## Appendix J:

Detailed private dwelling assessment

## Assessment of visual impact – private dwellings

### Stage 2- Detailed view assessment of shortlisted private dwellings

The assessment of views from private dwellings has been undertaken as a two-stage process, as described in Chapter 3 of this technical paper. Stage one being a preliminary visual impact screening to shortlist dwellings that may have the potential for a visual impact, and Stage 2 being a detailed view assessment.

The following pages contains the detailed assessment of those dwellings identified as having the potential for a moderate or higher visual impact in Stage 1.

This detailed visual assessment has been undertaken in the following steps:

- For each residential dwelling, Identify the visual sensitivity by:
  - Determining the viewpoint sensitivity
  - Determining the scenic quality of the view
  - Combining the viewpoint sensitivity and scenic quality to identify the visual sensitivity
- Determine the magnitude of change.
- Combine the visual sensitivity and magnitude of change to assign a level of visual impact.
- Identify any opportunities for mitigation of the identified impact (if moderate or higher) in accordance with the visual performance objectives.

A summary of the results of this assessment is contained in Table 6-3.

In Table 6-3, the visual impact level of those dwellings on no-host properties have been shaded in green, and highlighted with a black outline where the impact is moderate or high, and mitigation would be necessary.

Table 6-1 Summary of Stage 2 Detailed dwelling view assessment – daytime during operation

Receiver ID	Distance to Project operational area (metres)	Location / address	Project host (Y/N)	Detailed visual assessment (Y/N)	Visual Sensitivity	Magnitude of Change	Visual Impact level	Detailed assessment provided
19	950	Barigan Road, Wollar	N	Y	Moderate	Low	Low	Appendix J Page 1
31	1,900	Barigan Road, Wollar	Υ	N	Moderate	Low	Low	Appendix J Page 2
245	780	28 Robison Street, Ulan,	N	Y	Moderate	Low	Low	Appendix J Page 3
236	750	15 Robison Street, Ulan	N	Y	Moderate	Low	Low	Appendix J Page 3
228	690	20 Robison Street, Ulan	N	Y	Moderate	Low	Low	Appendix J Page 4
224	680	18 Robison Street, Ulan	N	Y	Moderate	Low	Low	Appendix J Page 4
216	670	6 Bent Street, Ulan	N	Y	Moderate	Low	Low	Appendix J Page 5
207	500	2236 Cope Road, Cope	N	Y	Moderate	Moderate	Moderate	Appendix J Page 5
198	220	Main Street, Ulan	N	Y	Moderate	Moderate	Moderate	Appendix J Page 6
166	760	9-127 Toole Road, Ulan	N	Y	Moderate	Low	Low	Appendix J Page 7
188	660	3812 Ulan Road, Ulan	N	Y	Moderate	Low	Low	Appendix J Page 8
204	990	2034 Cope Road, Cope	N	Y	Moderate	Low	Low	Appendix J Page 8

Receiver ID	Distance to Project operational area (metres)	Location / address	Project host (Y/N)	Detailed visual assessment (Y/N)	Visual Sensitivity	Magnitude of Change	Visual Impact level	Detailed assessment provided
247	710	1977 Cope Road, Cope	N	Y	Moderate	Low	Low	Appendix J Page 9
244	1,140	1936 Cope Road, Cope	N	Y	Moderate	Low	Low	Appendix J Page 9
267	920	1910 Cope Road, Cope	N	Y	Moderate	Moderate	Moderate	Appendix J Page 10
328	420	1863 Cope Road, Cope	Υ	Y	Moderate	Moderate	Moderate	Appendix J Page 14
333	630	1713 Cope Road, Cope	N	Y	Moderate	Negligible	Negligible	Appendix J Page 15
335	820	1679 Cope Road, Cope	Y	Y	Moderate	Low	Low	Appendix J Page 15
350	660	1601 Cope Road, Cope	N	Y	Moderate	Moderate	Moderate	Appendix J Page 16
357	650	1599 Cope Road, Cope	N	Y	Moderate	Moderate	Moderate	Appendix J Page 17
367	430	1599 Cope Road, Cope	Υ	Y	Moderate	Low	Low	Appendix J Page 18
373	640	440 Blue Springs Road, Stubbo	N	Y	Moderate	Moderate	Moderate	Appendix J Page 18
399	290	654 Blue Springs Road, Stubbo	Υ	Y	Moderate	High	High	Appendix J Page 19
462	1,650	917 Blue Springs Road, Cope	N	Y	Low	Negligible	Negligible	Appendix J Page 25
485	1,650	1083 Blue Springs Road, Cope	N	Y	Low	Negligible	Negligible	Appendix J Page 25
1483	210	86 Rissler Road, Stubbo	Υ	Y	Moderate	High	High	Appendix J Page 26
616	1,300	1303 Blue Springs Road, Cope	N	Y	Moderate	Negligible	Negligible	Appendix J Page 27
826	1,150	82 Birkalla Road, Merotherie	N	Y	Low	Low	Low	Appendix J Page 28
703	280	677 Merotherie Road, Merotherie	Υ	Y	Low	Low	Low	Appendix J Page 31
1482	760	135 Birkalla Road, Merotherie	Y	Y	Moderate	Negligible	Negligible	Appendix J Page 32
1027	1,830	951 Birriwa Bus Route North, Merotherie	N	N	Moderate	Low	Low	Appendix J Page 33
880 / 876	240	908 Birriwa Bus Route, Merotherie	Y	Y	Moderate	High	High	Appendix J Page 33
902	2,420	Birriwa Bus Route south, Birriwa	N	N	Low	Moderate	Low	Appendix J Page 34
965	1,210	Birriwa Bus Route north, Merotherie	Υ	Y	Moderate	Negligible	Negligible	Appendix J Page 37
998	1,410	Blue Springs Road, Leadville	N	Y	Moderate	Low	Low	Appendix J Page 38
955	800	782 Birkalla Road, Bungaba	N	Y	Low	Low	Low	Appendix J Page 38

Receiver ID	Distance to Project operational area (metres)	Location / address	Project host (Y/N)	Detailed visual assessment (Y/N)	Visual Sensitivity	Magnitude of Change	Visual Impact level	Detailed assessment provided
929	210	2178 Blue Springs Road, Bungaba	Υ	Y	Low	High	High*	Appendix J Page 39
927	320	944 Birkalla Road, Bungaba	Υ	Y	Low	Low	Low	Appendix J Page 43
941	460	782-944 Birkalla Road, Bungaba	N	Y	Low	Moderate- High	Moderate	Appendix J Page 44
947	580	675 Birkalla Road, Bungaba	N	Y	Low	Negligible	Negligible	Appendix J Page 47
846	1,910	1811 Blue Springs Road, Bungaba	N	N	Moderate	Low	Low	Appendix J Page 48
979	280	2178-2461 Blue Springs Road, Bungaba	Υ	Y	Moderate	High	High	Appendix J Page 48
1152	680	Cliffdale Road, Leadville	Υ	Y	Moderate	Low	Low	Appendix J Page 49
1057	910	549 Blue Springs Road Uarbry	Y	Y	Moderate	Low	Low	Appendix J Page 52
1195	520	12694 Golden Hwy, Uarbry	N	Y	Moderate	Moderate	Moderate	Appendix J Page 52
1184	1,700	190 Melrose Road, Leadville	N	Y	Low	Negligible	Negligible	Appendix J Page 53
1202	510	Golden Highway, Uarbry	Υ	Y	Low	Negligible	Negligible	Appendix J Page 53
1200	990	11880 Golden Highway, Uarbry	N	Y	Moderate	Low	Low	Appendix J Page 55
1261	1,250	247 Moorefield Road, Uarbry	Y	Y	Low	Low	Low	Appendix J Page 54
1288	660	1370 Moorefield Road, Uarbry	Υ	Y	Moderate	Moderate	Moderate	Appendix J Page 56
1316	780	1280 Moorefield Road, Uarbry	N	Y	Low	Low	Low	Appendix J Page 59
1323	1,320	1370 Moorefield Road, Coolah	N	Y	Moderate	Low	Low	Appendix J Page 62
1324	520	Moorefield Road, Coolah	Y	Y	Moderate	Moderate	Moderate	Appendix J Page 63
1119	350	121 Cliffdale Road, Uarbry	N	Y	Low	Moderate	Low	Appendix J Page 66
1070	2,180	390 Cliffdale Road, Uarbry	N	N	Moderate	Low	Low	Appendix J Page 69
1010 / 1015	870	140 Turill Bus Route, Turill	N	Y	Moderate	Low	Low	Appendix J Page 69
1037	1,220	Cliffdale Road, Uarbry	N	Y	Moderate	Moderate	Moderate	Appendix J Page 70
1003	400	Turill Bus Route, Turill	Υ	Y	Low	Low	Low	Appendix J Page 73
1044	880	6293 Ulan Road, Turill	N	Y	Moderate	Low	Low	Appendix J Page 77
1066	600	6293 Ulan Road, Turill	N	Y	Moderate	Moderate	Moderate	Appendix J Page 74
1091	280	6569 Ulan Road, Turill	Y	Y	Moderate	Moderate	Moderate	Appendix J Page 78
1103	1,410	Ulan Road, Turill	Υ	Y	Moderate	Negligible	Negligible	Appendix J Page 79

Receiver ID	Distance to Project operational area (metres)	Location / address	Project host (Y/N)	Detailed visual assessment (Y/N)	Visual Sensitivity	Magnitude of Change	Visual Impact level	Detailed assessment provided
1475	930	Summerhill Road, Turill	N	Y	Moderate	Low	Low	Appendix J Page 80
1159	650	Golden Highway, Cassilis	Υ	Y	Low	Low	Low	Appendix J Page 80
1163 / 1162	520	9843 Golden Highway, Cassilis	Y	Y	Low	Low	Low	Appendix J Page 81
1308	1,600	Coolah Road, Cassilis	N	Y	Moderate	Low	Low	Appendix J Page 81
1480	140	9843 Golden Highway, Cassilis	Y	Y	Low	Low	Low	Appendix J Page 82
1351	220	1089 Rotherwood Road, Cassilis	Y	Y	Low	Negligible	Negligible	Appendix J Page 83
741	480	2493 Castlereagh Highway, Tallawang	N	Y	Moderate	High	High	Appendix J Page 84
790	1,280	2610 Castlereagh Highway, Tallawang	Y	Y	Moderate	Moderate	Moderate	Appendix J Page 89
775	1,090	2584 Castlereagh Hwy, Tallawang	Y	Y	Moderate	High	High	Appendix J Page 91
663 / 659	980	2330 Castlereagh Highway, Tallawang	N	Y	Moderate	High	High	Appendix J Page 92
672	930	2342 Castlereagh Hwy, Tallawang	Y	Y	Moderate	High	High	Appendix J Page 95
636	1,320	2282 Castlereagh Highway, Tallawang	N	Y	Moderate	Moderate	Moderate	Appendix J Page 95
772	990	1776 Tucklan Road, Dunedoo	N	Y	Moderate	Negligible	Negligible	Appendix J Page 96
789	1,690	327 Laheys Creek Road, Dunedoo	N	N	Moderate	Low	Low	Appendix J Page 97
732	20	41 Spir Road, Tallawang	Y	Y	Moderate	High	High	Appendix J Page 97
792	1,350	1744 Tucklan Road, Tallawang	N	Y	Moderate	Negligible	Negligible	Appendix J Page 98
717	400	145 Spir Road, Tallawang	N	Y	Moderate	High	High	Appendix J Page 99
705	530	Spir Road, Tallawang	N	Y	Moderate	Moderate	Moderate	Appendix J Page 103
543	1,110	330 Whistons Lane, Tallawang	Y	Y	Moderate	Low	Low	Appendix J Page 103
730 / 733	390	1010 Laheys Creek Road, Dunedoo	Y	Y	Moderate	Moderate	Moderate	Appendix J Page 104
531	95	330 Whistons Lane, Tallawang	Υ	Y	Moderate	High	High	Appendix J Page 105
487	1,340	250 Whistons Lane, Tallawang	N	Y	Low	Negligible	Negligible	Appendix J Page 105

Receiver ID	Distance to Project operational area (metres)	Location / address	Project host (Y/N)	Detailed visual assessment (Y/N)	Visual Sensitivity	Magnitude of Change	Visual Impact level	Detailed assessment provided
429	1,780	1450 Castlereagh Hwy, Tallawang	N	N	Moderate	Negligible	Negligible	Appendix J Page 106
385	580	980 Puggoon Road, Tallawang	N	Υ	Low	Moderate	Low	Appendix J Page 106
365	1,120	800 Puggoon Road, Tallawang	N	Y	Low	Low	Low	Appendix J Page 107
354	350	775 Puggoon Road, Tallawang	N	Y	Low	Moderate	Moderate	Appendix J Page 107
609	1,750	1420 Laheys Creek Road, Dunedoo	N	Y	Moderate	Low	Low	Appendix J Page 108
611	1,100	1350 Spring Ridge Road, Dunedoo	Y	Y	Moderate	Low	Low	Appendix J Page 108
719	1,060	1050 Spring Ridge Road, Cobbora	Y	Υ	Moderate	Moderate	Moderate	Appendix J Page 109
539	55	Dapper Road, Dunedoo	Y	Y	Moderate	High	High	Appendix J Page 110
646	1,350	1069 Sandy Creek Road, Cobbora	N	Y	Moderate	Low	Low	Appendix J Page 114
580	220	Sandy Creek Road, Dunedoo	Y	Y	Low	Low	Low	Appendix J Page 114
584/ 585	300	1198 Sandy Creek Road, Cobbora	Y	Υ	Low	Low	Low	Appendix J Page 115
480	1,460	1484 Sandy Creek Road, Dunedoo	N	Υ	Moderate	Low	Low	Appendix J Page 115
464	590	Dapper Road, Dunedoo	N	Y	Moderate	Negligible	Negligible	Appendix J Page 116
560	1,010	Dapper Road, Dunedoo	Y	Y	Moderate	Low	Low	Appendix J Page 117

<sup>\*</sup> Assessment level increased from moderate due to the close proximity of towers that would be seen in multiple directions from the dwelling.

# Detailed visual assessment Barigan Road, Wollar

#### Visual sensitivity

#### **MODERATE**

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area.

MODERATE - View across a landscape with steeply undulating landform and prominent hills in the distance.

Some scattered vegetation and vegetated hills. The view would include existing transmission line structures and the existing substation, glimpses of some existing roads and scattered sheds and farm buildings. This view has scenic quality values of predominantly moderate and low scenic quality.

### Magnitude of change

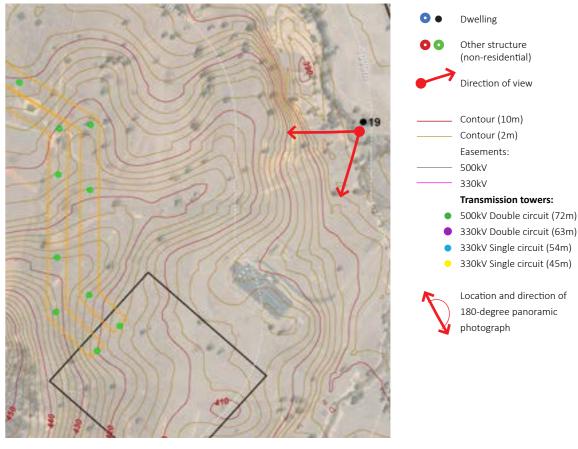
#### LOW

Twin 500kV double circuit lattice towers at about 1km to nearest tower, and 950m to switching station. Transmission lines may be seen in the background of the view, and viewed against the background of hills. These towers would be larger than those currently in the view and the switching station would be viewed in the context of the existing substation. Overall, the project would be somewhat prominent and the project would result in a slight change in the amenity of the view.

## Detailed aerial showing dwelling orientation



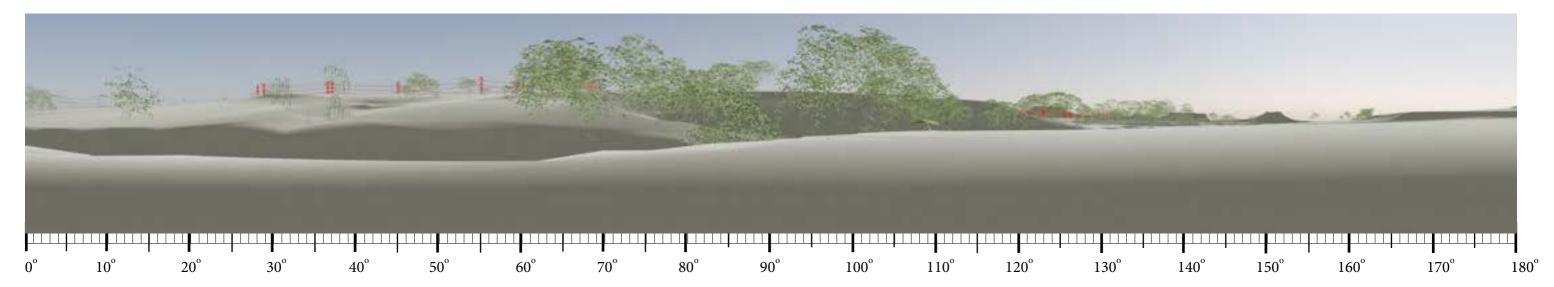
### Plan showing location of dwelling and the project



#### Visual impact level

## evel LOW

#### 3D modelled view







## Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 19

## **Detailed visual assessment**

### Visual sensitivity

#### **MODERATE**

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area. MODERATE - View across a landscape with steeply undulating landform, and prominent hills in the distance. Some scattered vegetation and vegetated hills. The view would include glimpses of some existing roads and scattered sheds and farm buildings. This view has scenic values of predominantly moderate and low scenic quality.

#### Magnitude of change

#### LOW

Twin 500kV double circuit lattice towers, about 1.9 kilometres to nearest tower. Intervening landform would limit views to the project. While the towers would rise above the surrounding landform they would be seen in the background of the view, and viewed against the background of hills.

Overall, the project would not be visually prominent and the project would result in a slight change in the amenity of the view.

#### Visual impact level

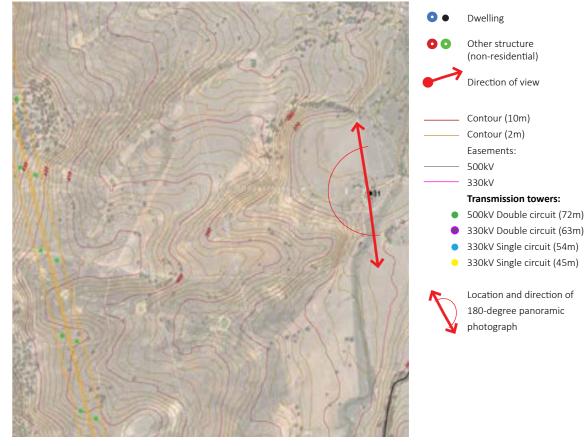
LOW

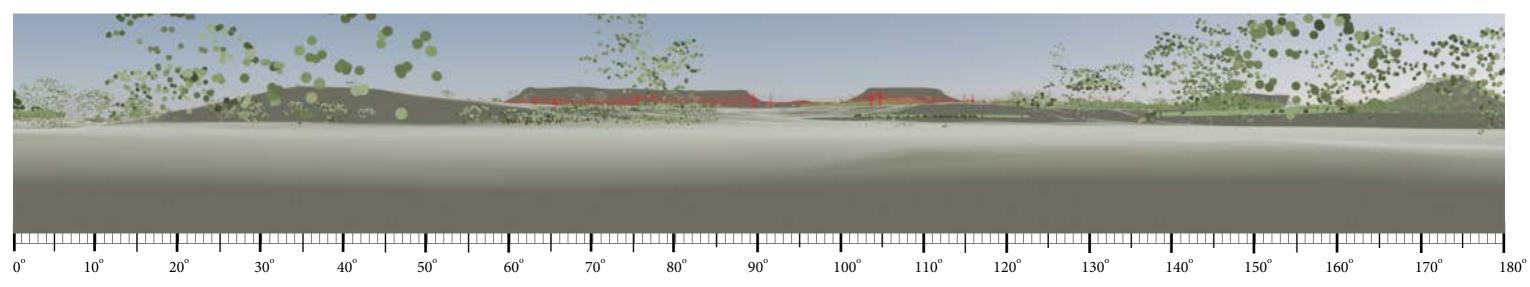
#### 3D modelled view

Barigan Road, Wollar Detailed aerial showing dwelling orientation



### Plan showing location of dwelling and the project









## Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 31

**Detailed visual assessment** 

Robison St, Ulan

Visual sensitivity

**MODERATE** 

Viewpoint sensitivity: Scenic quality:

MODERATE - Dwelling in rural village.

LOW - View across village with distant views to hills and glimpses to existing mining activity. Potential glimpses to existing transmission lines in the background. This view has scenic quality values of predominantly low

scenic quality.

Magnitude of change

LOW

Twin 500kV double circuit lattice towers, about 800m to alignment. Intervening buildings and vegetation would reduce the visibility of the transmission lines. However, the project may be seen in the background of the view as the towers would be larger scale than the existing transmission lines. Overall, the project would not be prominent and would result in a slight change in

the amenity of the view.

Visual impact level

236

**LOW** 

**Detailed visual assessment** 

Robison St, Ulan

Visual sensitivity

**MODERATE** 

Viewpoint sensitivity: Scenic quality:

MODERATE - Dwelling in rural village.

LOW - View across mining village with distant views to mining activity. Potential views to existing transmission lines. This view has scenic quality values

of predominantly low scenic quality.

Magnitude of change

LOW

Twin 500kV double circuit lattice towers, about 750m to alignment. Intervening buildings and vegetation would reduce the visibility of the transmission lines. However, the project may be seen in the background of the view as the towers would be larger scale than the existing transmission lines. Overall, the project would not be prominent and would result in a slight change in

the amenity of the view.

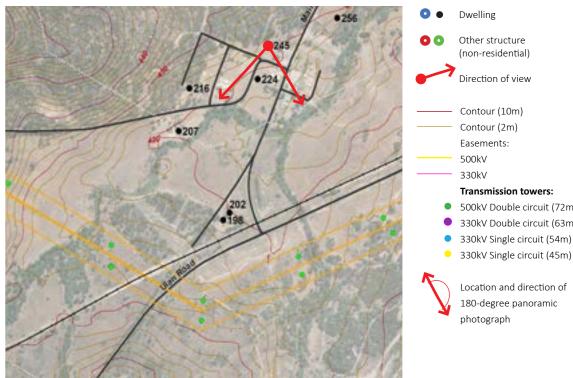
Visual impact level

LOW

Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



Contour (2m) Easements: 500kV

Transmission towers:

 500kV Double circuit (72m) 330kV Double circuit (63m)

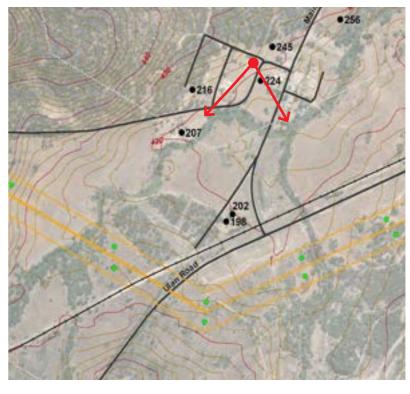
330kV Single circuit (45m)

Location and direction of 180-degree panoramic

Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project







Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 245

**Detailed visual assessment** 

**Robison Street, Ulan** 

Visual sensitivity

**MODERATE** 

Viewpoint sensitivity: Scenic quality:

MODERATE - Dwelling in rural village. LOW - View across mining village with distant views to mining activity. Potential views to existing transmission lines. This view has scenic quality values

of predominantly low scenic quality.

Magnitude of change

LOW

Twin 500kV double circuit lattice towers, about 700m to alignment. Intervening buildings and vegetation would reduce the visibility of the transmission lines. However, the project may be seen in the background of the view as the towers would be larger scale than the existing transmission lines. Overall, the project would not be prominent and would result in a slight change in the amenity of the view.

Visual impact level

LOW

228 **Detailed visual assessment Robison Street, Ulan** 

**MODERATE** 

Viewpoint sensitivity: Scenic quality:

Visual sensitivity

MODERATE - Dwelling in rural village.

LOW - View across mining village with distant views to mining activity. Potential views to existing transmission lines. This view has scenic quality values

of predominantly low scenic quality.

Magnitude of change

LOW

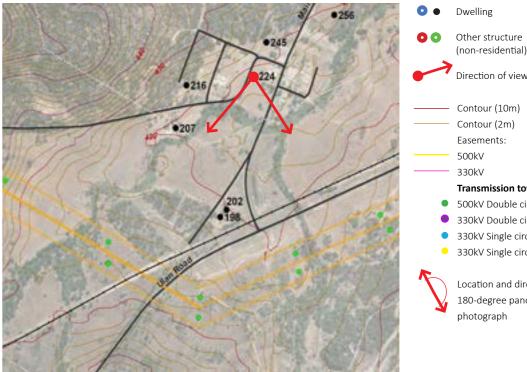
Twin 500kV double circuit lattice towers, about 700m to alignment. Intervening buildings and vegetation would reduce the visibility of the transmission lines. However, the project may be seen in the background of the view as the towers would be larger scale than the existing transmission lines. Overall, the project would not be prominent and would result in a slight change in the amenity of the view.

LOW Visual impact level

Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project

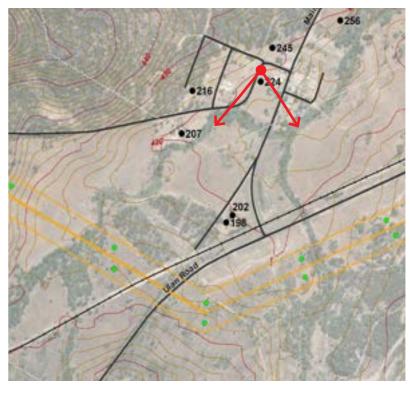


Direction of view Contour (10m) Contour (2m) Easements: 500kV Transmission towers: 500kV Double circuit (72m) 330kV Double circuit (63m) 330kV Single circuit (54m) 330kV Single circuit (45m) Location and direction of 180-degree panoramic

Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project







Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 224

**Detailed visual assessment** 

Bent Street, Ulan

Visual sensitivity

**MODERATE** 

LOW

LOW

Viewpoint sensitivity: Scenic quality:

MODERATE - Dwelling in rural village.

LOW - View partly enclosed by vegetation, with glimpses to neighbouring buildings, distant vegetated hills. May be glimpses to existing mining activity and transmission lines. This view has scenic quality values

of predominantly low scenic quality.

Magnitude of change

Twin 500kV double circuit lattice towers, about 650m to alignment. Intervening vegetation would reduce the visibility of the transmission lines. The project may be seen in the background of the view as the towers would be large in scale and rise above the backdrop of vegetation. Overall, the project would not be prominent and would result in a slight change in the

amenity of the view.

207

**Detailed visual assessment** 

Cope Road, Cope

**MODERATE** 

Visual sensitivity

Visual impact level

Viewpoint sensitivity:

Scenic quality:

MODERATE - Dwelling in rural village.

LOW - View partly enclosed by vegetation, with glimpses to neighbouring buildings, distant vegetated hills. May be glimpses to existing mining activityand transmission lines. This view has scenic quality values of predominantly low scenic quality.

Magnitude of change

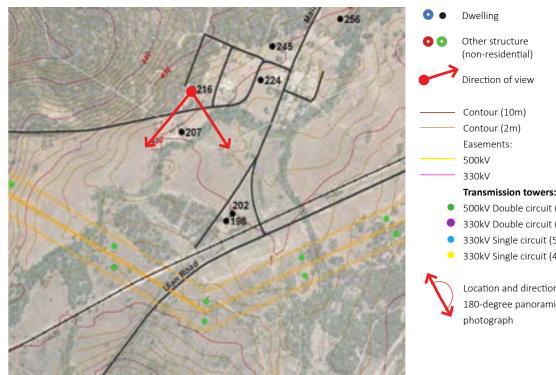
**MODERATE** 

Twin 500kV double circuit lattice towers, about 500m to alignment. Intervening vegetation would reduce the visibility of the transmission lines, however, the towers may be seen in the background rising above the backdrop of vegetation as the towers would be large in scale. Overall, the project would be somewhat prominent and the project would result in a noticeable reduction in the amenity of the view.

Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



Contour (10m) Contour (2m) Easements:

 500kV Double circuit (72m) 330kV Double circuit (63m)

330kV Single circuit (54m)

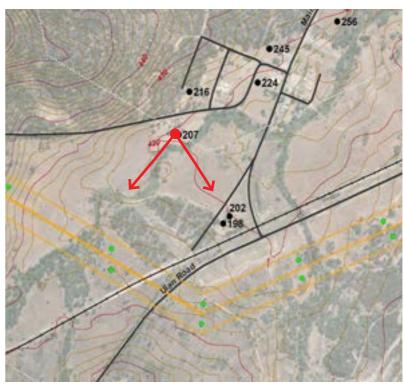
330kV Single circuit (45m)

Location and direction of 180-degree panoramic photograph

Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



Visual impact level

**MODERATE** 





Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 216

**Detailed visual assessment** 

Main Street, Ulan

**Visual sensitivity** 

MODERATE

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area. LOW - View on outskirts of mining village with views including existing railway and roads, and potential views to mining activity and existing transmission lines. This view has scenic quality values of predominantly low scenic quality.

Magnitude of change

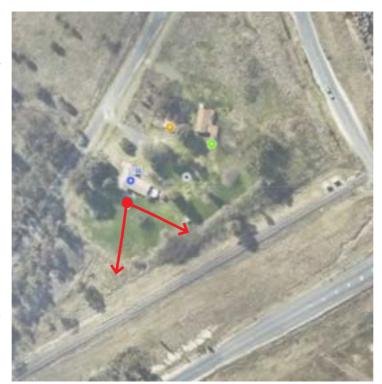
MODERATE

Twin 500kV double circuit lattice towers, about 200m to alignment. Vegetation surrounding the dwelling, and along the property boundary, would reduce the visibility. However, the project would be large in scale and rise above the surrounding landscape. Overall, the project would be somewhat prominent and the project would result in a noticeable reduction in the amenity of the view.

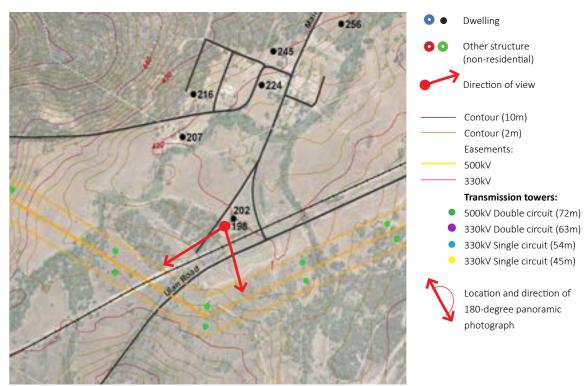
Visual impact level

**MODERATE** 

Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project







## **Detailed visual assessment**

Toole Road, Ulan

### Visual sensitivity

#### MODERATE

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area. LOW - View across a landscape with gently undulating to flat landform, blocks of vegetation in the distance, existing glimpses to transmission lines, train line, roads scattered sheds and farm buildings. This view has scenic quality values of predominantly low scenic quality.

## Magnitude of change

## LOW

Twin 500kV double circuit lattice towers, about 700m to alignment. Transmission lines may be seen in the background of the view and would be of much larger scale than the existing towers. Overall, the project would not be prominent and would result in a slight reduction in the amenity of the view.

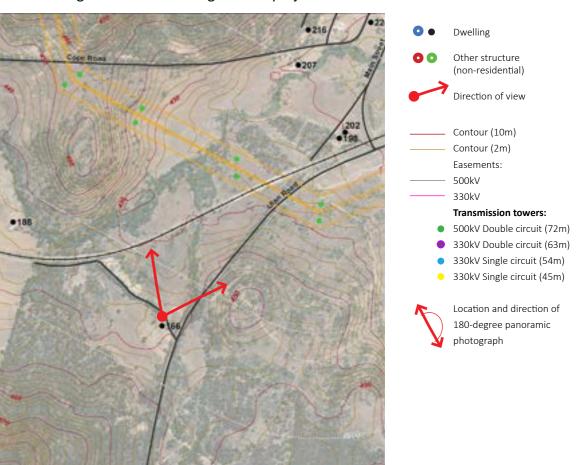
#### Visual impact level

LOW

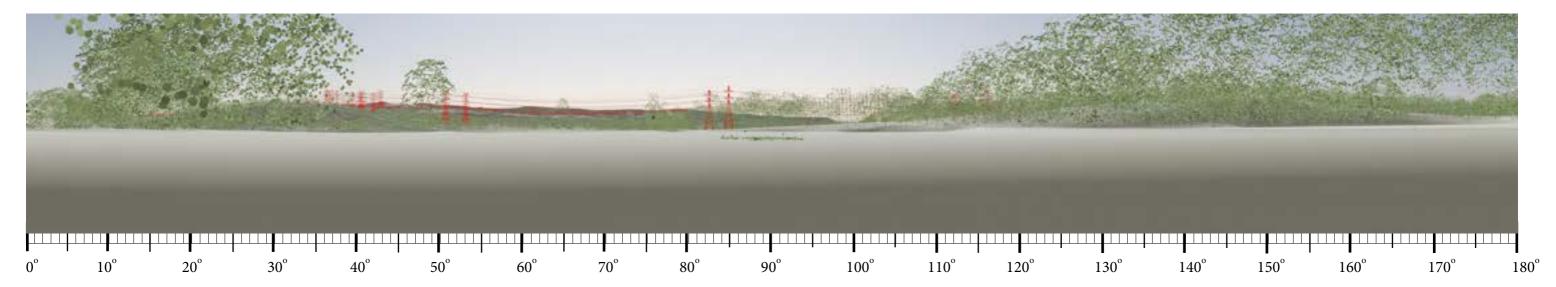
### Detailed aerial showing dwelling orientation



### Plan showing location of dwelling and the project



#### 3D modelled view







## Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 166

**Detailed visual assessment** 

Ulan Road, Ulan

Visual sensitivity

MODERATE

Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in a rural area. LOW - View across a landscape with undulating landform and vegetation along the creek. Potential glimpses to existing transmission lines, roads and scattered sheds and farm buildings. This view has scenic quality values of predominantly low scenic quality.

Magnitude of change

Twin 500kV double circuit lattice towers, about 700m to alignment. Some intervening vegetation and landform would reduce the visibility of the transmission lines. However, the project may be seen in the background of the view as the towers would be of much larger scale than the existing transmission lines. Overall, the project would not be prominent and would result in a slight change in the amenity of the view.

Visual impact level

204

LOW

LOW

**Detailed visual assessment** Cope Road, Cope

Visual sensitivity **MODERATE** 

Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in a rural area. LOW - View across a landscape with undulating landform, dense vegetation, and existing glimpses to transmission lines, roads and scattered sheds and farm buildings. This view has scenic quality values of predominantly low scenic quality.

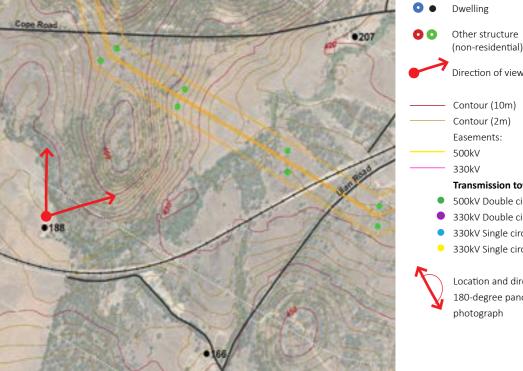
Magnitude of change LOW

> Twin 500kV double circuit lattice towers at a distance of over 1km. Transmission lines may be seen above the intervening vegetation in the background of the view. Overall, the project would not be prominent and would result in a slight reduction in the amenity of the view.

Visual impact level LOW Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



Other structure

Direction of view

Contour (10m) Contour (2m)

500kV

Transmission towers:

 500kV Double circuit (72m) 330kV Double circuit (63m)

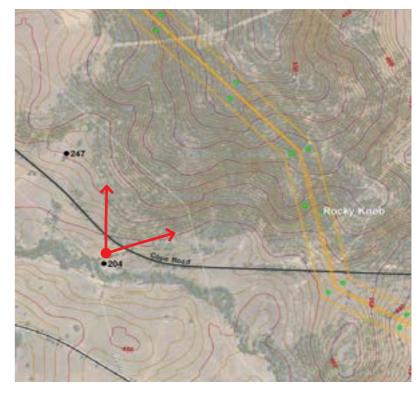
 330kV Single circuit (54m) 330kV Single circuit (45m)

Location and direction of 180-degree panoramic

Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project







Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 188

**Detailed visual assessment** 247 Cope Road, Cope

Visual sensitivity **MODERATE** 

Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in rural area. LOW - View across a landscape with undulating to hilly landform, intervening vegetation. There may be glimpses to existing transmission lines, roads, scattered sheds and farm buildings. This view has scenic quality values of predominantly low scenic quality. (Similar to view from dwelling 267 with more potential for intervening vegetation).

Magnitude of change LOW

> Twin 500kV double circuit lattice towers, about 700m to nearest tower. Towers may be seen above the intervening vegetation. Overall, the project would not be visually prominent and would result in a slight change to the amenity of the view.

