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HumeLink

Landscape Character and Visual Impact Assessment Addendum
Technical Report 8

HumeLink

Technical Report 8 -
Landscape Character and Visual Impact Assessment Addendum

May 2024

Executive summary

Transgrid has identified several proposed amendments and refinements to the project as described in the *Technical Report 8 – Landscape Character and Visual Impact Assessment*. These amendments and refinements reflect functional improvements to the design and construction methodology of the project.

There are some minor changes to the landscape character and visual impacts of the project as a result of these amendments and refinements. A summary of the impacts, and the changes as a result of these project amendments and refinements, are described in the following paragraphs.

Landscape character impact

During construction and operation there would be:

- low impacts on the Rural Fringe landscape character areas
- moderate impacts on the Great Dividing Range landscape character areas
- moderate-low impacts on the Rural valleys landscape character areas
- low and moderate-low impact on the Forested hills landscape character areas
- moderate and moderate-low impact on the Undulating rural hills landscape character areas
- moderate impact on the upland forest landscape character areas
- moderate-low impact on the rural tablelands landscape character areas
- moderate-low impact on the rural highlands landscape character areas.

This includes:

- a reduction in the impact on the Tumbarumba rural valleys landscape character area during construction, from a moderate-low to negligible as the Tumbarumba accommodation facility (AC1) is no longer proposed in the amended project and therefore there would not be any impacts on the this landscape character area
- an increase in the impact on the Green Hills forested hills landscape character area during construction, from low to a moderate-low, as the transmission line corridor been relocated west of Batlow to Green Hills
- a reduction in the impacts on the Batlow undulating rural hills and ridges landscape character area during construction and operation, from moderate to negligible due to the relocation of the transmission line corridor.

Visual impact

The visual impacts would change in the following areas:

- Viewpoint 2, Livingstone Road, where impacts of the amended project would increase from low-moderate to moderate during construction due to the additional construction facilities, and during operation as the proposed Gugaa 500 kV substation has been relocated closer to the road and increased in size.
- Viewpoint 3, Tumbarumba Road, where the moderate impact on views during construction and low-moderate visual impact during operation would occur further south than for the EIS project (refer to Viewpoint 3b). The amended project would lessen the visual impact at Viewpoint 3, where the transmission line corridor crossing over Tumbarumba Road has been realigned further away, reducing the impact from moderate to low-moderate during construction and from moderate-low to low during operation.
- Viewpoint 6, Yaven Creek Road, where there would continue to be moderate-low visual impacts during construction and operation in southbound views, and also in north bound

views, where the amended project includes a construction facility and additional transmission line structures at the transposition location.

- Viewpoint 9 from Stewarts Road in Batlow, where the low visual impact during construction and operation would reduce to negligible with the relocation of the transmission line corridor to the west of Batlow.
- Viewpoint 13 from Brungle Road, where the moderate visual impact during operation would reduce to a moderate-low visual impact due to the realignment of the transmission line corridor away from this local roadway.

There were also additional views assessed, including:

- Mates Gully Road, Adjungbilly Road, Batlow Road and Faulder Avenue, Yass – Moderate-low and low visual impacts on views during construction due to the presence of worker accommodation facilities and compounds.
- Batlow Road – Moderate-low visual impacts during operation, where the transmission line corridor would have a new crossing point along this road, which is a scenic route.
- Wondalga Road and the Greens Hill Access Road – where the transmission line corridor would have negligible visual impacts, due to the low sensitivity of forestry uses.

Scenic or significant vistas and road corridors in the public domain

There will continue to be no adverse impacts anticipated on significant vistas within the landscape and visual study area.

Views from Batlow Road, a scenic route, were identified as having moderate-low visual impacts during construction and operation, in views where the project would cross the road and vegetation clearing would be required.

Air traffic

There would be a decrease in the impact on views from the air during construction, from moderate to moderate-low, due to the realignment of the transmission line corridor from the scenic areas east of Batlow to the forestry areas to the west.

Night lighting

At night, the visual impacts would change in several areas during construction, including:

- Gregadoo to Book Book rural valleys character area – impact increased from moderate to high-moderate due to the new Tarcutta accommodation facility (AC03).
- Adjungbilly rural valleys landscape character – impact increased from moderate-low to moderate due to the new accommodation facility and compound (AC04) to the north of Adjungbilly Road.
- Tumbarumba rural valleys character area – impact reduced from moderate-low to negligible (no visual impact) as the Tumbarumba construction accommodation facility (AC1) would not be required for the amended project.
- Batlow undulating rural hills and ridges landscape character area – increased from moderate to high-moderate in the vicinity of the proposed new accommodation facility and compound (AC07) at Green Hills Access Road at night.
- Batlow undulating rural hills and ridges landscape character area –reduced impact from moderate to negligible, in all other parts of this character area due to the removal of the transmission line corridor.
- An increase from moderate-low to moderate in the Black Range to Yass undulating rural hills and ridges landscape character area due to the proposed additional accommodation facility and compound (AC05) at Faulder Avenue.

- An increase from moderate-low to moderate in the Crookwell rural tablelands landscape character area as a new accommodation facility and compound (AC06) is proposed to the east of Woodhouselee Road, including lighting. There would be no changes to the visual impact of the project at night during operation due to the amended project.

Views from surrounding residences

Visual impacts during operation:

All dwellings considered in the EIS as well as additional dwellings identified during the post-EIS phase of the project, were reassessed or assessed for the amended project (refer to Table 7 8). The detailed assessment of visual impact focused on those dwellings with the potential for higher visual impacts and identified the following visual impacts from private dwellings:

- 21 dwellings would have a high visual impact
- 23 dwellings would have a high- moderate visual impact
- 35 dwellings would have a moderate visual impact.

Mitigation measure LV5 would apply specifically to the above dwellings. All remaining dwellings that were reassessed or assessed for the amended project would have a moderate-low, low, or negligible visual impact. Mitigation measures LV1 to LV8 would apply to all dwellings, as relevant.

There were no dwellings within the Green Hills section identified as having a moderate or higher visual impact during construction or operation.

Generally, the impact levels have reduced. However, several newly built dwellings (or dwellings under construction), and dwellings previously thought to have been sheds, have been added to the assessment where there are the potential for visual impacts. There were also several dwellings, assessed in the *Technical Report 8 – Landscape Character and Visual Impact Assessment*, that have been either determined not to be a dwelling or have since been removed. These dwellings have been removed from the assessment. Of those dwellings with a moderate, high-moderate or high visual impact, four would be located on properties that are outside the amended project footprint. Of these dwellings:

- one dwelling would have a high-moderate visual impact
- three dwellings would have a moderate visual impact.

Visual impacts during construction

Twenty-one dwellings have the potential for a moderate or higher visual impact during construction, 14 of these are located on properties that are outside the amended footprint. These impacts would be temporary, and due to views of the following construction compounds and accommodation facilities:

- Proposed Gugaa 500 kV substation and Amended Gregadoo Road compound (C06)
- Tarcutta accommodation facility and compound (AC03)
- Ellerslie Road compound (C21)
- Ardrossan Headquarters Road compound (C17)
- Green Hills accommodation facility and compound (AC07)
- Amended Memorial Avenue compound (C14)
- Adjungbilly accommodation facility and compound (AC04)
- Yass accommodation facility and compound (AC05).

There are no dwellings that would have a potential visual impact near the Snubba Road compound (C18), Maragle 500 kV substation compound (C05), Gadara Road compound (C19), Amended Honeysuckle Road Compound (CO7), Crookwell Accommodation Facility and Compound (AC06) and Amended Bannaby Substation Compound (C12).

Cumulative impacts

If approved, there would be an additional cumulative landscape character and visual impacts associated with HumeLink and the Belhaven Battery Energy Storage System in the Wagga Wagga Rural fringe landscape character zone.

Overall, if approved, there would be cumulative landscape and visual impacts associated with this project and the following projects:

- EnergyConnect (NSW - Eastern Section)
- Gregadoo Solar Farm
- Belhaven Battery Energy Storage System
- Jeremiah Wind Farm
- Rye Park Wind Farm
- Crookwell 3 Wind Farm
- Victoria to NSW Interconnector West (VNI West)
- Snowy 2.0 - Transmission Connection.

This is due to the proximity and associated potential for these to be seen together and change the character and views of the surrounding landscape.

There is unlikely to be cumulative landscape or visual impacts associated with HumeLink and the Inland Rail – Albury to Illabo, Snowy 2.0 - Main Works and Yass solar farm, due to the large distance between the projects.

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Glossary and abbreviations

Term	Definition
3D	Three-dimensional
Amended project (the)	The CSSI project "HumeLink", which is the subject of the Amendment Report and inclusive of the proposed amendments and project refinements to the project as described in the EIS. The project involves the construction and operation of high voltage transmission lines and associated infrastructure between Wagga Wagga, Bannaby and Maragle. The CSSI project "HumeLink", which is the subject of the Amendment Report and inclusive of the proposed amendments and project refinements to the project as described in the EIS report. The project involves the construction and operation of high voltage transmission lines and associated infrastructure between Wagga Wagga, Bannaby and Maragle.
Amended project footprint (the)	The area that has been assumed for the purpose of the Amendment Report to be directly affected by the construction and operation of the project. It includes the indicative location of project infrastructure, the area that would be directly disturbed during construction and any easement required during operation.
Amendment	A change in what the proponent is seeking approval for following the public exhibition of the EIS. It requires changes to the project description in the EIS report and amendments to the associated infrastructure application.
Amenity	'The pleasantness of a place as conveyed by desirable attributes including visual, noise, odour etc' (Australian Institute of Landscape Architects QLD 2018).
Bannaby 500 kV substation	The existing 500 kV substation at Bannaby.
BESS	Battery Energy Storage System
Brake and winch sites	A brake and winch site is a temporarily cleared area where plant and equipment are located to spool and winch conductors into place on transmission line structures. The locations of the brake and winch sites may or may not be within the nominated transmission line easement. These sites are only required for construction of the project and do not need to be maintained during operation.
Construction compounds	Main construction compounds proposed for construction of the project. Each main construction compound would accommodate a range of facilities which may include (but not limited to): laydown areas site offices amenities construction support facilities such as vehicle and equipment storage, maintenance sheds, chemical/fuel stores and stockpile areas concrete batching plants helipads crushing/screening plants parking.
CSSI	Critical State Significant Infrastructure
DPE	NSW Department of Planning and Environment
DPHI	NSW Department of Planning, Housing and Infrastructure
EIS	Environmental Impact Statement
EIS project (the)	The CSSI project "HumeLink", which was the subject of the Environmental Impact Statement. The project involves the construction and operation of high voltage transmission lines and associated infrastructure between Wagga Wagga, Bannaby and Maragle.

Term	Definition
EIS project footprint (the)	The area that was assumed for the purpose of the EIS to be directly affected by the construction and operation of the project. It includes the indicative location of project infrastructure, the area that would be directly disturbed during construction and any easement required during operation.
Future Maragle 500 kV substation	The future Maragle 500/330 kV substation that would be built under the Snowy 2.0 Transmission Connection Project, which is subject to separate planning approval.
Glare	'Condition of vision in which there is discomfort or a reduction in ability to see, or both, caused by an unsuitable distribution or range of luminance, or to extreme contrasts in the field of vision.' (AS/NZS 4282:2019)
GPS	Global Positioning System
HumeLink	The project
km	kilometres
kV	kilovolt
landowners	People who own properties/land
Landscape and visual study area	This study considers a wider 'landscape and visual study area' which extends out to approximately five kilometres from the proposed transmission line easement centreline, 10 kilometre wide corridor in total.
LGA	Local Government Area
LiDAR	Light Detection and Ranging
MW	Megawatt
proponent (the)	NSW Electricity Networks Operations Pty Ltd (referred to as Transgrid). Transgrid is the operator and manager of the main high voltage (HV) transmission network in NSW and the Australian Capital Territory (ACT) and is the Authorised Network Operator (ANO) for the purpose of an electricity transmission or distribution network under the provisions of the *Electricity Network Assets (Authorised Transactions) Act 2015*.
Proposed Gugaa 500 kV substation	The new 500/330 kV substation proposed near Wagga Wagga.
Refinement	An aspect of the project that is more specific than what has been described in the EIS and fits within the limits set by the project description and does not change what is being sought for approval for or require an amendment to the infrastructure application for the project.
SEARs	Planning Secretary's Environmental Assessment Requirements
Transgrid	The project is proposed to be undertaken by NSW Electricity Networks Operations Pty Ltd (referred to as Transgrid). Transgrid is the operator and manager of the main high voltage transmission network in NSW and the ACT, and is the Authorised Network Operator for the purpose of an electricity transmission or distribution network under the provisions of the *Electricity Network Assets (Authorised Transactions) Act 2015.*
Transmission line corridor	An area generally 200 metres wide that the transmission line route and easement would be located within.
transmission line easement	A legal right attached to a parcel of land that enables the non-exclusive use of the land by a third party other than the owner. For transmission lines, an easement defines the corridor area where the lines are located and that allows access, construction and maintenance work to take place. The easements for the 500 kV transmission lines would typically be 70 metres wide. However, a few select locations would require wider easements up to 130 metres wide for specific engineering or property reasons. The easement grants a right of access and for construction, maintenance and operation of the transmission line and other operational assets.

Term	Definition
Transmission line route	The location of the transmission line structures along the middle of the transmission line easement.
Transmission line structures	Proposed free standing structures to support the transmission lines.
Transposition	Transposition is the periodic swapping of positions of the conductors of a transmission line in order to improve transmission reliability. Transposition is the periodic swapping of positions of conductors on a transmission line in order to improve transmission reliability.
Wagga 330 kV substation	The existing 330/132 kV substation located in Wagga Wagga.
Work site	A general word to describe a defined construction location.
Worker accommodation facilities	Temporary worker accommodation facilities that would be established for the construction workers.

1.0 Introduction

1.1 Background

Transgrid proposes to increase the energy network capacity in southern New South Wales (NSW) through the development of around 365 kilometres (km) of new 500 kilovolt (kV) high-voltage transmission lines and associated infrastructure between Wagga Wagga, Bannaby and Maragle. This project is collectively referred to as HumeLink. The project would be located across six Local Government Areas (LGAs) including Wagga Wagga City, Snowy Valleys, Cootamundra-Gundagai Regional, Upper Lachlan Shire, Yass Valley and Goulburn Mulwaree. HumeLink is a priority project for the Australian Energy Market Operator (AEMO) and the Commonwealth and NSW governments and has been declared as Critical State Significant Infrastructure (CSSI). The project would deliver a cheaper, more reliable and more sustainable grid by increasing the amount of renewable energy that can be delivered across the national electricity grid, helping to transition Australia to a low carbon future.

An EIS was prepared in accordance with the requirements of Division 5.2 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act). The EIS was placed on public exhibition by the NSW Department of Planning, Housing and Infrastructure (DPHI) (formerly the NSW Department of Planning and Environment (DPE)) for a period of 42 days, between 30 August 2023 and 10 October 2023.

Transgrid has proposed amendments and refinements to the project as described in the EIS. The amendments provide functional improvements to the design and construction methodology of the project. The proposed amendments take into account submissions received during the public exhibition of the EIS and ongoing design and construction methodology development following the selection of the construction contractors. Project refinements have also been made as part of the ongoing design and construction methodology development since the EIS was exhibited. These amendments and refinements have been described and considered in relevant impact assessments.

1.2 Key features of the project (as publicly exhibited)

The key components of the project as outlined and assessed in the EIS included:

- construction and operation of around 360 kilometres of new double circuit 500 kV transmission lines and associated infrastructure between Wagga Wagga, Bannaby and Maragle
- construction of a new 500/330 kV substation at Gregadoo (Gugaa 500 kV substation) approximately 11 kilometres south-east of the existing Wagga 330/132 kV substation (Wagga 330 kV substation)
- demolition and rebuild of a section of Line 51 (around two kilometres in length) as a double circuit 330 kV transmission line connecting into the Wagga 330 kV substation
- modification of the existing Wagga 330 kV substation and Bannaby 500/330 kV substation (Bannaby 500 kV substation) to accommodate the new transmission line connections
- connection of transmission lines to the future Maragle 500/330 kV substation (Maragle 500 kV substation, approved under the Snowy 2.0 Transmission Connection Project (SSI-9717))
- provision of one optical repeater telecommunications hut and associated connections to existing local electrical infrastructure
- establishment of new and/or upgraded temporary and permanent access tracks
- ancillary works required for construction of the project such as construction compounds, worker accommodation facilities, utility connections and/or relocations, brake and winch sites, and helipad/helicopter support facilities.

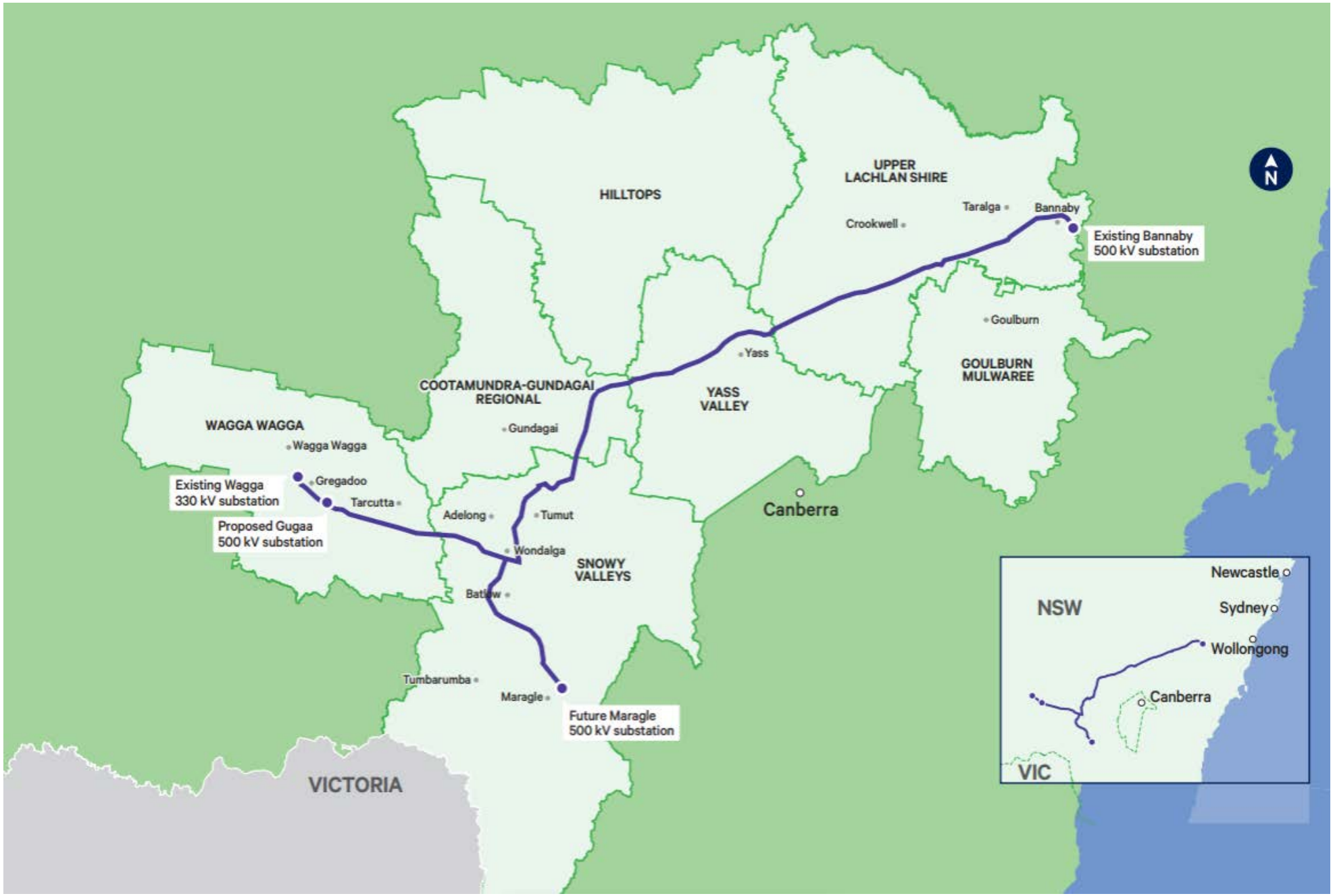


FIGURE 1-1 LOCATION OF THE PROJECT

1.3 Overview of proposed amendments

Since the public exhibition of the EIS, several amendments and refinements to the project have been proposed.

The proposed amendments to the project include:

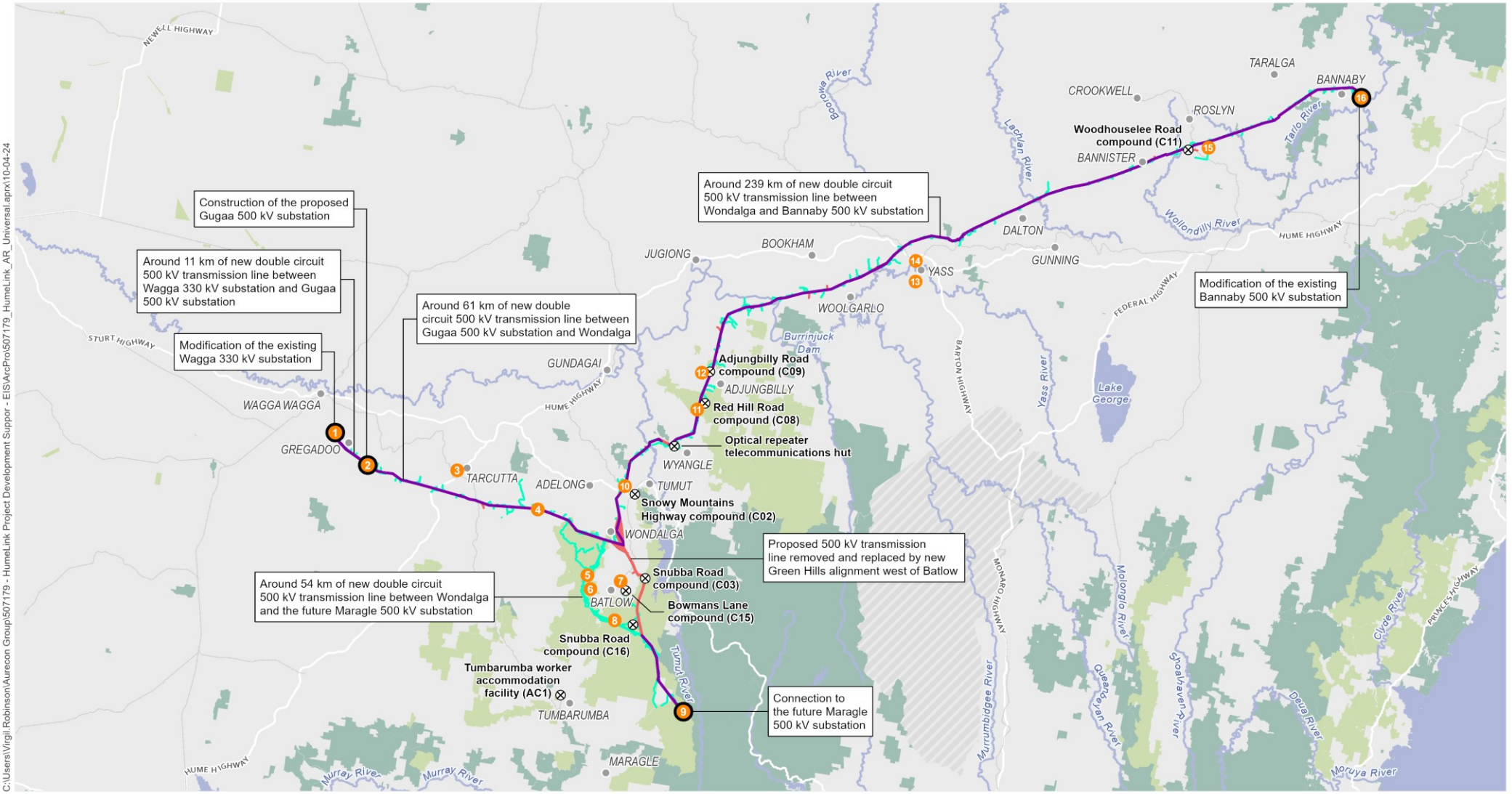
- changes to the transmission line corridor, including the realignment of the route through Green Hills State Forest to the west of Batlow
- change to the number and location of construction ancillary facilities, including worker accommodation facilities and construction compounds
- nomination of access tracks to support the construction and operation of the project
- additional telecommunications connections to existing substations.

The proposed refinements to the project include:

- transmission line and substation design refinements at Gregadoo
- identification of areas where controlled blasting may be required
- use of approved water sources
- use of helicopters and drones.

Refer to Chapter 2.0 of this report for a detailed description of amendments and refinements relevant to this assessment.

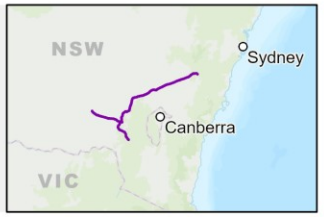
Figure 1-1 shows the location of the amended project and Figure 1-2 shows the key components of the amended project.



EIS project footprint
Removed footprint
Amendments
Removed project facility
National park and reserve
State forest
Waterbody
Waterway
Major road
Railway

Construction ancillary facilities

1. Wagga 330 kV substation compound (C01)
2. Amended Gregadoo Road compound (C06)
3. Tarcutta accommodation facility and compound (AC03)
4. Ellerslie Road compound (C21)
5. Ardrossan Headquarters Road compound (C17)
6. Green Hills accommodation facility and compound (AC07)
7. Amended Memorial Avenue compound (C14)
8. Snubba Road compound (C18)
9. Maragle 500 kV substation compound (C05)
10. Gadara Road compound (C19)
11. Amended Honeysuckle Road compound (C07)
12. Adjungbilly accommodation facility and compound (AC04)
13. Yass substation compound (C10)
14. Yass accommodation facility and compound (AC05)
15. Crookwell accommodation facility and compound (AC06)
16. Amended Bannaby 500 kV substation compound (C12)



Source: *Aurecon, Transgrid, Spatial Services (DCS), ESRI Basemap*

1:925,000
0 20 40km

Projection: GDA 1994 MGA Zone 55

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Figure 1-2: Key components of the amended project

1.4 Purpose and structure of this report

This report forms an addendum to *Technical Report 8 – Landscape Character and Visual Impact Assessment* prepared for the EIS. The purpose of this report is to support the HumeLink Amendment Report by assessing the potential impacts to Landscape Character and Visual Impact associated with the proposed amendments and refinements to the project.

This report is structured as follows:

- Chapter 1.0 – Introduction: Provides an overview of the project, the proposed amendments and the purpose of this report.
- Chapter 2.0 – Summary of the proposed amendments and refinements: Provides a description of the proposed amendments to the project.
- Chapter 3.0 – Legislative and policy context: Provides an outline of the key legislative requirements and policy guidelines relating to the proposed amendments to the project.
- Chapter 4.0 – Methodology: Provides an outline of the methodology used for the preparation of this technical report.
- Chapter 5.0 – Existing environment: Describes the existing conditions of the amended project footprint and surrounding land, including the topography and landscape features, and a general description of the visibility of the amended project.
- Chapter 6.0 – Landscape character impact assessment: Describes the potential landscape character impacts associated with the proposed amendments to the project during construction and operation.
- Chapter 7.0 – Visual impact assessment: Describes the potential visual impacts associated with the proposed amendments to the project during construction and operation, day and night.
- Chapter 8.0 – Cumulative impacts: Outlines the potential cumulative impacts with respect to other known developments within the vicinity of the proposed amendments to the project.
- Chapter 9.0 – Management of impacts: Outlines the proposed mitigation measures for the proposed amendments to the project.
- Chapter 10.0 – Conclusion: Provides a conclusion of the potential impacts of the amended project on the landscape character and visual amenity of the amended project footprint and surrounds.
- Chapter 11.0 – References: Identifies the key information sources (including reports and documents) used to generate this technical report.

1.5 Key project terms

The key project terms used in this assessment include:

- Amended project – The CSSI project "HumeLink", which is the subject of the Amendment Report and inclusive of the proposed amendments and project refinements to the project as described in the EIS. The project involves the construction and operation of high voltage transmission lines and associated infrastructure between Wagga Wagga, Bannaby and Maragle.
- Amended project footprint – The area that has been assumed for the purpose of the Amendment Report to be directly affected by the construction and operation of the project. It includes the indicative location of project infrastructure, the area that would be directly disturbed during construction and any easement required during operation.
- EIS project footprint – The area that was assumed for the purpose of the EIS to be directly affected by the construction and operation of the project. It includes the indicative location of project infrastructure, the area that would be directly disturbed during construction and any easement required during operation.

Consistent with the approach taken in *Technical Report 8 – Landscape Character and Visual Impact Assessment*, the study area for this technical report comprises a generally 10 kilometre-wide corridor centred on the amended project footprint, referred to as the 'landscape and visual study area' or 'study area'. Refer to Attachment A for the location and extent of the landscape and visual study area. The area considered for visual assessment is two kilometres from the amended project footprint for the assessment of views from the public domain and views from dwellings.

The landscape character of this area has been assessed in this technical report. Within this study area the visibility of the project varies according to the topography and land cover (vegetation and built form) of the landscape. Generally, this assessment focuses upon views within two kilometres of the project. This distance is based on the scale and visual characteristics of the project elements.

2.0 Summary of the proposed amendments

Transgrid has identified several proposed amendments and refinements to the project as described in the EIS. These amendments and refinements reflect functional improvements to the design and construction methodology of the project. They consider:

- feedback received from stakeholders prior to and during the public exhibition of the EIS
- comments made in formal submissions on the EIS
- ongoing design and construction methodology development by the construction contractors.

Amendments to the project are defined as changes in what the proponent is seeking approval for following the public exhibition of the EIS. Project amendments require changes to the project description in the EIS and amendments to the associated infrastructure application.

The proposed amendments to the project include:

- changes to the transmission line corridor including the realignment of the route through Green Hills State Forest to the west of Batlow
- changes to the number and location of construction ancillary facilities including worker accommodation facilities and construction compounds
- nomination of access tracks to support the construction and operation of the project
- additional telecommunications connections to existing substations.

Refinements to the project are defined as aspects of the project that generally fit within the limits set by the project description in the EIS. Refinements do not change what is being sought approval for or require an amendment to the infrastructure application for the project. For completeness, these refinements have been considered in this report.

The proposed refinements to the project include:

- transmission line and substation design refinements at Gregadoo
- identification of areas where controlled blasting may be required
- use of approved water sources
- use of helicopters and drones.

Table 2-1 describes the proposed amendments and refinements relevant to this technical report. A full description of the amended project is provided in Chapter 3 (Description of the amended project) of the Amendment Report. The construction contractors will continue to refine and confirm the design and construction methodology during detailed design and construction planning.

TABLE 2-1: PROPOSED AMENDMENTS AND REFINEMENTS RELEVANT TO THIS ASSESSMENT

Amendment/refinement	Description
Amendments	
Changes to the transmission line corridor	The amended project includes the preferred western route through Green Hills State Forest. The new 32.5 km route extends from Wondalga through the Green Hills State Forest before travelling to the west and south of Batlow and connecting to the EIS project transmission line corridor in Bago State Forest. In addition, the following minor changes have been made to the transmission line corridor following design considerations and feedback from landholders: 1.4 km realignment of the corridor to the north between Ashfords Road to Ivydale Road, Gregadoo 2.5 km realignment of the corridor to the south across Kyeamba Creek and Tumbarumba Road, Book Book 2.7 km realignment of the corridor to the east near Snowy Mountains Highway, Gadara 1.4 km realignment of the corridor to the east adjacent Minjary National Park at Gocup 5.9 km realignment of the corridor from north of the crossing of Tumut River to south of the crossing of Killimicat Creek, Killimicat (including a minor 50 m shift to the north for 2.1 km and a 2.6 km shift to the south from Brungle Road to before the crossing of Killimicat Creek) 0.4 km realignment of the corridor to the north at Bannister, about 2.7 km west of Crookwell Road/Goulburn Road narrowing of the project footprint at Wondalga, Gobarralong and Bowning.
Updates to construction ancillary facilities including worker accommodation facilities and construction compounds	**Changes to construction compounds** Following further construction planning and consultation with landowners, the following compounds described and assessed in the EIS have been removed from the project: Snowy Mountains Highway compound (C02) Snubba Road compound (C03) Red Hill Road compound (C08) Adjungbilly Road compound (C09) Woodhouselee Road compound (C11) Bowmans Lane compound (C15) Snubba Road compound (C16). These have been replaced with the following compounds: Ardrossan Headquarters Road compound (C17) – located about 7.6 km west of Batlow Snubba Road compound (C18) – located about 7.7 km south of Batlow Gadara Road compound (C19) – located about 4.9 km west of Tumut Ellerslie Road compound (C21) – located about 13.1 km south-west of Adelong. The proposed footprint for the Gregadoo Road compound (C06), Honeysuckle Road compound (C07), Bannaby substation compound (C12) and Memorial Avenue compound (C14) have also been revised. Following these changes, there are now 11 standalone construction compounds proposed.
	Changes to accommodation facilities The Tumbarumba accommodation facility (AC01) is no longer required. The amended project includes the following new combined worker accommodation facilities and compounds: Tarcutta accommodation facility and compound (AC03) – located about 1.5 km south-west of Tarcutta Adjungbilly accommodation facility and compound (AC04) – located about 21.7 km east of Gundagai Yass accommodation facility and compound (AC05) – located on the north-western outskirts of the Yass township

Amendment/refinement	Description
	Crookwell accommodation facility and compound (AC06) – located off Graywood Siding Road, about 18.1 km north of Goulburn Green Hills accommodation facility and compound (AC07) – located about 6.5 km west of Batlow.
Nomination of access tracks	New access tracks or upgrades to existing access tracks are proposed to connect construction areas and the transmission line easement to the existing road network. Existing unsealed local roads, forest roads, and tracks proposed for use as part of the access arrangements may also require minor improvement work, such as grading or resurfacing, or drainage work.
Additional telecommunications connections to existing substations	Removal of the telecommunications hut at Killimicat from the scope and inclusion of additional telecommunications connections to the following Transgrid substations: Gadara 132 kV substation Gullen Range 330 kV substation Crookwell 2 330 kV substation.
Refinements	
Transmission line and substation design refinements at Gregadoo	The transmission line between the existing Wagga 330 kV substation and the proposed Gugaa 500 kV substation has been assessed as operating at 500 kV for the amended project. However, energisation to 500 kV would only occur at the commissioning stage of the Victoria to NSW Interconnector West (VNI West) project, which is subject to a separate Planning Approval. Until such time, the line will operate at 330 kV.
	Associated changes with energisation to 500 kV include additional infrastructure at the proposed and relocated Gugaa 500 kV substation. The area of land required for the proposed Gugaa 500 kV substation has also increased in size.
Use of helicopters and drones	Additional information and assessment for the use of helicopters and drones for stringing transmission lines is now available with the engagement of construction contractors and this information has been presented in the Amendment Report. Drones are also expected to be used for additional construction activities such as, but not limited to, surveys and vegetation management. With the use of helicopters confirmed by the construction contractors and the proposed changes to ancillary facilities, the potential helipad locations have also been revised.

3.0 Legislative and policy context

The following review identifies key documents which provide relevant guidance for the landscape character and visual impact assessment of the proposed amendments to the project.

3.1 Regional planning framework

The regional planning documents described in *Technical Report 8 – Landscape Character and Visual Impact Assessment* remain relevant and would not require any additional information to respond to the proposed amendments to the project.

3.2 Local planning schemes

There has been no change to the local planning legislative and policy context detailed in Section 4.1.2 of *Technical Report 8 – Landscape Character and Visual Impact Assessment*, apart from the changes identified in the following sections (Sections 3.2.1 to 3.2.5).

3.2.1 Wagga Wagga City Council

Wagga Wagga Local Environmental Plan 2010

The amended project footprint for the rebuild of Line 51 was slightly realigned in consultation with landowners. The 500 kV transmission line routes have also been realigned slightly to the south of Glenrowan Park, west of Tumbarumba Road. Both transmission line routes remain in the Primary Production zone (RU1). The proposed Gugaa 500 kV substation has increased in size and remains wholly within the Primary Production zone (RU1).

A new worker accommodation facility is proposed in the Wagga Wagga City Council area, located about 1.5 kilometres south-west of Tarcutta (Tarcutta accommodation facility and compound (AC03)), within the Primary Production (RU1) zone.

The land use planning objectives for the RU1 zone are unchanged from those described in the *Technical Report 8 – Landscape Character and Visual Impact Assessment*.

3.2.2 Snowy Valleys Council

Tumut Local Environmental Plan 2012

The amended project has moved to the west of Batlow, extending through the elevated forested landscapes of Bago and Green Hills State Forest within the Forestry (RU3) zone.

Five new construction compounds and/or worker accommodation facilities and compounds are proposed in the Snowy Valleys Council area, including:

- Ellerslie Road compound (C21), located about 13.1 kilometres south-west of Adelong, within the Primary Production (RU1) zone
- Green Hills accommodation facility and compound (AC07), located about 5.6 kilometres south-west of Batlow, within the Primary Production (RU1) zone
- Ardrossan Headquarters Road compound (C17), located about 7.6 kilometres west of Batlow, within Green Hills State Forest (RU3 Forestry zone)
- Snubba Road compound (C18), located about 7.7 kilometres south of Batlow, within Bago State Forest (RU3 Forestry zone)
- Gadara Road compound (C19), located about 4.9 kilometres west of Tumut, north of Gadara Road, within the Primary Production (RU1) zone.

Although the proposed Amended Honeysuckle Road compound (C07) has slightly increased in size, it remains within the RU3 Forestry zone.

The land use planning objectives for the RU1 and RU3 zones are described in the *Technical Report 8 – Landscape Character and Visual Impact Assessment*.

Tumbarumba Local Environmental Plan 2010

The southern part of the new Green Hills section of the amended project passes through State forest land in the northern part of the Tumbarumba Local Environmental Plan area, between Laurel Hill and Buddong, within the RU3 Forestry zone, including the Snubba Road Compound (C18). The land use planning objectives for the RU3 zone is described in the *Technical Report 8 – Landscape Character and Visual Impact Assessment*.

The Tumbarumba accommodation facility (AC1) proposed in the EIS is no longer required and has been removed for the amended project.

3.2.3 Cootamundra-Gundagai Regional Council

Gundagai Local Environmental Plan 2011

The Adjungbilly Road compound (C09) proposed in the EIS is no longer required and has been removed for the amended project. A new worker accommodation facility is proposed in the Cootamundra-Gundagai Regional Council area, located about 121.7 kilometres east of Gundagai (Adjungbilly accommodation facility and laydown (AC04)), within the Primary Production (RU1) zone. The land use planning objectives for the RU1 zone are described in the *Technical Report 8 – Landscape Character and Visual Impact Assessment*.

3.2.4 Yass Valley Council

Yass Valley Local Environmental Plan 2013

A new worker accommodation facility is proposed in the Yass Valley Council area, located along Faulder Avenue on the north-western outskirts of Yass (Yass accommodation facility and compound (AC05)). This site is within the Productivity Support (E3) zone. The E3 land use zoning aims to '*provide a range of facilities and services, light industries, warehouses and offices'* that '*are compatible with, but do not compete with, land uses in surrounding local and commercial centres*' (Part 2, Land Use Table, Zone E3).

3.2.5 Upper Lachlan Shire Council

Upper Lachlan Local Environmental Plan 2010

A new worker accommodation facility is proposed in the Upper Lachlan Shire Council area, located off Graywood Siding Road, about 18.1 kilometres north of Goulburn (Crookwell accommodation facility and compound (AC06)). This site is within the Environmental Management (C3) zone and is located near an existing and under construction wind farm. The C3 land use zoning aims to '*protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values'* and '*minimise the proliferation of buildings in sensitive landscape areas*' (Part 2, Land Use Table, Zone C3).

The Crookwell accommodation facility and compound (AC06) would occupy land which has been previously disturbed as part of the construction of the Crookwell 3 Wind Farm (SSD-6695). Upon completion of the construction stage of the Crookwell 3 Wind Farm project, it was assessed that the facility would be rehabilitated to former agricultural land use. As such, for the purposes of this assessment it has been assumed that this site is agricultural land.

4.0 Methodology

This report considers the potential additional or changed landscape character and visual impacts of the proposed amendments and refinements to the project. This includes consideration of the landscape and views previously assessed in *Technical Report 8 – Landscape Character and Visual Impact Assessment* and, where necessary, as well as additional views to identify the potential visual impacts of the amended project.

This assessment includes the following key steps:

- an assessment of landscape character impact during construction and operation
- an assessment of the daytime visual impact during construction and operation
- a general assessment of nighttime visual impact during construction and operation
- identification of changes to or new mitigation measures.

The methodology for the assessment is described in the following sections. This methodology is consistent with that described in *Technical Report 8 – Landscape Character and Visual Impact Assessment*.

Since the preparation of *Technical Report 8 – Landscape Character and Visual Impact Assessment*, a *Draft Transmission Guideline, Technical Supplement for Landscape and Visual Impact Assessment* (DPE, 2023) has been exhibited by DPHI. This guideline is in draft form and does not apply to this project, which is assessed against the SEARs issued for the project in 2022. If this guideline is finalised by DPHI, it will not apply to the assessment of this project, as the SEARs were issued prior to the existence of this guideline.

4.1 Assessment of landscape character impact

The landscape character assessment was carried out using the steps shown in Figure 4-1. The landscape character zones (and areas) identified in *Technical Report 8 – Landscape Character and Visual Impact Assessment* have been used. Where the location of the project has changed, the landscape character zones (and areas) identified in *Technical Report 8 – Landscape Character and Visual Impact Assessment* has been modified. An assessment of landscape character impact was then carried out by identifying the sensitivity of each landscape character area (refer to Table 4-1), describing the magnitude of change expected as a result of the amended project (refer to Table 4-2), and combining these factors to make an overall assessment of landscape character impact (refer to Table 4-3).

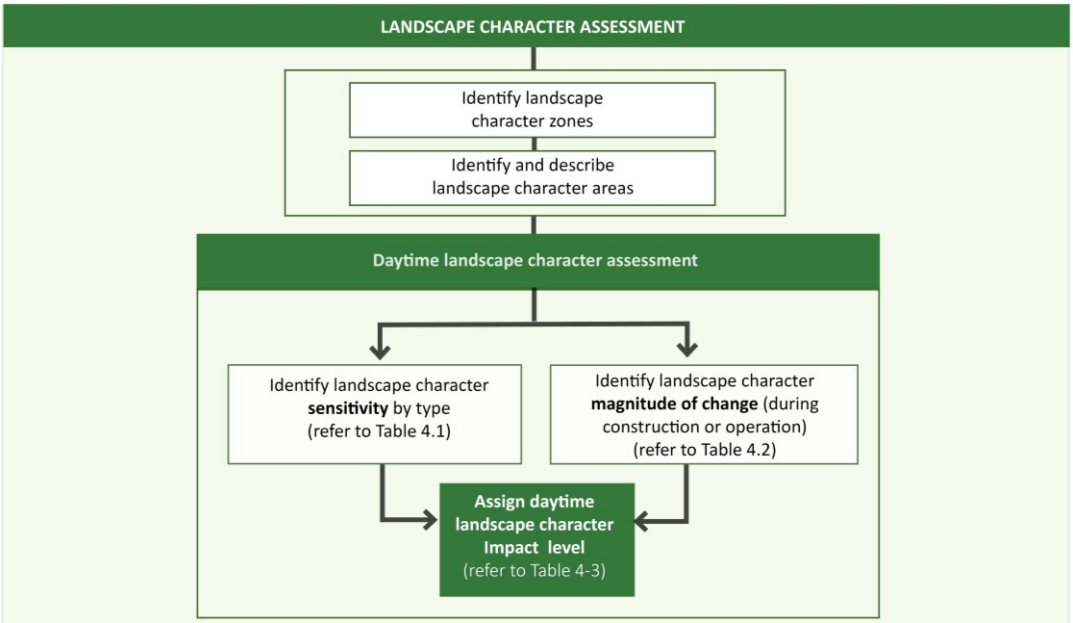


FIGURE 4-1 APPROACH TO LANDSCAPE CHARACTER IMPACT ASSESSMENT

TABLE 4-1: LANDSCAPE SENSITIVITY LEVELS

Landscape sensitivity	Description
National	- Landscape feature or place protected under national legislation or international policy, eg the Australian Alps National Parks and Reserves. - These landscapes are generally unique and uncommon nationally.
State	- Landscape feature or place that is heavily used and/or is iconic to the State, eg Snowy Mountains Scheme lookouts. - These landscapes are generally unique to or uncommon within the State.
Regional	- Landscape feature or place that is heavily used and valued by residents of a major portion of a city or a non-metropolitan region and / or Places with regionally important scenic value or to landscape features. - These places are generally unique or uncommon within the region.
Local	- Landscape feature valued and experienced by concentrations of residents and/or local recreational users and / or places of local scenic value or local landscape features. - These views are likely to be common within the landscape.
Neighbourhood	- Places where without any particular scenic values or local landscape features. - These places are likely to be common within the landscape.

TABLE 4-2: LANDSCAPE MAGNITUDE OF CHANGE LEVELS

Magnitude of change	Description
Very High	- The landscape is altered such that the project dominates and / or transforms its character, amenity and / or function.
High	- The project substantially changes and / or is not compatible with the character, amenity, and function of the landscape. - This would result in an extensive and / or severe change in landscape values.
Moderate	- The project changes and / or is not compatible with the character, amenity, and function of the landscape. - This would result in a considerable and / or unsympathetic change in landscape values.
Low	- The project changes are minor and / or are compatible with the character, amenity, and function of the landscape. - It would result in a slight change in landscape values.
Negligible	- The project would not change the character, amenity and/ or function of the landscape. - If there is a change, it would not be perceived as altering the landscape values.

TABLE 4-3: LANDSCAPE CHARACTER IMPACT LEVELS

		Sensitivity				
		National	State	Regional	Local	Neighbourhood
Magnitude	Very high	Very high	Very high	High	High-Moderate	Moderate
	High	Very high	High	High-Moderate	Moderate	Moderate-Low
	Moderate	High	High-Moderate	Moderate	Moderate-Low	Low
	Low	High-Moderate	Moderate	Moderate-Low	Low	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

Note, where a negligible impact level has been identified, there would be no impact.

