines will not cause significant modification of the visual catchment from this viewpoint.

Key Feature Disruption: The Project will not alter or disrupt key landscape features viewed from this location.

Mitigation Methods:

Consider supplementary planting if deemed necessary to further reduce any potential visual impacts in consultation with landowner.

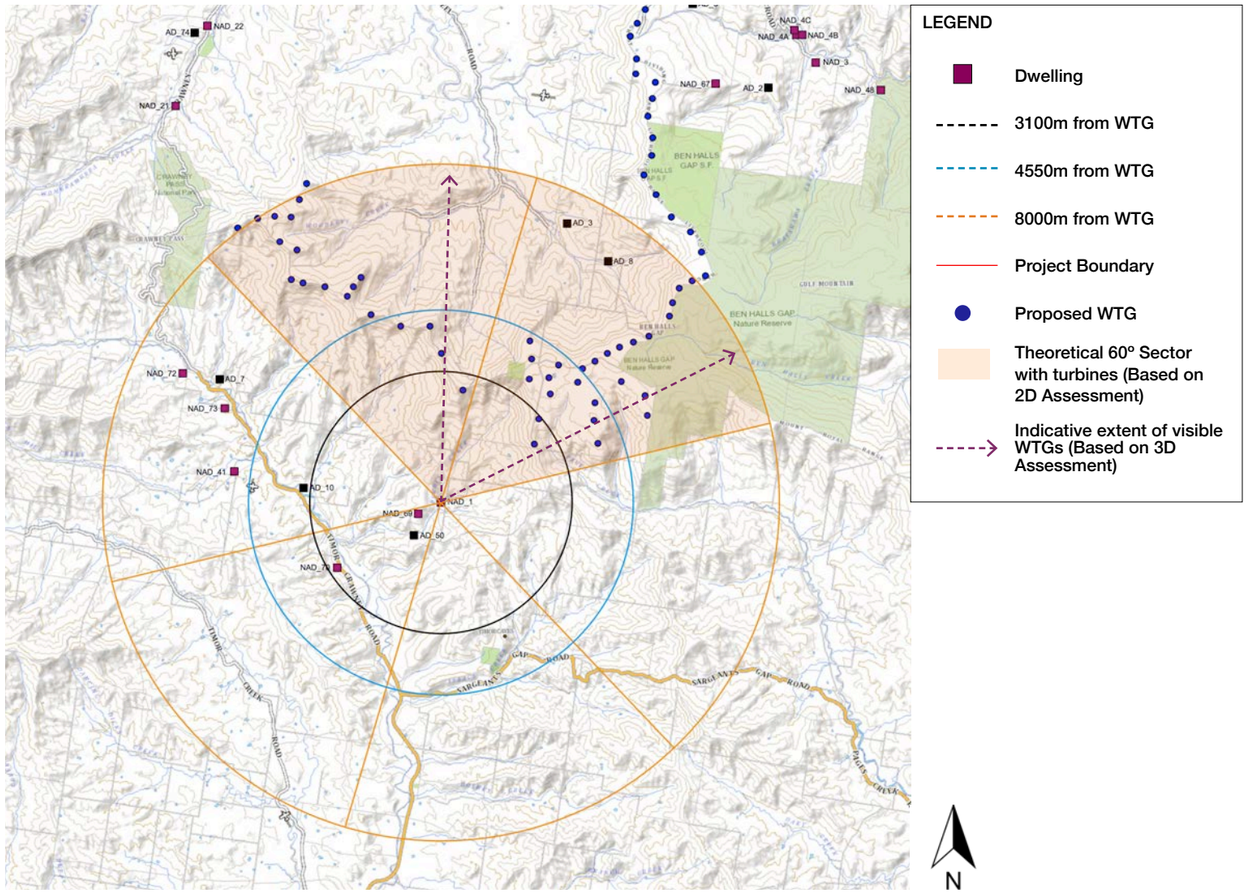
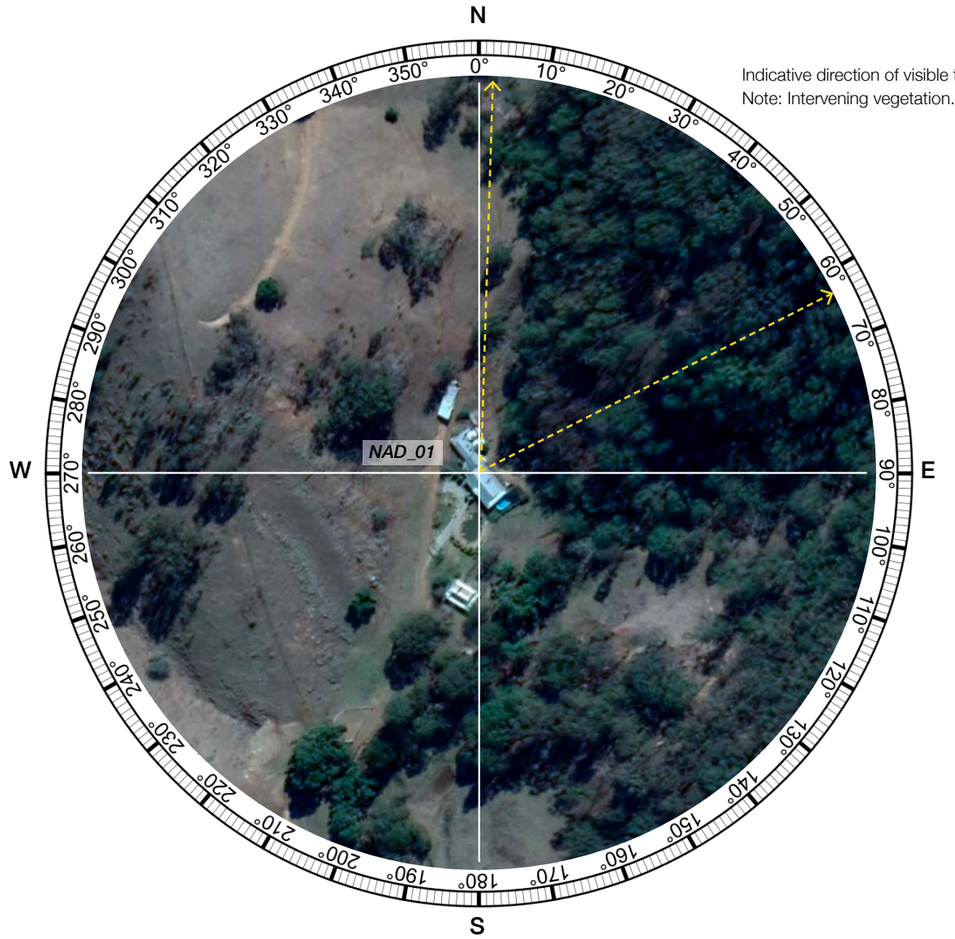


Figure E1a ***Preliminary Assessment Tool: NAD_1***



Indicative direction of visible turbines.
Note: Intervening vegetation.

Figure E1b ***Aerial Image - Dwelling NAD_1*** *(Aerial Image Source: Google Earth Image Date: 21.08.2018)*

E2. **NAD_4A** Dwelling Assessment *Refer to Photomontage 12 (Wire frame)*

NAD_4A			
Shearers Road, Hanging Rock			
Nearest *visible* turbine (km):*	*3.52km*	**Visibility Distance Zone:**	**Near Middle ground (NM)**
Total number of *visible* turbines:*	*7 (blades)*	**Viewer Sensitivity Level:**	**Level 2:** **Rural Dwelling**
Number of *visible* turbines within 3100m:*	**-**	**Landscape Character Unit:**	**LCU05: Forested Mountain Ranges**
Number of theoretical 60º Sectors (Based on 2D Assessment):	*3*	**Scenic Quality Rating:**	**Moderate / High**
Number of 60º Sectors (Based on 3D Assessment):*	*1*	**Visual Influence Zone:**	**VIZ2**

Based on an assessment of topography alone. Screening factors such as vegetation may reduce the potential visibility of the proposed turbines.

Assessment Notes:

Moir LA attended this property to undertake a site assessment on 16th June 2020. Dwelling is located on Shearers Road, to the east of the Project Site, on the foothills of Liverpool Range. The dwelling is located in a cluster of three houses near the Barnard River. The dwelling is orientated to the north west with a deck facing the south east. Views from the dwelling are generally contained to the west by a combination of topography and vegetation. From this dwelling the majority of the Project will be screened by topography with the exception of the blade tips of up to 7 turbines to the south west. Existing vegetation is located in this direction of the potentially visible turbines and is likely to screen views from the dwelling.

Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: No turbines are visible within the 'black line' of visual magnitude due to topography.

Multiple Wind Turbine Effects: 3D assessment identified turbines would be visible in up to one (1) 60º sector. This is deemed acceptable for a rural dwelling.

Landscape Scenic Integrity: The proposed turbines will not cause significant modification of the visual catchment from this viewpoint.

Key Feature Disruption: The Project will not alter or disrupt identified key landscape features viewed from this location.

Mitigation Methods:

Mitigation methods are not deemed necessary for this dwelling.

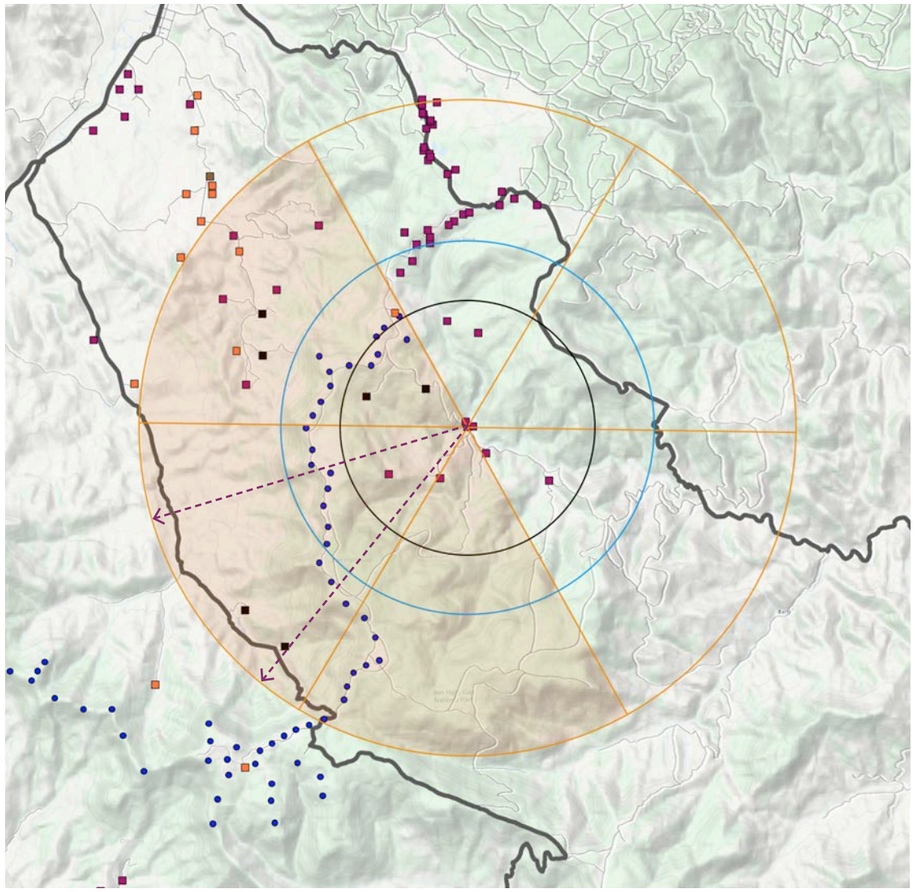
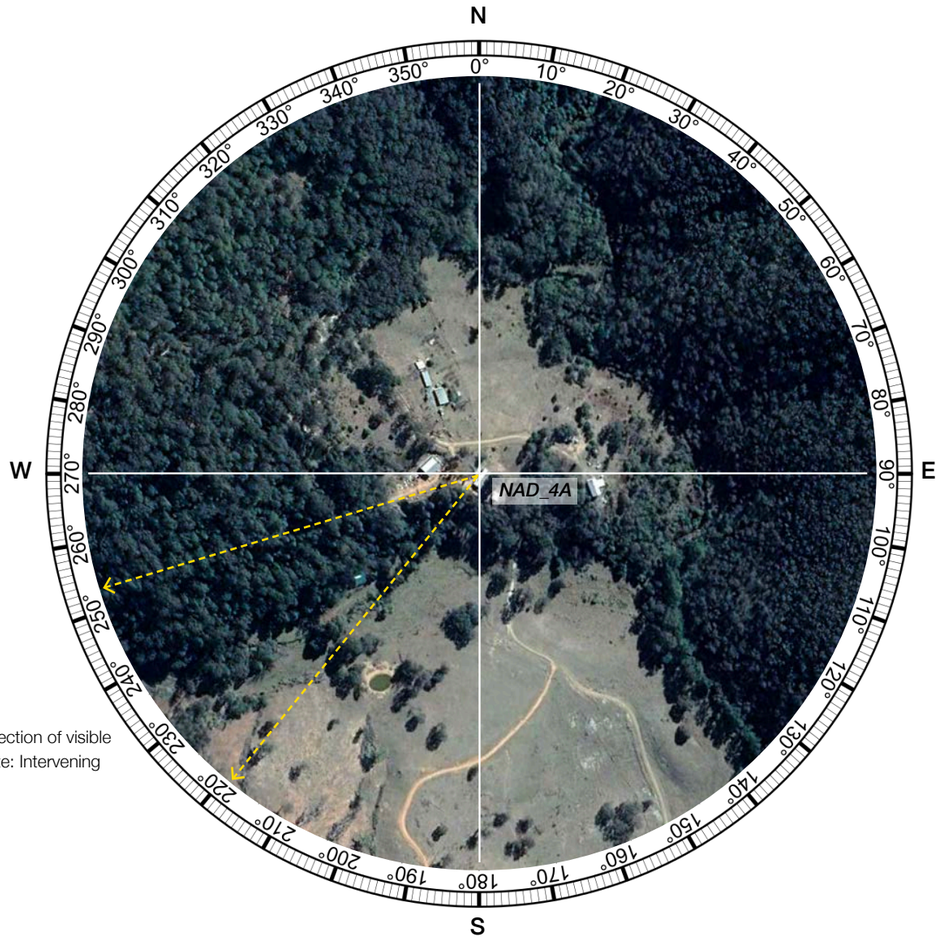


Figure E2a ***Preliminary Assessment Tool: NAD_4A***



Indicative direction of visible turbines. Note: Intervening vegetation.

Figure E2b ***Aerial Image - Dwelling NAD_4A*** *(Aerial Image Source: Google Earth Image Date: 05.08.2019)*

E3. **NAD_4B** Dwelling Assessment *Refer to Photomontage 12 (Wire frame)*

NAD_4B			
Shearers Road, Hanging Rock			
Nearest visible turbine (km):*	*2.67km*	**Visibility Distance Zone:**	**Near Middle ground (NM)**
Total number of visible turbines:*	*10*	**Viewer Sensitivity Level:**	**Level 2:** **Rural Dwelling**
Number of *visible* turbines within 3100m:*	*1*	**Landscape Character Unit:**	**LCU05: Forested Mountain Ranges**
Number of theoretical 60º Sectors (Based on 2D Assessment):	*3*	**Scenic Quality Rating:**	**Moderate / High**
Number of 60º Sectors (Based on 3D Assessment):*	*1*	**Visual Influence Zone:**	**VIZ2**

Based on an assessment of topography alone. Screening factors such as vegetation may reduce the potential visibility of the proposed turbines.

Assessment Notes:

Moir LA attended this property on 16th June 2020. Dwelling is located on Shearers Road, to the east of the Project Site, on the foothills of Liverpool Range. The dwelling is located in a cluster of three houses near the Barnard River. The dwelling is orientated in a generally north direction. Views from the dwelling are generally contained to the west by a combination of topography and vegetation. From this dwelling the majority of the Project is likely to be screened by topography with the exception of the tips of 1 turbine to the north west and up to nine (9) turbines to the WSW. Existing vegetation is located in this direction and is likely to screen views to the potentially visible turbines.

Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: One (1) visible turbines is located within the 'black line' of visual magnitude. It is likely views to this turbine would be limited to the blade tip and intervening vegetation may further reduce potential to view this turbine.

Multiple Wind Turbine Effects: The Project will be visible in up to two (2) sectors based on topography alone, however the aerial and site assessment identified dense vegetation to the south west of the dwelling which is likely to screen views to the one turbine located to the north west reducing the number of sectors to one which is deemed acceptable.

Landscape Scenic Integrity: The proposed turbines will not cause significant modification of the visual catchment from this viewpoint.

Key Feature Disruption: The Project will not alter or disrupt identified key landscape features viewed from this location.

Mitigation Methods:

Mitigation methods are not deemed necessary for this dwelling.

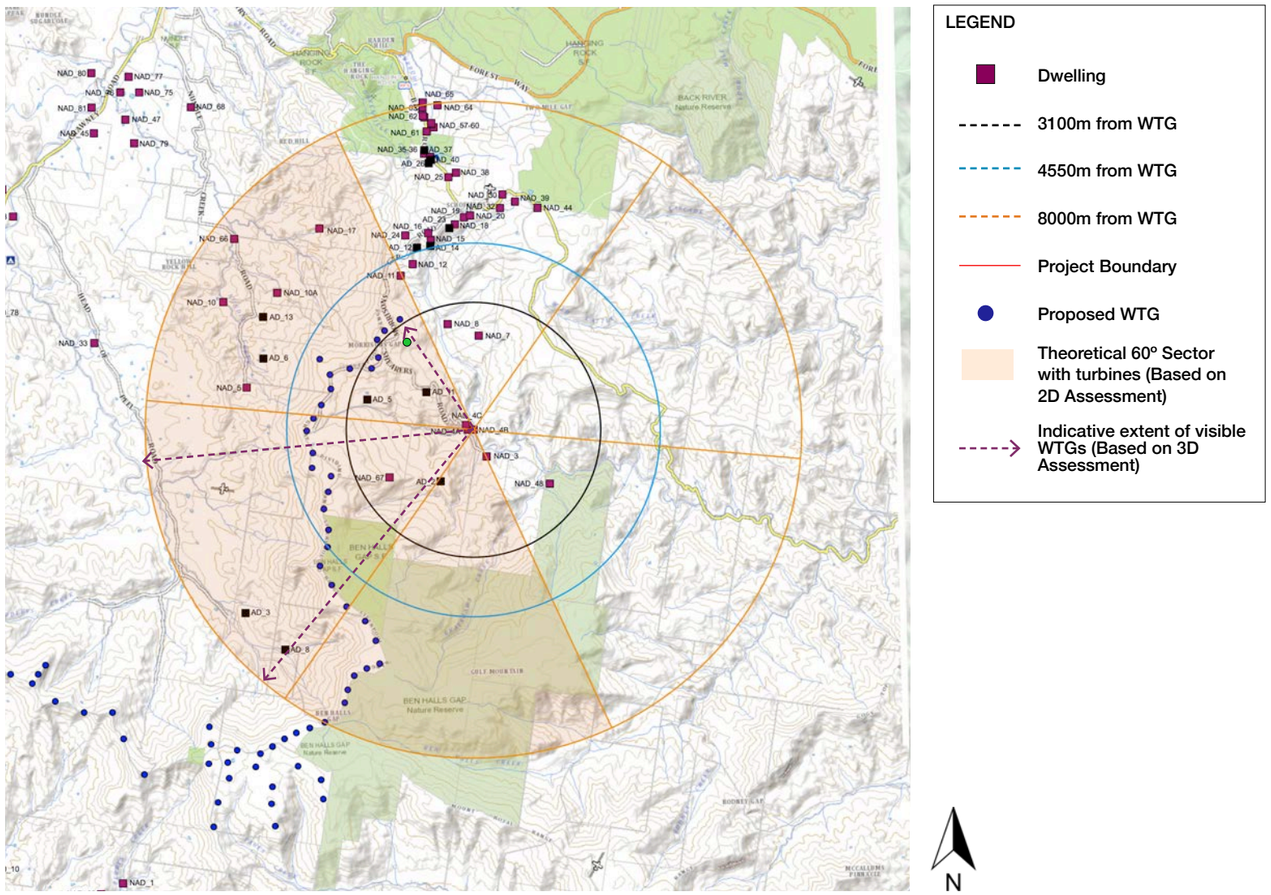


Figure E3a ***Preliminary Assessment Tool: NAD_4B***

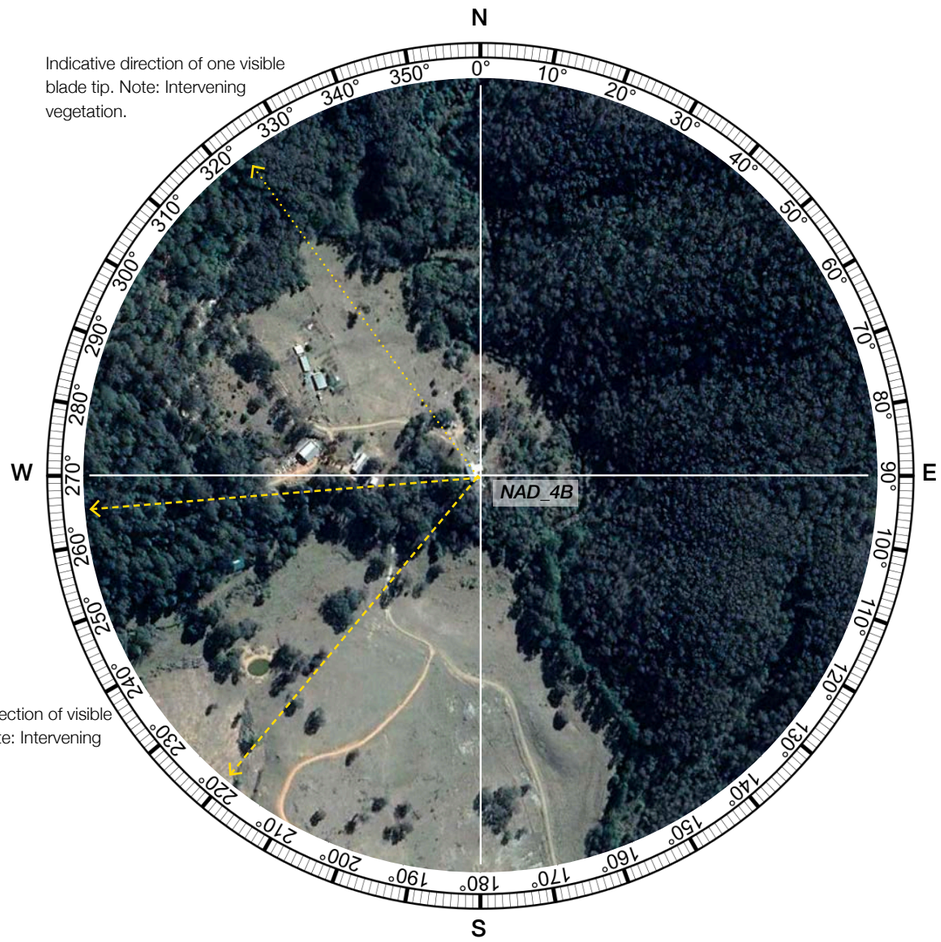


Figure E3b ***Aerial Image - Dwelling NAD_4B*** *(Aerial Image Source: Google Earth Image Date: 05.08.2019)*

E4. **NAD_4C** Dwelling Assessment *Refer to Photomontage 12 (Wire frame)*

NAD_4C			
Shearers Road, Hanging Rock			
Nearest visible turbine (km):*	*5.27km*	**Visibility Distance Zone:**	**Far Middle ground (FM)**
Total number of visible turbines:*	*1*	**Viewer Sensitivity Level:**	**Level 2:** **Rural Dwelling**
Number of *visible* turbines within 3100m:*	**0**	**Landscape Character Unit:**	**LCU05: Forested Mountain Ranges**
Number of theoretical 60º Sectors (Based on 2D Assessment):	*3*	**Scenic Quality Rating:**	**Moderate / High**
Number of 60º Sectors (Based on 3D Assessment):*	*1*	**Visual Influence Zone:**	**VIZ2**

Based on an assessment of topography alone. Screening factors such as vegetation may reduce the potential visibility of the proposed turbines.