Visual impact level LOW

244 **Detailed visual assessment** 

Cope Road, Cope

Visual sensitivity **MODERATE** 

Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in a rural area. LOW - View across a landscape with undulating to hilly landform, intervening vegetation, glimpses to transmission lines, roads, scattered sheds and farm buildings. This view has scenic quality values of predominantly low scenic quality.

Magnitude of change

LOW

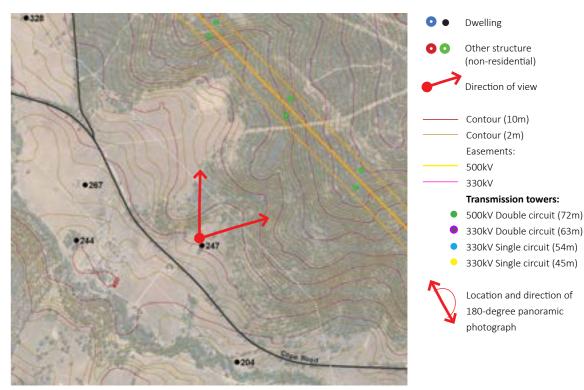
View enclosed by vegetation surrounding the house that would limit visibility of the project.

LOW Visual impact level

Detailed aerial showing dwelling orientation



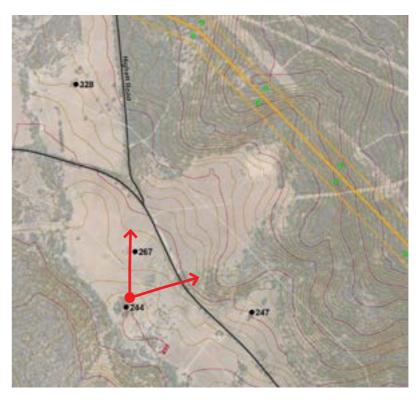
Plan showing location of dwelling and the project



Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project







Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 247 Dwelling no. 244

**Detailed visual assessment** 

Cope Road, Cope

Visual sensitivity

MODERATE

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area.

LOW - View across a landscape with gently undulating to flat landform, blocks of vegetation in the distance, existing glimpses to transmission lines, roads and scattered sheds and farm buildings. This view has predominantly low scenic quality

values.

Magnitude of change

**MODERATE** 

Twin 500kV double circuit lattice towers, about 1-2km to nearest tower, occupying horizontal field of view of about 120 degrees, lower portion of towers partly screened by vegetation.

There would be large scale towers visible which are substantially larger than those currently seen in this view. The towers would rise prominently above the surrounding vegetation and lines would extend across the view, with towers seen in the middle and background of the view.

Overall, the project would be visually prominent and is not compatible with the character of the view. The project would result in a considerable change in the amenity of the view.

Visual impact level

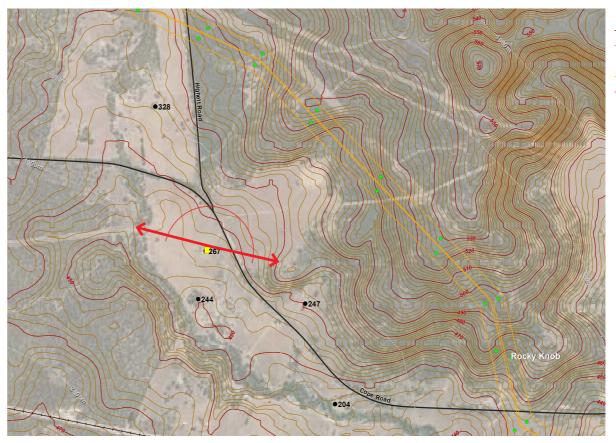
**MODERATE** 



Photo showing dwelling aspect



Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project





## Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 267

(non-residential)

Contour (2m) Easements:

Transmission towers:

500kV Double circuit (72m)

330kV Double circuit (63m)

330kV Single circuit (54m)

330kV Single circuit (45m)

Location and direction of 180-degree panoramic

photograph

330kV

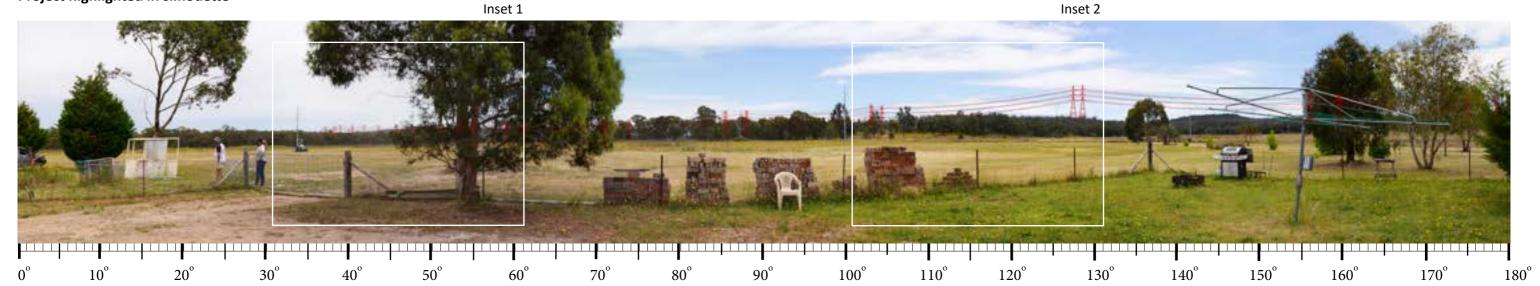
### Existing panoramic view towards the project



### **Panoramic photomontage**



### Project highlighted in silhouette







## Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 267





MODATA

iris

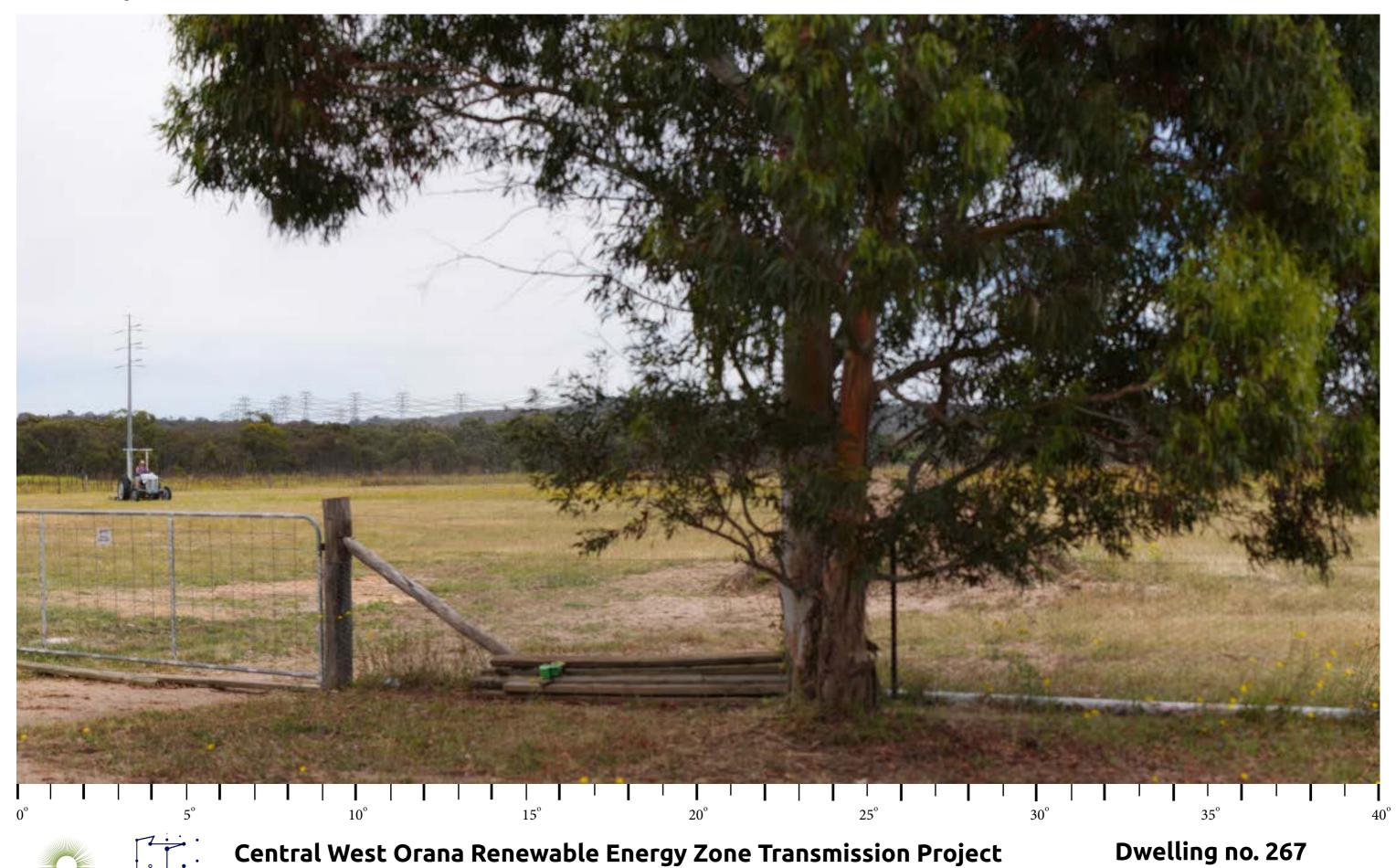
Dwelling no. 267

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Photomontage detail - inset 1

iris

MODATA



Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Page 13

Photomontage detail - inset 2

# Detailed visual assessment Cope Road, Cope

#### Visual sensitivity

#### MODERATE

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area. LOW - View across a landscape with gently undulating landform, with a backdrop of vegetation. The upper portion of the existing transmission line towers may be visible above the intervening vegetation. There are also to existing farm buildings and sheds. This view has scenic quality values of predominantly low scenic quality.

#### Magnitude of change

#### **MODERATE**

Twin 500kV double circuit lattice towers, about 500m to nearest tower, occupying horizontal field of view of up to 140 degrees, lower portion of towers partly screened by intervening vegetation.

There would be large scale towers visible which are substantially larger than those currently seen in this view. The towers would rise prominently above the surrounding vegetation and lines would extend across part of the view.

Overall, the project would be somewhat prominent and the project would result in a noticeable reduction in the amenity of the view.

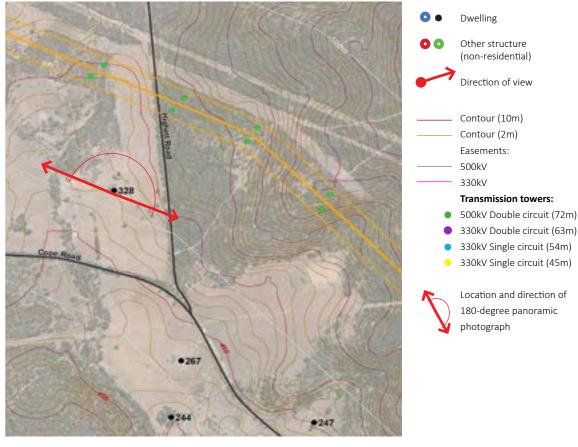
### Visual impact level

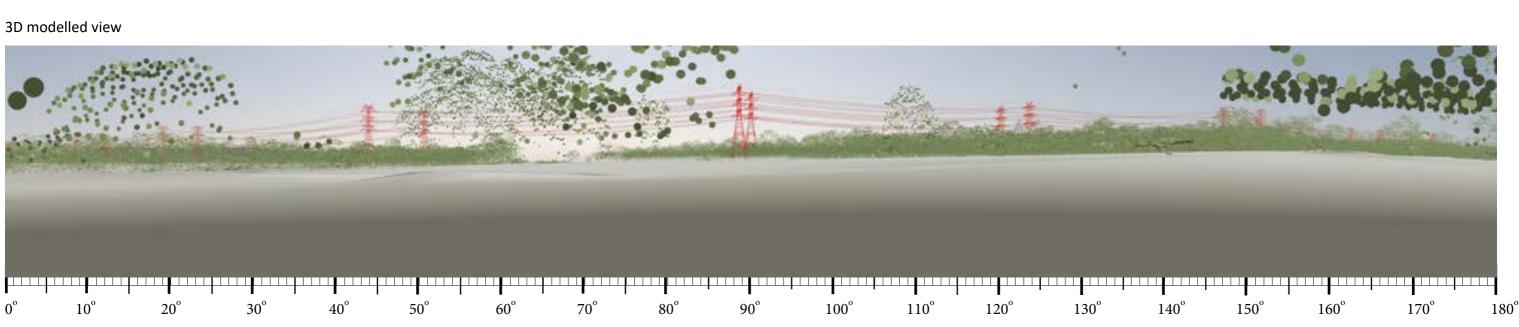
#### MODERATE

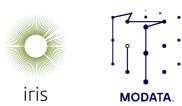


Detailed aerial showing dwelling orientation

### Plan showing location of dwelling and the project







## Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 328

Detailed visual assessment Cope Road, Cope

Visual sensitivity MODERATE

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area. LOW - Views would be enclosed by dense bushland. This view has scenic quality values of predominantly moderate and low scenic quality.(Refer to 357 for reference image from neighbouring dwelling)

Magnitude of change NEGLIGIBLE

Twin 500kV double circuit lattice towers, about 600m to nearest tower, extending across the view. Some vegetation around the dwelling and vegetation on intervening fields to the east of this dwelling would

reduce the visibility of the project.

Visual impact level NEGLIGIBLE

Detailed visual assessment Cope Road, Cope

Visual sensitivity MODERATE

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area.

MODERATE - View across a landscape with undulating landform in the foreground, and a backdrop of vegetated hills in the distance. This view has scenic quality values of predominantly moderate and low scenic quality. (Refer to 357 for reference image from neighbouring dwelling)

Magnitude of change LOV

Twin 500kV double circuit lattice towers, about 800m to nearest tower, extending across the view. Some vegetation around the dwelling and vegetation on intervening fields to the east of this dwelling would reduce the visibility of the project.

Visual impact level LOW

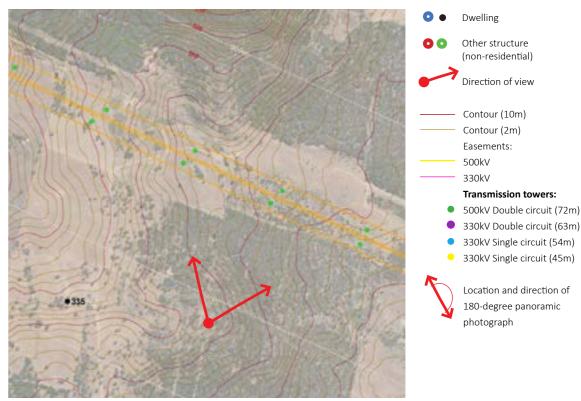
Detailed aerial showing dwelling orientation



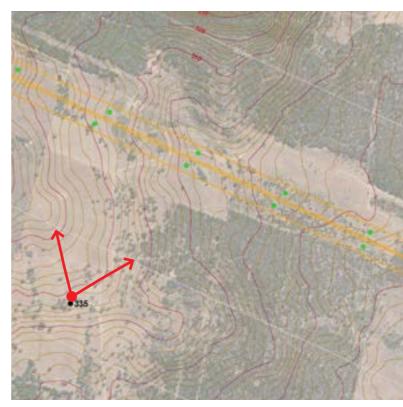
Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



Plan showing location of dwelling and the project







Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 333

**Detailed visual assessment** 

Cope Road, Cope

**Visual sensitivity**Viewpoint sensitivity:

MODERATE

Scenic quality:

MODERATE - Primary view from dwelling in a rural area. MODERATE - View across a landscape with undulating landform in the foreground, and a backdrop of vegetated hills in the distance. This view has scenic quality values of predominantly moderate and low scenic quality. (Refer to 357 for reference image from neighbouring dwelling).

Magnitude of change

MODERATE

Twin 500kV double circuit lattice towers, about 650m to nearest tower, some intervening landform to the northeast and some scattered intervening vegetation.

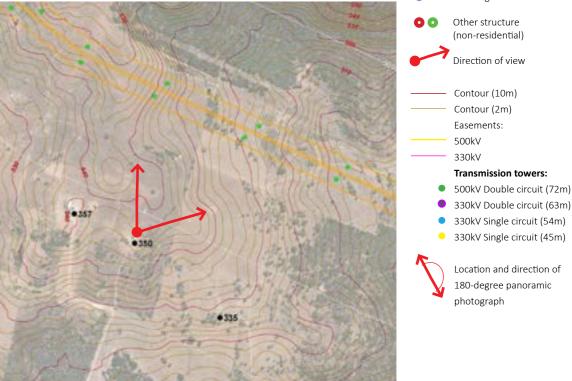
Visual impact level

**MODERATE** 

Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



iris



Dwelling no. 350

Dwelling

# Detailed visual assessment Cope Road, Cope

### Visual sensitivity MODERATE

Viewpoint sensitivity:

Scenic quality:

MODERATE - Primary view from dwelling in a rural area.

MODERATE - View across a landscape with undulating landform in the foreground, and a backdrop of vegetated hills in the distance. This view has scenic quality values of predominantly moderate to low scenic quality.

#### Magnitude of change

#### MODERATE

Twin 500kV double circuit lattice towers, about 730m to nearest tower, occupying horizontal field of view of about 130 degrees, some intervening landform would screen the towers to the northeast (left of view) and there would be some intervening vegetation. The towers would rise prominently above the landform and extend across the view, with towers seen mainly in the background of the view.

Overall, the project would be somewhat prominent and would not be compatible with the character of the view. The project would result in a noticeable change in the amenity of the view.

#### Visual impact level

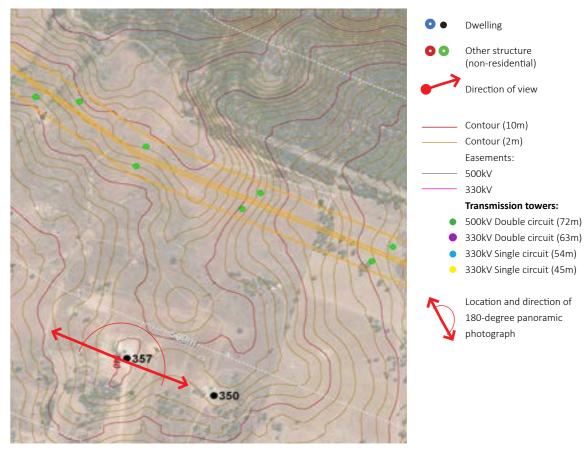
#### MODERATE

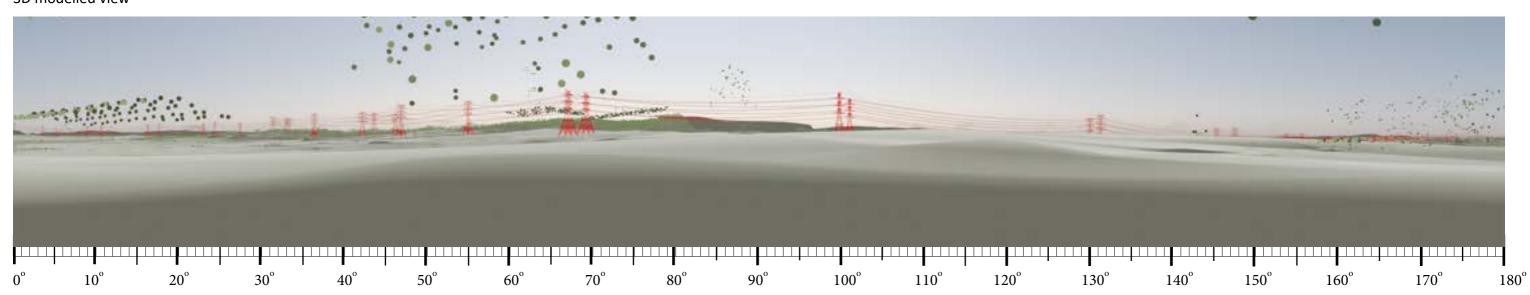
### 3D modelled view

## Detailed aerial showing dwelling orientation



### Plan showing location of dwelling and the project







## Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 357

367 **Detailed visual assessment** Cope Road, Cope

Visual sensitivity **MODERATE** 

Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in a rural area. **MODERATE** - View across a landscape with undulating landform in the foreground, and a backdrop of vegetated hills in the distance. This view would have scenic quality values that are predominantly low to moderate. (Refer to 357 for reference image from neighbouring dwelling)

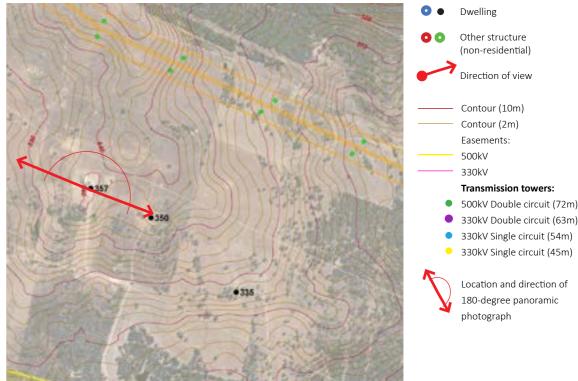
LOW Magnitude of change

> Twin 500kV double circuit lattice towers, about 430m to nearest tower, extending across the view. Vegetation to the northe of the dwelling would limit the visibility of the project.

Visual impact level LOW Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



Location and direction of 180-degree panoramic

373 **Detailed visual assessment Blue Springs Road, Stubbo** 

**MODERATE** Visual sensitivity

Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in a rural area. **MODERATE** - View across a landscape with undulating landform in the foreground and a backdrop of vegetated hills. This view would have scenic quality values that are predominantly low to moderate. (Refer to 399 for reference image from nearby dwelling)

Magnitude of change

**MODERATE - HIGH** 

MODERATE

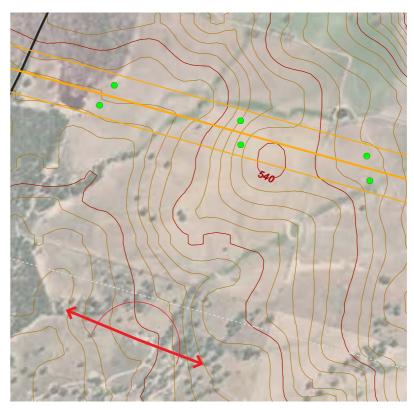
Twin 500kV double circuit lattice towers, about 600m to nearest tower, extending across the view. Some vegetation on intervening fields would reduce the visibility of the project. However, the visible towers would rise prominently above the surrounding landscape. Overall, the project would result in a substantial change in visual amenity.

Visual impact level

Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project





iris



Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 367

**Detailed visual assessment** 

**Blue Springs Road, Stubbo** 

**Visual sensitivity** 

**MODERATE** 

Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in a rural area.

MODERATE - View across a landscape with undulating to flat landform, blocks of vegetation and layered hills in the distance. View to existing transmission lines to the south, some existing tracks and farm buildings visible. This view has scenic quality

values of predominantly moderate scenic quality.

#### Magnitude of change

Twin 500kV double circuit lattice towers, less than 500 metres to nearest tower, occupying horizontal field of view over 180 degrees, viewed in multiple directions. Towers would be substantially larger than the existing transmission lines.

There would be large scale towers visible in primary and secondary views from the dwelling, and surrounding the dwelling. The towers would rise prominently above the surrounding vegetation and lines would extend across the view, with towers seen in the middle and background of the view, obstructing the distant views to the surrounding hills.

Overall, the project would dominate views to the south, west and northwest from the dwelling and result in a substantial change to the amenity of these views.

### Visual impact level

#### HIGH

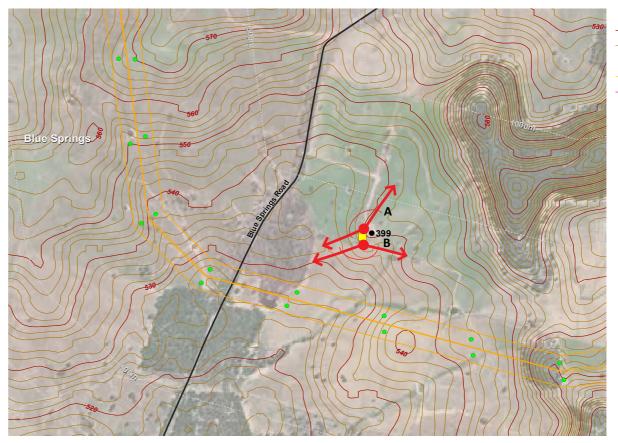
HIGH



Photos showing dwelling aspect



Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project





## Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 399

Other structure (non-residential)

Contour (2m) Easements:

Transmission towers: 500kV Double circuit (72m) 330kV Double circuit (63m) 330kV Single circuit (54m) 330kV Single circuit (45m)

> Location and direction of 180-degree panoramic

photograph

330kV

## Existing panoramic view towards the project



## Panoramic photomontage



## Project highlighted in silhouette







# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 399

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Viewpoint A

## 50mm focal length





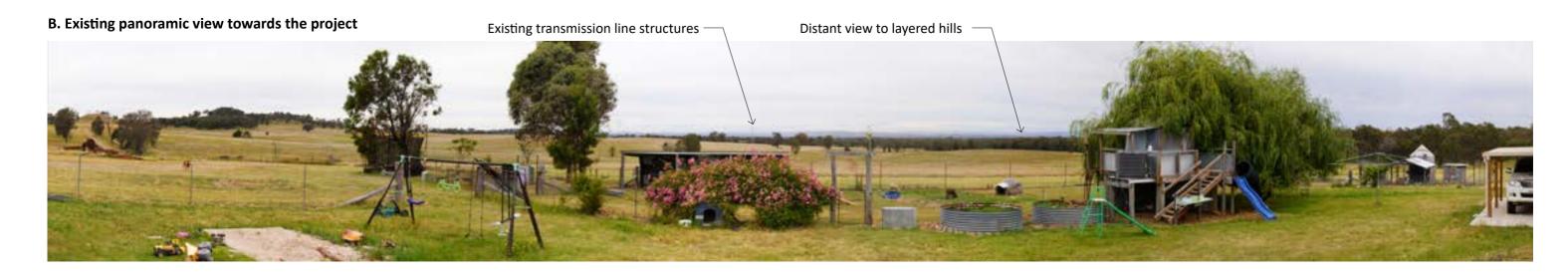
MODATA.

# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 399

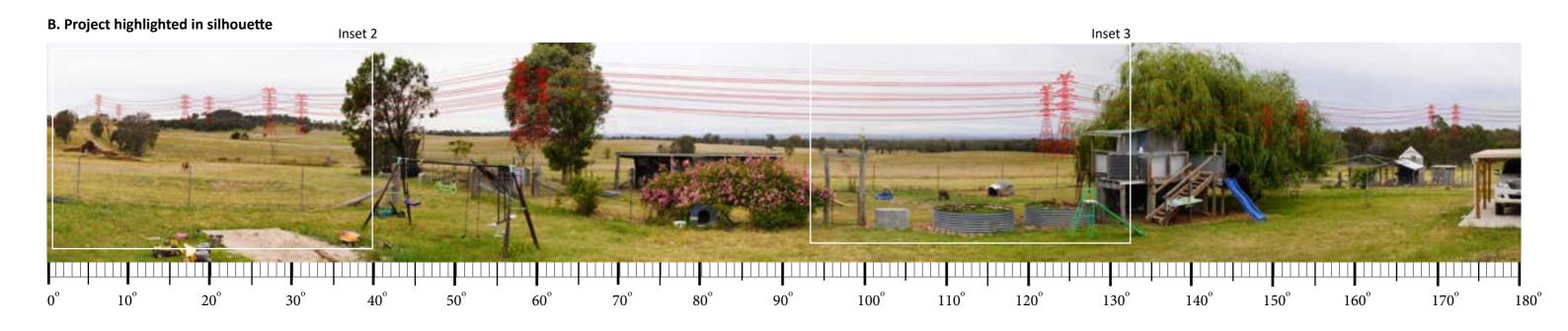
Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Photomontage detail - Inset 1



**B. Photomontage**Proposed 500kV transmission line structures









# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 399

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Viewpoint B

iris

MODATA.



Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Photomontage detail - Inset 2





Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 399

Photomontage detail - Inset 3

462 **Detailed visual assessment Blue Springs Road, Cope** 

Visual sensitivity LOW

Viewpoint sensitivity: Scenic quality:

LOW - Secondary view from dwelling in a rural area. LOW - View enclosed by vegetation and smaller farm buildings and sheds. Surrounding the dwelling there would be a landscape with undulating landform, blocks of vegetation and hills in the distance. This view has predominantly low scenic quality values.

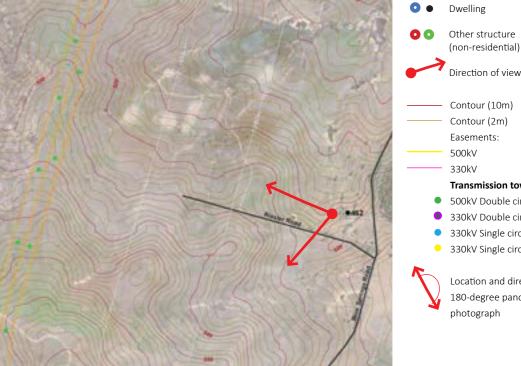
Magnitude of change **NEGLIGIBLE** 

> View enclosed by surrounding vegetation and farm structures that would limit visibility of the project. Project located about 1.5 kilometres from this dwelling.

Visual impact level **NEGLIGIBLE**  Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



Direction of view Transmission towers: 500kV Double circuit (72m) 330kV Double circuit (63m) 330kV Single circuit (54m) 330kV Single circuit (45m) Location and direction of 180-degree panoramic

485 **Detailed visual assessment Blue Springs Road, Cope** 

Visual sensitivity LOW

Viewpoint sensitivity: Scenic quality:

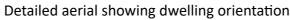
LOW - Secondary view from dwelling in a rural area. LOW - View enclosed by dense vegetation. Surrounding the dwelling there would be a landscape with undulating landform, blocks of vegetation and hills in the distance. This view has predominantly low scenic quality values.

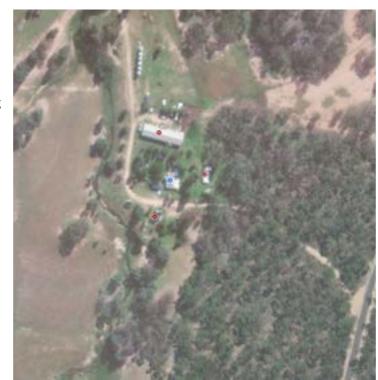
Magnitude of change **NEGLIGIBLE** 

> View enclosed by vegetation surrounding the house that would limit visibility of the project.

Project about 1.5 kilometres from this dwelling.

Visual impact level **NEGLIGIBLE** 





Plan showing location of dwelling and the project







Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 462

## 1483 Detailed visual assessment

Rissler Road, Stubbo

Visual sensitivity MODERATE

Viewpoint sensitivity: MODERATE - Primary view from future dwelling in a

rural area. (DA Approved)

Scenic quality: MODERATE - Elevated view to a landscape with mostly

open undulating landform with scattered trees, blocks of vegetation and hills in the distance. Views from this location would have predominantly low to moderate

scenic quality values.

Magnitude of change HIGH

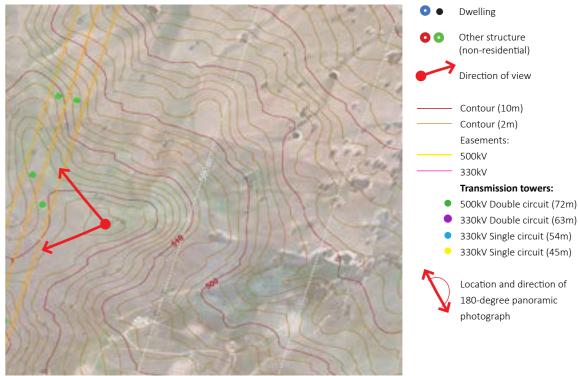
Future dwelling would be 200m from the project alignment, on an elevated site with no vegetation near the building site. Overall, the project would dominate views from the dwelling, and result in a substantial change to the amenity of views from this location.

Visual impact level HIGH

Detailed aerial showing future dwelling site



Plan showing location of future dwelling site and the project





## Detailed aerial showing dwelling orientation

Plan showing location of dwelling and the project

616 **Detailed visual assessment Blue Springs Road, Cope** 

Visual sensitivity **MODERATE** 

Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in a rural area. LOW - View across a landscape with undulating landform in the foreground, and a backdrop of vegetated hills in the distance. This view has scenic quality values of predominantly low scenic quality.

#### **NEGLIGIBLE**

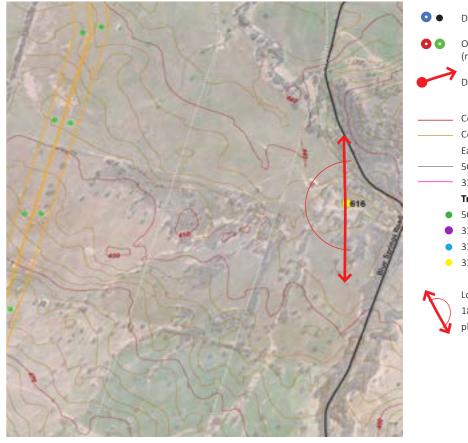
Magnitude of change

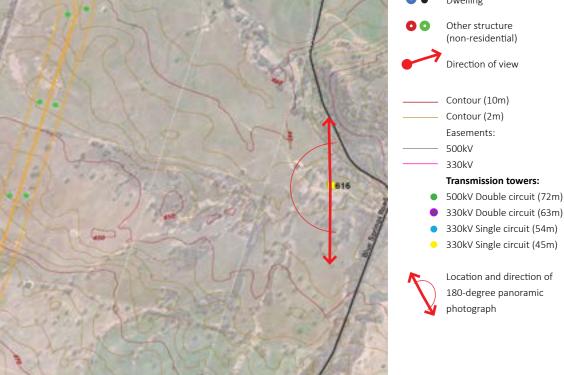
Intervening vegetation would obstruct the view to the project. The project would not be visually prominent in the view and there would be no perceived change in the amenity of the view.

Visual impact level

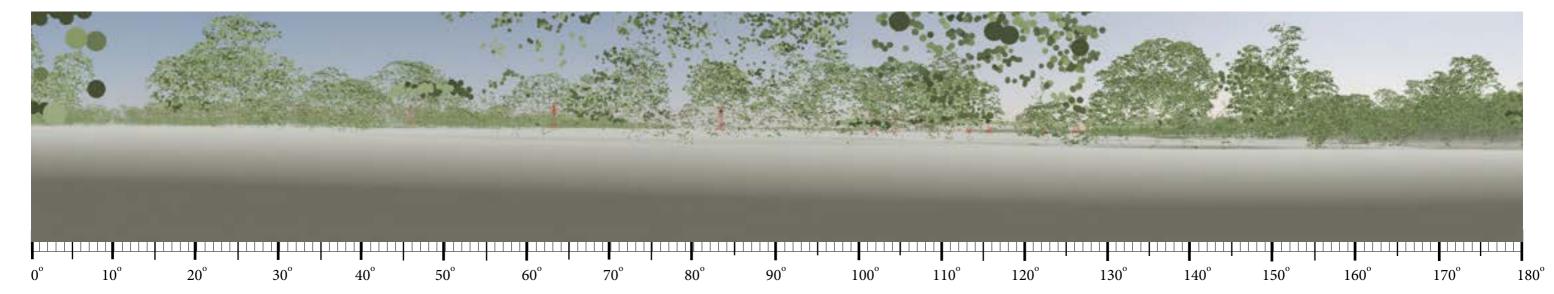
**NEGLIGIBLE** 







#### 3D modelled view







## Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 616

826 / 825

Detailed visual assessment Coppers Lane, Merotherie

Visual sensitivity

LOW

Viewpoint sensitivity: Scenic quality: LOW - Secondary view from dwelling in a rural area.

LOW - View across a landscape with undulating to flat landform, blocks of vegetation in the distance obscure views to ranges, local power lines, scattered sheds and farm

buildings. This view has scenic quality values of predominantly low scenic quality.

Magnitude of change

LOW

Twin 500kV double circuit lattice towers and a single row of single circuit 330kV lattice towers, about 1-1.5km to nearest tower, occupying horizontal field of view of

about 50 degrees, lower portion of towers partly screened by vegetation. There would be glimpses to towers that would be visible above the surrounding

vegetation, in the background of the view.

Overall, the project would not be prominent and the project would result in a slight

change to the amenity of the view.