4.2 Assessment of visual impact – public domain views

4.2.1 Potential visibility of the project

A map has been prepared to illustrate the potential visibility of the amended project and extent of visibility from areas within this catchment (refer to Attachment D). This visibility analysis uses a digital terrain model and points on the top of each transmission line structure along the indicative transmission line route to identify the areas where views to the amended project may be seen. The analysis shows areas where a greater number of transmission line structures are visible as a darker colour.

The terrain data included one second SRTM Derived Hydrological (version 1.0 Geoscience Australia 2011) Light Detection and Ranging (LiDAR) data. The model does not include land cover features (ie trees and buildings). This therefore represents a worst-case scenario and the first step in the analysis process.

4.2.2 Representative viewpoint assessment

The assessment of visual impact uses a representative viewpoint assessment approach and was carried out using the steps shown in Figure 4-2. Representative viewpoints have been selected to show a range of views towards the amended project. For this assessment of the amended project the views assessed in *Technical Report 8 – Landscape Character and Visual Impact Assessment* have been either removed, for instances where views are no longer impacted by the project, or reassessed, for instances where a change would be evident. New representative views have also been added to assess the impact of the amended project where the change was not adequately covered by the views identified in *Technical Report 8 – Landscape Character and Visual Impact Assessment*. An additional site inspection was carried out during October 2023.

The additional views were selected to include views to the relocated section of the transmission line corridor in the vicinity of Green Hills, transposition sites (requiring a wider easement) and where a new construction compound or worker accommodation facility is proposed.

A viewpoint assessment was carried out by describing the existing view and identifying the sensitivity of the expected viewer (refer to Table 4-4) and the magnitude of change created by the amended project (refer to Table 4-5). Combined, these characteristics of the view are then used to assign a level of potential visual impact (refer to Table 4-6).

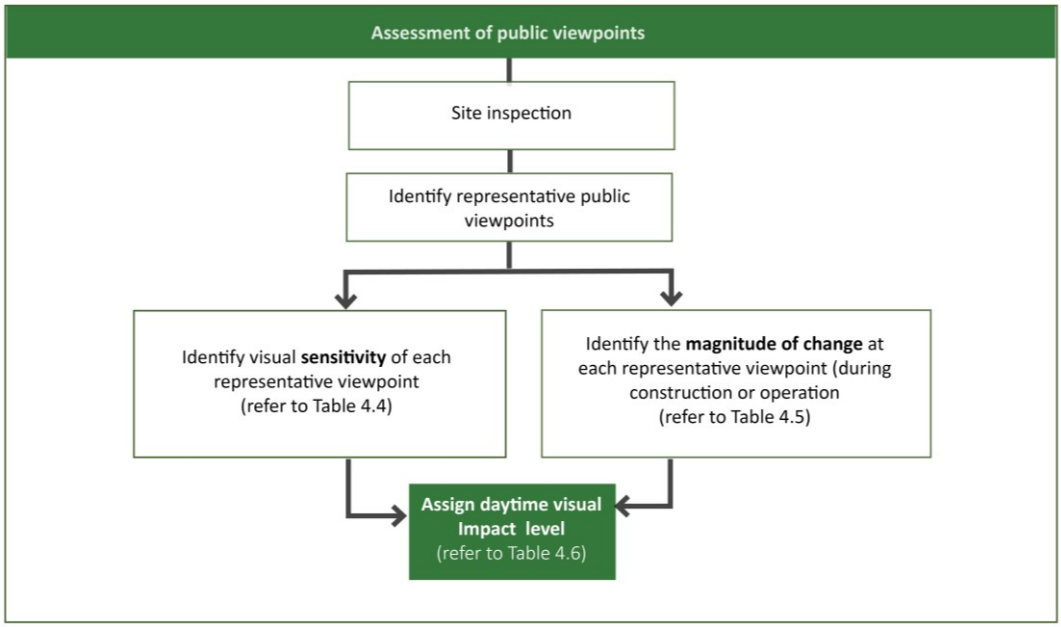


FIGURE 4-2 APPROACH TO VISUAL IMPACT ASSESSMENT

TABLE 4-4: VISUAL SENSITIVITY LEVELS

Visual sensitivity	Description
National	- Heavily experienced view to a national icon, eg view from lookouts within the Australian Alps National Parks and Reserves, and / or - Views to areas with a high scenic quality of national importance or to landscape features of state significance, and / or - Views from World Heritage Listed Places. - These views are generally unique and uncommon nationally.
State	- Heavily experienced view to a feature or landscape that is iconic to the state, eg views from the Snowy Mountains Scheme, and / or - Views to areas with a high scenic quality which may be recognised by the state. - These views are generally unique or uncommon within the state.
Regional	- Heavily experienced view to a feature or landscape that is iconic to a major portion of a city or a non-metropolitan region, or an important view from an area of regional open space, and / or - Views to areas of moderate scenic quality or to landscape features of the regional value. - These views are generally unique or uncommon within the region.
Local	- High quality view experienced by concentrations of residents and/or local recreational users, and/or large numbers of road or rail users, and / or - Views to areas of low scenic quality or to local landscape features. - These views are common within the landscape.
Neighbourhood	- Views where visual amenity is not particularly important to the wider community, such as views of low scenic quality briefly glimpsed from road. - These views are likely to be common within the landscape.

TABLE 4-5: MAGNITUDE OF CHANGE LEVELS

Magnitude of change	Description
Very high	- The view is altered such that the project visually dominates and transforms the character of the view. - It would result in a substantial change in the amenity of the view.
High	- The project is visually prominent, and / or contrasts with the character of the view. - It would result in a considerable change in the amenity of the view.
Moderate	- The project is prominent and / or is not compatible with the character of the view. - It would result in a noticeable change in the amenity of the view.
Low	- The project is not visually prominent and / or is visually compatible with the character of the view. - It would result in a slight change in the amenity of the view.
Negligible	- The project is not visible, is not visually prominent in the view and / or is compatible with the character of the view. - It would result in no perceived change in the amenity of the view.

TABLE 4-6: VISUAL IMPACT LEVELS

		Sensitivity				
		National	State	Regional	Local	Neighbourhood
Magnitude	Very high	Very high	Very high	High	High-Moderate	Moderate
	High	Very high	High	High-Moderate	Moderate	Moderate-Low
	Moderate	High	High-Moderate	Moderate	Moderate-Low	Low
	Low	High-Moderate	Moderate	Moderate-Low	Low	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

Note, where a negligible impact level has been identified, there would be no impact.

4.2.3 Assessment of night-time visual impact

The assessment of night-time impact has been carried out with a similar methodology to the daytime assessment. However, the assessment also draws upon the guidance contained within *AS/NZS 4282 Control of the obtrusive effects of outdoor lighting* (2019).

The method for night-time visual assessment is as follows.

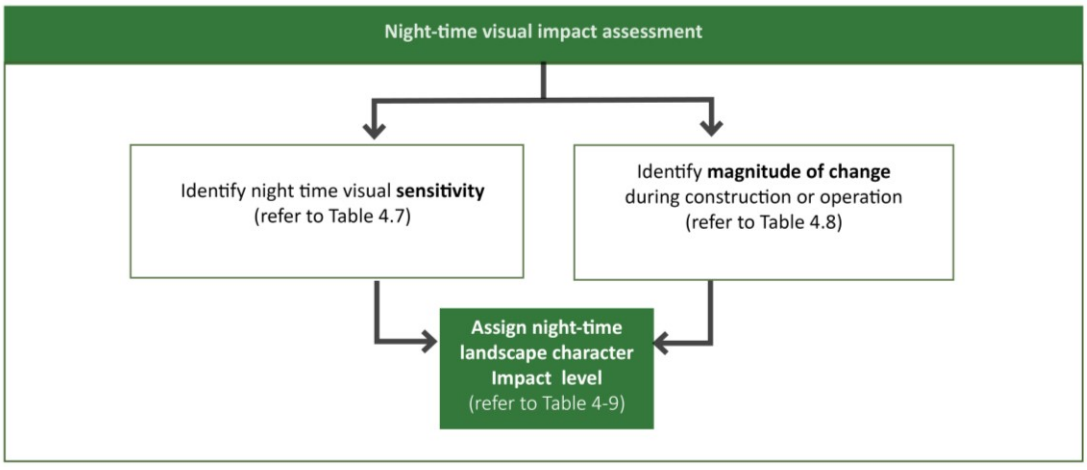


FIGURE 4-3 APPROACH TO NIGHT TIME VISUAL IMPACT ASSESSMENT

TABLE 4-7: ENVIRONMENTAL ZONE SENSITIVITY – NIGHT-TIME

	Environmental Zones (AS/NZS 4282:2019)	
Sensitivity level	**Description**	**Examples**
Very high	A0: Intrinsically dark	United Nations Educational, Scientific and Cultural Organization Starlight Reserve, International Dark-Sky Association Dark Sky Parks, Major optical observatories, no road lighting – unless specifically required by the road controlling authority
High	A1: Dark	Relatively uninhabited rural areas, no road lighting – unless specifically required by the road controlling authority
Moderate	A2: Low district brightness	Sparsely inhabited rural and semi-rural areas
Low	A3: Medium district brightness	Suburban areas in towns and cities
Very low	A4: High district brightness areas	Town and city centres and other commercial areas Residential areas abutting commercial areas

TABLE 4-8: VISUAL MAGNITUDE OF CHANGE LEVELS – NIGHT-TIME

Magnitude of change	Description
Very high	- Substantial change to the level of skyglow, glare or light spill expected, and / or - the lighting of the project would transform the character of the surrounding setting at night, and / or - the effect of lighting would be experienced over an extensive area.
High	- Considerable change to the level of skyglow, glare or light spill and / or - the lighting of the project would noticeably contrast with the surrounding landscape at night, and / or - the effect of lighting would be experienced across a large portion of the landscape.
Moderate	- Alteration to the level of skyglow, glare or light spill would be expected, and / or - the lighting of the project would contrast with the surrounding landscape at night, and / or - the effect of lighting would be experienced across a moderate portion of the landscape.
Low	- Alteration to the level of skyglow, glare or light spill would be expected, and / or - the lighting of the project would not contrast substantially with the surrounding landscape at night, and / or - the effect of lighting would be experienced across a small portion of the landscape.
Negligible	- Either the level of skyglow, glare and light spill is unchanged, or - if it is altered, the change is generally unlikely to be perceived by viewers, or - compatible with the existing or intended future use of the area.

TABLE 4-9: VISUAL IMPACT LEVELS – NIGHT-TIME

		Sensitivity (AS/NZS 4282:2019 Environmental Zone)				
		Very high (A0)	High (A1)	Moderate (A2)	Low (A3)	Very low (A4)
Magnitude	Very high	Very high	Very high	High	High-Moderate	Moderate
	High	Very high	High	High-Moderate	Moderate	Moderate-Low
	Moderate	High	High-Moderate	Moderate	Moderate-Low	Low
	Low	High-Moderate	Moderate	Moderate-Low	Low	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

Note, where a negligible impact level has been identified, there would be no impact.

4.3 Assessment of visual impact – private dwellings

4.3.1 Approach

The approach to assessing the potential visual impact of the amended project on private dwellings remains the same as the approach described in *Technical Report 8 – Landscape Character and Visual Impact Assessment*.

Changes to the impacts identified in the *Technical Report 8 – Landscape Character and Visual Impact Assessment* as a result of the amended project have been identified.

4.3.2 Assessment stages

The assessment of visual impact from private dwellings has been undertaken in two stages.

- **Stage 1 – Preliminary assessment:** Identified those dwellings with the potential for a moderate or higher visual impact based on a desktop analysis of aerial photography, topography, and observations from nearby publicly accessible areas.
- **Stage 2 – Detailed assessment of impacts on views:** Undertake a detailed assessment of those dwellings with a potential moderate to high visual impact, to confirm their visual impact level. This included a visit to a representative sample of these private dwellings to observe and photograph views.

Further details of the process of assessment are contained in *Technical Report 8 – Landscape Character and Visual Impact Assessment*.

4.4 Mitigation and management measures

Where a visual impact has been identified as a result of the project, methods for reducing and managing these impacts have been considered and specific mitigation approaches recommended.

Any new or revised mitigation measures for the amended project have been identified in Chapter 9.0.

4.5 Cumulative and interactive effects

The cumulative impact assessment in *Technical Report 8 – Landscape Character and Visual Impact Assessment* was prepared in accordance with the *Cumulative Impact Assessment Guidelines for State Significant Projects* (DPE, 2022). There is no specific guidance for the assignment of impact levels to cumulative landscape character and visual effects, therefore these effects have been described generally.

Cumulative impacts between projects were addressed in *Technical Report 8 – Landscape Character and Visual Impact Assessment* and this amendment report are based on assumptions about the likely implementation of proposed projects within neighbouring areas.

Additional projects with the potential for cumulative impacts with HumeLink were identified through a review of publicly available information and environmental impact assessments in February 2024. These projects are assessed in this report.

4.6 Visualisations

Photomontages and three-dimensional (3D) modelled views have been prepared to illustrate the expected changes to views as a result of the project at a sample of representative locations along the overall length of the amended project footprint.

Photomontages are created using a combination of 3D modelling and photo editing techniques.

The process used to prepare the photomontages was as follows:

- Global Positioning System (GPS) coordinates and details of the camera were recorded
- a digital surface model (terrain, trees and buildings) was prepared using LiDAR data
- the camera was positioned in the model using the photograph GPS data for each image
- the digital surface model was used to align the view
- the transmission line structures, wires and associated infrastructure were modelled in 3D and materials assigned to the model
- these 3D modelled components were then incorporated into the photograph using Photoshop
- further edits to the photograph were made in Photoshop including the removal of vegetation where appropriate.

Three-dimensional modelled views are created using point cloud data (derived from LiDAR) and 3D modelling.

The process used to prepare the 3D modelled views was as follows:

- an image is created using the point cloud data, the different components (terrain, trees and buildings) are colour coded and a size assigned to each point
- the camera was positioned in the model using the GPS coordinates of the selected viewing location
- the transmission line structures, wires and associated infrastructure were modelled in 3D and colours / materials assigned to the model
- these 3D modelled components were then incorporated into the point cloud model.

For this assessment, the transmission line structure locations along an indicative transmission line route within the amended project footprint have been used. It is noted that the transmission line structures may be shifted slightly within the amended project footprint during finalisation of the project design, however the assessment presents a representative assessment of impacts.

The photomontages used in this assessment represent the operational view to the project. Photomontages of construction activity or worker accommodation facilities have not been prepared as construction activity would change continuously throughout the construction program and these activities would not be permanent.

Transmission line structures have been modelled at an assumed height (76 metres for the 500 kV and 50 metres for the 330 kV transmission line structures) using a typical lattice structure that shows a worst-case scenario in terms of visual complexity.

Several public domain photomontages were revised for this report where the amended project materially altered the view.

For private property views, the photomontages were updated where the amendment would change the location of the project substantially. Additional 3D modelled views were prepared for all dwellings on properties outside of the amended project footprint with an impact rating of moderate or higher, or where the preparation of a 3D modelled view would assist in illustrating the visual impact from a new section (such as a transposition location) or feature of the amended project.

5.0 Existing environment

5.1 Topography and landscape features

The EIS project footprint has been changed in several locations for the amended project. This includes a substantial realignment of the route in the vicinity of Batlow. This new route includes a new 32.5-kilometre transmission line corridor that would pass through the undulating terrain of Green Hills and Bago State Forest, between Wondalga and Buddong, west of Batlow. This area includes large tracts of plantation pine forest, at varying stages of growth, with a history of logging and timber milling. Elsewhere, the general topography and landscape features within the amended project study area generally aligns with the description provided in *Technical Report 8 – Landscape Character and Visual Impact Assessment* (refer to Attachment B).

5.2 Potential visibility of the project

The visibility of the amended project is determined by the landform, and screening effect of building and vegetation cover. As such there would be greater potential visibility of the amended project in areas where the landform is flatter and there is less vegetation. Visibility can vary over time as vegetation grows and is removed or lost (such as in the case of plantation forestry or due to fire).

The diagrams in Attachment D have been revised to show the potential visibility of the amended project. This analysis is based on indicative transmission line structure locations and heights and is identified using a model of the landform of the site and surrounding areas.

Generally, the main changes to the visual catchment described in *Technical Report 8 – Landscape Character and Visual Impact Assessment* include:

- The visual catchment would extend north towards Tarcutta, including areas of low to moderate visibility surrounding the proposed Tarcutta accommodation facility and compound (AC03).
- There would continue to be low to moderate levels of visibility in areas between the Ellerslie Range, Wondalga and Maragle, where the landform transitions into mountainous areas. Although there would be a small area of visibility at Batlow surrounding the proposed Amended Memorial Avenue compound (C14), the majority of the amended visual catchment would shift to west of Batlow, including large areas of Green Hills and Bago State Forests. However, the dense tree cover in much of this area would obstruct views to the amended project. There are also fewer private residences in this area west of Batlow and large areas of forest with limited public access, further limiting opportunities to view the amended project.
- The visual catchment would be removed at Tumbarumba, due to the removal of the Tumbarumba accommodation facility.
- The visual catchment would be reduced south-west of Tumut, at Gilmore, due to the removal of the Snowy Mountains Highway compound (C02) and refinement of the amended project footprint around Wondalga.
- The visual catchment would extend slightly further west at Adjungbilly, including areas of low visibility surrounding the proposed Adjungbilly accommodation facility and compound (AC04).
- The visual catchment would extend slightly further to the north-east of Yass, including areas of low to moderate visibility surrounding the proposed Yass accommodation facility and compound (AC05).
- The visual catchment would also extend further south at Woodhouselee, including areas of low to moderate visibility surrounding the proposed Crookwell accommodation facility and laydown (AC06).

5.3 Landscape and visual sensitivity of the study area

The sensitivity of the landscape and visual study area described in *Technical Report 8 – Landscape Character and Visual Impact Assessment* remains relevant to the amended project.

6.0 Landscape character impact assessment

The following assessment of landscape character impact has been undertaken in accordance with the approach described in Section 4.1 of this report, Assessment of landscape character impact.

6.1 Landscape character zones and areas

Eight broad landscape character zones (and 19 sub-character areas) were identified in *Technical Report 8 – Landscape Character and Visual Impact Assessment*. The location of these have been adjusted to reflect the amended project footprint and are shown in Attachment C.

The landscape character descriptions in *Technical Report 8 – Landscape Character and Visual Impact Assessment* remain relevant to this assessment of the amended project with the following adjustments where the EIS project footprint has changed and notably alters the location of the character area:

- The Gregadoo to Book Book rural valley landscape character area has been expanded to the north to include the areas that would be required for the proposed Tarcutta accommodation facility and compound (AC03).
- The Green Hills forest hills landscape character area has been expanded to the south for this assessment, including a larger area of Green Hills State Forest. This area has a hilly landform with plantation forests with various stages of tree cover and height.
- The Wondalga to Batlow undulating rural hills and ridges landscape character area has been split into two separate areas.
- The Tumbarumba landscape character area has been removed from this assessment, due to the removal of the Tumbarumba accommodation facility (AC1) from the amended project.
- In the Black range to Yass undulating rural hills and ridges landscape character area, the proposed site of the Yass accommodation facility and compound (AC05) has mostly been cleared for agricultural use, grazing pastures and crops, alongside Bango Creek. The southern end of the site is used as a laydown and storage area for civil construction. The area surrounding the site includes several local roads leading to the town of Yass. Nearby land uses include the Yass refuse centre (east of the site), storage yards and rural dwellings.

6.2 Landscape character impacts of the amended project

Where the project has changed, the assessment of the corresponding landscape character zones and areas has been assessed. Any changes to the landscape character impact ratings, between the EIS project and the amended project, are identified in **bold underlined** text.

Where the amended project has been relocated, in the vicinity of Batlow and Green Hills, the landscape character areas identified in the EIS have been expanded or divided to reflect this change and more usefully describe the areas of potential impact on landscape character.

The construction activities described in Technical Report 8 – Landscape Character and Visual *Impact Assessment* would be consistent with that required to construct the amended project unless otherwise noted.

6.2.1 Changes to the assessment of landscape character during construction

Table 6-1 includes a revised landscape character assessment of the amended project during construction.

TABLE 6-1: CHANGES TO THE ASSESSMENT OF LANDSCAPE CHARACTER DURING CONSTRUCTION

	Landscape character area	Sensitivity level	Magnitude of change for the amended project	Amended project impact level	EIS project impact level
Rural Fringe landscape character zone					
A	Wagga Wagga rural fringe	Neighbourhood	Moderate • There is a minor realignment of around 1.4 km of the transmission line route between Ashfords Road and Ivydale Road, Gregadoo (Line 51), changes to the 330 kV line bays at the Wagga 330 kV substation. • Further clarity on the location of upgraded and new access tracks. Due to the scale of construction activity and extent of vegetation removal, there would be a moderate magnitude of change.	Low	Low
Great Dividing Range landscape character zone					
A	Gregadoo Great Dividing Range foothills	Regional	Moderate (no change).	Moderate	Moderate
B	Ellerslie Range Great Dividing Range foothills	Regional	Moderate (no change).	Moderate	Moderate
Rural Valleys landscape character zone					
A	Gregadoo to Book Book rural valleys	Local	Moderate • The area required for the proposed Gugaa 500 kV substation would increase in size, requiring slightly more vegetation removal and altering a larger area of existing rural fields. • There would be a larger area used for construction activity including the use and storage of helicopters. • Around 2.5 km of the transmission line corridor has been realigned to the south, across Kyeamba Creek and Tumbarumba Road at Book Book, which would result in slightly less tree removal in this location. • There would be a new worker accommodation facility (AC03) located about 1.5 km south-west of Tarcutta, north of Mates Gully Road, which would introduce large-scale temporary structures and support facilities into an otherwise rural landscape. Overall, there would be a moderate magnitude change due to the scale of construction activity, the presence of large-scale construction support facilities.	Moderate-low	Moderate-low

	Landscape character area	Sensitivity level	Magnitude of change for the amended project	Amended project impact level	EIS project impact level
B	Yaven Creek and Adelong Creek rural valleys	Local	High • There would be a new construction compound (C21) at the corner of Ellerslie and Yaven Creek roads. This compound would include a potential helipad, for the use and storage of helicopters during construction. • The easement would be widened within the Yaven Creek valley to accommodate several additional transmission line structures at the transposition location. The scale of construction activity within the Yaven Creek Valley would increase with the presence of large-scale construction support facilities, and the construction of additional transmission line structures for the transposition. However, this landscape has some capacity to absorb the change due to the undulating landform in the vicinity of the temporary facilities and large-scale of the landform enclosing the broader valley. Overall, there would be a high magnitude of change.	Moderate	Moderate-low
C	Tumut rural valleys landscape character area	Local	Moderate • The Snowy Mountains Highway compound (C02) is no longer proposed as a part of the amended project and therefore the impacts identified in *Technical Report 8 – Landscape Character and Visual Impact Assessment* from this compound would not occur. • A new construction compound (C19) is proposed north of Gadara Road. This construction compound would be located about 4.9 km west of Tumut, about two km south-east of an existing large paper mill. This compound may include a potential helipad and the include the use and storage of helicopters during construction. • The character of the construction compound would be similar to that of the paper mill and would be mostly seen at a distance from across the valley, so that it would be somewhat consistent and absorbed into the character of this locality. • The transmission line corridor would be slightly realigned in three places, including to the south of the Snowy Mountains Highway at Gadara, adjacent Minjary National Park at Gocup, and a 2.6 km shift to the south at Killimicat, to the east of Brungle Road. Overall, due to the extent and scale of construction activity, presence of large-scale construction support facilities, there would be a moderate magnitude of change.	Moderate-low	Moderate-Low

	Landscape character area	Sensitivity level	Magnitude of change for the amended project	Amended project impact level	EIS project impact level
D	Adjungbilly rural valleys landscape character area	Local	Moderate • The Adjungbilly Road compound (C09) would not be required and the effects of this facility on the landscape character would not occur. • The Adjungbilly accommodation facility and compound (AC04) would be located to the north of Adjungbilly Road, and a larger facility. The new facility would be more visible from Adjungbilly Road and introduce larger scale construction support and worker accommodation facilities into an otherwise rural landscape. Overall, due to the extent and scale of construction activity, presence of large-scale construction support facilities that would contrast with the character of the rural valley, there would be a moderate magnitude of change.	Moderate-low	Moderate-low
E	Tumbarumba rural valleys	Local	Negligible • The Tumbarumba accommodation facility (AC1) does not form part of the amended project and the impacts described in *Technical Report 8 – Landscape Character and Visual Impact Assessment* due to this facility would not occur. The amended project would not occur within this character area.	Negligible	Moderate-low
Forested Hills landscape character zone					
A	Green Hills forested hills	Local	Moderate • The amended project would introduce a new transmission line corridor extending south from Wondalga to Batlow Road, through Green Hills State Forest. • A new construction compound is proposed to the east of Wondalga Road, near the existing forestry deport (Ardrossan Headquarters Road compound (C17)), including a potential helipad, for storage and use of helicopters during construction. Overall, due to the increased extent of the amended project footprint in this area and current absence of transmission infrastructure, in this area, there would be a moderate magnitude of change.	Moderate-low	Low
B	Bago forested hills	Local	Moderate • the transmission line route in the amended project would be shifted to the west, extending south-east from near Laurel Hill, Batlow Road, through Bago State Forest. • The Snubba Road compound (C16) is no longer proposed, and the associated landscape character effects would not occur.	Moderate-low	Moderate-low

	Landscape character area	Sensitivity level	Magnitude of change for the amended project	Amended project impact level	EIS project impact level
			• A new construction compound is proposed also on Snubba Road (C18), south of Batlow, including a potential helipad, for storage and use of helicopters during construction. Overall, the transmission line corridor and new compound location would continue to be located within forestry area and there would be a moderate magnitude of change mainly due to the extent of vegetation removal.		
C	Minjary forested hills	Local	Moderate • A small section (around 1.4 km) of the transmission line corridor would be realigned to the east of Minjary National Park, at Gocup. Overall, this change is minor. Due to the scale of the works there would continue to be a moderate magnitude of change.	Moderate-low	Moderate-low
D	Red Hill and Bungongo forested hills	Local	Low • The Red Hill Road compound (C08) and Adjungbilly Road compound (C09) are no longer required and the effects on landscape character would not occur. • The area of land proposed for the Amended Honeysuckle Road compound (C07) has been increased slightly. Overall, while there would be less compounds in this area, there would continue to be large-scale transmission line infrastructure and tree removal in a small area and a low magnitude of change.	Low	Low
Undulating rural hills and ridges landscape character zone					
A	Wondalga undulating rural hills and ridges	Regional	Moderate • The location of the transmission line corridor has also been refined around Wondalga, reducing the width of the amended project footprint in this area. While part of the transmission line corridor has been removed from the southern part of this landscape, the construction of a large-scale transmission line would alter the character of this area during construction. Overall, there would continue to be a moderate magnitude of change to this landscape as a result of the amended project.	Moderate	Moderate
B	Batlow undulating rural hills and ridges landscape character area	Regional	Low • A section of the transmission line corridor has been removed from this landscape and relocated to the west of Batlow, through Green Hills State Forest reducing the potential for changes to the landscape character	<u>Moderate-low</u>	Moderate

	Landscape character area	Sensitivity level	Magnitude of change for the amended project	Amended project impact level	EIS project impact level
			• A new worker accommodation facility and compound (AC07) is proposed on the Green Hills Access Road, located about 6.5 km west of Batlow. While this facility would introduce large-scale construction support facilities into an otherwise agricultural landscape, this site is somewhat enclosed by landform and there are existing large-scale agricultural buildings in this area. • The Amended Memorial Avenue (C14) compound in Batlow remains in the same location as the EIS project, at an existing depot site zoned for industrial uses. • The Bowmans Lane compound (C15) is no longer required for the amended project and has been removed from this landscape. The presence of a worker accommodation facility and compound, and construction of a large-scale transmission line would alter the character of this area during construction. However, overall, the amended project would have a low magnitude of change on the character of this landscape.		
C	Tumut undulating rural hills and ridges	Regional	No change.	Moderate	Moderate
D	Murrumbidgee undulating rural hills and ridges	Regional	No change.	Moderate-low	Moderate-low
E	Black Range to Yass undulating rural hills and ridges landscape character area	Regional	Low • A new worker accommodation facility and compound (AC05) is proposed on the north-western outskirts of Yass, at Faulder Avenue. This would introduce large-scale construction support facilities, including a potential helipad, for the use and storage of helicopters during construction into the landscape. This facility would be located adjacent to industrial scale activities which has a higher capacity to absorb this change. • The Yass substation compound (C10) on the southern outskirts of Yass remains in the same location as the EIS project. While there would be large-scale construction activity occurring to construct the transmission line, the character effects of the construction compound and worker accommodation facilities would be reduced by their consistency with the existing large-scale infrastructure and industrial features of these localities. Overall, there would be a low magnitude of change.	Moderate-low	Moderate-low
F	Jerrawa to Dalton undulating rural hills and ridges landscape character area	Regional	No change.	Moderate-low	Moderate-low

	Landscape character area	Sensitivity level	Magnitude of change for the amended project	Amended project impact level	EIS project impact level
Upland forest landscape character zone					
A	Snowy Mountains upland forest landscape character area	Regional	Moderate • In the northern part of this area, north of Buddong, the amended project would divert the transmission line route to the north-west, towards Snubba Road. Due to the large-scale construction activity, construction at the future Maragle 500 kV substation and Maragle 500 kV substation compound (C05) there would continue to be a moderate magnitude of change.	Moderate	Moderate
Rural tablelands landscape character zone					
A	Crookwell rural tablelands landscape character area	Local	High • The Woodhouselee Road compound (C11), east of Pejar Dam, has been removed from the amended project and the associated effects on landscape character would not occur. • A new Crookwell accommodation facility and compound (AC06) is proposed to the east of and set back from Woodhouselee Road. This facility would occupy the site currently used for construction of the Crookwell wind farm. While the compound would introduce large-scale construction support facilities into a rural landscape, it is located near existing transmission lines, an existing and under construction wind farm, containing large-scale turbines. • There would also be some additional vegetation removal and potential changes to the landform, to install the facility and compound. • New access tracks would be constructed, and existing access tracks would be upgraded to provide access to the amended project, in the vicinity of Range, Crookwell and Woodhouselee roads, including vegetation removal and civil works. Overall, due to the additional area of rural landscape altered, the and the scale of construction activity that would contrast with the rural landscape, there would be a high magnitude of change during construction.	**Moderate**	Moderate-low
Rural highland and deep valley landscape character zone					
A	Taralga to Bannaby rural highland and deep valley landscape character area	Local	Moderate • The area required for the Amended Bannaby 500 kV substation compound (C12) has increased in size for the amended project, requiring slightly more vegetation removal to the north-west of the existing substation, including trees and low vegetation, and a wider expanse of construction activity. This compound would also include a potential	Moderate-low	Moderate-low

	Landscape character area	Sensitivity level	Magnitude of change for the amended project	Amended project impact level	EIS project impact level
			helipad, for the use and storage of helicopters during construction. • New access tracks would be constructed, and existing access tracks would be upgraded within the amended project footprint to provide access to existing roads such as Hillcrest, Bannaby and Adavale roads, including vegetation trimming or clearing and civil works. The access road to the proposed substation may also require construction of a new retaining wall due to the topography of the site. Overall, due to the vegetation removal and scale of construction activity, there would be a moderate magnitude of change.		

6.2.2 Changes to the assessment of landscape character during operation

Table 6-2 includes a summary of the changes to landscape character impacts during operation, as a result of the proposed amendments and refinements to the project.

TABLE 6-2: ASSESSMENT OF LANDSCAPE CHARACTER DURING OPERATION

	Landscape character area	Sensitivity level	Magnitude of change for the amended project	Amended project impact level	EIS project impact level
Rural fringe landscape character zone					
A	Wagga Wagga rural fringe	Neighbourhood	Moderate • The amended project would include the same project elements following a slightly realigned route. Due to the increase in electricity infrastructure reducing the extent of rural landscape and vegetation within the area, there would continue to be a moderate magnitude of change to this landscape.	Low	Low
Great Dividing Range landscape character zone					
A	Gregadoo Great Dividing Range foothills	Regional	No change.	Moderate	Moderate
B	Ellerslie Range Great Dividing Range foothills	Regional	No change.	Moderate	Moderate
Rural Valleys landscape character zone					
A	Gregadoo to Book Book rural valleys	Local	Moderate • A small section of the transmission line corridor in the amended project would divert away from (south of) the existing Tumut to Wagga 330 kV transmission line easement at Book Book, west of Tumbarumba Road. Although the new transmission line route would be slightly set back from the existing easement, it would still be experienced in the context of the existing transmission line structures. • The Gugaa 500 kV substation has increased in size slightly in the amended project, this would not increase the magnitude of change in this landscape during operation. • The Tarcutta accommodation facility and compound (AC03) at Tarcutta would be removed and returned to rural use. Due to the increased presence of large-scale transmission infrastructure in this landscape, there would continue be a moderate magnitude of change.	Moderate-low	Moderate-low
B	Yaven Creek and Adelong Creek rural valleys	Local	Moderate • There would be additional transmission line structures parallel to the existing transmission line easement for a transposition site in the valley to the west of Yaven Creek Road, • The construction compound at Ellerslie Road (C21) would have been removed and returned to rural use.	Moderate-low	Moderate-low

	Landscape character area	Sensitivity level	Magnitude of change for the amended project	Amended project impact level	EIS project impact level
			While there would be additional transmission line structures in this character zone, overall, there would continue to be a moderate magnitude of change.		
C	Tumut rural valleys landscape character area	Local	Moderate • The Gadara Road compound (C19) would be removed and returned to rural use. • The transmission line corridor would be slightly realigned in three places including to the south of the Snowy Mountains Highway at Gadara, adjacent Minjary National Park at Gocup and to the east of Brungle Road at Killimicat, through the hills to the south of Killimicat Creek. These adjustments would not noticeably alter the effect on the landscape character, as the transmission line would have a similar length and extent of vegetation clearance and earthworks as assumed in the EIS. While there would be a slight increased presence of large-scale transmission infrastructure, overall, there would continue to be a moderate magnitude of change.	Moderate-low	Moderate-low
D	Adjungbilly rural valleys landscape character area	Local	Moderate • The Adjungbilly accommodation facility and compound (AC04) would be removed and returned to rural use. While there would be a slight increased presence of large-scale transmission infrastructure, overall, there would continue to be a moderate magnitude of change.	Moderate-low	Moderate-low
E	Tumbarumba rural valleys	Local	Negligible The amended project would not occur within this character area during operation.	Negligible	Negligible
Forested Hills landscape character zone					
A	Green Hills forested hills	Local	Low • The amended project would introduce a new transmission line corridor extending south of Wondalga, through an area that does not contain large-scale electricity infrastructure. • The amended project would remove areas of plantation forestry that would otherwise be harvested in time. The character and use of the plantation forest in this landscape, including fields of trees at varying stages of growth, existing wide access tracks through the forest and presence of forestry activity (eg use of trucks, machinery and equipment) increases the ability of this landscape to absorb the amended project. Overall, there would be a low magnitude of change to this landscape due to the presence of large-scale transmission infrastructure.	Low	Low

	Landscape character area	Sensitivity level	Magnitude of change for the amended project	Amended project impact level	EIS project impact level
B	Bago forested hills	Local	Low • The amended project would shift the transmission line corridor to the west and mostly out of this character area. • Where present, the transmission line corridor would remove areas of plantation forestry that would otherwise be harvested. Overall, there would be a low magnitude of change due to the introduction of large-scale transmission infrastructure.	Low	Moderate -low
C	Minjary forested hills	Local	Moderate • The locational changes to the amended project would be minor and not alter the effect of the project on landscape character. There would continue to be a moderate magnitude of change, due to introduction of new large-scale transmission infrastructure.	Moderate-low	Moderate -low
D	Red Hill and Bungongo forested hills	Local	Low • The Amended Honeysuckle Road compound (C07) would be removed and returned to rural use. • Elsewhere the location of the amended project would be much the same as the EIS project. The magnitude of change would continue to be low, due to the presence of transmission infrastructure.	Low	Low
Undulating rural hills and ridges landscape character zone					
A	Wondalga undulating rural hills and ridges	Regional	Moderate • The amended project has been refined in this area, however, the proposed transmission line corridor would continue to create a new easement, in a hilly area, largely cleared of vegetation and under rural use, away from power easements. Overall, there would continue to be a moderate magnitude of change due to introduction of large-scale transmission infrastructure into the landscape.	Moderate	Moderate
B	Batlow undulating rural hills and ridges landscape character area	Regional	Negligible • The transmission line corridor would be relocated to the west of Batlow, outside of this area. • During operation the Amended Memorial Avenue (C14) compound in Batlow would have been removed. Overall, there would be a negligible magnitude of change as the amended project would not be located in this area.	Negligible	Moderate
C	Tumut undulating rural hills and ridges	Regional	No change.	Moderate	Moderate

	Landscape character area	Sensitivity level	Magnitude of change for the amended project	Amended project impact level	EIS project impact level
D	Murrumbidgee undulating rural hills and ridges	Regional	No change.	Moderate-low	Moderate-low
E	Black Range to Yass undulating rural hills and ridges landscape character area	Regional	Low • The amended project would be in the same location as the EIS project. • The Yass accommodation facility and compound (AC05) at Faulder Road would be removed. Overall, there would continue to be a low magnitude of change due to introduction of large-scale transmission line structures into this landscape.	Moderate-low	Moderate-low
F	Jerrawa to Dalton undulating rural hills and ridges landscape character area	Regional	No change.	Moderate-low	Moderate-low
Upland forest landscape character zone					
A	Snowy Mountains upland forest landscape character area	Regional	Moderate • The amended project would result in a minor realignment to the transmission line corridor between Snubba Road and Buddong. Overall, there would continue to be a moderate magnitude of change as there would be an increased presence of electricity infrastructure in this remote forested landscape, with a new transmission line corridor, cleared of tall-growing vegetation, and detracting from the character.	Moderate	Moderate
Rural tablelands landscape character zone					
A	Crookwell rural tablelands landscape character area	Local	Low • During operation, the Crookwell accommodation facility and compound (AC06) would have been removed and returned to rural use. There would continue to be a low magnitude of change to this landscape, as the amended project would be located near existing large-scale electricity infrastructure, including multiple wind turbines and substations.	Low	Low
Rural highland and deep valley landscape character zone					
A	Taralga to Bannaby rural highland and deep valley landscape character area	Local	Moderate • The Amended Bannaby 500 kV substation compound (C12) would be removed • The existing 500 kV substation at Bannaby would be expanded slightly from what was described in the EIS. The amended project would be seen in the context of existing large-scale electricity infrastructure, including existing transmission line easements a substation. Overall, there would continue to be a moderate magnitude of change.	Moderate-low	Moderate-low

6.3 Summary of landscape character impacts

Table 6-3 summarises the landscape character impacts of the amended project.

The colours used for the impact level shading corresponds with the impact level tables in the methodology, at Table 4-3: Landscape character impact levels. Any changes to impact ratings, between the EIS project and the amended project, are identified in **bold underline** text. Those areas not re-assessed have been presented in grey text, as the amended project would be unchanged from project assessed in *Technical Report 8 – Landscape Character and Visual Impact Assessment* in these character areas.

TABLE 6-3: SUMMARY OF LANDSCAPE CHARACTER IMPACTS

	Location	Sensitivity rating	Construction impact		Operation impact	
			Amended project	EIS project	Amended project	EIS project
Rural fringe landscape character zone						
A	Wagga Wagga rural fringe landscape character area	Neighbourhood	Low	Low	Low	Low
Great Dividing Range landscape character zone						
A	Gregadoo Great Dividing Range foothills landscape character area	Regional	Moderate	Moderate	Moderate	Moderate
B	Ellerslie Range Great Dividing Range foothills landscape character area	Regional	Moderate	Moderate	Moderate	Moderate
Rural valleys landscape character zone						
A	Gregadoo to Book Book rural valleys landscape character area	Local	Moderate-low	Moderate-low	Moderate-low	Moderate-low
B	Yaven Creek and Adelong Creek rural valleys landscape character area	Local	**Moderate**	Moderate-low	Moderate-low	Moderate-low
C	Tumut rural valleys landscape character area	Local	Moderate-low	Moderate-low	Moderate-low	Moderate-low
D	Adjungbilly rural valleys landscape character area	Local	Moderate-low	Moderate-low	Moderate-low	Moderate-low
E	Tumbarumba rural valleys landscape character area	Local	**Negligible**	Moderate-low	Negligible	Negligible
Forested Hills landscape character zone						
A	Green Hills forested hills landscape character area	Local	**Moderate-low**	Low	Low	Low
B	Bago forested hills landscape character area	Local	Moderate-low	Moderate-low	**Low**	Moderate-low
C	Minjary forested hills landscape character area	Local	Moderate-low	Moderate-low	Moderate-low	Moderate-low
D	Red Hill and Bungongo forested hills landscape	Local	Low	Low	Low	Low
Undulating rural hills and ridges landscape character zone						
A	Wondalga undulating rural hills and ridges landscape character area	Regional	Moderate	Moderate	Moderate	Moderate
B	Batlow undulating rural hills and ridges landscape character area	Regional	**Moderate-low**	Moderate	**Negligible**	Moderate
C	Tumut undulating rural hills and ridges landscape character area	Regional	Moderate	Moderate	Moderate	Moderate

	Location	Sensitivity rating	Construction impact		Operation impact	
			Amended project	EIS project	Amended project	EIS project
D	Murrumbidgee undulating rural hills and ridges landscape character area	Regional	Moderate-low	Moderate-low	Moderate-low	Moderate-low
E	Black Range to Yass undulating rural hills and ridges landscape character area	Regional	Moderate-low	Moderate-low	Moderate-low	Moderate-low
F	Jerrawa to Dalton undulating rural hills and ridges landscape character area	Regional	Moderate-low	Moderate-low	Moderate-low	Moderate-low
Upland forest landscape character zone						
A	Snowy Mountains upland forest landscape character area	Regional	Moderate	Moderate	Moderate	Moderate
Rural tablelands landscape character zone						
A	Crookwell rural tablelands landscape character area	Local	Moderate	Moderate-low	Low	Low
Rural highland and deep valley landscape character zone						
A	Taralga to Bannaby rural highland and deep valley landscape character area	Local	Moderate-low	Moderate-low	Moderate-low	Moderate-low

7.0 Visual impact assessment

7.1 Assessment of daytime visual impacts

The following assessment of visual impact has been undertaken in accordance with the approach described in Section 4.2 of this report, Assessment of visual impact – public domain views.

7.1.1 Selection of representative viewpoints

Viewpoints where the level of impact had the potential to change as a result of the amended project were reassessed.

Additional viewpoints have been selected to represent views to the relocated section of the transmission line corridor in the vicinity of Green Hills, and from locations where a transposition site (requiring a wider easement) or a worker accommodation facility is proposed. Views from scenic routes were selected over other local routes where possible.

Viewpoints from *Technical Report 8 – Landscape Character and Visual Impact Assessment* that have been reassessed are:

- Viewpoint 2: View south from Livingstone Gully Road
- Viewpoint 3: Views from Tumbarumba Road
- Viewpoint 6: Views from Yaven Creek Road
- Viewpoint 9: View east from The Big Apple, Stewarts Road, Batlow
- Viewpoint 13: View south-east from Brungle Road
- Viewpoint 24: View south-west from Grabben Gullen Road.

New viewpoints that have been assessed are:

- Viewpoint 29: View north-east from Mates Gully Road
- Viewpoint 30: View south-west from Wondalga Road (north)
- Viewpoint 31: Views from Wondalga Road (south)
- Viewpoint 32: View north-west from Green Hills Access Road
- Viewpoint 33: View south-west from Batlow Road
- Viewpoint 34: View north from Adjungbilly Road
- Viewpoint 35: Views from Faulder Avenue, Yass
- Viewpoint 36: View from Woodhouselee Road.

Note, additional images have been included for Viewpoint 3 and Viewpoint 6 where the amended project footprint would not be adequately covered by the view selected for *Technical Report 8 – Landscape Character and Visual Impact Assessment*.

The location of views that have been assessed in this technical report are shown in Attachment E. An assessment of each view is contained in the following section of this report. In addition, views from the air have been addressed for the whole landscape and visual study area, at Section 7.1.3.

7.1.2 Assessment of representative viewpoints

The following section includes an assessment of each representative view to the amended project and identifies the daytime visual impacts. These are arranged from west to east, along the amended project footprint (as shown in Attachment E). An updated photomontage, showing the project during operation, has been provided for some viewpoints (refer Attachment F).

Any changes to impact ratings, between *Technical Report 8 – Landscape Character and Visual Impact Assessment* and this technical report, and new impacts associated with the amended project are identified in **bold underlined** text.