Assessment Notes:

Dwelling is located in a cleared section of otherwise densely vegetated land at the base of Shearers Road to the east of the Project Site. Moir LA attended the property on 16th June 2020 to undertake a site assessment. From this dwelling, the Project will be screened by topography with the exception of one (1) turbine located in a generally south west direction in excess of 5 kilometres from the dwelling. Roadside vegetation associated with Shearers Road is likely to fragment views to the turbine which is unlikely to be noticeable.

Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: No turbines are visible within the 'black line' of visual magnitude from this dwelling.

Multiple Wind Turbine Effects: One turbine associated with the Project is likely to be visible (based on topography alone) and therefore visible in only one 60º sector.

Landscape Scenic Integrity: The proposed turbines will not modify the visual catchment from this viewpoint.

Key Feature Disruption: The Project will not alter or disrupt identified key landscape features viewed from this location.

Mitigation Methods:

Mitigation methods are not deemed necessary for this dwelling.

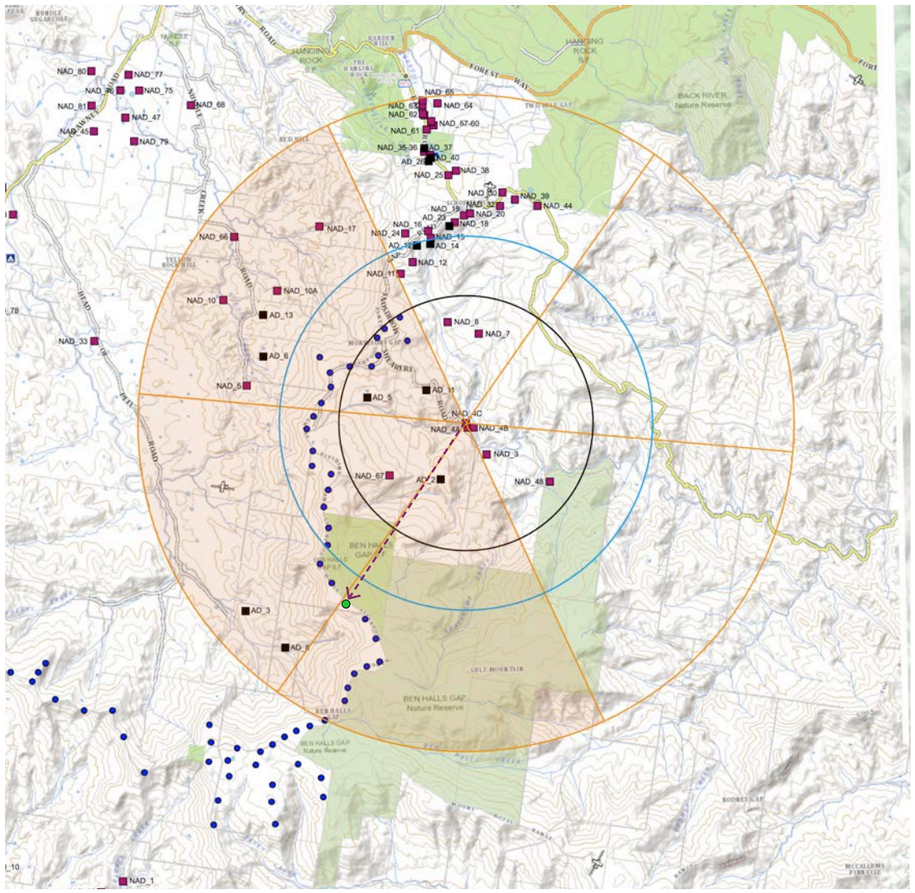
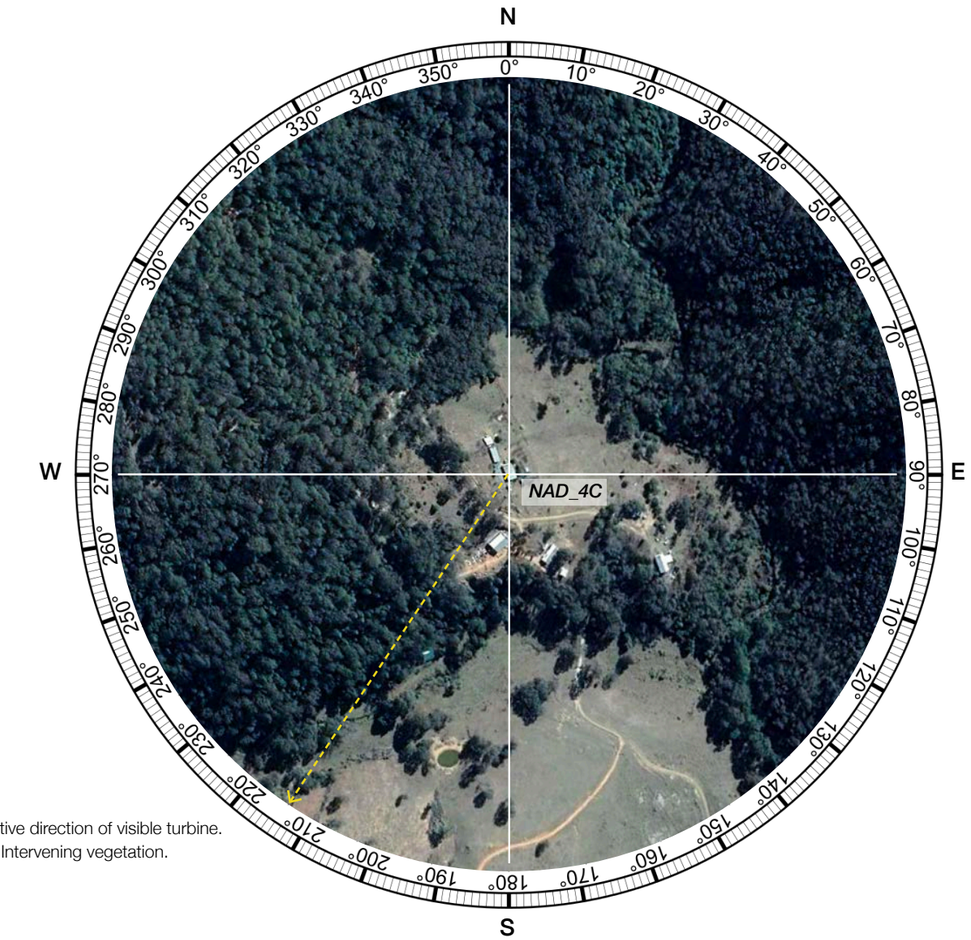


Figure E4a ***Preliminary Assessment Tool: NAD_4C***



Indicative direction of visible turbine.
Note: Intervening vegetation.

Figure E4b ***Aerial Image - Dwelling NAD_4C*** *(Aerial Image Source: Google Earth Image Date: 05.08.2019)*

NAD_4C Dwelling Assessment

E5. **NAD_5** Dwelling Assessment *Refer to Photomontage 13*

NAD_5			
Nundle Creek Road			
Nearest visible turbine (km):*	*1.79km*	**Visibility Distance Zone:**	**Far Foreground (FF)**
Total number of visible turbines:*	*10*	**Viewer Sensitivity Level:**	**Level 2: Rural Dwelling**
Number of *visible* turbines within 3100m:*	*8*	**Landscape Character Unit:**	**LCU07: Nundle Creek**
Number of theoretical 60º Sectors (Based on 2D Assessment):	*3*	**Scenic Quality Rating:**	**Moderate**
Number of 60º Sectors (Based on 3D Assessment):*	*1*	**Visual Influence Zone:**	**VIZ1**

***Based on an assessment of topography alone. Screening factors such as vegetation may reduce the potential visibility of the proposed turbines.**

Assessment Notes:

Moir LA attended this property on 17th June 2020 to undertake a visual assessment. The dwelling is located in an isolated location off Nundle Creek Road. Views from the property are expansive across the valley associated with Nundle Creek to the north. Topography rises to the south of the dwelling. Views to the Project are largely screened by topography. Up to 10 proposed turbines are likely to be visible (based on topography alone) to the east of the dwelling. Existing vegetation may assist in screening views to a few proposed turbines from the dwelling.

Visual Performance Objectives Evaluation (VIZ1):

Visual Magnitude: Seven (7) visible turbines are located within the 'black line' of visual magnitude.

Multiple Wind Turbine Effects: The Project will be visible in up to one (1) 60º sector which is deemed acceptable for a rural dwelling.

Landscape Scenic Integrity: The proposed turbines will not cause significant modification of the visual catchment from this viewpoint. Desired views from the dwelling are generally to the north in the direction the dwelling is orientated.

Key Feature Disruption: The Project will not alter or disrupt identified key landscape features viewed from this location. Views of the valley associated with Nundle Creek and distant vegetated ranges to the north will remain undisturbed.

Mitigation Methods:

Screen planting close to the eastern side of the dwelling would be an acceptable form of mitigation to reduce the visibility of turbines to the east. Desirable views to the north would be maintained. This is a long-term solution which would require consultation with the landowner.

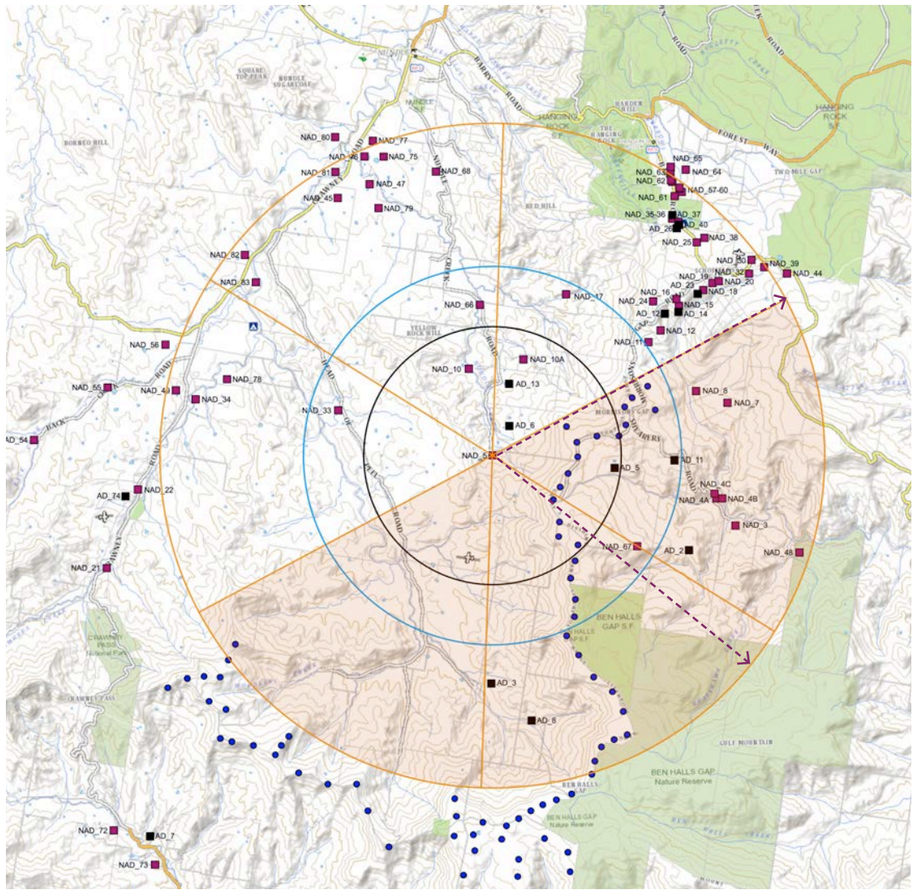


Figure E5a ***Preliminary Assessment Tool: NAD_5***

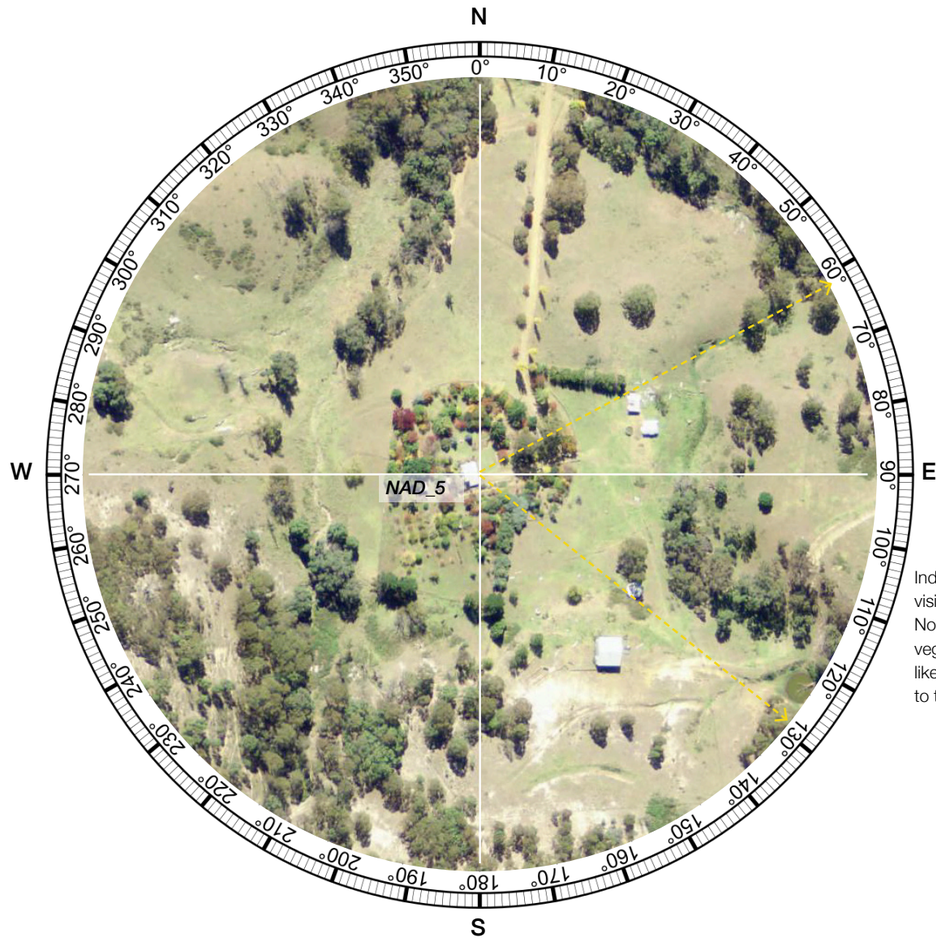


Figure E5b ***Aerial Image - Dwelling NAD_5*** *(Aerial Image Source: Google Earth Image Date: 05.08.2019)*

NAD_5 Dwelling Assessment

E6. **NAD_7** Dwelling Assessment

NAD_7			
Morrisons Gap Road			
Nearest visible turbine (km):*	*1.74km*	**Visibility Distance Zone:**	**Far Foreground (FF)**
Total number of visible turbines:*	*25**	**Viewer Sensitivity Level:**	**Level 2:** **Rural Dwelling**
Number of *visible* turbines within 3100m:*	**6**	**Landscape Character Unit:**	**LCU05: Forested Mountain Range**
Number of theoretical 60º Sectors (Based on 2D Assessment):	*2*	**Scenic Quality Rating:**	**Moderate / High**
Number of 60º Sectors (Based on 3D Assessment):*	*2*	**Visual Influence Zone:**	**VIZ1**

Based on an assessment of topography alone. Screening factors such as vegetation may reduce the potential visibility of the proposed turbines.

Assessment Notes:

A desktop assessment of this dwelling identified it is in an elevated position, surrounded by dense vegetation. An assessment identified approximately 40 turbines would be visible (based on topography alone) however, only 25 of the turbines are within 8 kilometres of the dwelling. The dwelling is surrounded by dense vegetation and it is likely this would screen views to the Project. *Note: This is based on an assessment utilising topographic mapping and available aerial imagery.*

Visual Performance Objectives Evaluation (VIZ1):

Visual Magnitude: Six (6) visible turbines are located within the 'black line' of visual magnitude. It is likely views to these turbines would be limited due to intervening vegetation.

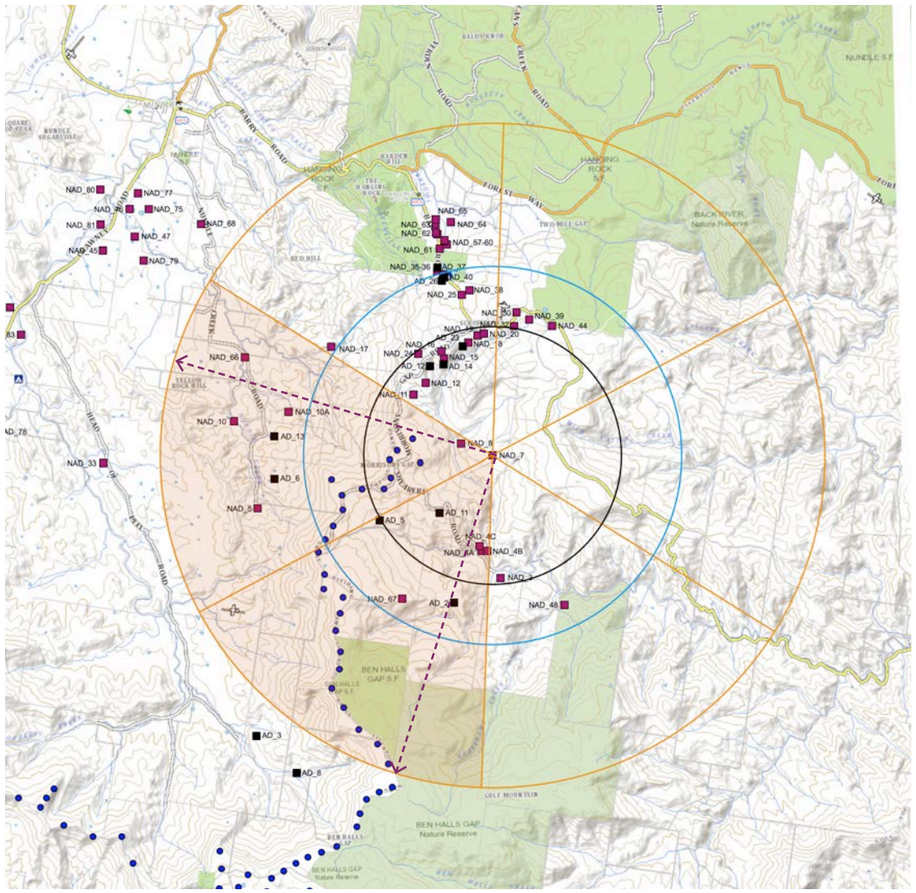
Multiple Wind Turbine Effects: The Project will be visible in up to two (2) 60º sectors. Existing vegetation surrounding the dwelling is likely to reduce the number of visible turbines

Landscape Scenic Integrity: The proposed turbines will not cause significant modification of the visual catchment from this viewpoint.

Key Feature Disruption: The Project will not alter or disrupt identified key landscape features viewed from this location.

Mitigation Methods:

Mitigation methods are unlikely to be necessary for this dwelling. Existing vegetation is likely to sufficiently reduce potential visual impacts.