Visual impact level

LOW



Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project





Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 826 / 825

Other structure

(non-residential)

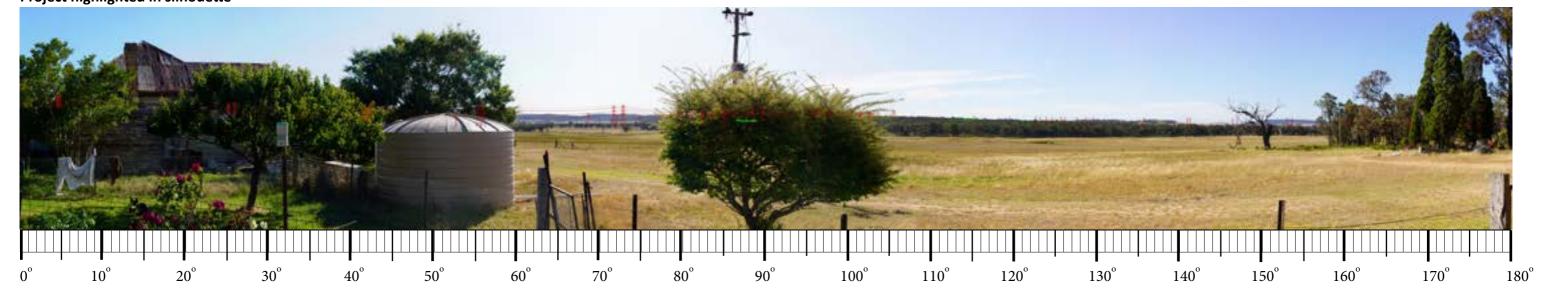
## Existing panoramic view towards the project



## Panoramic photomontage



## Project highlighted in silhouette





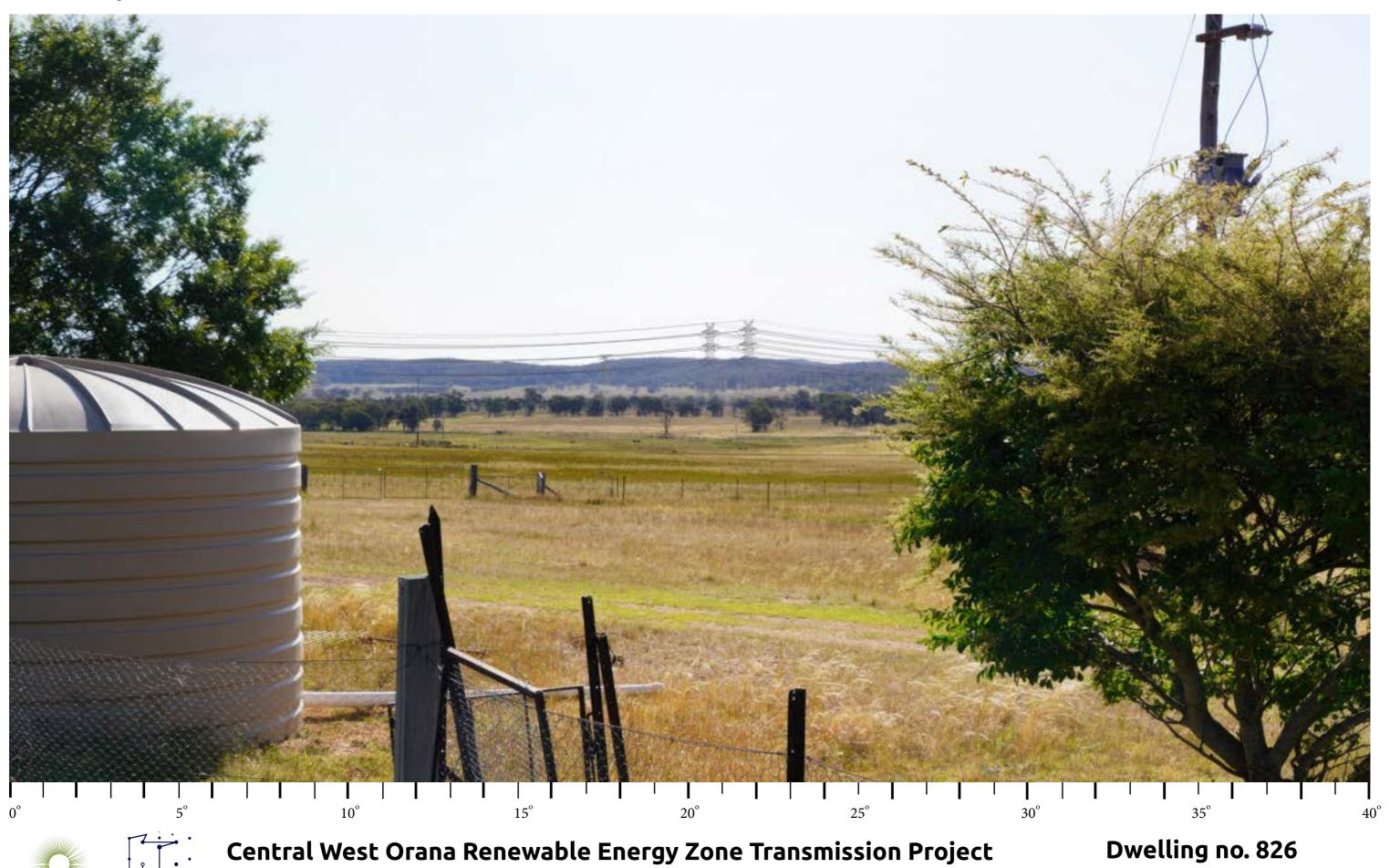


# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 826

iris

MODATA.



Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Page 30

Photomontage detail - Inset 1

# 703 Detailed visual assessment Merotherie Road, Merotherie

Visual sensitivity

LOW

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area. LOW - View across a landscape with undulating to flat landform, scattered mature trees surrouding the house and on intervening fields. Glimpses to the distant hills, local roads, scattered sheds and farm buildings. This view has features of predominantly low scenic quality.

#### Magnitude of change LOW

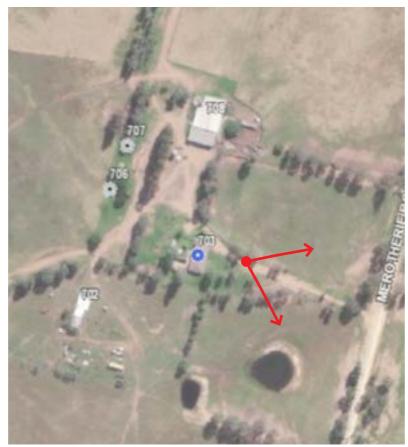
Single row of 330kV single circuit lattice towers, about 300m to nearest tower. The projec would be partly screened by intervening vegetation surrounding the house. Some towers would be visible in the background, above and partly screened by the intervening surrounding trees.

Overall, the project would not be prominent and would there would be a slight change to the amenity of the

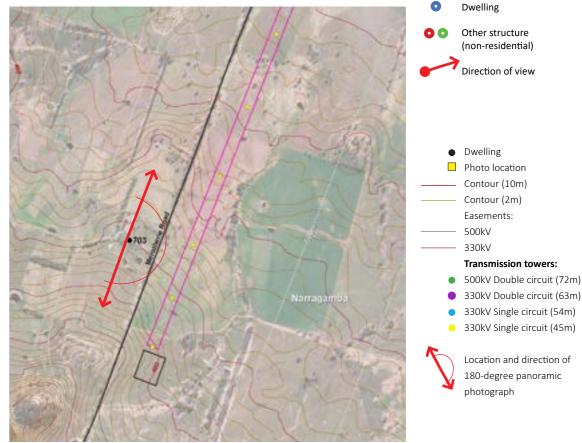
view.

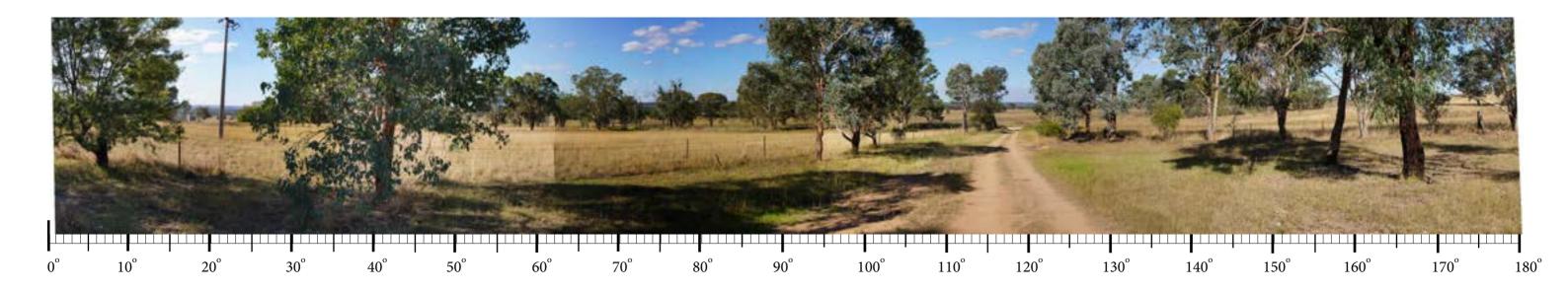
Visual impact level LOW

Detailed aerial showing dwelling orientation



# Plan showing location of dwelling and the project









# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 703

1482 Detailed

Detailed visual assessment Birkalla Road, Merotherie

Visual sensitivity MODERATE

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area. LOW - View enclosed by vegetation. Surrounding landscape has an undulating landform with local roads, scattered sheds and farm buildings. This view has predominantly low scenic quality values.

Magnitude of change NEGLIGIBLE

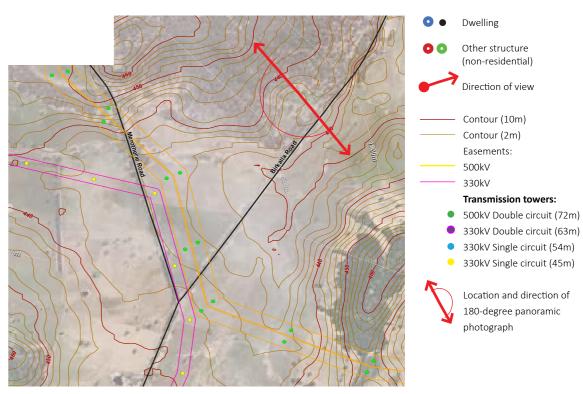
Twin 500kV double circuit lattice towers and a single row of single circuit 330kV lattice towers, about 750m to nearest tower, however, towers would be screened by surrounding vegetation.

Visual impact level NEGLIGIBLE

Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project







# **Detailed visual assessment**Birriwa Bus Route North, Merotherie

#### Visual sensitivity

#### **MODERATE**

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in rural area.

MODERATE - View across a landscape with flat to
undulating landform, backdrop of vegetated hills,
existing glimpses to roads and scattered sheds and farm
buildings. This view predominantly moderate to low
scenic quality values.

#### Magnitude of change

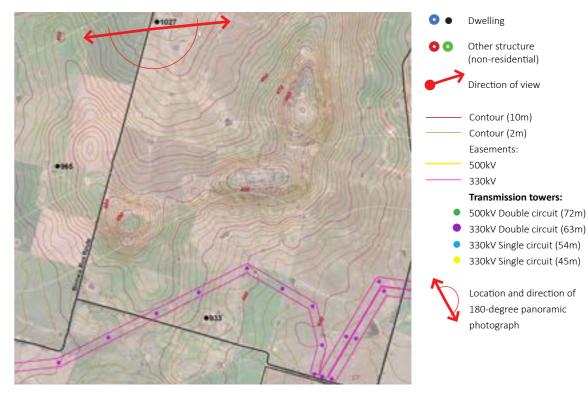
#### LOW

Multiple lines converging on the Merotherie energy hub including 330kV double circuit towers at a distance of about 1.8km. Intervening landform reduces the horizontal field of view. Where visible, there would be overlapping infrastructure visible, viewed partly against a backdrop of hills. Some screening by vegetation surrounding the dwelling and on intervening fields. Overall, the project would not be prominent and there would be a slight reduction in the amenity of the view.

# Detailed aerial showing dwelling orientation



### Plan showing location of dwelling and the project



#### Visual impact level

#### LOW

# 880 / 876

### Detailed visual assessment Birriwa Bus Route, Merotherie

#### Visual sensitivity

#### **MODERATE**

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in rural area.

MODERATE - View across a landscape with flat to undulating landform, backdrop of vegetated hills, existing glimpses to roads and scattered sheds and farm buildings. This view has predominantly of moderate to low scenic quality values.

#### Magnitude of change

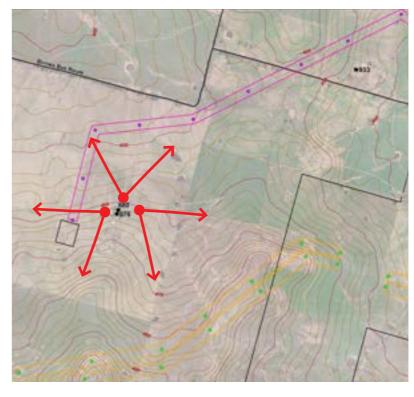
#### HIGH

Multiple lines converging on the Merotherie energy hub including 500kV and 330kV double circuit towers that would encircle the dwelling at a distance of about 280 to 830 metres. There would be overlapping infrastructure visible, viewed partly against a backdrop of hills. Some screening by vegetation surrounding the dwelling and on intervening fields. The project would be visually dominant and substantially reduce the amenity of the view.

Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



#### Visual impact level

HIGH



# Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 1027

Dwelling no. 880 / 876

Detailed visual assessment Birriwa Bus Route South, Birriwa

**Visual sensitivity** 

LOW

Viewpoint sensitivity: Scenic quality: LOW - Secondary view from dwelling in a rural area.

MODERATE - View across a landscape with flat to undulating landform, backdrop of vegetated hills in the distance, existing glimpses to roads and scattered sheds and farm buildings. This view predominantly of low moderate to low scenic quality values.

values

Magnitude of change

MODERATE

Twin 500kV double circuit lattice towers and third row of 330kV double circuit towers, about 2km to nearest tower, some intermittent screening by vegetation surrounding the dwelling and on intervening fields.

The towers would be large scale and would rise prominently above the surrounding vegetation and backdrop of hills. The lines would extend across the view, with towers seen in the background of the view.

Overall, the project would be somewhat prominent and would not be compatible with the character of the view. The project would result in a noticeable reduction in the amenity of the view.

Visual impact level

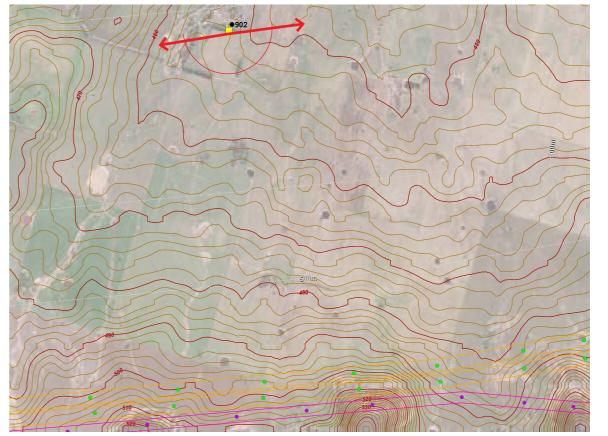
LOW



Photo showing dwelling aspect



Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project

Dwelling no. 902

Other structure (non-residential)

Contour (2m)
Easements:
500kV
330kV

Transmission towers:

500kV Double circuit (72m)

330kV Double circuit (63m)

330kV Single circuit (54m)

330kV Single circuit (45m)

Location and direction of 180-degree panoramic

photograph

iris



# Central West Orana Renewable Energy Zone Transmission Project

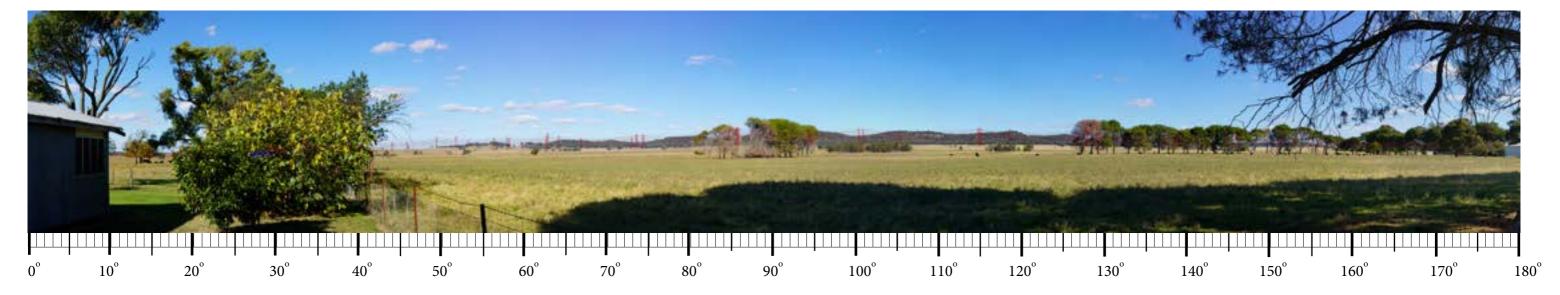
### Existing panoramic view towards the project



### Panoramic photomontage



# Project highlighted in silhouette



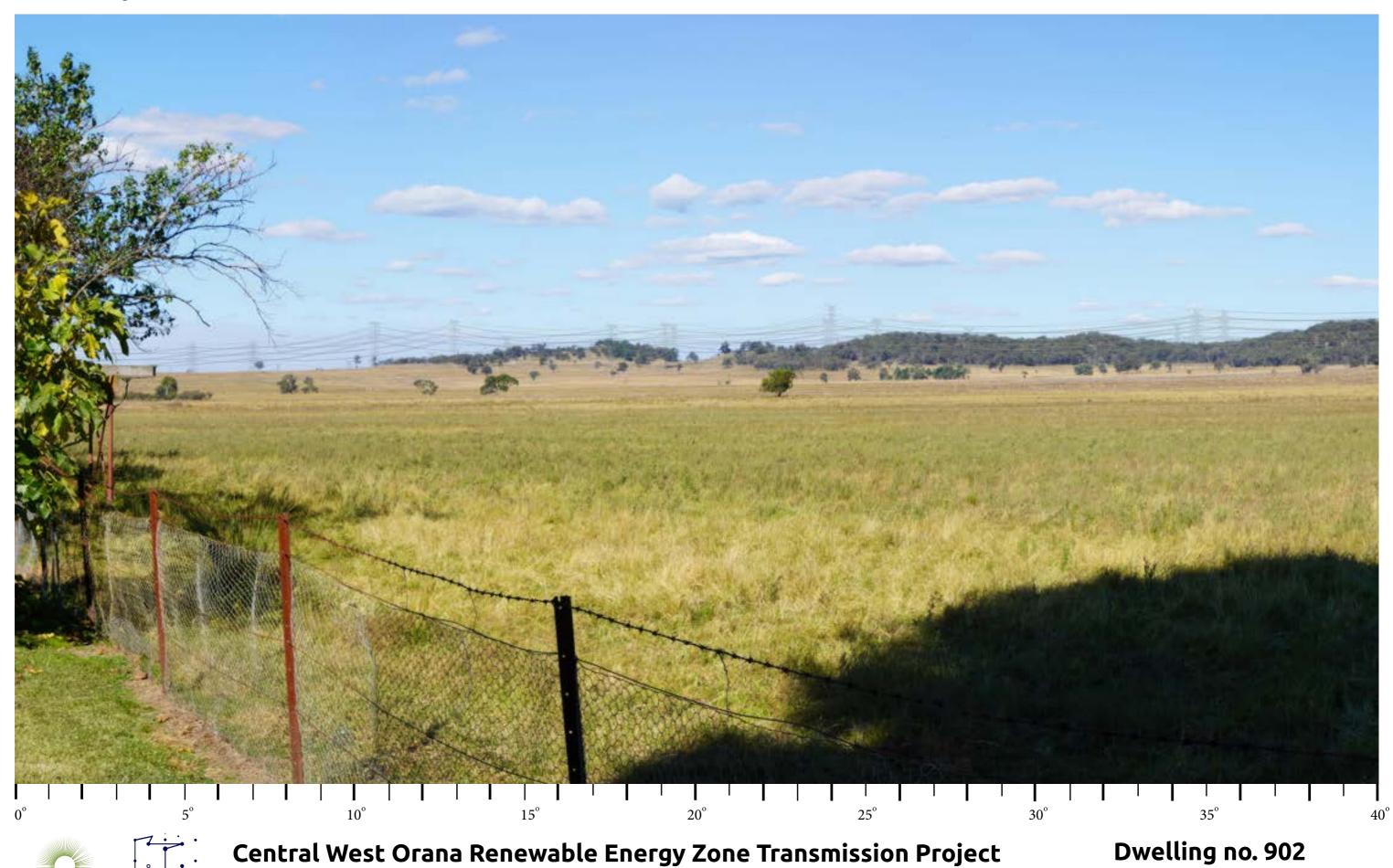




# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 902

MODATA



Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

### Detailed aerial showing dwelling orientation

### Plan showing location of dwelling and the project

965 Detailed visual assessment
Birriwa Bus Route North, Merotherie

Visual sensitivity MODERATE

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area. MODERATE - View across an undulating to flat landform, with the hills of Barney's Reef in the distance. There are glimpses to roads and scattered sheds and farm buildings. This view has scenic quality values of predominantly low to moderate scenic quality.

#### Magnitude of change

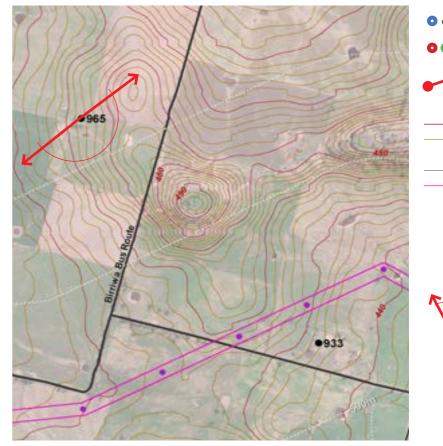
NEGLIGIBLE

Single row of 330kV double circuit lattice towers about 1.3km to nearest tower, mostly obstructed by intervening landform and vegetation. Overall, the project would not be visually prominent and there would be a no perceived change to the amenity of this view.

Visual impact level

**NEGLIGIBLE** 



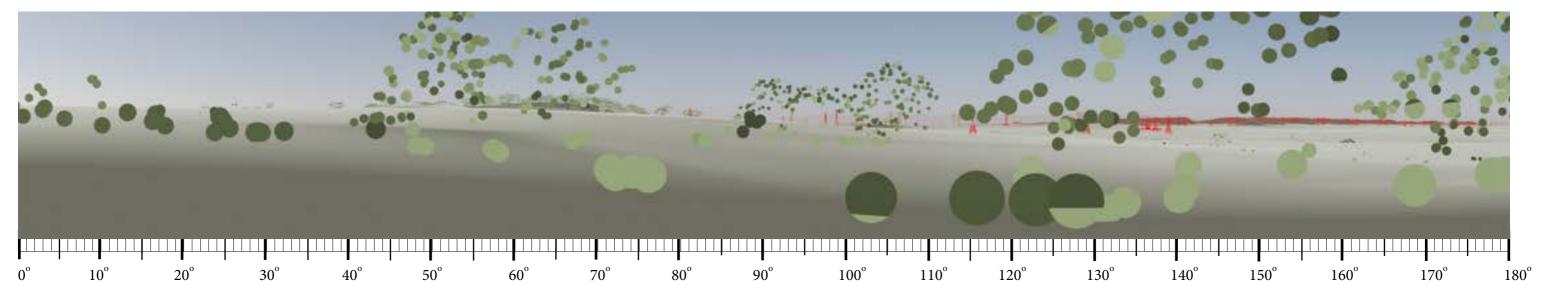


Other structure (non-residential)
Direction of view

Contour (10m)
Contour (2m)
Easements:
500kV
330kV
Transmission towers:
500kV Double circuit (72m)
330kV Double circuit (63m)
330kV Single circuit (45m)

Location and direction of 180-degree panoramic photograph

#### 3D modelled view







# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 965

998 **Detailed visual assessment** Blue Springs Road, Leadville

Visual sensitivity **MODERATE** 

Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in a rural area. **MODERATE** - View across a landscape with undulating to hiilly landform, blocks of vegetation, scattered sheds and farm buildings. This view has predominantly low to moderate scenic quality values.

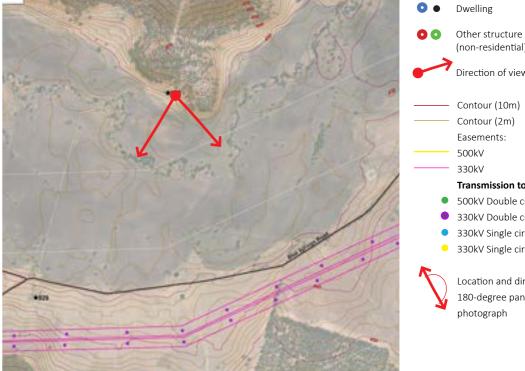
LOW Magnitude of change

> Twin 500kV double circuit lattice towers, about 1.4km to nearest tower. Large scale structures would rise above the existing valley and lines would be seen extending across the background of the view. The towers would be be partly viewed against vegetated hills and be seen in the distance.

Visual impact level LOW Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



(non-residential) Direction of view Contour (10m) Contour (2m) Easements: Transmission towers: 500kV Double circuit (72m) 330kV Double circuit (63m) 330kV Single circuit (54m) 330kV Single circuit (45m)

> Location and direction of 180-degree panoramic photograph

**Detailed visual assessment** 955 Birkalla Road, Bungaba

Visual sensitivity LOW

Viewpoint sensitivity: Scenic quality:

LOW - Secondary view from dwelling in a rural area. **MODERATE** - View across a landscape with undulating to flat landform, blocks of vegetation in the distance, existing glimpses to roads and scattered sheds and farm buildings. This view has predominantly of low to moderate scenic quality values.

LOW Magnitude of change

Twin 500kv double circuit lattice towers, about 800 metres to nearest tower. Vegetation around the dwelling, intervening landform and vegetation would limit views to the the towers, which may rise above the hill and vegetation and be seen in the middle to background of this view.

Visual impact level LOW

Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project







Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 998

Detailed visual assessment Blue Springs Road, Bungaba

Visual sensitivity

LOW

Viewpoint sensitivity: Scenic quality: LOW - Secondary view from dwelling in a rural area.

**MODERATE** - View across a landscape with undulating to flat landform, blocks of vegetation in the distance, existing sheds and farm buildings. This view has predominantly moderate to low scenic quality values.

#### Magnitude of change

#### HIGH

Twin 330kV double circuit lattice towers, about 300m to nearest tower with no intervening vegetation. There would be large scale towers visible which are substantially larger than those currently seen in this view. The towers would rise prominently above the surrounding vegetation and lines would extend across the view, with towers seen in the middle and background of the view.

Overall, the project would be visually prominent and would not be compatible with the character of the view. The project would result in a substantial change in the amenity of the view.

#### Visual impact level

#### HIGH\*

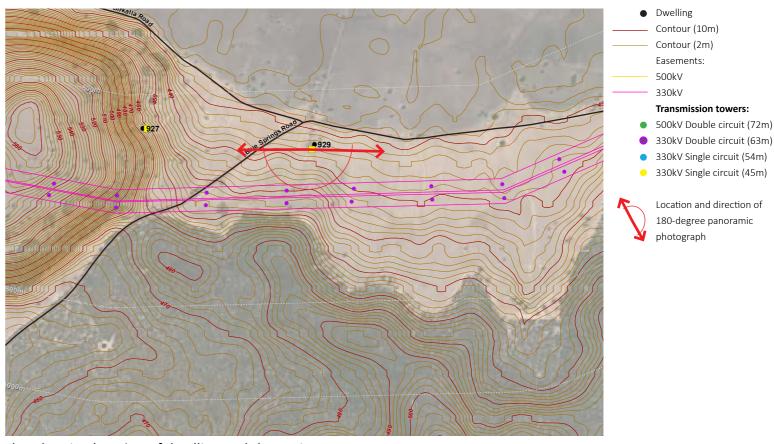
\*Assessment level increased from moderate due to the close proximity of towers that would be seen in multiple directions from the dwelling.



Photo showing dwelling aspect



Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



iris



# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 929

(non-residential)

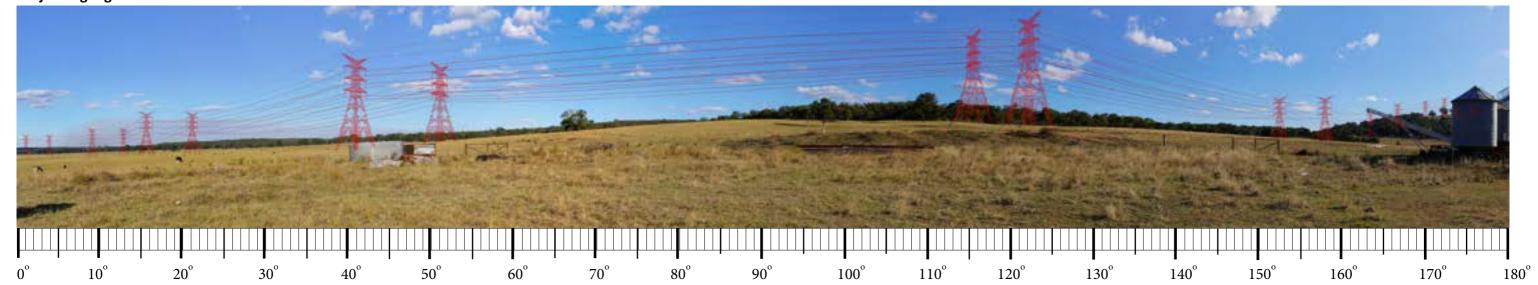
## Existing panoramic view towards the project



## Panoramic photomontage



# Project highlighted in silhouette



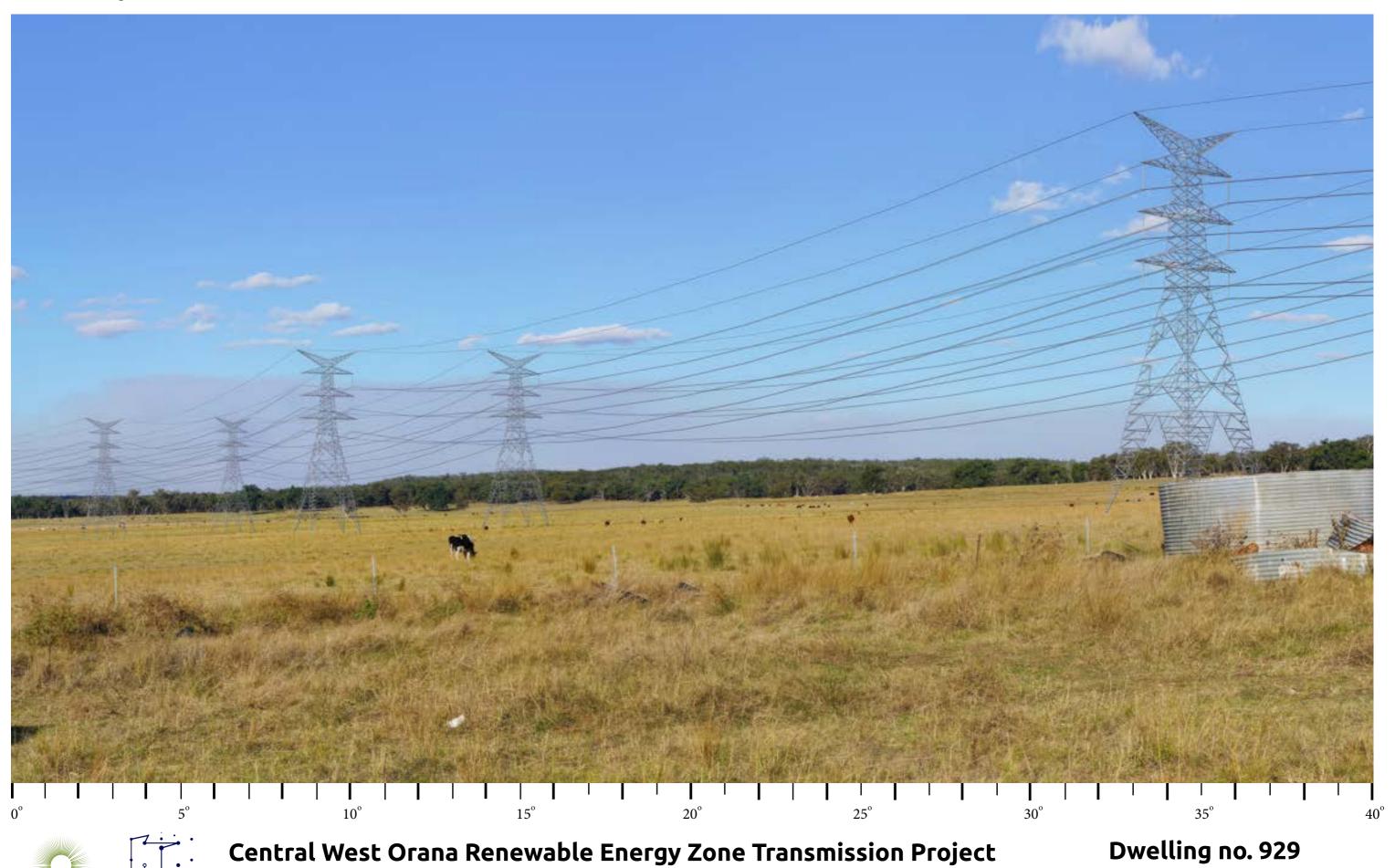




# Central West Orana Renewable Energy Zone Transmission Project

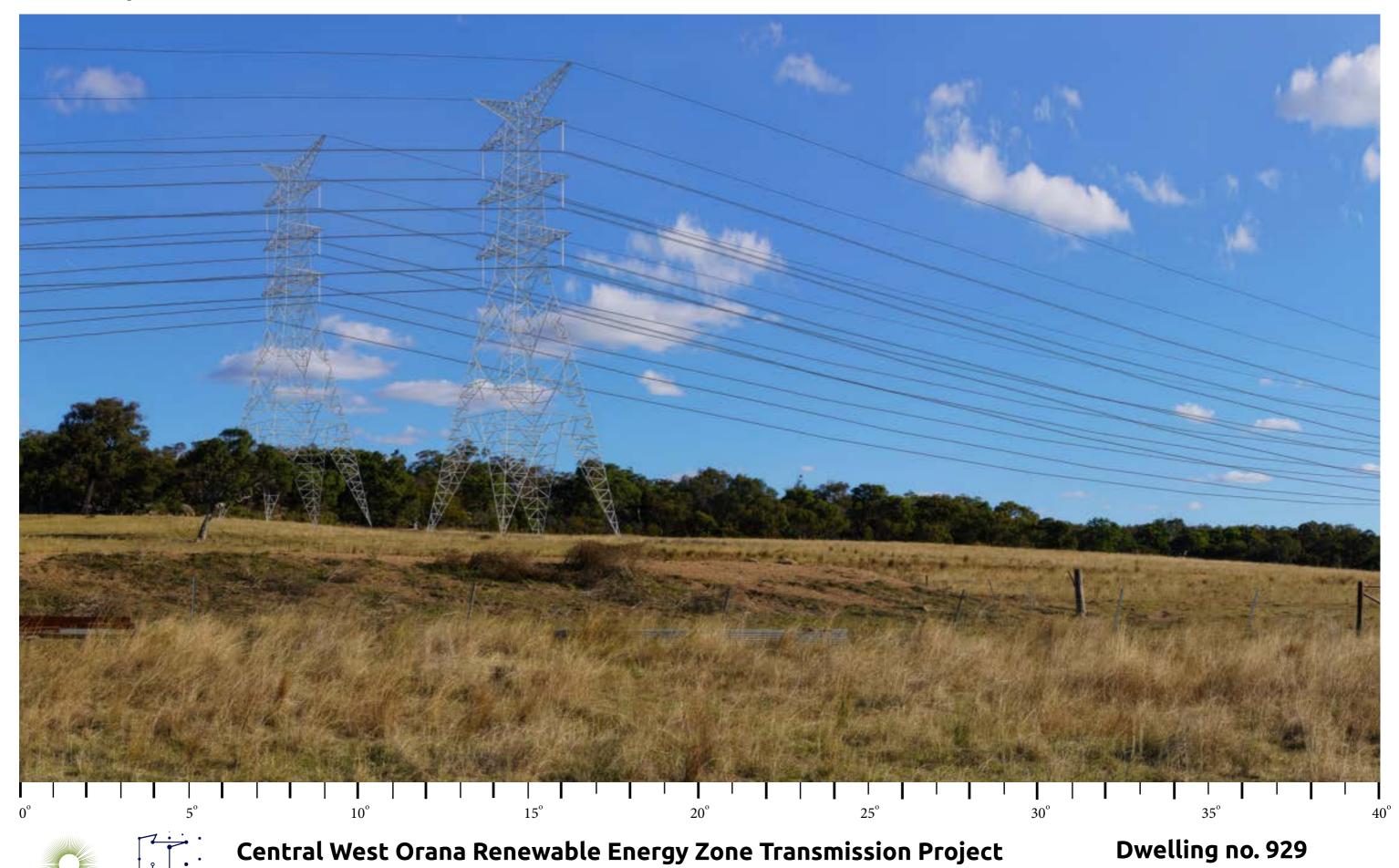
Dwelling no. 929

MODATA



Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

MODATA



Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

# **Detailed visual assessment**

Birkalla Road, Bungaba

#### Visual sensitivity

LOW

Viewpoint sensitivity: Scenic quality: LOW - Secondary view from dwelling in a rural area.