Viewpoint 2: View south from Livingstone Gully Road

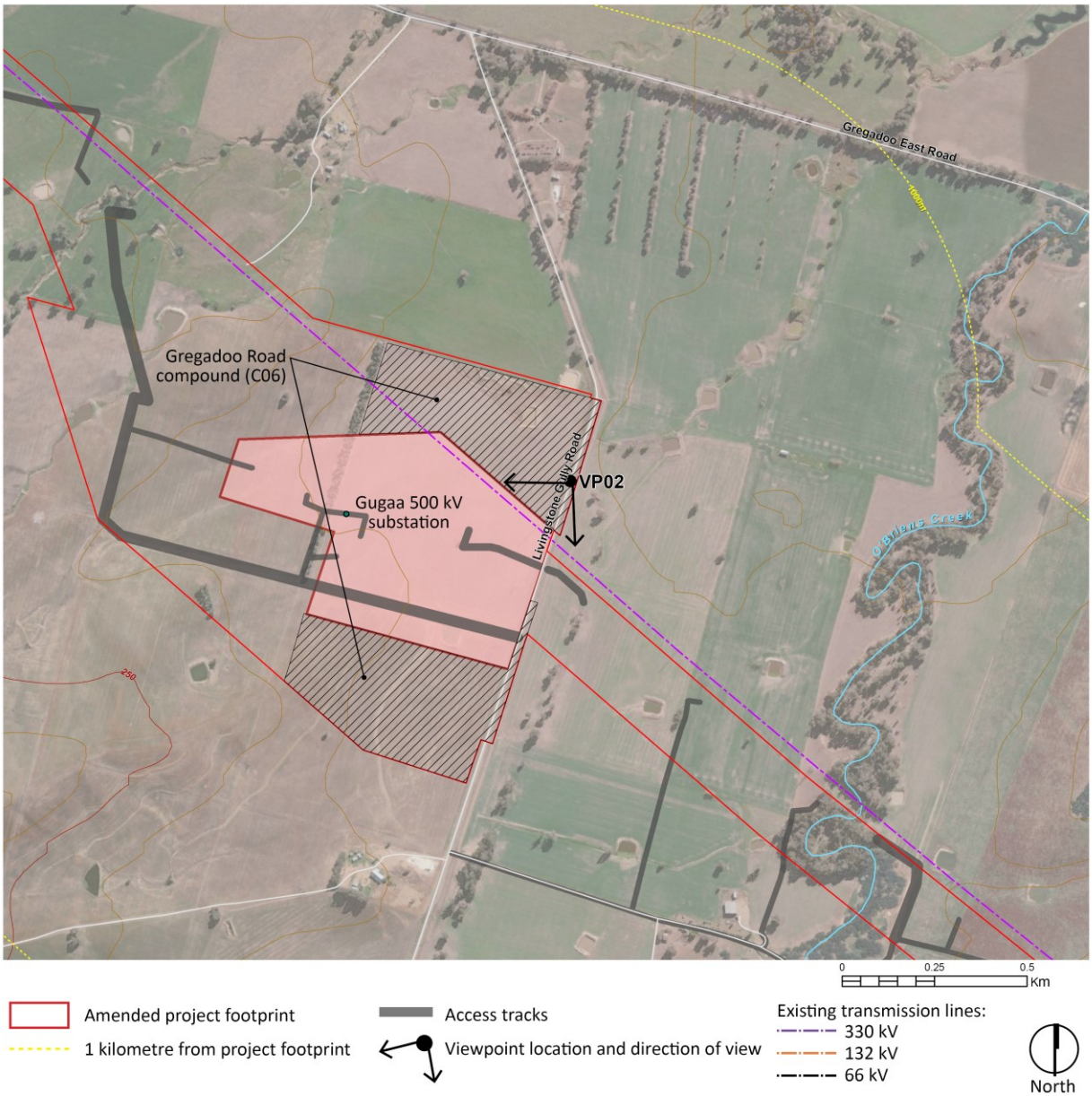


FIGURE 7-1 VIEW SOUTH FROM LIVINGSTONE GULLY ROAD, VIEWPOINT 2 LOCATION PLAN

Location: 35°16'6.43"S, 147°29'3.57"E

Visual sensitivity: **Neighbourhood visual sensitivity**.

Visual impact during construction: In this view, the construction of the Gugaa 500 kV substation would be closer to Livingstone Gully Road and more visually prominent than it was when assessed in *Technical Report 8 – Landscape Character and Visual Impact Assessment*. The proposed Amended Gregadoo Road compound (C06), including site offices, amenities and construction support facilities, as well new access roads and a potential helipad, would be visible during construction.

While there is existing transmission line infrastructure in this view, the scale and extent of energy infrastructure would, with no notable screening by vegetation or landform, result in a very high

magnitude of change. Overall, there would be a **moderate visual impact**. This impact level has increased from *Technical Report 8 – Landscape Character and Visual Impact Assessment* (moderate-low visual impact).

Visual impact during operation: The substation would be a prominent, large-scale piece of infrastructure in the fore and middle ground of this view (refer to Figure 7-3). There would be additional infrastructure at the proposed Gugaa 500 kV substation to the view assessed in the EIS, including additional electrical equipment/conductors. Areas impacted by the Amended Gregadoo Road compound (C06) would have been reinstated and restored to rural use.

Overall, the amended project would be much closer, increased in size and detract from the amenity of this view, resulting in a very high magnitude of change and a **moderate visual impact** during operation. This impact level has increased from the EIS project (moderate-low visual Impact).

FIGURE 7-2 VIEWPOINT 2: VIEW SOUTH FROM LIVINGSTONE GULLY ROAD, EXISTING VIEW

FIGURE 7-3 VIEWPOINT 2: VIEW SOUTH FROM LIVINGSTONE GULLY ROAD, PHOTOMONTAGE OF AMENDED PROJECT

Viewpoint 3: Views from Tumbarumba Road

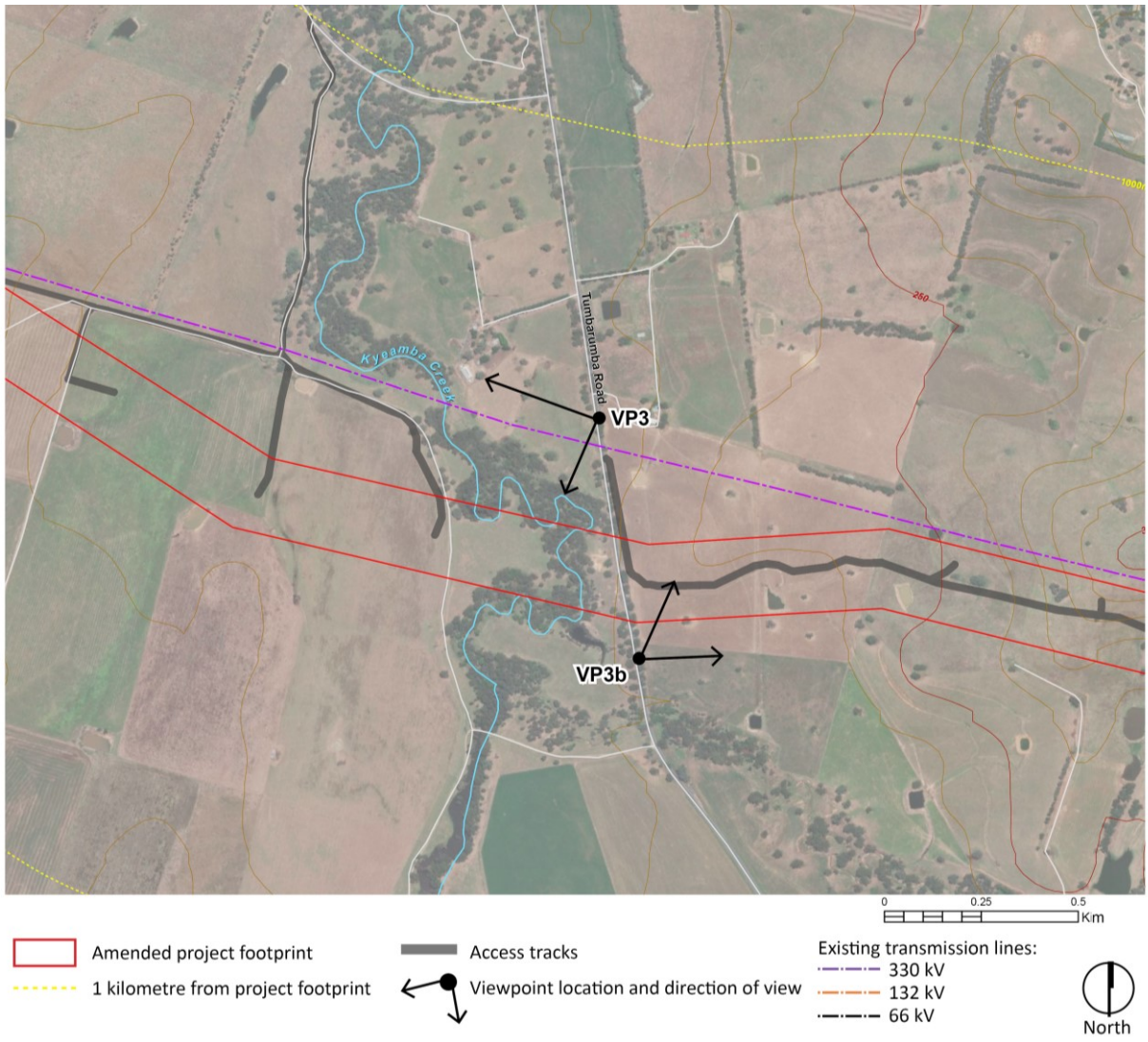


FIGURE 7-4 VIEWS FROM TUMBARUMBA ROAD, VIEWPOINT 3 AND 3B LOCATION PLAN

Viewpoint 3: View south-west from Tumbarumba Road

Location: 35°17'2.35"S, 147°31'25.06"E

Sensitivity: Local visual sensitivity

Visual impact during construction: The amended project footprint would be relocated to the south, away from the existing transmission line. The vegetation along Kyeamba Creek (left of view) would be retained. This vegetation would screen views to the ground level construction activity along the easement, within the amended project footprint. There may be views to the stringing of wires at the transmission line structures in the background of view, rising above the canopy. Overall, there would be a low magnitude of change and a low visual impact.

This impact level has decreased from the EIS project (moderate visual Impact).

Visual impact during operation: The project would be seen in the background of this view, behind the vegetation along Kyeamba Creek. The upper section of the transmission line structures would be visible, rising above the canopy. The structures would be much larger in size, ranging between 50 and 76 metres tall, about double to triple the height of the existing structures. These structures would have a more elongated shape and be spaced at wider intervals so that there would be less structures. Overall, the proposed transmission line would be seen in the background of this view

and would not dominate this view. Overall, there would be a low magnitude of change and a **low visual impact** on this view during operation.

This impact level has decreased from the EIS project (moderate-low visual Impact).

FIGURE 7-5 VIEWPOINT 3: VIEW SOUTH-WEST FROM TUMBARUMBA ROAD, EXISTING VIEW

FIGURE 7-6 VIEWPOINT 3B: VIEW NORTH-EAST FROM TUMBARUMBA ROAD, EXISTING VIEW

Viewpoint 3b: View north-east from Tumbarumba Road

This view along Tumbarumba Road has been added to show the change in location of the amended transmission line near Kyeamba Creek, Book Book.

Location: 35°17’21.67”S, 147°31’31.63”E

Existing conditions: The landscape in view includes an undulating rural landscape containing fields of grazing pastures, with scattered rural dwellings and sheds, and a backdrop of hills. The existing Lower Tumut to Wagga 330 kV transmission lines can be seen crossing the landscape and including steel lattice transmission line structures ranging between 24 to 40 metres tall, within an easement cleared of trees.

Sensitivity: Local visual sensitivity

Visual impact during construction: The amended project footprint would divert to the south and away from the existing transmission line easement for around a 2.5 kilometre section of the proposed transmission line route. The clearing of vegetation, particularly to the west of Tumbarumba Road alongside Kyeamba Creek (left, out of view), and the construction of several transmission structure sites would be seen from this location, extending either side of the road and into the background of the view. There would be machinery and construction vehicles working within the easement to install the transmission line structures and string the wires and conductors, as described in the EIS. The construction activity would be seen in proximity and the vegetation removal and would reduce the amenity of this view. Overall, there would be a high magnitude of change and a moderate visual impact.

Visual impact during operation: The existing and proposed transmission line structures would be seen converging in the views from Tumbarumba Road (refer to Figure 7-5 and Figure 7-6). While the amended project would be seen in the context of the existing easement, the new transmission line structures would be much larger in size, and spaced at wider intervals so that there would be less structures, as described in the EIS. Overall, the project, including the proposed amendments, would be seen in close proximity to road users and introduce two road crossing points. This would result in a moderate magnitude of change and a moderate-low visual impact during operation.

Viewpoint 6: Views from Yaven Creek Road

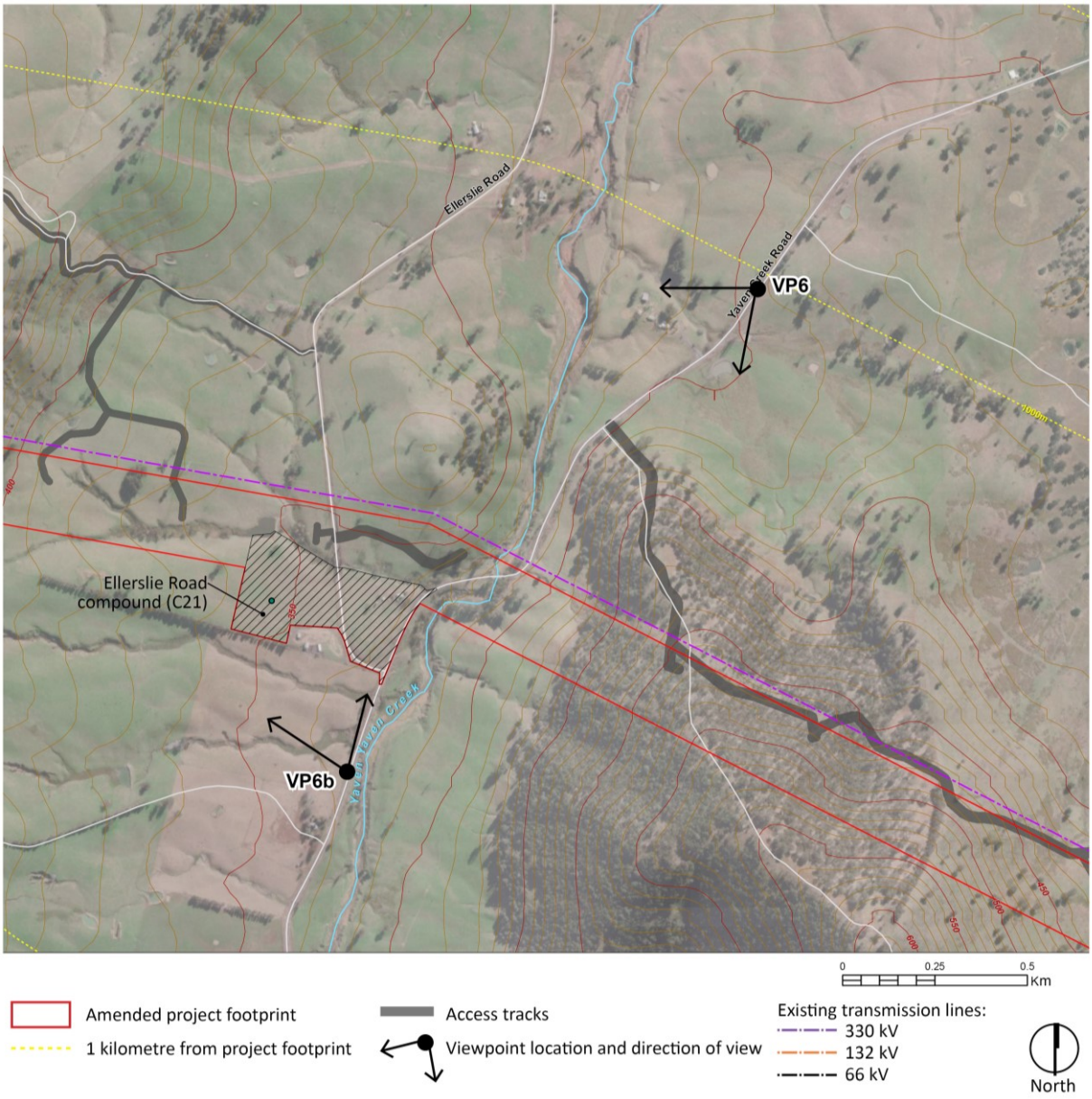


FIGURE 7-7 VIEWS FROM YAVEN CREEK ROAD, VIEWPOINT 6 AND 6B LOCATION PLAN

FIGURE 7-8 VIEWPOINT 6: VIEW SOUTH FROM YAVEN CREEK ROAD, EXISTING VIEW

Viewpoint 6: View south from Yaven Creek Road

Location: 35°21'14.49"S, 147°56'25.35"E

Sensitivity: **Neighbourhood visual sensitivity**

Visual impact during construction: The amended project footprint would expand to include the updated indicative disturbance area and a construction compound near the intersection of Yaven Creek Road and Ellerslie Road. There would be a greater number of construction vehicles and machinery visible working within the easement than anticipated in the EIS. While the undulating terrain and scattered trees would partially screen views to some of the transmission line structure sites, and much of the construction compound, the machinery used to install the structures and string the wires and conductors would be visible and seen against the backdrop of hills. The construction activity would continue to detract from the remote rural character of this view, resulting in a high magnitude of change and a **moderate-low visual impact**.

This impact level in unchanged from the EIS.

Visual impact during operation: In addition to what was assessed in *Technical Report 8 – Landscape Character and Visual Impact Assessment*, the upper portion of the structures at the transposition site would be visible rising above the intervening landform, and viewed against the hills, reducing their prominence in the valley somewhat. These additional steel lattice structures would slightly increase the visual clutter and presence of transmission line infrastructure into the view further. Overall, there would continue to be a high magnitude of change and a **moderate-low visual impact** during operation.

This impact level in unchanged from the EIS.

Viewpoint 6b: View north from Yaven Creek Road

This view along Yaven Creek Road has been added to show the proposed transposition location.

Location: 35°22'2.18"S, 147°55'47.04"E

Existing conditions: This view includes an undulating landscape alongside Yaven Creek (right of view) through undulating pasture fields and scattered trees to either side. A rural dwelling and collection of outbuildings can be seen in the middle ground of this view, at the corner of Ellerslie Road. The existing Lower Tumut to Wagga 330 kV transmission line easement is visible in the background of this view, descending from Mount Mersey in the Ellerslie Range, across the hills, crossing Yaven Creek, and continuing east towards Green Hills State Forest. The easement contains steel lattice transmission line structures ranging between 24 to 40 metres tall, that are seen against a backdrop of hills, reducing their prominence somewhat.

Sensitivity: Neighbourhood visual sensitivity

Visual impact during construction: The amended project footprint would be located in front of (south) and parallel to the existing transmission line. A new construction compound (C21) would be established alongside the new easement, at the corner of Yaven Creek and Ellerslie Roads, in the centre of view, surrounding the rural dwelling and outbuildings. There would be construction vehicles and machinery visible working within the easement including works to install new access tracks and install the transmission line structures on the top of the ridge at Mount Mersey and extending along the hillside towards Yaven Creek. While the undulating terrain and scattered trees would partially screen views to some of the transmission line structure sites, the machinery used to install the structures and string the wires and conductors would be visible and seen against the backdrop of hills, including the construction of additional structures for the transposition site in the valley. The construction activity and presence of a construction compound would detract from the remote rural character of this view, resulting in a high magnitude of change and a moderate-low visual impact.

FIGURE 7-9 VIEWPOINT 6B: VIEW NORTH FROM YAVEN CREEK ROAD, EXISTING VIEW (24MM FOCAL LENGTH)

FIGURE 7-10 VIEWPOINT 6B: VIEW NORTH FROM YAVEN CREEK ROAD, PHOTOMONTAGE (24MM FOCAL LENGTH)

Visual impact during operation: Following construction, the compound would have been removed and there would be a new easement containing large transmission line structures, ranging between 50 and 76 metres tall, seen in front of and aligned parallel to the existing transmission line easement, in the middle ground of this view (refer to Figure 7-10). The transmission line structures would be visible crossing the Yaven Creek valley and hills to the east, and there would be a double row of structures at the transposition site, increasing the presence of large-scale infrastructure in this view. Overall, there would be a high magnitude of change and a **moderate-low visual impact** during operation.

Viewpoint 9: View east from The Big Apple, Stewarts Road, Batlow

FIGURE 7-11 VIEWPOINT 9: VIEW EAST FROM THE BIG APPLE, STEWARTS ROAD, BATLOW, EXISTING VIEW

Location: 35°29'27.09"S, 148° 9'19.57"E

Sensitivity: **Local visual sensitivity**

Visual impact during construction: The amended project footprint would be relocated around 6.5 kilometres the west of this viewpoint, through Green Hills State Forest, and would not be seen in this view. There would be no change to this view (refer to Figure 7-11), and a **negligible visual impact.**

This impact level has reduced from the level identified in *Technical Report 8 – Landscape Character and Visual Impact Assessment* (low visual Impact).

Visual impact during operation: The amended project would be located around 6.5 kilometres the west of this viewpoint and would not be seen in this view, resulting in a **negligible visual impact**.

This impact level has reduced from the level identified in *Technical Report 8 – Landscape Character and Visual Impact Assessment* (low visual Impact).

Viewpoint 13: View south-east from Brungle Road

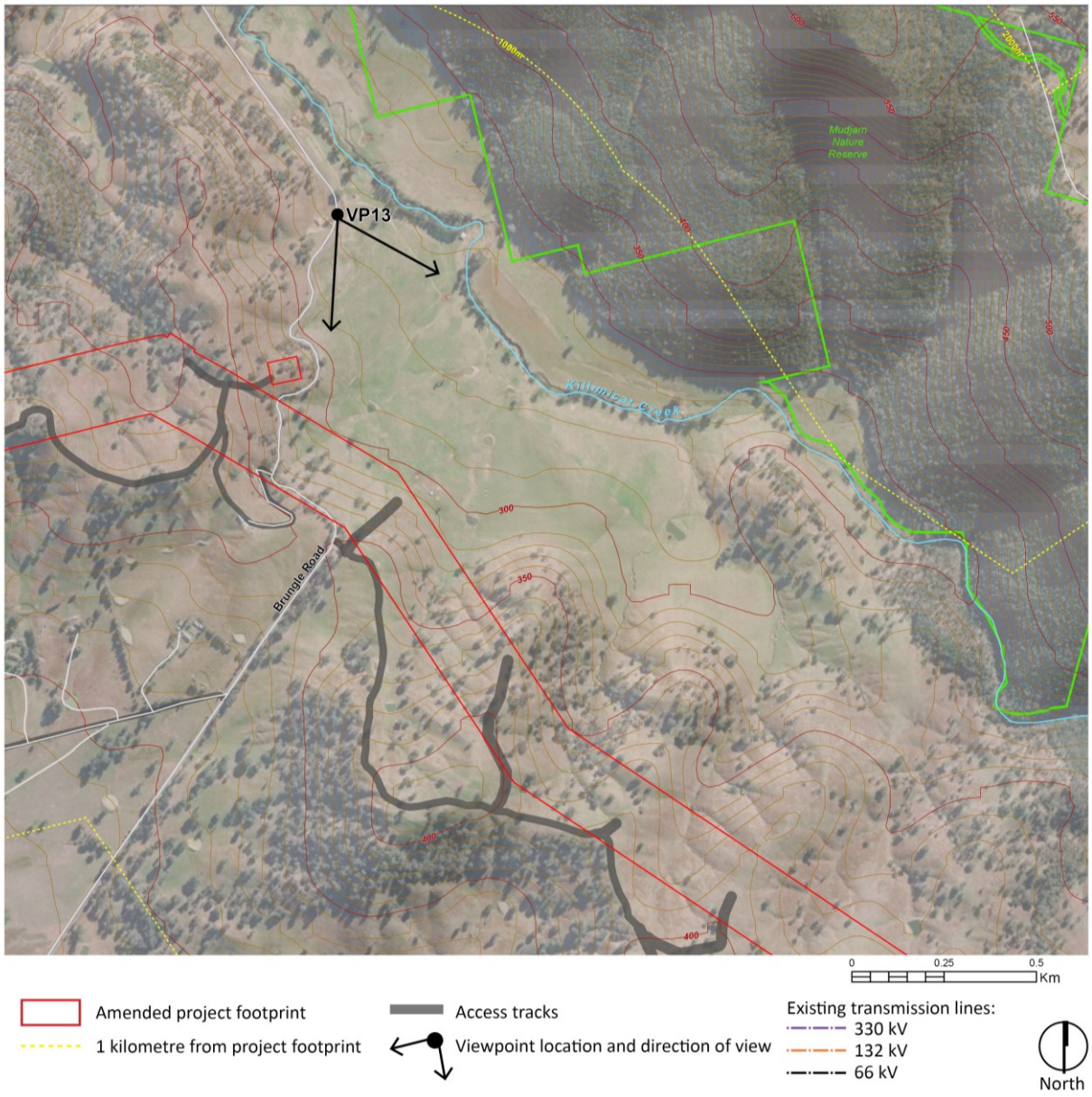


FIGURE 7-12 VIEW SOUTH-EAST FROM BRUNGLE ROAD, VIEWPOINT 13 LOCATION PLAN

Location: 35°12'17.30"S, 148°14'38.05"E

Sensitivity: **Local visual sensitivity**

Visual impact during construction: In this view, the amended project has moved slightly to the south, on the other side of the low hills (refer to Figure 7-12, right of view). Although the construction activity at several transmission line structure sites would still be visible, the construction activity would be located further away, and partly screened by intervening landform and vegetation. Vehicles and machinery would continue to be seen in this view, upgrading and creating new access track within a new easement. Overall, the construction activity of the amended project would detract from the amenity of the view, resulting in a high magnitude of change and a **moderate visual impact**.

This impact level is unchanged from the EIS.

Visual impact during operation: There would continue to be a new transmission line corridor seen in the fore and middle ground of this view, crossing over Brungle Road, as described in the EIS. However, east of the road crossing, the amended project would divert to the south, further away than the project as assessed in the EIS, so that the transmission structures would be partially screened by the intervening hills (refer to Figure 7-14) in the background of the view. The amended project would not cross the hills or remove any vegetation within Mudjarn Nature Reserve. Overall, there would be a moderate magnitude of change and a **moderate-low visual impact** during operation.

This impact level has reduced from the level identified in *Technical Report 8 – Landscape Character and Visual Impact Assessment* (moderate visual Impact).

FIGURE 7-13 VIEWPOINT 13: VIEW SOUTH-EAST FROM BRUNGLE ROAD, EXISTING VIEW (PANORAMA)

FIGURE 7-14 VIEWPOINT 13: VIEW SOUTH-EAST FROM BRUNGLE ROAD, PHOTOMONTAGE (PANORAMA)

Viewpoint 24: View south-west from Grabben Gullen Road

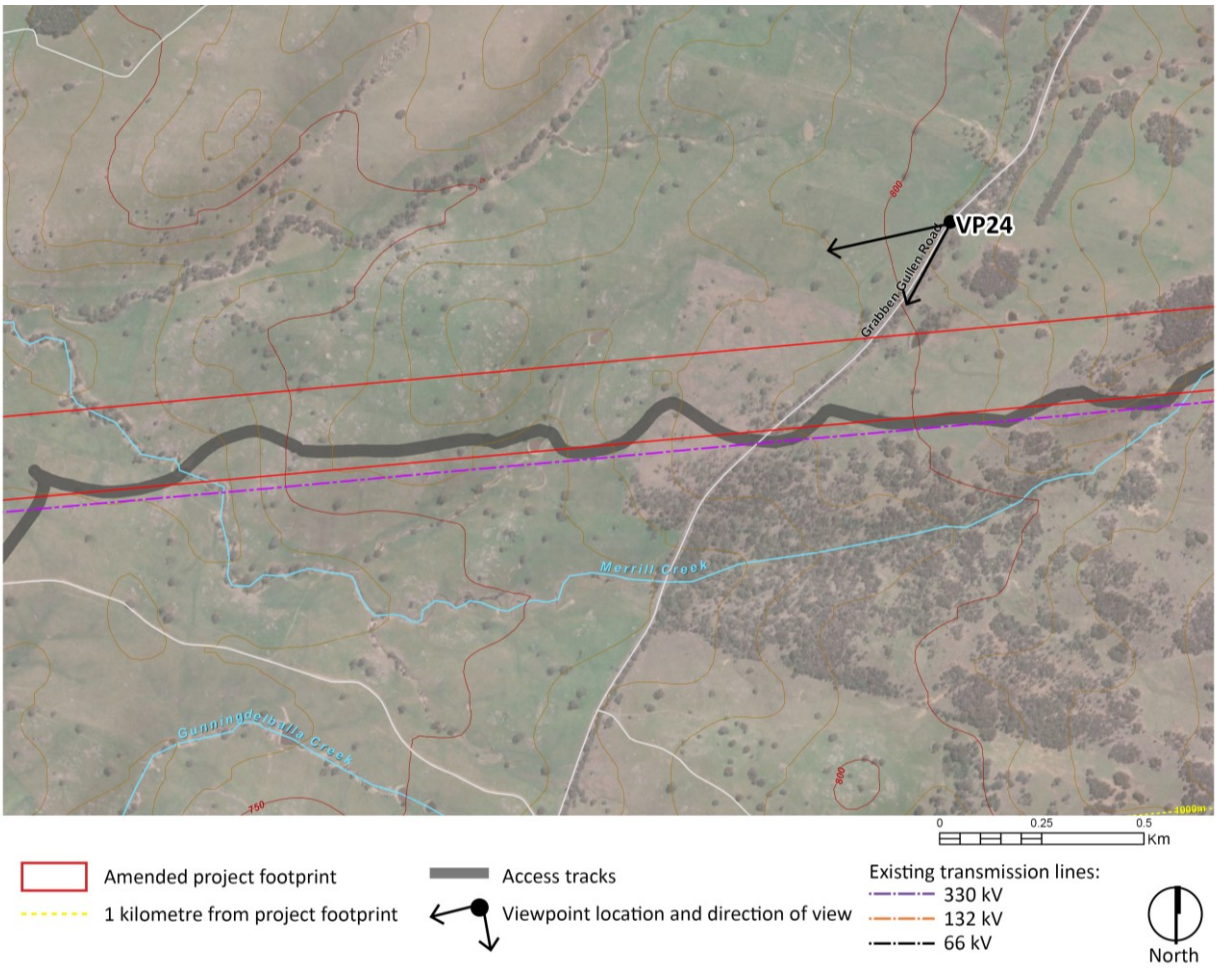


FIGURE 7-15 VIEW SOUTH-WEST FROM GRABBEN GULLEN ROAD, VIEWPOINT 24 LOCATION PLAN

FIGURE 7-16 VIEWPOINT 24: VIEW SOUTH-WEST FROM GRABBEN GULLEN ROAD, EXISTING VIEW

Location: 34°38’39.42”S, 149°19’51.62”E

Sensitivity: **Local visual sensitivity**

Visual impact during construction: The location of the amended project would be the same as the project described in the EIS, extending through the undulating terrain, in front of the existing easement (refer to Figure 7-16). There would however be a transposition site proposed to the west of Grabben Gullen Road, including a double row of transmission line structures. There would be some additional construction activity seen for these additional structures, however, this would be in the background of the view, partly screened by the undulating hills. This change would not materially alter the assessment of impact at this location and there would continue to be a moderate magnitude of change and a **moderate-low visual impact**.

This impact level is unchanged from the EIS.

Visual impact during operation: The amended project would include a transposition, with views to a double row of transmission line structures for a short section of the new easement. This would be seen in the background of this view, partly screened by the undulating landform. Overall, this change would not materially alter the assessment of impact at this location and there would continue to be a moderate magnitude of change and a **moderate-low visual impact** during operation.

This impact level is unchanged from the EIS.

Viewpoint 29: View north-east from Mates Gully Road

This view has been added to capture the visual impacts of the proposed Tarcutta accommodation facility and compound (AC03).

Location: 35°16’50.61”S, 147°43’3.60”E

Existing conditions: This view includes an elevated and gently undulating landscape, which has mostly been cleared for agricultural use, predominantly pastoral grazing (refer to Figure 7-18). It has an open, rural landscape character with glimpses of distant hills. Although there are few large-scale built structures in this view, there are scattered houses in the surrounding fields and the Hume Highway is located to the east (out of this view), about 800 metres away.

Sensitivity: Mates Gully Road in this location is a sealed road providing access between the Hume and Sturt Highways, used mainly by nearby residents and their visitors. Rural views such as this are common within this area around Tarcutta. This view is of **neighbourhood visual sensitivity**.

Visual impact during construction: The construction and operation of Tarcutta accommodation facility and compound (AC03) would be seen in the centre of this view, extending along Mates Gully Road. The facility would be located in the pasture fields in the middle ground of this view, and extending north towards Mates Gully, requiring removal of pastures and trees. There would be machinery and construction vehicles seen accessing the site from Mates Gully Road and working to install the accommodation facility and compound. Once installed, the facility would include demountable and modular accommodation unit structures to accommodate staff and other facilities, with vehicles seen accessing the site. The construction and operation of the worker accommodation facility would introduce large-scale construction support facilities into an otherwise rural landscape. The facility and compound would be prominent and reduce the amenity of this view. Overall, there would be a high magnitude of change to a view of neighbourhood sensitivity, resulting in a **moderate-low visual impact** during construction.

Visual impact during operation: At the end of construction, the worker accommodation facility and compound would be disassembled. The site would be returned to rural use and the rural character of this view would be restored. There would be a negligible magnitude of change and a **negligible visual impact** during operation in this view.

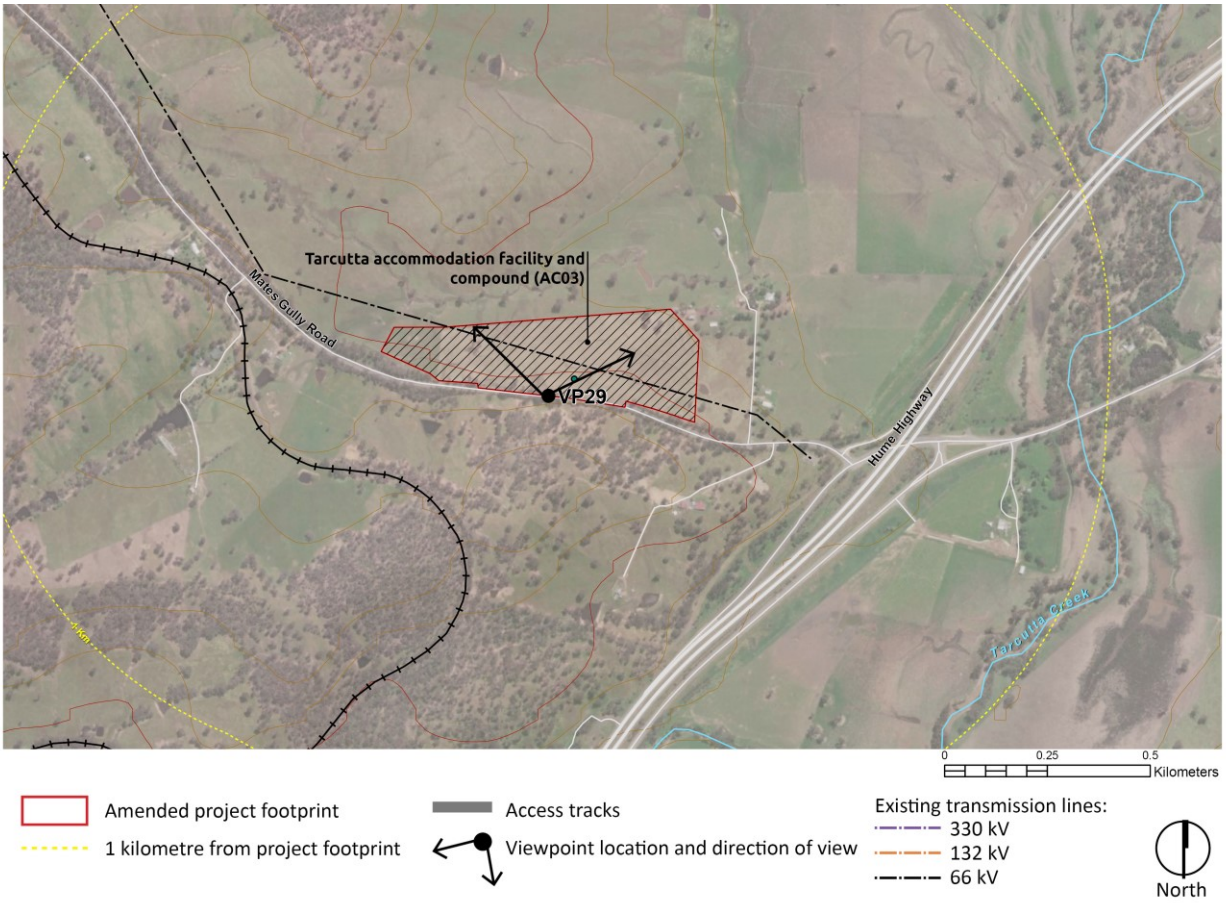


FIGURE 7-17 VIEW NORTH-EAST FROM MATES GULLY ROAD, VIEWPOINT 29 LOCATION PLAN

FIGURE 7-18 VIEWPOINT 29: VIEW NORTH-EAST FROM MATES GULLY ROAD, EXISTING VIEW

Viewpoint 30: View south-east from Wondalga Road (north)

This view has been added to capture the visual impacts of the new Green Hills section of the amended project.

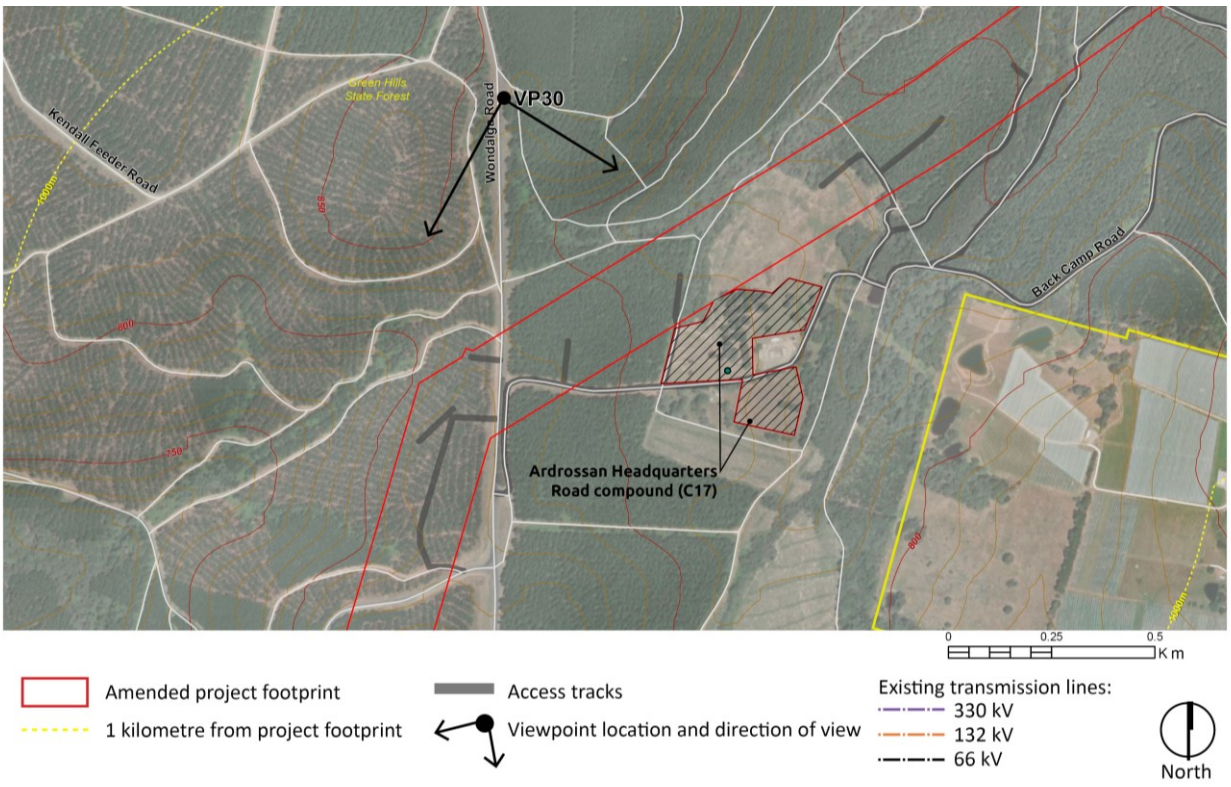


FIGURE 7-19 VIEW SOUTH- EAST FROM WONDALGA ROAD NORTH, VIEWPOINT 30 LOCATION PLAN

FIGURE 7-20 VIEWPOINT 30: VIEW SOUTH-EAST FROM WONDALGA ROAD NORTH, EXISTING VIEW

Location: 35°29’50.40”S, 148° 3’7.74”E

Existing conditions: This view shows an elevated and undulating landscape, with tree plantations at varying stages of growth (refer to Figure 7-20). The plantation forests in view were recently planted, and in time will enclose and partially block views from Wondalga Road. The large sheds located at the Ardrossan forestry depot are visible in the background of view. Further to the east (left of view), there is a large area of native forest, outside of the State forest area, extending towards Batlow.

Sensitivity: Wondalga Road is a sealed road providing access through Green Hills State Forest, between Wondalga and Taradale, used mainly by nearby forestry workers, residents and visitors to the area. Views such as this are common within this forestry area west of Batlow. This view is of **neighbourhood visual sensitivity**.

Visual impact during construction: The amended project footprint would cross Wondalga Road around 650 metres away, in the middle ground of view, and extend through the forested landscape either side of Wondalga Road. The construction of several transmission line structure sites would be visible, along the new transmission line easement, including removal of trees, leveling works and foundation construction. Vehicles and machinery would be seen in the construction area, travelling along existing access tracks within and near the new easement. A new construction compound would be established beside the Ardrossan forestry depot, including site offices, amenities, and construction support facilities. The construction activity would contrast with the undulating forested landscape which does not currently include large-scale transmission infrastructure. Overall, there would be a low magnitude of change to a view of neighbourhood sensitivity, and a **negligible visual impact** during construction.

Visual impact during operation: In this view there would be a new cleared easement with some native shrubs alongside the adjacent forestry. This easement would contain several transmission line structures ranging between 50 and 76 metres tall. The vegetation in the foreground of view would screen the lower section of the structures once mature, and the rural and forestry uses seen from this location would continue around the new easement. Overall, there would be a low magnitude of change to this view, which is of neighbourhood visual sensitivity, and a **negligible visual impact** during operation.

Viewpoint 31: Views from Wondalga Road (south)

This view has been added to capture the visual impacts of the new Green Hills section of the amended project.

Location: 35°32’27.15”S, 148° 2’47.63”E

Existing conditions: The views in Figure 7-22 and Figure 7-23 show the forested hills landscape at Green Hills, south-west of Batlow. It is an elevated and undulating landscape, with tree plantations at varying stages of growth, and corridors of native vegetation along creeks and roads, creating a mixture of partially enclosed and open views. The hillside in Figure 7-23 shows a recently planted pine plantation forest, which in time would enclose and partially block views from Wondalga Road.

Sensitivity: Wondalga Road is a sealed road providing access through Green Hills State Forest, between Wondalga and Taradale, used mainly by nearby forestry workers, residents and visitors to the area. Views such as this are common within this forestry area west of Batlow. This view is of **neighbourhood visual sensitivity**.

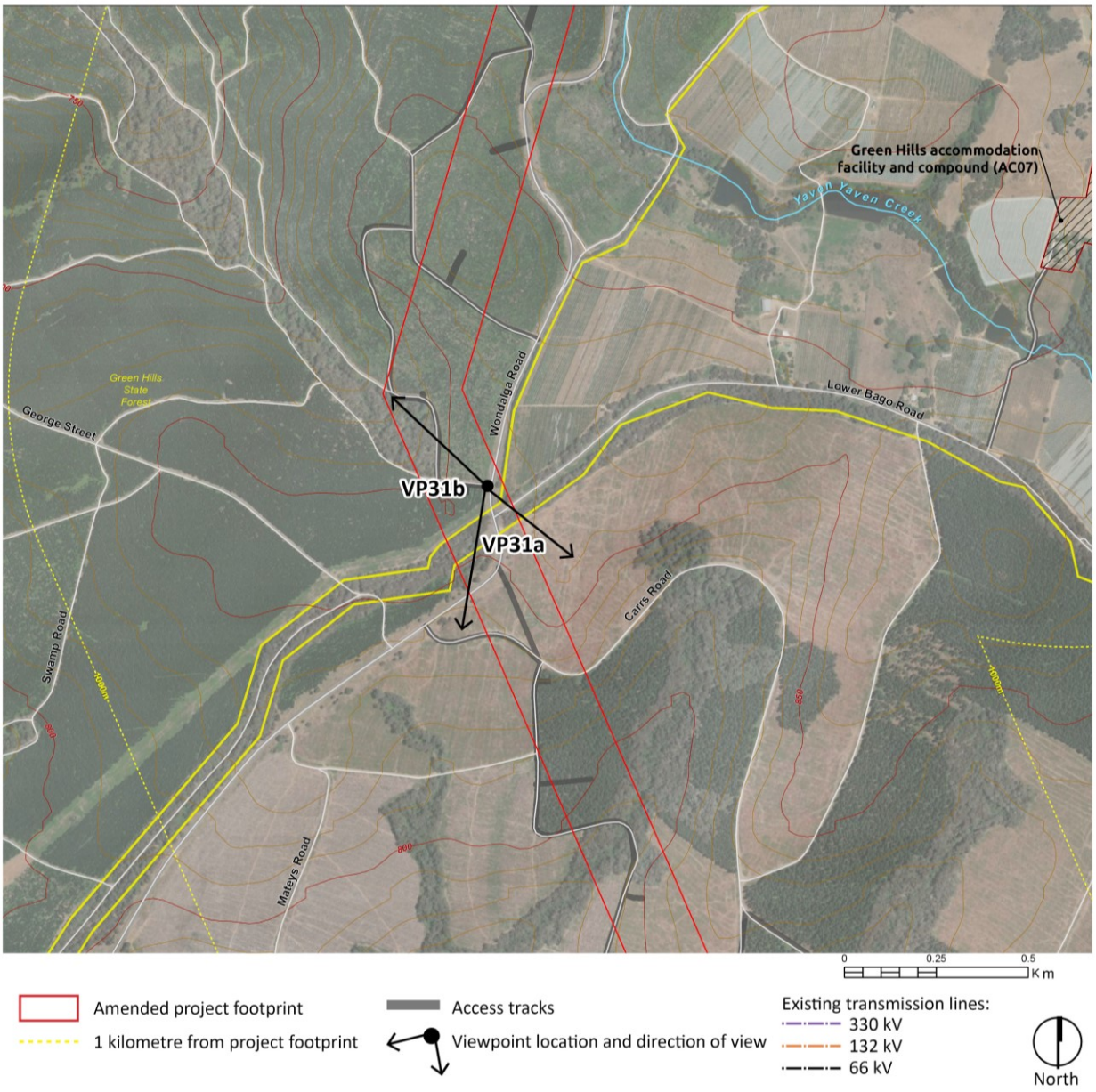


FIGURE 7-21 VIEWS FROM WONDALGA ROAD (SOUTH), VIEWPOINT 31A AND 31B LOCATION PLAN

Visual impact during construction: The new transmission line corridor would cross Wondalga Road around and extend through the forested landscape either side of Wondalga Road. The new easement would extend through the recently planted pine plantation forest, with the removal of vegetation and construction of several transmission line structure sites visible. Vehicles and machinery would be seen in the amended project footprint, travelling along existing access tracks within and near the new easement. The construction activity would contrast with the undulating forested landscape which does not currently include large-scale transmission infrastructure but be somewhat in character with the scale of equipment used for forestry harvesting and transportation. Overall, there would be a low magnitude of change to a view of neighbourhood sensitivity, and a **negligible visual impact** during construction.