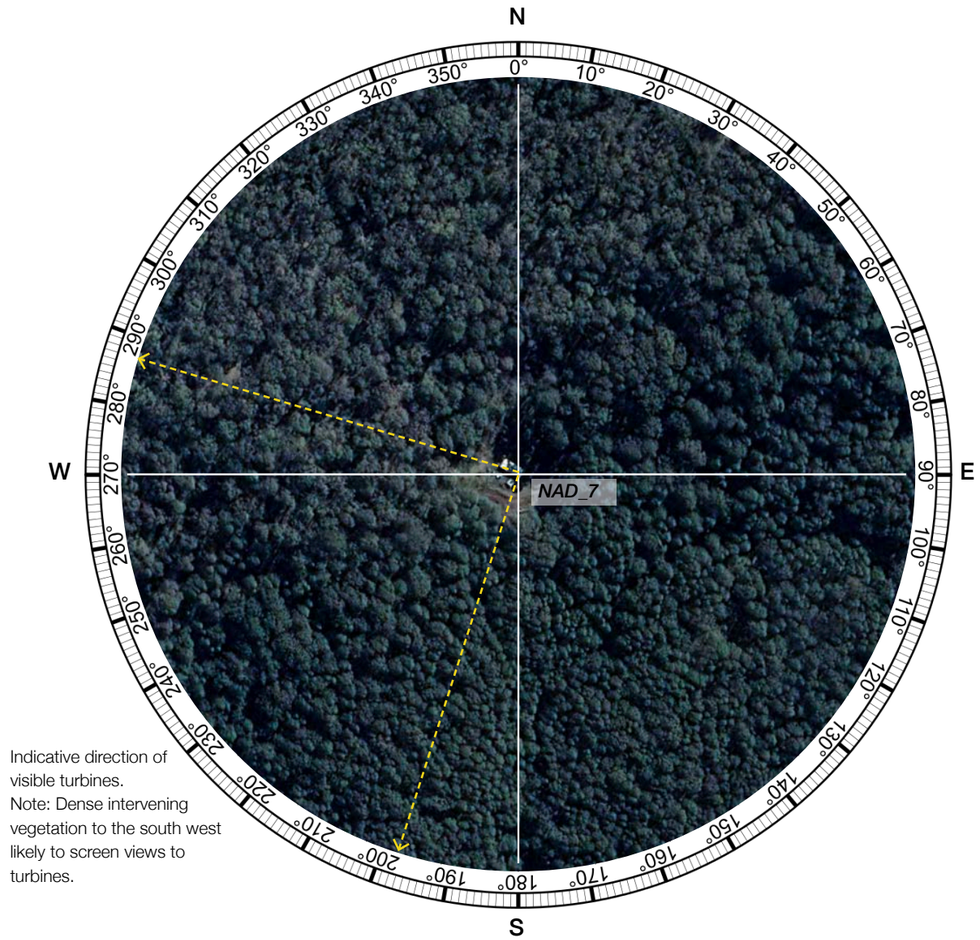


LEGEND

- Dwelling
- 3100m from WTG
- 4550m from WTG
- 8000m from WTG
- Project Boundary
- Proposed WTG
- Theoretical 60º Sector with turbines (Based on 2D Assessment)
- Indicative extent of visible WTGs (Based on 3D Assessment)

N

Figure E6a ***Preliminary Assessment Tool: NAD_7***



Indicative direction of visible turbines.
Note: Dense intervening vegetation to the south west likely to screen views to turbines.

Figure E6b ***Aerial Image - Dwelling NAD_7*** *(Aerial Image Source: Google Earth Image Date: 05.08.2019)*

NAD_7 Dwelling Assessment

E7. **NAD_8** Dwelling Assessment

NAD_8			
Morrisons Gap Road			
Nearest visible turbine (km):*	*1.16km*	**Visibility Distance Zone:**	**Far Foreground (FF)**
Total number of visible turbines:*	*6*	**Viewer Sensitivity Level:**	**Level 2: Rural Dwelling**
Number of *visible* turbines within 3100m:*	*6*	**Landscape Character Unit:**	**LCU05: Forested Mountain Range**
Number of theoretical 60º Sectors (Based on 2D Assessment):	*2*	**Scenic Quality Rating:**	**Moderate / High**
Number of 60º Sectors (Based on 3D Assessment):*	*1*	**Visual Influence Zone:**	**VIZ1**

Based on an assessment of topography alone. Screening factors such as vegetation may reduce the potential visibility of the proposed turbines.

Assessment Notes:

Based on a desktop assessment the dwelling appears to be located in a valley associated with the Barnard River. The majority of proposed turbines are likely to be screened by topography from this location. An assessment based on topography alone suggests up to 6 turbines would be visible to the west. Dense vegetation is likely to screen views to these turbines from this dwelling, significantly reducing potential visual impacts from this location. *Note: This is based on an assessment utilising topographic mapping and available aerial imagery.*

Visual Performance Objectives Evaluation (VIZ1):

Visual Magnitude: Six (6) turbines are located within the 'black line' of visual magnitude. It is likely views to these turbines would be screened due to intervening vegetation.

Multiple Wind Turbine Effects: The Project will be visible in up to one (1) 60º sector. Existing vegetation to the west of the dwelling and south west of the dwelling is likely to reduce the number of visible turbines. This is deemed acceptable for a rural dwelling.

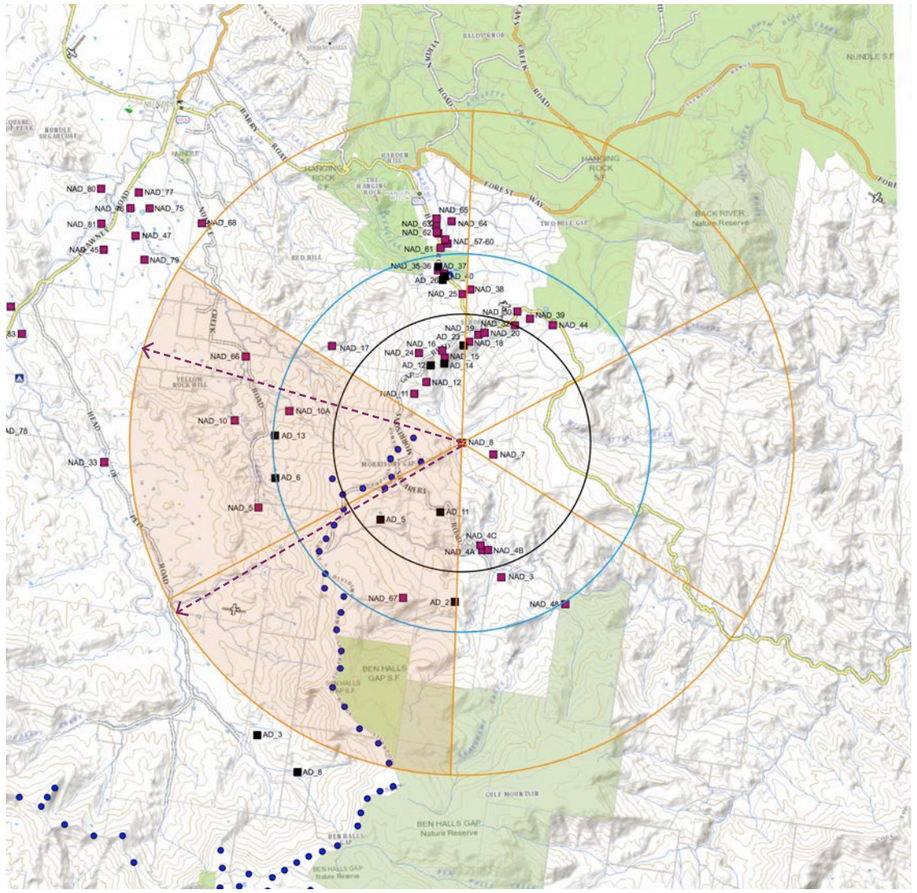
Landscape Scenic Integrity: The proposed turbines is unlikely to cause significant modification of the visual catchment from this viewpoint due to intervening vegetation.

Key Feature Disruption: The Project is unlikely to alter or disrupt identified key landscape features viewed from this location due to intervening vegetation.

Shadow Flicker: Dwelling was identified as having the potential to experience in excess of 30 hours per year of shadow flicker (33 hours and 56 minutes per year). Existing vegetation is likely to screen views to the turbines and subsequently eliminate the potential to experience an excess of 30 hours per year of shadow flicker.

Mitigation Methods:

Based on a desktop assessment alone, it appears existing vegetation surrounding the dwelling is likely to screen views to the Project. If deemed necessary supplementary planting would assist in further reducing potential visibility.

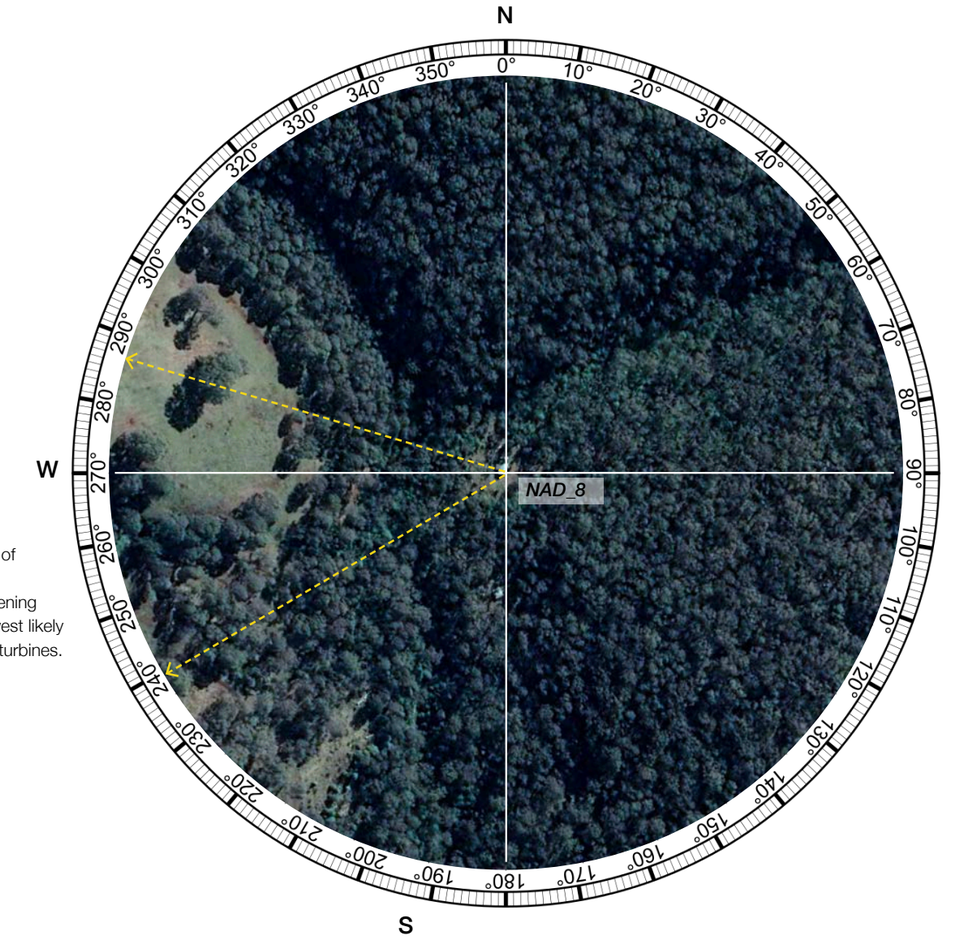


LEGEND

- Dwelling
- 3100m from WTG
- 4550m from WTG
- 8000m from WTG
- Project Boundary
- Proposed WTG
- Theoretical 60º Sector with turbines (Based on 2D Assessment)
- Indicative extent of visible WTGs (Based on 3D Assessment)

N

Figure E7a ***Preliminary Assessment Tool: NAD_8***



Indicative direction of visible turbines.
Note: Dense intervening vegetation to the west likely to screen views to turbines.

Figure E7b ***Aerial Image - Dwelling NAD_8*** *(Aerial Image Source: Google Earth Image Date: 05.08.2019)*

NAD_8 Dwelling Assessment

E8. **NAD_10** Dwelling Assessment *Refer to Photomontage 14*

NAD_10			
Nundle Creek Road			
Nearest visible turbine (km):*	*2.74km*	**Visibility Distance Zone:**	**Near Mid-dleground**
Total number of visible turbines:*	*22*	**Viewer Sensitivity Level:**	**Level 2: Rural Dwelling**
Number of *visible* turbines within 3100m:*	**1**	**Landscape Character Unit:**	**LCU03: Nundle Valley Pastures**
Number of theoretical 60º Sectors (Based on 2D Assessment):	**2**	**Scenic Quality Rating:**	**Moderate**
Number of 60º Sectors (Based on 3D Assessment):*	**1**	**Visual Influence Zone:**	**VIZ2**

Based on an assessment of topography alone. Screening factors such as vegetation may reduce the potential visibility of the proposed turbines.

Assessment Notes:

Based on a desktop assessment the dwelling appears to be orientated to the north with views along the valley floor. Views to approximately 22 proposed turbines are likely to be available to the south east, the nearest turbine is approximately 2.74 kilometres from the dwelling. Existing scattered vegetation located in the foreground may assist in fragmenting views of the turbines from the dwelling.

Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: One (1) turbine is located within the 'black line' of visual magnitude.

Multiple Wind Turbine Effects: The Project will be visible in up to one (1) 60º sector which is deemed acceptable.

Landscape Scenic Integrity: The proposed turbines will be a visible element in the landscape, however it is unlikely they will cause significant modification of the visual catchment from this dwelling.

Key Feature Disruption: The Project will be a visible element in the landscape, however it is unlikely to significantly alter or disrupt identified key landscape features viewed from this location.

Mitigation Methods:

Screen planting close to the eastern side of the dwelling would be an acceptable form of mitigation to reduce the visibility of turbines to the south east. Desirable views to the north would be maintained. This is a long-term solution which would require consultation with the landowner.

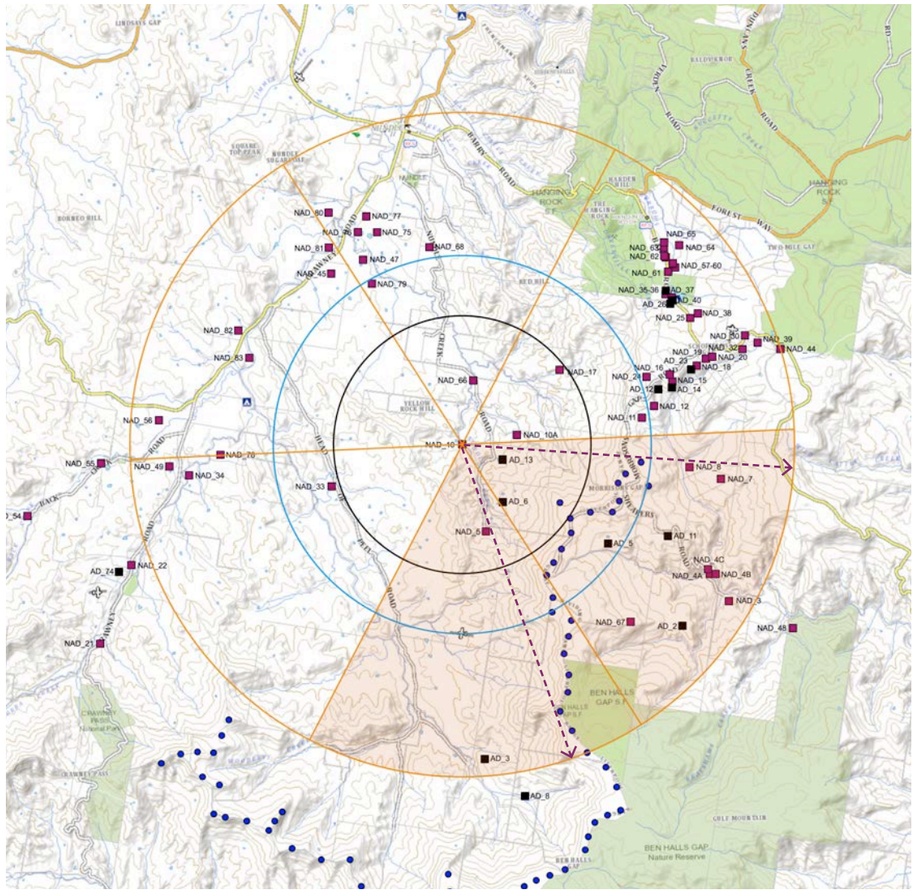


Figure E8a ***Preliminary Assessment Tool: NAD_10***

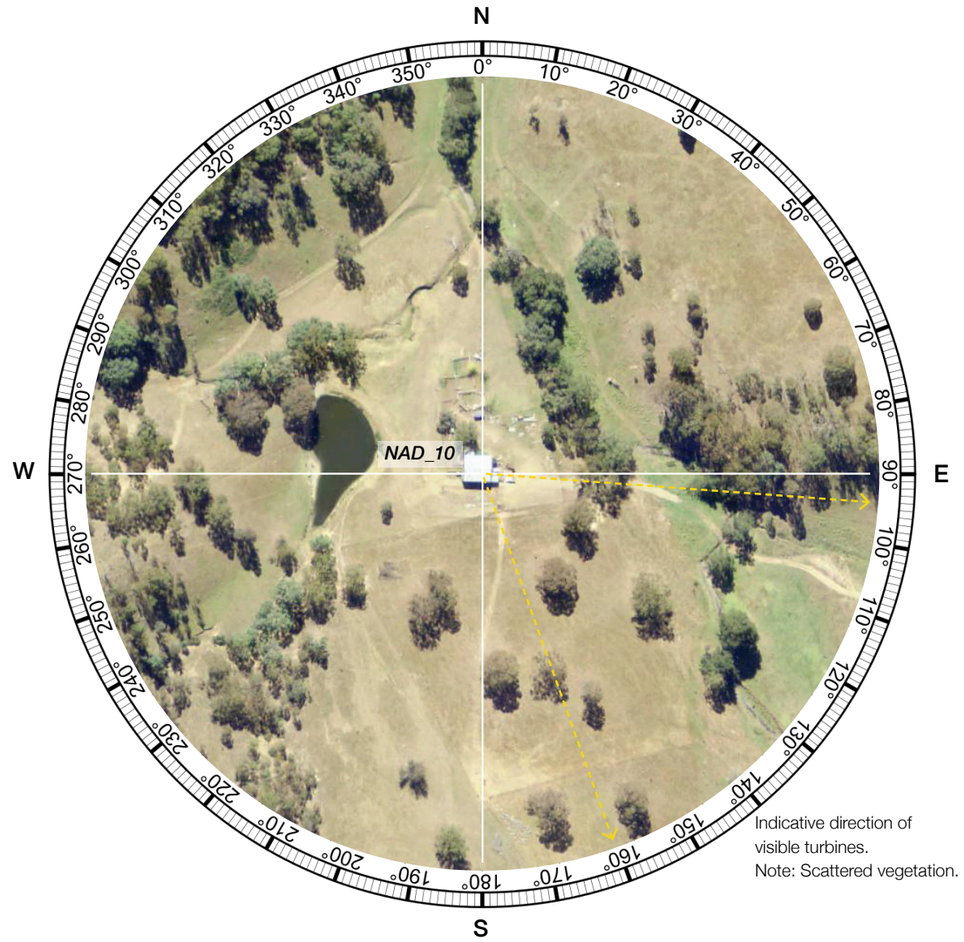


Figure E8b ***Aerial Image - Dwelling NAD_10*** *(Aerial Image Source: Google Earth Image Date: 05.08.2019)*

NAD_10 Dwelling Assessment

E9. **NAD_10A** Dwelling Assessment

NAD_10A			
Nundle Creek Road			
Nearest visible turbine (km):*	*1.91km*	**Visibility Distance Zone:**	**Far Foreground (FF)**
Total number of visible turbines:*	*15*	**Viewer Sensitivity Level:**	**Level 2: Rural Dwelling**
Number of *visible* turbines within 3100m:*	*10*	**Landscape Character Unit**	**LCU07: Nundle Creek**
Number of theoretical 60º Sectors (Based on 2D Assessment):	*2*	**Scenic Quality Rating:**	**Moderate**
Number of 60º Sectors (Based on 3D Assessment):*	*2*	**Visual Influence Zone:**	**VIZ1**

Based on an assessment of topography alone. Screening factors such as vegetation may reduce the potential visibility of the proposed turbines.

Assessment Notes:

Based on a desktop assessment, NAD_10A is located in an elevated position to the north west of the Project Site, accessed off Nundle Creek Road. The property is surrounded by vegetation, with the exception of a cleared area of land from the east to south of the dwelling. From this dwelling it is likely 15 turbines will be visible to the south east of the dwelling along the vegetated ridgeline in the foreground. 10 of these visible turbines are located within 3100 metres of the dwelling.

Visual Performance Objectives Evaluation (VIZ1):

Visual Magnitude: 10 turbines are located within 3100 metres of the dwelling.

Multiple Wind Turbine Effects: The Project will be visible in up to two (2) 60º sectors which is deemed acceptable for a viewer sensitivity level 2.

Landscape Scenic Integrity: The proposed turbines will be a dominant visual element in the landscape from this dwelling due to the close proximity.

Key Feature Disruption: Views to vegetated ridges surrounding the property will remain a key feature, however the proposed turbines will also become a dominant visual element.

Mitigation Methods:

Consultation with the landowner is required to determine valued vistas and provide recommendations to reduce the visual impact from this dwelling. There is an opportunity to employ screen planting to the south east of the dwelling, however this could disrupt views across to vegetated ranges.