MODERATE - View across a broad valley from an elevated position, including a backdrop of vegetated hills. Existing glimpses to country roads, scattered dwellings, sheds and farm buildings. This view has predominantly low to moderate scenic quality values.

#### Magnitude of change

LOW

Twin 330kV double circuit lattice towers, about 320m to nearest tower. There would be some screening by intervening vegetation and landform. Where visible, the towers would rise above the surrounding landform and vegetation. The lines would extend away from the view, with towers seen in the middle and background of the view.

Overall, the project would result in a slight reduction to the amenity of the view.

#### Visual impact level

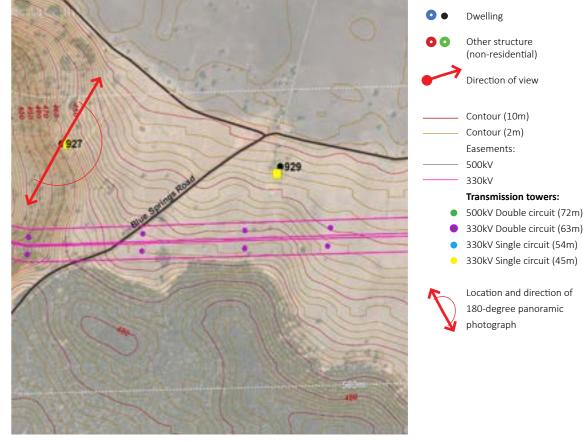
LOW

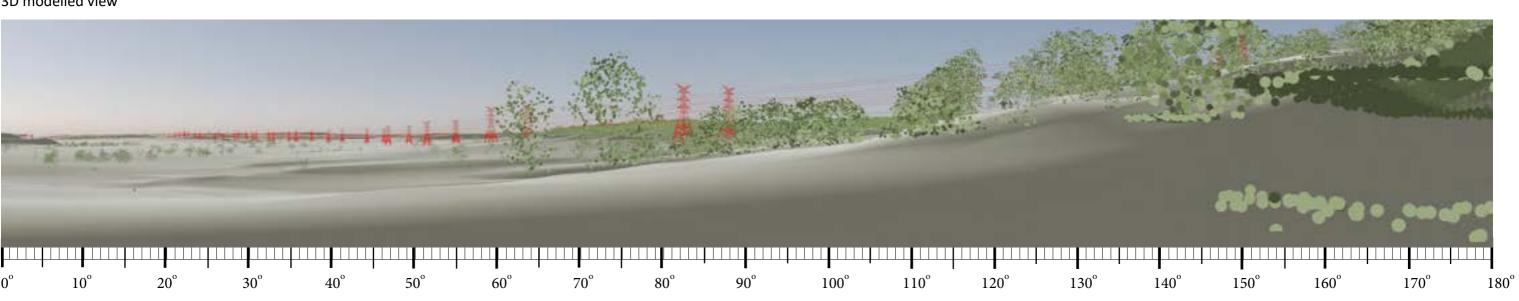
#### 3D modelled view



Detailed aerial showing dwelling orientation

### Plan showing location of dwelling and the project









# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 927

941 Detailed visual assessment

Birkalla Road, Bungaba

Visual sensitivity LOW

Viewpoint sensitivity: LO

LOW - Secondary view from dwelling in a rural area.

Scenic quality:

**MODERATE** - View across a landscape with undulating landform, rising to hills with blocks of vegetation, roads and scattered sheds and farm buildings. This view has

predominantly moderate to low scenic quality values.

Magnitude of change MODERATE-HIGH

Twin 330kV double circuit lattice towers, about 570m to nearest tower, occupying

horizontal field of view of about 180 degrees.

The towers would rise prominently above the surrounding vegetation and lines would extend across the view, with towers seen in the middle and background of the view and rising to cross the hills to the west, which are a local visual feature. Overall, the project would be prominent and would not be compatible with the character of the view. The project would result in a considerable change in the amenity of the view.

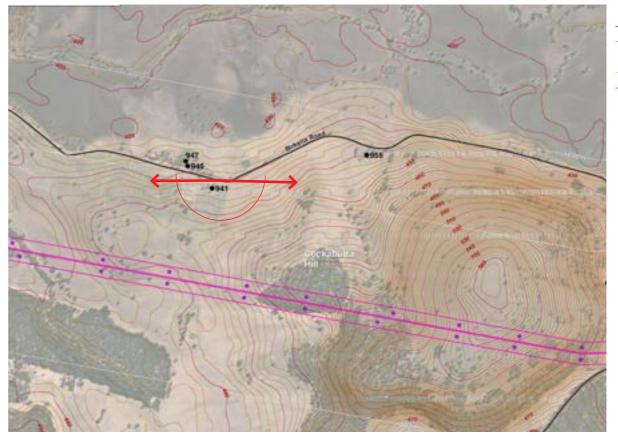
Visual impact level MODERATE



Photo showing dwelling aspect



Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project





# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 941

Other structure

(non-residential)

Direction of view

Contour (2m)
Easements:
500kV
330kV

Transmission towers:

500kV Double circuit (72m)

330kV Double circuit (63m)

330kV Single circuit (54m)

330kV Single circuit (45m)

Location and direction of 180-degree panoramic

photograph

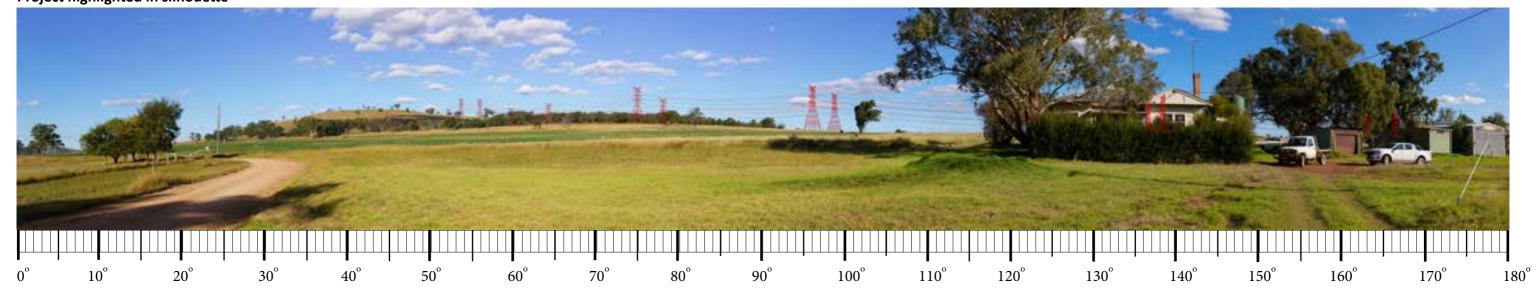
## Existing panoramic view towards the project



## Panoramic photomontage



## Project highlighted in silhouette



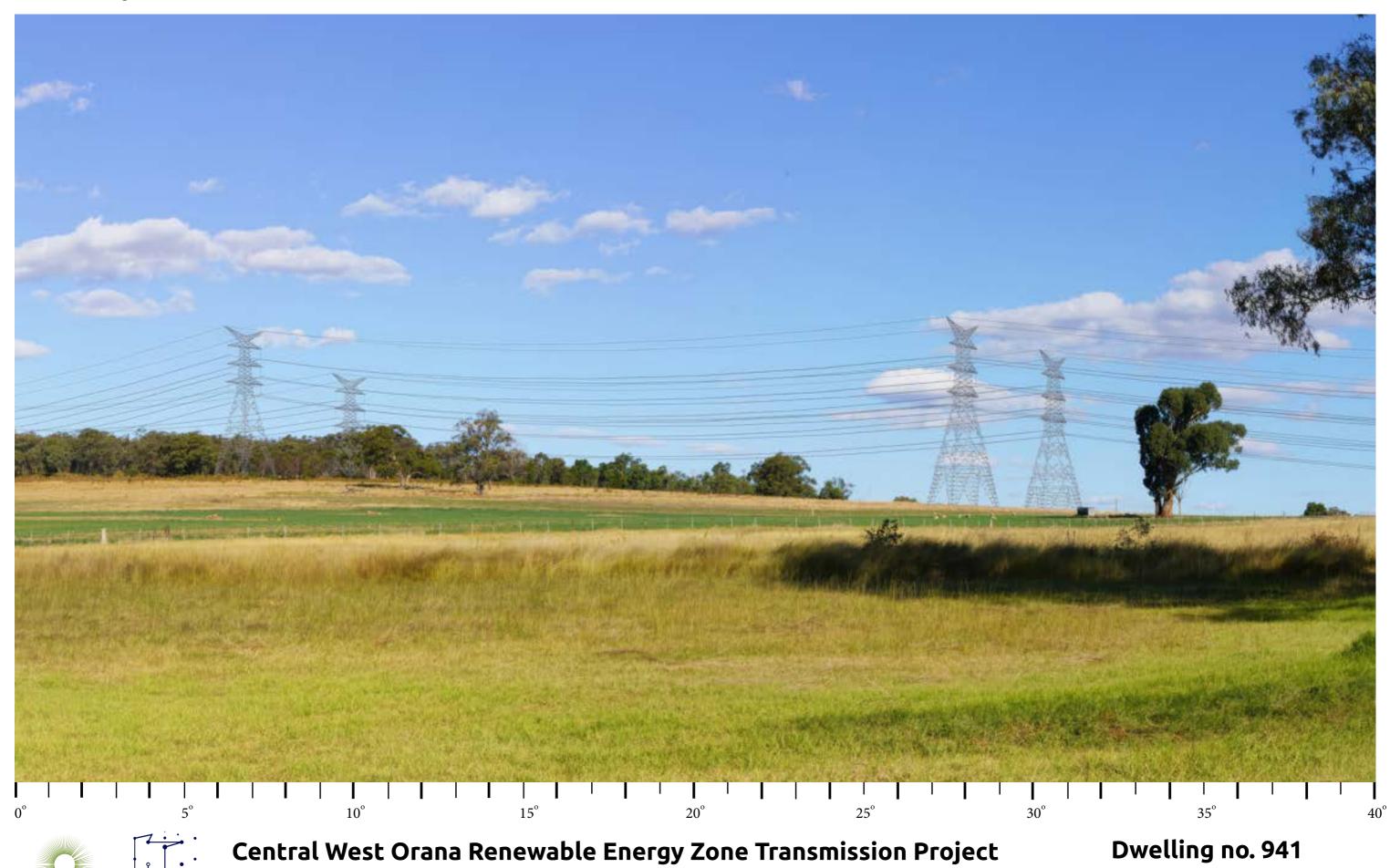




# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 941

MODATA



Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

# 947 Detailed visual assessment Birkalla Road, Bungaba

Visual sensitivity

LOW

Viewpoint sensitivity: Scenic quality: LOW - Secondary view from dwelling in a rural area. LOW - View enclosed by gardens, beyond gardens views include undulating to flat landform, glimpses to vegetated hills in the distance, existing view to access road and sheds and farm buildings. This view has predominantly low scenic quality values.

### Magnitude of change

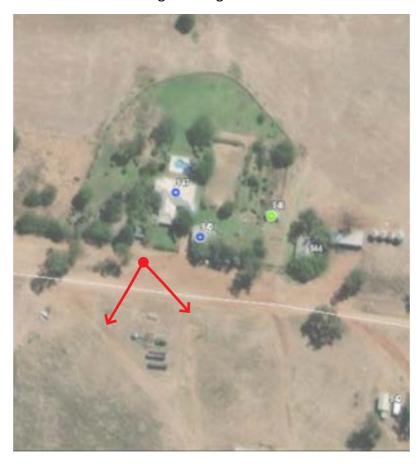
#### **NEGLIGIBLE**

Single row of 330kV double circuit lattice towers, about 500 metres to nearest tower. Vegetation around the dwelling, landform and existing sheds would screen the view to the project. Overall, the project would not be visible from the dwelling and there would be no perceived change to the amenity of the view.

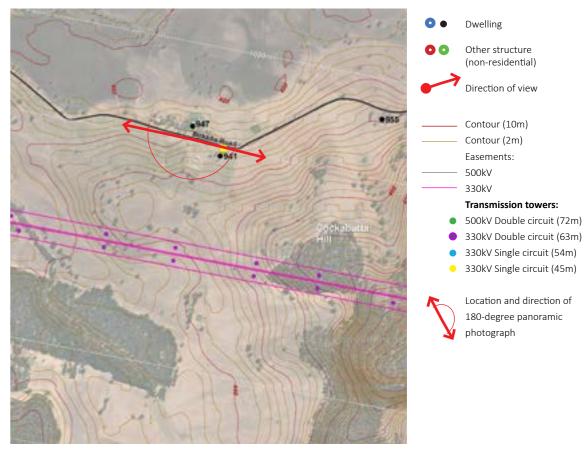
#### Visual impact level

**NEGLIGIBLE** 

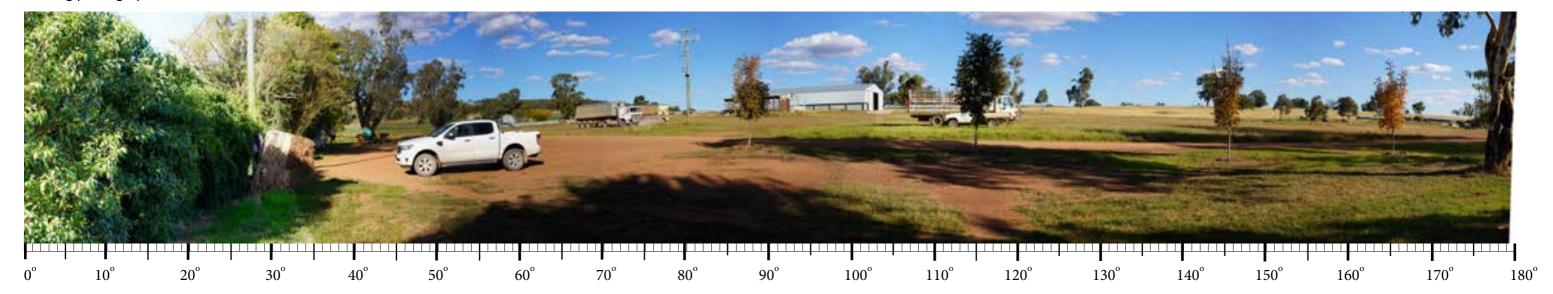
#### Detailed aerial showing dwelling orientation



#### Plan showing location of dwelling and the project



#### Existing photograph







# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 947

846 Detailed visual assessment
Blue Springs Road, Bungaba

Visual sensitivity MODERATE

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in rural area. MODERATE - View across a landscape with undulating landform, rising to hills with blocks of vegetation, roads and scattered sheds and farm buildings. This view has characteristics which are predominantly of moderate to low scenic quality.

Magnitude of change LOW

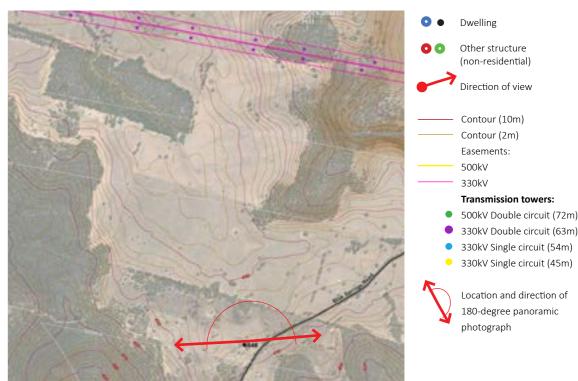
Twin 330kV double circuit lattice towers, about 1.9km to nearest tower, with intervening landform limiting the horizontal field of view. This would be a partly obstructed view to towers in the background.

Visual impact level LOW

Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



979

Detailed visual assessment Blue Springs Road, Bungaba

Visual sensitivity MODERATE

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in rural area. MODERATE - View across a landscape with undulating landform, rising to hills with blocks of vegetation, roads and scattered sheds and farm buildings. There is a distinctive rocky outcrop in the vicinity of this dwelling. This view includes elements of predominantly

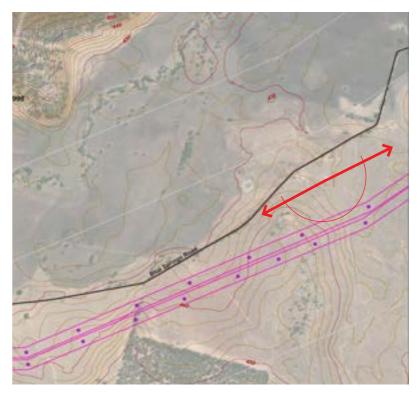
moderate to low scenic quality.

Magnitude of change HIG

Twin 330kV double circuit lattice towers, about 270m to nearest tower, with intervening landform limiting the horizontal field of view. This would be a partly obstructed view to towers in the background.

Visual impact level HIGH









Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 846

**Detailed visual assessment** 1152 Cliffdale Road, Leadville

**MODERATE Visual sensitivity** 

MODERATE - Primary view from dwelling in a rural area. Viewpoint sensitivity: Scenic quality:

MODERATE - View across a landscape with undulating to flat landform, with hills in the distance and vegetation associated with a nearby creekline. There are glimpses to vehicles on the highway, scattered sheds and farm buildings. This view has scenic

quality values of predominantly of moderate to low scenic quality.

LOW Magnitude of change

> Single row of 330kV single circuit lattice towers, about 740m to nearest tower, occupying horizontal small horizontal field of view, and lower portion of towers partly screened by vegetation. The visible towers would rise above the surrounding vegetation and be seen seen in the middle to background of the view.

Overall, the project would not be prominent and result in a slight change in the

amenity of the view.

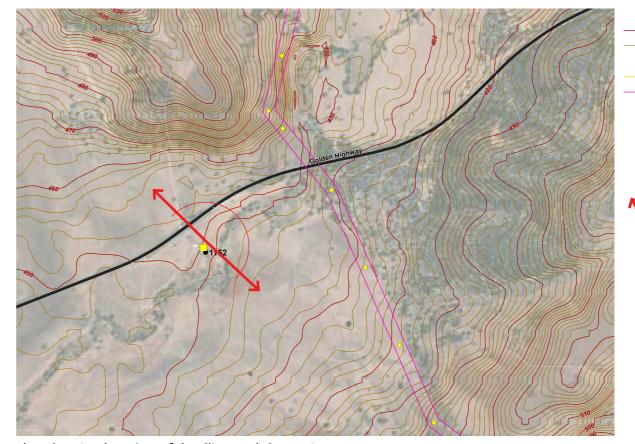
LOW Visual impact level



Photos showing dwelling aspect



Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project





# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 1152

Other structure

Contour (10m) Contour (2m) Easements: 500kV 330kV

Transmission towers: 500kV Double circuit (72m) 330kV Double circuit (63m) 330kV Single circuit (54m) 330kV Single circuit (45m)

> Location and direction of 180-degree panoramic

photograph

(non-residential)

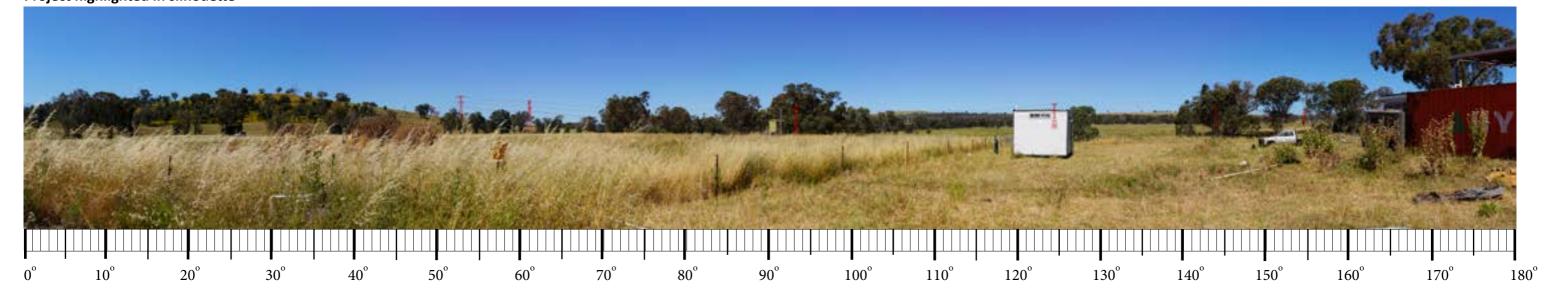
### **Existing panoramic view towards the project**



### **Panoramic photomontage**



## Project highlighted in silhouette



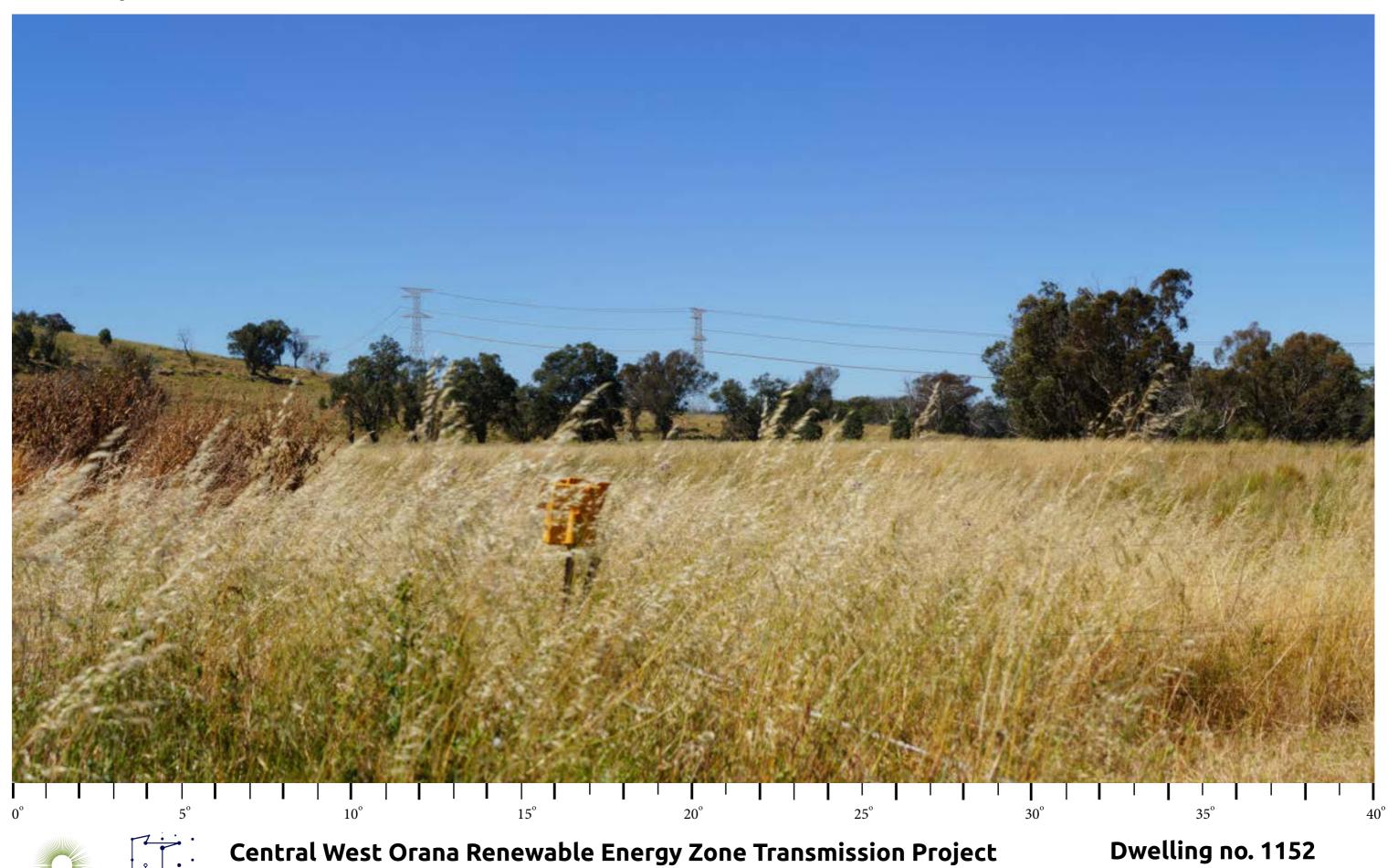




# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 1152

MODATA



Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

**Detailed visual assessment Blue Springs Road, Uarbry** 

Visual sensitivity

**MODERATE** 

Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in rural area. MODERATE - View across a landscape with undulating landform, rising to hills with blocks of vegetation, roads and scattered sheds and farm buildings. This view has characteristics of predominantly of moderate to low scenic quality value.

Magnitude of change LOW

Twin 330kV double circuit lattice towers, about 900m to nearest tower, with intervening landform and vegetation limiting the horizontal field of view. This would be a mostly obstructed view to towers in the

background.

Visual impact level

LOW

**Detailed visual assessment Golden Hwy, Uarbry** 

Visual sensitivity

1195

MODERATE

Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in rural area. MODERATE - View across a landscape with undulating landform, rising to hills with blocks of vegetation, roads and scattered sheds and farm buildings. This view has predominantly of moderate to low scenic quality values.

Magnitude of change MODERATE

Single row of 330kV double circuit lattice towers, about 500m to nearest tower. The project would be located on the lower slopes and viewed against a hilly backdrop with some scattered intervening vegetation. The project would be prominent and reduce the amenity of this view.

Visual impact level

MODERATE

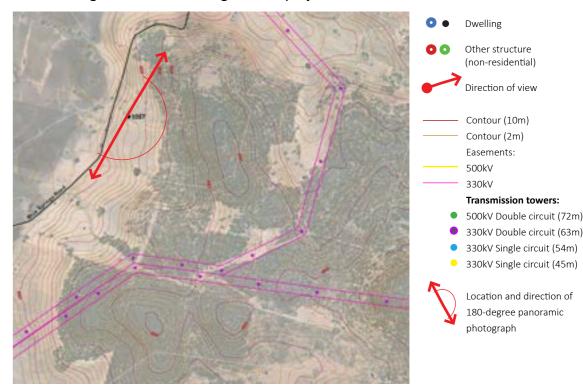
Detailed aerial showing dwelling orientation



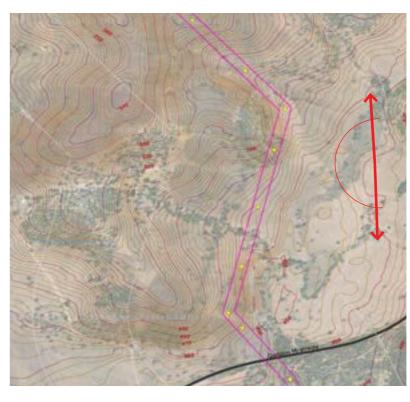
Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



Plan showing location of dwelling and the project







Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 1057

**Detailed visual assessment** Melrose Rd, Leadville

Visual sensitivity

LOW

Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in a rural area. LOW - View across a landscape with undulating to flat landform, blocks of vegetation in the distance, existing glimpses to scattered sheds and farm buildings. This view has scenic quality values of predominantly of low scenic quality.

Magnitude of change

**NEGLIGIBLE** 

Single row of 330kV single circuit lattice towers, about 1.5-2km to nearest tower. Vegetation surrounding the dwelling would limit views to the broader landscape.

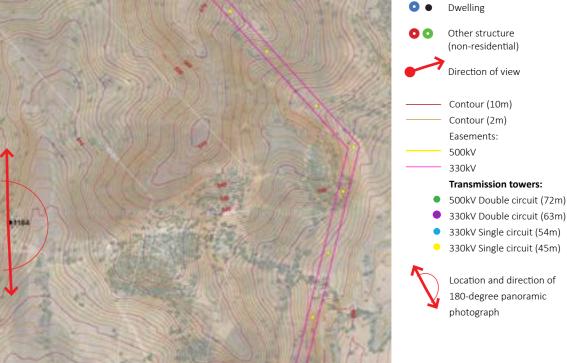
Visual impact level

**NEGLIGIBLE** 

Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



Contour (2m)

500kV Double circuit (72m)

330kV Single circuit (54m)

330kV Single circuit (45m)

Location and direction of 180-degree panoramic

1202

**Detailed visual assessment** Golden Highway, Uarbry

Visual sensitivity

LOW

Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in a rural area. LOW - View enclosed by vegetation, with bushland views and potentially broader views to the surrounding undulating landform. This view has characteristics of predominantly low scenic quality.

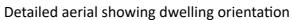
Magnitude of change

**NEGLIGIBLE** 

Single row of 330kV single circuit lattice towers, about 500m to nearest tower. Vegetation surrounding the dwelling would limit views to the broader landscape.

Visual impact level

**NEGLIGIBLE** 





Plan showing location of dwelling and the project







Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 1184

### Detailed aerial showing dwelling orientation

### Plan showing location of dwelling and the project

1261 **Detailed visual assessment Moorefield Road, Uarbry** 

**Visual sensitivity** LOW

Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in a rural area. LOW - View to a landscape with undulating landform, scatterd trees in the fore and midle ground and blocks of vegetation an hills in the distance. This view has scenic quality values of predominantly of low scenic quality.

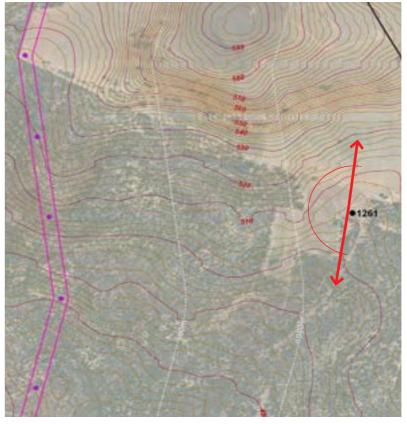
## Magnitude of change LOW

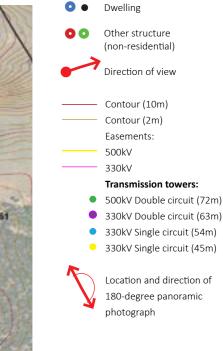
Single row of 330kV double circuit lattice towers, about 1.25 kilometres to nearest tower. There would be screening by intervening vegetation and landform, with some towers potentially visible in the background of

Overall, the project would not be prominent and there may be a slight change in the amenity of this view.

#### Visual impact level LOW











### **Detailed visual assessment** Golden Highway, Uarbry

#### Visual sensitivity

#### **MODERATE**

### Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in a rural area. **MODERATE** - Broad view across a landscape with undulating landform and to vegetated hills. Existing glimpses to the Golden Highway, scattered sheds and farm buildings. This view has predominantly moderate to low scenic quality values.

#### Magnitude of change

#### LOW

Single row of 330kV double circuit pole towers, about 1 kilometres to nearest tower. Some filtering by intervening vegetation. Towers would be partly viewed against the hills in the background, with the upper portion rising above the hills. There would be multiple towers visible and the lines would be visible in the background of the view.

Overall, the project would not be visually prominent and would result in a slight change to the amenity of the

#### Visual impact level

#### LOW

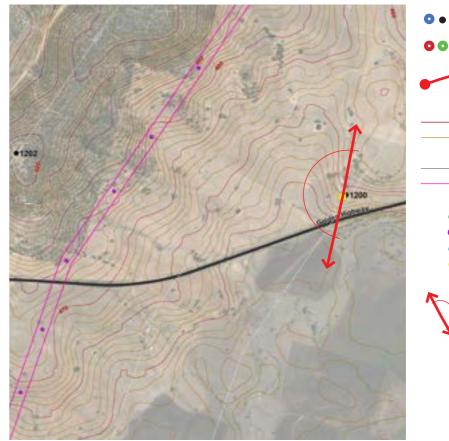
#### 3D modelled view



### Detailed aerial showing dwelling orientation



### Plan showing location of dwelling and the project





(non-residential)

Direction of view

Contour (2m)

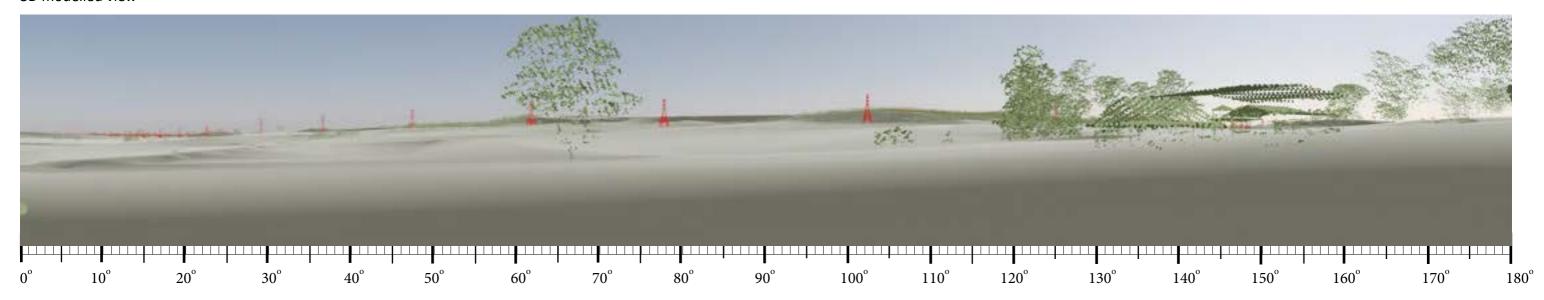
Fasements: 500kV

#### Transmission towers

- 500kV Double circuit (72m)
- 330kV Double circuit (63m) 330kV Single circuit (54m)
- 330kV Single circuit (45m)

Location and direction of

180-degree panoramic photograph







# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 1200

**Detailed visual assessment** 

**Moorefield Road, Uarbry** 

**Visual sensitivity** 

MODERATE

Viewpoint sensitivity: Scenic quality: MODERATE - Private view from dwelling in a rural area.

MODERATE - View across a landscape with undulating to flat landform, with vegetation in across the valley and hills forming layers in the distance. There are glimpses to scattered sheds and farm buildings on surrounding properties. This view has scenic quality values of predominantly low to moderate scenic quality.

#### Magnitude of change

#### **MODERATE**

Single row of 330kV double circuit lattice towers, about 650m to nearest tower, occupying horizontal field of view of about 180 degrees, mostly open view with some intervening vegetation screening the lower portion of some towers. The towers would rise prominently above the surrounding vegetation and lines would extend across the view, with towers seen in the middle and background of the view.

Overall, the project would be somewhat prominent and would not be compatible with the character of the view. The project would result in a noticeable change in the amenity of the view.