Visual impact during operation: A new cleared easement with native vegetation established adjacent to the forestry, would be seen in this view. This easement would include several transmission line structures ranging between 50 and 76 metres tall. The easement would be cleared of trees and the forestry uses seen from this location would continue around the new easement. Overall, there would be a low magnitude of change to this view, which is of neighbourhood visual sensitivity, and a **negligible visual impact** during operation.

FIGURE 7-22 VIEWPOINT 31A: VIEW SOUTH-EAST FROM WONDALGA ROAD, EXISTING VIEW

FIGURE 7-23 VIEWPOINT 31B: VIEW WEST FROM WONDALGA ROAD, EXISTING VIEW

Viewpoint 32: View north-west from Green Hills Access Road

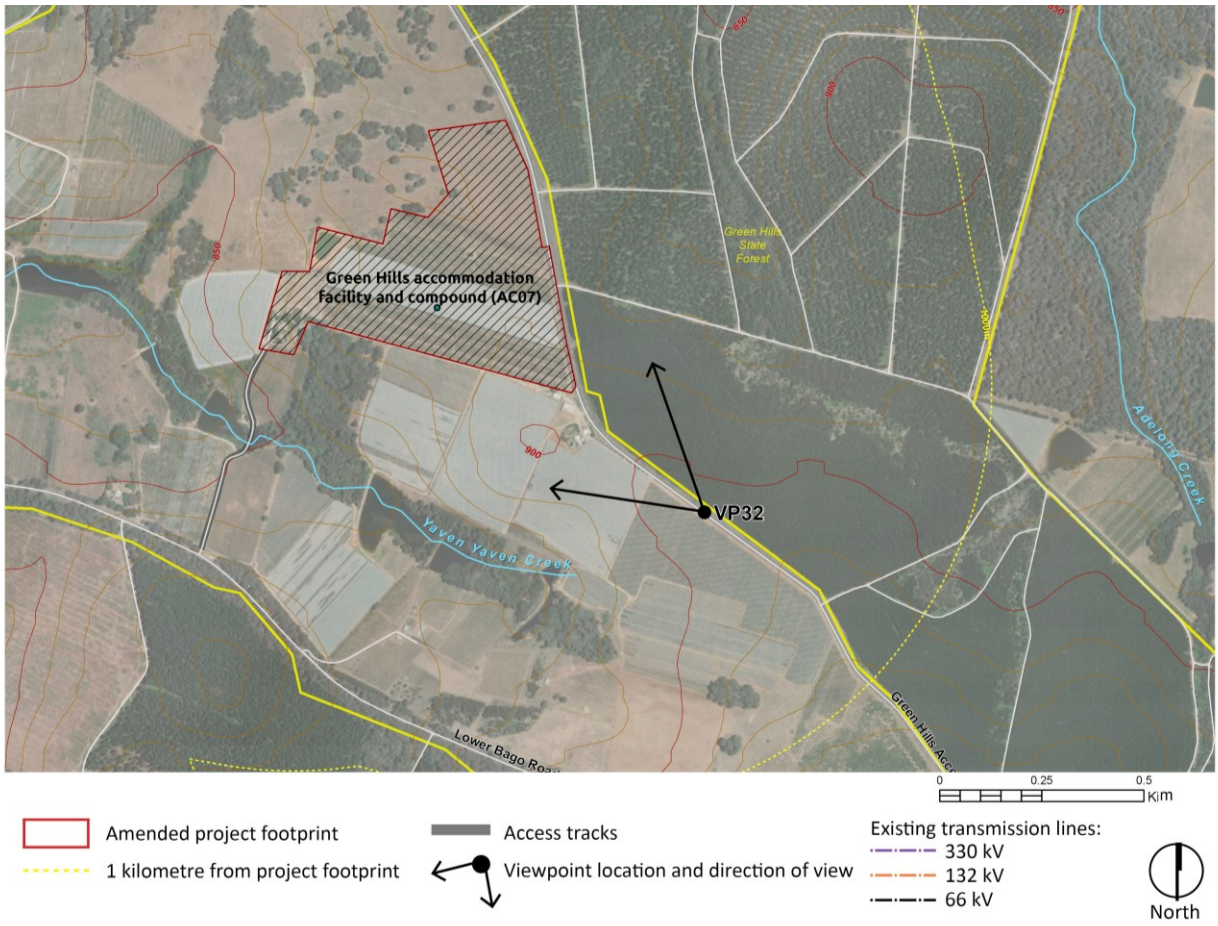


FIGURE 7-24 VIEW NORTH-WEST FROM GREEN HILLS ACCESS ROAD, VIEWPOINT 32 LOCATION PLAN

FIGURE 7-25 VIEWPOINT 32: VIEW NORTH-WEST FROM GREEN HILLS ACCESS ROAD, EXISTING VIEW

This view has been added to capture the visual impacts of the proposed Green Hills accommodation facility and compound (AC07) and new Green Hills section of the amended project.

Location: 35°32'11.74"S, 148° 4'27.48"E

Existing conditions: The view in Figure 7-25 shows the division between the undulating rural hills and ridges landscape (left of view) and the forested hills landscape (right of view), west of Batlow. To the west of Green Hills Access Road (left of view), the landscape is characterised by horticultural uses, including rows fruit trees and associated packing sheds. To the east of Green Hills Access Road, the landscape includes plantation forest at varying stages of growth. The landscape in view is elevated and undulating, with long-range views to the Ellerslie Range.

Sensitivity: Green Hills Access Road is a sealed road providing access through Green Hills State Forest, between Wondalga Road and Batlow Road, used mainly by nearby forestry workers, residents and visitors to the area. Views such as this are common within this area west of Batlow. This view is of **neighbourhood visual sensitivity**.

Visual impact during construction: The construction and operation of Green Hills accommodation facility and compound (AC07) would be seen in the centre of this view, extending along the western side of Green Hills Access Road. The facility and compound would be located in the horticultural fields in the middle ground of this view and extending north towards native trees seen in the background of view, requiring removal of rows fruit trees. There would be machinery and construction vehicles seen accessing the site from Green Hills Access Road and working to install the facility and compound. Once installed, the facility would include demountable and modular accommodation unit structures to accommodate staff and other facilities, with vehicles seen accessing the site, generally in the mornings and evenings. The construction and operation of the worker accommodation facility would introduce large-scale construction support facilities into an otherwise rural and forestry land uses. The facility and compound would be prominent and contrast with the character of the existing view. Construction of the new transmission line corridor would be located around 2.5 kilometres to the north-west, and not seen in this view. Overall, there would be a moderate magnitude of change to a view of neighbourhood sensitivity, resulting in a **low visual impact** during construction.

Visual impact during operation: At the end of construction, the worker accommodation facility and compound would be demobilised. The site would be returned to rural use and the character of this view would be restored. There would be a negligible magnitude of change and a **negligible visual impact** during operation in this view.

Viewpoint 33: View south-west from Batlow Road

This view has been added to capture the visual impacts of the new Green Hills section of the amended project.

Location: 35°35’18.16”S, 148° 5’25.46”E

Existing conditions: The view in Figure 7-27 shows a forested view along Batlow Road. Batlow Road forms the division between Bago State Forest (left of view) and the Green Hills State Forest (right of view). The roadside vegetation includes a mix of native and exotic vegetation, with glimpses to the plantation forest beyond.

Sensitivity: This part of Batlow Road forms part of Snowy Valleys Way, a scenic touring route between Gundagai and Beechworth. Views such as this are experienced by moderate to high number of receivers, including tourists, residents, forestry workers and freight transporters. This view is of **local visual sensitivity**.

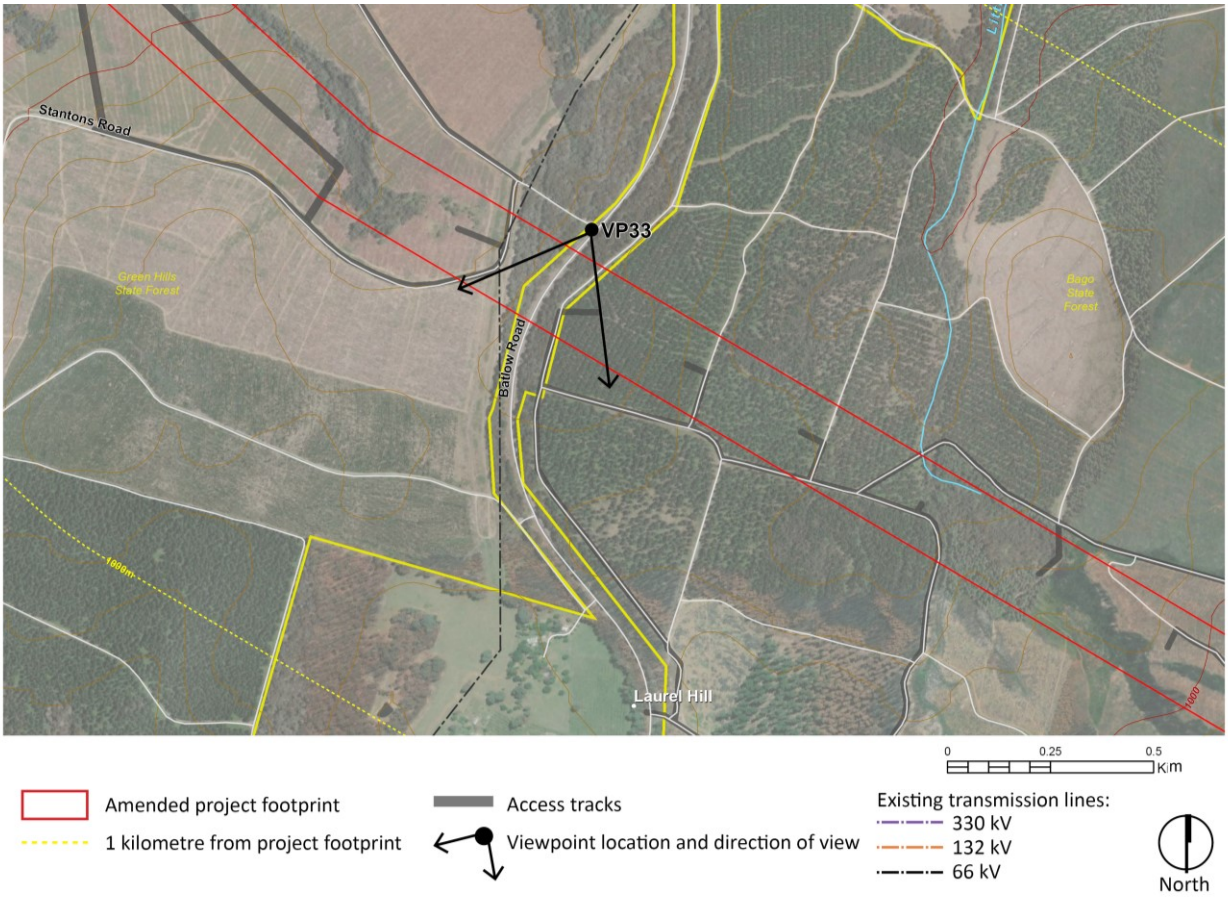


FIGURE 7-26 VIEW SOUTH-WEST FROM BATLOW ROAD, VIEWPOINT 33 LOCATION PLAN

FIGURE 7-27 VIEWPOINT 33: VIEW SOUTH-WEST FROM BATLOW ROAD, EXISTING VIEW

Visual impact during construction: In this view, the amended project would cross over and extend either side of Batlow Road, in the middle ground of view. The installation of several transmission line structures would be visible, including vegetation removal alongside Batlow Road, forming a wide cleared corridor through this forested landscape. Machinery and construction vehicles would be seen working to install structures and string the wires and conductors. Overall, this construction activity would be prominent in this view, substantially altering the character of the view and resulting in a moderate magnitude of change. This is a view of local sensitivity, and there would be a **moderate-low visual impact** during construction.

Visual impact during operation: A new cleared easement would create a wide break in the vegetation along this route. There would be several transmission line structures ranging between 50 and 76 metres tall, seen from Batlow Road, with wires overhead and extending to the east and west of Batlow Road. The easement would be cleared of trees and the forestry uses seen from this location would continue around the new easement. Overall, due to the clearing of vegetation and scale of the infrastructure, there would be a moderate magnitude of change and a **moderate-low visual impact** during operation.

Viewpoint 34: View north from Adjungbilly Road

This view has been added to capture the visual impacts of the proposed Adjungbilly accommodation facility and compound (AC04).

Location: 35° 3’59.98”S, 148°21’15.78”E

Existing conditions: The view in Figure 7-29 shows the rural valleys landscape extending north of the Adjungbilly Creek valley. It is an elevated and undulating landscape, consisting of cleared agricultural land used for grazing. The forestry reserves at Red Hill State Forest are seen in the background of view, extending over the hills to the north. This view contains no large-scale built structures.

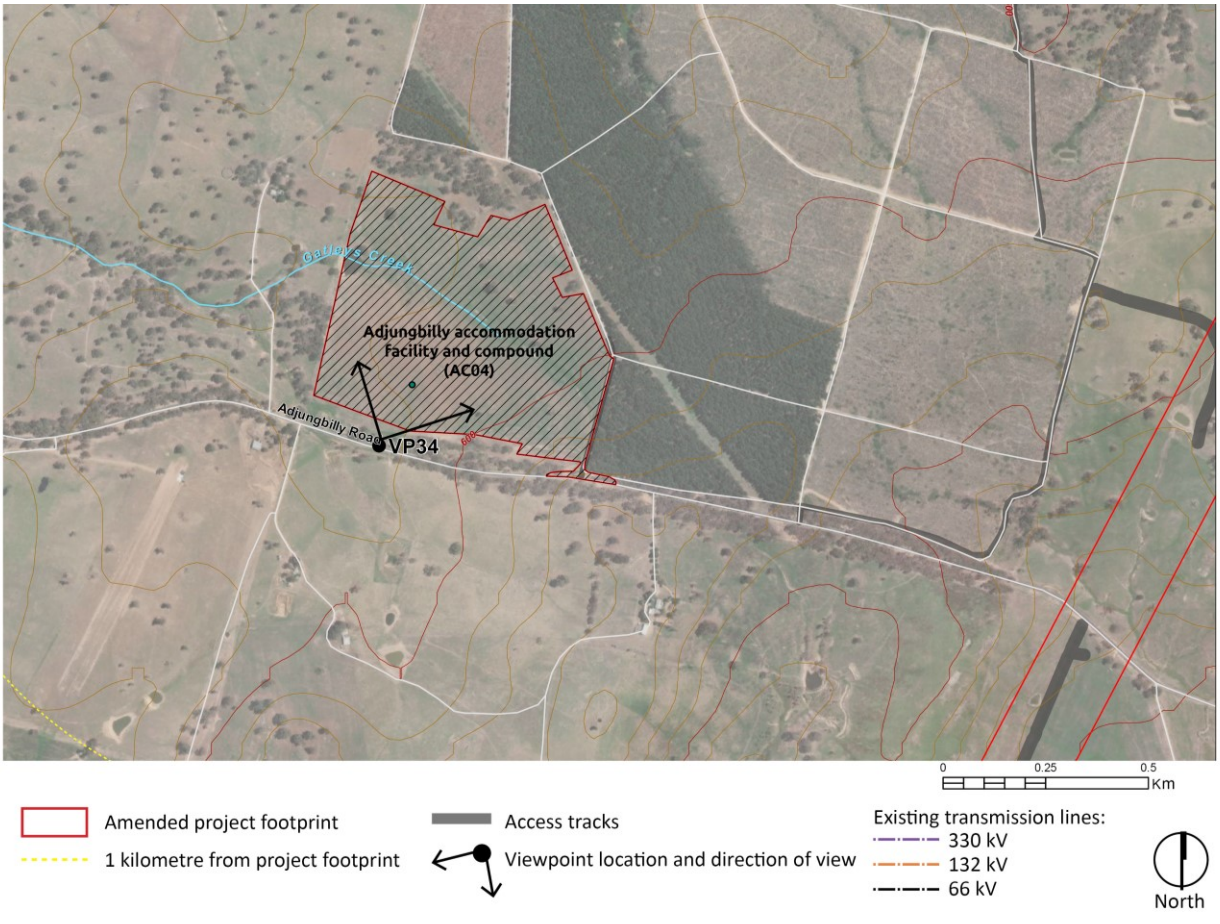


FIGURE 7-28 VIEW NORTH FROM ADJUNGBILLY ROAD, VIEWPOINT 34 LOCATION PLAN

FIGURE 7-29 VIEWPOINT 34: VIEW NORTH FROM ADJUNGBILLY ROAD, EXISTING VIEW

Sensitivity: Adjungbilly Road in this location is a sealed road providing access between the Hume Highway and Adjungbilly, used mainly by nearby residents and their visitors. While the vegetated hills in Red Hill State Forest are a local feature, rural views such as this are common within this area around Adjungbilly. This view is of **neighbourhood visual sensitivity**.

Visual impact during construction: The construction and operation of Adjungbilly accommodation facility and compound (AC04) would be seen in the centre of this view, extending along the northern side of Adjungbilly Road. The facility and compound would be located in the pasture fields in the middle ground of this view and extending north towards plantation trees seen in the background. There would be machinery and construction vehicles seen accessing the site from Adjungbilly Road and working to install the facility and compound. Once installed, the facility would include demountable and modular accommodation unit structures to accommodate staff and other facilities, with vehicles seen accessing the site. The construction and operation of the worker accommodation facility would introduce large-scale construction support facilities into an otherwise rural landscape. The facility and compound would be prominent and reduce the amenity of this view. Overall, there would be a high magnitude of change to a view of neighbourhood sensitivity, resulting in a **moderate-low visual impact** during construction.

Visual impact during operation: At the end of construction, the worker accommodation facility and compound would be disassembled. The site would be returned to rural use and the rural character of this view would be restored. There would be a negligible magnitude of change and a **negligible visual impact** during operation in this view.

Viewpoint 35: Views from Faulder Avenue, Yass

This view has been added to capture the visual impacts of the proposed Yass accommodation facility and compound (AC05).

Location: 34°49'3.21"S, 148°54'19.70"E and 34°48'52.19"S, 148°54'27.64"E

Existing conditions: The views in Figure 7-32 and Figure 7-30 show the proposed site for the Yass accommodation facility and compound (AC05). It is a gently undulating site, located on the northern fringe of Yass. The site extends north from Faulder Road towards the Bango Creek valley. The southern part of the site (refer to Figure 7-32) used as a laydown and storage area for civil construction. The central and northern part of the site consists of rural fields, predominantly used for pastoral grazing and crops, creating an open, rural landscape character. The Yass to Cowra transmission easement is seen in the background of view, including steel lattice structures, about one kilometre away.

Sensitivity: Faulder Avenue is a sealed road providing access to the Yass Tip and several industrial sites, as well as surrounding rural properties and uses. This road would be used mainly by nearby workers, residents and visitors to the area. Rural views such as this are common within this area north of Yass. This view is of neighbourhood visual sensitivity.

Visual impact during construction: The construction and operation of Yass accommodation facility and compound (AC05) would be seen in the centre of these views, extending along Faulder Road. At the southern end of the site, the facility would replace the existing laydown and storage area. At the northern end of the site, the facility would occupy the pasture fields and extend west towards Bango Creek, requiring removal of the existing fields.

There would be machinery and construction vehicles seen accessing the site from Faulder Avenue and working to install the facility. Once installed, the facility would include demountable and modular accommodation unit structures to accommodate staff and other facilities, with vehicles seen accessing the site, generally in the mornings and evenings. The construction and operation of the worker accommodation facility and compound would introduce large-scale construction support facilities into this semi-rural area on the northern outskirts of Yass. The facility would be prominent and reduce the amenity of this view. This facility would have similar visual characteristics to the adjacent industrial areas. Overall, there would be a moderate magnitude of change to a view of neighbourhood sensitivity, and a low visual impact during construction.

Visual impact during operation: Once construction is complete, the worker accommodation facility and compound would be disassembled. The site would be returned to rural use and the rural character of this view would be restored. There would be a negligible magnitude of change and a negligible visual impact during operation.

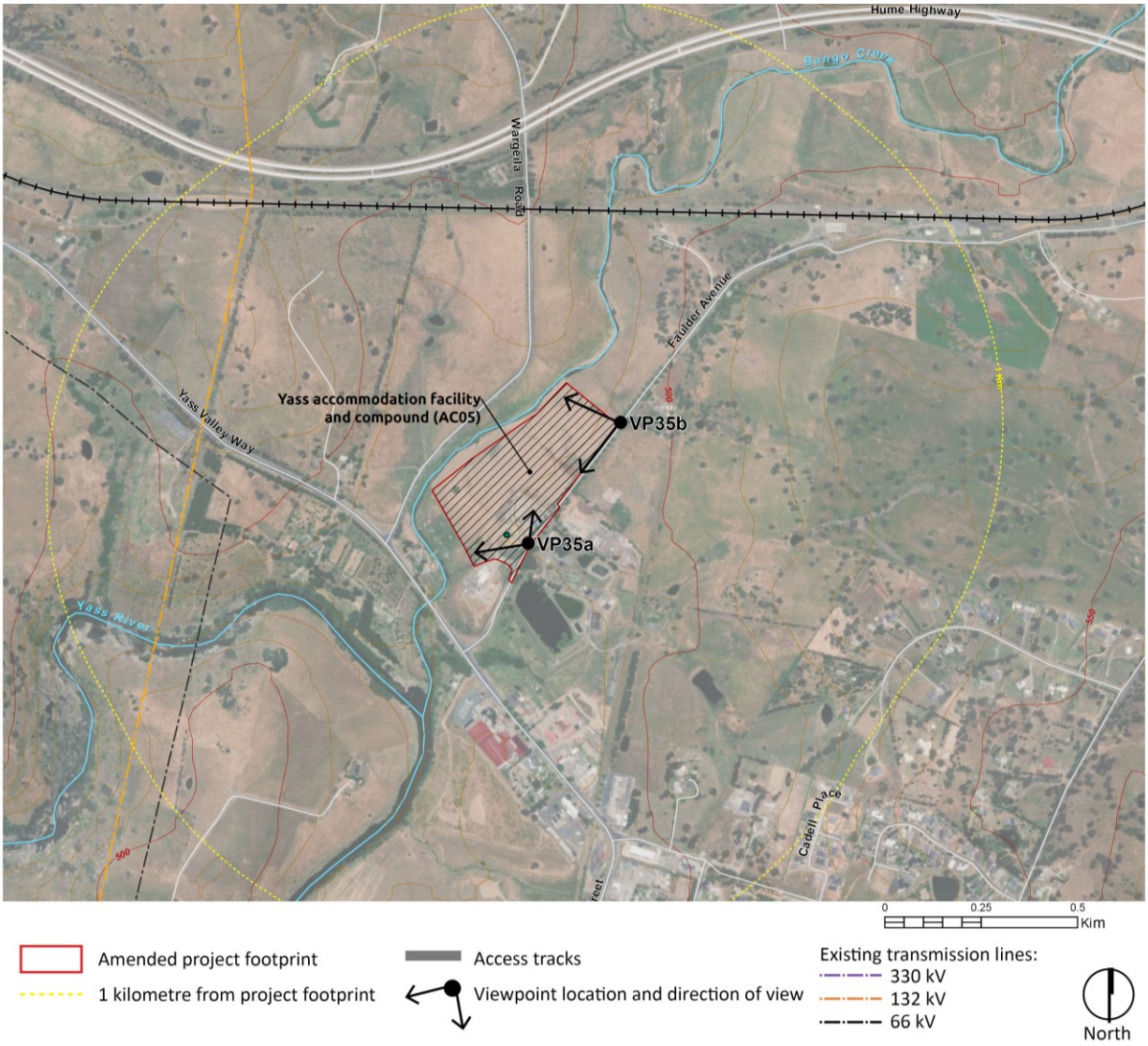


FIGURE 7-30 VIEWS FROM FAULDER AVENUE, VIEWPOINT 35A AND 35B LOCATION PLAN

FIGURE 7-31 VIEWPOINT 35A: VIEW WEST FROM FAULDER AVENUE, EXISTING VIEW

FIGURE 7-32 VIEWPOINT 35B: VIEW SOUTH-WEST FROM FAULDER AVENUE, EXISTING VIEW

Viewpoint 36: Views from Woodhouselee Road

This view has been added to capture the visual impacts of the proposed Crookwell accommodation facility and compound (AC06).

Location: 34°34'56.45"S, 149°37'27.27"E and 34°33'46.55"S, 149°37'50.49"E

Existing conditions: The views in Figure 7-34 and Figure 7-35 show the rural tablelands landscape south-east of Crookwell. This is an elevated and gently undulating landscape, which has mostly been cleared for agricultural use, predominantly pastoral grazing, creating an open, rural landscape character. The Crookwell 3 wind farm can be seen in the background of these views, including several turbines, some were under construction at the time of inspection. Construction access for the wind farm is via Graywood Siding Road, seen in Figure 7-34.

Sensitivity: Woodhouselee Road is a two-lane sealed road providing access to the rural areas north of Crookwell Road, used mainly by nearby residents and their visitors, as well as staff of nearby facilities such as the Crookwell 3 wind farm project, currently under construction. This view is of **neighbourhood visual sensitivity**.

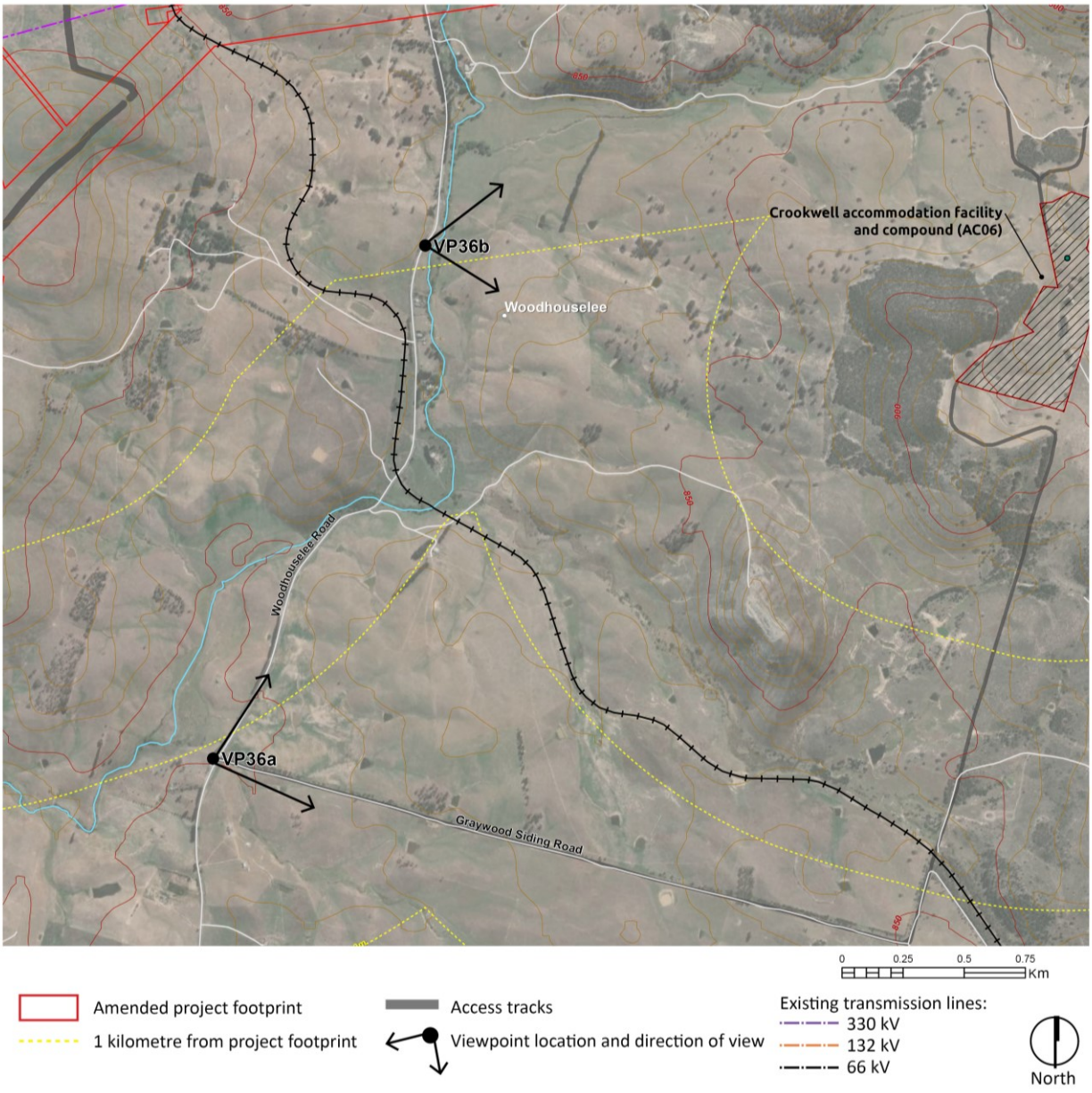


FIGURE 7-33 VIEWS FROM WOODHOUSELEE ROAD, VIEWPOINT 36A AND 36B LOCATION PLAN

FIGURE 7-34 VIEWPOINT 36A, VIEW NORTH-EAST ALONG GRAYWOOD SIDING ROAD FROM WOODHOUSELEE ROAD, EXISTING VIEW

FIGURE 7-35 VIEWPOINT 36B: VIEW EAST FROM WOODHOUSELEE ROAD, EXISTING VIEW

Visual impact during construction: The Crookwell accommodation facility and compound (AC06) would be established in the background of view (refer to Figure 7-35), around 2.5 kilometres to the east. Graywood Siding Road would be upgraded and used as an access road to the facility and compound, with machinery and construction vehicles seen accessing the site from Woodhouselee Road. The facility would be screened by intervening landform and out of view. Construction of the new transmission line corridor would be located around 800 metres to the north of view in Figure 7-35, and seen in the background of this view. Overall, there would be a low magnitude of change to a view of neighbourhood local sensitivity, resulting in a **negligible visual impact** during construction.

Visual impact during operation: Following construction, the worker accommodation facility and compound would be disassembled. The site would be returned to rural use and the rural character would be restored. There would be a new transmission line corridor visible, containing several transmission line structures ranging between 50 and 76 metres tall, extending over Woodhouselee Road, in the background of view. The structures would be seen in the context of Crookwell wind farm, reducing their visual prominence. Overall, there would be a low magnitude of change to these views and a **negligible visual impact** during operation.

7.1.3 Views from the air

The following assessment of views from the air has been undertaken generally in accordance with the approach described in Section 4.2 of this report, Assessment of visual impact – public domain views. It considers views from the air generally rather than a representative viewpoint.

Existing conditions: The recreational flights operating from the Wagga Wagga Airport and Tumut Airport described in *Technical Report 8 – Landscape Character and Visual Impact Assessment* would offer views to the amended project.

Sensitivity: The scenic flights offered from these airports are of **regional visual sensitivity**. This sensitivity level is unchanged from *Technical Report 8 – Landscape Character and Visual Impact Assessment*.

Visual impact during construction: The changes to the amended project between Wagga Wagga, Tumut and Bannaby would not appreciably alter the assessment identified in *Technical Report 8 – Landscape Character and Visual Impact Assessment*. However, the impacts would change as the transmission line corridor is relocated from the areas east of Batlow to a route through the forestry areas west of Batlow, within Green Hills and Bago State Forests. In these areas the progressive removal of vegetation and project construction would be seen in an area where forestry harvesting occurs. The project construction would be somewhat compatible with the pattern of large-scale vegetation removal already visible from the air in this location. The proposed compounds and worker accommodation facilities may also be visible from the air but be seen in a vast and highly varied landscape and would somewhat contrast with the surrounding landscape.

Overall, during construction there would be less of an impact from the project in areas east of Batlow as the transmission line corridor is shifted west and through the Green Hills and Bago State Forests. Due to the compatibility with this modified landscape, there would be a low magnitude of change and a **moderate-low visual impact**.

This impact level is reduced from impacts identified in *Technical Report 8 – Landscape Character and Visual Impact Assessment*, which was moderate for views from the air in the vicinity of Bago and Green Hills State Forests, and moderate-low elsewhere. Note, there would be no visual impact on commercial flights as they are not operated for the purposes of appreciating views and are mostly operating at heights that would limit visibility of the project.

Visual impact during operation: The changes to the amended project between Wagga Wagga, Tumut and Bannaby would not appreciably alter the assessment identified in *Technical Report 8 – Landscape Character and Visual Impact Assessment*. The proposed changes to the Gugaa 500 kV

substation, would be seen within a varied and complex landscape where other transmission and related infrastructure are noticeable and would be largely absorbed into the view.

The amended transmission line route would, however, remove the EIS project footprint from the more scenic landscapes east of Batlow and introduce a new built feature in Green Hills and Bago State Forests. Due to the compatibility of the project within the forestry landscape, there would be a low magnitude of change and a **moderate-low visual impact**.

This impact level is unchanged from impacts identified in *Technical Report 8 – Landscape Character and Visual Impact Assessment*.

7.1.4 Summary of daytime visual impacts

The daytime visual impacts of the amended project are summarised in Table 7-1.

The colours used for the impact level shading corresponds with the impact level tables in the methodology, at Table 4-6: Visual impact levels. Any changes to impact ratings, between the EIS project and the amended project, including new impacts, are identified in **bold underline** text. Views that have not been re-assessed have been shown in grey text, as the amended project would be unchanged from project assessed in *Technical Report 8 – Landscape Character and Visual Impact Assessment*.

TABLE 7-1: SUMMARY OF VISUAL IMPACTS

No.	Location	Sensitivity rating	Construction impact		Operation impact	
			EIS project impact level	Amended project impact level	EIS project impact level	Amended project impact level
1	View south from Gregadoo East Road	Local	Moderate-low	Moderate-low	Moderate-low	Moderate-low
2	View south from Livingstone Gully Road	Neighbourhood	Moderate-low	**Moderate**	Moderate-low	**Moderate**
3	View south-west from Tumbarumba Road	Local	Moderate	**Low**	Moderate-low	**Low**
3b	View north-east from Tumbarumba Road	Local	-	**Moderate**	-	**Moderate-low**
4	View south-west from the Hume Highway	Local	Moderate-low	Moderate-low	Moderate-low	Moderate-low
5	View south-east from Westbrook Road	Neighbourhood	Moderate-low	Moderate-low	Low	Low
6	View south from Yaven Creek Road	Neighbourhood	Moderate-low	Moderate-low	Moderate-low	Moderate-low
6b	View north from Yaven Creek Road	Neighbourhood	-	**Moderate-low**	-	**Moderate-low**
7	View south from Wondalga Road	Local	Moderate-low	Moderate-low	Moderate-low	Moderate-low
8	View north-east from Batlow Road, Wondalga	Local	Moderate-low	Moderate-low	Low	Low
9	View east from The Big Apple, Stewarts Road, Batlow	Local	Low	**Negligible**	Low	**Negligible**
10	View north from Batlow Road, Windowie	Local	Moderate-low	Moderate-low	Moderate-low	Moderate-low
11	View south from Snowy Mountains Highway	Local	Moderate	Moderate	Moderate	Moderate
12	View north from Gocup Road	Local	Moderate	Moderate	Moderate	Moderate
13	View south-east from Brungle Road	Local	Moderate	Moderate	Moderate	**Moderate-low**

No.	Location	Sensitivity rating	Construction impact		Operation impact	
			EIS project impact level	Amended project impact level	EIS project impact level	Amended project impact level
14	View east from Elliott Way	Local	Moderate-Low	Moderate-Low	Moderate-low	Moderate-low
15	View west from Adjungbilly Road	Neighbourhood	Low	Low	Low	Low
16	View south-east from Childowla Road	Neighbourhood	Moderate-low	Moderate-low	Moderate-low	Moderate-low
17	View east from Burrinjuck Road	Local	Moderate	Moderate	Moderate-low	Moderate-low
18	View west from Black Range Road	Neighbourhood	Low	Low	Low	Low
19	View east from the Hume Highway, Yass	Local	Moderate-low	Moderate-low	Moderate-low	Moderate-low
20	View north-west from Orion Street, Yass	Neighbourhood	Negligible	Negligible	Negligible	Negligible
21	View south from Cooks Hills Road	Local	Moderate	Moderate	Moderate	Moderate
22	View south-east from Greendale Church	Local	Moderate	Moderate	Moderate	Moderate
23	View north from Rugby Road	Neighbourhood	Moderate-low	Moderate-low	Low	Low
24	View south-west from Grabben Gullen Road	Local	Moderate-low	Moderate-low	Moderate-low	Moderate-low
25	View north from Pejar Dam visitor area	Local	Low	Low	Low	Low
26	View north from Taralga Road	Local	Moderate-low	Moderate-low	Moderate-low	Moderate-low
27	View west from Bannaby Road	Neighbourhood	Moderate-low	Moderate-low	Moderate-low	Moderate-low
28	View north-west from Hanworth Road	Neighbourhood	Low	Low	Low	Low
29	View north-east from Mates Gully Road	Neighbourhood	-	Moderate-low	-	Negligible
30	View south-east from Wondalga Road (north)	Neighbourhood	-	Negligible	-	Negligible
31a / 31b	Views from Wondalga Road (south)	Neighbourhood	-	Negligible	-	Negligible
32	View north-west from Green Hills Access Road	Neighbourhood	-	Low	-	Negligible
33	View south-west from Batlow Road	Local	-	Moderate-low	-	Moderate-low
34	View north from Adjungbilly Road	Neighbourhood	-	Moderate-low	-	Negligible
35a / 35b	Views from Faulder Avenue, Yass	Neighbourhood	-	Low	-	Negligible
36a / 35b	Views from Woodhouselee Road	Neighbourhood	-	Negligible	-	Negligible
Views from the air						
	Views from the air in the vicinity of Bago and Green Hills State Forests, west of Batlow	Regional	Moderate	Moderate-low	Moderate-low	Moderate-low
	Views from the air elsewhere, surrounding Wagga Wagga	Regional	Moderate-low	Moderate-low	Moderate-low	Moderate-low

7.2 Assessment of night-time visual impacts

The landscape character zones and sub-character areas, identified in Section 6.0 of this report, have been used to assess the night-time impacts of the amended project (refer to **Attachment C**).

Where the project has not changed at night, the landscape character zones and areas have been shaded in grey and *Technical Report 8 – Landscape Character and Visual Impact Assessment* should be referred to, as no further assessment has been carried out.

Note, there would be no visual impact on views from aircraft at night as scenic flights are operated during daylight hours and there is limited lighting proposed as a part of the project, including the amendments.

The colours used for the impact level shading corresponds with the impact level tables in the methodology, at Table 4-9: Visual impact levels – night-time. Any changes to impact ratings, between the EIS project and the amended project, including new impacts, are identified in **bold underline** text.

TABLE 7-2: ASSESSMENT OF NIGHT-TIME VISUAL IMPACTS – CONSTRUCTION

	Landscape character area	Sensitivity level	Changes to magnitude of change for amended project	Amended project Impact level	EIS project Impact Level
Rural Fringe landscape character zone					
A	Wagga Wagga rural fringe landscape character area	Low	Low • There would be no notable change to lighting requirements due to the minor realignment of the amended project footprint between Ashfords Road and Ivydale Road, Gregadoo. • The expansion of the construction activity at the Wagga 330 kV substation to include a larger compound (C01) at the corner of Boiling Down and Ashfords Roads would increase the area where there may be lighting used during construction. Overall, this change is minor and there would be a low magnitude change due to the scale of construction activity, the presence of large-scale construction support facilities used at night.	Low	Low
Great Dividing Range landscape character zone					
A	Gregadoo Great Dividing Range foothills landscape character area	Moderate	No change.	Moderate-low	Moderate-low
B	Ellerslie Range Great Dividing Range foothills landscape character area	Moderate	No change.	Moderate-low	Moderate-low
Rural Valleys landscape character zone					
A	Gregadoo to Book Book rural valleys landscape character area	Moderate	Moderate to high • The area required for the proposed Gugaa 500 kV substation has increased and the construction compound has extended to the west and north-east (along Livingstone Gully Road), requiring a slightly larger expanse of construction activity, with lighting for operations outside of standard construction hours. • There would also be a new worker accommodation facility (AC03) located in this	**Moderate / High-moderate**	Moderate

	Landscape character area	Sensitivity level	Changes to magnitude of change for amended project	Amended project Impact level	EIS project Impact Level
			landscape, about 1.5 km south-west of Tarcutta, which would require lighting for 24 hour use. There would be a high magnitude in the vicinity of the Tarcutta accommodation facility (AC03) due to the intensity of lighting that would contrast with the scattered lighting within this rural landscape. There would be a moderate magnitude of change across remaining areas of this character zone.		
B	Yaven Creek and Adelong Creek rural valleys landscape character area	Moderate	Low • The new construction compound (C21) at the corner of Ellerslie and Yaven Creek Roads, would require lighting during construction. Overall, this facility would introduce a small amount of additional lighting and there would be a low magnitude of change.	Moderate-low	Moderate-low
C	Tumut rural valleys landscape character area	Moderate	Low • The Snowy Mountains Hwy compound (C02) is no longer proposed as a part of the amended project and the effects of this on the landscape character would not occur. • A new construction compound (C19) is proposed north of Gadara Road that may require some lighting at night. This compound is located near to an existing large paper mill, which is brightly lit at night. Overall, any lighting associated with the new construction compound would be seen in the context of the brightly lit paper mill. There would continue to be a low magnitude of change as identified in the EIS.	Moderate-low	Moderate-low
D	Adjungbilly rural valleys landscape character area	Moderate	Moderate • A new worker accommodation facility and compound (AC04) to the north of Adjungbilly Road, which would require lighting. This lighting would contrast with the surrounding low district brightness. Overall, there would be a moderate magnitude of change to this landscape and a moderate visual impact during construction. This impact level has increased from the EIS.	**Moderate**	Moderate-low
E	Tumbarumba rural valleys landscape character area	Moderate	Negligible • The Tumbarumba accommodation facility (AC1) would not be required and the effects of this facility on the landscape character would not occur. The project would not occur within this character area.	**Negligible**	Moderate-low

	Landscape character area	Sensitivity level	Changes to magnitude of change for amended project	Amended project Impact level	EIS project Impact Level
Forested Hills landscape character zone					
A	Green Hills forested hills landscape character area	High	Low • Construction of a new transmission line corridor extending south from Wondalga to Batlow Road, through Green Hills State Forest, may require lighting at each transmission line structure site during winter (and potentially for other periods) for a short duration in the early evening. • a new construction compound is proposed to the east of Wondalga Road, near the existing forestry deport (Ardrossan Headquarters Road compound (C17)), which may require some lighting. Overall, while the extent of the project in this area would increase, due to the limited potential for lighting, there would be a low magnitude of change.	Moderate	Moderate
B	Bago forested hills landscape character area	High	Low • Snubba Road compound (C16) which was assessed in *Technical Report 8 – Landscape Character and Visual Impact Assessment* is no longer required in the amended project. • A new construction compound is proposed at Snubba Road (C18), south of Batlow. This would require a similar level of lighting to the previous compound and be mostly contained by vegetation. • The transmission line corridor in the amended project would be shifted to the west, extending south-east from near Laurel Hill, Batlow Road, through Bago State Forest, with lighting levels as described in the EIS. Overall, there would be a low magnitude of change to this landscape.	Moderate	Moderate
C	Minjary forested hills landscape character area	High	Low • A small section (around 1.4 km) of the transmission line corridor would be realigned to the east adjacent Minjary National Park, at Gocup. There would be no change to the extent of lighting required during construction. Overall, this change is minor and the effects are unchanged. Due to the scale of the works there would continue to be a low magnitude of change.	Moderate	Moderate
D	Red Hill and Bungongo forested hills landscape character area	High	Low • The Red Hill Road (C08) and Adjungbilly Road (C09) compounds are no longer required and the effects on landscape character would not occur.	Moderate	Moderate

	Landscape character area	Sensitivity level	Changes to magnitude of change for amended project	Amended project Impact level	EIS project Impact Level
			• The area of land proposed for the Amended Honeysuckle Road compound (C07) has been increased slightly and may operate outside standard construction hours, requiring lighting. Overall, the extent of lighting required during construction would not noticeably change from what was assessed in the EIS, and there would be a low magnitude of change,		
Undulating rural hills and ridges landscape character zone					
A	Wondalga undulating rural hills and ridges landscape character area	Moderate	Low • A new worker accommodation facility and compound (AC07) is proposed at Green Hills Access Road, which would require lighting. • The transmission line corridor has also been refined around Wondalga, reducing the width of the amended project footprint in this area. Part of the transmission line corridor has been removed from the southern part of this landscape, construction along the amended easement would continue, requiring lighting during winter (and potentially for other periods) for a short duration in the early evening. Overall, there would be a low magnitude of change occurring in different areas of this landscape character zone.	Moderate-low	Moderate-low
B	Batlow undulating rural hills and ridges landscape character area	Moderate	Negligible / High • A new worker accommodation facility and compound (AC07) is proposed on the Green Hills Access Road, this facility would introduce brightly lit construction support facilities into an otherwise agricultural landscape. • The transmission line corridor has been removed from this landscape and relocated to the west, into Green Hills State Forest. • The Memorial Avenue compound in Batlow remains in the same location as the project described in the EIS, at an existing depot site zoned for industrial uses, and would require lighting. • The Bowmans Lane compound (C15) is no longer required for the amended project and has been removed from this landscape. Overall, there would be a negligible magnitude of change at night where the transmission line corridor is no longer passing through this character area, and a high magnitude of change in the vicinity of the compound and worker accommodation facility due to the contrast of this brightly lit compound and facility in an area of predominantly low brightness.	Negligible / High-moderate	Moderate-low

	Landscape character area	Sensitivity level	Changes to magnitude of change for amended project	Amended project Impact level	EIS project Impact Level
C	Tumut undulating rural hills and ridges landscape character area	Moderate	No change.	Moderate-low	Moderate-low
D	Murrumbidgee undulating rural hills and ridges landscape character area	Moderate	No change.	Moderate-low	Moderate-low
E	Black Range to Yass undulating rural hills and ridges landscape character area	Moderate	Moderate • a new worker accommodation facility and compound (AC05) is proposed on the north-western outskirts of Yass, at Faulder Avenue. This facility would be brightly lit but be in an area with some brighter lighting. • The Yass substation compound (C10) on the southern outskirts of Yass remains in the same location as the project described in *Technical Report 8 – Landscape Character and Visual Impact Assessmen*t and there would be no change to the transmission line corridor. Overall, there would be a moderate magnitude of change to this landscape due to the additional lighting for the worker accommodation facility.	**Moderate**	Moderate-low
F	Jerrawa to Dalton undulating rural hills and ridges landscape character area	Moderate	No change.	Moderate-low	Moderate-low
Upland forest landscape character zone					
A	Snowy Mountains upland forest landscape character area	High	Low • In the northern part of this area, north of Buddong, the amended project would divert the transmission line route to the north-west, towards Snubba Road. The same level of lighting would be required, just in a different area. • There would be no change to the location and extent of the proposed Maragle 500 kV substation compound (C05). Overall, the extent and level of lighting would be similar to what was described in *Technical Report 8 – Landscape Character and Visual Impact Assessment* and there would be a low magnitude of change.	Moderate	Moderate
Rural tablelands landscape character zone					
A	Crookwell rural tablelands landscape character area	Moderate	Moderate • A new worker accommodation facility and compound (AC06) is proposed to the east of and set back from Woodhouselee Road. This facility would occupy the site currently used for construction of the Crookwell wind farm. This facility would be brightly lit and likely to contrast with the surrounding area of low district brightness where visible.	**Moderate**	Moderate-low

	Landscape character area	Sensitivity level	Changes to magnitude of change for amended project	Amended project Impact level	EIS project Impact Level
			Overall, while this would introduce a brightly lit facility to this landscape, it has a limited visual influence and there would be a moderate magnitude of change.		
Rural highland and deep valley landscape character zone					
A	Taralga to Bannaby rural highland and deep valley landscape character area	High	Low • The Amended Bannaby 500 kV substation compound (C12) would be slightly larger in size, requiring additional construction and the potential for lighting. This site would, however, continue to be located in a deep valley beside the existing substation with limited visibility from surrounding areas. Overall, any additional lighting would not be noticeable, and the magnitude of change would be a low.	Moderate	Moderate

TABLE 7-3: ASSESSMENT OF NIGHT-TIME VISUAL IMPACTS – OPERATION

	Landscape character area	Sensitivity level	Changes to magnitude of change	Impact level	EIS Impact Level
Rural Fringe landscape character zone					
A	Wagga Wagga rural fringe landscape character area	Low	Negligible • During operation there would not be any lighting proposed along the transmission line route. • There would be no additional lighting at the existing Wagga 330 kV substation. Overall, there would be a negligible magnitude of change.	Negligible	Negligible
Great Dividing Range landscape character zone					
A	Gregadoo Great Dividing Range foothills landscape character area	Moderate	No change.	Negligible	Negligible
B	Ellerslie Range Great Dividing Range foothills landscape character area	Moderate	No change.	Negligible	Negligible
Rural Valleys landscape character zone					
A	Gregadoo to Book Book rural valleys landscape character area	Moderate	Low • The proposed Gugaa 500 kV substation would be slightly larger in size than the project assessed in the EIS, but unlikely to require additional lighting. There would continue to be a low magnitude of change to this landscape as identified in the EIS.	Moderate -low	Moderate -low

	Landscape character area	Sensitivity level	Changes to magnitude of change	Impact level	EIS Impact Level
B	Yaven Creek and Adelong Creek rural valleys landscape character area	Moderate	Negligible • There would be no lighting proposed along the transmission line route, including the new west of Yaven Creek Road. Overall, there would be a negligible magnitude of change as identified in the EIS.	Negligible	Negligible
C	Tumut rural valleys landscape character area	Moderate	Negligible • There would continue to be no lighting proposed along the transmission line route.	Negligible	Negligible
D	Adjungbilly rural valleys landscape character area	Moderate	Negligible • There would continue to be no lighting proposed along the transmission line route.	Negligible	Negligible
E	Tumbarumba rural valleys landscape character area	Moderate	Negligible • The project would not occur within this character area.	Negligible	Negligible
Forested Hills landscape character zone					
A	Green Hills forested hills landscape character area	High	Negligible • The amended project would introduce a new transmission line corridor extending south of Wondalga, however, there would not be any lighting proposed along the transmission line route.	Negligible	Negligible
B	Bago forested hills landscape character area	High	Negligible • The amended project would shift the transmission line corridor to the west, however, there would not be any lighting proposed along the transmission line route.	Negligible	Negligible
C	Minjary forested hills landscape character area	High	Negligible • The locational changes to the amended project would be minor and there would be no lighting proposed along the transmission line route.	Negligible	Negligible
D	Red Hill and Bungongo forested hills landscape character area	High	Negligible There are no changes and no lighting proposed along the transmission line route.	Negligible	Negligible
Undulating rural hills and ridges landscape character zone					
A	Wondalga undulating rural hills and ridges landscape character area	Moderate	Negligible There are no changes and no lighting proposed along the transmission line route.	Negligible	Negligible
B	Batlow undulating rural hills and ridges landscape character area	Moderate	Negligible There is no lighting proposed along the transmission line route.	Negligible	Negligible
C	Tumut undulating rural hills and ridges landscape character area	Moderate	Negligible During operation there would not be any lighting proposed along the amended transmission line route.	Negligible	Negligible

	Landscape character area	Sensitivity level	Changes to magnitude of change	Impact level	EIS Impact Level
D	Murrumbidgee undulating rural hills and ridges landscape character area	Moderate	Negligible During operation there would not be any lighting proposed along the amended transmission line route.	Negligible	Negligible
E	Black Range to Yass undulating rural hills and ridges landscape character area	Moderate	Negligible During operation there would not be any lighting proposed along the amended transmission line route.	Negligible	Negligible
F	Jerrawa to Dalton undulating rural hills and ridges landscape character area	Moderate	Negligible During operation there would not be any lighting proposed along the amended transmission line route.	Negligible	Negligible
Upland forest landscape character zone					
A	Snowy Mountains upland forest landscape character area	High	Negligible During operation there would not be any lighting proposed along the amended transmission line route.	Negligible	Negligible
Rural tablelands landscape character zone					
A	Crookwell rural tablelands landscape character area	Moderate	Negligible During operation there would not be any lighting proposed along the amended transmission line route.	Negligible	Negligible
Rural highland and deep valley landscape character zone					
A	Taralga to Bannaby rural highland and deep valley landscape character area	High	Negligible • There would be a minor increase in the extent of security lighting provided at the modified Bannaby 500 kV substation, which would operate from dusk until dawn, seven days a week. This lighting would generally be contained by the hills and vegetation within the surrounding landscape, and any view to the substation lighting would be seen in the context of an existing substation.	Negligible	Negligible

7.2.1 Summary of night-time visual impacts

The visual impacts at night are summarised in

Table 7-4.