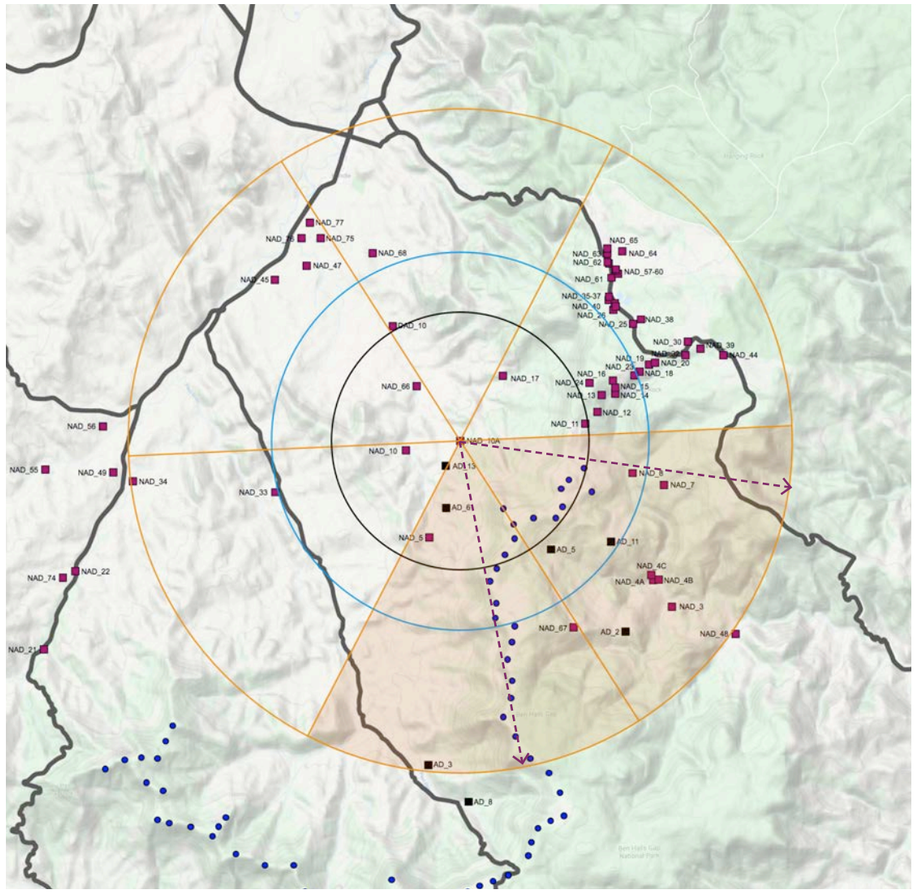


Figure E9a ***Preliminary Assessment Tool: NAD_10A***

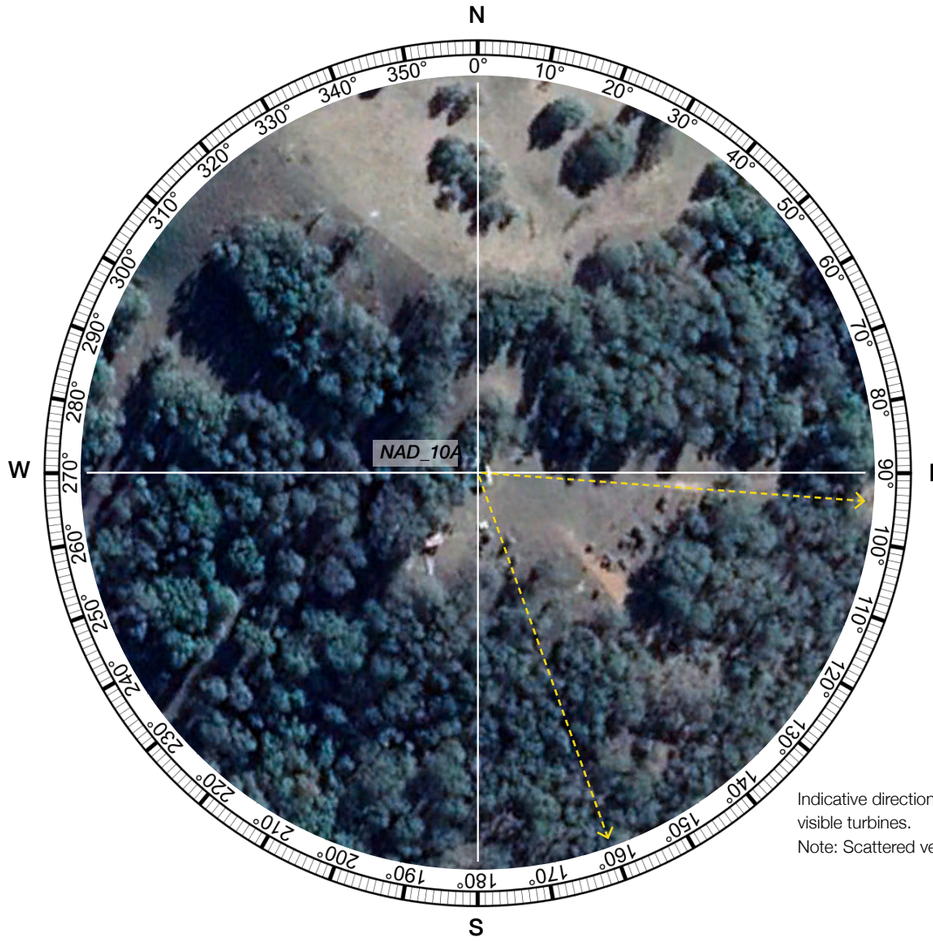


Figure E9b ***Aerial Image - Dwelling NAD_10A*** *(Aerial Image Source: Google Earth Image Date: 05.08.2019)*

E10. **NAD_11** Dwelling Assessment

NAD_11			
Morrisons Gap Road			
Nearest visible turbine (km):*	*1.05km*	**Visibility Distance Zone:**	**Far Foreground (FF)**
Total number of visible turbines:*	*22**	**Viewer Sensitivity Level:**	**Level 2: Rural Dwelling**
Number of *visible* turbines within 3100m:*	**9**	**Landscape Character Unit:**	**LCU05: Forested Mountain Range**
Number of theoretical 60º Sectors (Based on 2D Assessment):	*1*	**Scenic Quality Rating:**	**Moderate / High**
Number of 60º Sectors (Based on 3D Assessment):*	*1*	**Visual Influence Zone:**	**VIZ1**

Based on an assessment of topography alone. Screening factors such as vegetation may reduce the potential visibility of the proposed turbines.

Assessment Notes:

The dwelling is sited in a cleared section of land to the north of the Project Site. Based on 3D modelling considering topography alone it is likely up to 22 turbines would be visible. However, 90 metres of vegetation is located to the south of the dwelling. It is likely views to the Project would be largely fragmented by the intervening vegetation, however some filtered views may be available.

Visual Performance Objectives Evaluation (VIZ1):

Visual Magnitude: Nine (9) turbines are located within the 'black line' of visual magnitude. Existing vegetation to the south of the dwelling is likely to reduce the number of turbines visible from the dwelling.

Multiple Wind Turbine Effects: The Project will be visible in up to one (1) 60º sector. This is deemed acceptable for a rural dwelling.

Landscape Scenic Integrity: The proposed turbines have the potential to be visible, however views are likely to be fragmented and will not cause significant modification of the visual catchment from this viewpoint.

Key Feature Disruption: The Project will not alter or disrupt identified key landscape features viewed from this location.

Mitigation Methods:

If deemed necessary supplementary planting could be considered along the northern edge of existing vegetation in the direction of the Project (as shown as a green dashed line on Figure E9b) to ensure views to the Project are screened in the long-term.

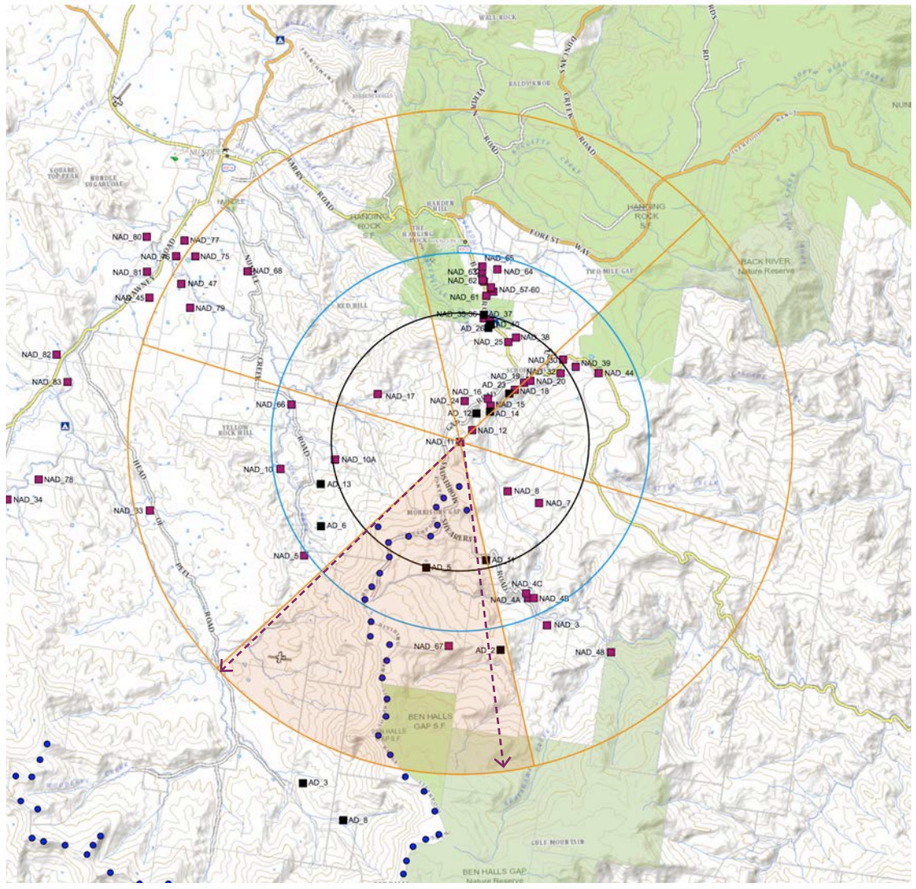


Figure E10a ***Preliminary Assessment Tool: NAD_11***

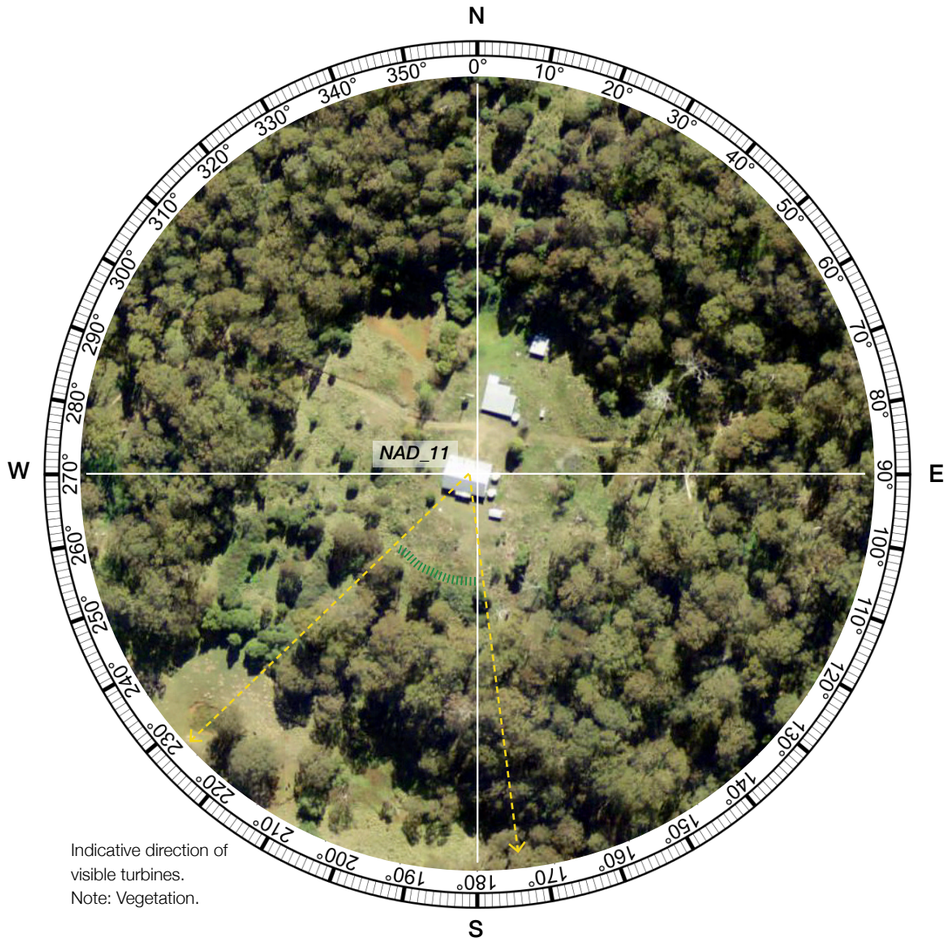


Figure E10b ***Aerial Image - Dwelling NAD_11*** *(Aerial Image Source: Google Earth Image Date: 05.08.2019)*

E11. **NAD_12** Dwelling Assessment *Refer to Photomontage 15 (Wire frame)*

NAD_12			
Morrisons Gap Road			
Nearest visible turbine (km):*	*1.38km*	**Visibility Distance Zone:**	**Far Foreground (FF)**
Total number of visible turbines:*	*21** *Within 8kms*	**Viewer Sensitivity Level:**	**Level 2:** **Rural Dwelling**
Number of *visible* turbines within 3100m:*	**7***	**Landscape Character Unit:**	**LCU05: Forested Mountain Range**
Number of theoretical 60º Sectors (Based on 2D Assessment):	*1*	**Scenic Quality Rating:**	**Moderate / High**
Number of 60º Sectors (Based on 3D Assessment):*	*1*	**Visual Influence Zone:**	**VIZ1**

***Based on an assessment of topography alone. Screening factors such as vegetation may reduce the potential visibility of the proposed turbines.**

Assessment Notes:

Moir LA attended the property and undertook a visual assessment on 16th June 2020. The dwelling is sited in an elevated position off Morrisons Gap Road, and is surrounded by vegetation. The dwelling is orientated north with views over the vegetated valley. The driveway, entry to the property and gardens are located on the southern side of the dwelling. Very limited filtered views are available through the vegetation towards the Project Site. Based on an assessment of topography alone (without taking into account vegetation screening) approximately 60 - 70 proposed turbines would be visible (however only 21 of these are within 8 kilometres of the dwelling).

Visual Performance Objectives Evaluation (VIZ1):

Visual Magnitude: Seven (7) turbines are located within the 'black line' of visual magnitude.

Multiple Wind Turbine Effects: The Project will be visible in up to one (1) 60º sector which is deemed acceptable for a rural dwelling.

Landscape Scenic Integrity: The proposed turbines will not cause significant modification of the visual catchment from this viewpoint.

Key Feature Disruption: The Project will not significantly alter or disrupt identified key landscape features viewed from this location.

Mitigation Methods:

If deemed necessary supplementary planting could be considered along the northern edge of existing vegetation in the direction of the Project (as shown as a green dashed line on Figure E11b) to ensure views to the Project are screened in the long-term.

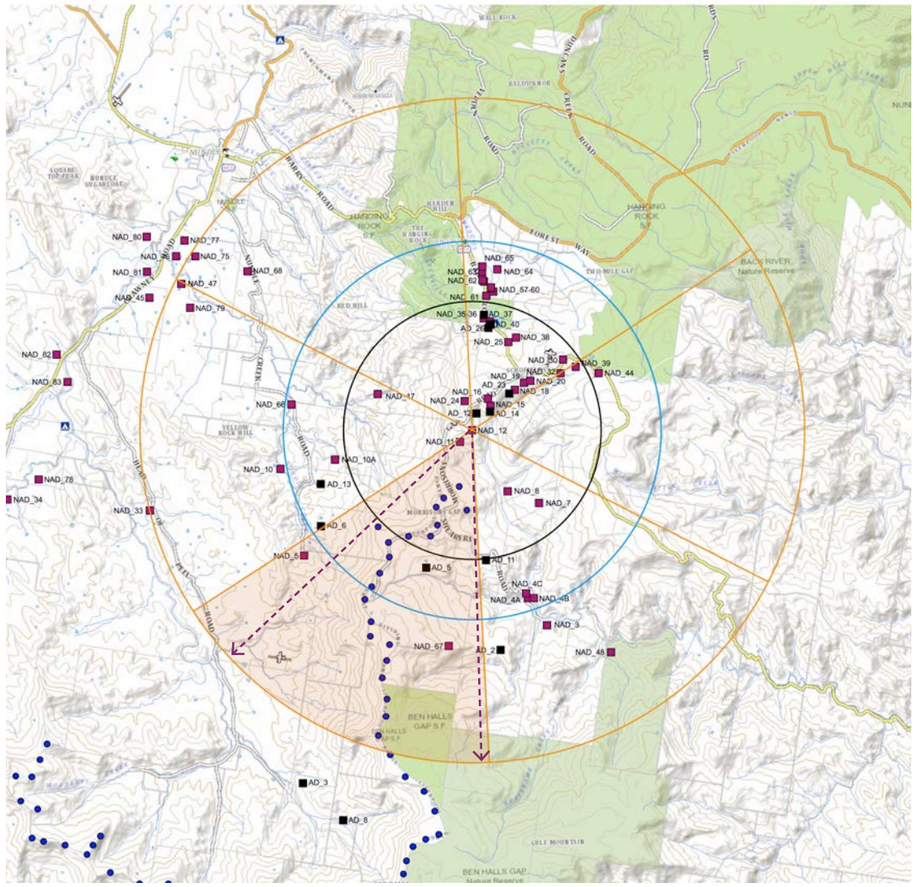


Figure E11a ***Preliminary Assessment Tool: NAD_12***

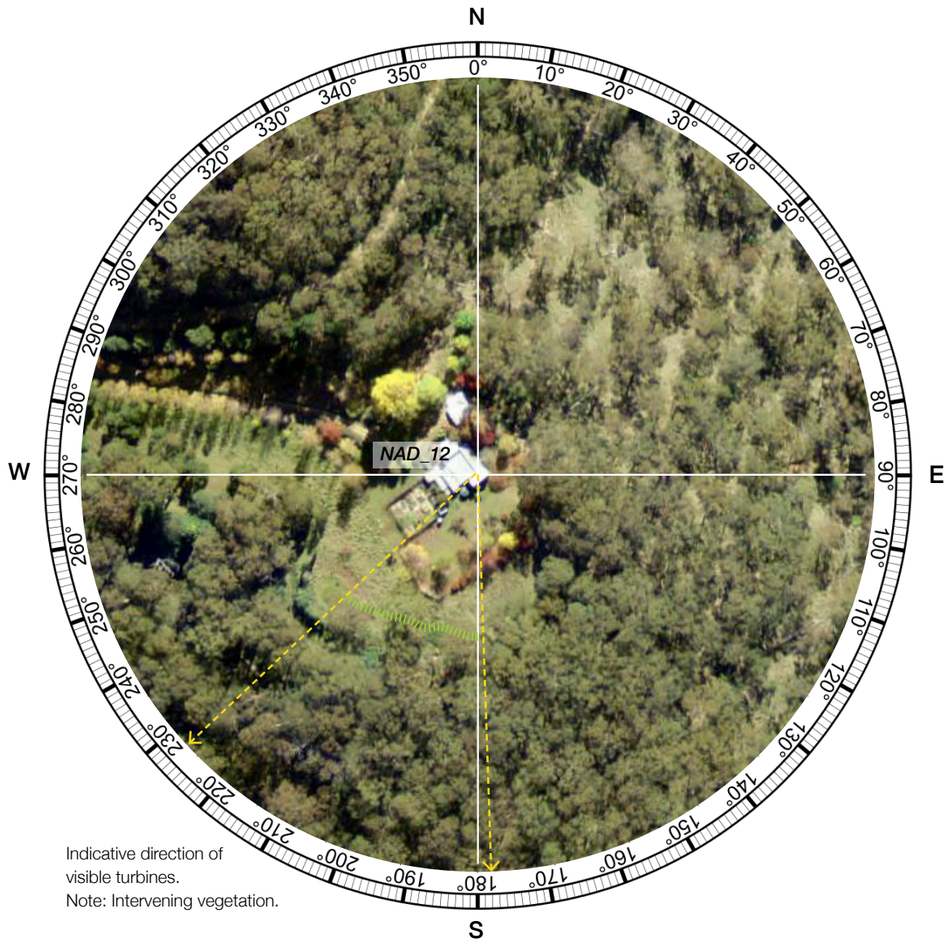


Figure E11b ***Aerial Image - Dwelling NAD_12*** *(Aerial Image Source: Google Earth Image Date: 05.08.2019)*

E12. **AD_12** Dwelling Assessment

AD_12			
Morrisons Gap Road			
Nearest visible turbine (km):*	*1.79km*	**Visibility Distance Zone:**	**Far Foreground (FF)**
Total number of visible turbines:*	*13** *Within 8kms*	**Viewer Sensitivity Level:**	**Level 2: Rural Dwelling**
Number of *visible* turbines within 3100m:*	**5***	**Landscape Character Unit:**	**LCU05: Forested Mountain Range**
Number of theoretical 60º Sectors (Based on 2D Assessment):	*1*	**Scenic Quality Rating:**	**Moderate / High**
Number of 60º Sectors (Based on 3D Assessment):*	*1*	**Visual Influence Zone:**	**VIZ1**

Based on an assessment of topography alone. Screening factors such as vegetation may reduce the potential visibility of the proposed turbines.

Assessment Notes:

Moir LA attended the property to undertake a visual assessment on 16th June 2020. The dwelling is located off Morrisons Gap Road. There is a rise in topography to the east and dense vegetation surrounds the property. Based on topography alone, up to 40 turbines would be visible to the SSW, however only 13 of these are located within 8 kilometres. It is likely views to the Project will be screened by vegetation to the SSE.

Visual Performance Objectives Evaluation (VIZ1):

Visual Magnitude: Five (5) turbines are located within the 'black line' of visual magnitude. However, existing vegetation to the south west of the dwelling is likely to screen views to these turbines.

Multiple Wind Turbine Effects: The Project will be visible in up to one (1) 60º sector (based on topography alone), which is acceptable for a Level 2 viewer.

Landscape Scenic Integrity: The proposed turbines will not modify the visual catchment from this viewpoint.

Key Feature Disruption: The Project will not alter or disrupt identified key landscape features viewed from this location.

Mitigation Methods:

Mitigation methods are not deemed necessary for this dwelling as existing vegetation is likely to sufficiently screen the Project.