#### Visual impact level

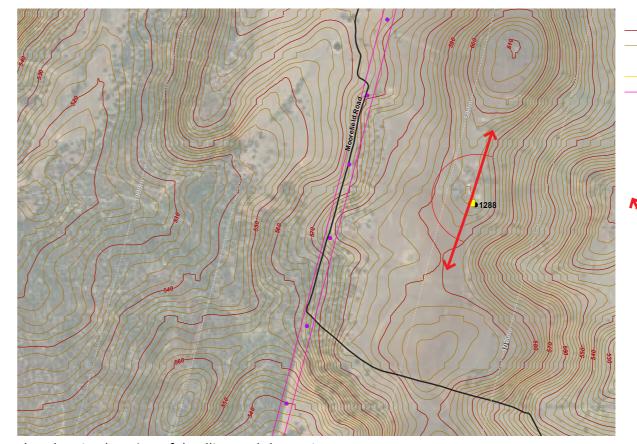
#### MODERATE



Photo showing dwelling aspect



Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project





# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 1288

(non-residential)

Contour (2m) Easements: 500kV 330kV

Transmission towers:

500kV Double circuit (72m)

330kV Double circuit (63m)

330kV Single circuit (54m)

330kV Single circuit (45m)

Location and direction of 180-degree panoramic

photograph

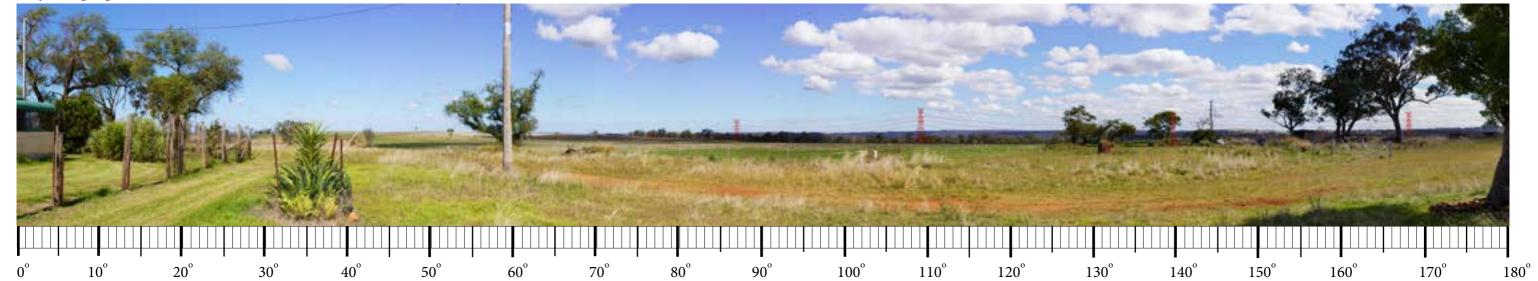
# Existing panoramic view towards the project



## Panoramic photomontage



# Project highlighted in silhouette



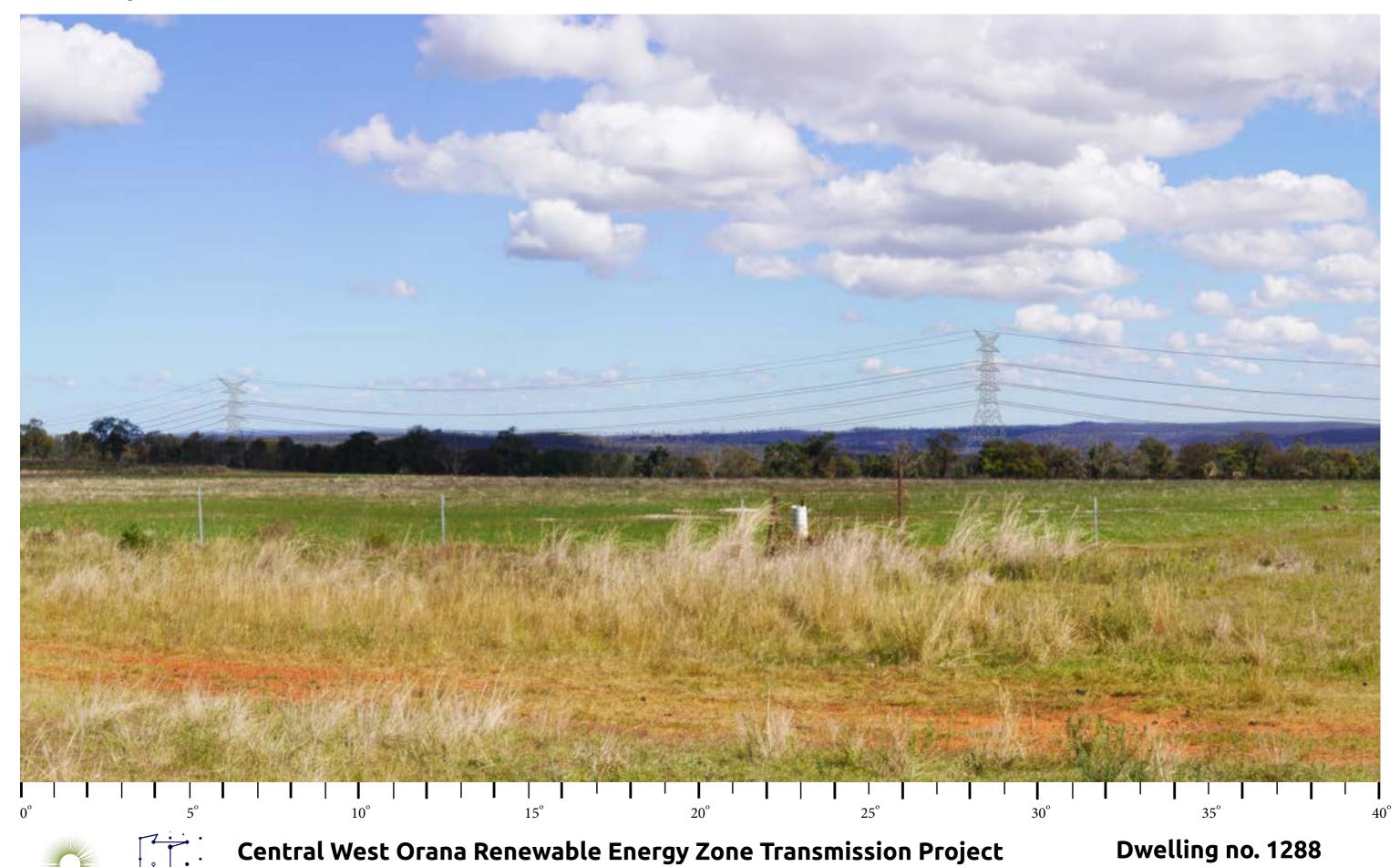




# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 1288

MODATA.



Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Detailed visual assessment Moorefield Road, Uarbry

**Visual sensitivity** 

LOW

Viewpoint sensitivity: Scenic quality: LOW - Secondary view from dwelling in a rural area.

MODERATE - View across a field with small crops and vineyard, and gentle undulations with scattered trees. Some glimpses to farm buildings and sheds. This view has scenic quality values of predominantly of moderate to low scenic quality.

#### LOW

#### Magnitude of change

Single row of 330kV double circuit lattice towers, about 800m to nearest tower, occupying horizontal field of view of about 120 degrees, mostly open view with some intervening vegetation screening the lower portion of some towers. The towers would rise prominently above the surrounding vegetation and lines would extend across the view, with towers seen in the middle and background of the view. The towers would be located on lower ground so that they would be partly screened by intervening vegetation and partly viewed against the undulating hills. Overall, the project would not be visually prominent and would result in a slight change in the amenity of the view.

#### Visual impact level

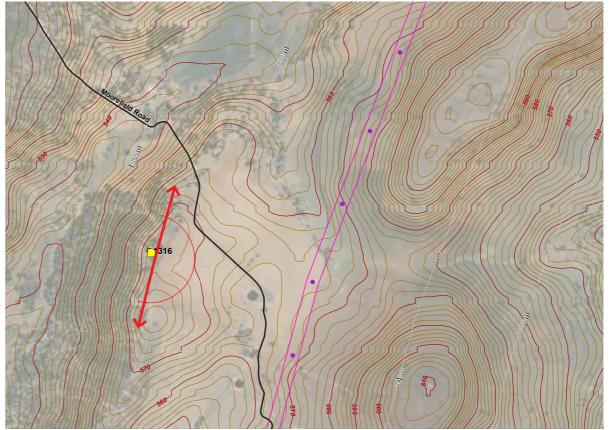
#### LOW



Photo showing dwelling aspect



Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 1316

Other structure

(non-residential)

Contour (2m) Easements:

Transmission towers:

500kV Double circuit (72m)

330kV Double circuit (63m)

330kV Single circuit (54m)

330kV Single circuit (45m)

Location and direction of 180-degree panoramic

photograph

330kV

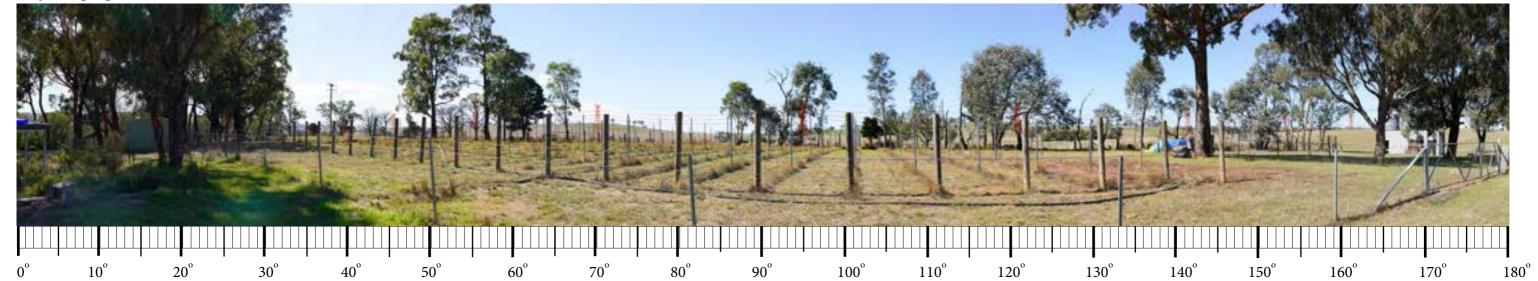
# Existing panoramic view towards the project



## Panoramic photomontage



# Project highlighted in silhouette







# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 1316

MODATA.



Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

**Detailed visual assessment** 

Moorefield Rd, Coolah

Visual sensitivity

MODERATE

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area.

MODERATE - View across a landscape with undulating landform, scattered trees, existing glimpses to access tracks, sheds and farm buildings. This view has scenic quality values of predominantly of moderate to low

valu

Magnitude of change LOW

Single row of 330kV double circuit lattice towers, about 1.3km to nearest tower. Would be visible in multiple directions. Intermittent screening by intervening vegetation and landform. The towers would rise above the surrounding vegetation and lines would extend across the background of the view.

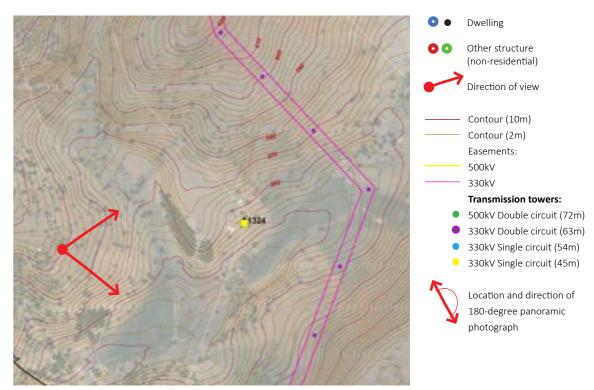
Visual impact level

LOW

Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



iris



**Detailed visual assessment** 1324 **Moorefield Road, Coolah** 

**MODERATE Visual sensitivity** 

Viewpoint sensitivity:

MODERATE - Primary view from dwelling in a rural area.

Scenic quality:

MODERATE - View across a landscape with undulating landform, scattered trees, existing glimpses to access tracks, sheds and farm buildings. This view has scenic

quality values of predominantly of moderate to low scenic quality.

**MODERATE** Magnitude of change

> Single row of 330kV double circuit lattice towers, about 530m to nearest tower, occupying horizontal field of view of about 180 degrees, visible in multiple directions. Intermittent screening by intervening vegetation. The towers would rise prominently above the surrounding vegetation and lines would extend across the view, with towers seen in the middle and background of the view.

Overall, the project would be somewhat prominent and would not be compatible with the character of the view. The project would result in a noticeable change in

the amenity of the view.

**MODERATE** Visual impact level



Photos showing dwelling aspect



Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project





# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 1324

(non-residential)

Contour (2m) Easements:

Transmission towers: 500kV Double circuit (72m) 330kV Double circuit (63m) 330kV Single circuit (54m) 330kV Single circuit (45m)

> Location and direction of 180-degree panoramic

photograph

330kV

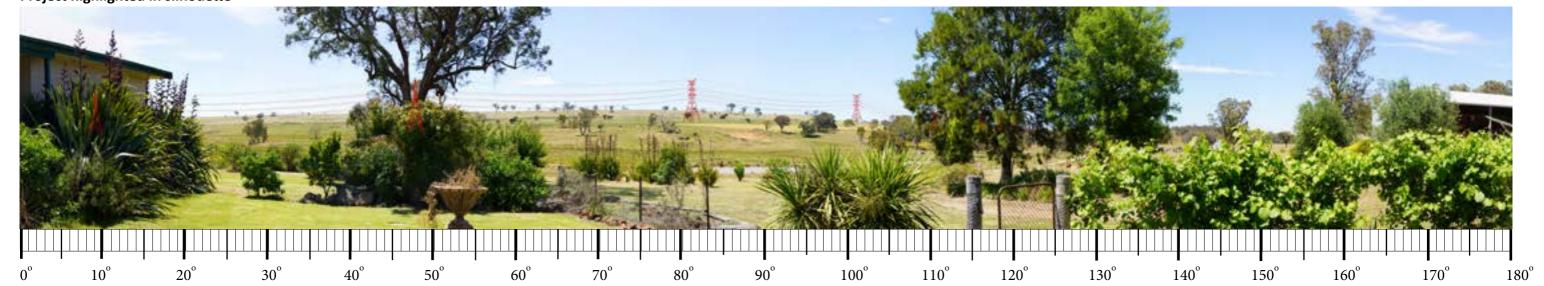
### Existing panoramic view towards the project



## Panoramic photomontage



## Project highlighted in silhouette







# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 1324

MODATA.



Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Page 65

**Detailed visual assessment** 

**Cliffdale Road, Uarbry** 

**Visual sensitivity** 

LOW

Viewpoint sensitivity: Scenic quality: **LOW** - Secondary view from a dwelling in a rural area. Note, there is limited visibilty from the dwelling due to dense garden vegetation.

MODERATE - View across a landscape with undulating to flat landform, vegetated hills in the distance, glimpses to existing roads, scattered sheds and farm buildings. This view has scenic quality values of predominantly moderate to low scenic quality.

Magnitude of change

#### MODERATE

Single row of 330kV double circuit lattice towers, about 340m to nearest tower, occupying horizontal field of view of about 160 degrees, scattered trees provide some intermittent screening but mostly open view. There would be large scale towers visible, rising prominently above the surrounding backdrop of hills. Lines would extend across the view, with towers seen in the middle and background of the view.

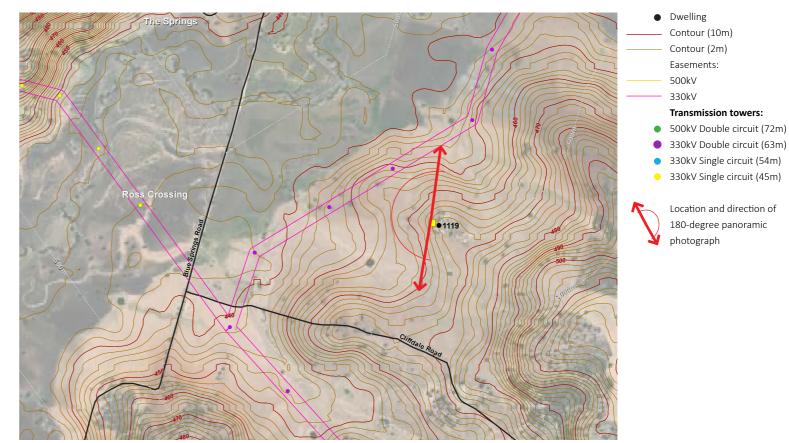
Overall, the project would be somewhat prominent and would not be compatible with the character of the view. The project would result in a noticeable change in the amenity of the view.

Visual impact level

LOW



Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project





Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 1119

(non-residential)

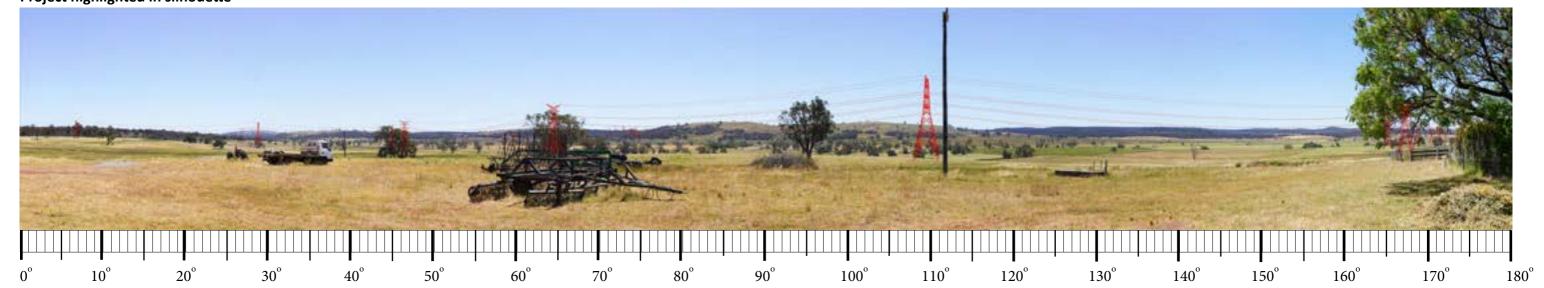
#### **Existing panoramic view towards the project**



### Panoramic photomontage



### Project highlighted in silhouette



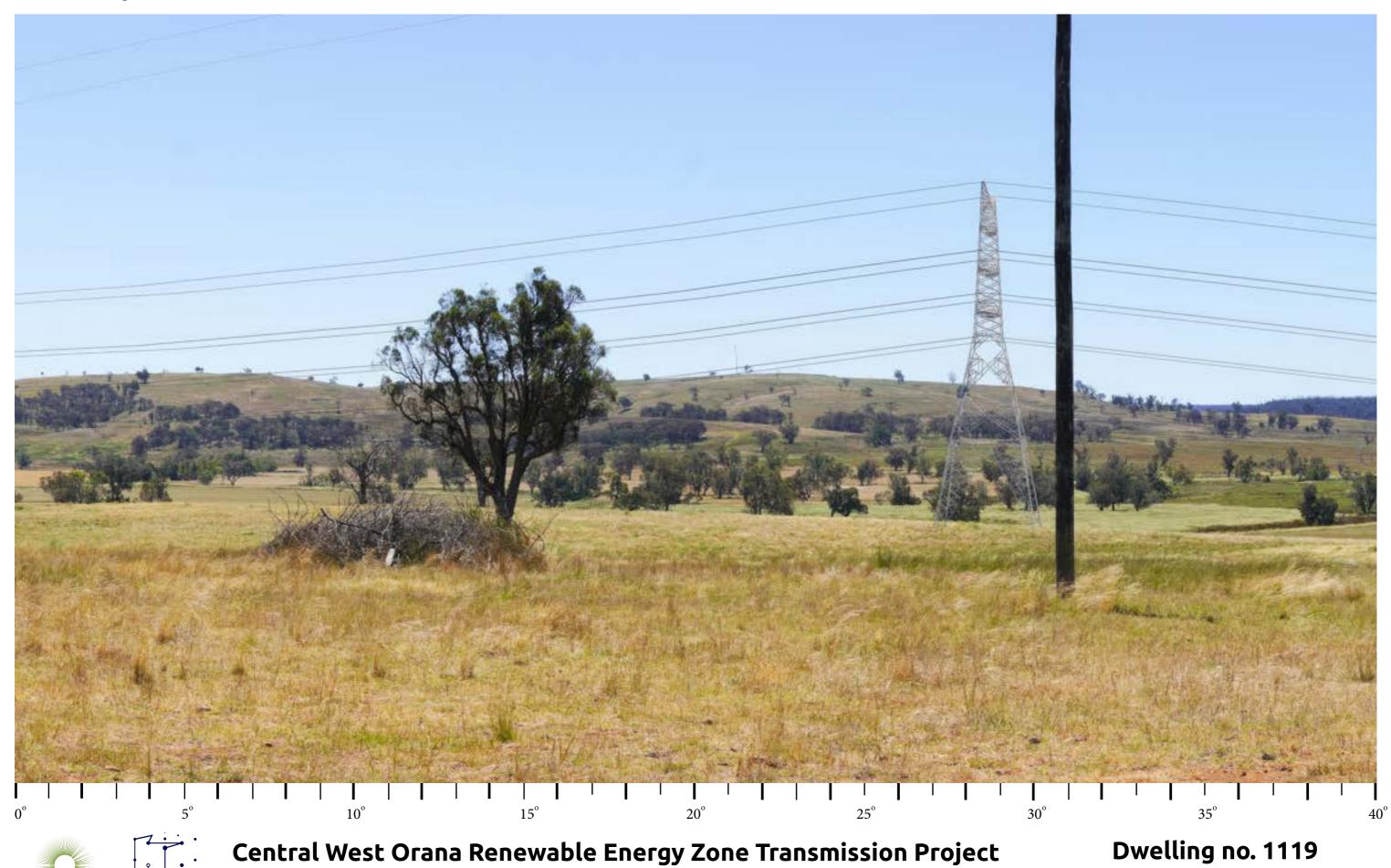




# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 1119

MODATA



Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Photomontage detail

**Detailed visual assessment** Cliffdale Road, Uarbry

Visual sensitivity

**MODERATE** 

LOW

Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in a rural area. MODERATE - View across a landscape with undulating to flat landform, blocks of vegetation in the distance, existing glimpses to transmission lines, roads and scattered sheds and farm buildings. This view has characteristics of predominantly low to moderate scenic quality (Refer to 1037 for representative images)

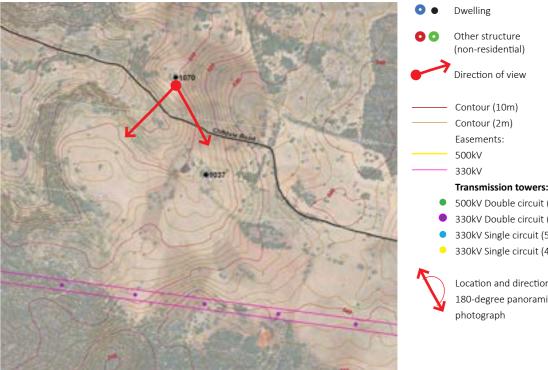
Magnitude of change

Single row of 330kV transmission towers with the nearest tower at a distance of about 1.5km.

Visual impact level LOW Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



Other structure (non-residential)

Direction of view

Contour (10m) Contour (2m)

 500kV Double circuit (72m) 330kV Double circuit (63m)

330kV Single circuit (54m)

330kV Single circuit (45m)

Location and direction of 180-degree panoramic photograph

## 1010/1015

#### **Detailed visual assessment Turill Bus Route, Turill**

Visual sensitivity

**MODERATE** 

Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in a rural area. **MODERATE** - View to a landscape with undulating landform, scatterd trees in the fore and midle ground and blocks of vegetation an hills in the distance. This view has scenic quality values of predominantly of low scenic quality.

Magnitude of change

LOW

LOW

Single row of 330kV double circuit lattice towers, about 870 metres to nearest tower. There would be screening by intervening vegetation and landform, with some towers potentially visible in the middle and background of the view.

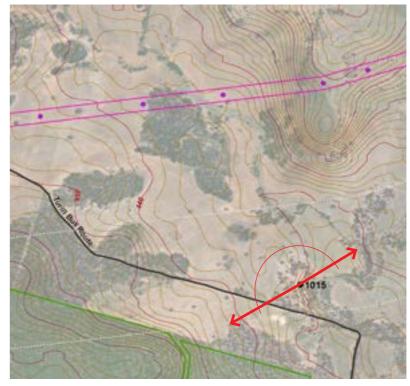
Overall, the project would not be prominent and there would be a slight change in the amenity of this view.

Visual impact level

Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project







Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 1070

Dwelling no. 1010/1015

1037 Detailed visual assessment

Cliffdale Road, Uarbry

Visual sensitivity MODERATE

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area.

MODERATE - View across a landscape with undulating to flat landform, blocks of vegetation in the distance, existing glimpses to transmission lines, roads and scattered sheds and farm buildings. This view has scenic quality values of predominantly

low to moderate scenic quality.

#### Magnitude of change MODERATE

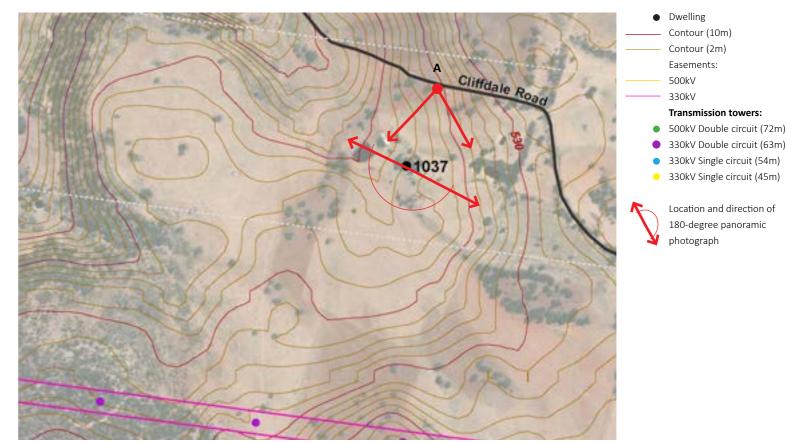
Single row of 330kV double circuit lattice towers, about 700m to nearest tower, occupying horizontal field of view of about 100 degrees, with some screening by intervening vegetation. The towers would rise prominently above the surrounding vegetation and backdrop of hills. The lines would extend across the view, with towers seen in the middle and background.

Overall, the project would be somewhat prominent and would not be compatible with the character of the view. The project would result in a noticeable change in the amenity of the view.

#### Visual impact level MODERATE



Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project





Dwelling no. 1037

(non-residential)

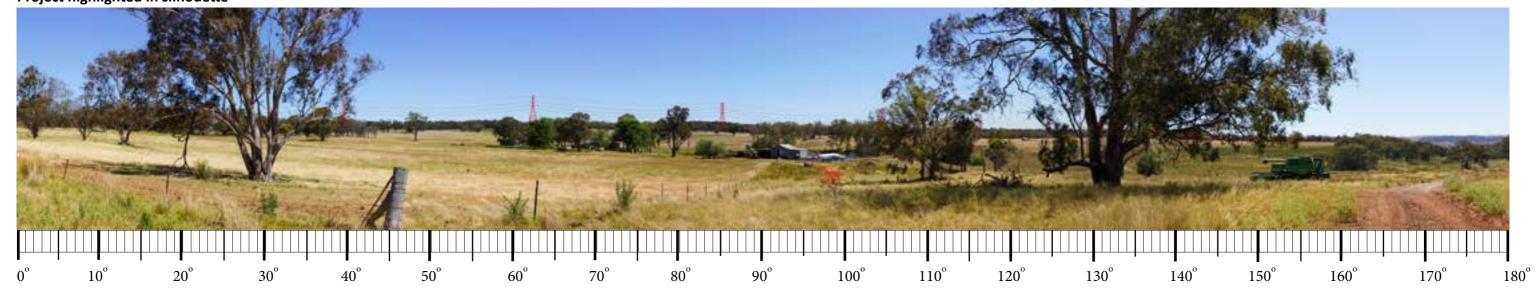
### Existing panoramic view towards the project



### Panoramic photomontage



### Project highlighted in silhouette







# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 1037



Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Photomontage detail

### **Detailed visual assessment**

**Turill Bus Route, Turill** 

**Visual sensitivity** 

LOW

Viewpoint sensitivity: Scenic quality: LOW - Secondary view from dwelling in a rural area. MODERATE - View across a landscape with undulating landform, blocks of vegetation in the distance, existing glimpses to scattered sheds and farm buildings. This view has scenic quality of predominantly of moderate to low scenic value.

Magnitude of change

ge LOW

Single row of 330kV double circuit lattice towers, about 400 metres to nearest tower. Dwelling location on slope facing away from the project so that some landform and intermittent vegetation would provide screening. Where visible, towers would rise above the

landform.

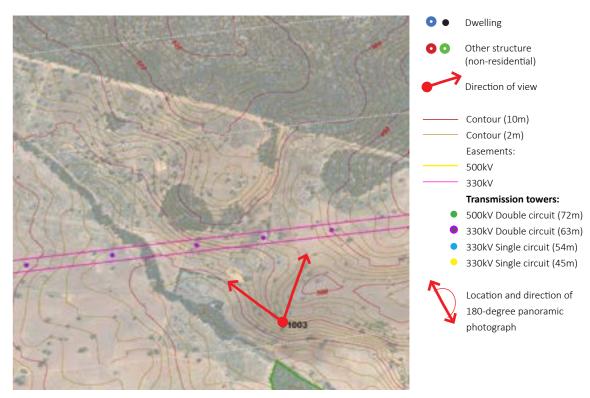
Visual impact level

LOW

Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project







Dwelling no. 1003

**1066** Detailed visual assessment

Ulan Rd, Turill

Visual sensitivity MODERATE

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area.

MODERATE - View across a landscape with undulating landform, blocks of vegetation in the distance, existing glimpses to scattered sheds and farm buildings. This view has scenic quality values of predominantly of moderate to low scenic quality.

Magnitude of change

#### MODERATE

Single row of 330kV double circuit lattice towers, about 600 metres to nearest tower, occupying small horizontal field of view due to some intermittent screening by intervening vegetation.

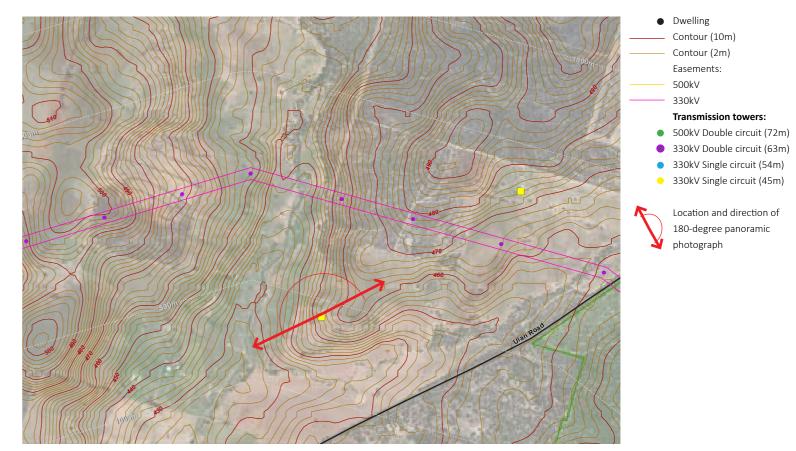
The visible towers would be located on the ridgeline in the centre of this view, rising prominently above the landform and extending across the view, with the more distant towers in the centre of the view, and dissapearing over the hill.

Overall, the project would be somewhat prominent and would not be compatible with the character of the view. The project would result in a noticeable change in the amenity of the view.

Visual impact level MODERATE



Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project





Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 1066

(non-residential)

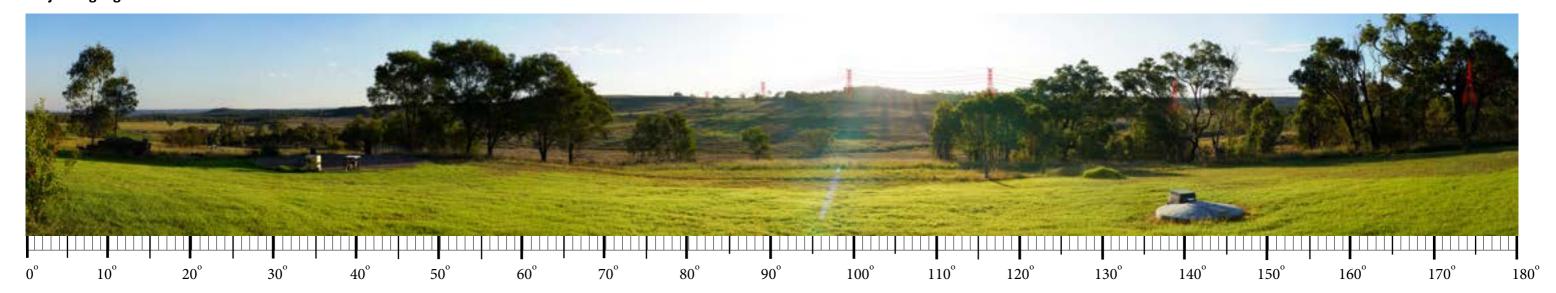
#### **Existing panoramic view towards the project**



### Panoramic photomontage



### Project highlighted in silhouette



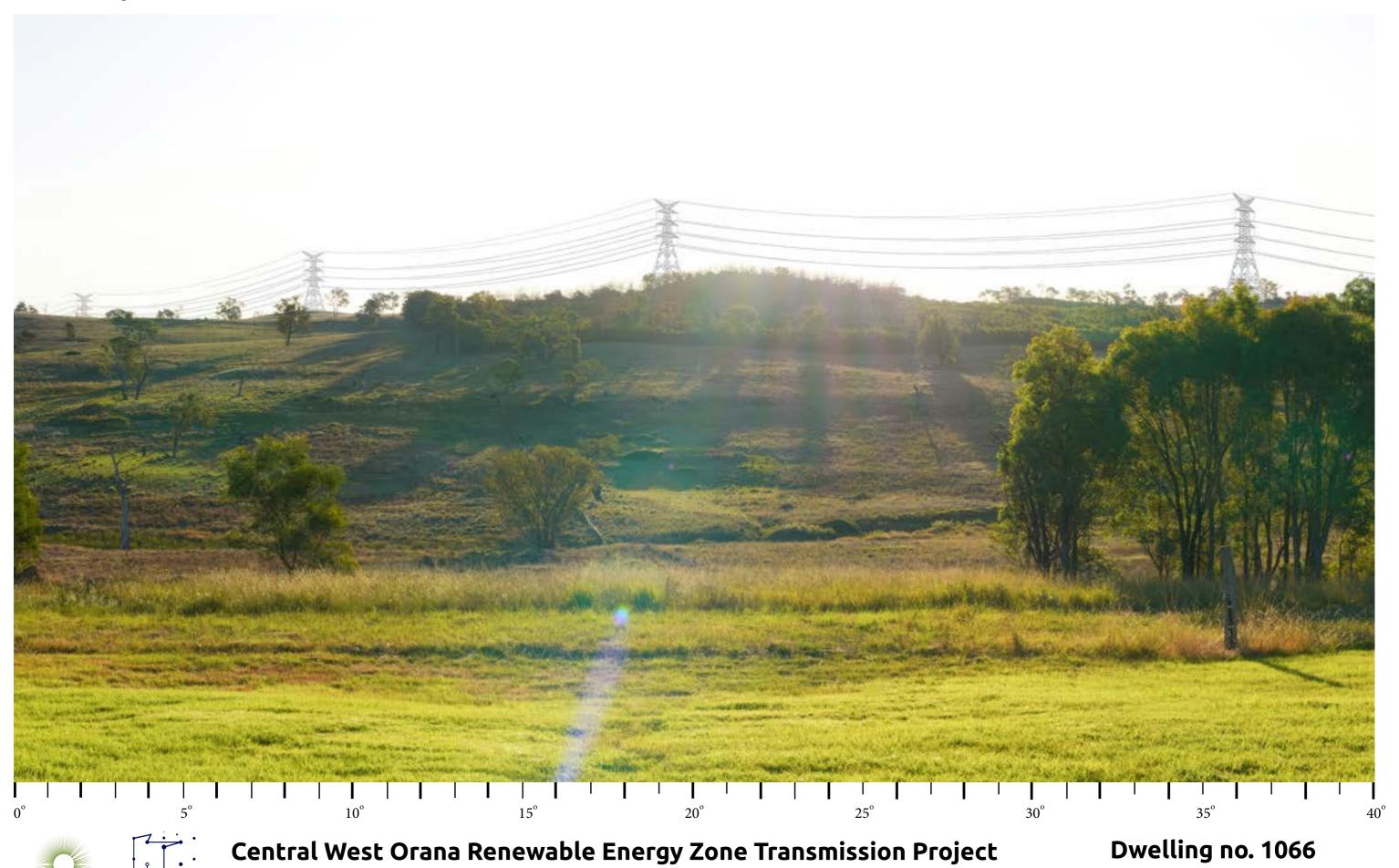




# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 1066

MODATA.



Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Photomontage detail

#### **Detailed visual assessment**

Ulan Rd, Turill

#### Visual sensitivity

#### MODERATE

Viewpoint sensitivity: Scenic quality: LOW - Secondary view from dwelling in a rural area.

MODERATE - View across a landscape with undulating landform, blocks of vegetation in the distance, existing glimpses to scattered sheds and farm buildings. This view has characteristics of predominantly of moderate to low scenic quality.

#### Magnitude of change

#### LOW

Single row of 330kV double circuit lattice towers, about 900 metres to nearest tower, with some screening due to intervening landform and vegetation.

Overall, the project would not be prominent and would not result in a perceived change to the amenity of the .

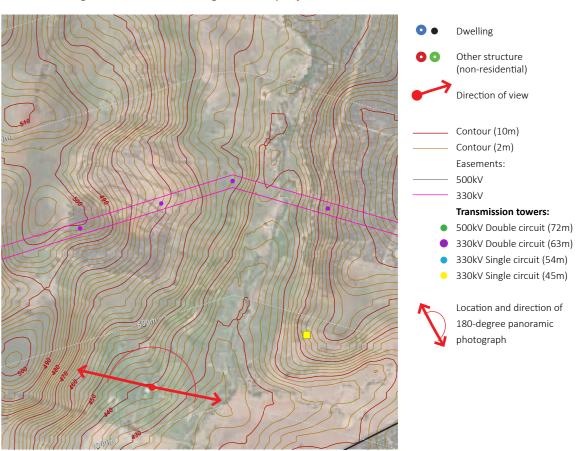
Visual impact level

LOW

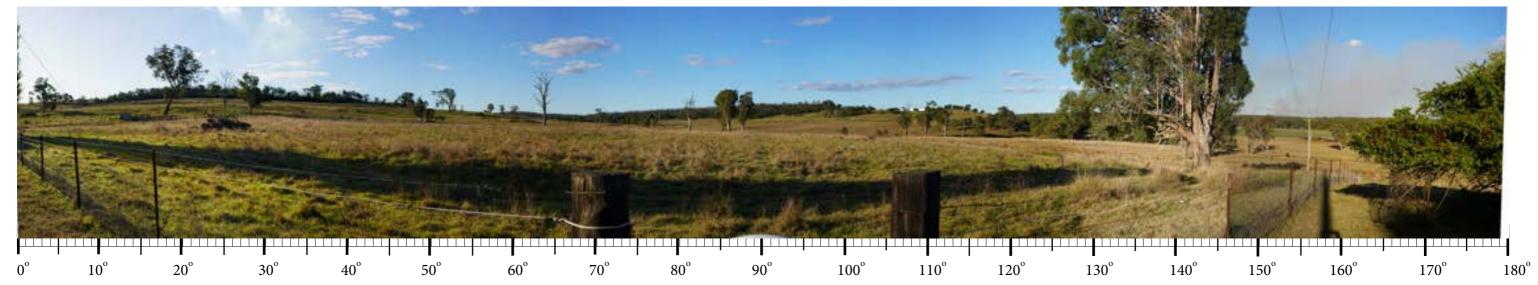
#### Detailed aerial showing dwelling orientation



#### Plan showing location of dwelling and the project



### Existing photograph







# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 1044

#### 1091 **Detailed visual assessment** Ulan Road, Turill

#### Visual sensitivity **MODERATE**

Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in a rural area. LOW - View across a landscape with undulating landform, and a vegetated hills in the distance, existing glimpses to transmission lines, roads and scattered sheds and farm buildings. This view has scenic quality values of predominantly low scenic quality.