The colours used for the impact level shading corresponds with the impact level tables in the methodology, at Table 4-9: Visual impact levels – night-time. Any changes to impact ratings, between the EIS project and the amended project, including new impacts, are identified in **bold underline** text. Those areas not re-assessed have been shaded in grey, as the amended project would be unchanged from project assessed in *Technical Report 8 – Landscape Character and Visual Impact Assessment*.

TABLE 7-4: SUMMARY OF VISUAL IMPACTS AT NIGHT

	Location	Sensitivity rating	Construction impact		Operation impact	
			EIS project	Amended project	EIS project	Amended project
Rural fringe landscape character zone						
A	Wagga Wagga rural fringe landscape character area	Low	Low	Low	Negligible	Negligible
Great Dividing Range landscape character zone						
A	Gregadoo Great Dividing Range foothills landscape character area	Moderate	Moderate-low	Moderate-low	Negligible	Negligible
B	Ellerslie Range Great Dividing Range foothills landscape character area	Moderate	Moderate-low	Moderate-low	Negligible	Negligible
Rural valleys landscape character zone						
A	Gregadoo to Book Book rural valleys landscape character area	Moderate	Moderate	**Moderate / High-moderate**	Moderate-low	Moderate-low
B	Yaven Creek and Adelong Creek rural valleys landscape character area	Moderate	Moderate-low	**Moderate**	Negligible	Negligible
C	Tumut rural valleys landscape character area	Moderate	Moderate-low	Moderate-low	Negligible	Negligible
D	Adjungbilly rural valleys landscape character area	Moderate	Moderate-low	**Moderate**	Negligible	Negligible
E	Tumbarumba rural valleys landscape character area	Moderate	Moderate-low	**Negligible**	Negligible	Negligible
Forested Hills landscape character zone						
A	Green Hills forested hills landscape character area	High	Moderate	Moderate	Negligible	Negligible
B	Bago forested hills landscape character area	High	Moderate	Moderate	Negligible	Negligible
C	Minjary forested hills landscape character area	High	Moderate	Moderate	Negligible	Negligible
D	Red Hill and Bungongo forested hills landscape character area	High	Moderate	Moderate	Negligible	Negligible
Undulating rural hills and ridges landscape character zone						
A	Wondalga undulating rural hills and ridges landscape character area	Moderate	Moderate-low	Moderate-low	Negligible	Negligible
B	Batlow undulating rural hills and ridges landscape character area	Moderate	Moderate-low	**Negligible / High-moderate**	Negligible	Negligible
C	Tumut undulating rural hills and ridges landscape character area	Moderate	Moderate-low	Moderate-low	Negligible	Negligible
D	Murrumbidgee undulating rural hills and ridges landscape character area	Moderate	Moderate-low	Moderate-low	Negligible	Negligible
E	Black Range to Yass undulating rural hills and ridges landscape character area	Moderate	Moderate-low	**Moderate**	Negligible	Negligible

	Location	Sensitivity rating	Construction impact		Operation impact	
			EIS project	Amended project	EIS project	Amended project
F	Jerrawa to Dalton undulating rural hills and ridges landscape character area	Moderate	Moderate-low	Moderate-low	Negligible	Negligible
Upland forest landscape character zone						
A	Snowy Mountains upland forest landscape character area	High	Moderate	Moderate	Negligible	Negligible
Rural tablelands landscape character zone						
A	Crookwell rural tablelands landscape character area	Moderate	Moderate-low	**Moderate**	Negligible	Negligible
Rural highland and deep valley landscape character zone						
A	Taralga to Bannaby rural highland and deep valley landscape character area	High	Low	Moderate	Negligible	Negligible

7.3 Impact on views from private residences

The following assessment of visual impact has been undertaken in accordance with the approach described in Section 4.3 of this report, Assessment of visual impact – private dwellings.

This revised assessment has taken into account minor updates to the sensitive receiver information as explained in the following section.

7.3.1 Updated sensitive receivers

During the development of the Amendment Report and this assessment, several minor updates to the assessed sensitive receivers have been identified based on landowner feedback. The receiver updates include reclassifying receivers to remove non sensitive buildings, removing receivers which have been demolished, relocating receivers and one additionally identified receiver. It should be noted that sensitive receivers will continue to be reviewed during the detailed design process and as part of ongoing stakeholder engagement.

The changes from *Technical Report 8 – Landscape Character and Visual Impact Assessment* are summarised in the below section. There are:

- About 27 removed receiver structures which have been identified as residential receivers but have since been confirmed to be sheds, uninhabited, demolished or similar. The removed receivers vary in distance to the amended project footprint and some are predicted to have visual impacts based on their previous classification as residential receivers.
- About 10 relocated residential receivers which have had their location adjusted to represent the dwelling location more accurately. The change in distance between the receivers and the amended project footprint is generally small, around 10 metres to 30 metres, and is not expected to result in a major change to the predicted visual impacts. For the relocated receivers which are currently predicted to have construction visual impacts in this assessment, the revised locations generally move the receivers further from the amended project footprint.
- There is a number of newly identified residential receivers that have been identified, this includes dwellings.

The updated receivers either within 500 metres of the amended project footprint, or with the potential visual impact of moderate or higher been included in the qualitative assessment of private dwelling view impacts.

7.3.2 Stage 1 - Preliminary assessment

For the new Greenhills section, the desktop assessment reviewed those dwellings, which are either located within 500 metres of the amended project footprint or have otherwise been identified as having the potential for a visual impact (refer to **Attachment J** for location of dwellings). This desktop assessment is summarised in Table 7-5.

This preliminary assessment was informed by visibility plans contained in **Attachment H,** which shows the visibility of transmission structures to two kilometres, where they would have the potential for the greatest visual impact.

TABLE 7-5: PRELIMINARY VISUAL IMPACT ASSESSMENT – NEWLY IDENTIFIED DWELLINGS

Building ID	Location / address	Distance from Receiver to amended project footprint (metres)	Within 500m of amended project footprint	Potential view	Reasoning	Amended project footprint located on property (Y/N)	Property visit undertaken (Y/N)	Potential Moderate or higher visual impact
Y14	Greenhills	772	N	Y	- Some intervening vegetation - View to forestry - Landform rises towards project, reducing visibility - Distance reduces visual effect	Y	N	N
Y19*	Greenhills	180	Y	Y	- Some intervening vegetation - View to forestry	Y	N	N
Z42	Greenhills	971	N	Y	- Some intervening vegetation - View to forestry - Distance reduces visual effect	N	N	N
Y7	Greenhills	735	N	Y	- Some intervening vegetation - View to forestry - Distance reduces visual effect	N	N	N
Z22	Greenhills	883	N	N	- Intervening landform and vegetation	N	N	N
Z51	Greenhills	890	N	N	- Intervening landform and vegetation	N	N	N
Z10	Greenhills	650	N	N	- Intervening landform and vegetation	N	N	N
D28	Ellerslie Road, Ellerslie	940	N	Y	- Additional structures for the Transposition would be seen from this dwelling - Some intervening landform	N	N	N
D29	Yaven Creek Road, Yaven Creek	720	N	Y	- Additional structures for the - Transposition would be seen from this dwelling - Some intervening landform	N	N	Y
V17	Bannaby Road, Bannaby	230	Y	Y	- Intervening vegetation	Y	N	N
V41	Bannaby Road, Bannaby	0	Y	Y	- No intervening vegetation or landform	Y	N	Y

* State forest owned house - seasonal worker accommodation

7.3.3 Stage 2 - Detailed assessment of visual impact from dwellings

A revised assessment has been undertaken on those dwellings where the amendment may result in a changed visual impact level. In addition to this, those dwellings identified as having the potential for a moderate or higher visual impact in the preliminary assessment have also been assessed for the amended project.

A summary of this analysis is contained in **Attachment G.** This includes pre-mitigation visual impact levels. **Attachment I** contains maps, photographs, photomontages and 3D modelled images for a selection of these dwellings.

7.3.4 Summary of visual impacts on views from private dwellings during operation

All dwellings considered in the EIS as well as additional dwellings identified during the post-EIS phase of the project, were reassessed or assessed for the amended project (refer to Table 7-8). The detailed assessment of visual impact focused on those dwellings with the potential for higher visual impacts and identified the following visual impacts from private dwellings:

- 21 dwellings would have a **high** visual impact
- 23 dwellings would have a **high- moderate** visual impact
- 35 dwellings would have a **moderate** visual impact.

Mitigation measure LV5 would apply specifically to the above dwellings. All remaining dwellings that were reassessed or assessed for the amended project would have a moderate-low, low, or negligible visual impact. Mitigation measures LV1 to LV8 would apply to all dwellings, as relevant.

There were no dwellings within the Green Hills section identified as having a moderate or higher visual impact during construction or operation.

Table 7-6 summarises the impacts identified in *Technical Report 8 – Landscape Character and Visual Impact Assessment* and compares them with the impact levels identified for amended project. This includes revised total figures for the entire project.

Generally, the impact levels have reduced. However, several newly constructed dwellings, dwellings under construction, and dwellings previously identified as sheds in *Technical Report 8 – Landscape Character and Visual Impact Assessment*, have been added to this assessment and have the potential for visual impacts. There was also one dwelling, identified as having a visual impact in the EIS, that has been determined not to be a dwelling.

TABLE 7-6: PRIVATE DWELLING VISUAL IMPACTS – COMPARISON BETWEEN EIS AND AMENDED PROJECT

Impact level	EIS project assessment results - Number of dwellings	Amended project – Number of dwellings
Low	1	10
Moderate-low	10	10
Moderate	36	35
High-moderate	27	23
High	17	21
Total:	**91**	**96**

Of those dwellings with a moderate, high-moderate or high visual impact, four are located on properties that are outside the amended project footprint. Table 7-7 shows the difference between the visual impacts from these dwellings for the EIS project and the amended project. Of these dwellings:

- one dwelling would have a **high-moderate** visual impact
- three dwellings would have a **moderate** visual impact.

TABLE 7-7: PRIVATE DWELLINGS LOCATED ON PROPERTY OUTSIDE THE AMENDED PROJECT FOOTPRINT – VIEW IMPACT COMPARISON BETWEEN EIS AND AMENDED PROJECT

Impact level	EIS project assessment results - Number of dwellings	Amended project assessment results – number of dwellings
Negligible	1	1
Low	1	6
Moderate-low	2	2
Moderate	5	3
High-moderate	5	1
High	0	0
Total:	**14**	**13**

Table 7-8 provides a summary of the visual impact assessment of the amended project on each dwelling during operation, showing comparison to the EIS project.

TABLE 7-8: SUMMARY OF PRIVATE DWELLING IMPACTS

ID.	Address	EIS project - Potential visual impact	Distance to amended project footprint (metres)	Amended project footprint located on property (Y/N)	Amended project – Potential visual impact
A24	202 Ashfords Road	Moderate	524	N	Low
A28	216 Ashfords Road	Moderate	475	N	Low
A29	202 Ashfords Road	Moderate-low	173	N	Low
A33	231 Ashfords Road	High-Moderate	390	N	Moderate
A40	112 Ivydale Road, Gregadoo	High	40	Y	High
A41	112 Ivydale Road, Gregadoo	High	30	Y	High
A51	10 Ivydale Road	High-moderate	200	Y	High-moderate
A45	152 Ivydale Road*	High-moderate	-	Y	N/A
A120	152 Ivydale Road	N/A	382	Y	High-moderate
A60	191 Ivydale Road	Moderate	253	Y	Moderate
B12	477 Gregadoo East Road	High-moderate	434	Y	High-moderate
B3	848 Big Springs Road	High	108	Y	High
B15	1070 Livingstone Gully Road	Moderate-low	805	Y	Moderate-low
B18	1070 Livingstone Gully Road	High-moderate	325, 682 to substation	Y	High-moderate
B21	8095 Tumbarumba Road	High-moderate	300	Y	Negligible
C4	107 Burkinshaws Lane	Moderate	408	Y	Moderate
C10	171 Keajura Road, Tarcutta	Moderate	413	Y	Moderate
C21	170 Wilds Road, Tarcutta	High	0	Y	High
C28	1725 Humula Road, Tarcutta	Moderate-low	475	Y	Moderate-low
C29	1615 Humula Road, Tarcutta	High	112	Y	High
C35	1532 Humula Road, Tarcutta	Moderate	491	N	Moderate
D8	3563 Westbrook Road, Oberne Creek	High-Moderate	203	Y	High-moderate
D9	3563 Westbrook Road, Oberne Creek	High-Moderate	184	Y	High-Moderate
D25	1154 Yaven Creek Road, Ellerslie	High	0	Y	High
D29	Ellerslie Road, Ellerslie	N/A	720	Y	Low
D31	158 Westwood Road, Westwood	Moderate	388	Y	Moderate
E61	Yesteryear plantations	Low	10km+	N	Negligible
E27	Batlow Road, Tumut	Moderate-low	670	N	Moderate-low
E29	Batlow Road, Tumut	High-moderate	750	Y	High-moderate
E68	Batlow Road, Tumut	High-moderate	725	Y	High-moderate

ID.	Address	EIS project - Potential visual impact	Distance to amended project footprint (metres)	Amended project footprint located on property (Y/N)	Amended project – Potential visual impact
H10	Batlow Road, Tumut	Moderate	806	N	Low
H13	Batlow Road, Tumut	Moderate	640	Y	Low
H16	Batlow Road, Tumut	High-moderate	312	Y	Moderate
H19	Batlow Road, Windowie	Moderate	266	N	Moderate-low
H20	Batlow Road, Windowie	Moderate	460	Y	Moderate
H40	Batlow Road, Tumut	Moderate	900	N	Low
H25	348 Gadara Lane, Windowie	Moderate-low	319	Y	Moderate-low
H33	1393 Snowy Mountains Highway, Gadara	Moderate	541	Y	Moderate-low
K21	676 Gocup Road, Gocup	Moderate	426	Y	Moderate
K26	Gocup Road	Moderate	397	Y	Moderate
K23	Gocup Road	High-moderate	190	N	High-moderate
K35	188 Cockatoo Road, Killimicat	High-moderate	272	Y	High-moderate
K41	133 Wee Jasper Road, Wyangle	High-moderate	400	Y	High-moderate
N2	Brungle Creek Link Road Darbalara	Moderate	251	Y	Moderate
N8	1675 Adjungbilly Road, Adjungbilly	Moderate	306	Y	Moderate
N11	977 Parsons Creek Road, Gobarralong	High-moderate	510	Y	High-moderate
N13	866 Parsons Creek Road, Adjungbilly	Moderate	400	Y	Moderate
N37	867 Parsons Creek Road, Adjungbilly	Moderate	75	Y	Moderate
N25	1618 Childowla Rd, Bookham	-	0	Y	High
N28	1546 Childowla Road, Bookham	High-moderate	386	Y	High-moderate
N32	142 Talmo Road, Bookham	High-moderate	296	Y	High-moderate
N33	142 Talmo Road, Bookham	Moderate	490	Y	Moderate
O12	1599 Black Range Road, Woolgarlo	Moderate	493	Y	Moderate
O13	1381 Black Range Road, Woolgarlo	High	181	Y	High
O29	27205 Hume Highway, Bowning	Moderate	388	Y	Moderate
O31	230 Black Range Road, Bowning	Moderate-low	142	Y	Moderate-low
O43	561 Wargalla Road, Bango	Moderate	269	Y	High-moderate
Q10	557 Fairy Hole Road, Bango	Moderate	283	Y	Moderate
Q19	561 Fairy Hole Road, Bango	High	48	Y	High
Q62	Fairy Hole Road	Moderate-low	140	Y	Moderate-low
Q27	787 Cooks Hill Road, Bango	High-moderate	218	Y	High-moderate
Q36	Coolalie Road, Jerrawa	High	0	Y	High
Q40	Bushs Road	Moderate	320	Y	Moderate
Q63	Bushs Road	High-moderate	180	Y	High-moderate
Q44	Stink Pot Road, Broadway	High	0	Y	High
Q45	Flacknell Creek Road, Broadway*	Moderate	132	N	N/A
Q53	Howards Road, Broadway	High	72	Y	High
R3	1661 Rye Park Road, Broadway	High	79	Y	High
R5	1661 Rye Park Road, Broadway	Moderate	257	Y	Moderate
R20	53 Felled Timber Road, Dalton	High-moderate	250	Y	High-moderate
R23	Felled Timber Road, Blakney Creek	High-moderate	0	Y	High
R24	31 Felled Timber Road, Dalton	Moderate	325	N	Moderate
R26	308 Rugby Road, Blakney Creek	High	0	Y	High
R27	308 Rugby Road, Blakney Creek	High	50	Y	High

ID.	Address	EIS project - Potential visual impact	Distance to amended project footprint (metres)	Amended project footprint located on property (Y/N)	Amended project – Potential visual impact
R40	812 Sapphire Road, Biala	Moderate	260	Y	Moderate
R43	451 Clancys Road, Biala	Moderate	413	Y	Moderate
R45	1755 Gurrundah Road, Gurrundah	Moderate	385	Y	Moderate
R46	1755 Gurrundah Road, Gurrundah	Moderate	492	Y	Moderate
R50	1016 Bannister Lane, Gurrundah	High	0	Y	High
S3	Bannister Lane, Gurrundah	High	125	Y	High
S29	2811 Range Road, Bannister	High-moderate	199	Y	High-moderate
T3	2611 Crookwell Rd, Pejar 2583	Moderate-low	161	Y	Moderate-low
T32	Middle Arm Road, Middle Arm	Moderate	118	Y	Moderate
T39	172 Back Arm Road, Middle Arm	High	43	Y	High
T49	1367 Rhyanna Road, Chatsbury	Moderate	189	Y	Moderate
T50	1325 Rhyanna Road, Chatsbury	High-moderate	150	Y	High-moderate
T54	1363 Rhyanna Road, Middle Arm	Moderate-low	350	Y	Moderate-low
U24	703 Hillcrest Road Myrtleville	High-moderate	185	Y	High-moderate
U25	Menzies Lane, Myrtleville	High-moderate	190	Y	High-moderate
U27	152 Soldiers Settlement Road South, Myrtleville	Moderate	460	Y	Moderate
V10	1344 Bannaby Road Bannaby	High-moderate	336	Y	High-moderate
V28	365 Hanworth Road, Bannaby*	High-moderate	260	Y	N/A
V29	409 Hanworth Road, Bannaby	Moderate	400	Y	Moderate
V41	Bannaby Road, Bannaby	Newly identified dwelling	0	Y	High
V46	Hanworth Road, Bannaby	Newly identified dwelling	440	Y	Moderate
U19	427 Hillcrest Road, Myrtleville (derelict)	Newly identified dwelling	0	Y	High
T53	Woodhouselee Road, Woodhouselee	Newly identified dwelling	575	Y	Negligible
T25	2544 Middle Arm Rd, Roslyn	Newly identified dwelling	600	Y	Negligible
R36	226 Cowpers Lane, Myrtleville	Newly identified dwelling	500	Y	Low
R83	1473 Rye Park Road, Dalton	Newly identified dwelling	600	Y	Low
R78	Dawes Road, Broadway	Newly identified dwelling	325	Y	Moderate
R79	Dawes Road, Broadway	Newly identified dwelling	395	Y	Moderate
R80	1661 Rye Park Road,	Newly identified dwelling	585	Y	Moderate
Q87	Flacknell Creek Road	Newly identified dwelling	676	N	Low
Q88	Flacknell Creek Road, Broadway	Newly identified dwelling	170	Y	Moderate
Q89	337 Flacknell Creek Road, Broadway	Newly identified dwelling	70-100	Y	Moderate

*Note: During the development of the HumeLink Submissions Report and Amendment Report it was identified that these were not dwellings.

7.3.5 Visual impacts on views from private dwellings during construction

There would be temporary visual impacts to dwellings located with a view to one of the proposed worker accommodation facilities and construction compounds with the level of impact varying according to the visibility (distance and intervening landform and vegetation) and sensitivity of the viewing location. Table 7-9 provides a summary of the potential visual impacts of the amended project for those compounds and worker accommodation facilities that have changed.

In summary, there would be the potential for a moderate or higher visual impact during construction to:

- three dwellings near the Tarcutta accommodation facility and compound (AC03)
- three dwellings near the proposed Gugaa 500 kV substation and Amended Gregadoo Road compound (C06)
- two dwellings near the Ellerslie Road compound (C21)
- one dwelling near the Ardrossan Headquarters Road compound (C17)
- two dwellings near the Green Hills accommodation facility and compound (AC07)
- two dwellings near the Amended Memorial Avenue compound (C14)
- three dwellings near the Adjungbilly accommodation facility and compound (AC04)
- five dwellings near the Yass accommodation facility and compound (AC05).

There would be no dwellings with the potential for a moderate or higher visual impact near the Snubba Road compound (C18), Maragle 500 kV substation compound (C05), Gadara Road compound (C19), Amended Honeysuckle Road Compound (CO7), Crookwell Accommodation Facility and Compound (AC06), and Amended Bannaby Substation Compound (C12) with the potential for a moderate or higher visual impact.

TABLE 7-9: SUMMARY OF PRIVATE DWELLING IMPACTS FOR THE AMENDED PROJECT DURING CONSTRUCTION

Temporary construction facility	Dwelling ID.	Address	Distance from construction compound or worker accommodation facilities (metres)	Amended project footprint located on property (Y/N)	Potential Moderate or higher visual impact	Reasoning
Proposed Gugaa 500 kV substation and Amended Gregadoo Road compound (C06)	B12	477 Gregadoo East Rd, Gregadoo	580	Y	Y	Compound expanded slightly and closer to this dwelling. Intervening landform would partially screen compound.
	B15	1070 Livingstone Gully Rd, Gregadoo	686	Y	Y	Compound expanded slightly and closer to this dwelling. Intervening landform and vegetation along Livingstone Gully Road would partially screen compound.
	B18	1070 Livingstone Gully Rd, Gregadoo	690	Y	Y	No change in distance to compound. Some intervening vegetation. Existing view to transmission lines.
Tarcutta accommodation facility and compound (AC03)	C101	15 Mates Gully Road Tarcutta	205	N	Y	Dwelling oriented north and towards the accommodation facility and compound. Some intervening vegetation along Mates Gully Road.
	C113	28 Mates Gully Road Tarcutta	185	Y	Y	Dwelling in close proximity to the accommodation facility and compound. Some intervening vegetation around the dwelling and along driveway.
	C114	143 Mates Gully Road Tarcutta	248	N	N	Compound located on other (northern) side of Mates Gully Road. Dwelling oriented south-east and away from the compound. Intervening landform and vegetation along Mates Gully Road would partially screen views to the compound.
	C115	161 Mates Gully Road Tarcutta	403	N	N	Compound located on other (northern) side of Mates Gully Road. Dwelling oriented south-east and away from the compound. Intervening landform and vegetation along Mates Gully Road would screen views to the compound.
	C116	175 Mates Gully Road Tarcutta	514	N	N	Dwelling oriented north-east and away from the compound. Intervening vegetation around dwelling and along Mates Gully Road would screen views to the compound.
	C120	28 Mates Gully Road Tarcutta	171	Y	Y	Dwelling in close proximity to the accommodation facility and compound. Some intervening vegetation around the dwelling and along driveway.

Temporary construction facility	Dwelling ID.	Address	Distance from construction compound or worker accommodation facilities (metres)	Amended project footprint located on property (Y/N)	Potential Moderate or higher visual impact	Reasoning
Ellerslie Road compound (C21)	C21	1154 Yaven Creek Rd, Ellerslie	Within compound	Y	Y	Dwelling surrounded by compound. Some intervening vegetation around the dwelling.
	D24	1226 Yaven Creek Road Darlow	415	N	Y	Some intervening vegetation around the dwelling.
Ardrossan Headquarters Road compound (C17)	Y19	76 Back Camp Road Green Hills	22	Y	Y	State forest owned house for seasonal worker accommodation. Dwelling in close proximity to the compound. Some intervening vegetation around the dwelling.
Green Hills accommodation facility and compound (AC07)	Z23	258 Lower Bago Road Kunama	Within compound	Y	Y	Dwelling surrounded by compound. Some intervening vegetation around the dwelling.
	Y3	145 Green Hills Access Road Kunama	115	N	Y	Dwelling in close proximity to the accommodation facility and compound. Dwelling oriented north-east and away from the accommodation facility and compound. Some intervening vegetation around the dwelling.
	Y8	278 Lower Bago Road Kunama	491	Y	N	Dwelling orientated north-east and away from the accommodation facility and compound. Intervening landform between dwelling and the accommodation facility and compound.
Amended Memorial Avenue compound (C14)	W305	Mill Road Batlow	89	N	Y	Dwelling in close proximity to the compound. Some intervening vegetation around the dwelling.
	W199	70 Wakehurst Avenue Batlow	71	N	Y	Dwelling in close proximity to the compound Some intervening vegetation along Memorial Avenue.
Snubba Road compound (C18)						No dwellings within 500 metres of the compound.
Maragle 500 kV substation compound (C05)						No dwellings within 500 metres of the compound.
Gadara Road compound (C19)						No dwellings within 500 metres of the compound.
Amended Honeysuckle Road Compound (CO7)						No dwellings within 500 metres of the compound.

Temporary construction facility	Dwelling ID.	Address	Distance from construction compound or worker accommodation facilities (metres)	Amended project footprint located on property (Y/N)	Potential Moderate or higher visual impact	Reasoning
Adjungbilly accommodation facility and compound (AC04)	N3	Adjungbilly Road Adjungbilly	210	N	Y	Dwelling in close proximity to the compound. Some intervening vegetation around dwelling and within adjacent fields.
	N4	1428 Adjungbilly Rd, Adjungbilly	408	N	Y	Some intervening vegetation around dwelling and along Adjungbilly Road.
	N5	1428 Adjungbilly Rd, Adjungbilly	303	N	Y	Some intervening vegetation around dwelling and along Adjungbilly Road.
Yass accommodation facility and compound (AC05)	O675	1480 Yass Valley Way Yass	124	N	Y	Dwelling in close proximity to the accommodation facility and compound. Views from rear of dwelling and garden.
	O674	1504 Yass Valley Way Yass	219	N	Y	Some intervening vegetation around dwelling would partially screen views to the accommodation facility and compound.
	O676	1504 Yass Valley Way Yass	310	N	Y	Elevated views from east side of dwelling and garden to the accommodation facility and compound. Some intervening vegetation within adjacent property would partially screen views.
	O673	1475 Yass Valley Way Yass	259	N	Y	Elevated views from front of dwelling and garden to the accommodation facility and compound. Some intervening vegetation along driveway and Yass Valley Way would partially screen views.
	O72	80 Faulder Avenue Yass	117	N	Y	Intervening vegetation around dwelling and along Faulder Avenue would partially screen views.
	O78	113 Faulder Avenue Yass	447	Y	N	Intervening vegetation around dwelling and in adjacent fields would screen views.
Crookwell Accommodation Facility and Compound (AC06)	-	-	-	-	-	No dwellings within 500 metres of the accommodation facility and compound.
Amended Bannaby Substation Compound (C12)	-	-	-	-	-	No dwellings within 500 metres of the compound.

8.0 Cumulative impact

8.1 Cumulative landscape character and visual impacts

Since the public exhibition of the EIS, two additional projects have been identified as having the potential for cumulative effects with HumeLink. These are:

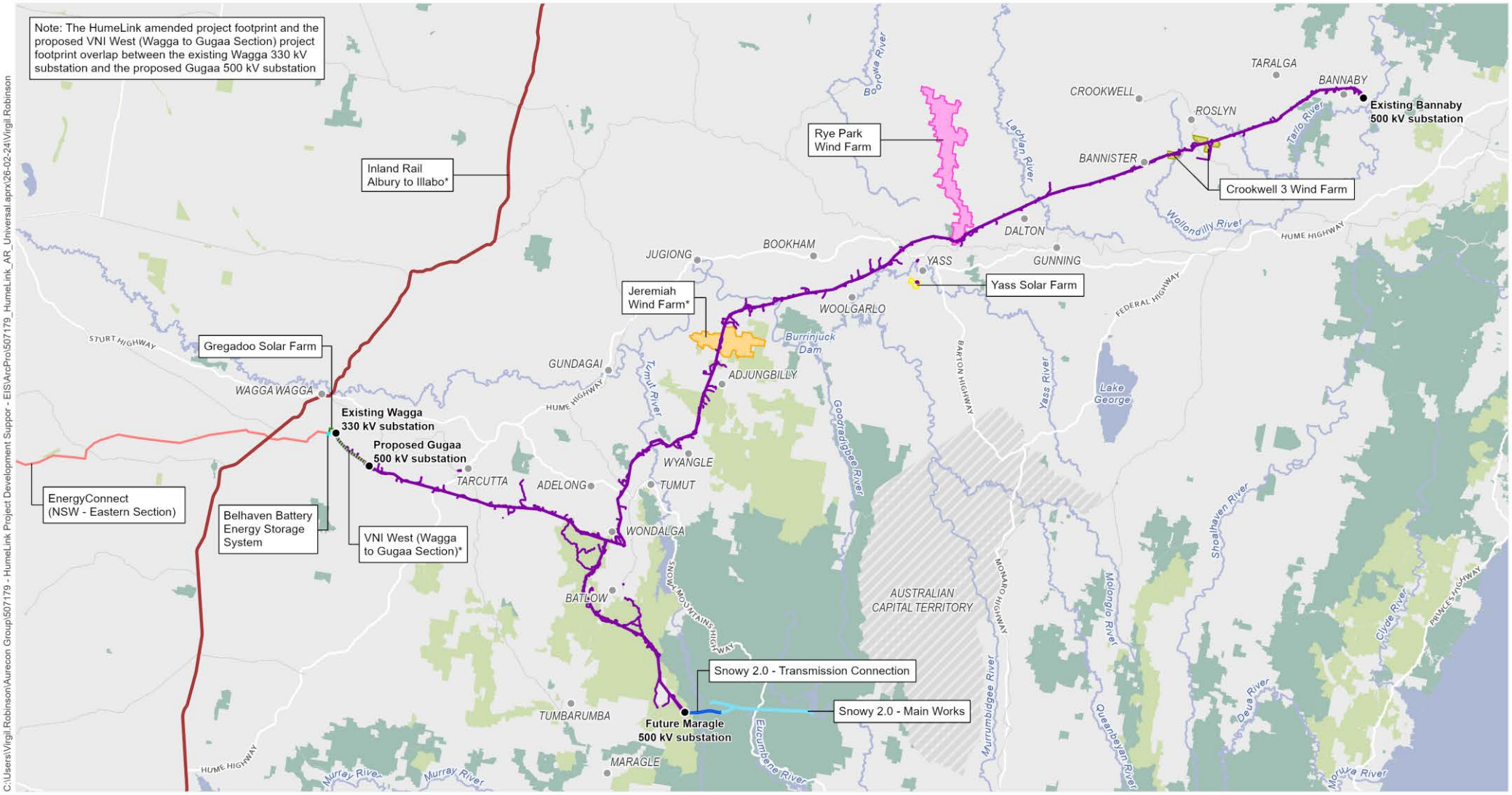
- Belhaven Battery Energy Storage System
- Yass Solar Farm.

Figure 8-1 shows the location of these projects and Table 8-1 contains a summary of the cumulative impact assessment.

TABLE 8-1 CUMULATIVE IMPACT ASSESSMENT

Project	Description	Distance / Interface	Cumulative impacts
Belhaven Battery Energy Storage System	Construction and operation of a 400 MW / 800 MWh Battery Energy Storage System (BESS) including transmission connection and associated infrastructure.	The main site is located about 1.5 km west of the existing Wagga 330 KV substation, but a connection from BESS to the substation (most likely underground) is proposed. Based on publicly available information there are likely to be overlapping construction programs.	Potential cumulative landscape impact: The BESS would introduce further energy generation infrastructure into the landscape south of Wagga Wagga, within the Rural fringe landscape character zone. These changes would further transform the landscape character from rural to a character where electricity infrastructure prevails. If approved, there would be a cumulative landscape impact associated with HumeLink in combination with this project, potentially during construction and operation. Potential cumulative visual impact: This project would be seen sequentially and together with HumeLink in areas south of Wagga Wagga. When viewed together they would further alter the character with the introduction of batteries and associated infrastructure. There is, however, a visual compatibility between the existing substation, existing transmission lines, and approved solar farms with further similar character infrastructure. As the landscape is relatively flat in this area, it has some capacity to accommodate further infrastructure with existing and proposed vegetation used to separate the proposal areas from surrounding rural and suburban properties. If approved, there would be a cumulative visual impact associated with HumeLink and this project, potentially during construction and operation. However, this would be in views seen primarily from a small section of Boiling Down Road where there is a strong visual precedent of electrical infrastructure.

Project	Description	Distance / Interface	Cumulative impacts
Yass Solar Farm	The construction, operation and decommissioning of a 100 MW solar photovoltaic energy generating facility with an associated battery energy storage system	The site surrounds the Yass substation, and based on publicly available information, there are likely to be overlapping construction programs. However, given the proximity and likely impacts, cumulative impacts are likely limited to the establishment and use of HumeLink's construction compound proposed at the Yass substation during construction only.	Potential cumulative landscape impact: The solar farm would require some minor landform changes, removal of vegetation and would introduce further energy generation infrastructure and additional transmission lines into the landscape south of Yass. This change would occur in the Black Range to Yass undulating rural hills and ridges landscape where adjacent to the existing Yass substation and the Yass substation compound is proposed to be (C10) a part of HumeLink. These changes would further transform the landscape character from rural to a character where electricity infrastructure prevails. If approved, there would be a cumulative landscape impact associated with HumeLink in combination with this project, potentially during construction. Potential cumulative visual impact: There is limited visibility of the Yass substation compound, and no visual impact identified in *Technical Report 8 – Landscape Character and Visual Impact Assessment*. There would be no cumulative visual impact during construction of operation.



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Amended project footprint
National park and reserve
State forest
Waterbody
Waterway
Major road
Railway
Substation

Relevant future projects

Belhaven Battery Energy Storage System
Crookwell 3 Wind Farm
EnergyConnect (NSW - Eastern Section)
Gregadoo Solar Farm
Inland Rail Albury to Illabo*
Jeremiah Wind Farm*
Rye Park Wind Farm
Snowy 2.0 - Main Works
Snowy 2.0 - Transmission Connection
VNI West (Wagga to Gugga Section)*
Yass Solar Farm

*Note: Subject to approval

Source: *Aurecon, Transgrid, Spatial Services (DCS), ESRI Basemap*

1:925,000
0 20 40km

Projection: GDA 1994 MGA Zone 55

HumeLink **Landscape Character and Visual Impact Assessment**

FIGURE 8-1: Relevant future projects

9.0 Management of impacts

Similar to the approach described in *Technical Report 8 – Landscape Character and Visual Impact Assessment*, mitigation has been incorporated into the amended project to minimise visual impacts wherever practicable. Design considerations to minimise visual impacts will continue during further design development and construction planning, such as maximising the distance of transmission line structures to sensitive viewpoints or retaining existing vegetation.

In addition, vegetation screening will be investigated to assist in filtering and screening views from private residential properties. Following mitigation measure LV5, private residential properties assessed as potentially having a **moderate or higher visual impact** will be eligible for consideration in consultation with the landowner. While private residential properties that have been assessed as potentially having a **moderate-low or lower visual impact** will not be eligible for consideration of vegetation screening, several other mitigation measures will assist in managing potential visual impacts, such as LV1 and new mitigation measure LV7.

9.1 Mitigation measures

The mitigation measures identified in *Technical Report 8 – Landscape Character and Visual Impact Assessment* remain relevant. Changes to these measures have been highlighted in **bold underline** and strikethrough.

TABLE 9-1: REVISED AND/OR NEW MITIGATION MEASURES

Reference	Mitigation measure	Timing	Relevant location(s)
LV2	Temporary and permanent access **tracks** ~~would~~ **will** be designed to minimise vegetation removal, changes to landform, and visual impacts where practicable.	Detailed design	All locations
LV3	Lighting at construction compounds and worker accommodation **facilities** ~~facility~~ ~~would~~ **will** be designed and operated in accordance with *AS 4282 2019 Control of the obtrusive effects of outdoor lighting*.	Detailed design and construction	Construction compounds and worker accommodation **facilities** ~~facility~~
LV5	For residences where the project is predicted to have a moderate to high visual impact, opportunities for screening vegetation ~~would~~ **will** be investigated. Appropriate visual screening or other options **(for example planting of vegetation)** ~~would~~ **will** be confirmed in consultation with the affected landowner and implemented where practicable. Vegetative screening ~~would~~ **will** be maintained by the landowner.	Detailed design, **construction** and operation	Transmission line
LV7	**Transmission line structures will have a pre-dulled steel finish to minimise the potential for glare and reflection.**	**Detailed design and operation**	**All transmission line structures**
LV8	**Transgrid will continue to work with landowners and neighbours to avoid, minimise and mitigate impacts, as well as advocate strongly for a consistent, fair, NSW Government policy on visual impacts to neighbouring properties.**	**Detailed design, construction and operation**	**Transmission line**

10.0 Conclusion

Landscape character impact

During construction and operation there would be predominantly low, moderate-low and moderate landscape character impacts consistent with the findings of *Technical Report 8 – Landscape Character and Visual Impact Assessment*.

This includes reduced landscape character impacts in the Tumbarumba rural valley landscape character area, due to the removal of the Tumbarumba accommodation facility (AC1) from the amended project, and a reduction in the impacts on the Batlow undulating rural hills and ridges landscape character area, due to the relocation of the transmission line corridor west of Batlow.

There would be an increase in the impact on the Green Hills forested hills landscape character area, from low to a moderate-low during construction as the transmission line corridor has been relocated to the west of Batlow, through Green Hills State Forest, however, this impact would be experienced in the less sensitive plantation forestry area. During operation the impact remains as low on the Green Hills forested hills landscape character area.

Visual impact

The visual impacts would change in several areas, including:

- Increased visual impacts in the vicinity of the proposed Gugaa 500 kV substation, due to the revised location and slight expansion of this facility.
- Similar visual impacts would occur from Tumbarumba Road (Viewpoint 3), and Yaven Creek Road (Viewpoint 6) where the impacts would occur in slightly different locations.
- Reduction in visual impacts from Stewarts Road in Batlow with the relocation of the transmission line corridor, and from Brungle Road, due to the realignment of the transmission line corridor, away from this local roadway.
- Where additional views were assessed, there would be Moderate- low and low visual impacts on views during construction from Mates Gully Road, Adjungbilly Road, Batlow Road and Faulder Avenue, Yass due to the temporary construction facilities; and moderate-low visual impacts during operation at Batlow Road, where the transmission line would have a new crossing point along this road, which is a scenic route.
- There would be negligible visual impacts in views from Wondalga Road and the Green Hills Access Road due to the low sensitivity of forestry uses.

Scenic or significant vistas and road corridors in the public domain

There would continue to be no adverse impacts anticipated on significant vistas within the landscape and visual study area. There would be moderate-low visual impacts during construction and operation, in views where the project would cross the road and vegetation clearing would be required.

Air traffic

There would be a decrease in the impact on views from the air during construction from moderate to moderate-low due to the realignment of the transmission line corridor from the scenic areas east of Batlow to the forestry areas to the west.