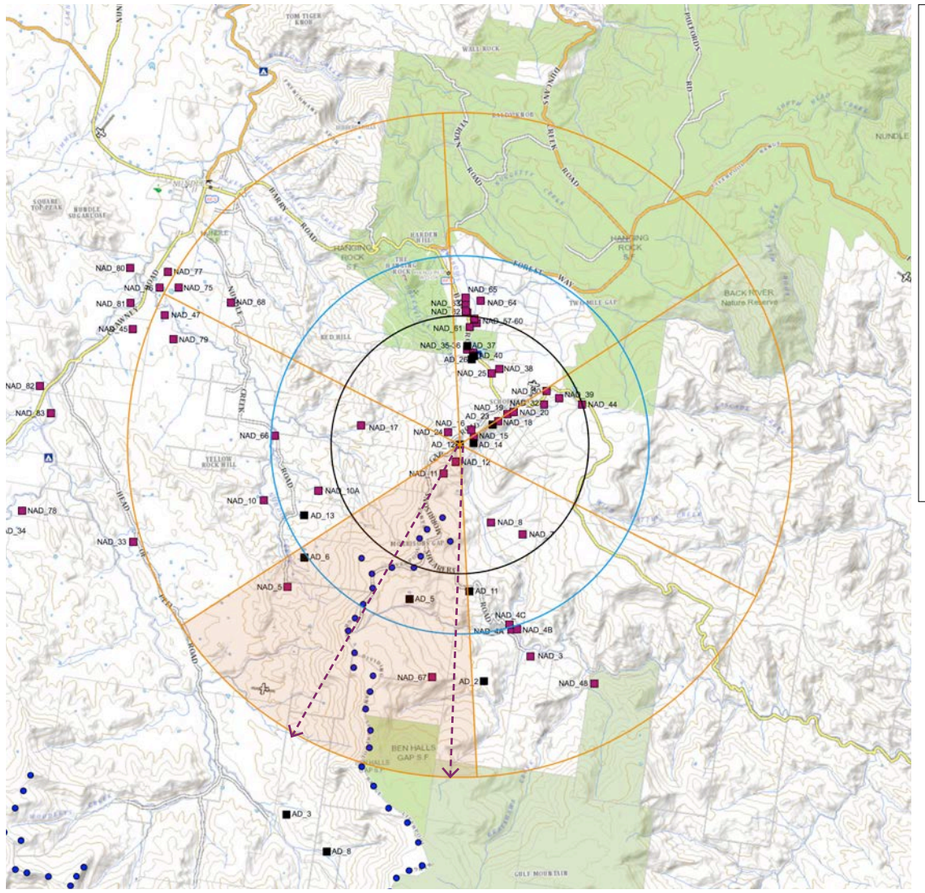


Figure E12a ***Preliminary Assessment Tool: AD_12***

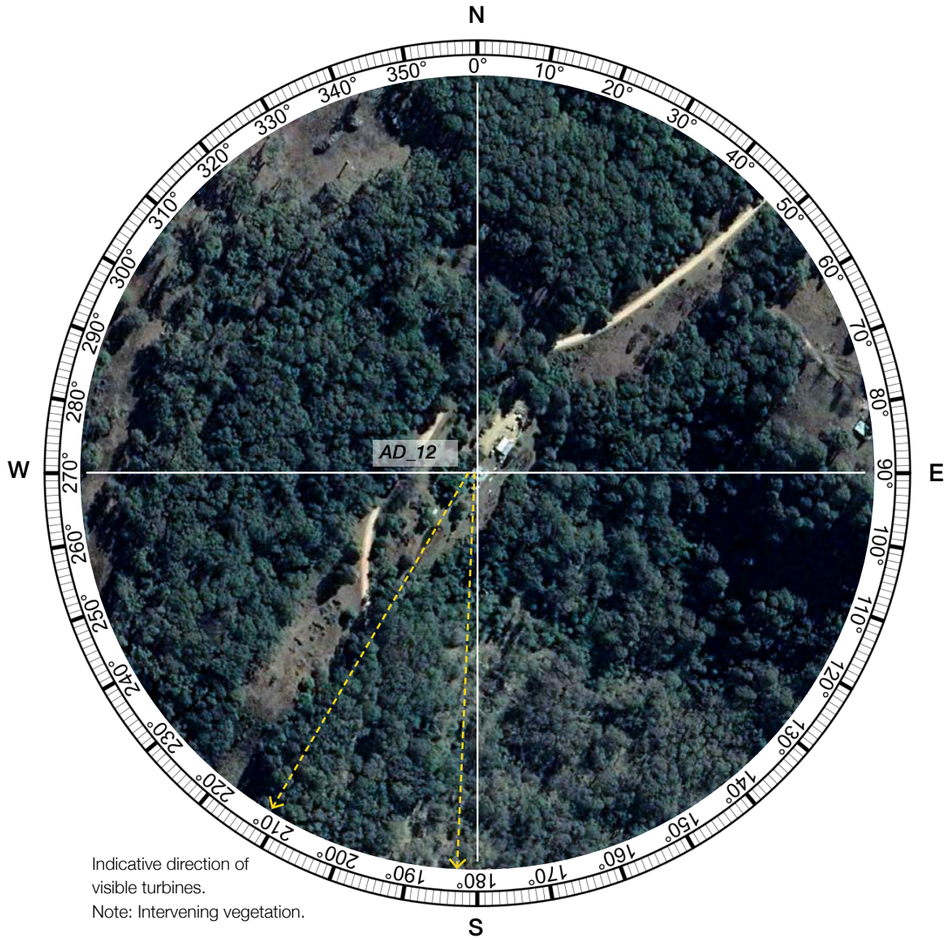


Figure E12b ***Aerial Image - Dwelling AD_12*** *(Aerial Image Source: Google Earth Image Date: 05.08.2019)*

E13. **AD_14** Dwelling Assessment

AD_14			
Morrisons Gap Road			
Nearest visible turbine (km):*	*1.94km*	**Visibility Distance Zone:**	**Far Foreground (FF)**
Total number of visible turbines:*	*20** *Within 8kms*	**Viewer Sensitivity Level:**	**Level 2: Rural Dwelling**
Number of *visible* turbines within 3100m:*	**5**	**Landscape Character Unit:**	**LCU05: Forested Mountain Range**
Number of theoretical 60º Sectors (Based on 2D Assessment):	*1*	**Scenic Quality Rating:**	**Moderate / High**
Number of 60º Sectors (Based on 3D Assessment):*	*1*	**Visual Influence Zone:**	**VIZ1**

***Based on an assessment of topography alone. Screening factors such as vegetation may reduce the potential visibility of the proposed turbines.**

Assessment Notes:

Moir LA attended the property to undertake a visual assessment on 16th June 2020. The dwelling is a small cottage orientated to the north east. The dwelling is surrounded by dense vegetation in the direction of the Project Site. An assessment based on topography alone indicates approximately 30 turbines would be available to the south west (20 of which are within 8 kilometres). The dense vegetation (as shown on aerial image - Figure E13b) is likely to screen views to the Project.

Visual Performance Objectives Evaluation (VIZ1):

Visual Magnitude: Five (5) turbines are located within the 'black line' of visual magnitude. Existing vegetation to the south west of the dwelling is likely to screen views to these turbines.

Multiple Wind Turbine Effects: The Project will be visible in up to one (1) 60º sectors which is deemed acceptable for a level 2 viewer.

Landscape Scenic Integrity: The proposed turbines will not cause significant modification of the visual catchment from this viewpoint.

Key Feature Disruption: The Project will not alter or disrupt identified key landscape features viewed from this location.

Mitigation Methods:

Mitigation methods are not deemed necessary for this dwelling as existing vegetation is likely to sufficiently screen the Project.

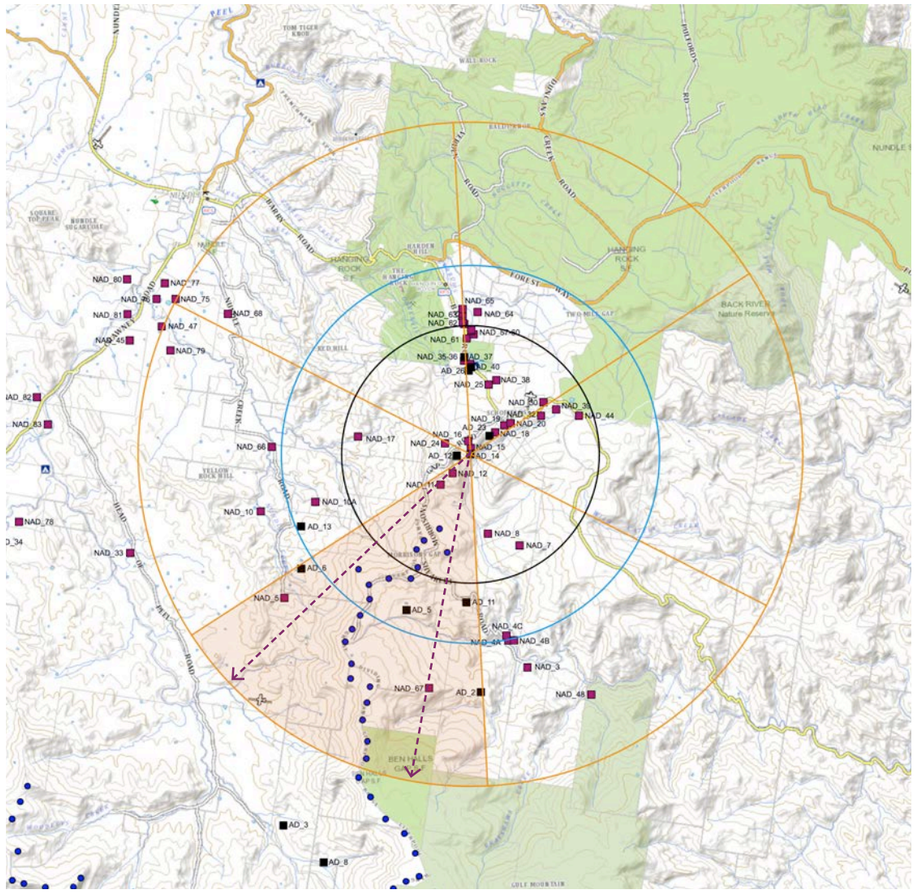


Figure E13a ***Preliminary Assessment Tool: AD_14***

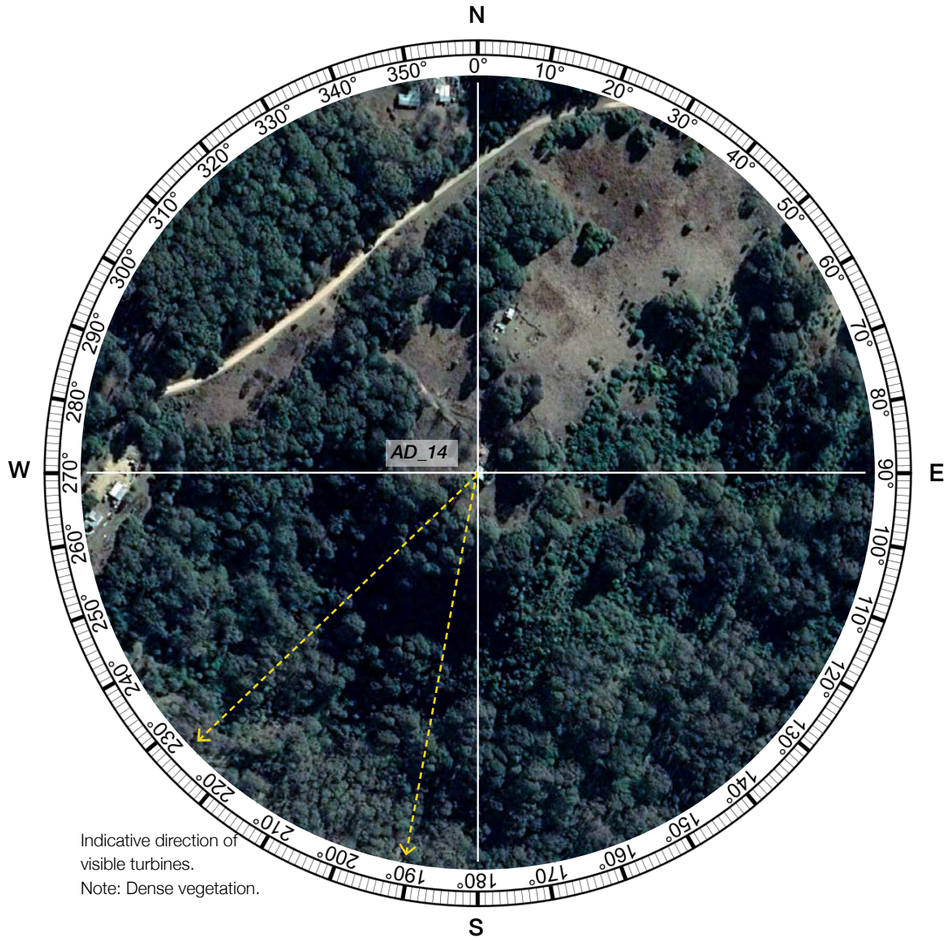


Figure E13b ***Aerial Image - Dwelling AD_14*** *(Aerial Image Source: Google Earth Image Date: 05.08.2019)*

E14. **NAD_15** Dwelling Assessment *Refer to Photomontage 16 (Wire frame)*

NAD_15			
Morrisons Gap Road			
Nearest visible turbine (km):*	*2.08km*	**Visibility Distance Zone:**	**Far Foreground (FF)**
Total number of visible turbines:*	**20*** *Within 8kms*	**Viewer Sensitivity Level:**	**Level 2: Rural Dwelling**
Number of *visible* turbines within 3100m:*	**4***		**LCU05: Forested Mountain Range**
Number of theoretical 60º Sectors (Based on 2D Assessment):	*1*	**Scenic Quality Rating:**	**Moderate / High**
Number of 60º Sectors (Based on 3D Assessment):*	*1*	**Visual Influence Zone:**	**VIZ1**

***Based on an assessment of topography alone. Screening factors such as vegetation may reduce the potential visibility of the proposed turbines.**

Assessment Notes:

Moir LA undertook a visual assessment from this property on the 16th of June 2020. The dwelling is a small cabin which is orientated to the south east. Vegetation surrounds the property to the north west (associated with Morrisons Gap Road) and the south west (towards the Project Site). A wire frame diagram has been prepared from this location, and determined (based on topography alone, that up to 59 turbines would be visible from this property (however only 20 if these are within 8 kilometres) . When overlaid onto the panoramic photograph from this location, it illustrates vegetation to the south west will screen the Project.

Visual Performance Objectives Evaluation (VIZ1):

Visual Magnitude: Four (4) turbines are located within the 'black line' of visual magnitude. Existing vegetation to the south west of the dwelling is likely to screen views to these turbines.

Multiple Wind Turbine Effects: The Project will be visible in up to one (1) 60º sectors which is deemed acceptable for a level 2 viewer.

Landscape Scenic Integrity: The proposed turbines will not cause significant modification of the visual catchment from this viewpoint.

Key Feature Disruption: The Project will not alter or disrupt identified key landscape features viewed from this location.

Mitigation Methods:

Mitigation methods are not deemed necessary for this dwelling as existing vegetation is likely to sufficiently screen the Project.

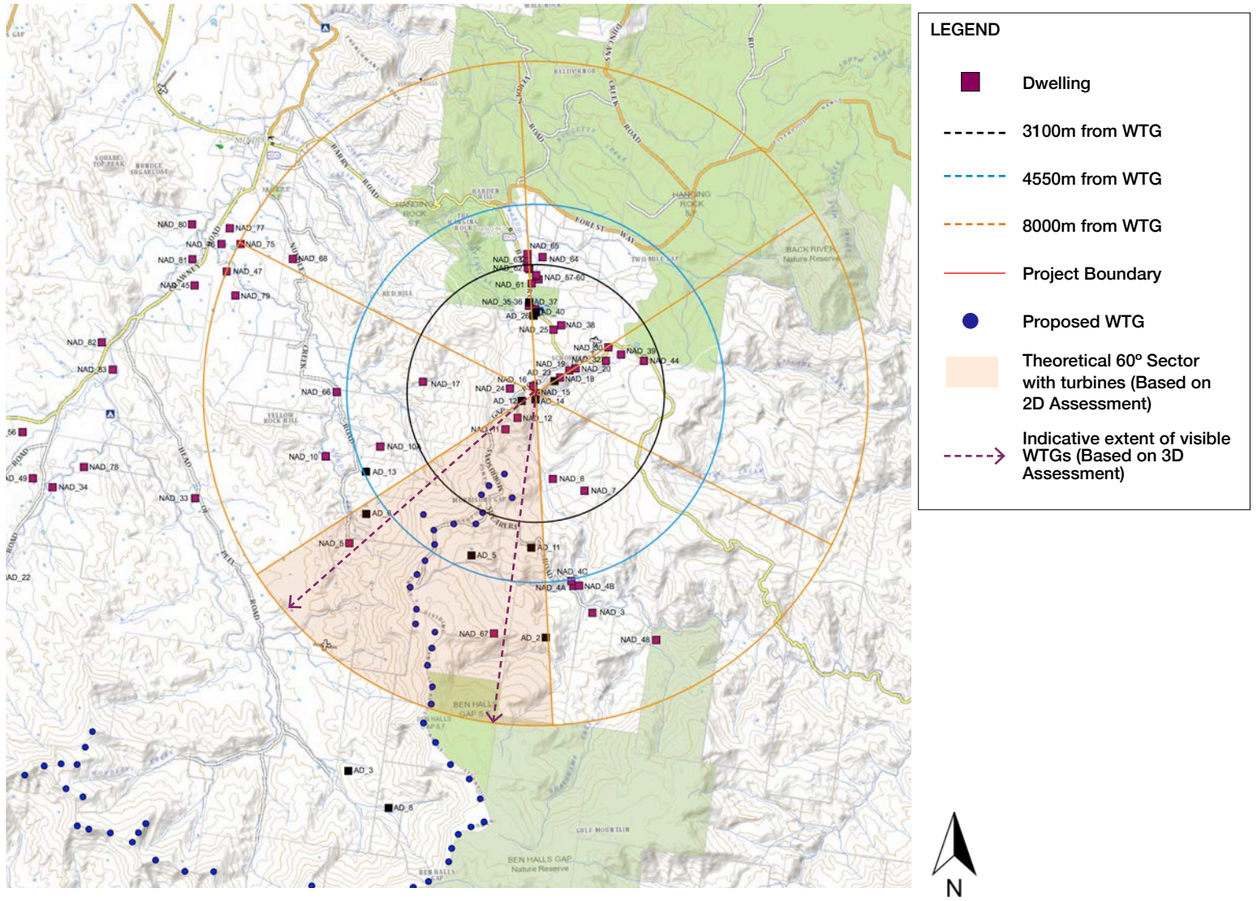


Figure E14a ***Preliminary Assessment Tool: NAD_15***

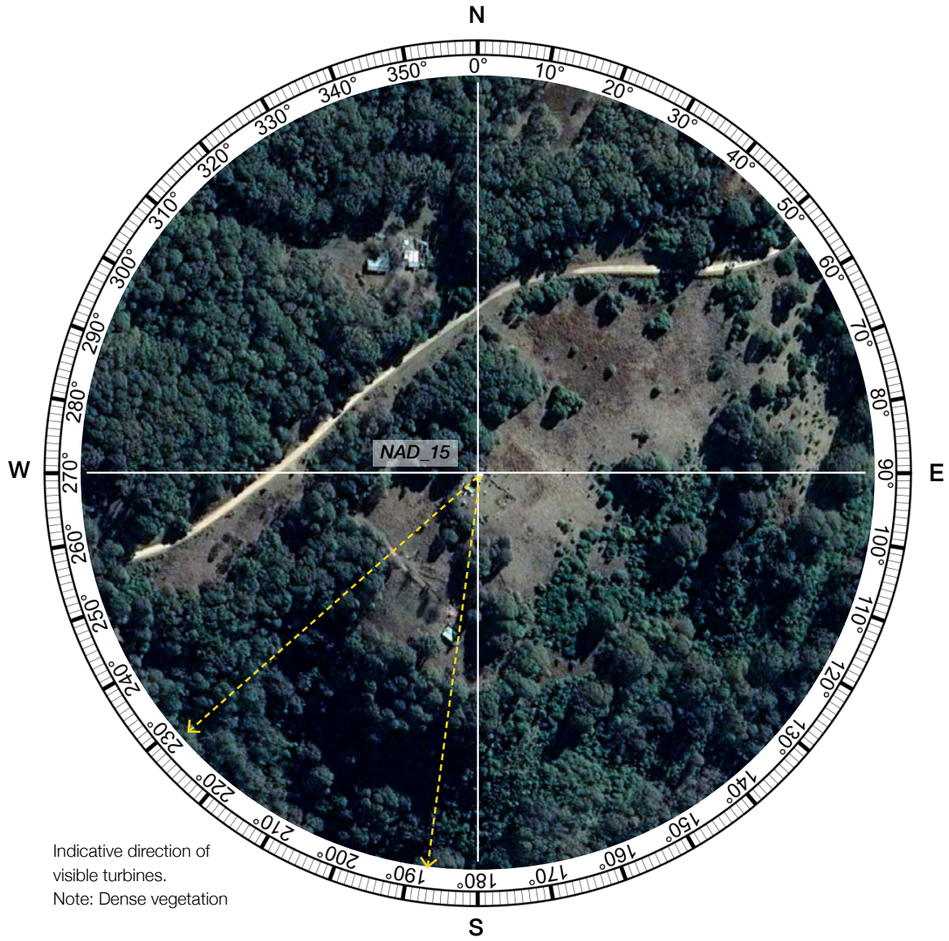


Figure E14b ***Aerial Image - Dwelling NAD_15*** *(Aerial Image Source: Google Earth Image Date: 05.08.2019)*

E15. **NAD_16** Dwelling Assessment

NAD_16			
Morrisons Gap Road			
Nearest visible turbine (km):*	*2.20km*	**Visibility Distance Zone:**	**Near Middleground (NM)**
Total number of visible turbines:*	*19** *Within 8kms*	**Viewer Sensitivity Level:**	**Level 2: Rural Dwelling**
Number of *visible* turbines within 3100m:*	**4***	**Landscape Character Unit:**	**LCU05: Forested Mountain Range**
Number of theoretical 60º Sectors (Based on 2D Assessment):	*1*	**Scenic Quality Rating:**	**Moderate / High**
Number of 60º Sectors (Based on 3D Assessment):*	*1*	**Visual Influence Zone:**	**VIZ2**

Based on an assessment of topography alone. Screening factors such as vegetation may reduce the potential visibility of the proposed turbines.

Assessment Notes:

A desktop assessment has been undertaken for this dwelling. The dwelling is located on the northern side of Morrisons Gap Road. Based on topography alone, up to 23 turbines have the potential to be visible from this dwelling (4 of which are in excess of 8 kilometres). However, dense vegetation to the south west of the property and the south west of Morrisons Gap Road is likely to screen views to the Project. ***Viewpoint HOG39*** was taken from the front of this property at Morrisons Gap Road and illustrates the dense vegetation which screens views towards the Project Site.

Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Four (4) turbines are located within the 'black line' of visual magnitude. Existing vegetation to the south west of the dwelling will screen views to these turbines

Multiple Wind Turbine Effects: The Project will be visible in up to one (1) 60º sector which is deemed acceptable for a Level 2: Rural Dwelling.

Landscape Scenic Integrity: The proposed turbines will not cause significant modification of the visual catchment from this viewpoint.

Key Feature Disruption: The Project will not alter or disrupt identified key landscape features viewed from this location.

Mitigation Methods:

Mitigation methods are not deemed necessary for this dwelling as existing vegetation is likely to sufficiently screen the Project.