#### Magnitude of change

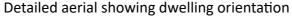
#### MODERATE

Single row of 330kV double circuit lattice towers, about 300m to nearest tower, occupying horizontal field of view of about 120 degrees. Vegetation would provided some screening of the towers to the east and the combination of landform and vegetation would provide some screening of towers to the west. The lower portion of towers would also be partly screened by vegetation. Where visible, the towers would rise prominently above the surrounding landform and lines would potentially be seen extending across the view, with towers seen in the middleground of the view.

Overall, the project would be somewhat prominent and would not be compatible with the character of the view. The project would result in a noticeable change in the

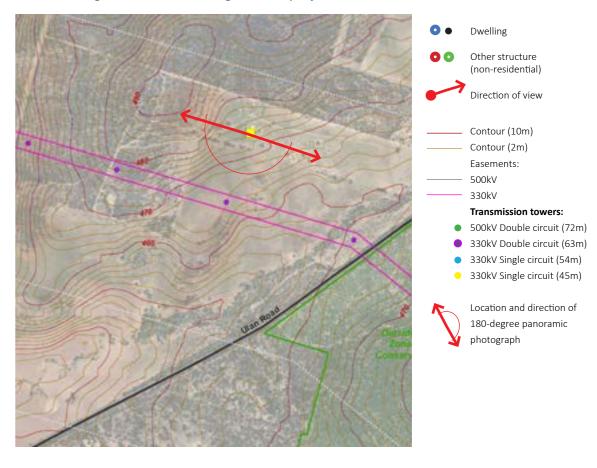
amenity of the view.

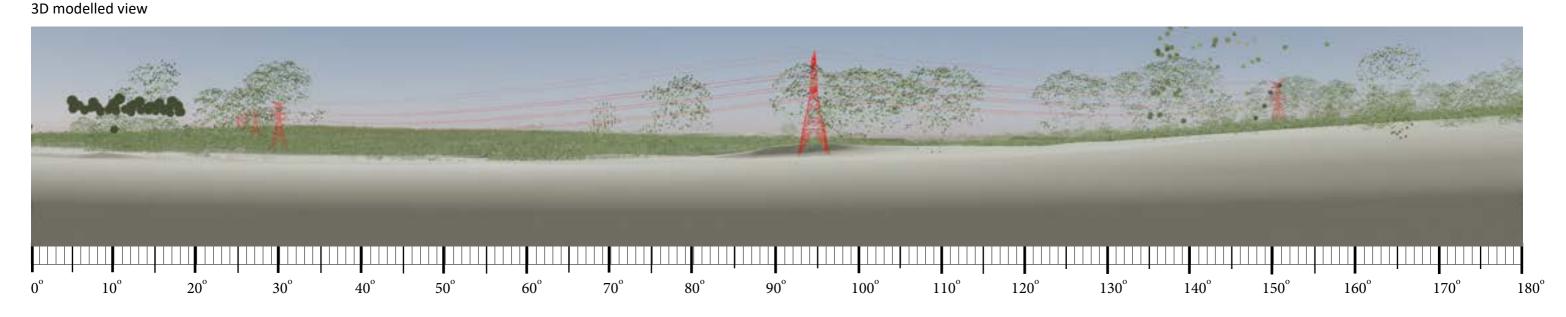
#### **MODERATE** Visual impact level





#### Plan showing location of dwelling and the project









# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 1091

#### **Detailed visual assessment**

Ulun Road, Turill

#### **Visual sensitivity**

#### **MODERATE**

#### Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in a rural area. LOW - View across a landscape with undulating landform, large area of bushland vegetation in the distance, existing glimpses to roads, scattered sheds and farm buildings. This view has scenic quality values predominantly of low scenic quality.

#### Magnitude of change NEGLIGIBLE

Single row of 330kV double circuit lattice towers, about 1.5km to nearest tower. Intervening landform and vegetation would screens some areas of the line and the lower portion of some towers, reducing the visiblity of

Overall, the project would not be visually prominent and would result in no perceived change in the amenity of

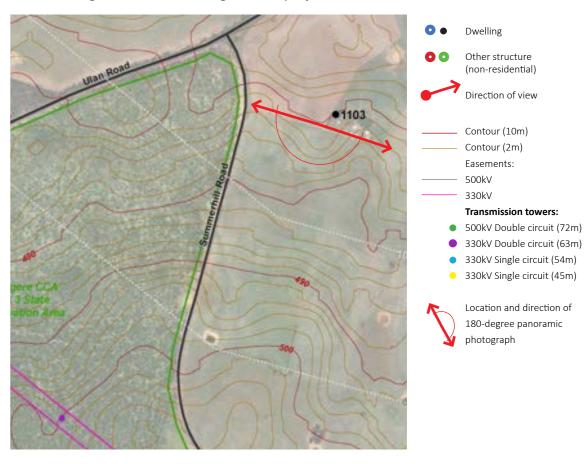
the view.

### Visual impact level

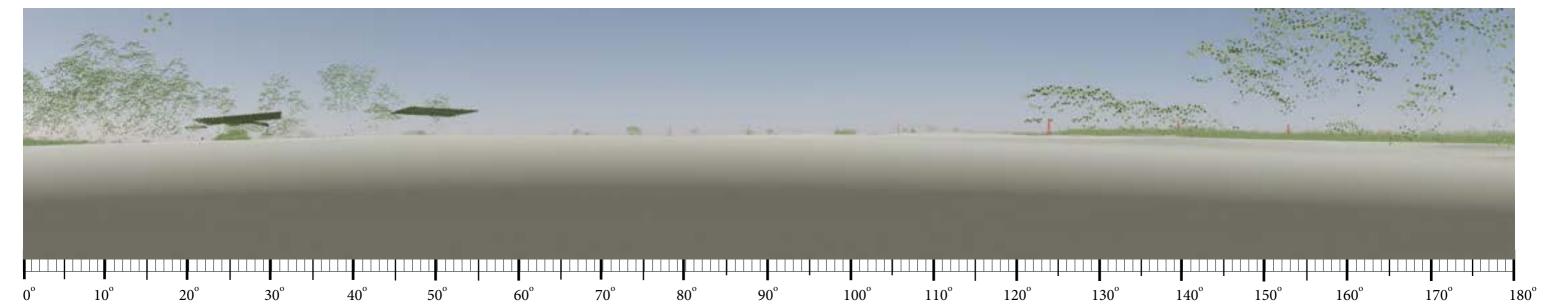
#### **NEGLIGIBLE**

#### Detailed aerial showing dwelling orientation

#### Plan showing location of dwelling and the project



#### 3D modelled view







# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 1103

Detailed visual assessment Summerhill Road, Turill

**MODERATE** 

Visual sensitivity

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area. MODERATE - View across a landscape with undulating landform, blocks of vegetation in the distance, existing glimpses to scattered sheds and farm buildings. This view has scenic quality values of predominantly of moderate to low scenic quality.

Magnitude of change

LOW

Open view across fields with some undulating landform scattered vegetation intervening and partly screening views to the project. Single 330kv transission line with the nearest tower about 945 metres from this dwelling.

Visual impact level

LOW

## 1159

Detailed visual assessment Golden Highway, Cassilis

Visual sensitivity

ivity LOW

Viewpoint sensitivity: Scenic quality: LOW - Secondary view from dwelling in a rural area LOW - View across a landscape with undulating landform, blocks of vegetation, existing glimpses to scattered sheds and farm buildings. This view is assumed to have scenic values of predominantly of low quality. Wth views east and down the valley assumed to be of higher scenic quality.

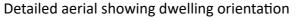
Magnitude of change

IOW

View would be partly obstructed by vegetation to the west of the dwelling and other buildings in the middle ground. Project would be on elevated land to the west of the dwelling. Single 330kv transission line with the nearest tower about 650 metres from this dwelling.

Visual impact level

LOW

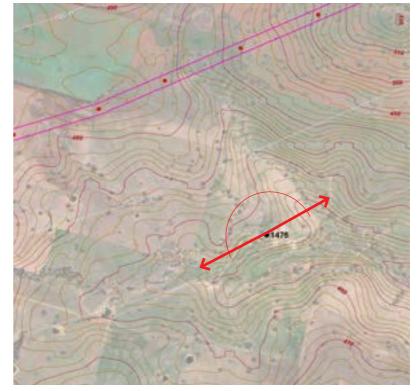




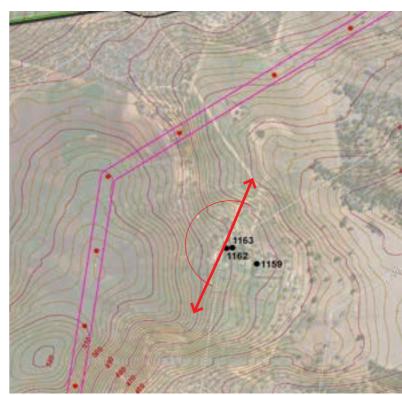
Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



Plan showing location of dwelling and the project







Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 1475 Dwelling no. 1159

(non-residential)

Direction of view

Contour (2m)
Easements:
500kV

Transmission towers

500kV Double circuit (72m)

330kV Double circuit (63m)

330kV Single circuit (54m)330kV Single circuit (45m)

Location and direction of 180-degree panoramic

photograph

#### Detailed aerial showing dwelling orientation

#### Plan showing location of dwelling and the project

# 1163/1162 Detailed visual assessment Golden Highway, Cassilis

Visual sensitivity LOW

Viewpoint sensitivity: Scenic quality: LOW - Secondary view from dwelling in a rural area.

LOW - View enclosed by vegetation and smaller farm buildings and sheds. Surrounding the dwelling there would be a landscape with undulating landform, blocks of vegetation and hills in the distance. This view has scenic quality values of predominantly of low scenic

quality.

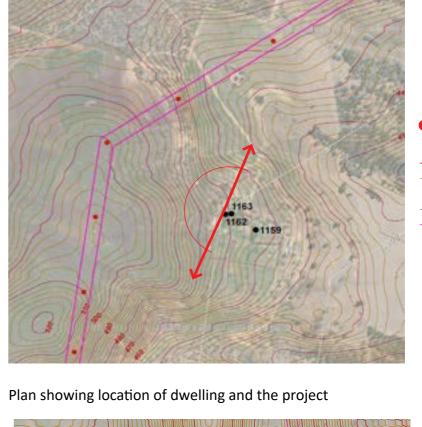
Magnitude of change LOW

View enclosed by vegetation, there are some farm structures and intervening landform that would limit visibility of the project. The project is about 500 metres from this dwelling.

Visual impact level LOW



Detailed aerial showing dwelling orientation





1308

**Detailed visual assessment** 

Coolah Road, Cassilis

Visual sensitivity

MODERATE

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area.

MODERATE - View across a rural valley with undulating landform, blocks of vegetation and hills in the distance.

This view has predominantly moderate to low scenic

quality values.

Magnitude of change L

The project would have some screening by intervening vegetation and landform, and be visble in the middle ground, viewed against the surrounding landscape. The project is about 1.6 kilometres from this dwelling.

Visual impact level LO





## Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 1163/1162 Dwelling no. 1308

(non-residential)

Direction of view

Contour (10m)

Contour (2m)
Easements:
500kV

Transmission towers:

500kV Double circuit (72m)

330kV Double circuit (63m)

330kV Single circuit (54m)330kV Single circuit (45m)

Location and direction of 180-degree panoramic

photograph

# Detailed visual assessment Golden Highway, Cassilis

#### Visual sensitivity

#### LOW

#### Viewpoint sensitivity: Scenic quality:

LOW - Secondary view from dwelling in a rural area. LOW - View across a landscape with undulating landform, blocks of vegetation around the house and in surrunding areas. Existing glimpses to access roads, scattered sheds and farm buildings. This view has predominantly low scenic quality values.

#### Magnitude of change

#### e LOW

Single row of 330kV double circuit pole towers, about 180m to nearest tower. Some screening by intervening landform and vegetation surrounding the dwelling and in adjacent fields. The pole tower design would reduce the visual prominence of the towers. There would be lines visible extending across part of the view, in the middle ground. Overall, the project would be not prominent and would result in a slight change in the amenity of the

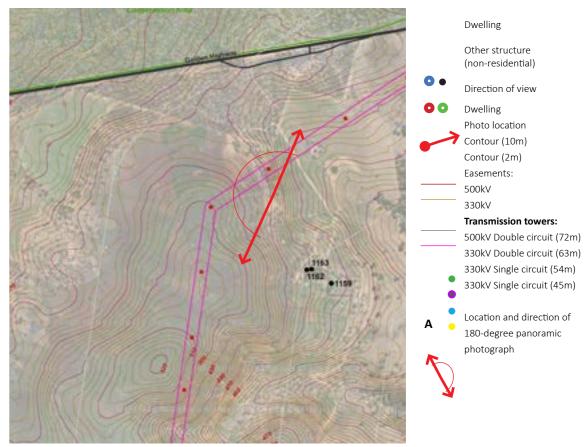
#### Visual impact level

#### LOW

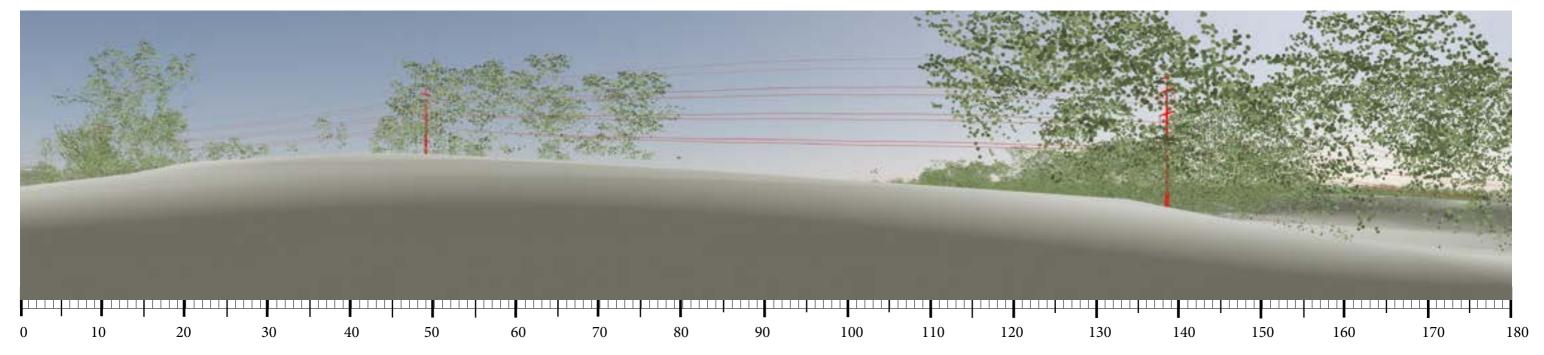
#### Detailed aerial showing dwelling orientation



#### Plan showing location of dwelling and the project



#### 3D modelled view







# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 1480

Detailed aerial showing dwelling orientation

Plan showing location of dwelling and the project

**Detailed visual assessment** 1351 Rotherwood Road, Cassilis

Visual sensitivity LOW

Viewpoint sensitivity: Scenic quality:

LOW - Secondary view from dwelling in a rural area. LOW - View enclosed by mature gardens. This view has scenic quality values predominantly of low scenic quality

Single row of 330kV single circuit lattice towers, about 200m to nearest tower, towers may be glimpsed by mostly screened by vegetation. Overall, the project would not be prominent and there would be no perceived change in the amenity of the view.

Visual impact level NEGLIGIBLE

(VIew B). Magnitude of change NEGLIGIBLE

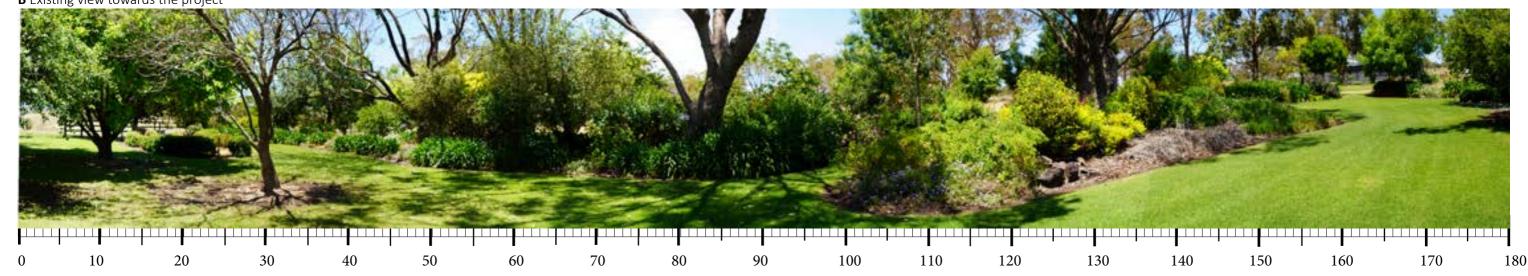


(non-residential) Contour (10m) Contour (2m) Easements: 500kV Transmission towers: 500kV Double circuit (72m) 330kV Double circuit (63m) 330kV Single circuit (54m) 330kV Single circuit (45m) Location and direction of

A Existing view northeast from the dwelling



**B** Existing view towards the project







Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 1351

#### **Detailed visual assessment** 741 Castlereagh Highway, Tallawang

#### Visual sensitivity

**MODERATE** 

Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in a rural area.

MODERATE - View across a landscape with undulating landform, scattered trees, and distant hills. The view includes the Castlereagh Highway in the middle ground, some local power lines, rural sheds and dwellings. This view has scenic quality values of predominantly of low to moderate scenic quality.

#### Magnitude of change

#### HIGH

Twin 500kV double circuit lattice towers, one row of 330kV double circircuit lattice towers, one row of 330kV single circiuit lattice towers, some 330kV and a switching station at a distance of about 500 metres. Visible crossing the Castlereagh Highway in the middle ground and extending away from the viewer.

Multiple towers would be visible clustered together and diverging as the lines extend to the northwest and south. The project would occupy a horizontal field of view of about 120 degrees with some intermittent screening by lower level trees to the east of the highway. The towers would be visible rising prominently above the surrounding vegetation horizon.

Overall, the project would be visually dominant not compatible with the character of the view. The project would result in a substantial change in the amenity of the view.

#### Visual impact level

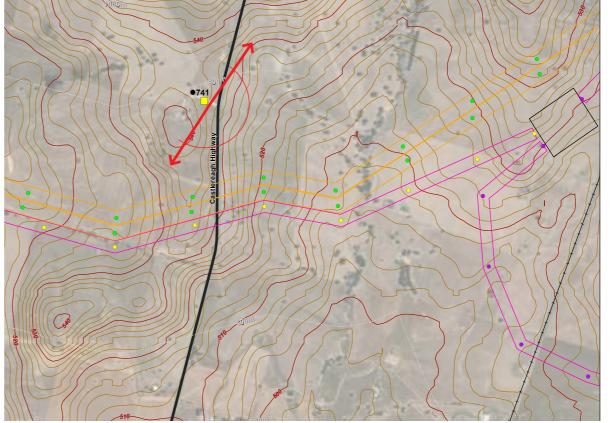
#### HIGH



Photo showing dwelling aspect



Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



Other structure (non-residential)







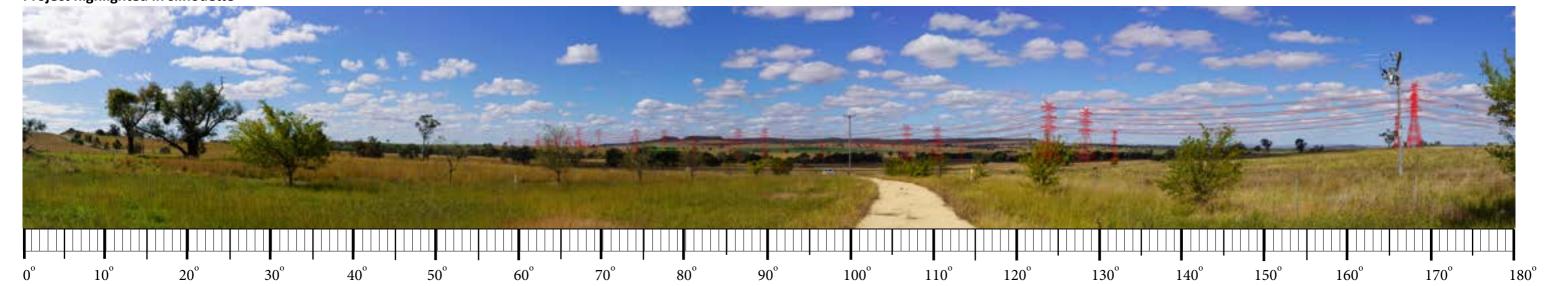
#### Existing panoramic view towards the project



### Panoramic photomontage



#### Project highlighted in silhouette



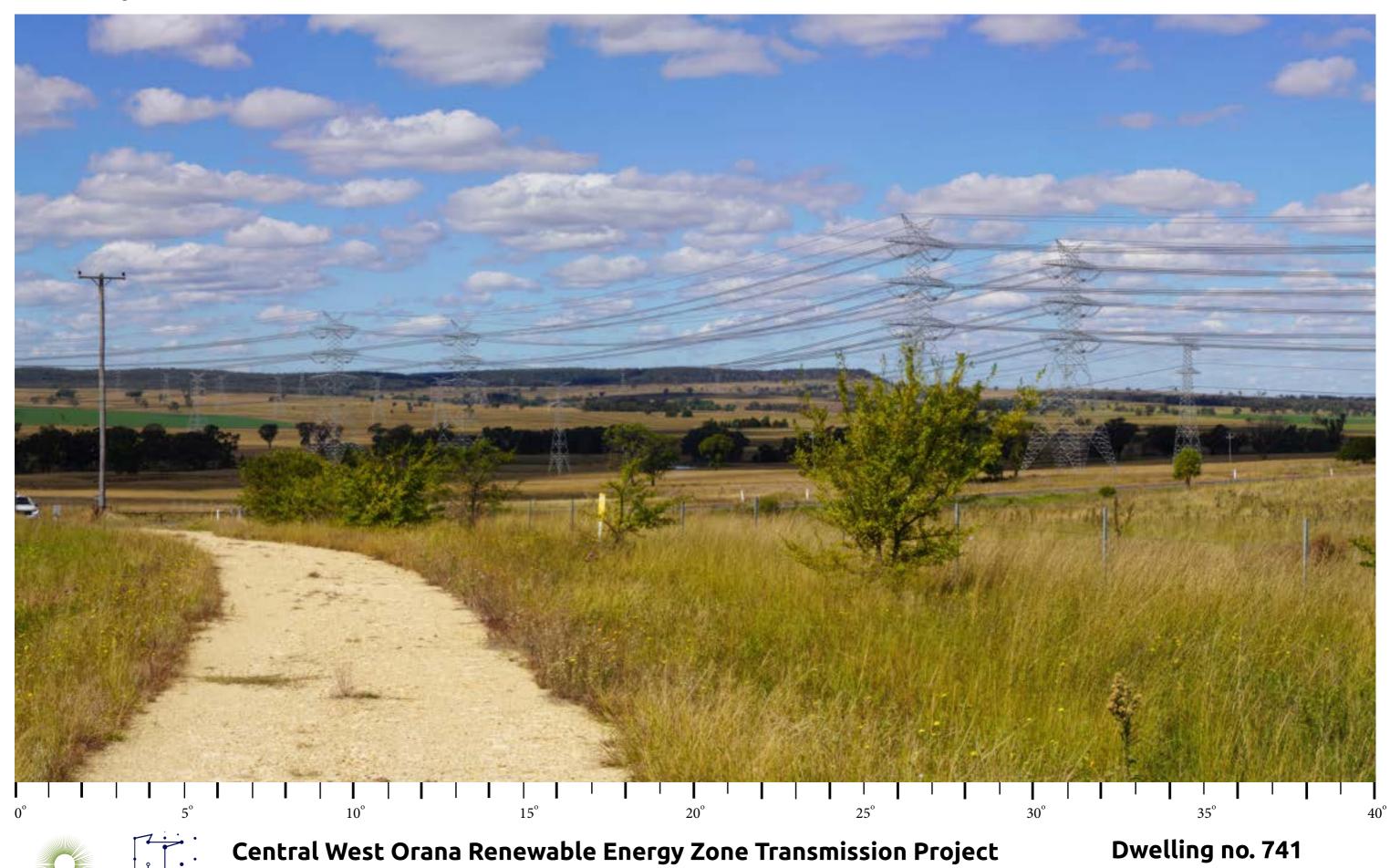




# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 741

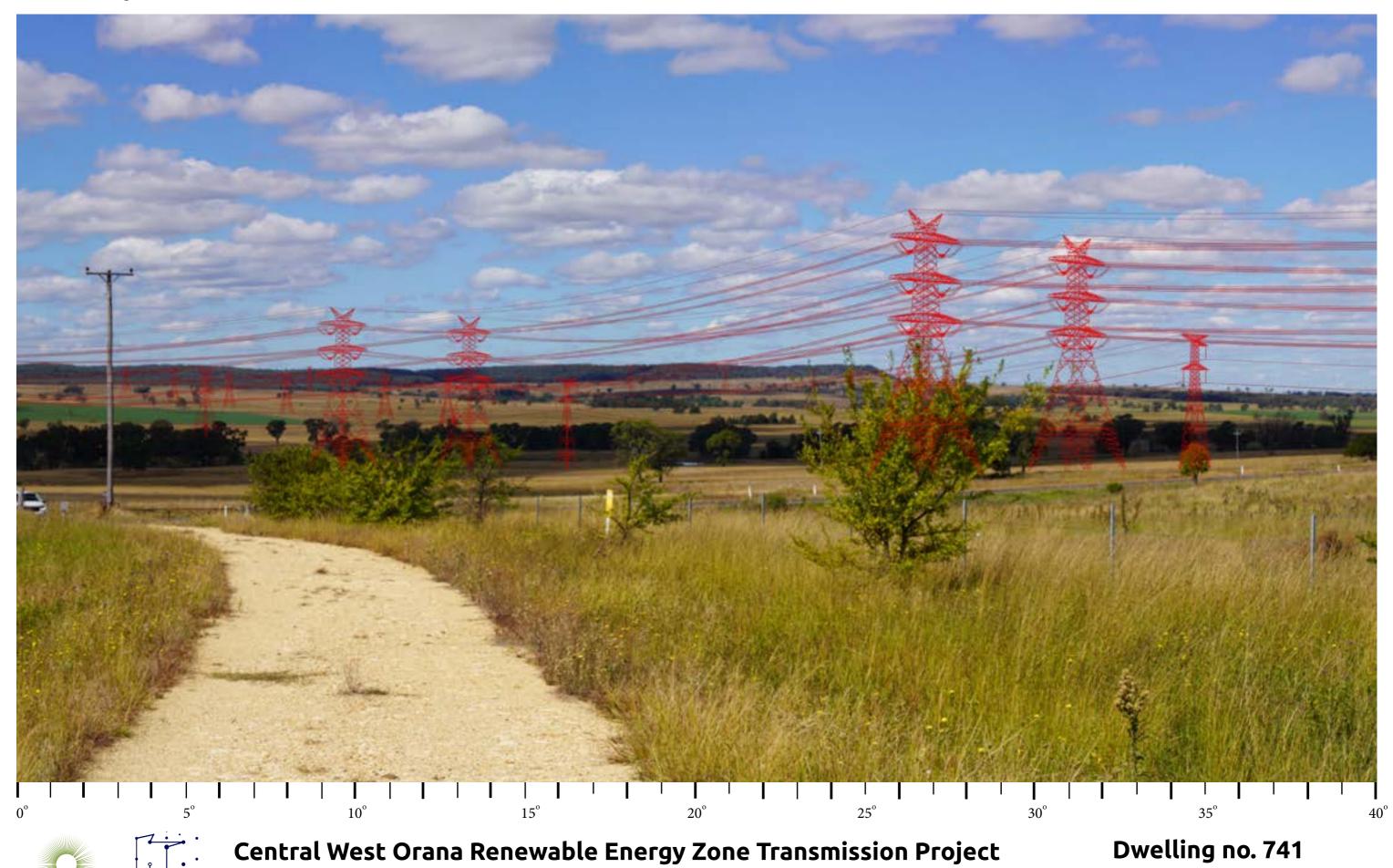
MODATA.



Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Photomontage detail

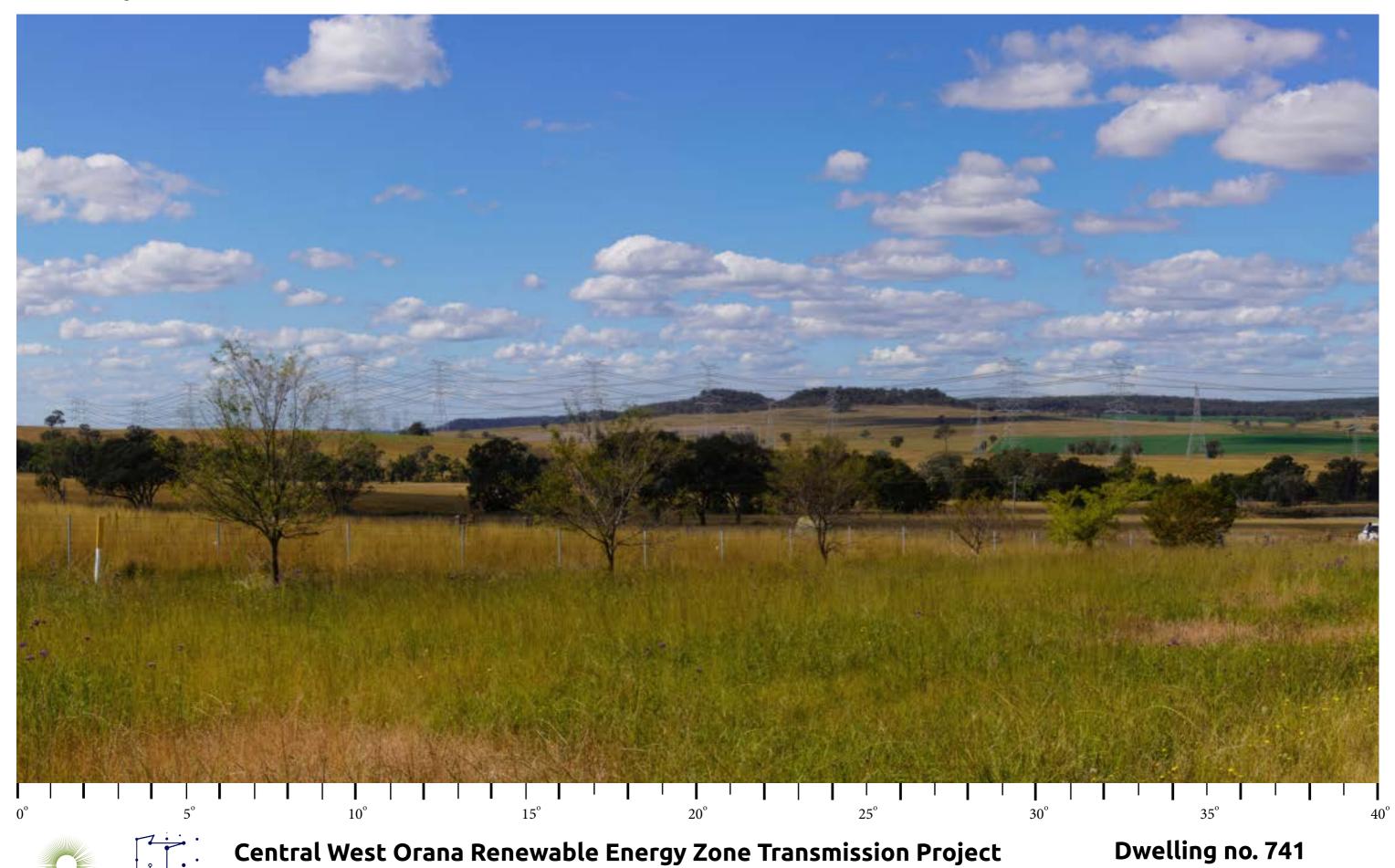
MODATA.



Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Silhouette detail

MODATA.



Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Page 88

Photomontage detail

#### Detailed visual assessment Castlereagh Highway, Tallawang

#### Visual sensitivity

#### MODERATE

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area. MODERATE - View across a rural valley with undulating landform, blocks of vegetation and hills in the distance. This view has predominantly moderate to low scenic quality values.

#### Magnitude of change

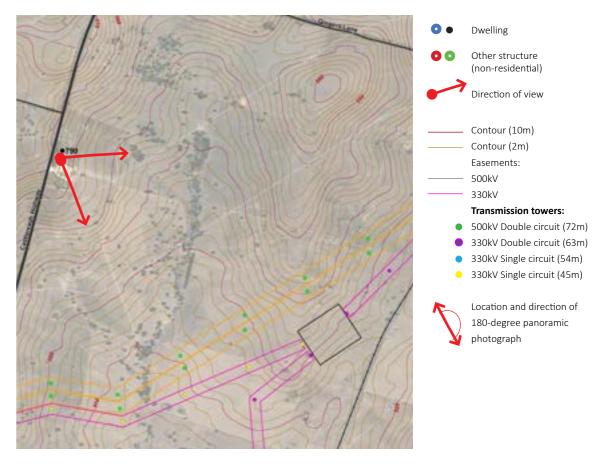
### MODERATE

Many towers of different heights and shapes, including both 500kV and 330kV towers, together with a switching station would be located in the middle and background of this view. From this angle, towers would be visible overlapping, lines would be converging and diverging, creating visual clutter. The switching station, however, would be partly obstructed by intervening landform and only slightly visible above the landform. The towers, would be seen rising above the landform in some areas. While there is vegetation surrounding this dwelling, limiting the view, where the project is visible through the intervening vegetation, it would contrast with the amenity of this view.

#### Detailed aerial showing dwelling orientation



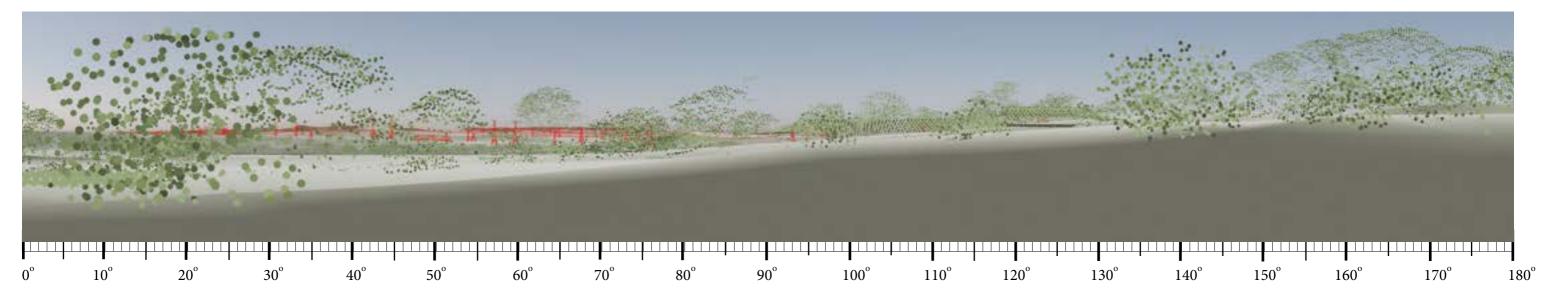
#### Plan showing location of dwelling and the project



#### Visual impact level

#### evel MODERATE

#### 3D modelled view

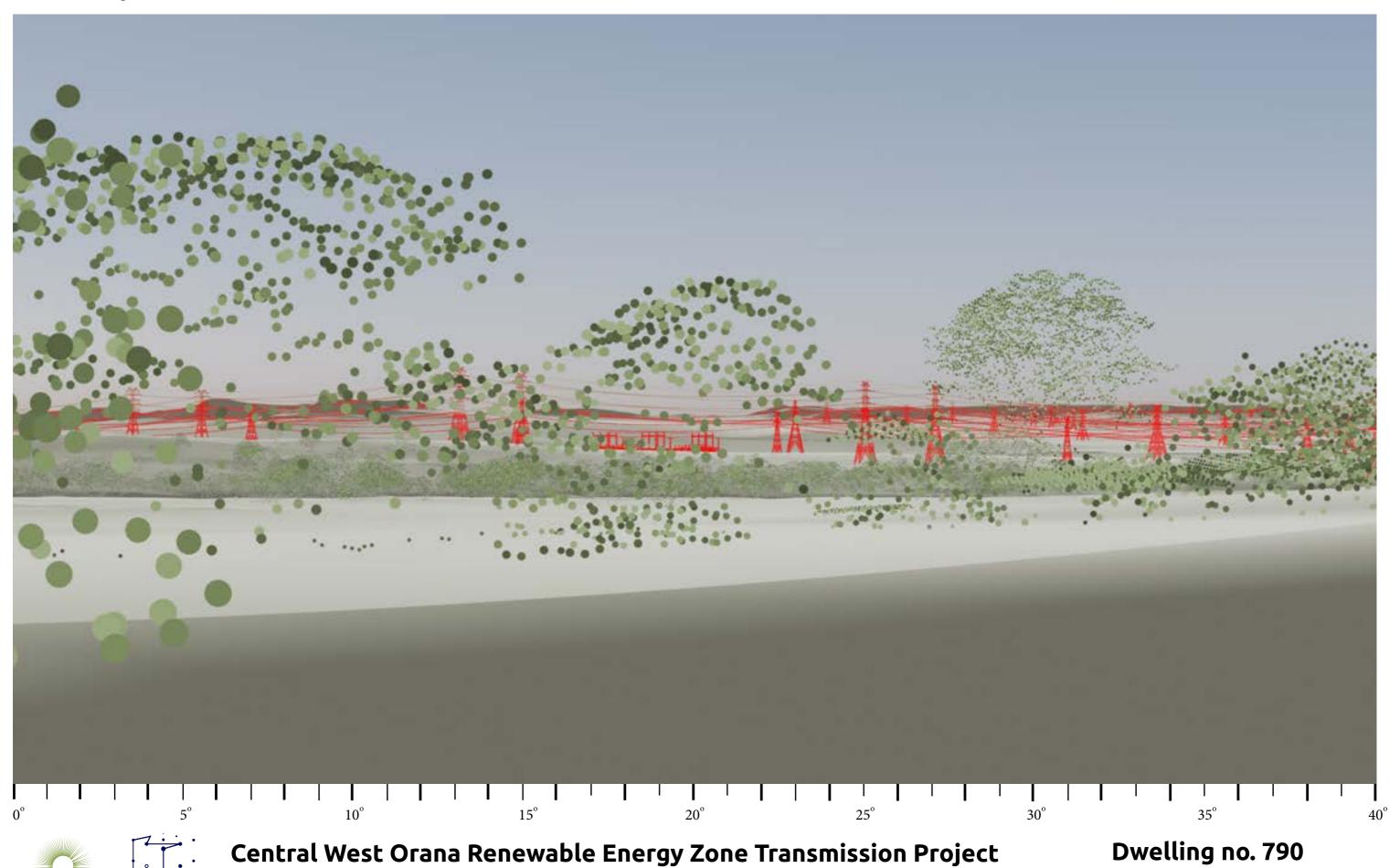






# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 790



Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

3D modelled view detail

#### **Detailed visual assessment** Castlereagh Highway, Tallawang

#### Visual sensitivity

#### **MODERATE**

#### Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in a rural

MODERATE - View across a rural valley with undulating landform, blocks of vegetation and hills in the distance. This view has predominantly moderate to low scenic quality values.