Night lighting

At night the visual impacts would change in several areas during construction, including in the landscape character zones (and areas) where the temporary worker accommodation facilities have been removed from or added to the amended project, including:

- Increased visual impact to the Gregadoo to Book Book rural valleys landscape character area in the vicinity of the proposed new Tarcutta accommodation facility (AC03).
- Increased visual impact to the Adjungbilly rural valleys landscape character area in the vicinity of the proposed new accommodation facility and compound (AC04) to the north of Adjungbilly Road.
- Increased visual impact to the Batlow undulating rural hills and ridges landscape character due to the proposed new worker accommodation facility and compound (AC07) at Green Hills Access Road at night, and a reduced impact in other areas of this character area due to the removal of the transmission line corridor from this area.
- Increased visual impact to the Black Range to Yass undulating rural hills and ridges landscape character area in the vicinity of the proposed additional worker accommodation facility and compound (AC05) at Faulder Avenue.
- Increased visual impact to the Crookwell rural tablelands landscape character area in the vicinity of the proposed accommodation facility and compound (AC06) to the east of and set back from Woodhouselee Road.
- There would be a reduction in visual impact in the Tumbarumba rural valleys landscape character area as the Tumbarumba accommodation facility (AC1) would not be required for the amended project.

There would be no changes to the visual impact of the amended project at night during operation as there would be no lighting proposed along the transmission line route and any additional lighting proposed in the amended project is unlikely to change the impacts identified in *Technical Report 8 – Landscape Character and Visual Impact Assessment*.

Views from surrounding residences

Due to the project changes, during operation there would be:

- four additional dwellings with a High visual impact
- five fewer dwellings with a High-moderate visual impact
- no change to the number of dwellings with a Moderate impact
- nine additional dwellings with a Low visual impact.

Of those dwellings with a high, high-moderate or high visual impact, five would be located on properties that are outside the amended project footprint. Of these, a high- moderate visual impact was identified for two dwellings, and a moderate visual impact for three dwellings.

There were no dwellings within the Green Hills section identified as having a moderate or higher visual impact during construction or operation.

During construction, 21 dwellings have the potential for a moderate or higher visual impact during construction due to the construction compounds and accommodation facilities, 14 of these are located on properties that are outside the amended project footprint. These impacts would be temporary, and due primarily to views of the construction compounds and worker accommodation facilities in rural areas, including at the Gugaa 500 kV substation and Amended Gregadoo Road compound (C06); Tarcutta accommodation facility and compound (AC03); Ellerslie Road compound (C21); Ardrossan Headquarters Road compound (C17); Green Hills accommodation facility and compound (AC07); Amended Memorial Avenue compound (C14); Adjungbilly accommodation facility and compound (AC04); Yass accommodation facility and compound (AC05).

There are no dwellings that would have a potential visual impact near the Snubba Road compound (C18), Future Maragle 500 kV substation, and Maragle 500 kV substation compound (C05), Gadara Road compound (C19), Amended Honeysuckle Road compound (CO7), Crookwell accommodation facility and compound (AC06) and Amended Bannaby 500 kV substation compound (C12).

Cumulative landscape and visual impact

If approved, there would be an additional cumulative landscape character and visual impacts associated with this project and the Belhaven Battery Energy Storage System in the Wagga Wagga Rural fringe landscape character zone.

11.0 References

Australian Institute of Landscape Architects QLD, 2018, *Guidance Note for Landscape and Visual Assessment*, accessed from: https://www.aila.org.au/Web/Advocacy/Submission-Library.aspx (accessed 23/10/2023).

NSW DPE, 2022, *Cumulative Impact Assessment Guidelines for State Significant Projects.*

NSW DPE, 2022, Technical Supplement – Landscape and Visual Impact Assessment, Transmission Guideline, accessed from: https://shared-drupal-s3fs.s3.ap-southeast-2.amazonaws.com/master-test/fapub_pdf/NSW+Planning+Portal+Documents/Draft+Transmisison+Visual+Technical+Supplement.pdf (accessed 23/10/2023).

NSW Government, 2010, *Tumbarumba Local Environmental Plan 2010*, accessed from: https://legislation.nsw.gov.au/view/html/inforce/current/epi-2010-0317 (accessed 23/10/2023).

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NSW Government, 2012, *Tumut Local Environmental Plan 2012*, accessed from: https://legislation.nsw.gov.au/view/html/inforce/current/epi-2012-0637 (accessed 23/10/2023).

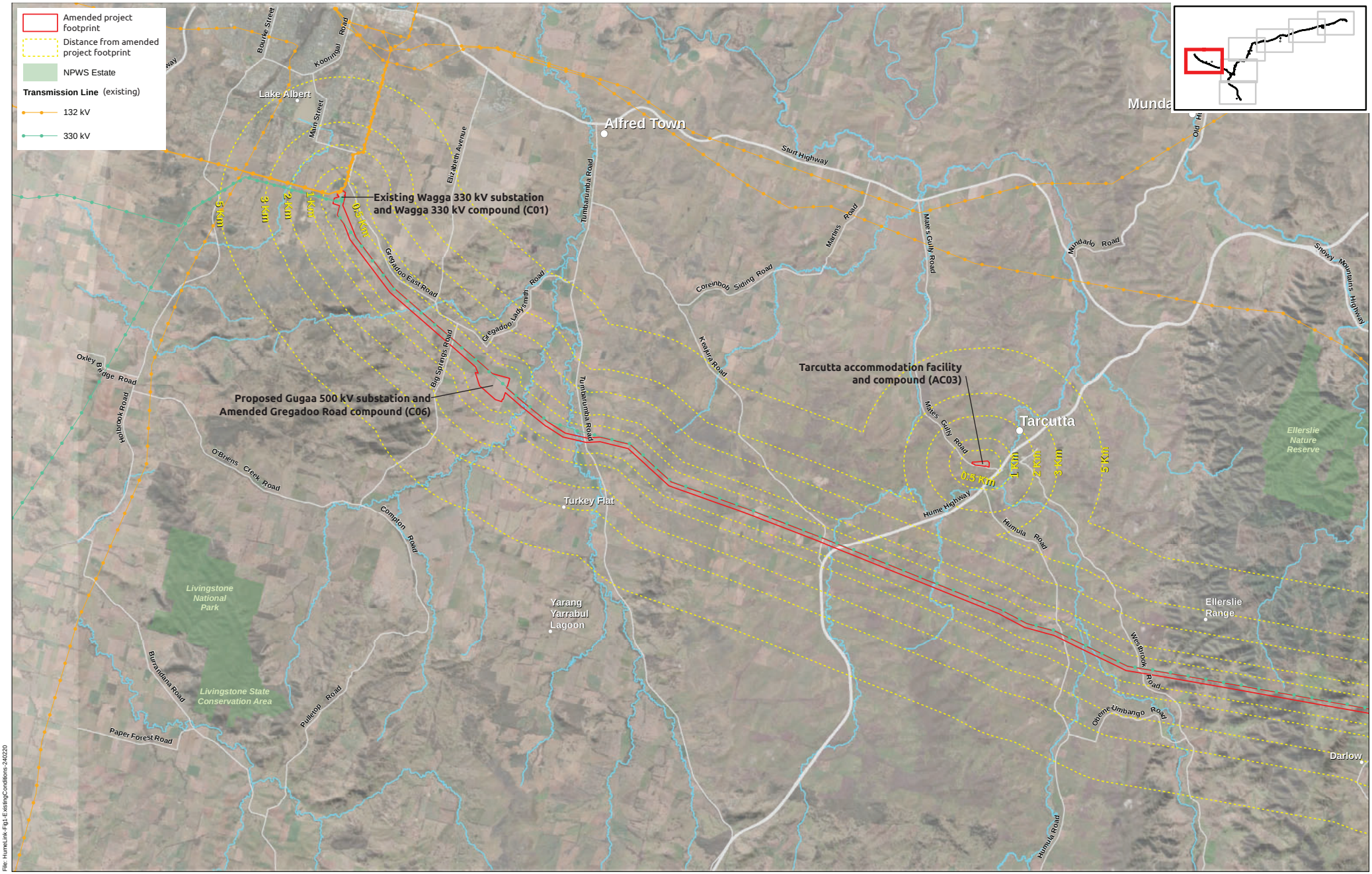
NSW Government, 2013, *Yass Valley Local Environmental Plan 2013*, accessed from: https://legislation.nsw.gov.au/view/html/inforce/current/epi-2013-0391 (accessed 23/10/2023).

NSW National Parks and Wildlife Service (NSW NPWS), 1998, *Tarlo River National Park Plan of Management*, accessed from: https://www.environment.nsw.gov.au/research-and-publications/publications-search/tarlo-river-national-park-plan-of-management (accessed 23/10/2023).

Standards Australia, 2019, *AS/NZS 4282:2019, Control of the obtrusive effects of outdoor lighting*.

Attachment A

Existing environment plans



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NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Transmission Line: Supplied by Aurecon 2023
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011

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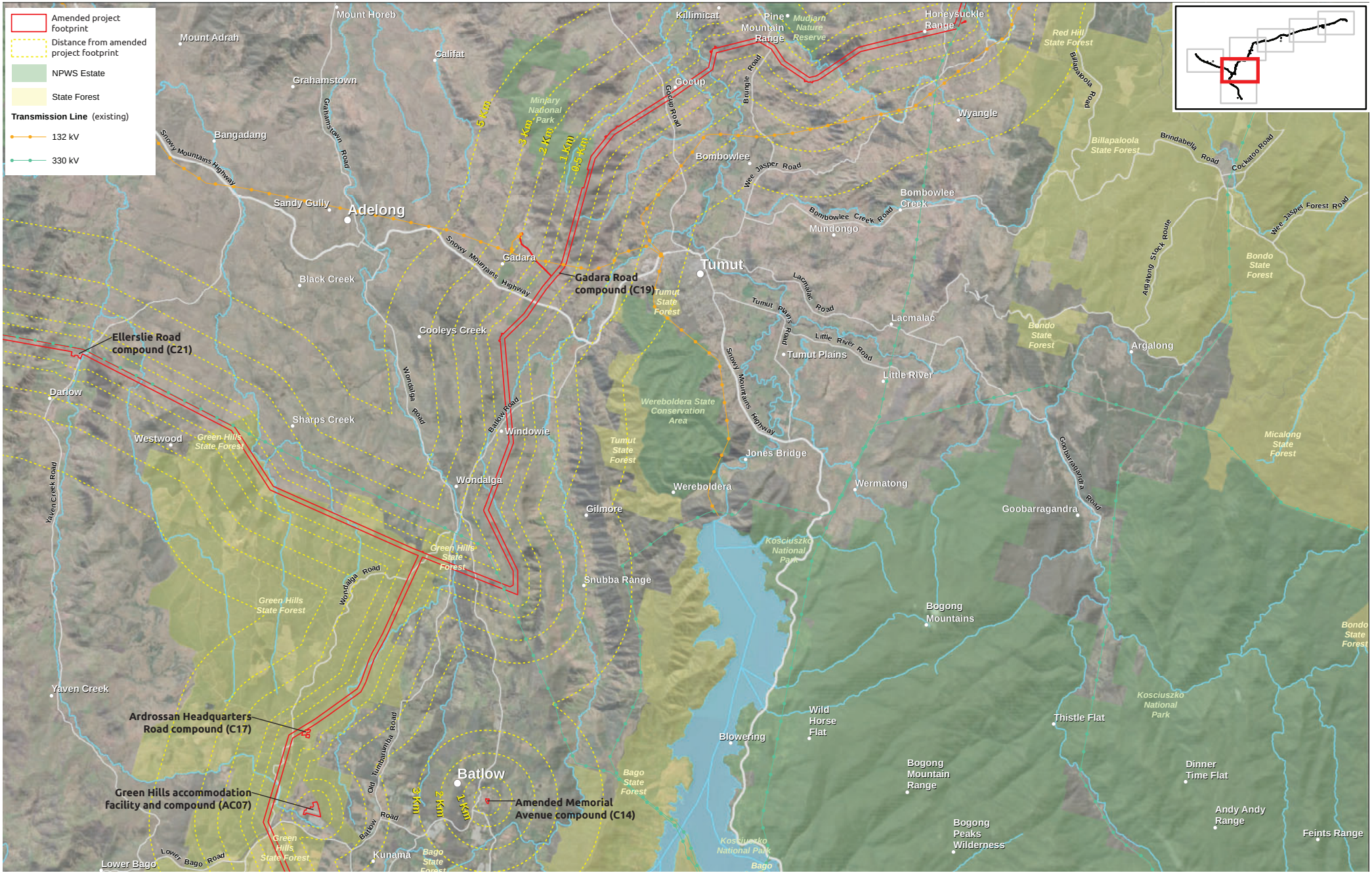

Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT A - **Existing environment** (Ellerslie Range to Tumut and Batlow)

0 2 4 6 8km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Transmission Line: Supplied by Aurecon 2023
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011

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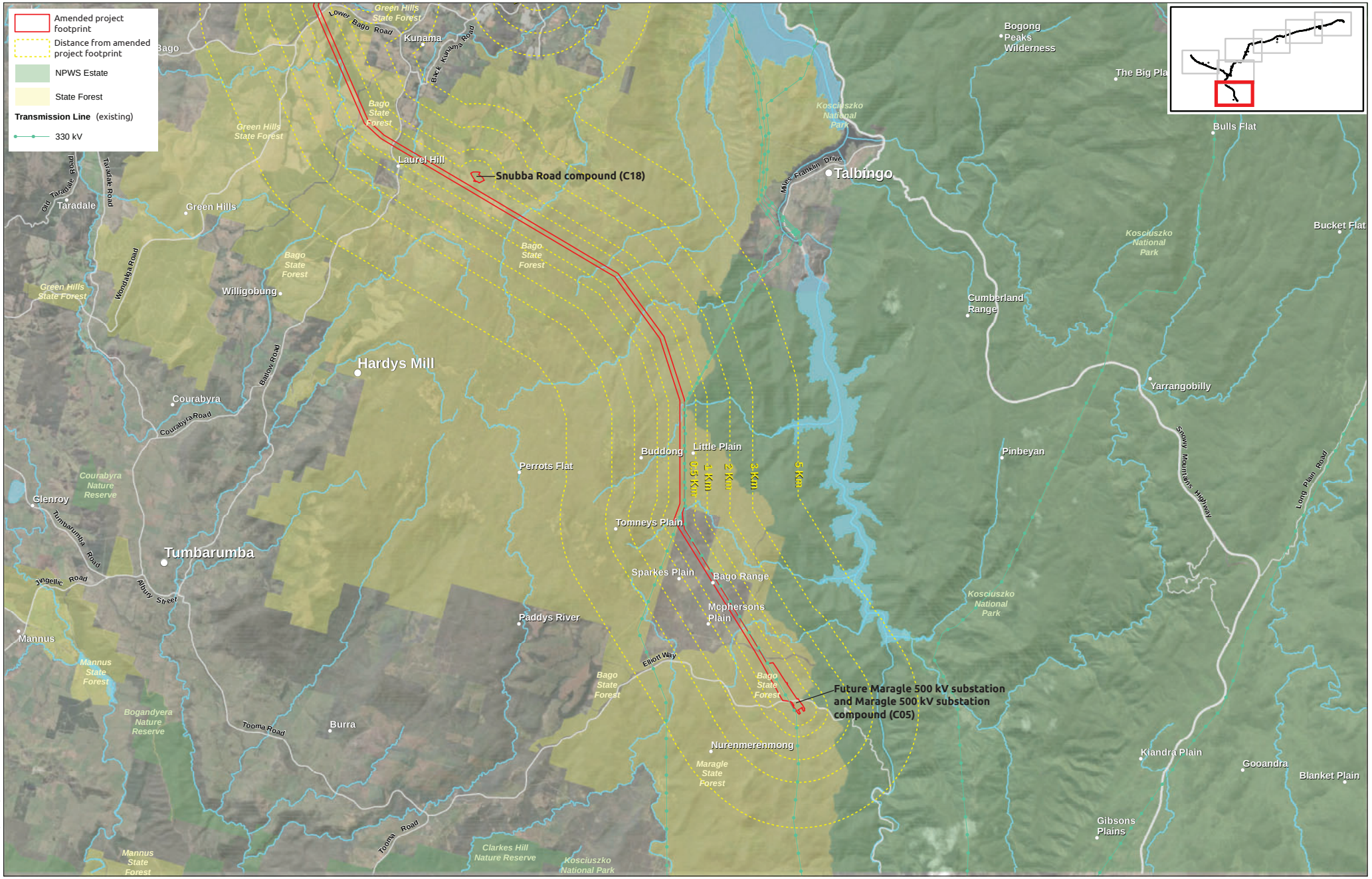

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Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT A - **Existing environment** (Batlow to Maragle)

0 2 4 6 8km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Transmission Line: Supplied by Aurecon 2023
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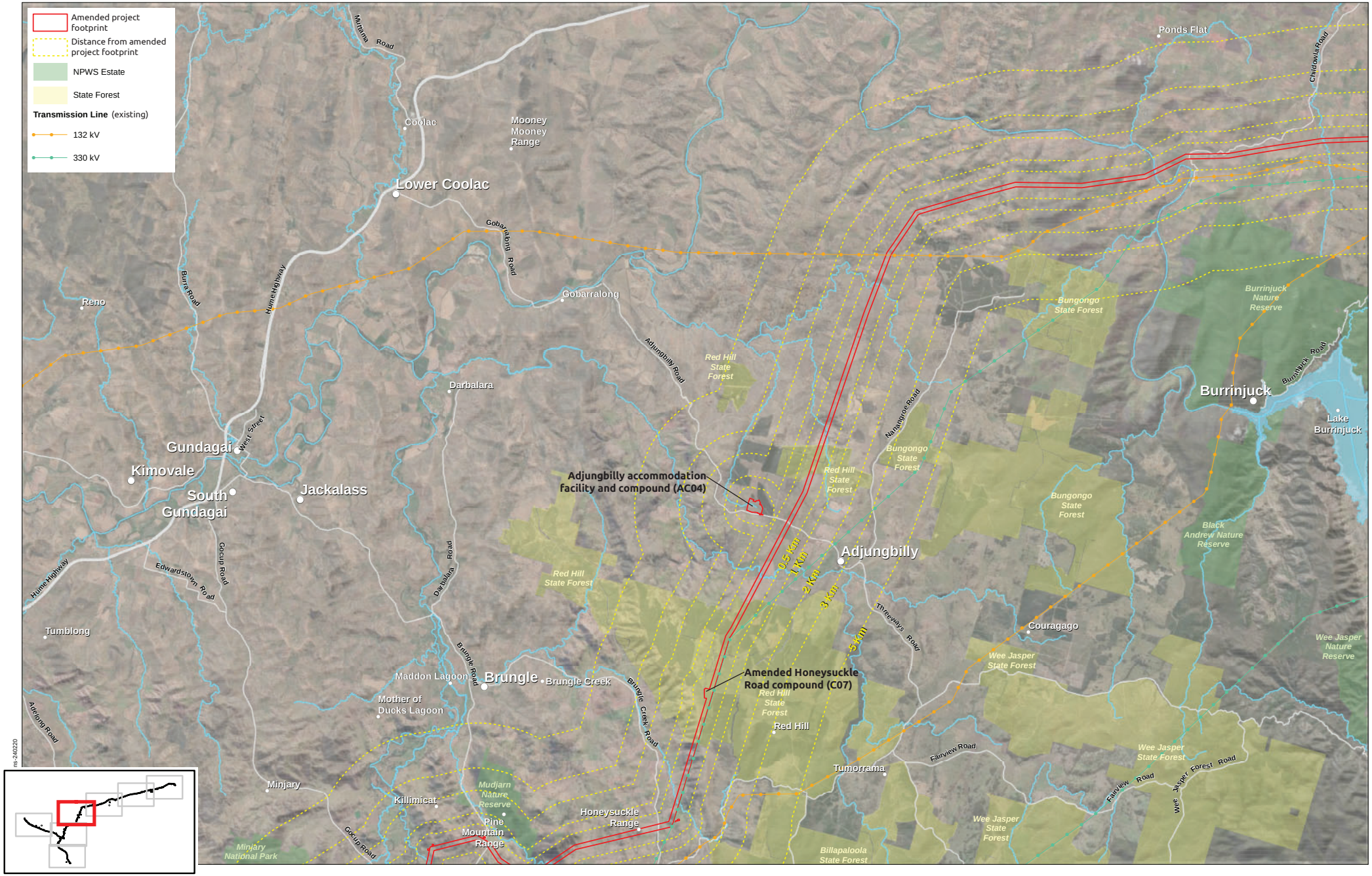

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Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT A - **Existing environment** (Tumut to Adjungbilly and Burrinjuck)

0 2 4 6 8km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Transmission Line: Supplied by Aurecon 2023
Imagery: Maxar 2018
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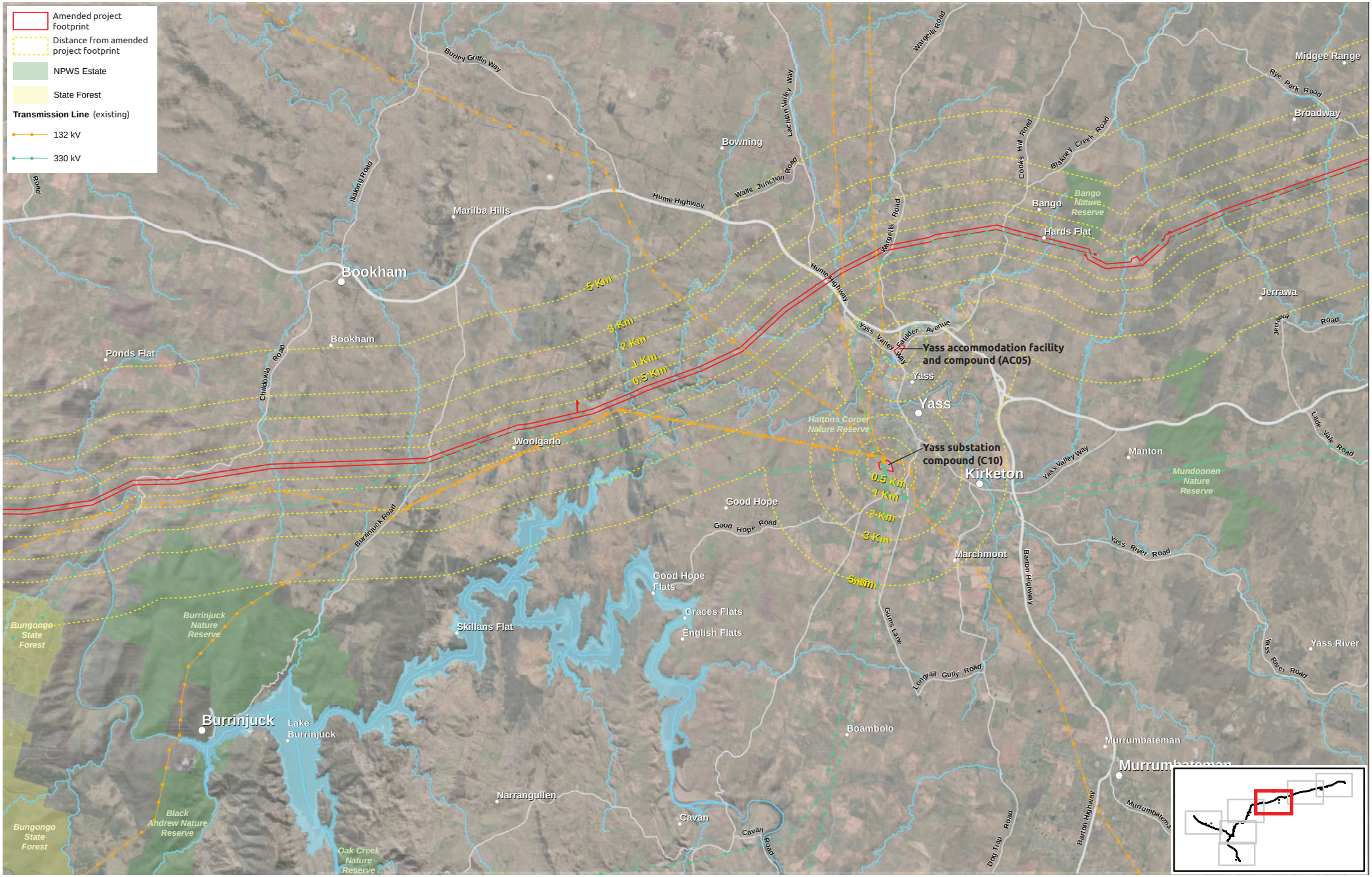

Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT A - **Existing environment** (Burrinjuck to Yass and Jerrawa)

0 2 4 6 8km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Transmission Line: Supplied by Aurecon 2023
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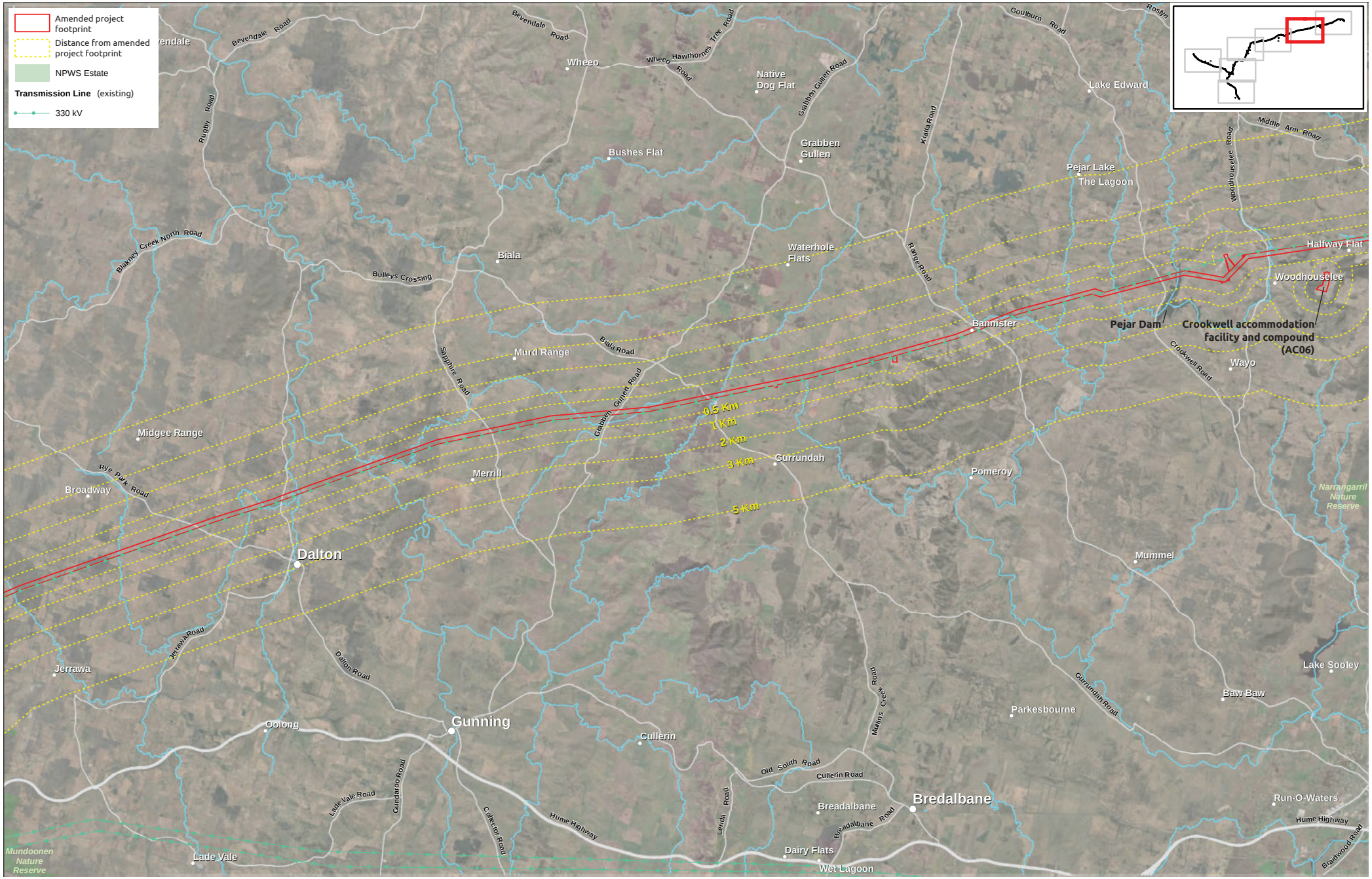

Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT A - **Existing environment** (Jerrawa to Woodhouselee)

0 2 4 6 8km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Transmission Line: Supplied by Aurecon 2023
Imagery: Maxar 2018
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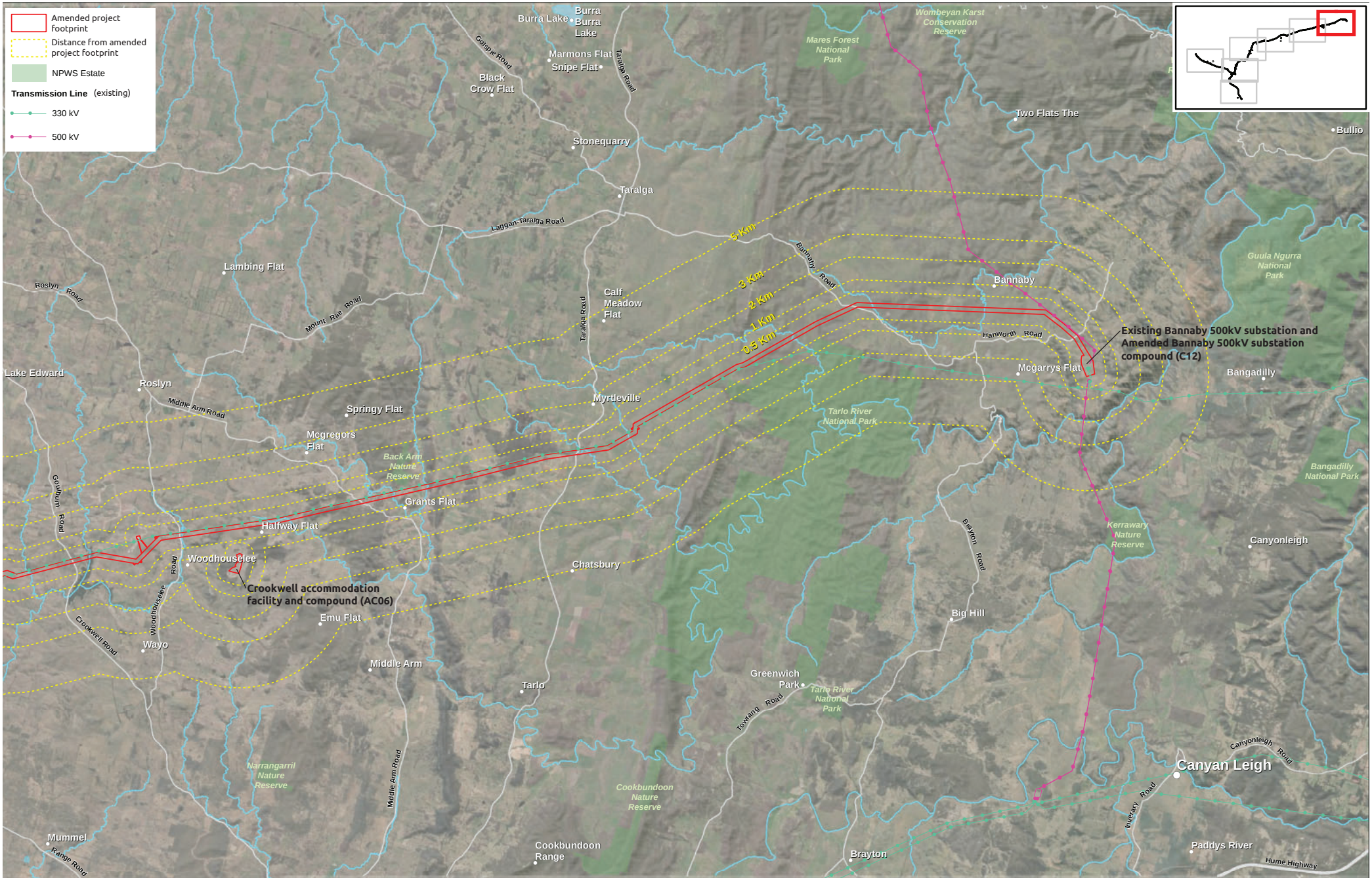

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Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT A - **Existing environment** (Woodhouselee to Bannaby)

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Transmission Line: Supplied by Aurecon 2023
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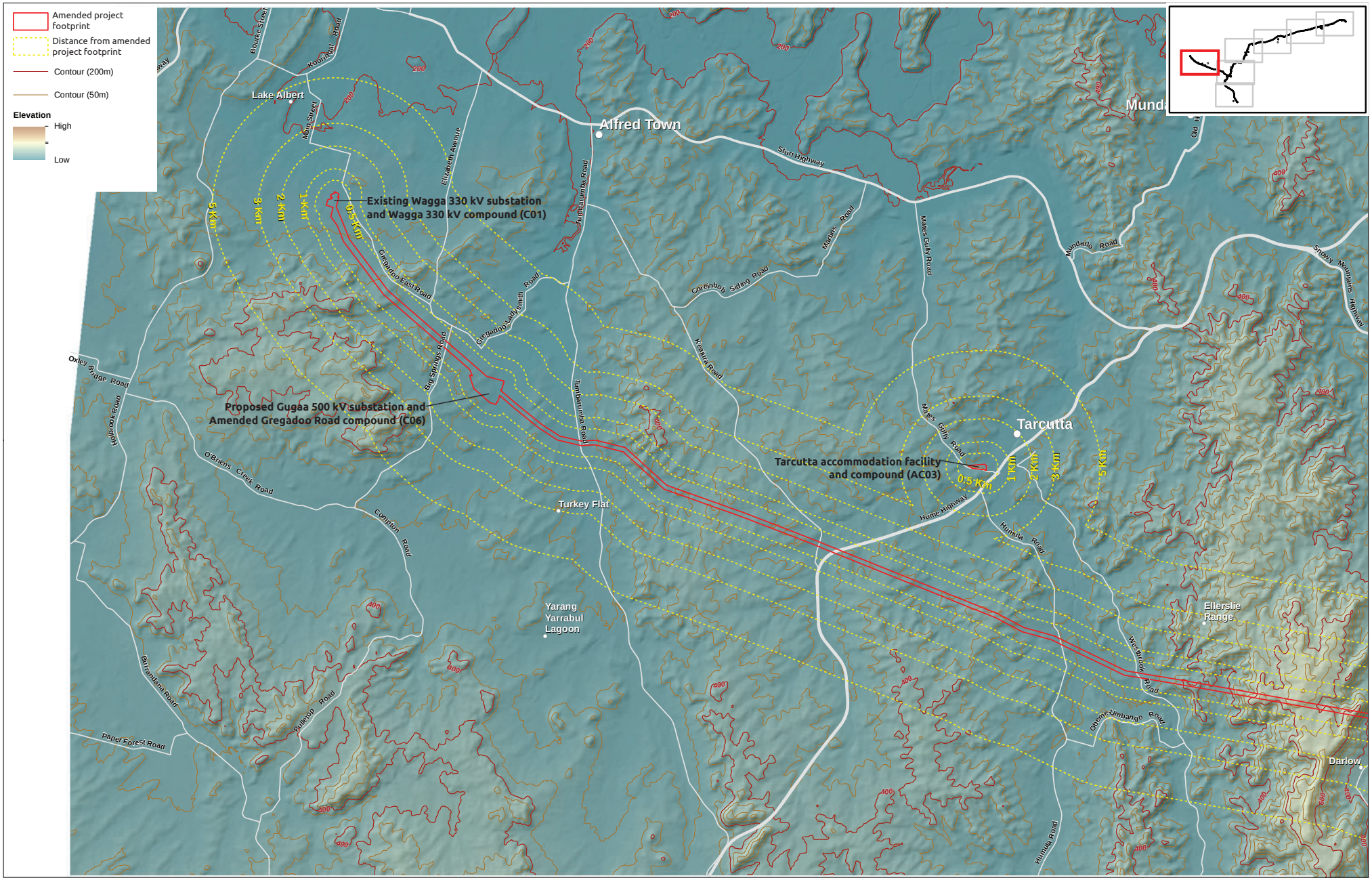
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011

Attachment B

Topography plans



Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT B - **Existing environment** (Wagga Wagga to Ellerslie Range)

0 2 4 6 8km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: Geoscience Australia 2011

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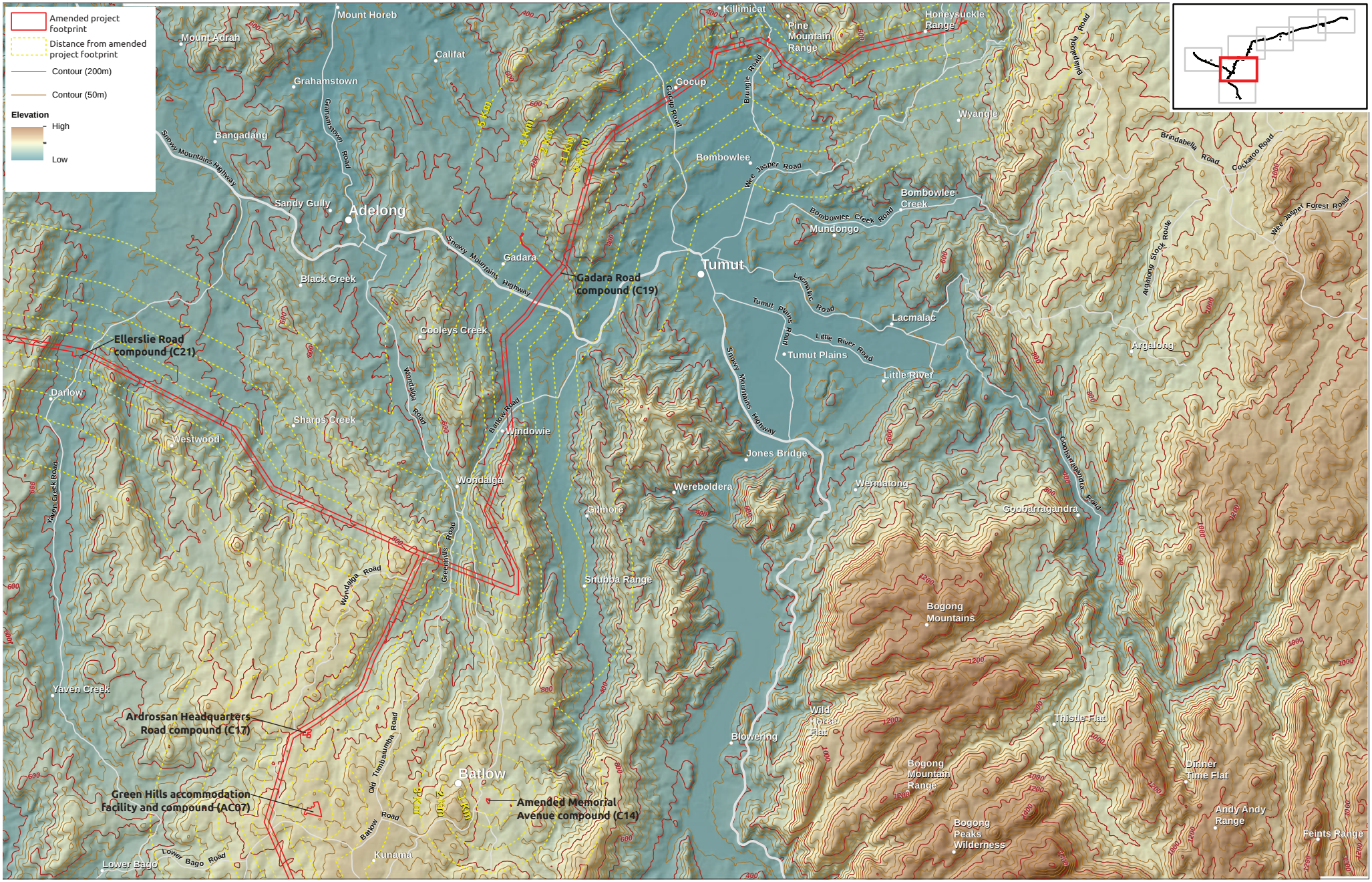

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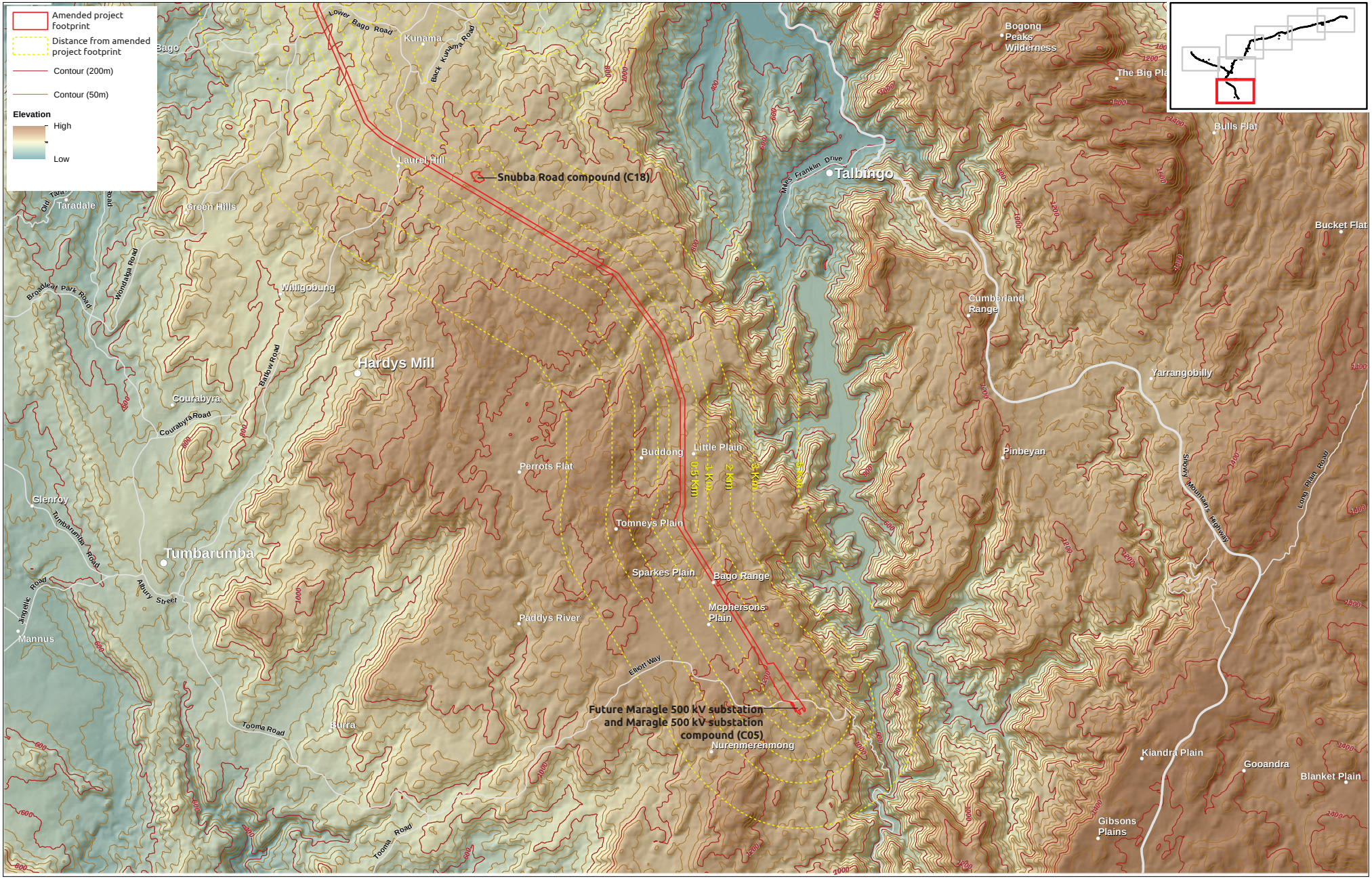
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT B - **Existing environment** (Ellerslie Range to Tumut and Batlow)

0 2 4 6 8km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: Geoscience Australia 2011



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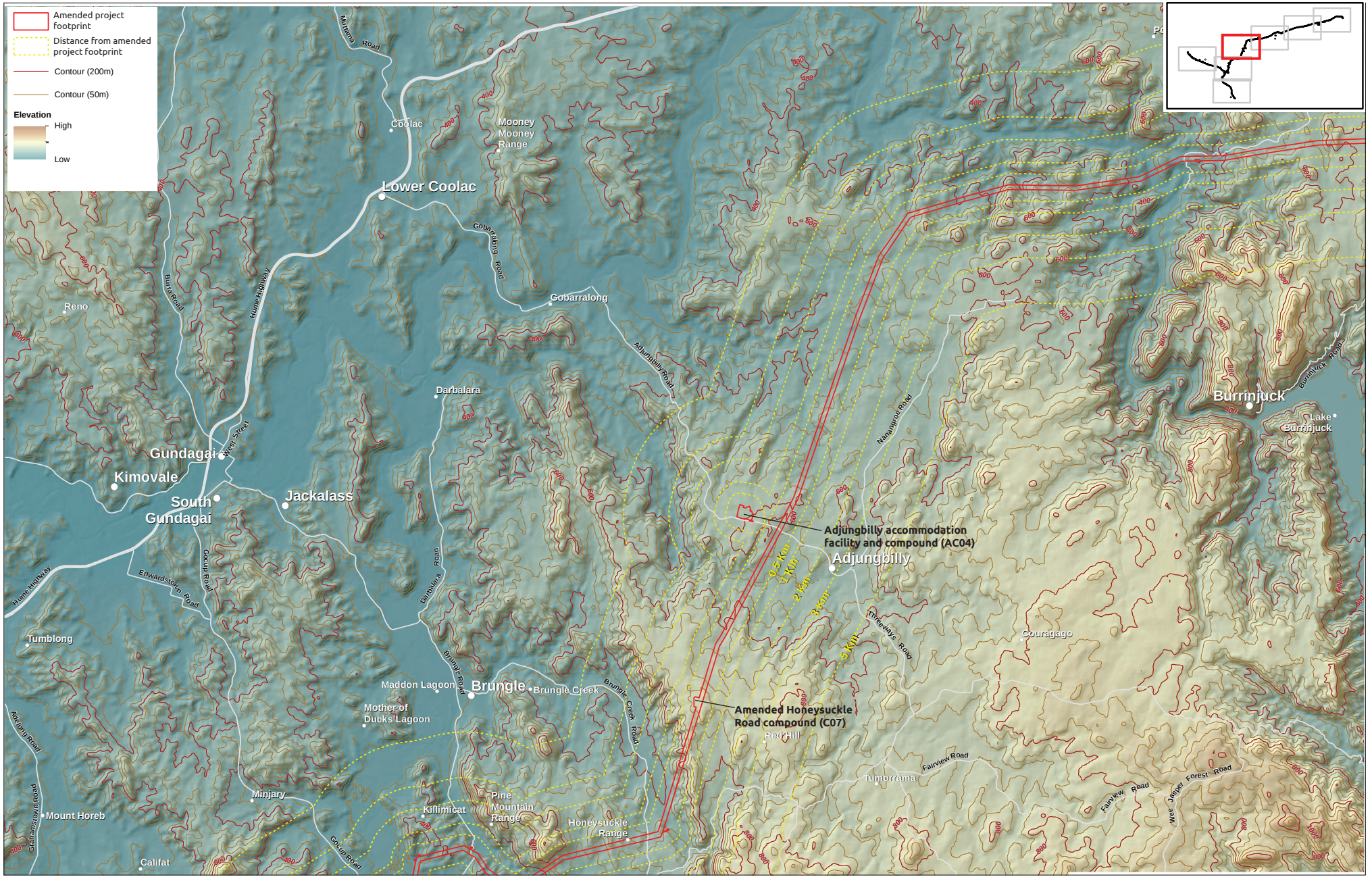
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT B - **Topography** (Batlow to Maragle)