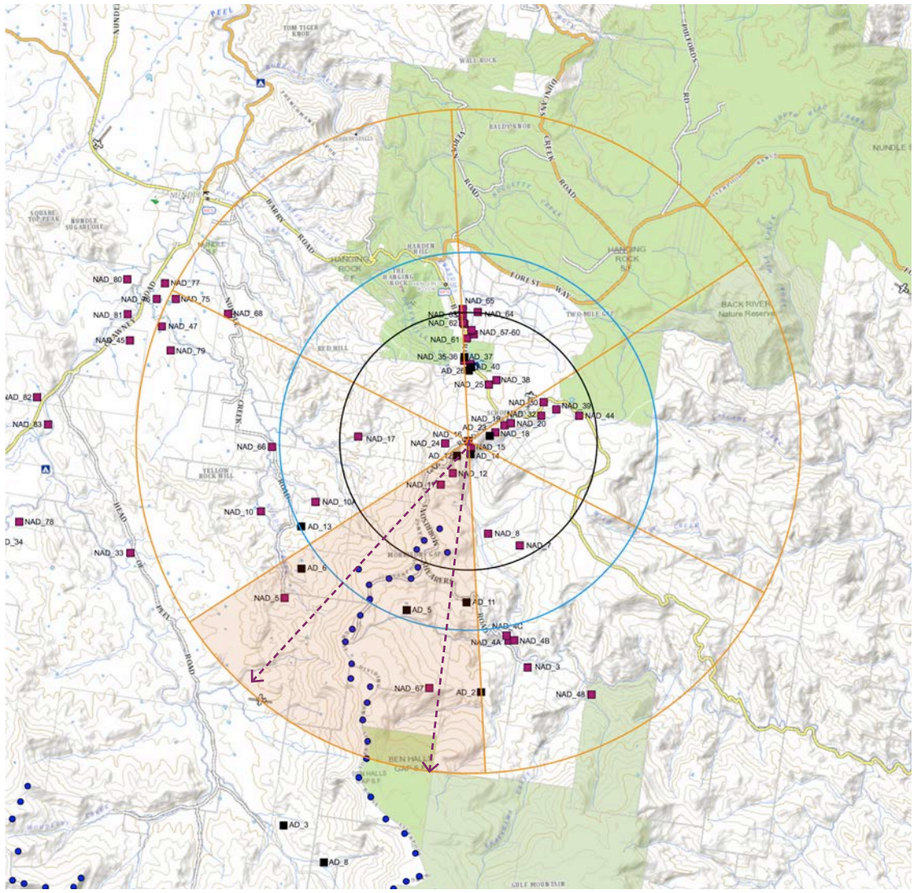


Figure E15a ***Preliminary Assessment Tool: NAD_16***

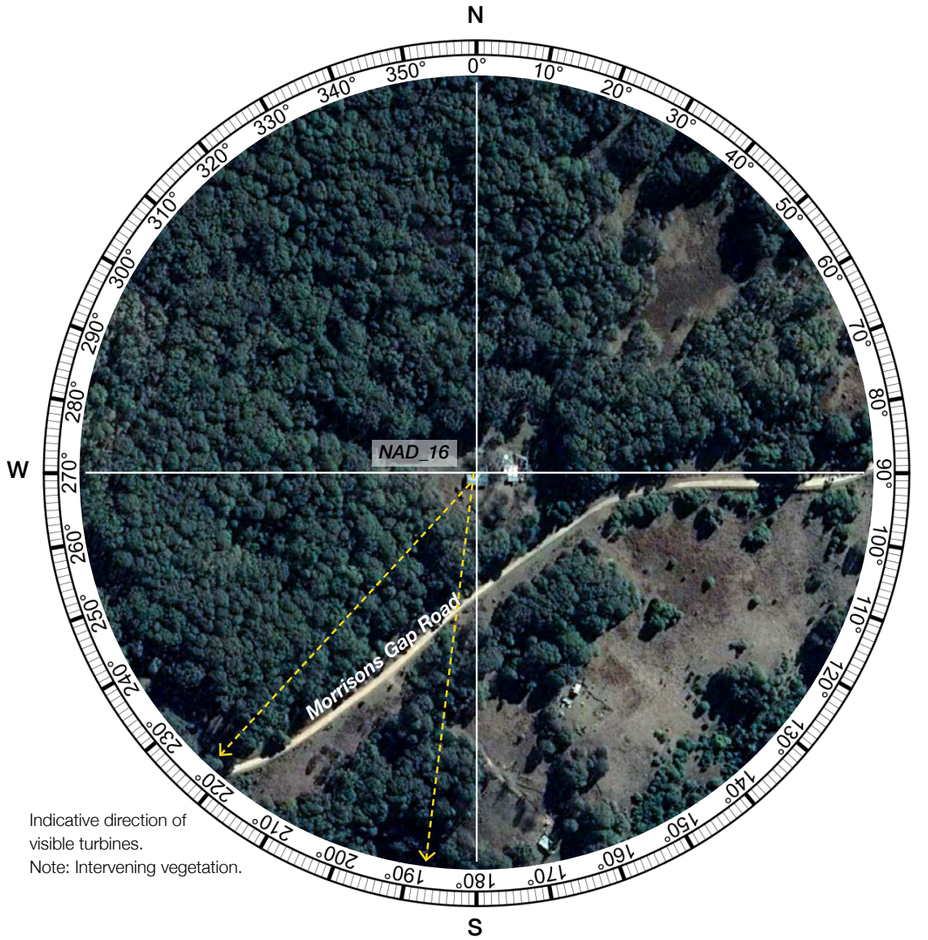


Figure E15b ***Aerial Image - Dwelling NAD_16*** *(Aerial Image Source: Google Earth Image Date: 05.08.2019)*

E16. **NAD_17** Dwelling Assessment

NAD_17			
Nundle Creek Road			
Nearest visible turbine (km):*	*2.94km*	**Visibility Distance Zone:**	**Near Middleground (NM)**
Total number of visible turbines:*	*15** *Within 8kms*	**Viewer Sensitivity Level:**	**Level 2: Rural Dwelling**
Number of *visible* turbines within 3100m:*	**3***	**Landscape Character Unit:**	**LCU07: Nundle Creek**
Number of theoretical 60º Sectors (Based on 2D Assessment):	*1*	**Scenic Quality Rating:**	**Moderate**
Number of 60º Sectors (Based on 3D Assessment):*	*1*	**Visual Influence Zone:**	**VIZ2**

Based on an assessment of topography alone. Screening factors such as vegetation may reduce the potential visibility of the proposed turbines.

Assessment Notes:

Desktop assessment undertaken has identified the dwelling is located on an elevated parcel of land located to the north of the Project Site, accessed via Nundle Creek Road. A 3D assessment identified views to the west appear to be expansive and views to the north and east are contained by topography. Based on topography alone, up to 15 turbines are likely to be visible (within 8 kilometres) to the south east. Approximately 20 turbines may be visible to the south and south west (in excess of 10 kilometres from the dwelling). Intervening vegetation to the south east may fragment views to the turbines.

Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Three (3) turbines are located within the 'black line' of visual magnitude.

Multiple Wind Turbine Effects: The Project will be visible in up to one (1) 60º sectors which is deemed acceptable for a Level 2: Rural Dwelling.

Landscape Scenic Integrity: Although potentially visible, the proposed turbines will not cause significant modification of the visual catchment from this viewpoint. Views across the valley to the west are not impacted.

Key Feature Disruption: The Project will not alter or disrupt identified key landscape features viewed from this location.

Mitigation Methods:

Screen planting close to the south eastern side of the dwelling would be an acceptable form of mitigation to reduce the visibility of turbines to the east. Desirable views to the west across the valley would be maintained. This is a long-term solution which would require consultation with the landowner.

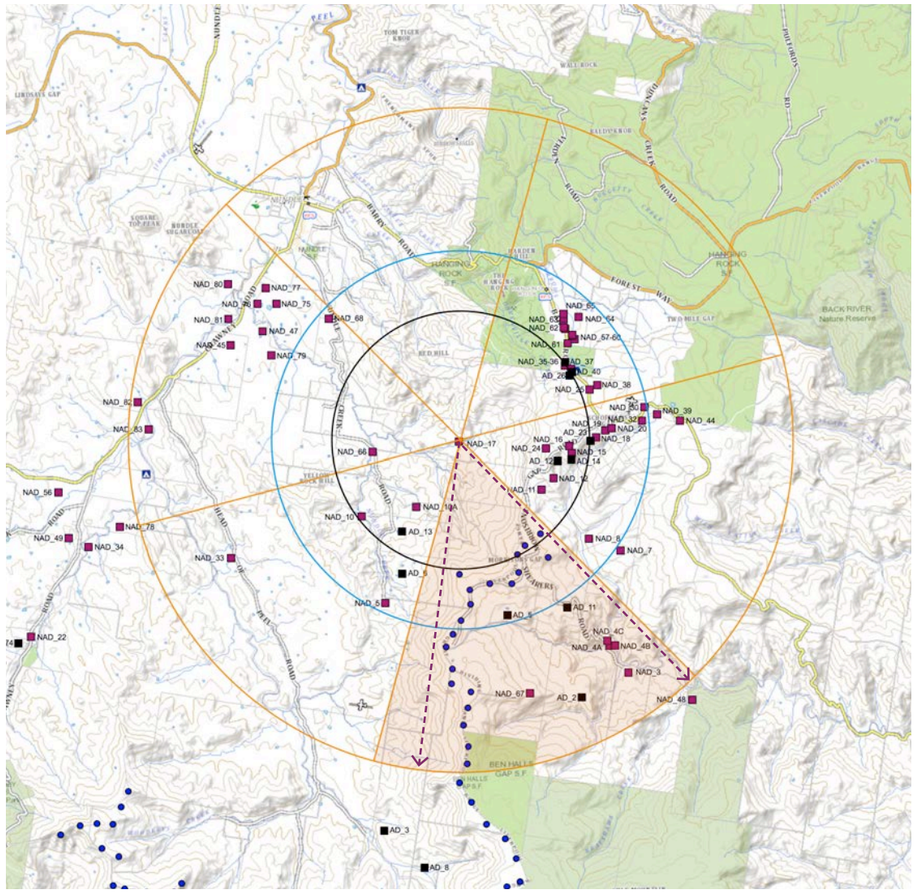


Figure E16a ***Preliminary Assessment Tool: NAD_17***

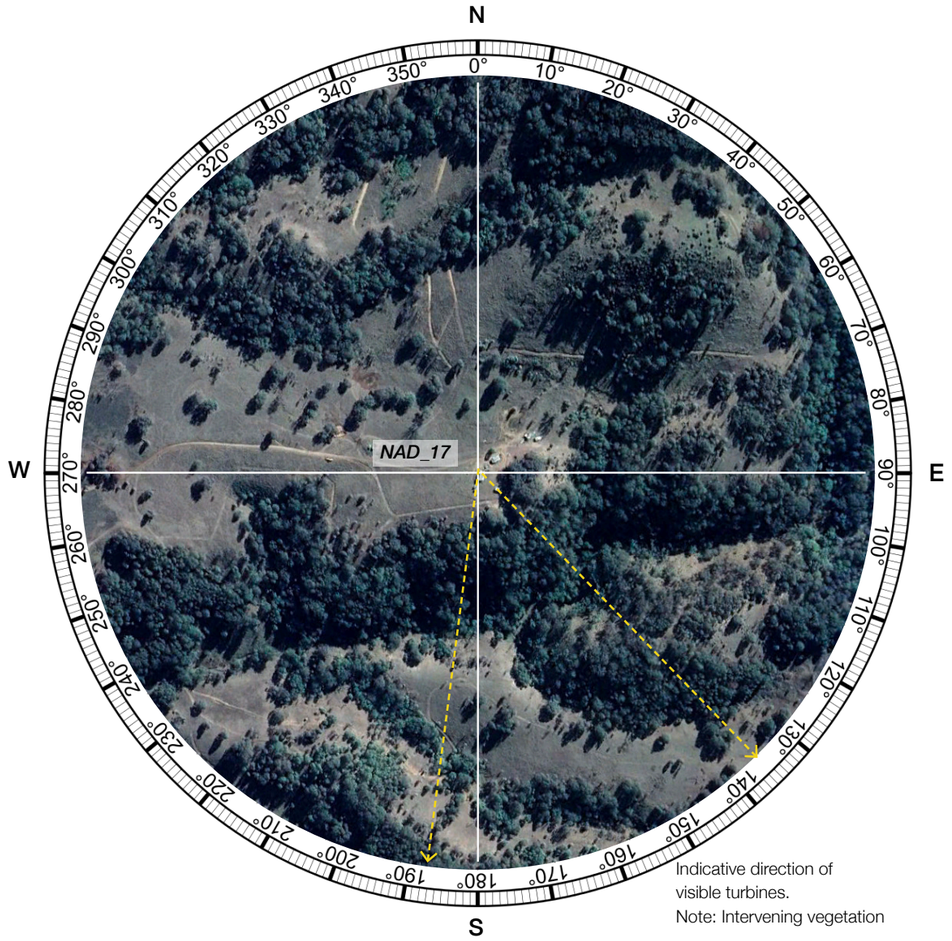


Figure E16b ***Aerial Image - Dwelling NAD_17*** *(Aerial Image Source: Google Earth Image Date: 05.08.2019)*

E17. **NAD_18** Dwelling Assessment

NAD_18			
Morrisons Gap Road			
Nearest visible turbine (km):*	*2.69km*	**Visibility Distance Zone:**	**Near Middleground (NM)**
Total number of visible turbines:*	*12* *Within 8kms*	**Viewer Sensitivity Level:**	**Level 2: Rural Dwelling**
Number of *visible* turbines within 3100m:*	*1*	**Landscape Character Unit**	**LCU05: Forested Mountain Range**
Number of theoretical 60º Sectors (Based on 2D Assessment):	*1*	**Scenic Quality Rating:**	**Moderate / High**
Number of 60º Sectors (Based on 3D Assessment):*	*1*	**Visual Influence Zone:**	**VIZ2**

Based on an assessment of topography alone. Screening factors such as vegetation may reduce the potential visibility of the proposed turbines.

Assessment Notes:

NAD_18 is located in a cleared area of land off Morrisons Gap Road. Dwelling is orientated to the NNW, and views from this location are generally contained by vegetation typical of the Forested Mountain Range LCU. An opening in the vegetation to the south west of the property with framed views of vegetated ridgeline associated with the Project Site. Approximately 30 turbines (most of which are in excess of 8 kilometres from the dwelling) will be visible in this view.

Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: One (1) turbine is located within the 'black line' of visual magnitude.

Multiple Wind Turbine Effects: The Project will be visible in up to one (1) 60º sector which is deemed acceptable for a level 2: rural dwelling.

Landscape Scenic Integrity: The proposed turbines will be a visible element on the vegetated ranged, however the will not cause significant modification of the visual catchment from this viewpoint.

Key Feature Disruption: The Project will be a visible element on the ranges and will have the potential to alter the appearance of the key landscape features (vegetated hills) viewed from this location.

Mitigation Methods:

Screen planting close to the south eastern side of the dwelling would be an acceptable form of mitigation to reduce the visibility of turbines in this direction, however it would also screen views across the vegetated ranges. Consultation with the landowner would be required to discuss appropriate mitigation methods.

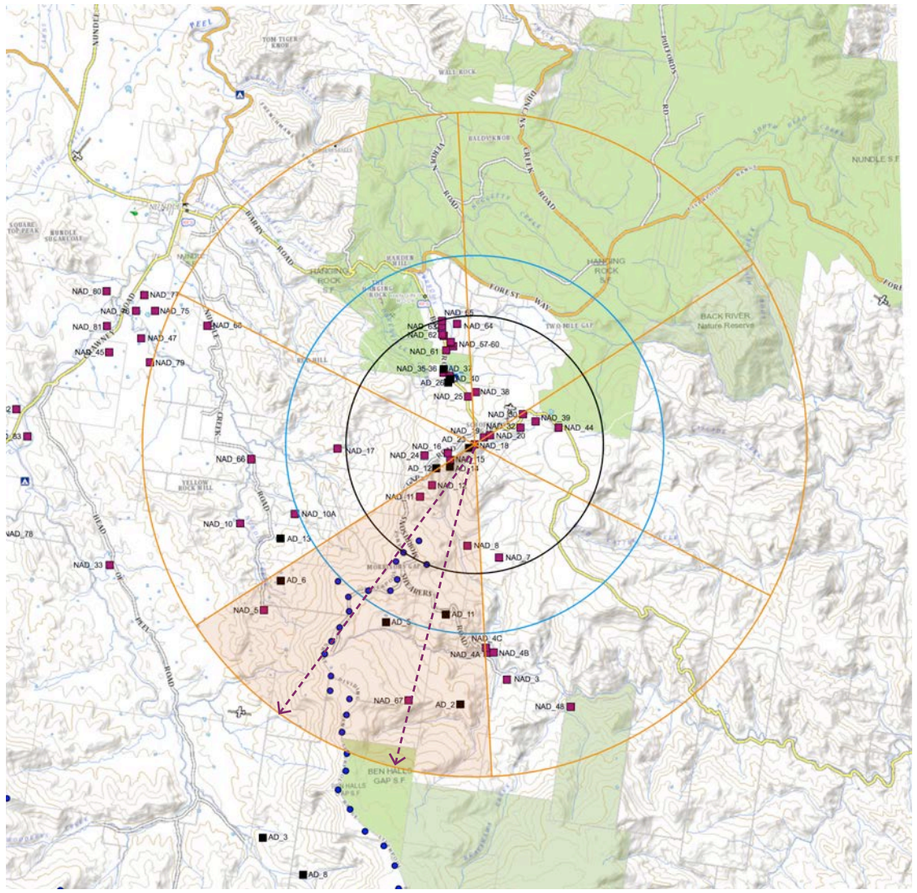


Figure E17a ***Preliminary Assessment Tool: NAD_18***

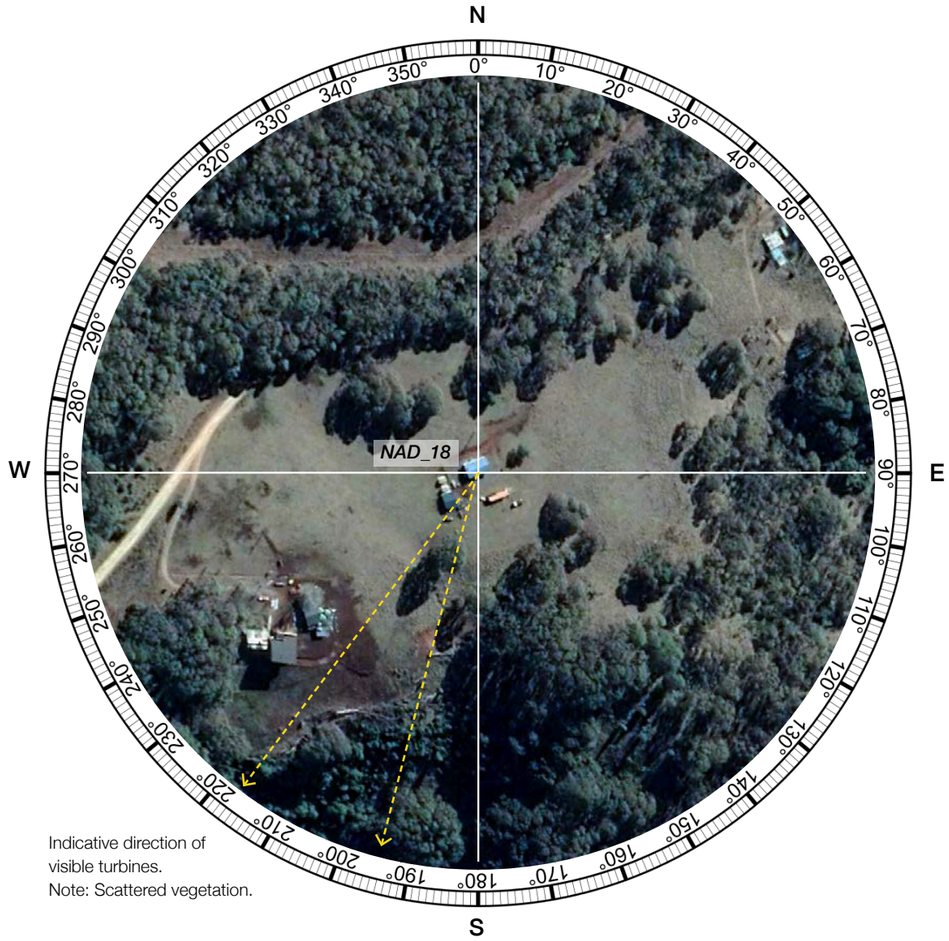


Figure E17b ***Aerial Image - Dwelling NAD_18*** *(Aerial Image Source: Google Earth Image Date: 05.08.2019)*

E18. **NAD_19** Dwelling Assessment

NAD_19			
Morrisons Gap Road			
Nearest visible turbine (km):*	*2.93km*	**Visibility Distance Zone:**	**Near Middleground (NM)**
Total number of visible turbines:*	*11** *Within 8kms*	**Viewer Sensitivity Level:**	**Level 2: Rural Dwelling**
Number of *visible* turbines within 3100m:*	*1**	**Landscape Character Unit**	**LCU05: Forested Mountain Range**
Number of theoretical 60º Sectors (Based on 2D Assessment):	*1**	**Scenic Quality Rating:**	**Moderate / High**
Number of 60º Sectors (Based on 3D Assessment):*	*1*	**Visual Influence Zone:**	**VIZ2**

Based on an assessment of topography alone. Screening factors such as vegetation may reduce the potential visibility of the proposed turbines.

Assessment Notes:

A desktop assessment was undertaken for this dwelling. The dwelling is located off Morrisons Gap Road and as per the character of the area, is surrounded by vegetation. Based on an assessment of topography alone, approximately 11 turbines associated with the project would be visible to the SSW within 8 kilometres. Existing intervening vegetation in this direction is likely to screen views to the Project.

Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: One (1) turbine is located within the 'black line' of visual magnitude. Vegetation is likely to screen this turbine.

Multiple Wind Turbine Effects: The Project will be visible in one (1) 60º sectors (based on topography alone).

Landscape Scenic Integrity: The proposed turbines will not cause significant modification of the visual catchment from this viewpoint.

Key Feature Disruption: The Project will not alter or disrupt identified key landscape features viewed from this location.

Mitigation Methods:

If deemed necessary supplementary planting could be considered along existing vegetation in the direction of the Project (as shown as a green dashed line on Figure E18b) to ensure views to the Project are screened in the long-term.