#### Magnitude of change

#### HIGH

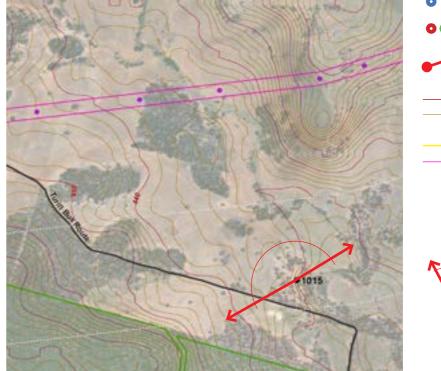
Many towers of different heights and shapes would visible, including both 500kV and 330kV towers, together with a switching station in the middle and background of this view. From this angle, towers would be visible overlapping, lines would be converging and diverging, creating visual clutter. The switching station, however, would be partly obstructed by intervening landform and only slightly visible above the landform. The towers, would be seen rising above the landform in some areas. (refer to 3D modelled view prepared for dwelling 790) As there is limited vegetation surrounding this dwelling, the project would be visually prominent and not compatible with the character of the view. The project would result in a substantial change in the amenity of the view.

#### Visual impact level

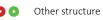
#### HIGH

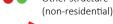
#### Detailed aerial showing dwelling orientation

#### Plan showing location of dwelling and the project











Contour (10m) Contour (2m) Easements:

500kV

#### Transmission towers:

- 500kV Double circuit (72m)
- 330kV Double circuit (63m) 330kV Single circuit (54m)
- 330kV Single circuit (45m)



Location and direction of 180-degree panoramic photograph





Dwelling no. 775

## 663/659

# **Detailed visual assessment**Castlereagh Highway, Tallawang

#### Visual sensitivity

#### **MODERATE**

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area.

MODERATE - View across a rural valley with undulating landform, blocks of vegetation and the hills of Barneys Reef in the distance. This view has predominantly moderate tp low scenic quality values.

#### Magnitude of change

#### HIGH

Many towers of different heights and shapes would visible, including both 500kV and 330kV towers, and a switching station in the middle and background of this view. The project would extend across most of this view and from this angle, towers would be visible overlapping, lines would be converging and diverging, creating visual clutter. The switching station, however, would be partly obstructed by intervening landform and only slightly visible above the landform. The towers, would be seen rising above the landform, including above Barneys Reef, which is a local visual landmark. While the project would be 1-1.5km from the project, due to the complexity and extent visible, the project would be prominent and not compatible with the character of the view.

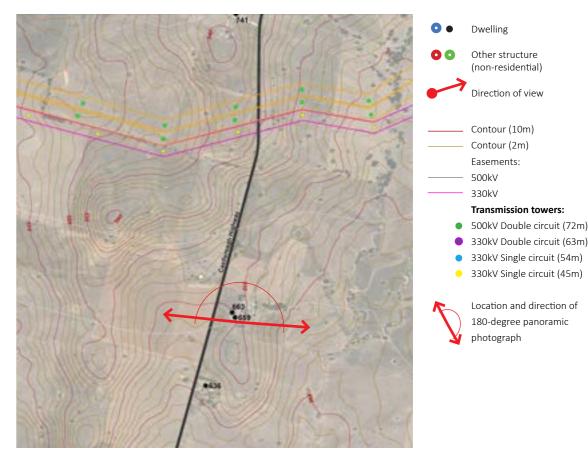
#### Visual impact level HIGH

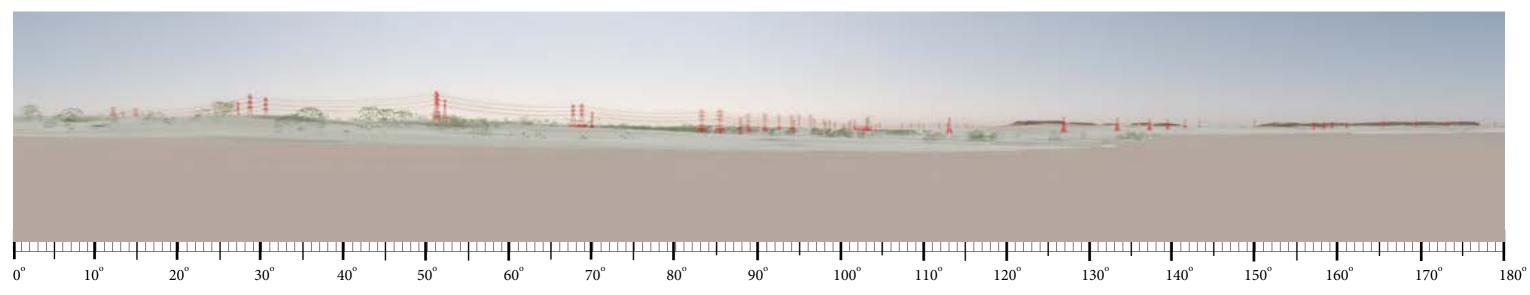
#### 3D modelled view

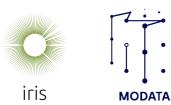
Detailed aerial showing dwelling orientation



#### Plan showing location of dwelling and the project



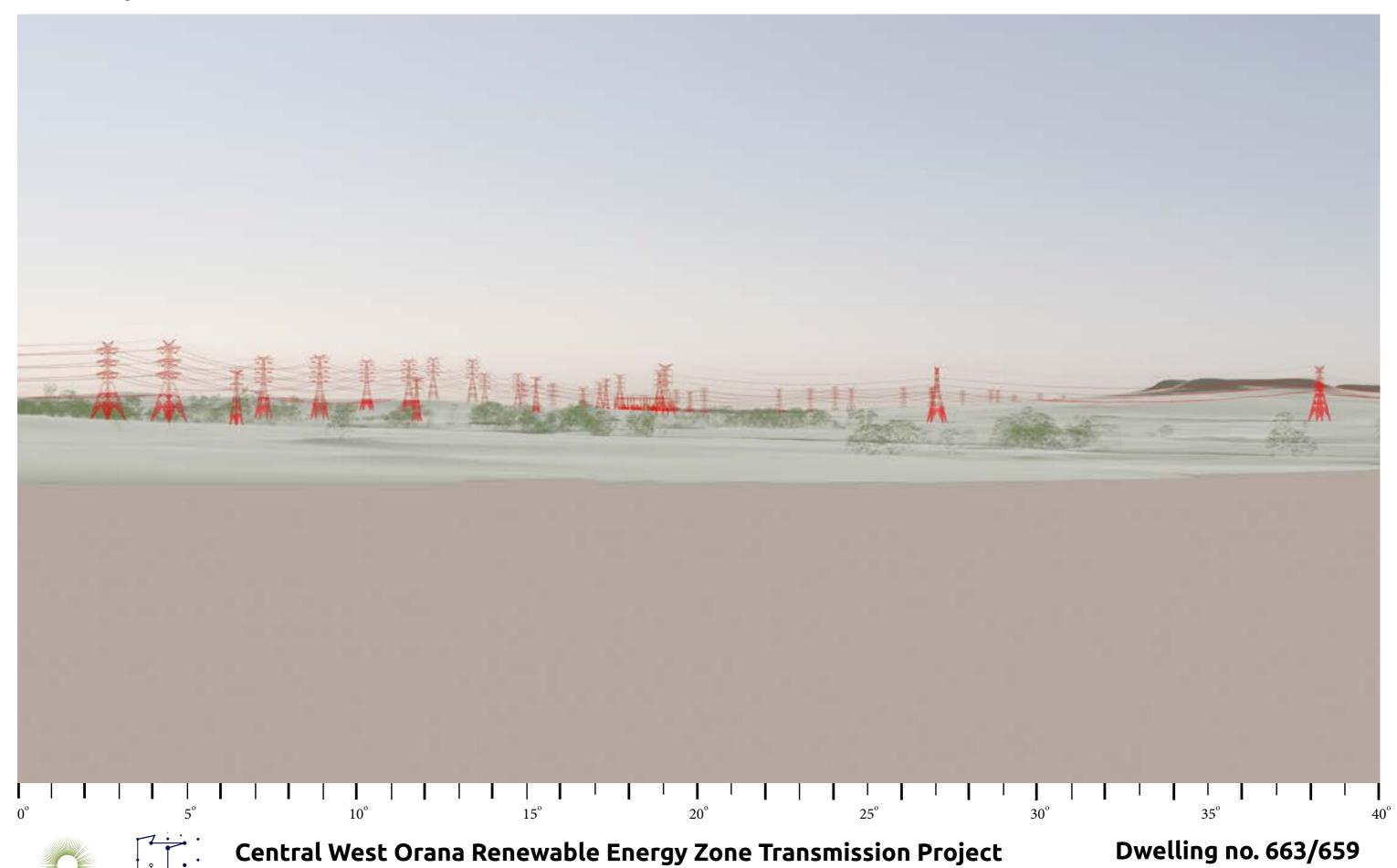




## Central West Orana Renewable Energy Zone Transmission Project

**Dwelling no. 663/659** 

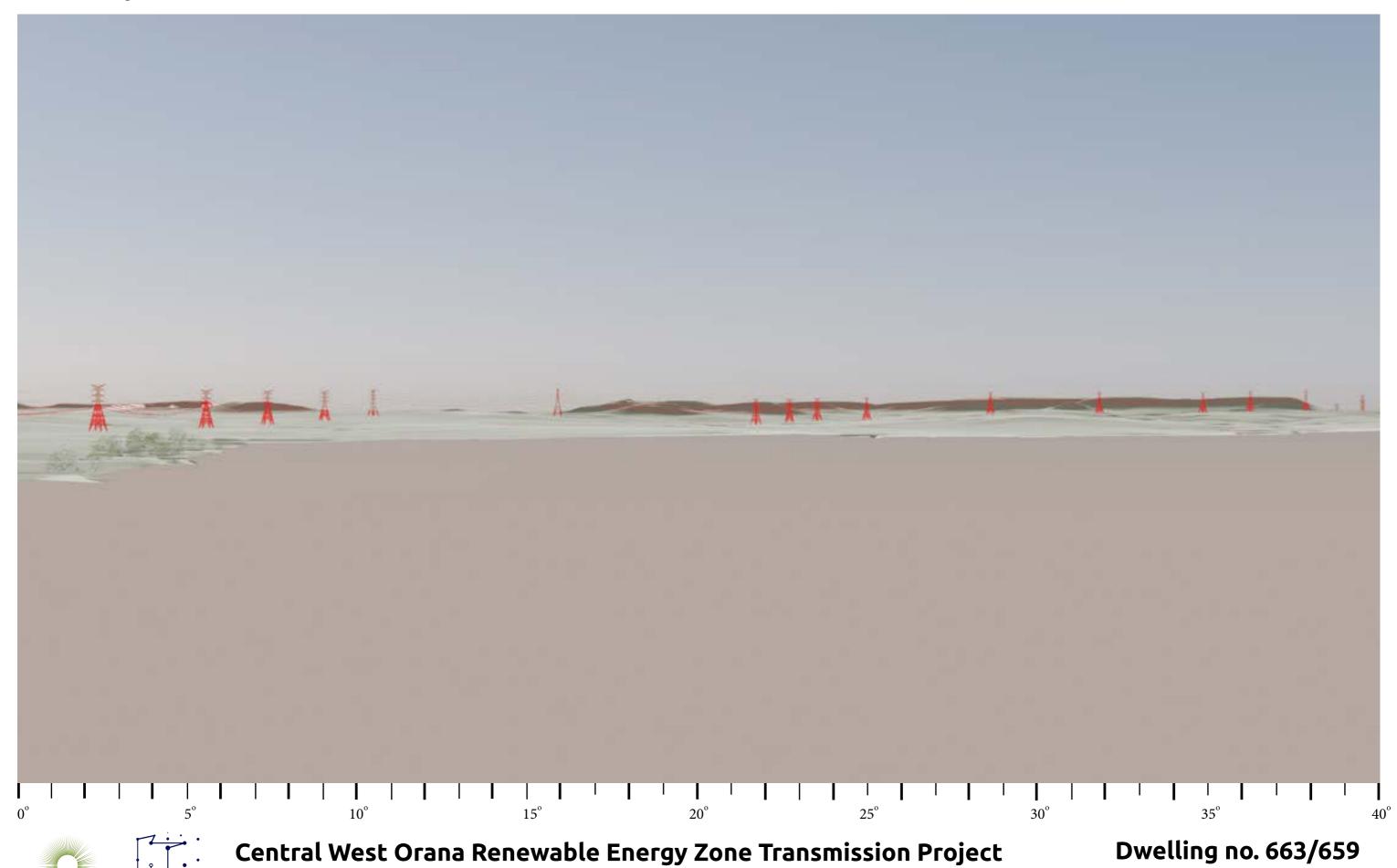
MODATA.



Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

3D modelled view detail

MODATA.



Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

3D modelled view detail

Detailed visual assessment Castlereagh Highway, Tallawang

Detailed aerial showing dwelling orientation

Plan showing location of dwelling and the project

**Visual sensitivity** 

MODERATE

HIGH

HIGH

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area. MODERATE - View across a rural valley with undulating landform, blocks of vegetation and hills in the distance. This view has predominantly moderate to low scenic quality values.

#### Magnitude of change

Many towers of different heights and shapes would visible, including both 500kV and 330kV towers, together with a switching station in the middle and background of this view. From this angle, towers would be visible overlapping, lines would be converging and diverging, creating visual clutter. The switching station, however, would be partly obstructed by intervening landform and only slightly visible above the landform. The towers, would be seen rising above the landform in some areas (refer to 3D modelled view prepared for dwelling 663/659).

Visual impact level

Detailed visual assessment
Castlereagh Highway, Tallawang

Visual sensitivity MODERATE

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in rural area.

MODERATE - View across a rural valley with undulating landform, blocks of vegetation and hills in the distance.

Existing glimpses to Castlereagh Highway, scattered sheds and farm buildings. This view has scenic quality values of predominantly of low to moderate scenic quality.

#### Magnitude of change MODERATE

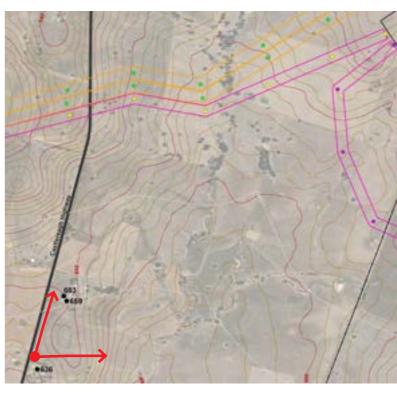
Twin 500kv and 330kV double circuit lattice towers. About 1.3km to nearest tower. Vegetation to the north of dwelling would reduce views to the surrounding landscape. Towers would be visible in the background of the view.

Visual impact level MODERATE



Detailed aerial showing dwelling orientation











Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 672

Dwelling

Other structure (non-residential)

Direction of view

Contour (10m) Contour (2m)

Transmission towers:

500kV Double circuit (72m)

330kV Double circuit (63m)330kV Single circuit (54m)

330kV Single circuit (45m)

Location and direction of

180-degree panoramic

photograph

Easements: 500kV

Dwelling no. 636

# Detailed visual assessment

Tucklan Road, Dunedoo

#### Visual sensitivity MODERATE

Viewpoint sensitivity: Scenic quality:

**772** 

MODERATE - Primary view from dwelling in a rural area. LOW - View enclosed by gardens with glimpses to surrounding undulating landform, blocks of vegetation in the distance, existing glimpses to local roads and scattered sheds and farm buildings. This view has scenic quality values of predominantly low scenic quality.

#### Magnitude of change

## NEGLIGIBLE

Twin 500kV double circuit lattice towers, one row of 330kV double circircuit lattice towers, and a switching station at a distance of about 950 metres but out of view due to intervening vegeation and landform. Overall, the project would not be visually prominent and there would be no perceived change in the amenity of the view.

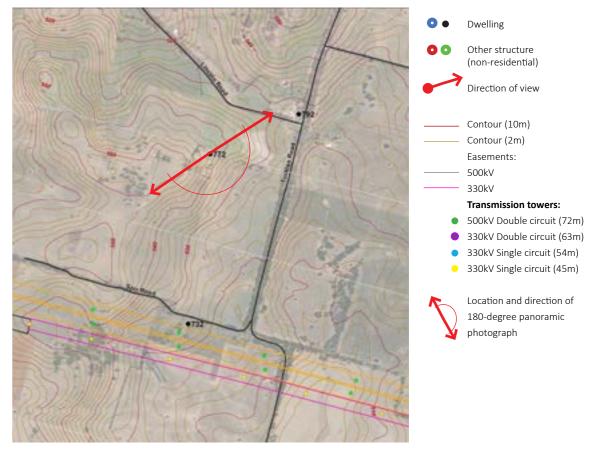
#### Visual impact level

#### **NEGLIGIBLE**

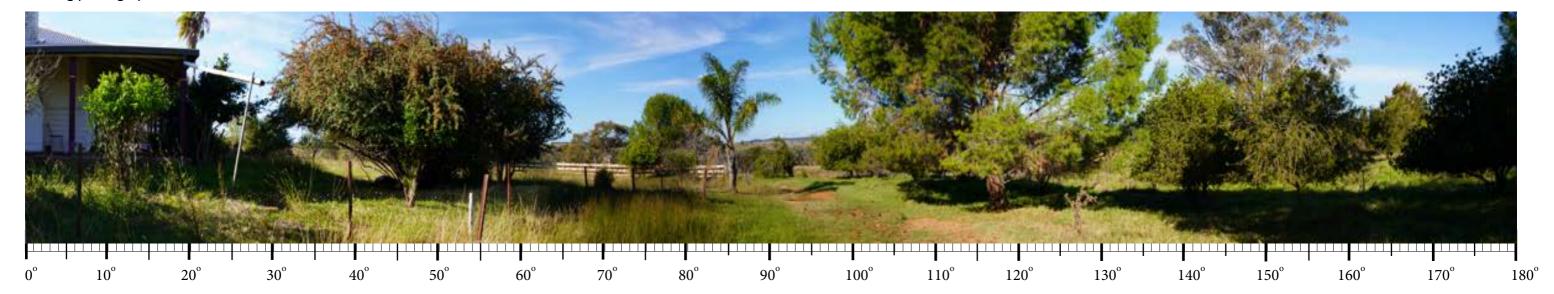
#### Detailed aerial showing dwelling orientation



#### Plan showing location of dwelling and the project



#### Existing photograph







## Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 772

789 Detailed visual assessment Laheys Creek Road, Dunedoo

LOW

Visual sensitivity MODERATE

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in rural area. MODERATE - View across a landscape with undulating to hilly landform. Blocks of vegetation and vegetated hills, existing glimpses to scattered sheds and farm buildings. This view has scenic quality values of predominantly of moderate to low scenic quality.

Magnitude of change

Twin 500kv double circuit lattice towers, about 1.7km to nearest tower. Would be partly screened by intervening landform and vegetation, and visible in the background of the view.

Visual impact level LOW

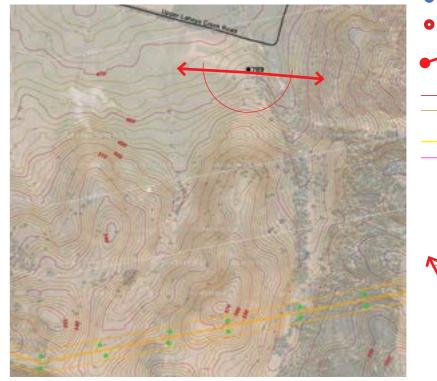
Detailed aerial showing dwelling orientation



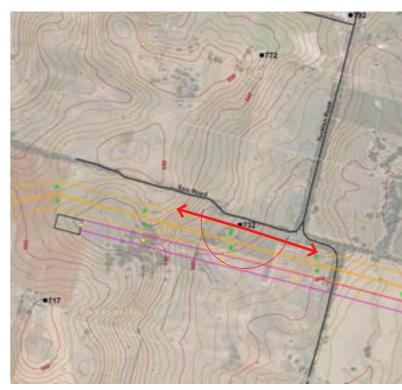
Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



Plan showing location of dwelling and the project



732 Detailed visual assessment Spir Road, Tallawang

Visual sensitivity HIGH

Viewpoint sensitivity:

Scenic quality:

HIGH - View from local heritage listed dwelling in a rural area (not occupied).

MODERATE - View across a landscape with flat to undulating landform, scattered vegetation, existing glimpses to roads, dwellings, scattered sheds and farm buildings. This view has scenic quality values of predominantly of moderate to low scenic quality.

Magnitude of change

HIGH

Twin 500kv double circuit lattice towers, 330kV single circuit towers and switching station (in distance). About 50 metres to nearest tower, occupying horizontal field of view of about 180 degrees. Some minor screening by garden vegetation.

Visual impact level HIGH





Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 789

Other structure (non-residential)

Direction of view

Contour (10m)

Transmission towers:

500kV Double circuit (72m)330kV Double circuit (63m)

330kV Single circuit (54m)

330kV Single circuit (45m)

Location and direction of 180-degree panoramic

photograph

Contour (2m)

Easements:

500kV

Dwelling no. 732

#### **Detailed visual assessment**

**Tucklan Road, Tallawang** 

#### Visual sensitivity

#### **MODERATE**

#### Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in a rural area. LOW - View would be enclosed by gardens with glimpses to surrounding undulating landform, blocks of vegetation in the distance, existing glimpses to local roads and scattered sheds and farm buildings. This view has scenic quality values of predominantly low scenic

#### quality.

#### Magnitude of change NEGLIGIBLE

Twin 500kV double circuit lattice towers and one row of 330kV double circircuit lattice towers at a distance of about 1.3 kilometres. Intervening vegetation and landform would screen the project .Overall, the project would not be visually prominent and there would be no perceived change in the amenity of the view.

#### Visual impact level

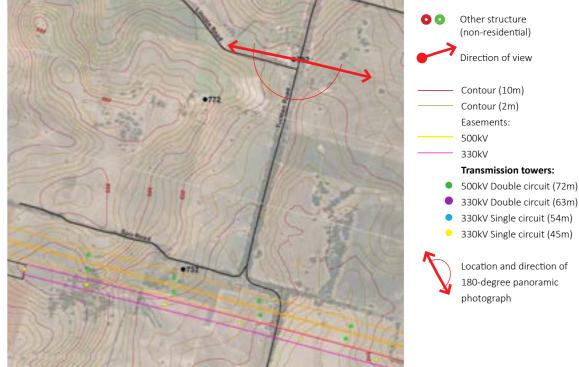
#### **NEGLIGIBLE**

#### Detailed aerial showing dwelling orientation



Detailed aerial showing dwelling orientation

#### Plan showing location of dwelling and the project



Plan showing location of dwelling and the project





Dwelling no. 792

Dwelling

**Detailed visual assessment** 

Spir Road, Tallawang

#### **Visual sensitivity**

MODERATE

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area.

MODERATE - View across a landscape with undulating landform, scattered trees, and distant hills. The view includes local access tracks, local power lines, rural sheds and dwellings. This view has scenic quality values of predominantly of moderate to low scenic quality.

#### Magnitude of change

#### HIGH

Twin 500kV double circuit lattice towers, one row of 330kV double circircuit lattice towers, and a switching station at a distance of about 350 metres. The project would occupy a horizontal field of view of about 180 degrees with some intermittent screening by vegetation in the garden.

There would be many large scale towers visible, rising prominently above the surrounding vegetation horizon. The lines would extend across the view, with towers seen in the middle and background and overlapping.

Overall, the project would be visually dominant and not compatible with the character of the view. The project would result in a substantial change in the amenity of the view.

#### Visual impact level

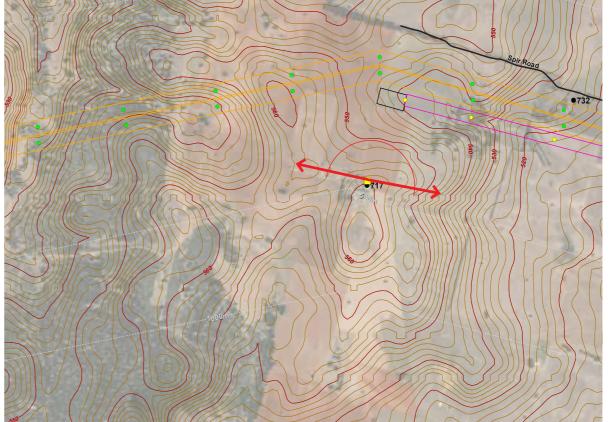
#### HIGH



Photo showing dwelling aspect



Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



Dwelling no. 717

(non-residential)

Contour (2m) Easements:

Transmission towers:

500kV Double circuit (72m)

330kV Double circuit (63m)

330kV Single circuit (54m)

330kV Single circuit (45m)

Location and direction of 180-degree panoramic

photograph

330kV

iris

**MODATA** 

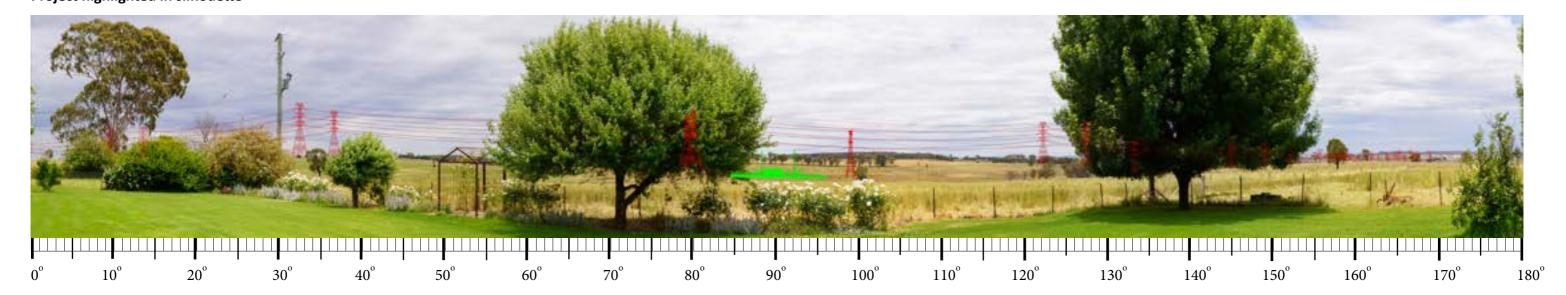
#### Existing panoramic view towards the project



### Panoramic photomontage



### Project highlighted in silhouette





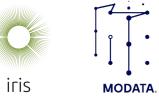


# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 717

### 50mm focal length





# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 717

Photomontage detail

MODATA.



Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

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Photomontage detail

**Detailed visual assessment** 

Spir Road, Tallawang

**Visual sensitivity** 

MODERATE

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area. MODERATE - View across a landscape with undulating landform, scattered trees, and distant hills. The view includes local access tracks, local power lines, rural sheds and dwellings. This view has scenic quality values of predominantly moderate to low scenic quality.

Magnitude of change

MODERATE

Twin 500kV double circuit lattice towers about 530 metres away, and potentially glimpses to an additional row of 330kV double circuit lattice towers and a switching station at a distance of about 900 metres. There would be some intermittent screening by vegetation and intervening landform.

Visual impact level

**MODERATE** 

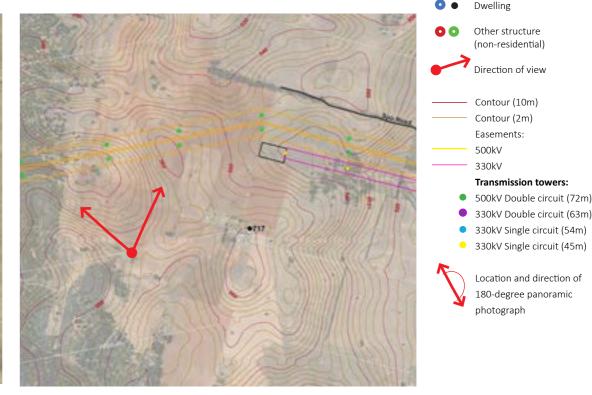
Detailed aerial showing dwelling orientation



Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



Plan showing location of dwelling and the project



543

Detailed visual assessment Whistons Lane, Tallawang

**Visual sensitivity** 

MODERATE

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area.

MODERATE - View across a rural valley with undulating landform, blocks of vegetation and the hills of Barney's Reef in the distance. This view has predominantly moderate to low scenic quality values.

Magnitude of change

LOW

One line of 330kV towers, would be over 1 kilometres from this dwelling. Vegetation surrounding the dwelling, and adjacent fields and intervening landform would partly obstruct the view to the towers. Towers may be visible in the background of this view, rising above the landform.

Visual impact level

LOW





Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 705

# 730 / 733

# **Detailed visual assessment** Laheys Creek Road, Dunedoo

### Visual sensitivity

#### **MODERATE**

Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in a rural area. MODERATE - View across a landscape over undulating landform to vegetated in the distance. This view has scenic quality values of predominantly low to moderate

Twin 500kV double circuit lattice towers, about 420m to nearest tower, occupying horizontal field of view of about 140 degrees. There would be some screening by vegetation in intervening fields.

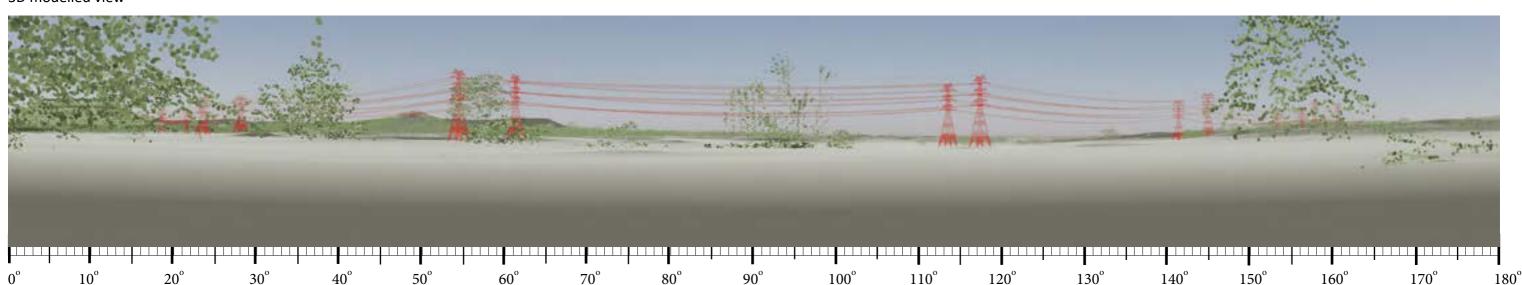
The towers would rise prominently above the surrounding landscape and lines would extend across the view, with towers seen in the middle and background of the view.

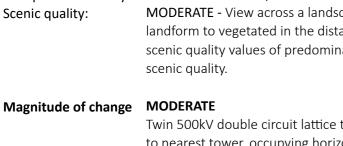
Overall, the project would be somewhat prominent and would not be compatible with the character of the view. The project would result in a noticeable change in the amenity of the view.

#### Visual impact level

### MODERATE

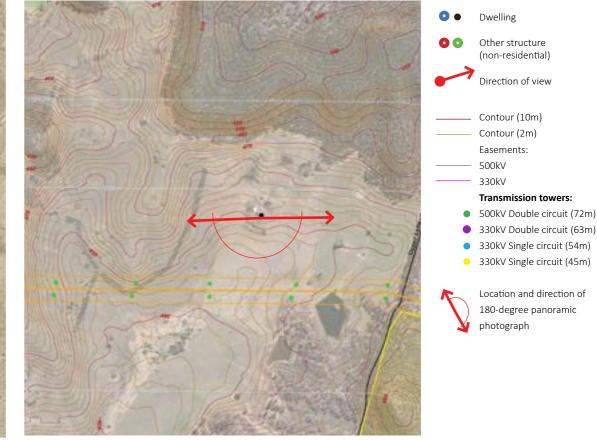
#### 3D modelled view





Detailed aerial showing dwelling orientation

# Plan showing location of dwelling and the project





# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 730 / 733

**Detailed visual assessment** 

Whistons Lane, Tallawang

Visual sensitivity

**MODERATE** 

Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in rural area. **MODERATE** - View across a landscape with undulating to hilly landform. Blocks of vegetation and vegetated hills, existing glimpses to scattered sheds and farm buildings. This view has values of predominantly moderate to low scenic quality.

Magnitude of change

HIGH

Single 330kv double circuit lattice towers, about 90 metres to nearest tower. Would be partly screened by intervening landform and vegetation, and visible in the background of the view.

Visual impact level

HIGH

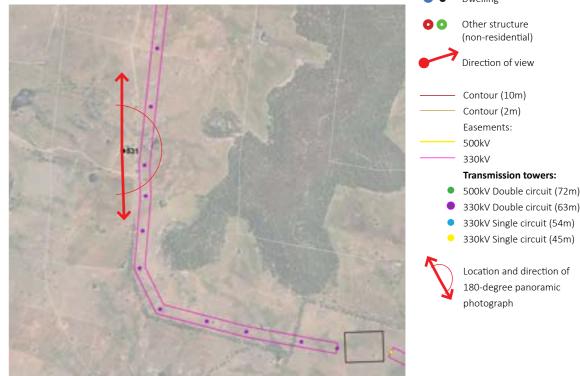
Detailed aerial showing dwelling orientation



Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



Plan showing location of dwelling and the project

487

**Detailed visual assessment** Whistons Lane, Tallawang

Visual sensitivity

LOW

Viewpoint sensitivity: Scenic quality:

LOW - Secondary view from dwelling in rural area. **MODERATE** - View across a landscape with undulating to hilly landform. The vegetated hills of Barney's Reef, a local landmark, can be seen in the background. There are existing glimpses to scattered sheds and farm buildings. This view has scenic quality values of predominantly moderate to low scenic quality.

Magnitude of change

**NEGLIGIBLE** 

Single 330kv single circuit lattice towers, about 1.3 kilometres to nearest tower. Would be mostly screened by intervening landform and vegetation, and unlikely to be visible from the dwelling.

Visual impact level

**NEGLIGIBLE** 





Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 531

Other structure (non-residential)

Direction of view

Contour (10m) Contour (2m)

Transmission towers:

Location and direction of 180-degree panoramic

photograph

Easements:

500kV

**Detailed visual assessment** Castlereagh Highway, Tallawang

Visual sensitivity

**MODERATE** 

Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in rural area. **MODERATE** - View across a landscape with undulating landform, scattered trees and corridors of vegetation along creek corridor, existing glimpses to railway, scattered sheds and farm buildings. This view has scenic quality values of predominantly of low scenic quality.