0 2 4 6 8km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: Geoscience Australia 2011



Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT B - **Topography** (Tumut to Adjungbilly and Burrinjuck)

0 2 4 6 8km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: Geoscience Australia 2011

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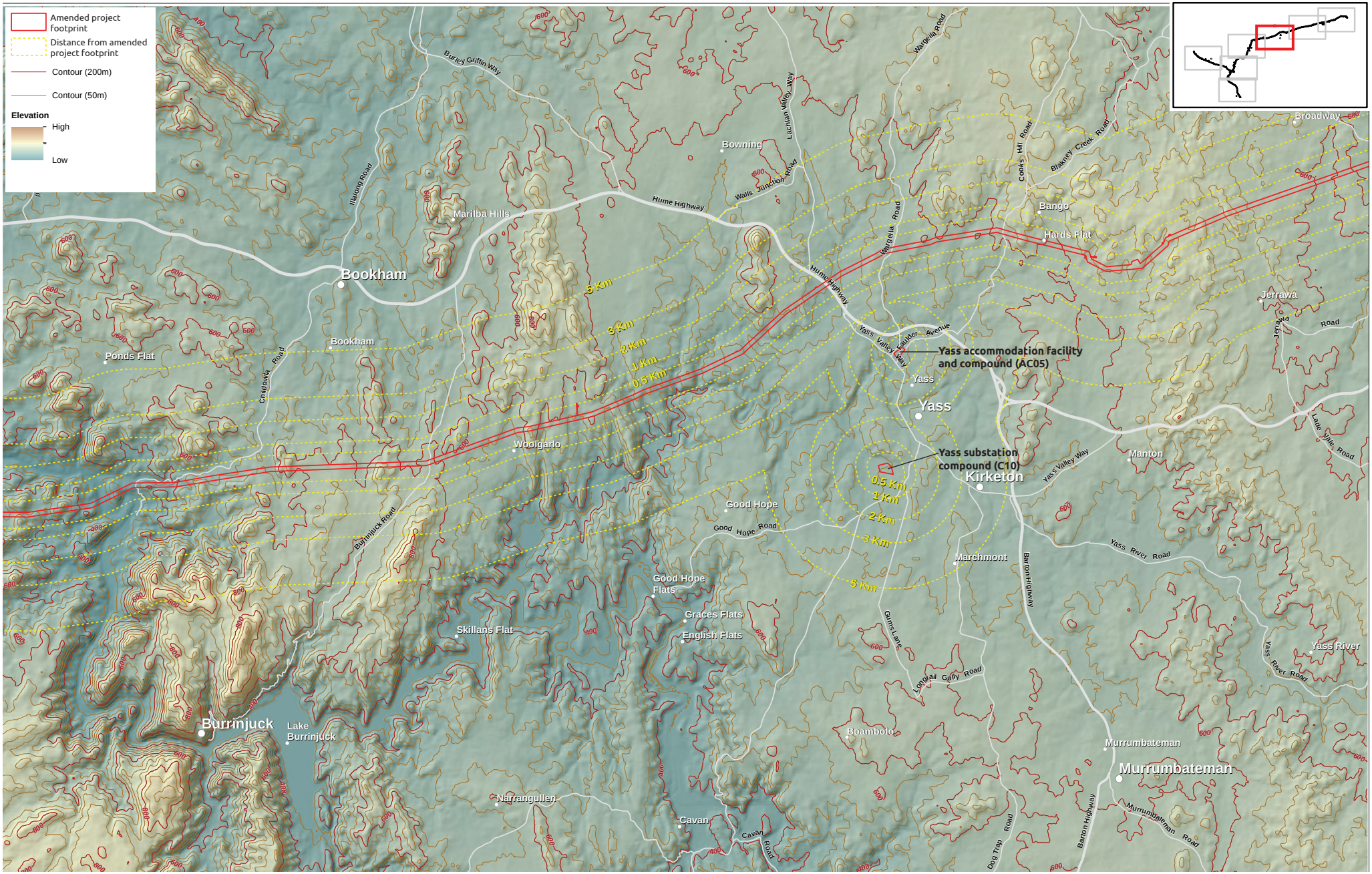

Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT B -- **Topography** (Burrinjuck to Yass and Jerrawa)

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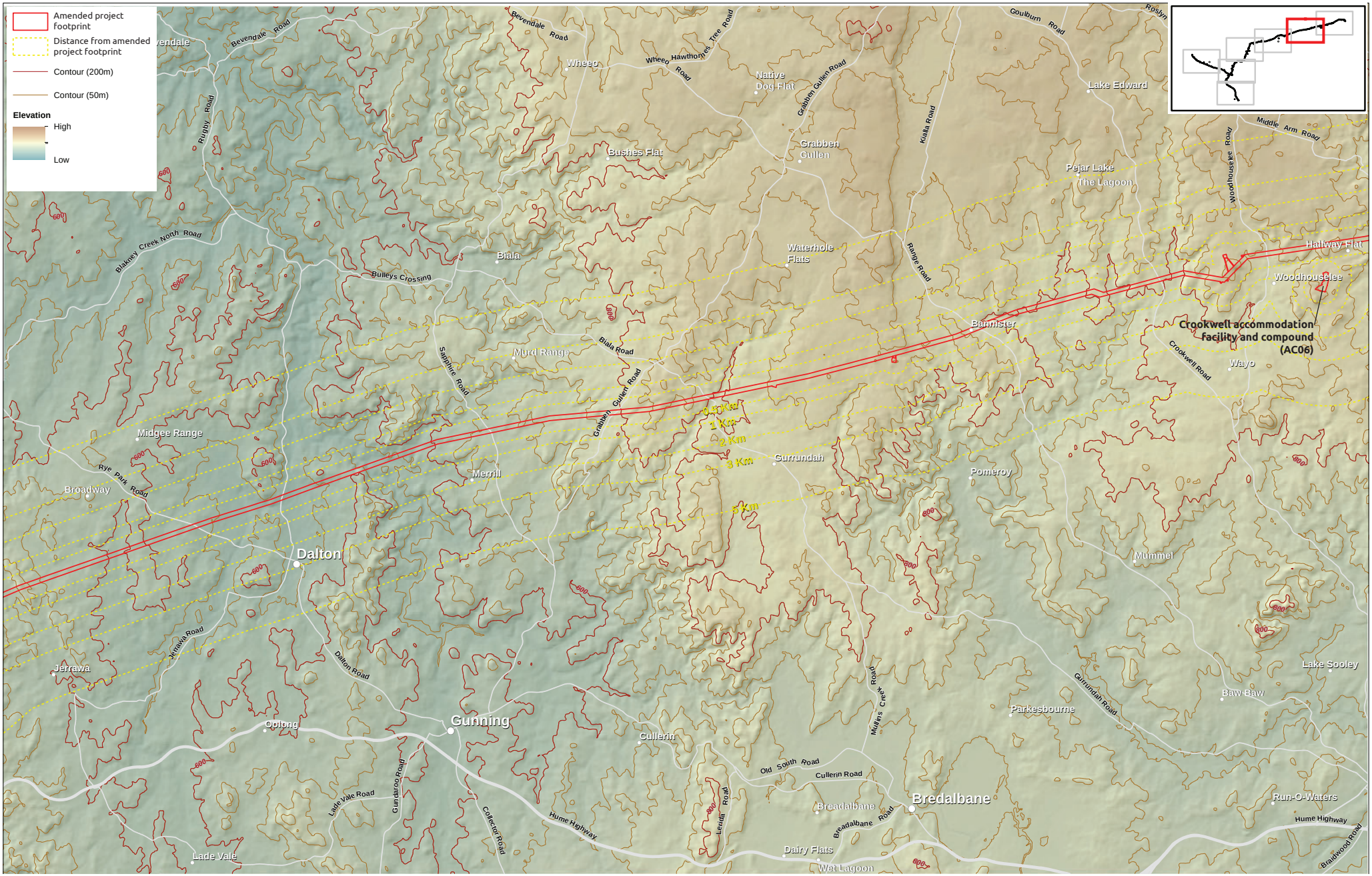
Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: Geoscience Australia 2011



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Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT B -- **Topography** (Jerrawa to Woodhouselee)

0 2 4 6 8km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H)
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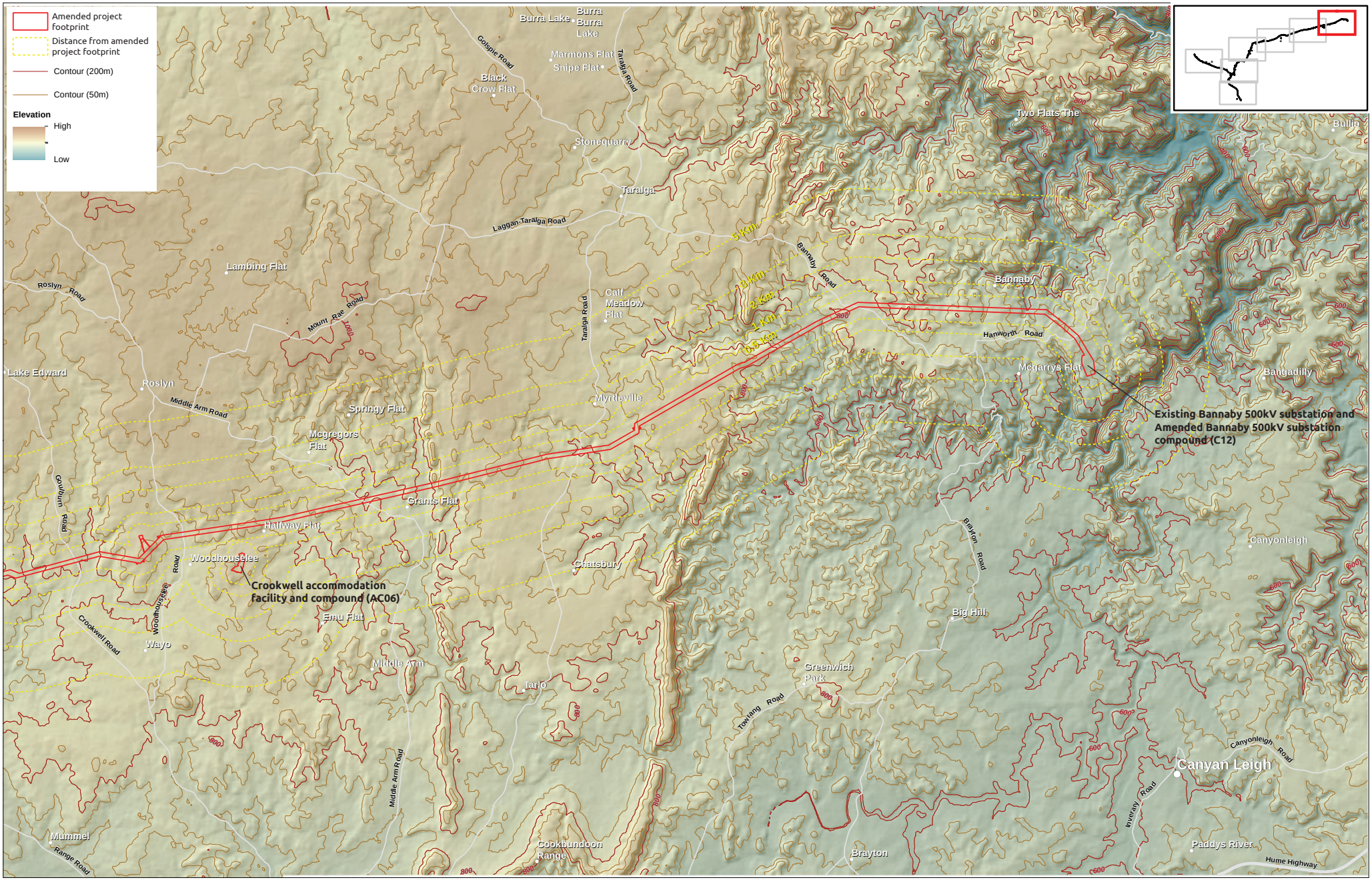

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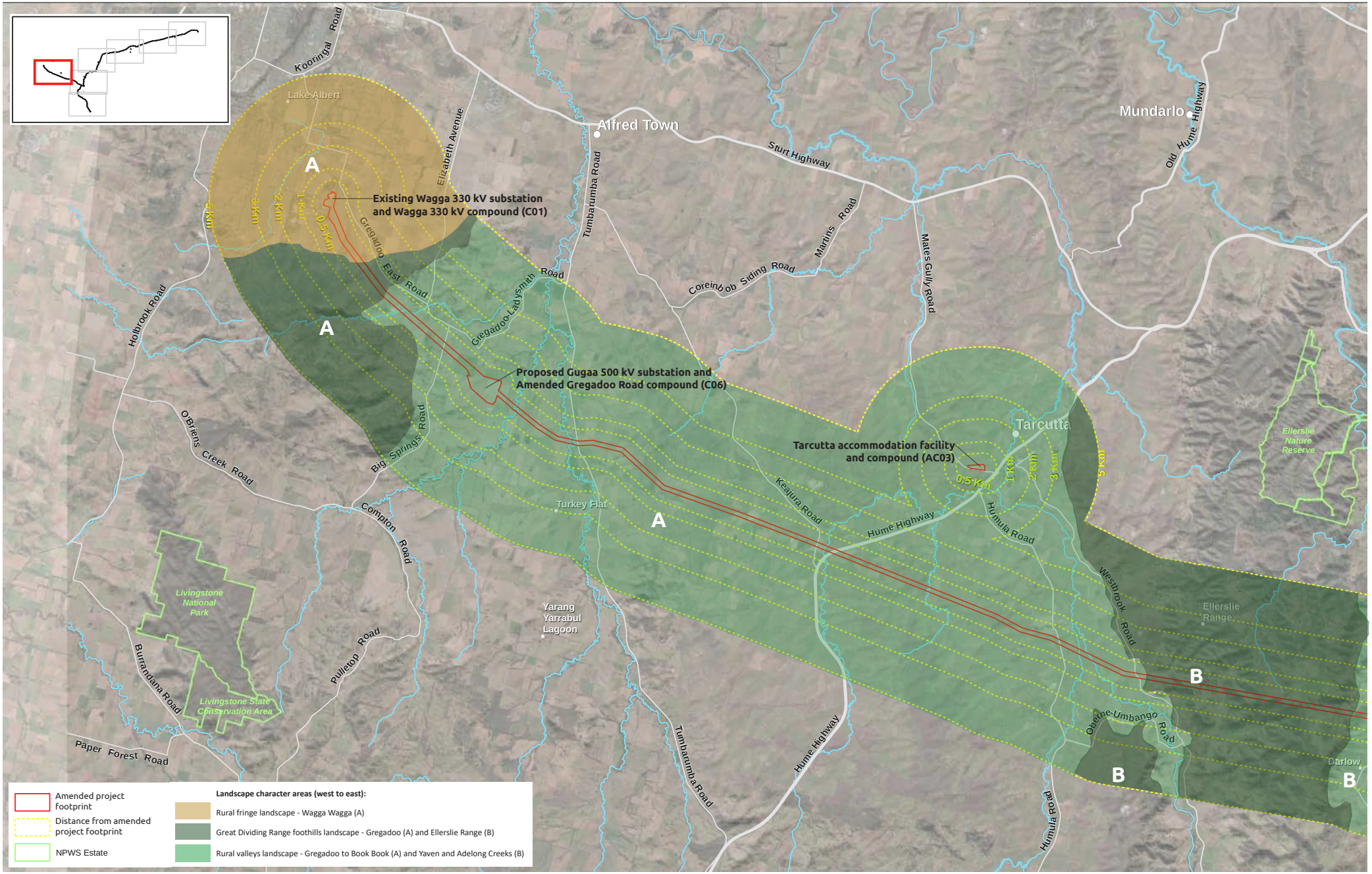
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT B -- **Topography** (Woodhouselee to Bannaby)

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: Geoscience Australia 2011

Attachment C

Landscape character plans



Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT C - **Landscape character** (Wagga Wagga to Ellerslie Range)

0 2 4 6 8km

north

iris

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Transmission Line: Supplied by Aurecon 2023
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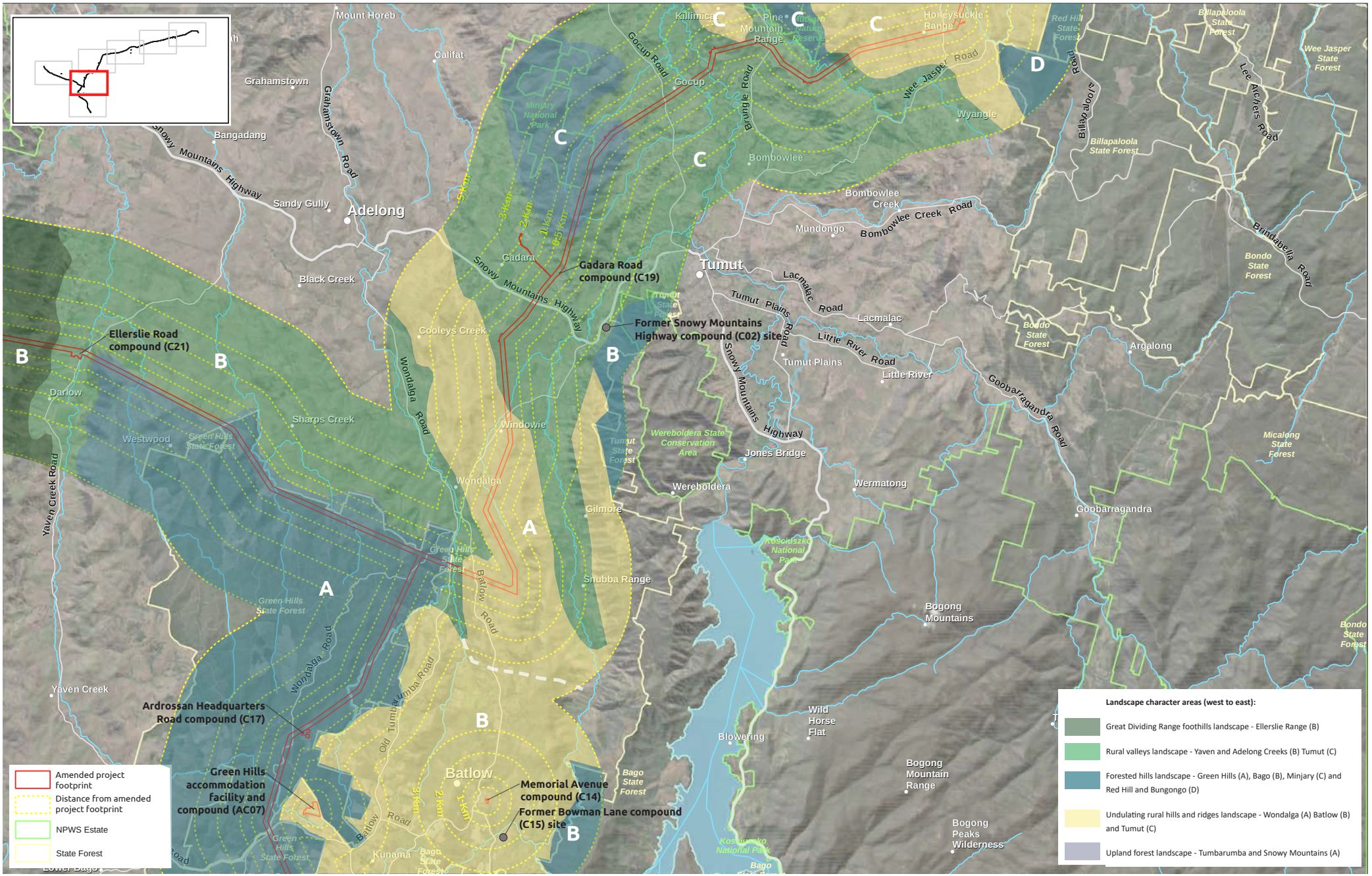

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Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT C - **Landscape character** (Ellerslie Range to Tumut and Batlow)

0 2 4 6 8km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Transmission Line: Supplied by Aurecon 2023
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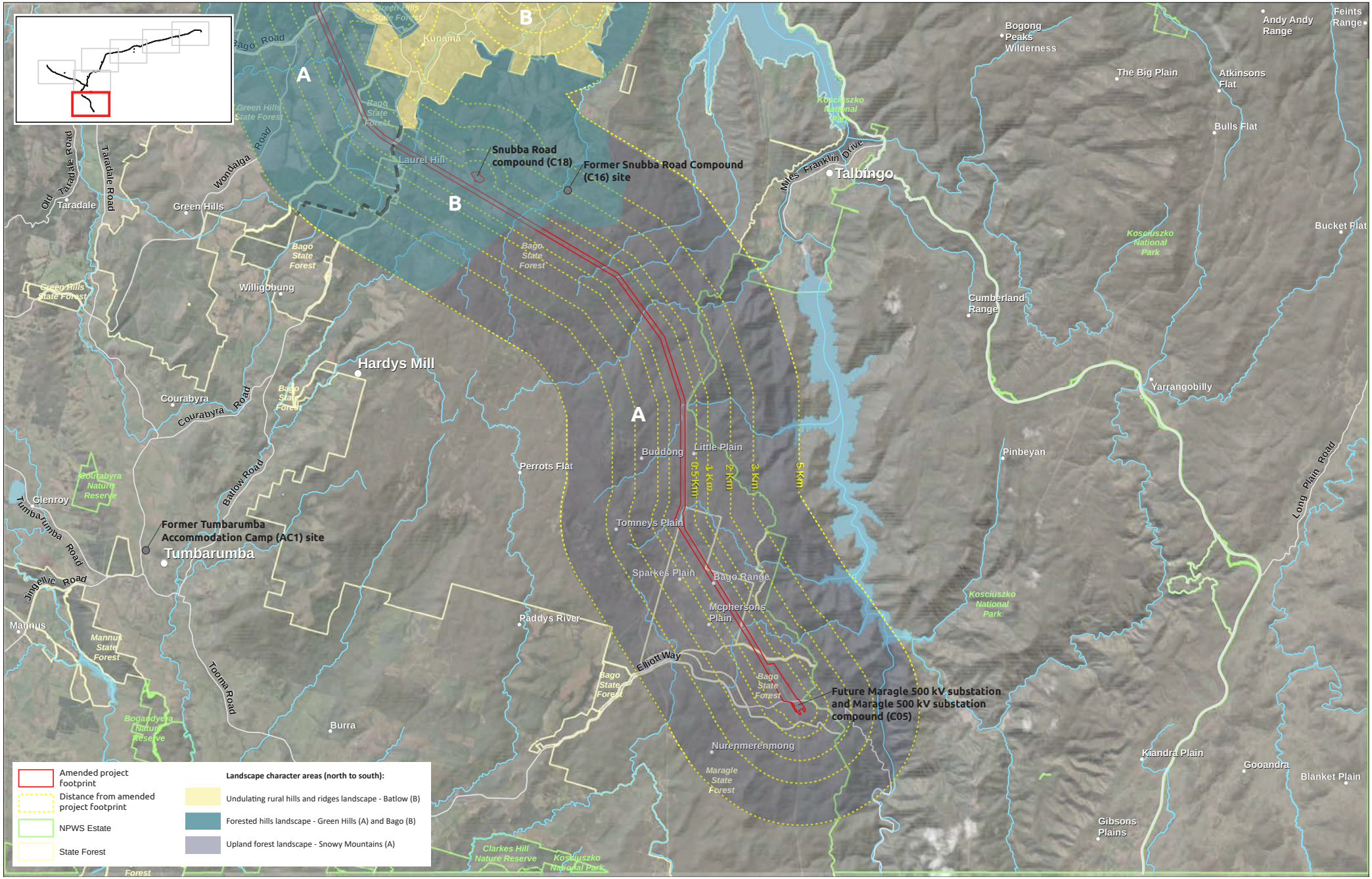

Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT C - **Landscape character** (Batlow to Maragle)

0 2 4 6 8km

north

iris

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
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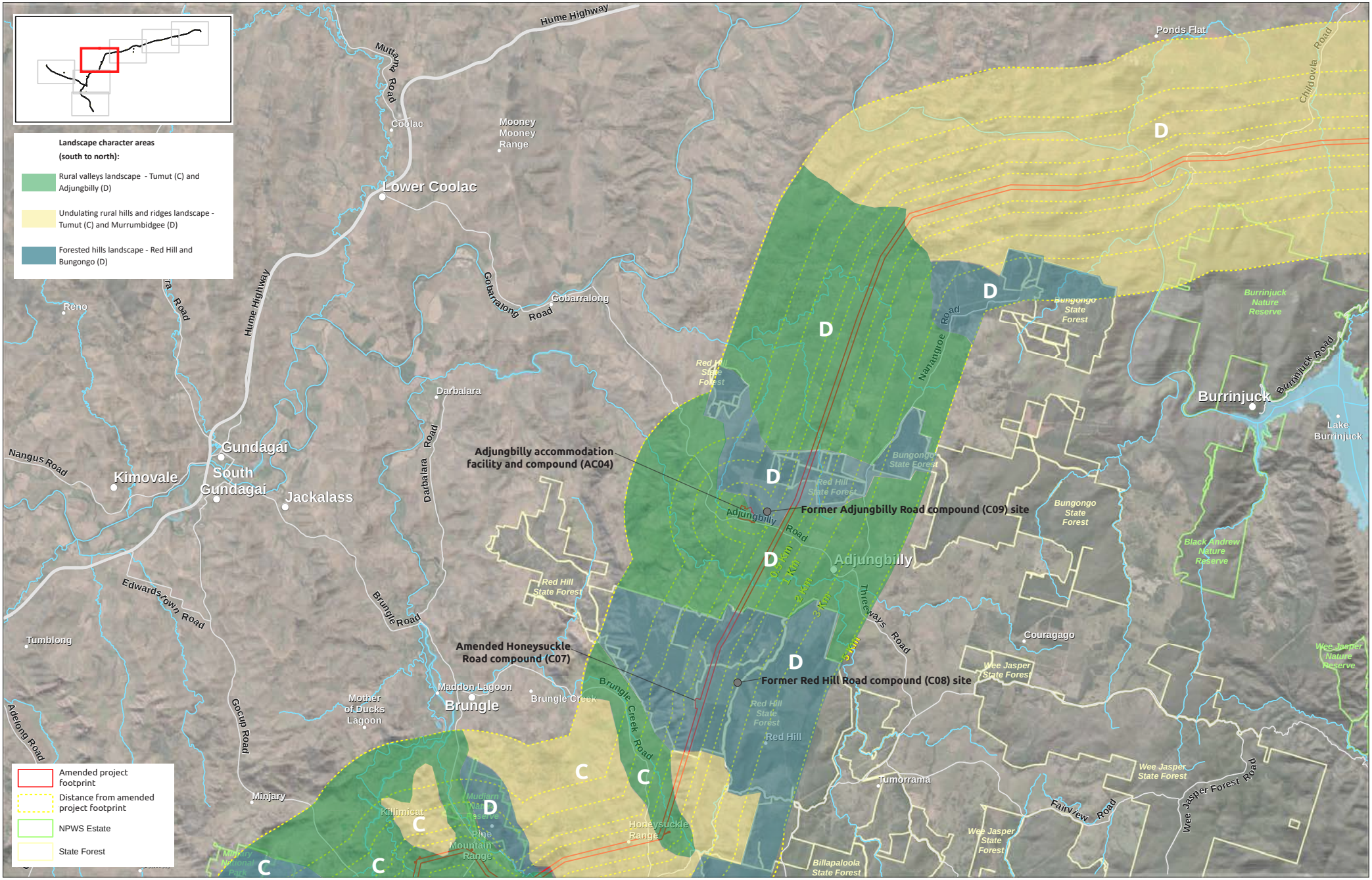

Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT C - **Landscape character** (Tumut to Adjungbilly and Burrinjuck)

iris

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
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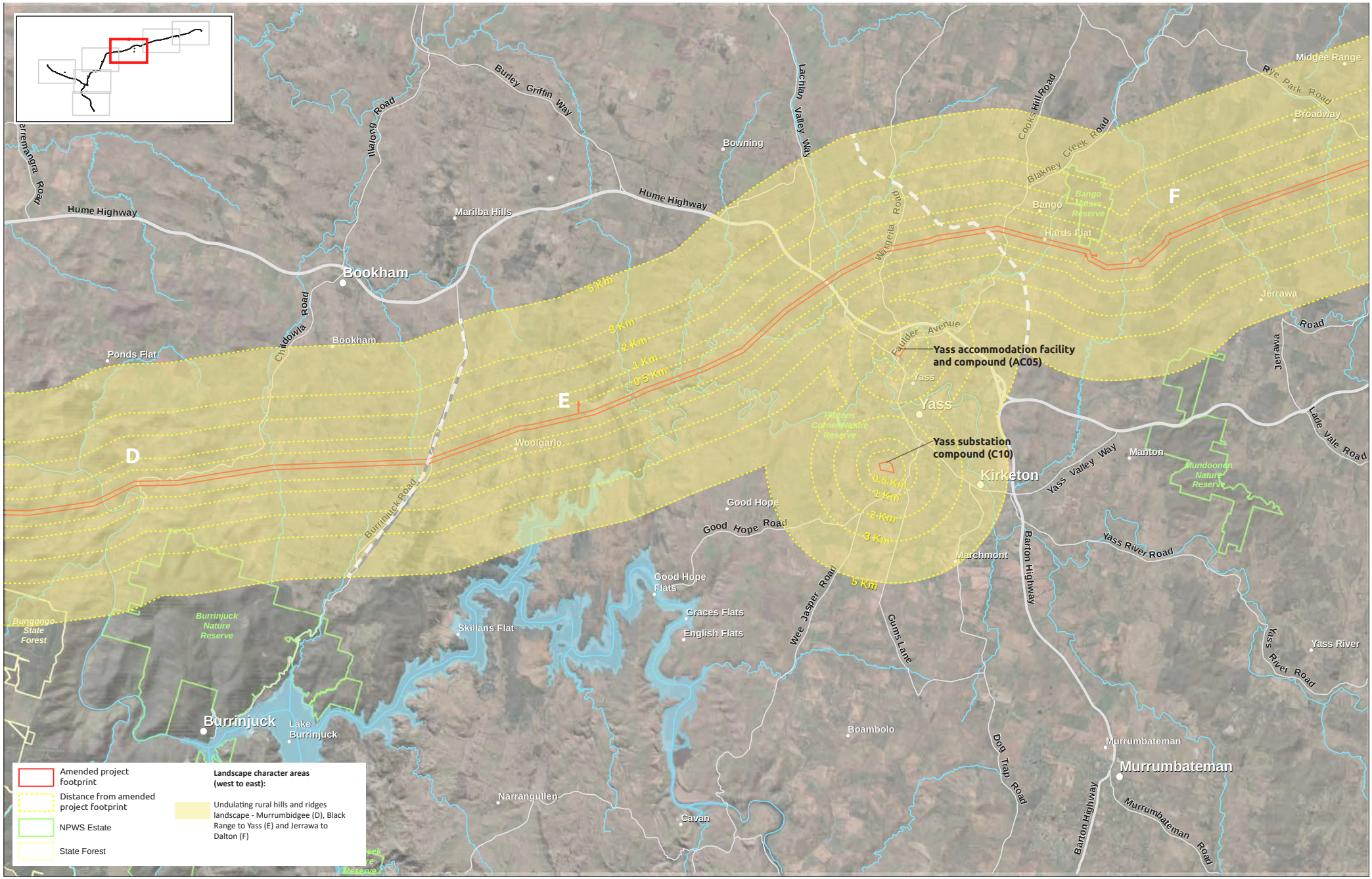


Humelink Landscape and visual impact assessment - Amendment Report

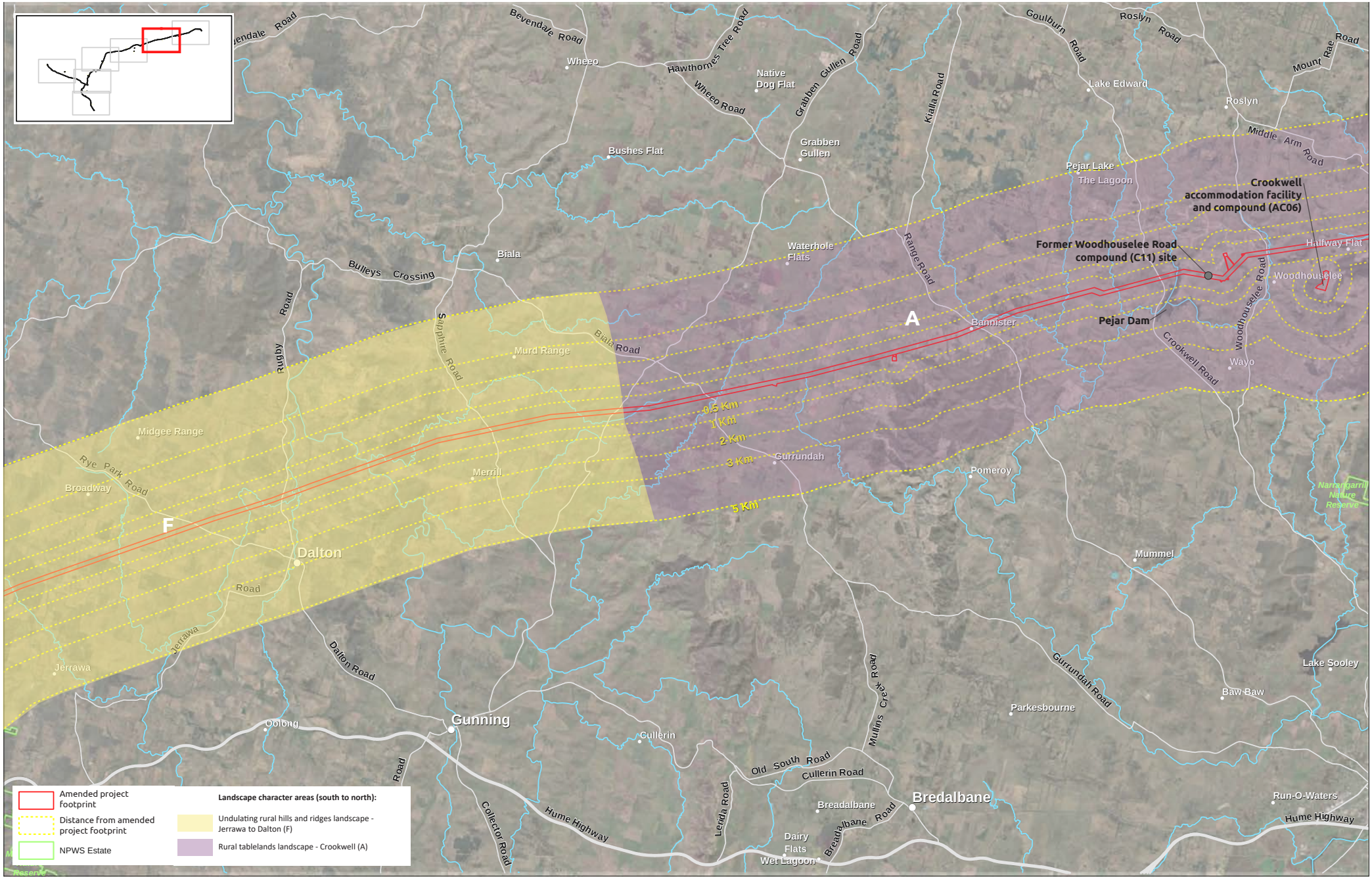
ATTACHMENT C - **Landscape character** (Burrinjuck to Yass and Jerrawa)

0 2 4 6 8km

north

iris

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Transmission Line: Supplied by Aurecon 2023
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



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Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT C - **Landscape character** (Jerrawa to Woodhouselee)

0 2 4 6 8km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Transmission Line: Supplied by Aurecon 2023
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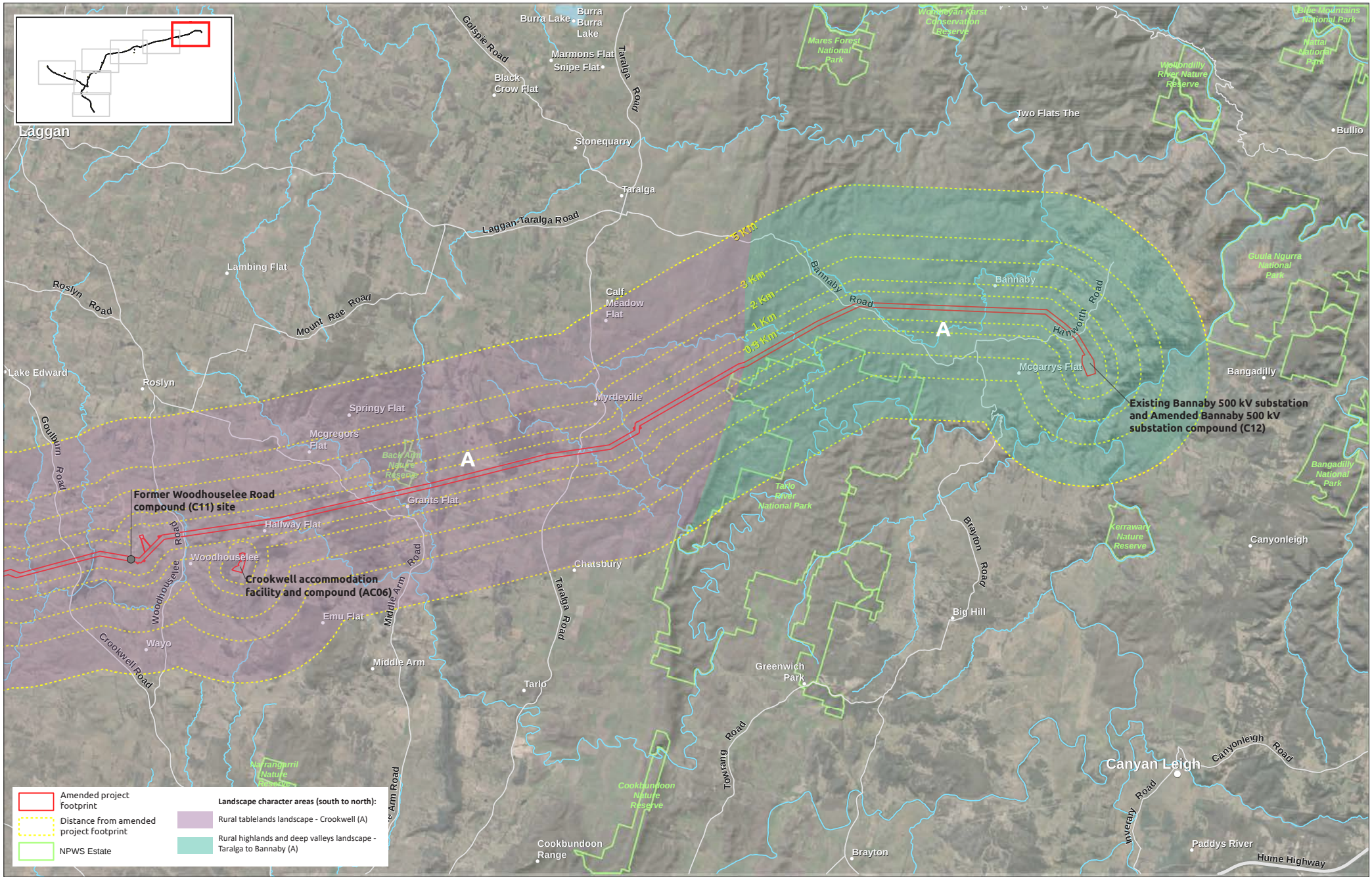

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Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT C - **Landscape character** (Woodhouselee to Bannaby)

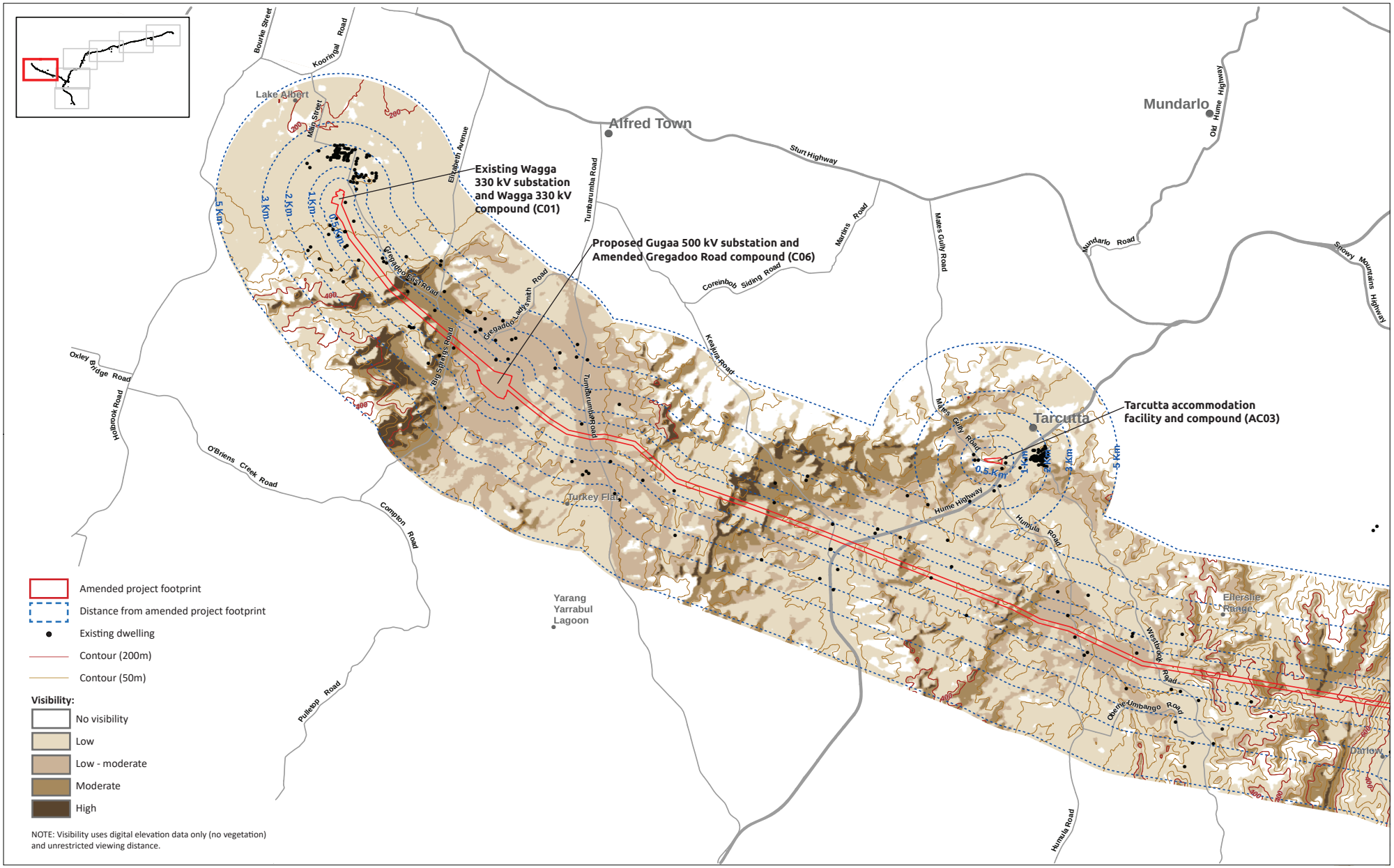
0 2 4 6 8km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Transmission Line: Supplied by Aurecon 2023
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011