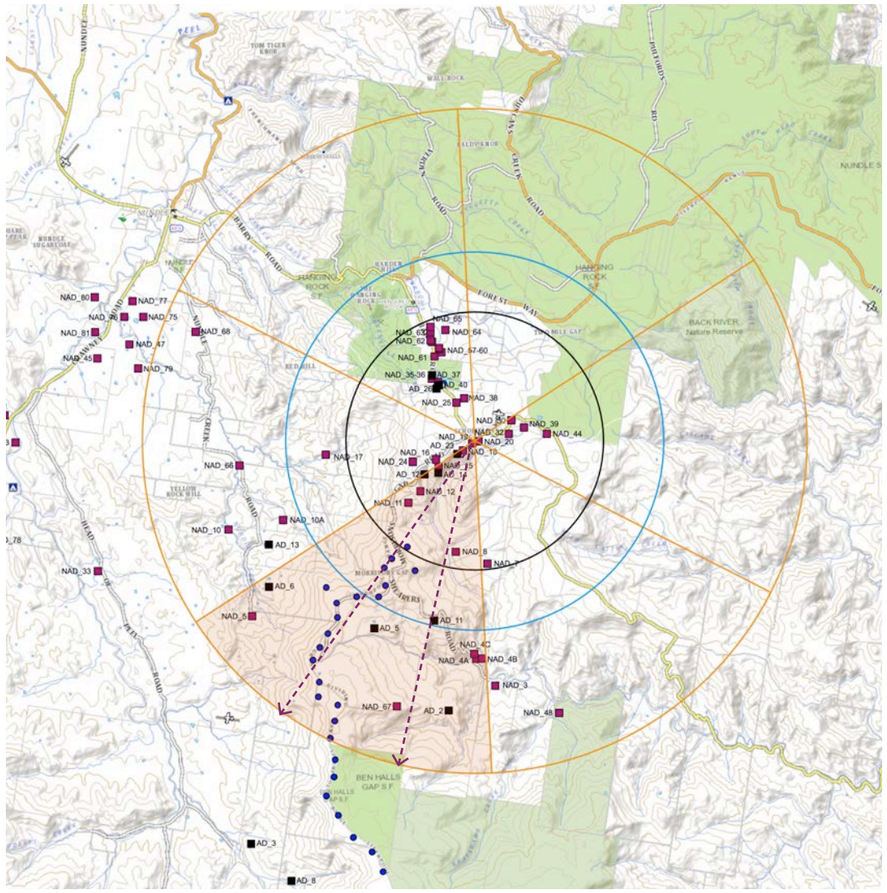


Figure E18a ***Preliminary Assessment Tool: NAD_19***

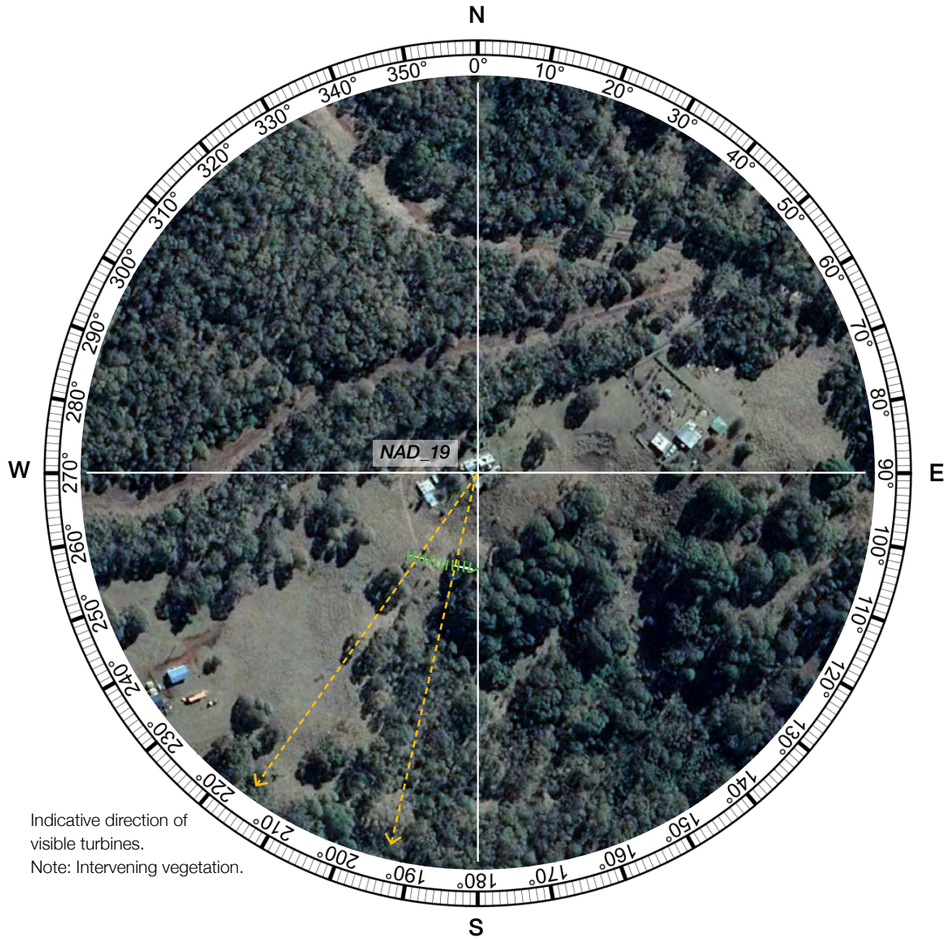


Figure E18b ***Aerial Image - Dwelling NAD_19*** *(Aerial Image Source: Google Earth Image Date: 05.08.2019)*

E19. **NAD_20** Dwelling Assessment *Refer to Photomontage 17*

NAD_20			
Morrisons Gap Road			
Nearest visible turbine (km):*	*3.05km*	**Visibility Distance Zone:**	**Near Middleground (NM)**
Total number of visible turbines:*	*7** *Within 8kms*	**Viewer Sensitivity Level:**	**Level 2: Rural Dwelling**
Number of *visible* turbines within 3100m:*	**1***	**Landscape Character Unit**	**LCU05: Forested Mountain Ranges**
Number of theoretical 60º Sectors (Based on 2D Assessment):	*1*	**Scenic Quality Rating:**	**Moderate / High**
Number of 60º Sectors (Based on 3D Assessment):*	*1*	**Visual Influence Zone:**	**VIZ2**

***Based on an assessment of topography alone. Screening factors such as vegetation may reduce the potential visibility of the proposed turbines.**

Assessment Notes:

Moir LA attended this dwelling on the 16th of June 2020. Views are generally contained by vegetation to the south. An assessment based on topography alone identified 7 turbines visible to the south west. A combination of existing shed / structure and vegetation to the south west of the property will screen views to the Project from this dwelling. Views to the Project are likely to be available from the garden. A photomontage has been prepared (refer to Photomontage 17).

Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: One (1) turbine is located within the 'black line' of visual magnitude, however this turbine will be screened due to vegetation.

Multiple Wind Turbine Effects: The Project will be visible in up to one (1) 60º sectors, however screened due to vegetation.

Landscape Scenic Integrity: The proposed turbines will not significantly modify the visual catchment from this viewpoint.

Key Feature Disruption: The Project will not alter or disrupt identified key landscape features viewed from this location.

Mitigation Methods:

Mitigation methods are not deemed necessary for this dwelling as existing vegetation is likely to sufficiently screen the Project.

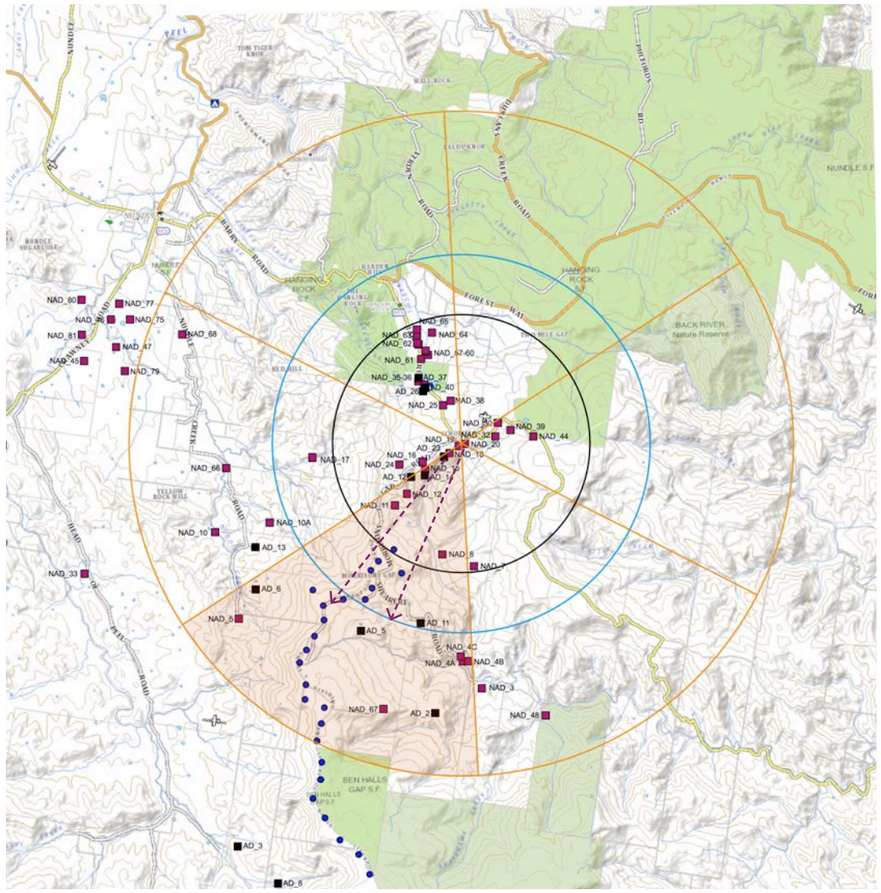


Figure E19a ***Preliminary Assessment Tool: NAD_20***

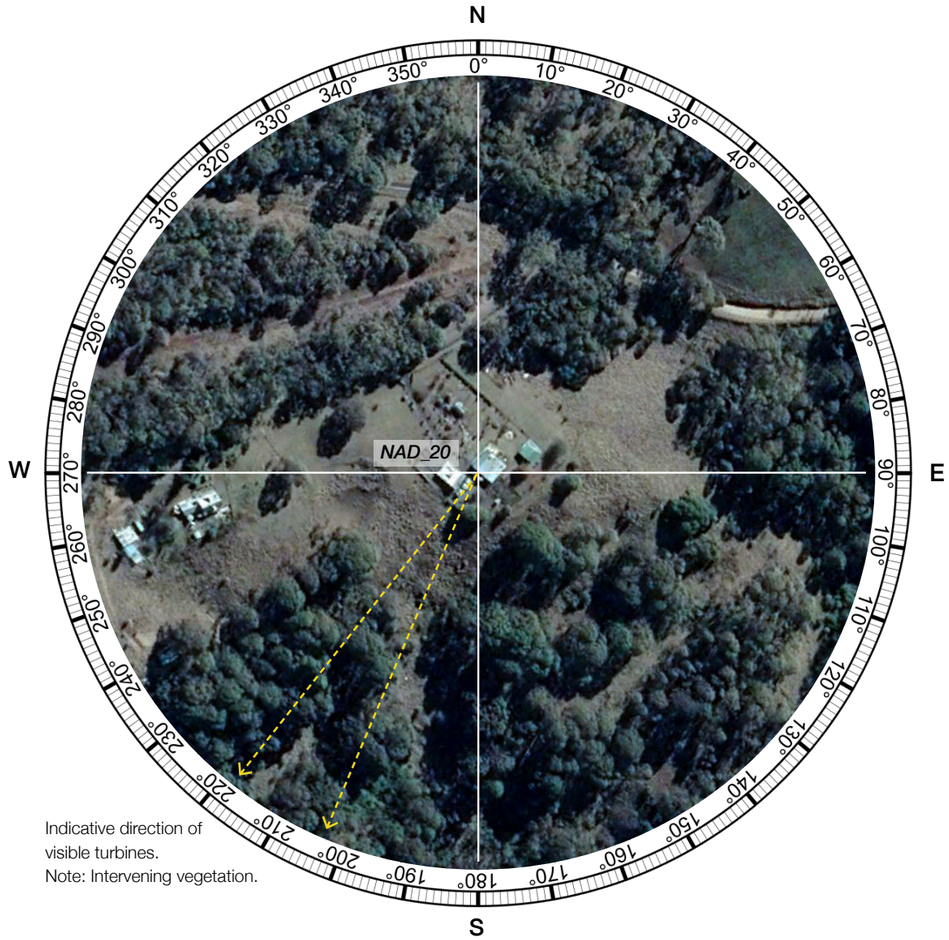


Figure E18b ***Aerial Image - Dwelling NAD_20*** *(Aerial Image Source: Google Earth Image Date: 05.08.2019)*

NAD_20 Dwelling Assessment

E20. **AD_23** Dwelling Assessment *Refer to Photomontage 19*

AD_23			
Morrisons Gap Road			
Nearest visible turbine (km):*	*2.96km*	**Visibility Distance Zone:**	**Near Middleground (NM)**
Total number of visible turbines:*	*3* *Within 8kms*	**Viewer Sensitivity Level:**	**Level 2: Rural Dwelling**
Number of *visible* turbines within 3100m:*	**1**	**Landscape Character Unit**	**LCU05: Forested Mountain Ranges**
Number of theoretical 60º Sectors (Based on 2D Assessment):	*1*	**Scenic Quality Rating:**	**Moderate / High**
Number of 60º Sectors (Based on 3D Assessment):*	*1*	**Visual Influence Zone:**	**VIZ2**

Based on an assessment of topography alone. Screening factors such as vegetation may reduce the potential visibility of the proposed turbines.

Assessment Notes:

Moir LA attended the property and undertook a visual assessment on 17th June 2020. The dwelling is orientated towards the south with views across the project site from two decks on the southern side of the house framed by adjoining vegetation. Vegetation to the SSE may assist in screening some turbines. Three (3) turbines are located within 3100m, however only one of these is visible. The remaining visible turbines are in excess of 8 kilometres from the dwelling. A photomontage illustrating the proposed view has been prepared. Refer to **Photomontage 19**.

Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: One (1) turbine is located within the 'black line' of visual magnitude.

Multiple Wind Turbine Effects: The Project will be visible in up to one (1) 60º sector.

Landscape Scenic Integrity: The proposed turbines will be a noticeable element in the landscape yet not cause significant modification of the visual catchment from this viewpoint.

Key Feature Disruption: The Project will not significantly alter or disrupt identified key landscape features viewed from this location.

Mitigation Methods:

Due to the elevated position and orientation of the dwelling, opportunities to mitigate the visual impacts from this dwelling are limited. Screen planting on the low rise to the north east of the dwelling may assist in reducing the extent of visibility of the Project, to screen the nearest turbines whilst maintaining a large portion of the desirable views to the north west.

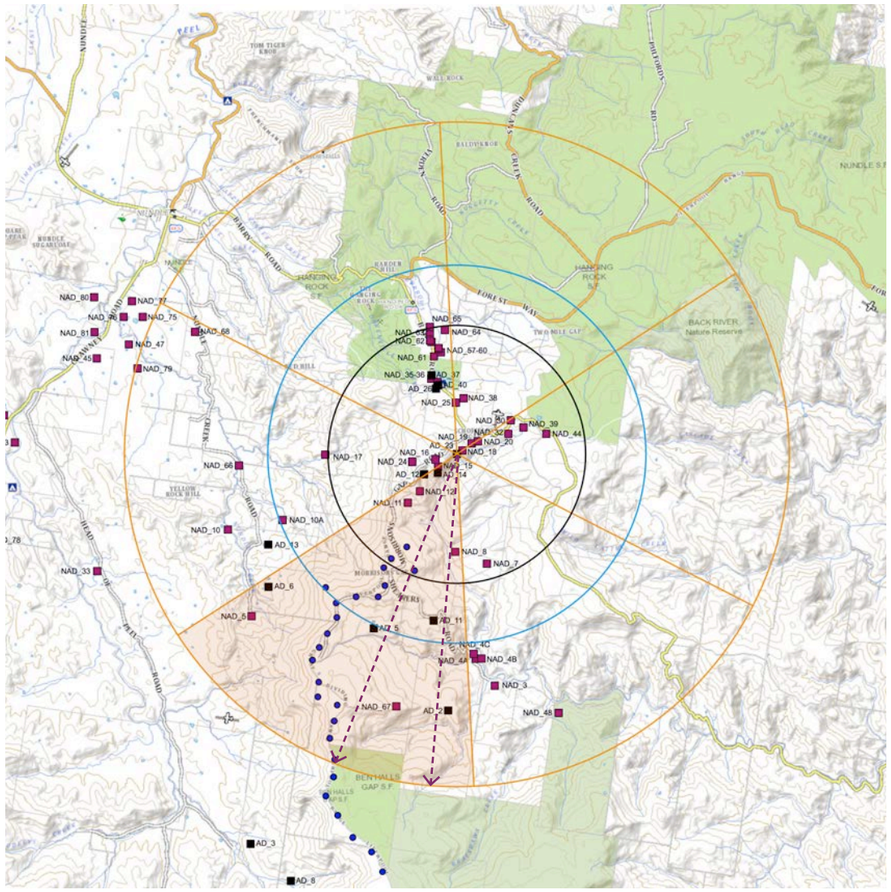


Figure E20a ***Preliminary Assessment Tool: AD_23***

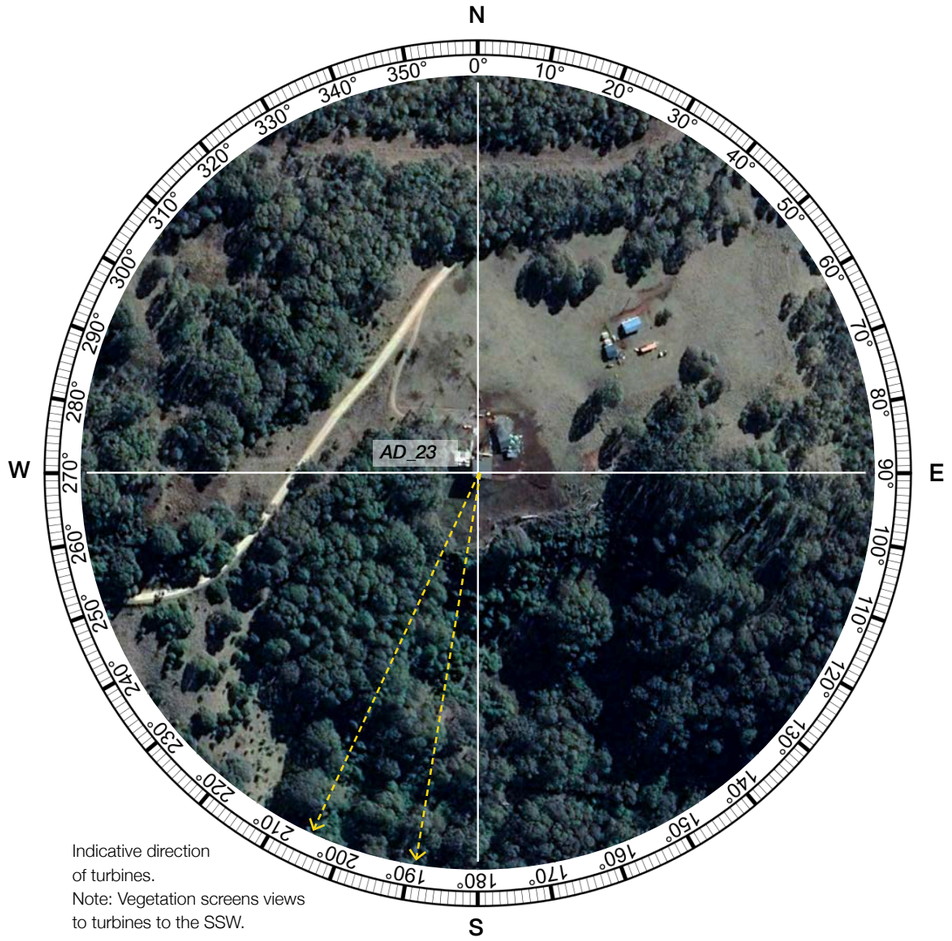


Figure E20b ***Aerial Image - Dwelling AD_23*** *(Aerial Image Source: Google Earth Image Date: 05.08.2019)*

E21. **NAD_67** Dwelling Assessment *Refer to Photomontage 26 (Wire frame)*

NAD_67			
Morrisons Gap Road			
Nearest visible turbine (km):*	*2.39km*	**Visibility Distance Zone:**	**Near Middleground (NM)**
Total number of visible turbines:*	*10*	**Viewer Sensitivity Level:**	**Level 2: Rural Dwelling**
Number of *visible* turbines within 3100m:*	**5**	**Landscape Character Unit**	**LCU05: Forested Mountain Ranges**
Number of theoretical 60º Sectors (Based on 2D Assessment):	*4*	**Scenic Quality Rating:**	**Moderate / High**
Number of 60º Sectors (Based on 3D Assessment):*	*1*	**Visual Influence Zone:**	**VIZ2**

***Based on an assessment of topography alone. Screening factors such as vegetation may reduce the potential visibility of the proposed turbines.**

Assessment Notes:

A desktop assessment was undertaken from this dwelling. Although within close proximity to the Project, the majority of turbines are screened by topography. Based on topography alone it is likely 10 wind turbines will be visible to the north, the closest visible turbine is 2.39 kilometres from the dwelling. Views to the east are expansive across the valley associated with the Barnard River. *Note: This is based on an assessment utilising topographic mapping and available aerial imagery.*

Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: Five (5) visible turbines are located within the 'black line' of visual magnitude and will be visible from this dwelling (within 3100 metres from the dwelling).

Multiple Wind Turbine Effects: The Project will be visible in up to one (1) 60º sectors which is deemed acceptable for a level 2 dwelling.

Landscape Scenic Integrity: The proposed turbines will be a visible feature in the landscape from this viewpoint, however due to the expansive views they would occupy a small portion of the visual catchment.

Key Feature Disruption: The Project will be a visible and has the potential to be dominant element on the ridgeline to the north, however as views are expansive the surrounding vegetated ranges will remain the key feature from this dwelling.

Mitigation Methods:

Due to the elevated position and orientation of the dwelling, opportunities to mitigate the visual impacts from this dwelling are limited. Screen planting near the dwelling to the north may reduce the visibility of turbines whilst maintaining desirable views across the valley to the north east.