Magnitude of change

**NEGLIGIBLE** Single row of 330kV single circuit lattice towers, about 1.75 kilometres to the nearest tower, with intervening vegetation and landform. The project would not be

prominent in this view.

Visual impact level

**NEGLIGIBLE** 

385

**Detailed visual assessment Puggoon Road, Tallawang** 

Visual sensitivity

LOW

Viewpoint sensitivity: Scenic quality:

LOW - Secondary view from dwelling in rural area (assumed due to landform).

LOW - View across a landscape with undulating to flat landform, scattered trees and corridors of vegetation along creek corridor, existing glimpses to railway, scattered sheds and farm buildings. This view has scenic quality values of predominantly of low scenic

quality.

Magnitude of change

**MODERATE** 

Single row of 330kV single circuit lattice towers, about 580 metres to the nearest tower, some screening by

intervening vegetation.

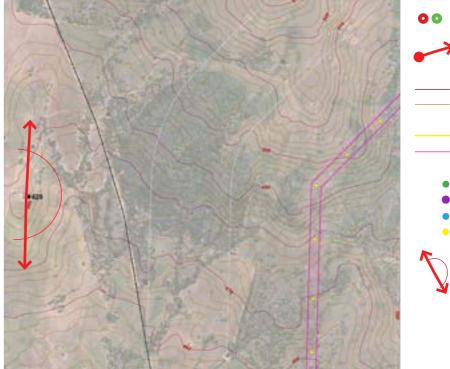
Visual impact level LOW Detailed aerial showing dwelling orientation

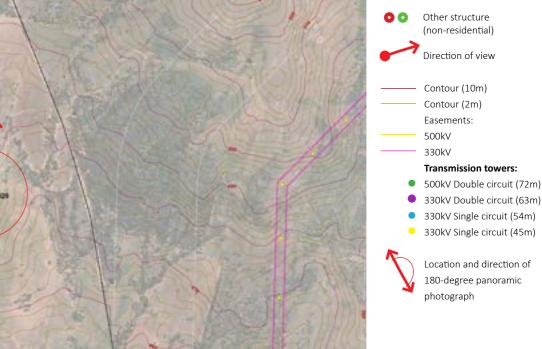


Detailed aerial showing dwelling orientation

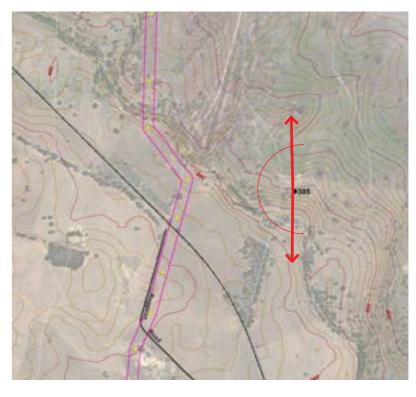


Plan showing location of dwelling and the project





Plan showing location of dwelling and the project







Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 429

# 365 Detailed visual assessment

**Puggoon Road, Tallawang** 

Visual sensitivity LOW

Viewpoint sensitivity: Scenic quality: LOW - Secondary view from dwelling in a rural area. LOW - View across a landscape with undulating to flat landform, blocks of vegetation, existing glimpses to roads, railway, scattered sheds and farm buildings. This view has scenic quality values of predominantly of low scenic quality.

Magnitude of change

LOW

Single row of 330kV single circuit lattice towers, over 1km to nearest tower, some screening by intervening

vegetation.

Visual impact level

354

Visual sensitivity

Scenic quality:

Viewpoint sensitivity:

LOW

LOW

# Detailed visual assessment Puggoon Road, Tallawang Detailed aerial showing dwelling orientation

LOW - Secondary view from dwelling in a rural area. LOW - View across a landscape with undulating to flat landform, blocks of vegetation, existing glimpses to scattered sheds and farm buildings. This view has scenic quality values of predominantly of low scenic

quality.

Magnitude of change MODERATE

Single row of 330kV single circuit lattice towers, over 350m to nearest tower, some screening by intervening

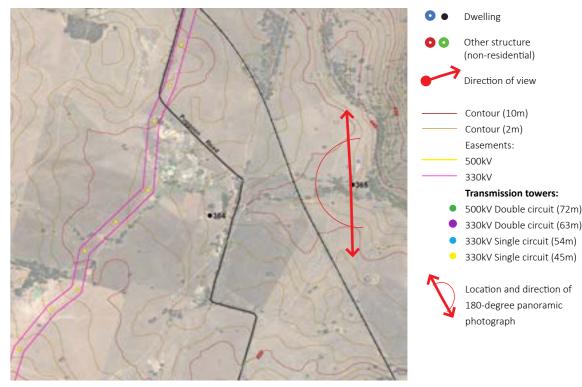
vegetation.

Visual impact level MODERATE

Detailed aerial showing dwelling orientation

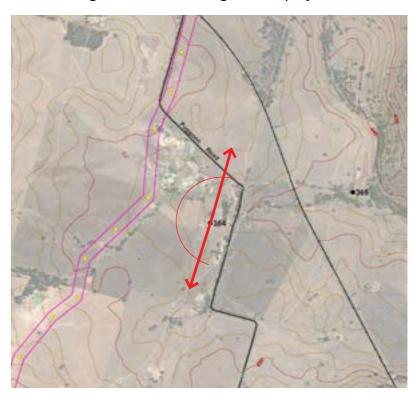


Plan showing location of dwelling and the project



Plan showing location of dwelling and the project









Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 365

611 **Detailed visual assessment** Spring Ridge Road, Dunedoo

Visual sensitivity **MODERATE** 

Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in rural area. . MODERATE - View across a landscape with flat to undulating landform, and surrounding vegetated hills. This view has scenic quality of predominantly of moderate to low value.

Magnitude of change LOW

> Twin 500kV single circuit lattice towers, and Elong Elong Energy hub about 1.1kilometres away. Some intervening vegetation and landform would reduce the visibility of the project. The project may be visible but would not be prominent in this view.

LOW Visual impact level

Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



Other structure (non-residential)

Dwelling

Direction of view

Contour (10m) Contour (2m) Easements: 500kV

Transmission towers:

 500kV Double circuit (72m) 330kV Double circuit (63m)

330kV Single circuit (54m)

330kV Single circuit (45m)

Location and direction of 180-degree panoramic photograph

609 **Detailed visual assessment** Laheys Creek Road, Dunedoo

**Visual sensitivity MODERATE** 

Viewpoint sensitivity: Scenic quality:

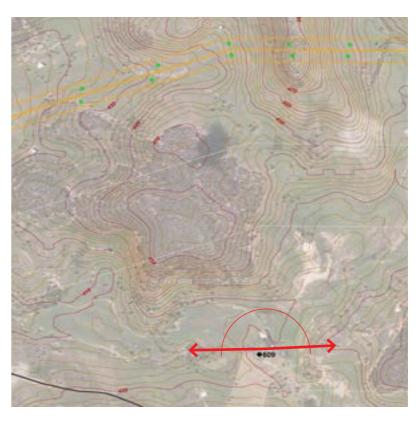
MODERATE - Primary view from dwelling in a rural area. MODERATE - View over undulating landform with some tree cropping providing adjacent to the dwelling, and large blocks of vegetation on surrounding hills.

Magnitude of change LOW

> Twin 500kV double circuit lattice towers, about 1.8 kilometres to nearest tower. Intervening landform and vegetation would limit views to the project. There may be some transmission towers visible in the background, along the valley between the hills. Due to the distance these towers would not be prominent.

Visual impact level LOW









Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 611

#### 719 **Detailed visual assessment**

Spring Ridge Road, Cobbora

### Visual sensitivity

### **MODERATE**

Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in a rural area. (associated with solar farm proposal)

MODERATE - View across a landscape over undulating landform to vegetated in the distance. This view has predominantly characteristics of low to moderate scenic

quality.

# Magnitude of change

### **MODERATE**

Twin 500kV double circuit lattice towers, switching station about 1.2 kilometres to energy hub and most visible towers. There would be some screening by vegetation in intermittent fields. The towers would rise prominently above the surrounding landscape and lines would extend across the view, with towers seen in the background of the view.

Overall, the project would be somewhat prominent and would not be compatible with the character of the view. The project would result in a noticeable change in the

amenity of the view.

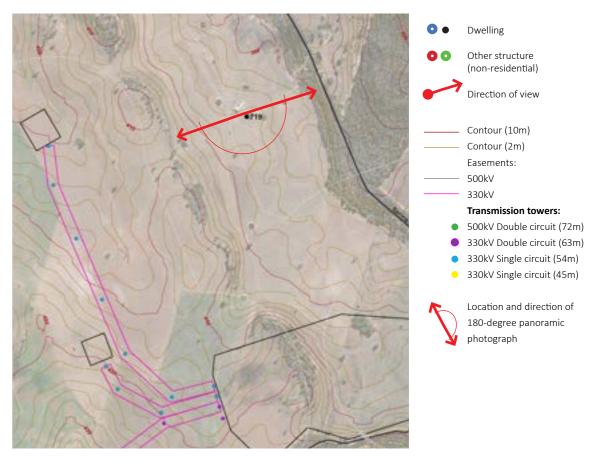
### Visual impact level

#### MODERATE

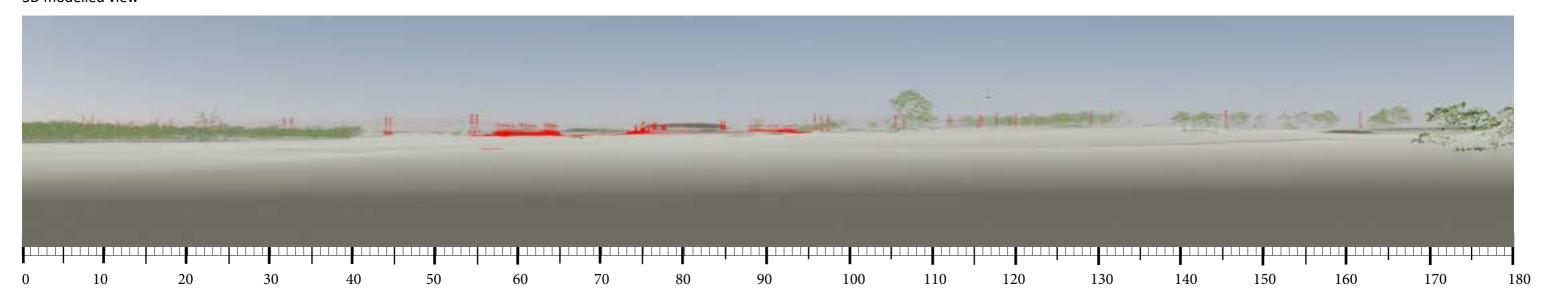
# Detailed aerial showing dwelling orientation



# Plan showing location of dwelling and the project



## 3D modelled view







# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 719

Detailed visual assessment
Dapper Road, Dunedoo

Visual sensitivity MODERATE

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area.

LOW - View across a landscape with undulating landform with scattered trees, and distant hills. The view includes local access tracks, local power poles and telecommunication towers, some rural sheds and farm buildings. This view has scenic quality values of predominantly of moderate to low scenic quality.

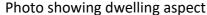
# Magnitude of change HIGH

Single row of 330kV double circuit lattice towers, in close proximity, about 50 metres to project easement, and occupying a horizontal field of view of about 180 degrees. There would be large scale towers visible in the foreground and extending away from the viewer into the background. The alinment changes in direction so that multiple towers would be seen overlapping and causing visual clutter in some areas of the view.

Overall, the project would dominate the view, and result in a substantial change in the amenity of the view.

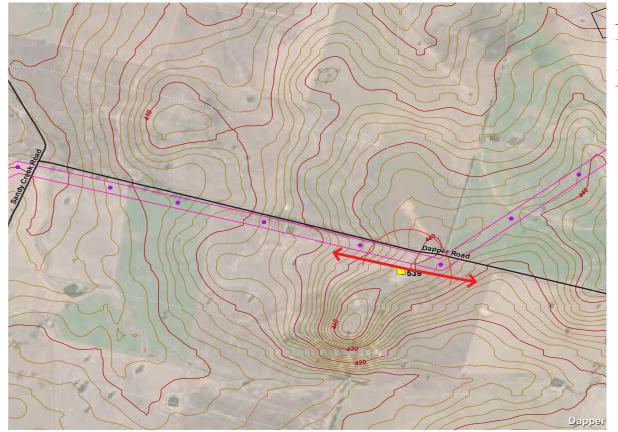
# Visual impact level HIGH







Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project





Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 539

Other structure

Contour (2m)
Easements:
500kV
330kV

Transmission towers:

500kV Double circuit (72m)

330kV Double circuit (63m)

330kV Single circuit (54m)

330kV Single circuit (45m)

Location and direction of 180-degree panoramic

photograph

(non-residential)

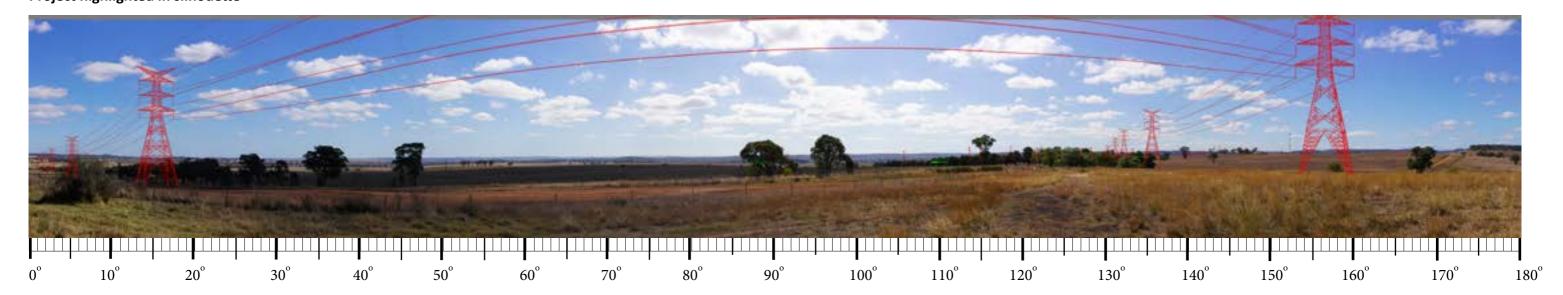
# Existing panoramic view towards the project



# Panoramic photomontage



# Project highlighted in silhouette





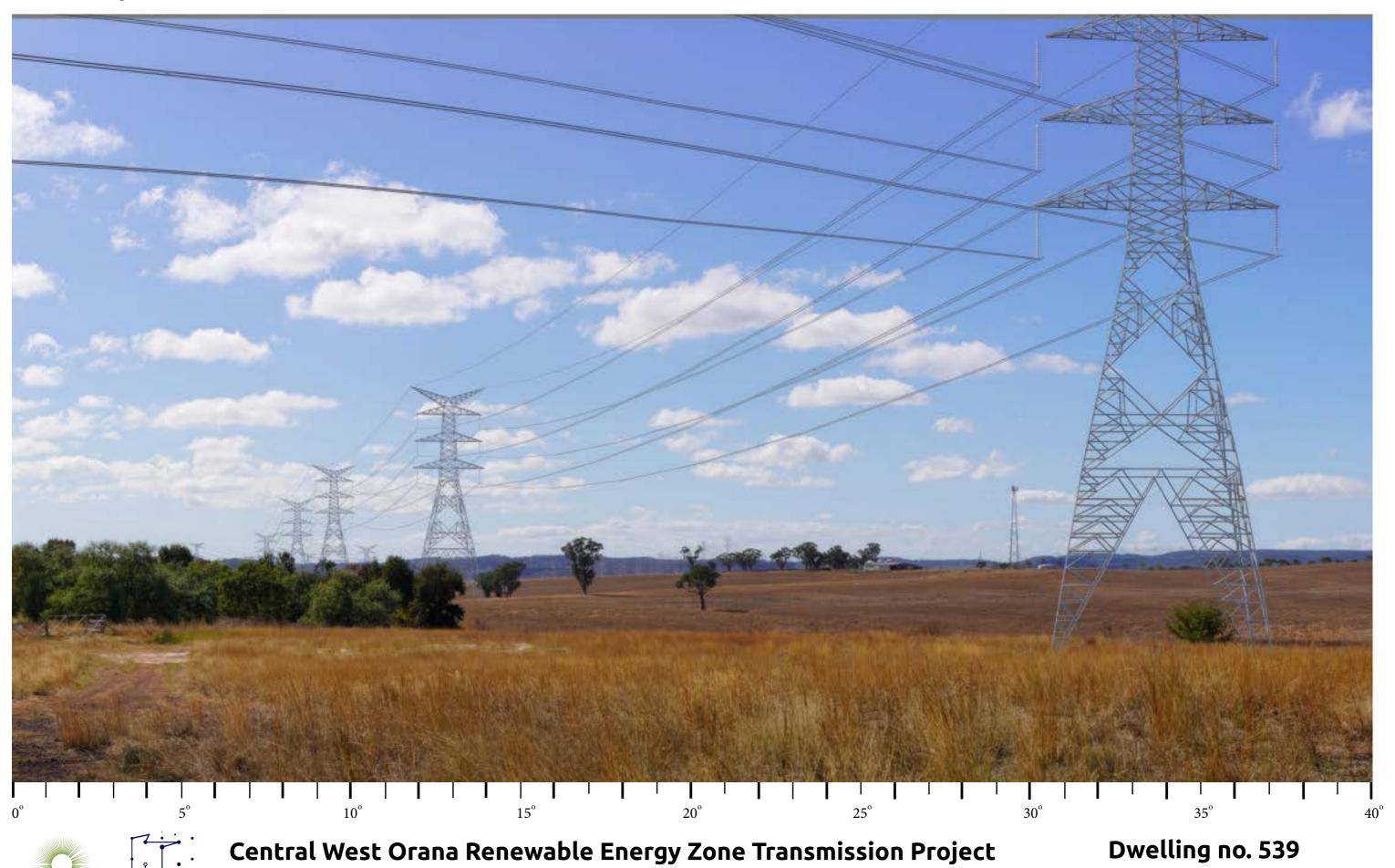


# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 539

iris

MODATA

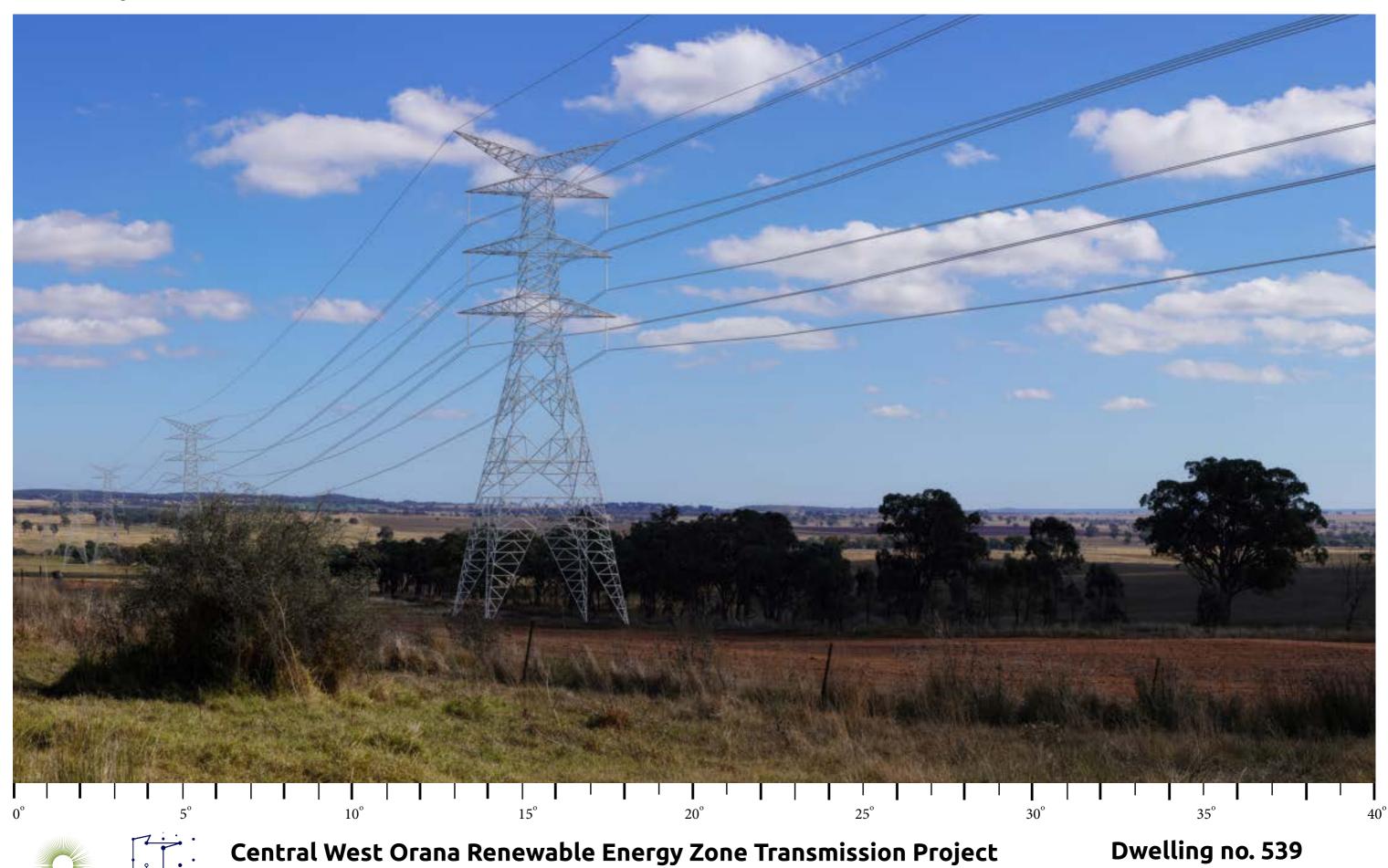


Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Photomontage detail

iris

MODATA



Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Photomontage detail

Detailed visual assessment Sandy Creek Road, Cobbora

Visual sensitivity

**MODERATE** 

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in rural area. (Dwelling associated with Dapper solar farm)

MODERATE - View across a landscape with undulating landform, some blocks of vegetation and vegetated hills. Existing glimpses to scattered sheds and farm buildings. This view has predominantly moderate to

low scenic quality values.

Magnitude of change

Single row of 330kv double circuit lattice towers, about 1.3km to nearest tower. Some screening by intervening undulating landform and scattered vegetation, and

visible in the background of the view.

Visual impact level

LOW

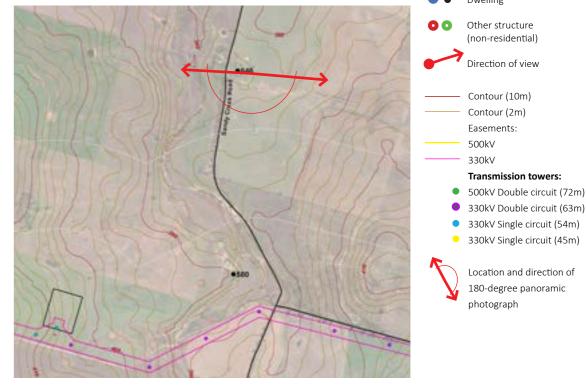
LOW

Detailed aerial showing dwelling orientation





Plan showing location of dwelling and the project



Plan showing location of dwelling and the project



580

Detailed visual assessment Sandy Creek Road, Dunedoo

Visual sensitivity

LOW

Viewpoint sensitivity: Scenic quality: LOW - Secondary view from dwelling in rural area. (Unoccupied, associated with Dapper solar farm)
LOW - View partly enclosed by vegetation, in a rural landscape with undulating landform, vegetation along the adacent stream and tracks. Existing glimpses to scattered sheds and farm buildings. This view has predominantly low scenic quality values.

Magnitude of change

LOW

LOW

Single row of 330kv double circuit lattice towers, about 200 metres to nearest tower. Vegetation and other structures around the dwelling would provide some screening of the project.

Visual impact level

iris



Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 646

584/585

**Detailed visual assessment** Sandy Creek Rd, Dunedoo

Visual sensitivity

LOW

Viewpoint sensitivity: Scenic quality:

LOW - Secondary view from dwelling in rural area. (Associated with Dapper solar farm)

LOW - View partly enclosed by vegetation, in a rural landscape with undulating landform, vegetation along the adacent stream and tracks. Existing glimpses to scattered sheds and farm buildings. This view has predominantly low scenic quality values.

Magnitude of change

Single row of 330kv double circuit lattice towers, about 300 metres to nearest tower. Vegetation and other structures around the dwelling would provide some

screening of the project.

**Detailed visual assessment** 

Visual impact level

LOW

LOW

Detailed aerial showing dwelling orientation

Plan showing location of dwelling and the project

180-degree panoramic photograph

Other structure (non-residential)

Direction of view

Contour (10m)

Contour (2m)

Transmission towers: 500kV Double circuit (72m) 330kV Double circuit (63m)

330kV Single circuit (54m)

330kV Single circuit (45m)

Location and direction of

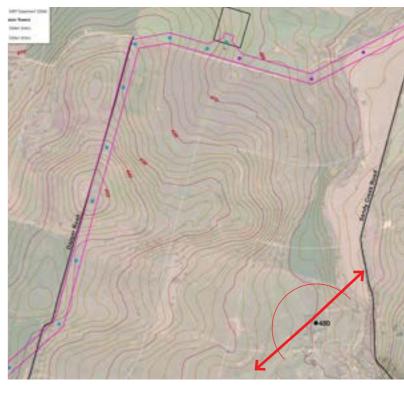
Easements:

500kV

Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



480

Sandy Creek Rd, Dunedoo

Visual sensitivity **MODERATE** 

Viewpoint sensitivity: Scenic quality:

MODERATE - Primary view from dwelling in a rural area. **MODERATE** - View across a landscape with undulating landform with scattered trees, and distant hills. The view is enclosed by garden vegetation. This view has scenic quality values of predominantly moderate to low

scenic quality.

Magnitude of change

Single row of 330kV single circuit lattice towers, over 1.4km to nearest tower, screening by intervening

vegetation.

Visual impact level

LOW





Central West Orana Renewable Energy Zone Transmission Project

Landscape and visual impact assessment - APPENDIX J - Private dwelling detailed view assessment

Dwelling no. 584 / 585

# Detailed visual assessment Dapper Road, Dunedoo

Visual sensitivity MODERATE

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area. LOW - View enclosed by landscaped gardens with glimpses to surrounding undulating to flat landform and trees. This view has scenic quality values of predominantly moderate to low scenic quality.

### Magnitude of change

#### NEGLIGIBLE

Single row of 330kV single circuit lattice towers, about 550m to nearest tower, occupying horizontal field of less than 30 degrees as broader views screened by vegetation.

Overall, the project would not be prominent and there would be no perceived change to the amenity of the

view.

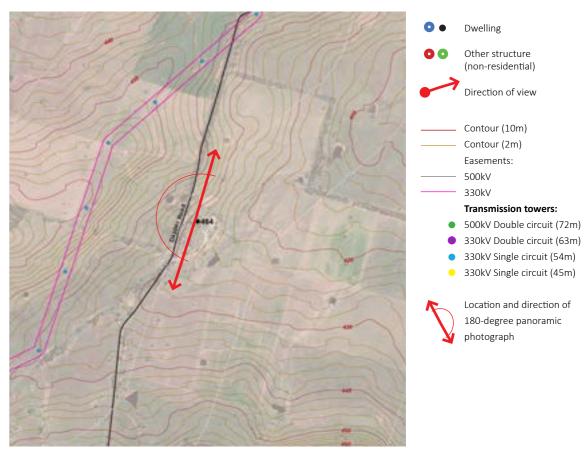
### Visual impact level

#### **NEGLIGIBLE**

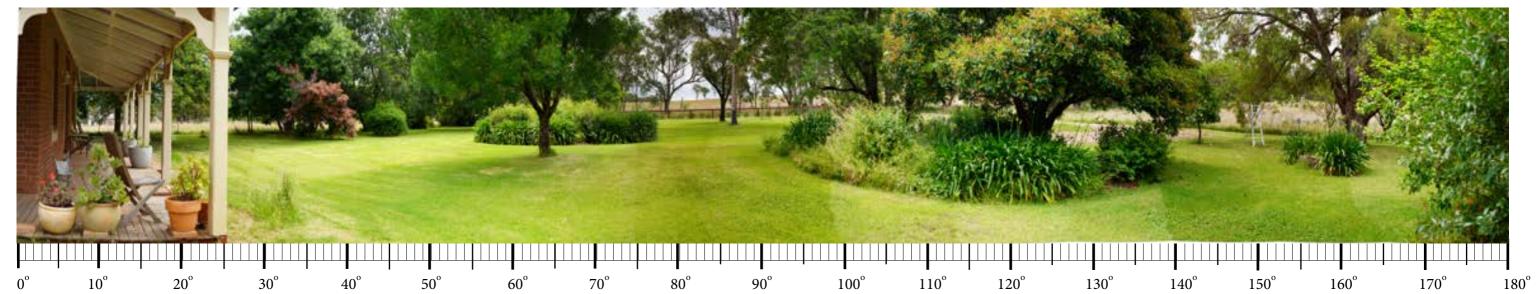
# Detailed aerial showing dwelling orientation



# Plan showing location of dwelling and the project



# Existing photograph







# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 464

560 Detailed visual assessment

Dapper Road, Cobbora

Visual sensitivity MODERATE

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area.

MODERATE - View across a landscape with undulating landform with scattered trees, and distant hills. The view includes a created water body, local access tracks, local power poles and telecommunication towers, some rural sheds and farm buildings. This view has scenic quality values of predominantly of moderate to low scenic

quality.

Magnitude of change LOW

Single row of 330kV double circuit lattice towers, about 1 kilometre to the project easement, occupying a small horizontal field of view and with substantial screening by intervening vegetation. The towers would be visible in the middle to background and extending away from the viewer.

Overall, the project would not be prominent, and there would be a slight change in the amenity of the view.

Visual impact level

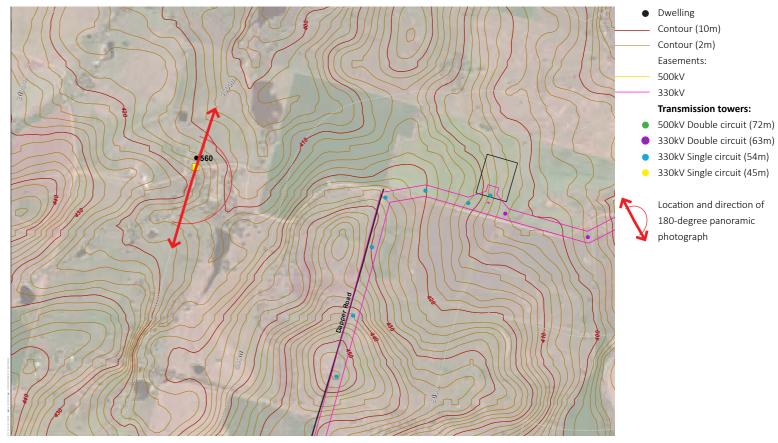
LOW



Photo showing dwelling aspect



Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project





# Central West Orana Renewable Energy Zone Transmission Project

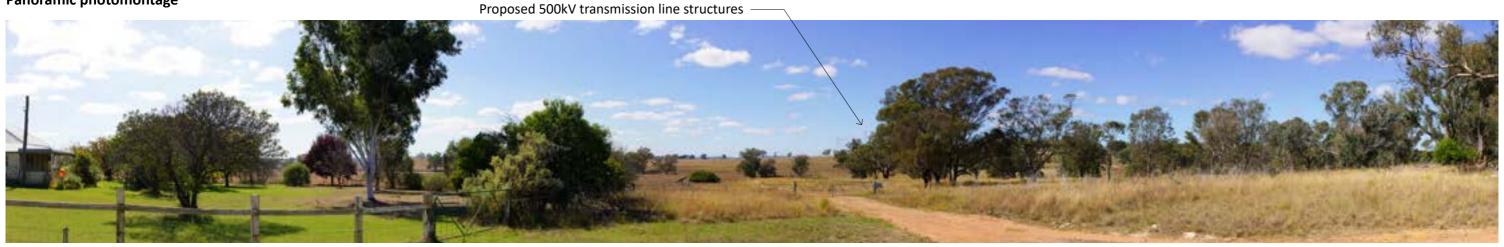
Dwelling no. 560

Other structure (non-residential)

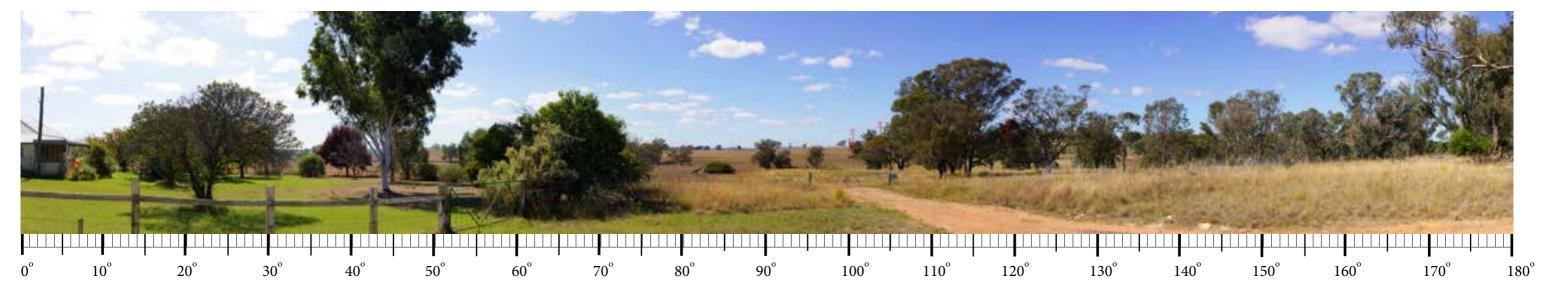
# Existing panoramic view towards the project



# Panoramic photomontage



# Project highlighted in silhouette







# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 560

iris

MODATA.



# 911 Detailed visual assessment Birriwa Bus Route South, Birriwa

Visual sensitivity MODERATE

Viewpoint sensitivity: Scenic quality: MODERATE - Primary view from dwelling in a rural area. MODERATE - View enclosed by attractive garden with glimmpses to vegetated hills in the distance.

#### **NEGLIGIBLE**

Magnitude of change

Twin 500kV double circuit lattice towers, about 2km to nearest tower and would unlikely to be visible due to intervening vegetation.

Overall, the project would not be prominent and would result in no perceived change to the amenity of the view.

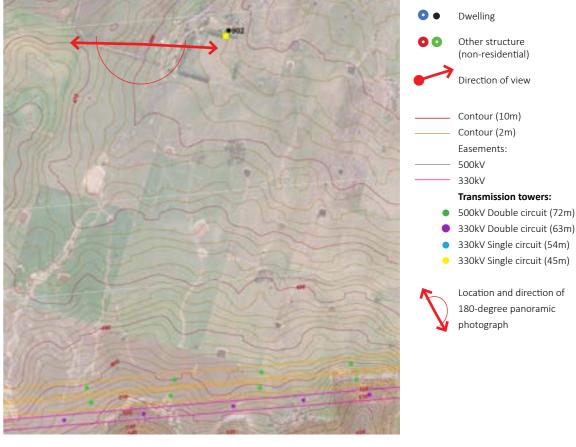
Visual impact level

**NEGLIGIBLE** 

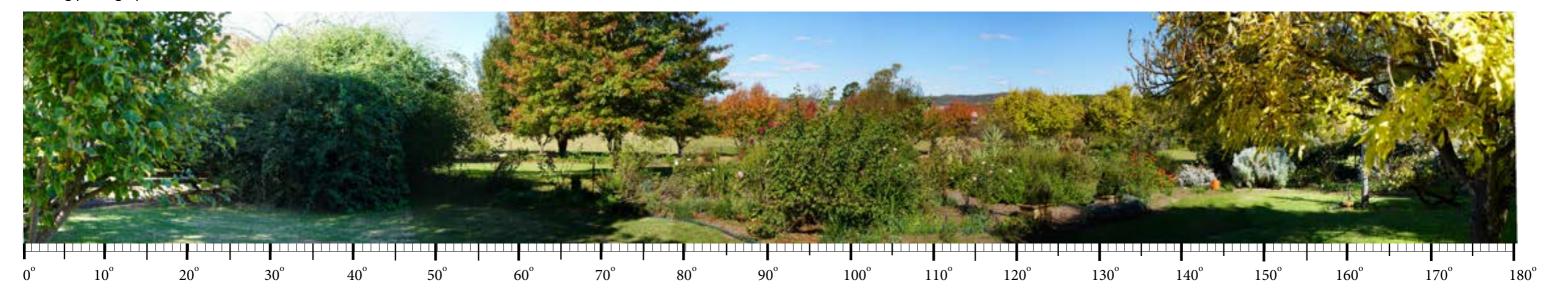
# Detailed aerial showing dwelling orientation



Plan showing location of dwelling and the project



# Existing photograph







# Central West Orana Renewable Energy Zone Transmission Project

Dwelling no. 911