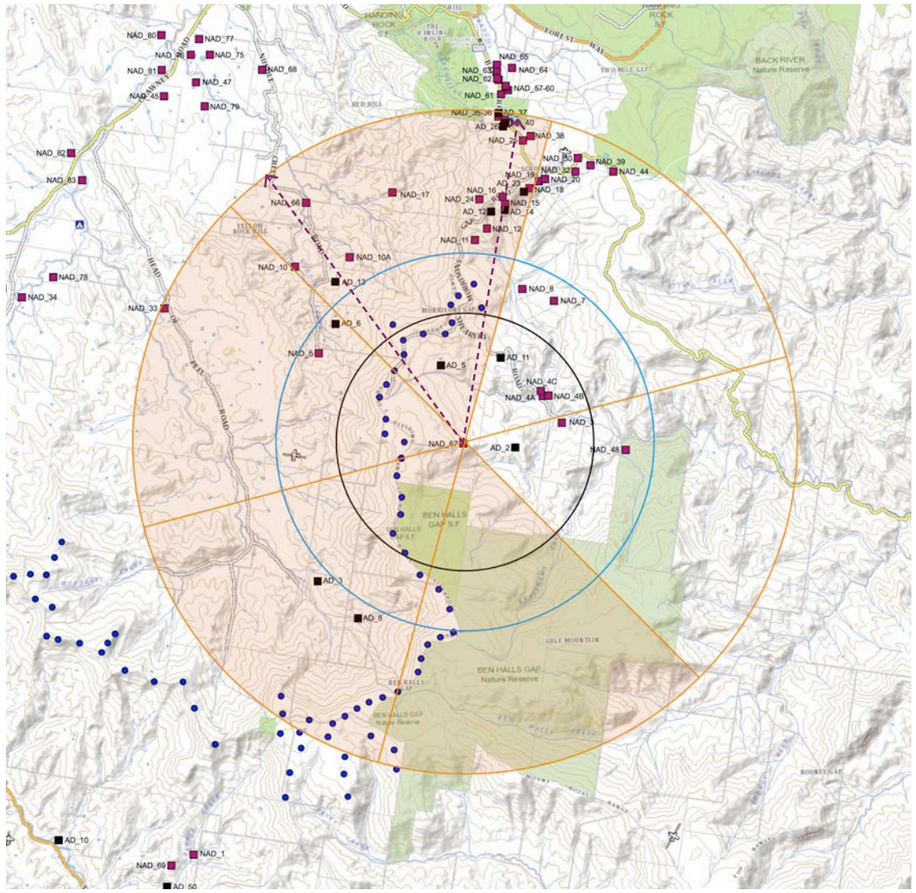
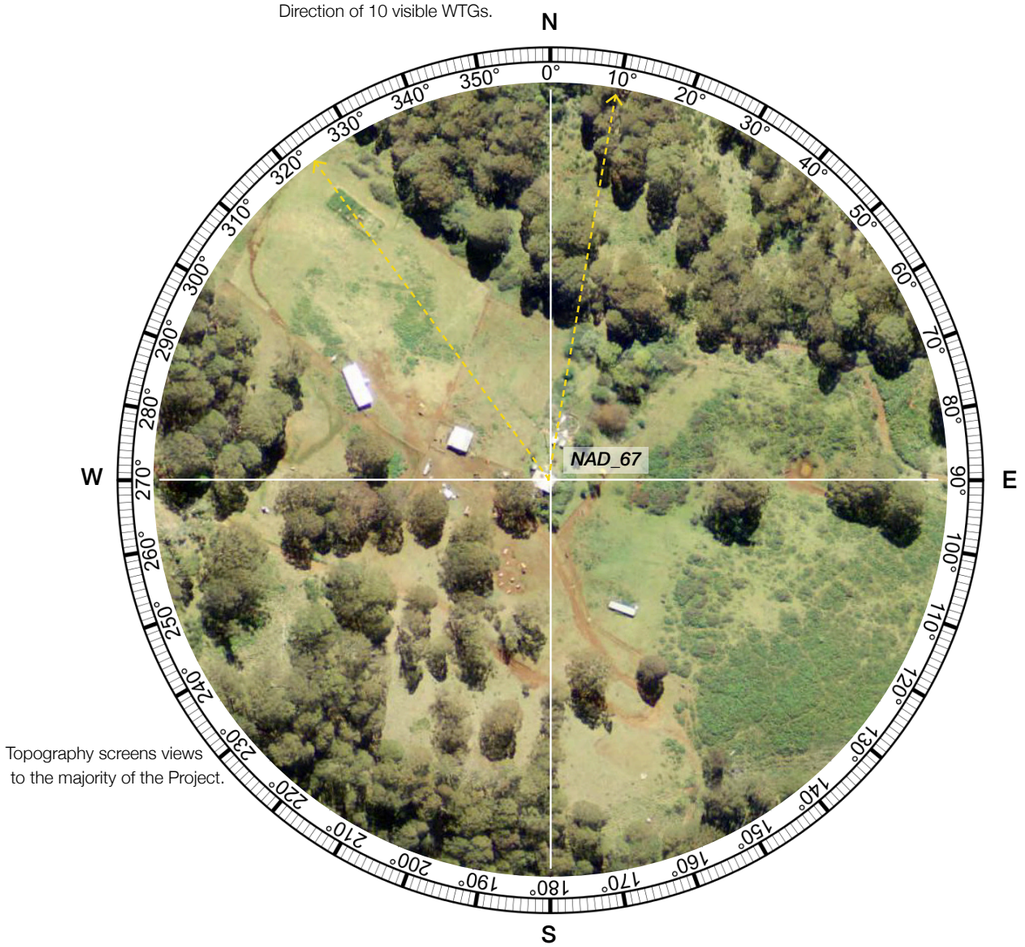


Figure E21a ***Preliminary Assessment Tool: NAD_67***

Direction of 10 visible WTGs.



Topography screens views to the majority of the Project.

Figure A21b ***Aerial Image - Dwelling NAD_67*** *(Aerial Image Source: Google Earth Image Date: 14.10.2016)*

E22. **NAD_69** Dwelling Assessment *Refer to Photomontage 22*

NAD_69			
Morrisons Gap Road			
Nearest visible turbine (km):*	*3.10km*	**Visibility Distance Zone:**	**Near Middleground (NM)**
Total number of visible turbines:*	*31*	**Viewer Sensitivity Level:**	**Level 2: Rural Dwelling**
Number of *visible* turbines within 3100m:*	*1*	**Landscape Character Unit:**	**LCU06: Crawney**
Number of theoretical 60º Sectors (Based on 2D Assessment):	*2*	**Scenic Quality Rating:**	**Moderate**
Number of 60º Sectors (Based on 3D Assessment):*	*2*	**Visual Influence Zone:**	**VIZ2**

***Based on an assessment of topography alone. Screening factors such as vegetation may reduce the potential visibility of the proposed turbines.**

Assessment Notes:

Moir LA attended this property on 17th June 2020 to undertake a visual assessment. The dwelling is sited in a cleared, elevated position with expansive, uninterrupted views in all directions. The dwelling is orientated to the north with views to the vegetated hills associated with the southern end of the Project Site. A total of 31 proposed turbines will be visible along the ridge in a generally NW to ENE direction at a distance of between approx 3100-8000m from the dwelling. A photomontage has been prepared to illustrate the visual impact from this dwelling.

Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: One (1) turbine is located within the 'black line' of visual magnitude and will be visible from this dwelling (3100 metres from the dwelling).

Multiple Wind Turbine Effects: The Project will be visible in up to two (2) 60º sectors which is deemed acceptable for a level 2 dwelling.

Landscape Scenic Integrity: The proposed turbines have the potential to be a dominant feature of the visual catchment from this viewpoint.

Key Feature Disruption: The Project will be a dominant element on the ridgeline, particularly to the north east of the dwelling.

Mitigation Methods:

Due to the elevated position and orientation of the dwelling, opportunities to mitigate the visual impacts from this dwelling are limited. Screen planting on the low rise to the north east of the dwelling may assist in reducing the extent of visibility of the Project, to screen the nearest turbines whilst maintaining a large portion of the desirable views to the north west.

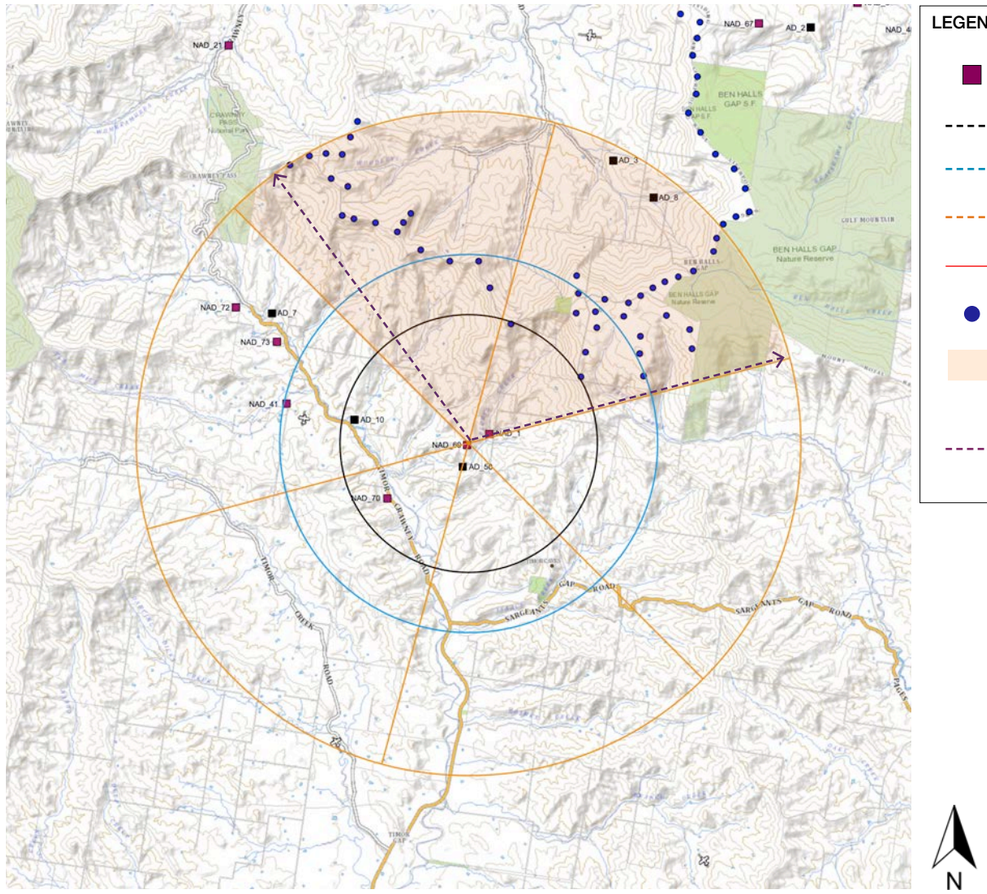


Figure E22a ***Preliminary Assessment Tool: NAD_69***

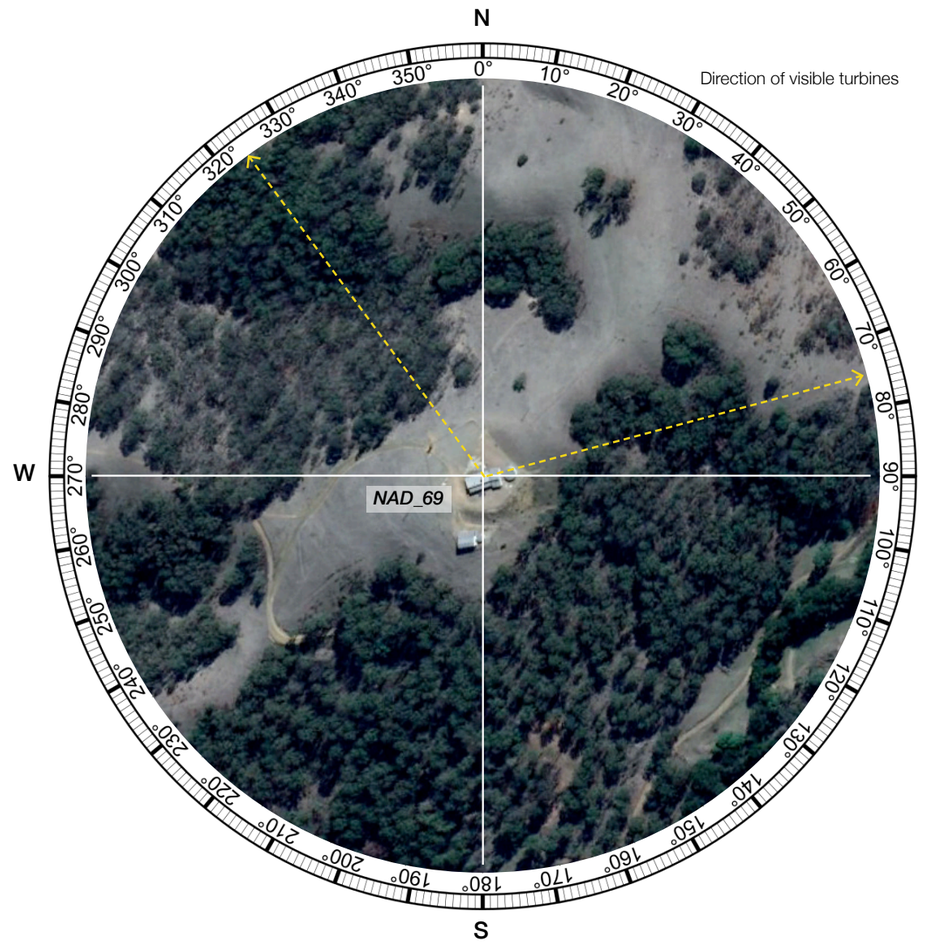


Figure A22b ***Aerial Image - Dwelling NAD_69*** *(Aerial Image Source: Google Earth Image Date: 21.08.2018)*

E23. **NAD_33** Dwelling Assessment *Refer to Photomontage 21*

NAD_33			
Head of Peel Road			
Nearest visible turbine (km):*	*5.62km*	**Visibility Distance Zone:**	**Far Middleground**
Total number of visible turbines:*	*30 (within 8kms)*	**Viewer Sensitivity Level:**	**Level 2: Rural Dwelling**
Number of *visible* turbines within 3100m:*	*0*	**Landscape Character Unit:**	**LCU06: Crawney**
Number of theoretical 60º Sectors (Based on 2D Assessment):	*3*	**Scenic Quality Rating:**	**Moderate**
Number of 60º Sectors (Based on 3D Assessment):*	*3*	**Visual Influence Zone:**	**VIZ2**

Based on an assessment of topography alone. Screening factors such as vegetation may reduce the potential visibility of the proposed turbines.

Assessment Notes:

Moir LA attended this property on 17th June 2020 to undertake a visual assessment. The dwelling is sited in a slightly elevated position with expansive views in most directions. The dwelling is orientated to the north east and yard to the south west with views across the valley associated with the Peel River which extend towards the Project Area. Views to the Project will be available to the ESE and SSW. Approximately 30 turbines visible turbines are located between 5.62 - 8 kilometres from the dwelling. Undulating topography and scattered vegetation assists in reducing the number of visible turbines from this dwelling.

Visual Performance Objectives Evaluation (VIZ2):

Visual Magnitude: No turbines are within the blue line of visual magnitude (4950m from the dwelling).

Multiple Wind Turbine Effects: The Project will be visible in up to three (3) 60º sectors, however it is worth noting only one turbine located just under 8 kilometres from the dwelling results in three (3) sectors of visibility. It would be reasonable to suggest the turbines would be visible in only two (2) sectors which is acceptable for a receptor with a viewer sensitivity Level 2.

Landscape Scenic Integrity: The proposed turbines have the potential to be a noticeable feature of the visual catchment from this viewpoint, however the dwelling has extensive views in most directions and the turbines would occupy approximately 80º of these views.

Key Feature Disruption: The Project will be a dominant element on the ridgeline, particularly to the north east of the dwelling, yet the ridgeline will remain the dominant feature.

Mitigation Methods:

Supplementary planting in keeping with the character of existing vegetation surrounding the dwelling could assist in reducing the potential visibility of turbines from this dwelling.

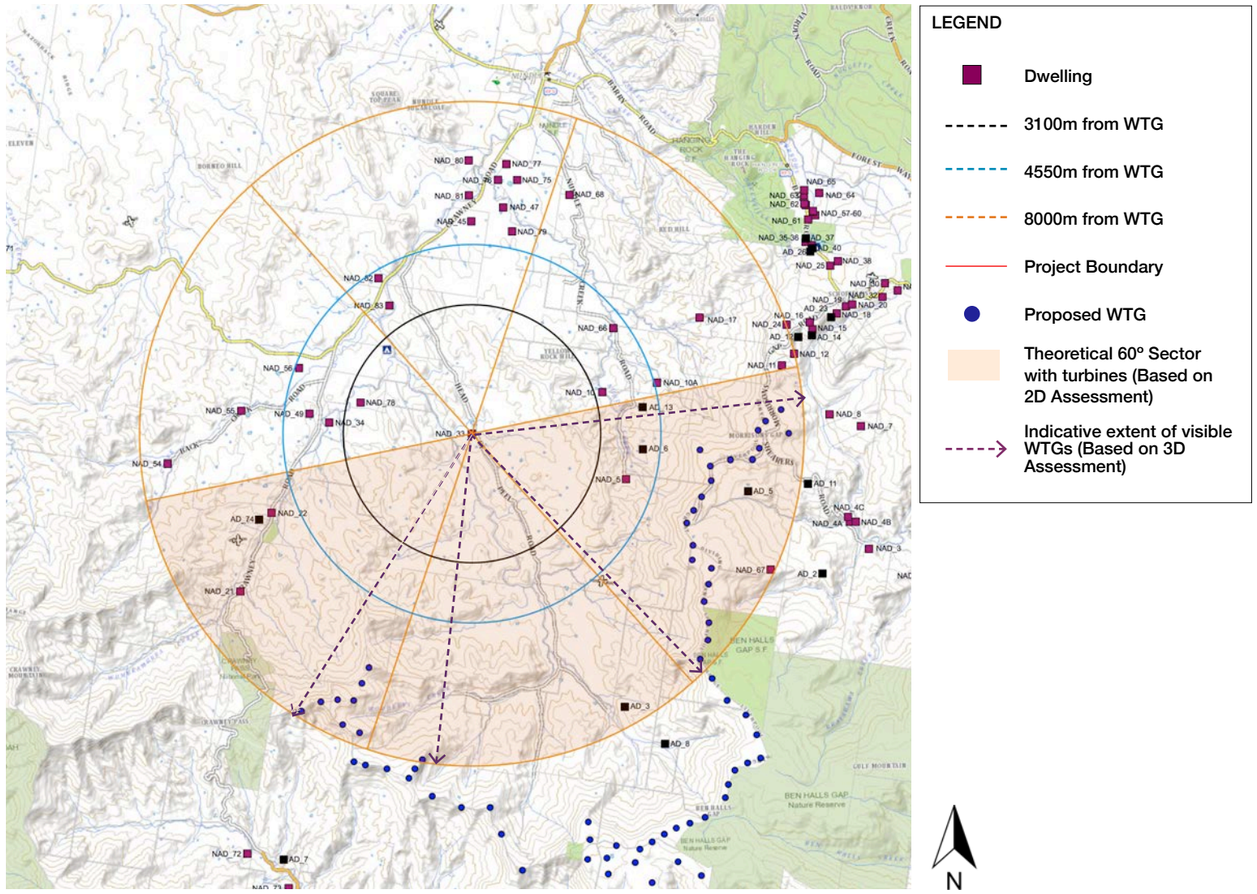


Figure E23a ***Preliminary Assessment Tool: NAD_33***

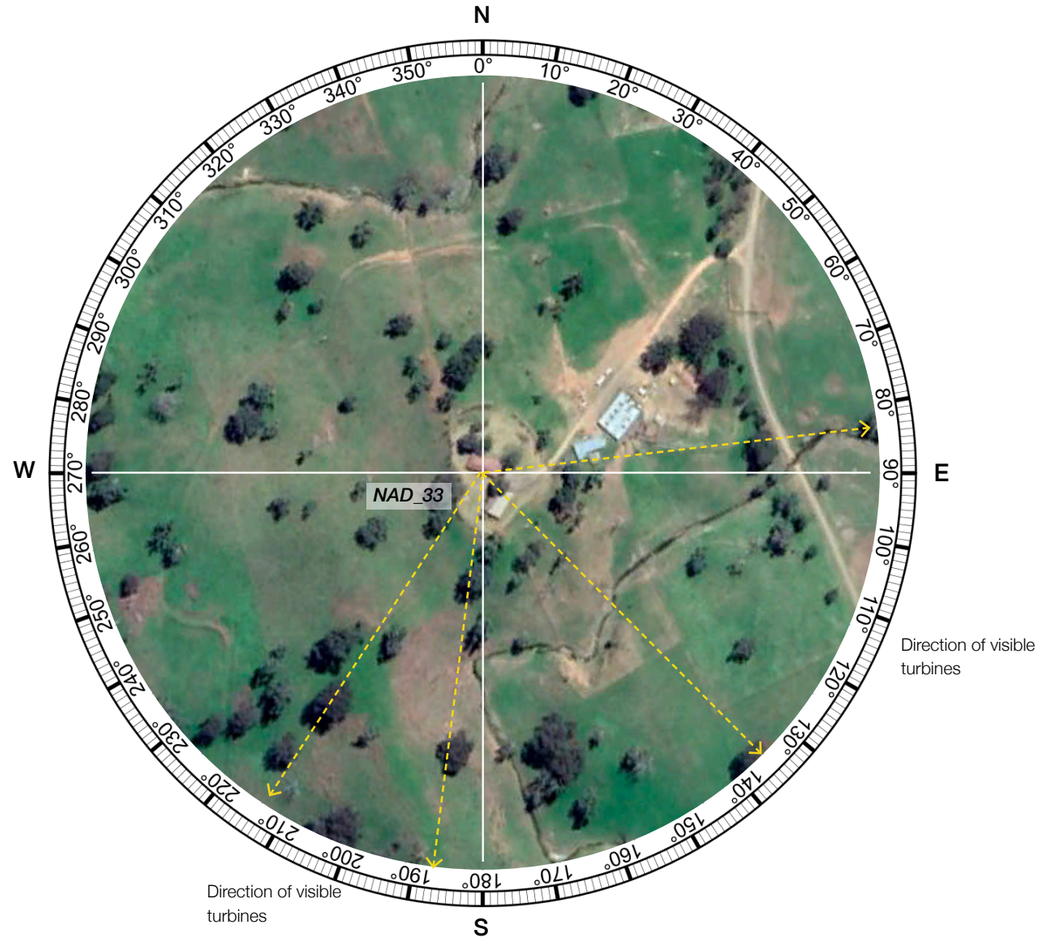


Figure A23b ***Aerial Image - Dwelling NAD_33*** *(Aerial Image Source: Google Earth Image Date: 20.07.2020)*