Attachment D

Visibility plans



iris

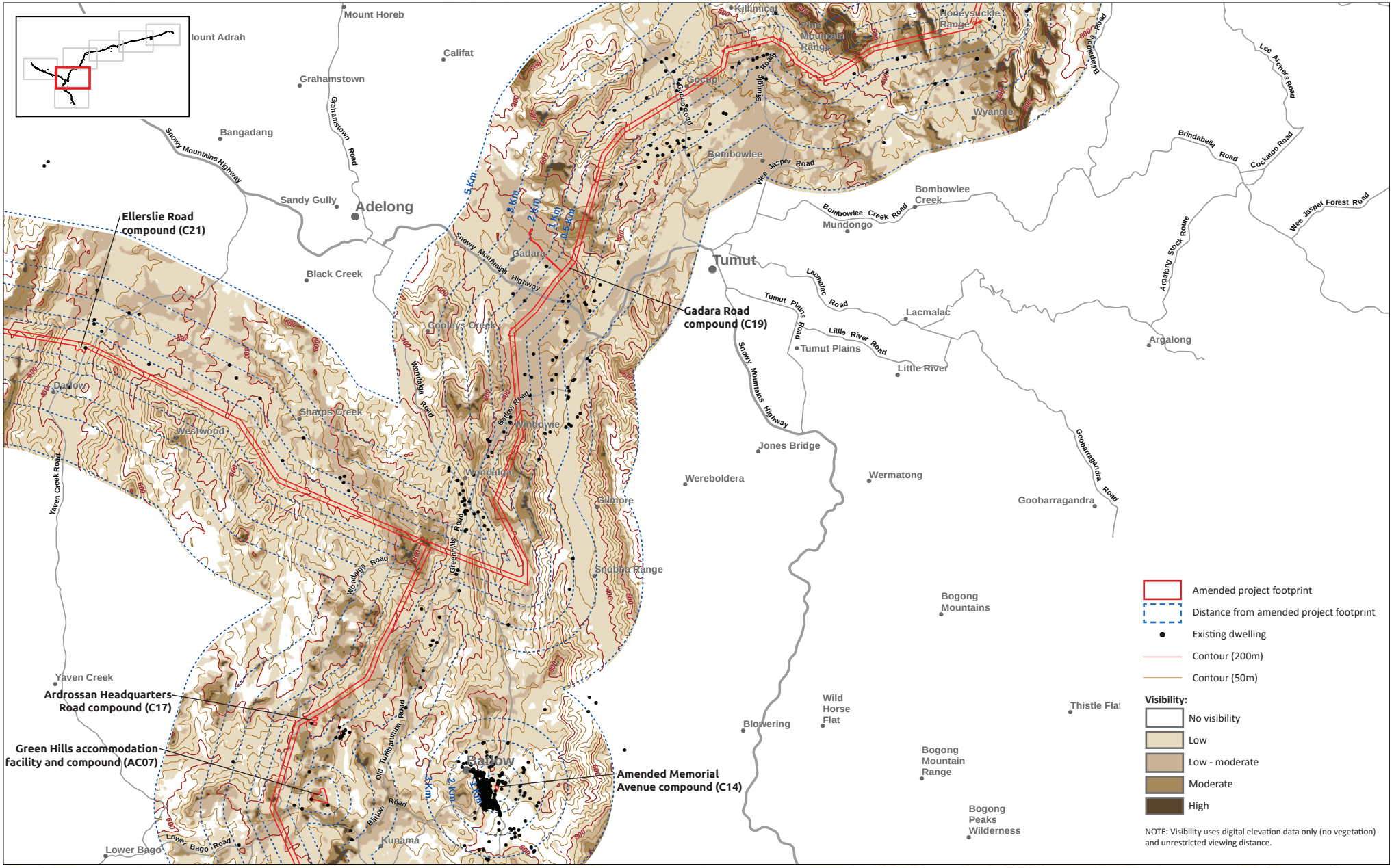
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT D - **Potential visibility** (Wagga Wagga to Ellerslie Range)

0 2 4 6 8km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



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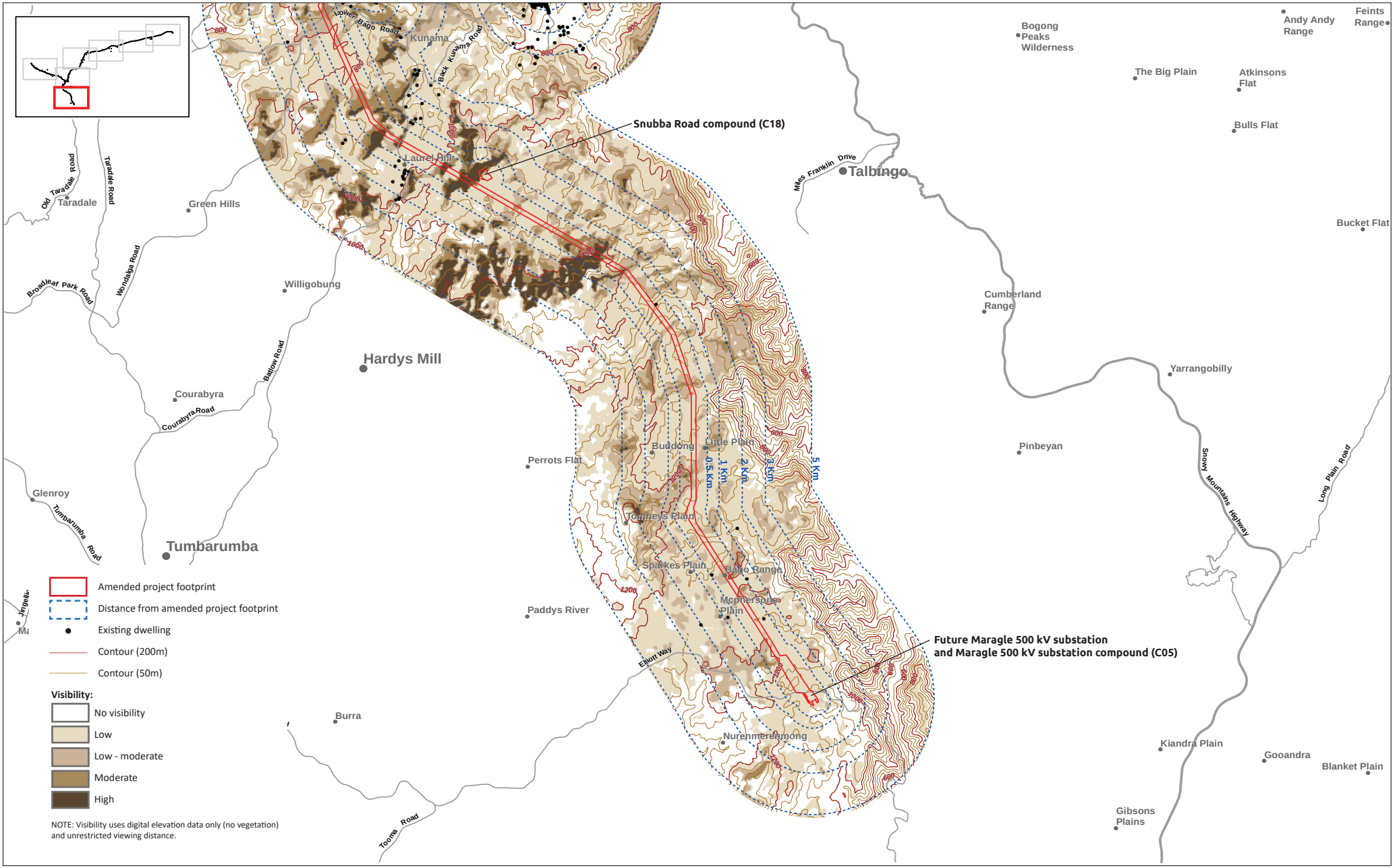
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT D - **Potential visibility** (Ellerslie Range to Tumut and Batlow)

0 2 4 6 8km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT D - **Potential visibility** (Batlow to Maragle)

0 2 4 6 8km

north

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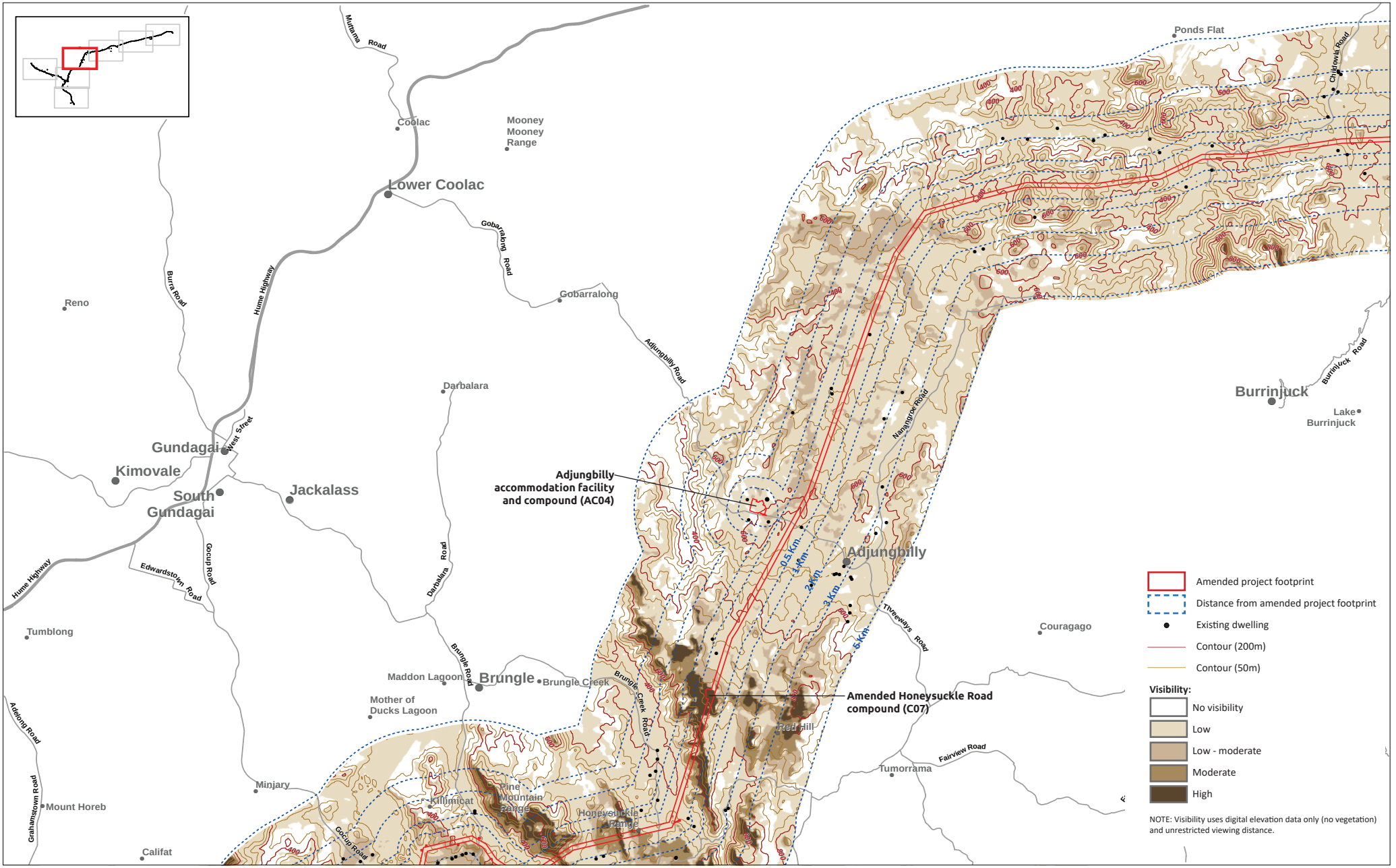
Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



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Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT D - **Potential visibility** (Tumut to Adjungbilly and Burrinjuck)

0 2 4 6 8km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011

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Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT D - **Potential visibility** (Burrinjuck to Yass and Jerrawa)

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011

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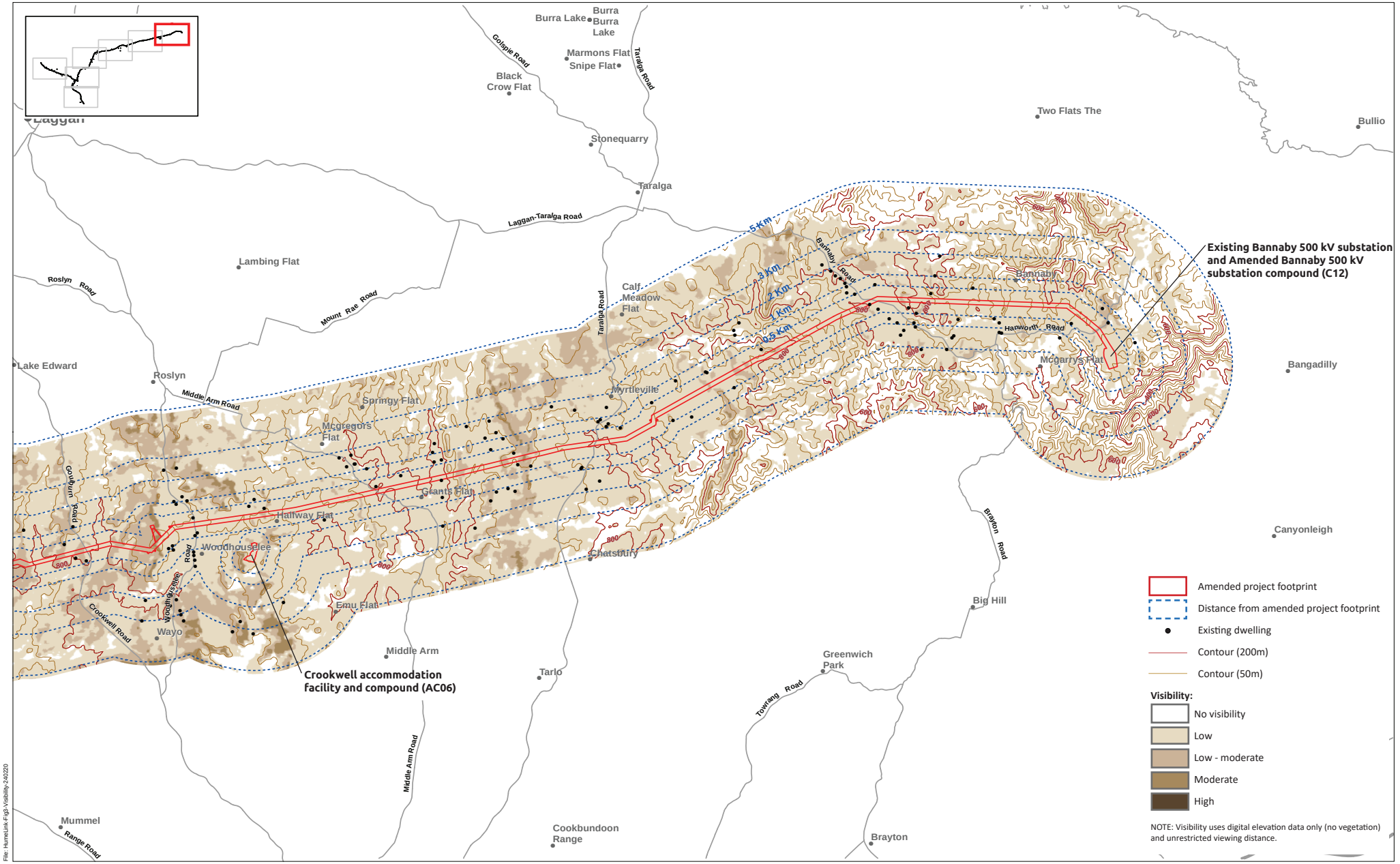
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT D - **Potential visibility** (Jerrawa to Woodhouselee)

0 2 4 6 8km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT D - **Potential visibility** (Woodhouselee to Bannaby)

0 2 4 6 8km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011

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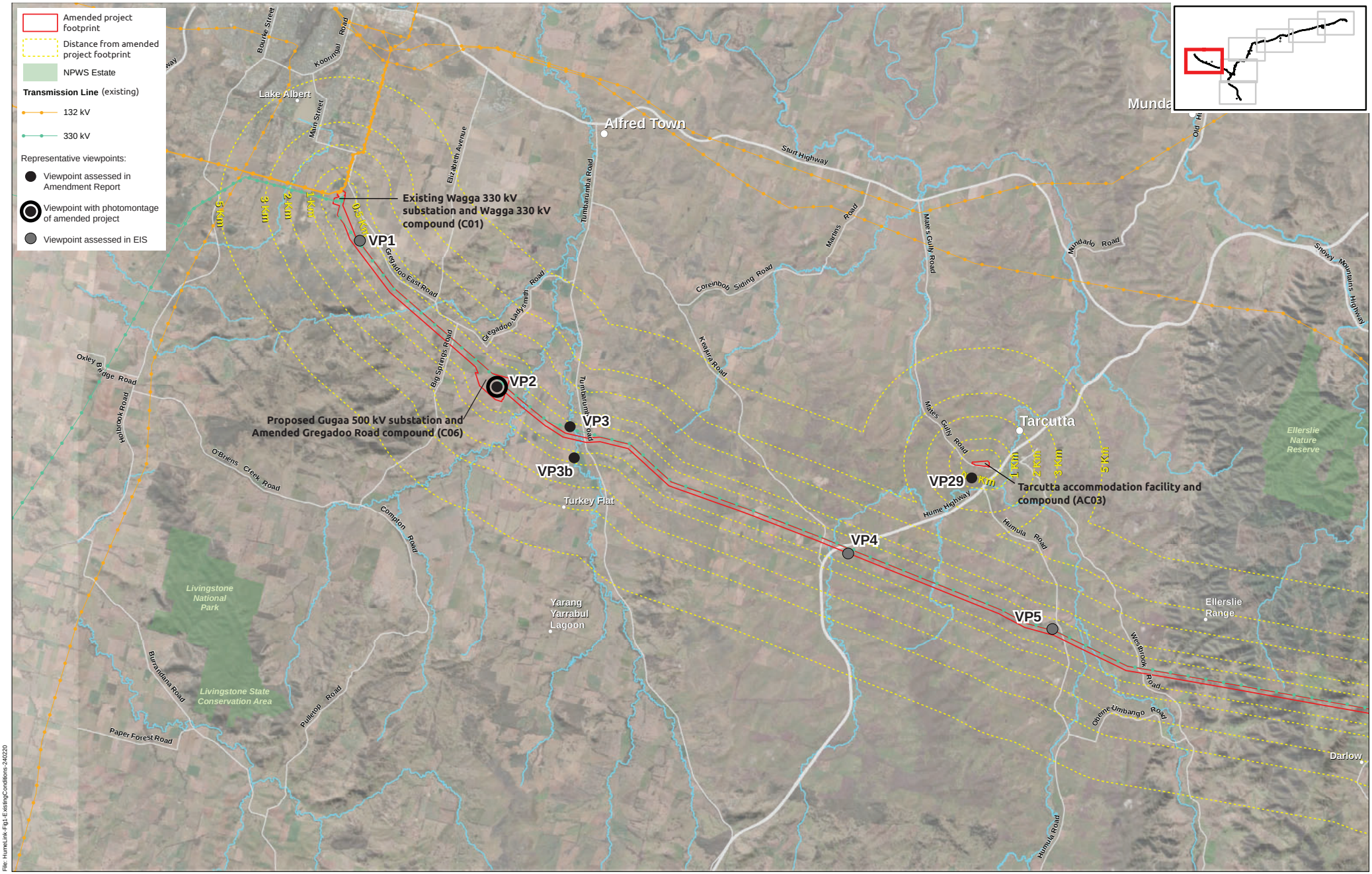
Attachment E

Viewpoint plans



File: HumeLink-Fig1-ExistingConditions-240220

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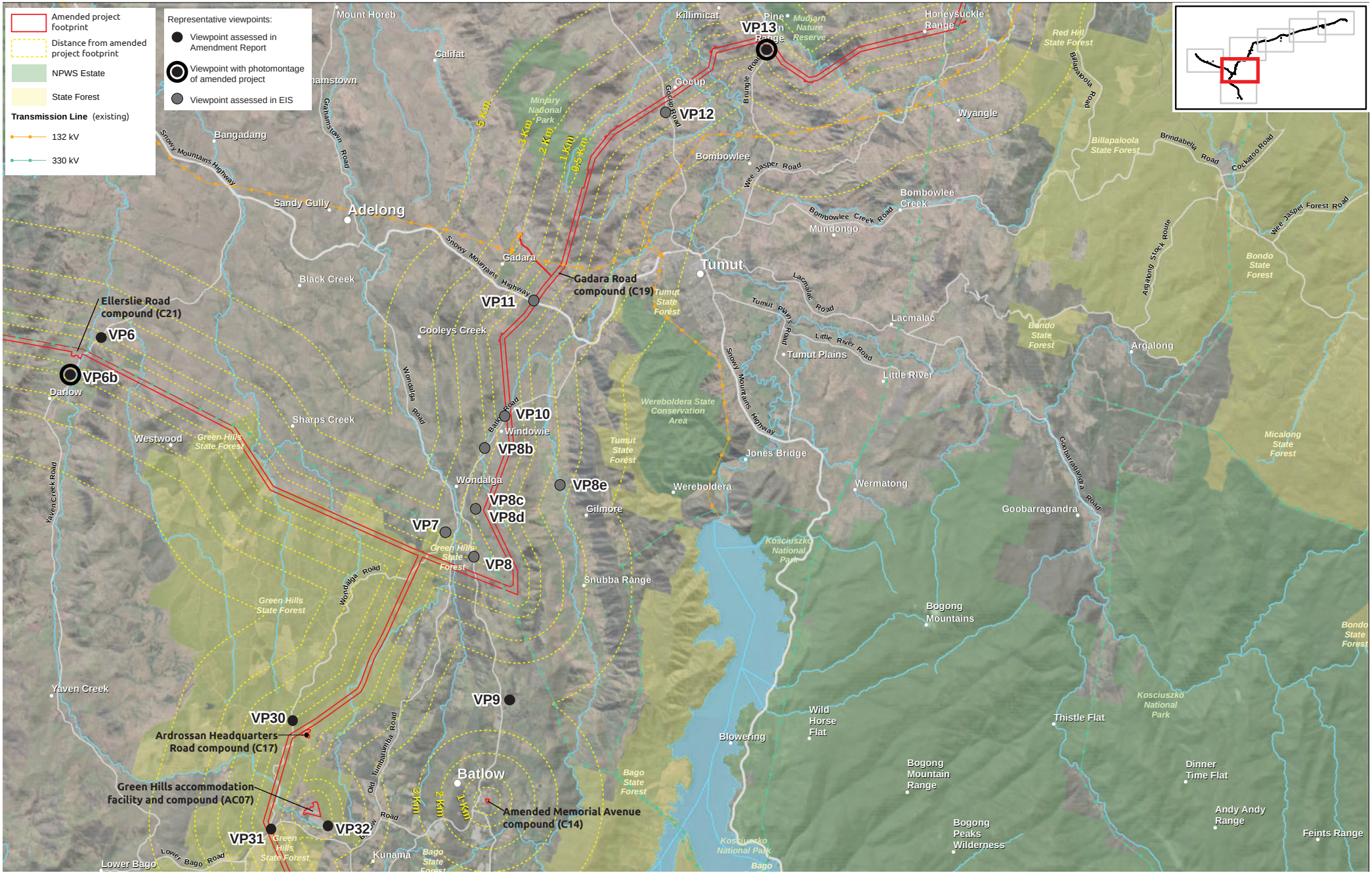
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT E - **Viewpoint location plan** (Wagga Wagga to Ellerslie Range)

0 2 4 6 8km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Transmission Line: Supplied by Aurecon 2023
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT E -- **Viewpoint location plan** (Ellerslie Range to Tumut and Batlow)

0 2 4 6 8km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Transmission Line: Supplied by Aurecon 2023
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011

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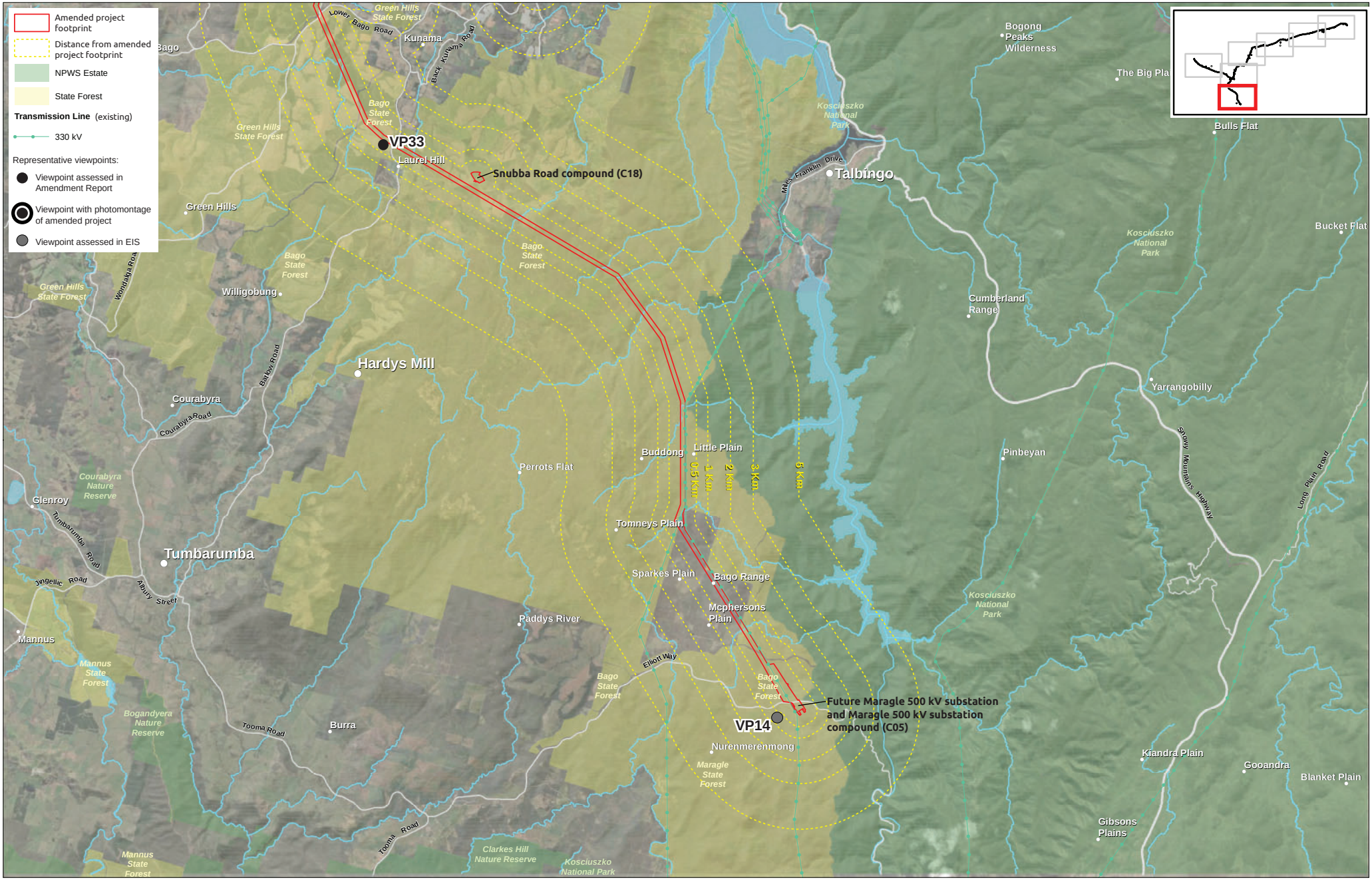

File: HumeLink-Fig1-ExistingConditions-240220

Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT E - **Viewpoint location plan** (Batlow to Maragle)

0 2 4 6 8km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Transmission Line: Supplied by Aurecon 2023
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011

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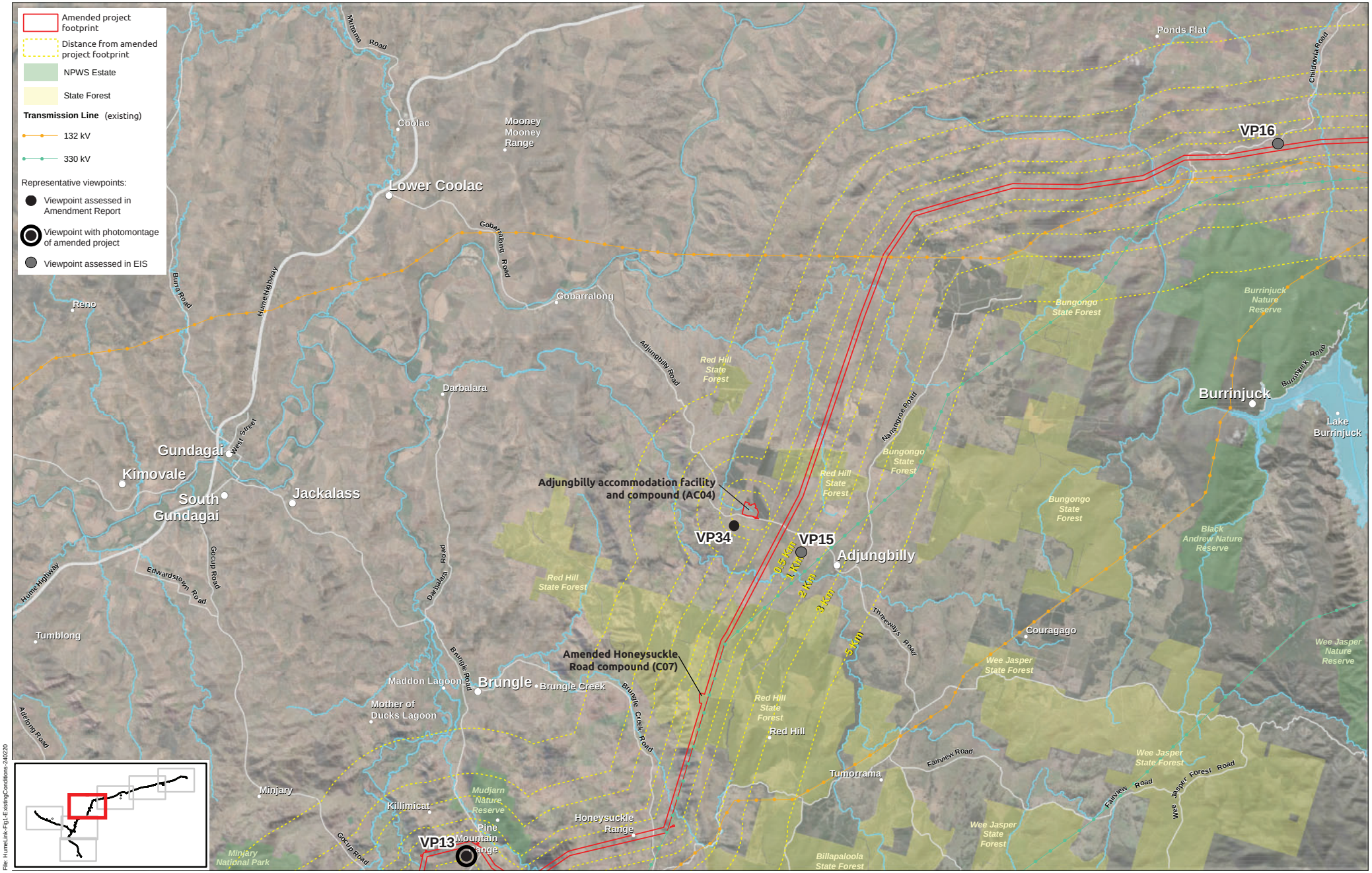

File: HumeLink-Fig1-ExistingConditions-240220

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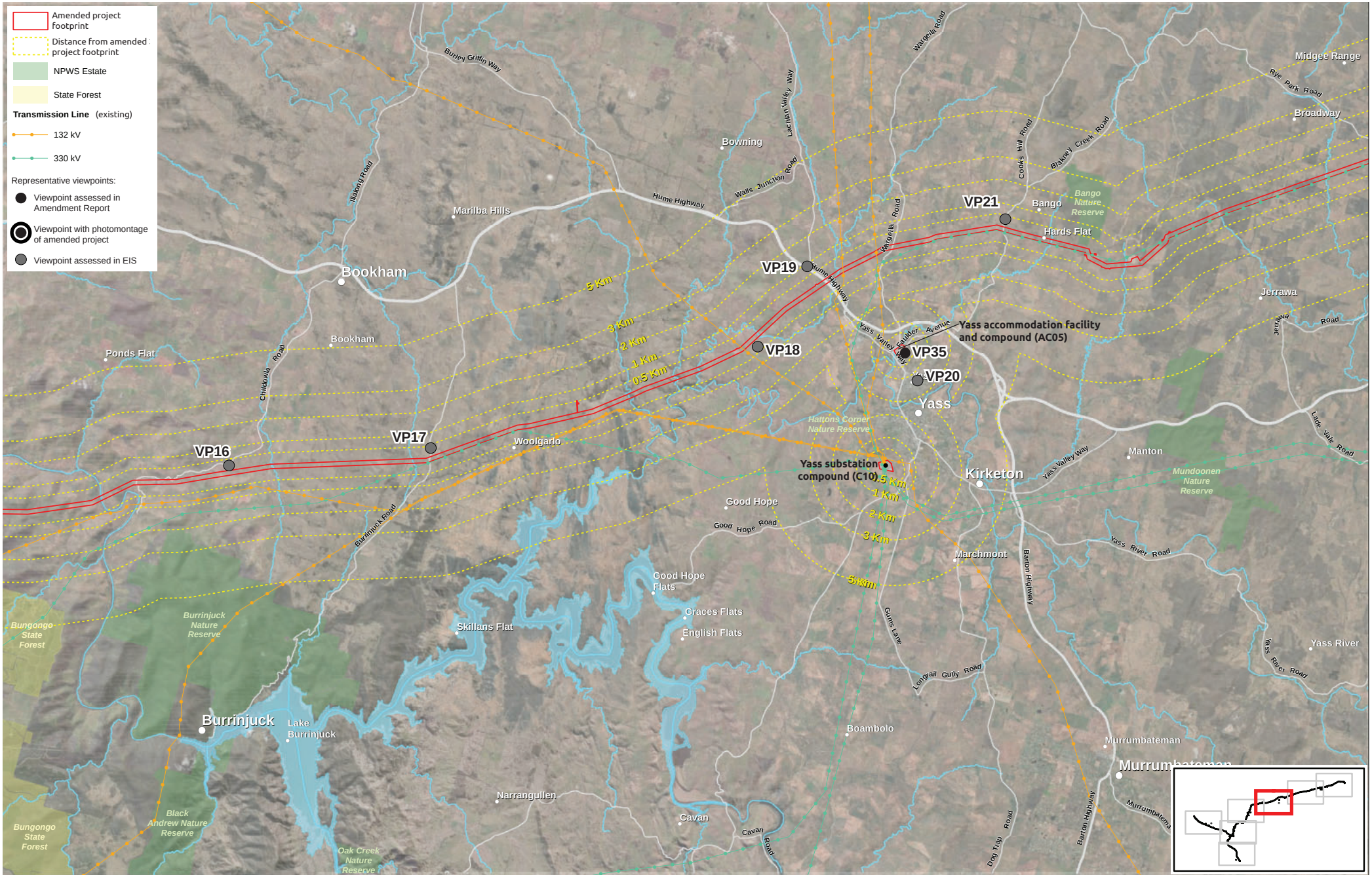
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT E - **Viewpoint location plan** (Tumut to Adjungbilly and Burrinjuck)

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Transmission Line: Supplied by Aurecon 2023
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT E - **Viewpoint location plan** (Burrinjuck to Yass and Jerrawa)

0 2 4 6 8km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Transmission Line: Supplied by Aurecon 2023
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011

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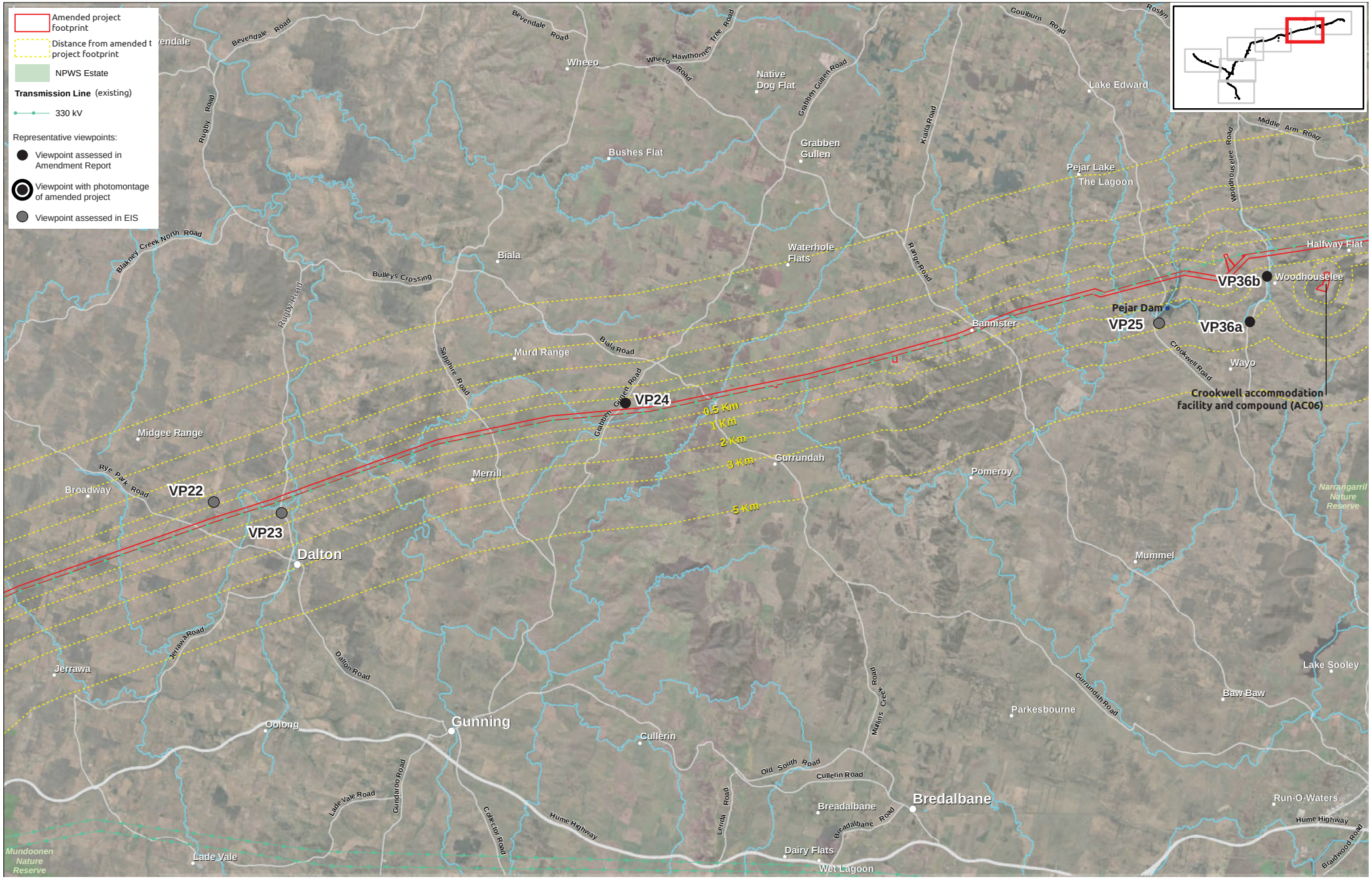

Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT E - **Viewpoint location plan** (Jerrawa to Woodhouselee)

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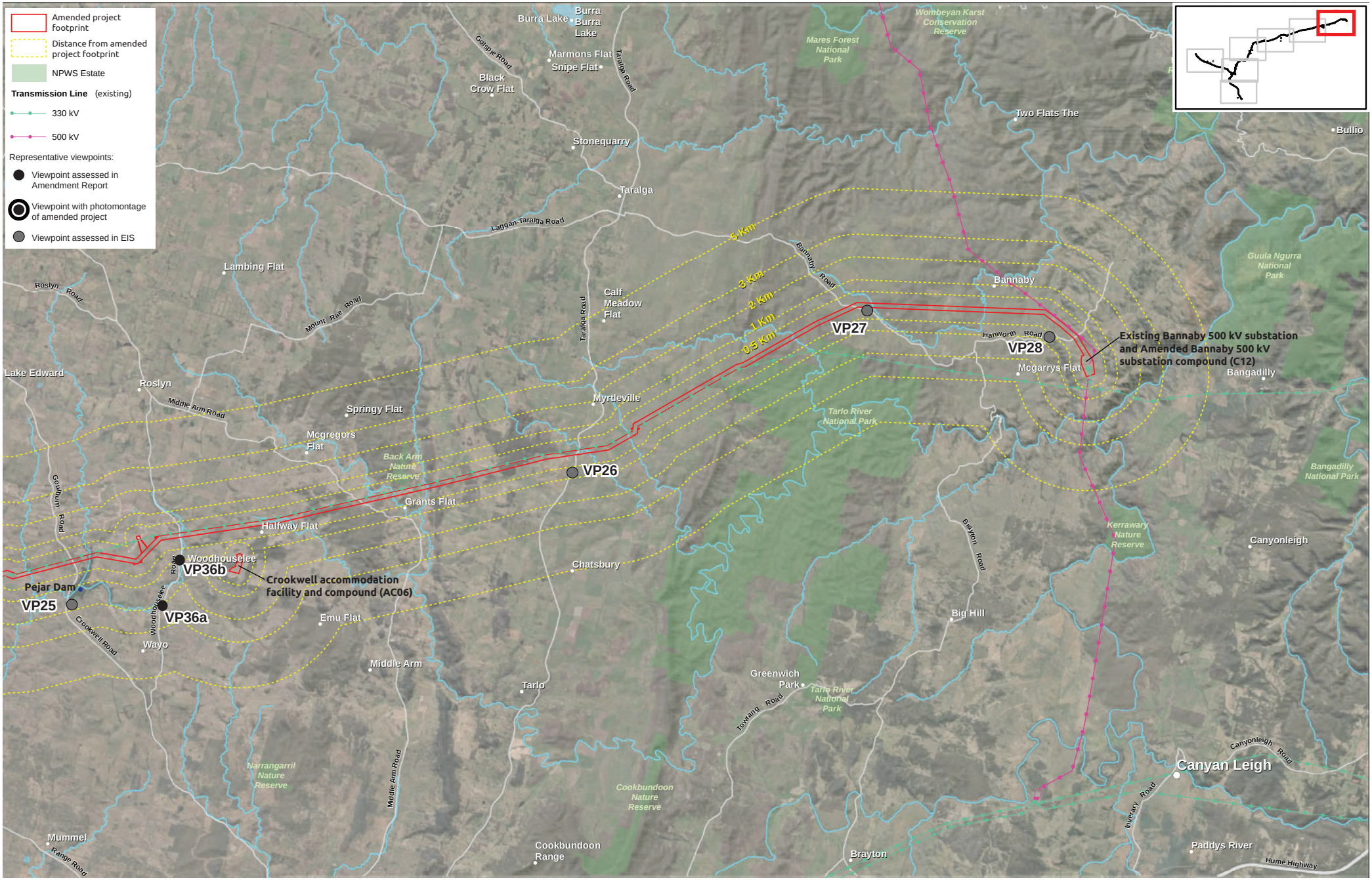
Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Transmission Line: Supplied by Aurecon 2023
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT E - **Viewpoint location plan** (Woodhouselee to Bannaby)

0 2 4 6 8km

north

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Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Transmission Line: Supplied by Aurecon 2023
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011

Attachment F

Viewpoint photomontages

Viewpoint 2:

View south from Livingstone Gully Road

Existing view

Amended project elements hightlighted

Photomontage showing indicative location of the amended project

Location: 35°16'6.43"S, 147°29'3.57"E

Focal length: 24mm

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MODATA.

Viewpoint 2:
View south from Livingstone Gully Road

Indicative location of the project as shown in the EIS

Indicative location of the amended project

Viewpoint 6b:

View north from Yaven Creek Road

Existing view

Amended project elements hightlighted

Photomontage showing indicative location of the amended project

Location: 35°22'2.18"S, 147°55'47.04"E

Focal length: 24mm

Viewpoint 13: View south-east from Brungle Road (panorama)

Indicative location of the project highlighted as shown in the EIS

Indicative location of the amended project highlighted

Viewpoint 13: View south-east from Brungle Road (panorama)

Photomontage showing indicative location as shown in the EIS

Photomontage showing indicative location of the amended project

Attachment G

Detailed assessment of visual impact from private residences – comparison between the EIS and Amended project

TABLE G – 1: DETAILED VISUAL IMPACT ASSESSMENT – SUMMARY OF IMPACTS ON ALL SHORTLISTED DWELLINGS

		Project in the EIS				Amended project			
ID.	Address	Distance to EIS project footprint (metres)	EIS project footprint located on property (Y/N)	Potential visual impact	Details	Revised distance to amended project footprint (metres)	Amended project footprint located on property (Y/N)	Amended project impact level	Reasoning for change
A24	202 Ashfords Road	394	N	Moderate	- EIS project footprint closer than existing transmission lines - Existing two km section of Line 51 may be demolished and rebuilt - EIS project footprint in close proximity to dwelling - Some intervening vegetation in field and on road	524	N	Low	- Amended project footprint moved further away from this dwelling, the project would be less visible and less prominent.
A28	216 Ashfords Road	336	N	Moderate	- Existing vegetation provides screening - Project visible through gap in trees from living areas. - *Refer photomontage (Attachment I)	475	N	Low	- Amended project footprint moved further away from this dwelling, the project would be less visible and less prominent.
A29	202 Ashfords Road	39	N	Moderate -low	- Dense hedge around garden boundary screens and encloses views from dwelling	173	N	Low	- Amended project footprint moved further away from this dwelling, the project would be less visible and less prominent.
A33	231 Ashfords Road	310	Y	High-Moderate	- View to rebuilt Line 51 - EIS project footprint closer than existing transmission lines - Limited intervening vegetation	390	N	Moderate	- Amended project footprint moved further away from this dwelling, the project would be slightly less visible and less prominent.
A40	112 Ivydale Road, Gregadoo	In EIS project footprint	Y	High	- Existing view to transmission lines - EIS project footprint very close to dwelling and crossing driveway. - EIS project footprint closer than existing transmission lines - Existing two km section of Line 51 would be demolished and rebuilt	40	Y	High	No change.

		Project in the EIS				Amended project			
ID.	Address	Distance to EIS project footprint (metres)	EIS project footprint located on property (Y/N)	Potential visual impact	Details	Revised distance to amended project footprint (metres)	Amended project footprint located on property (Y/N)	Amended project impact level	Reasoning for change
A41	112 Ivydale Road, Gregadoo	In EIS project footprint	Y	High	- Existing view to transmission lines - Project footprint very close to dwelling and crossing driveway - Project footprint closer than existing transmission lines - Existing two km section of Line 51 would be demolished and rebuilt	30	Y	High	No change.
A51	10 Ivydale Road	365	N	High-moderate	- Existing view to transmission lines - Multiple structures would be visible - EIS project footprint closer than existing transmission lines - Existing two km section of Line 51 would be demolished and rebuilt - Some existing intervening vegetation - View over rear garden and existing shed (and future pool house) would partly enclose the view from the dwelling.	200	Y	High-moderate	- Amended project footprint moved closer to this dwelling, and the project would be slightly more visible and more prominent.
A45 (now A120)	152 Ivydale Road*	269	Y	High-moderate	- Existing view to transmission lines (north-east facing) - EIS project footprint closer than existing transmission lines - Existing two km section of Line 51 would be demolished and rebuilt - Some existing intervening vegetation - New dwelling constructed and not assessed in *Technical Report 8 – Landscape Character and Visual Impact Assessment* (A120). No dwelling at previous location (A45)	382	N	High-moderate	- Primary view from dwelling. - There are existing view to transmission lines. - Amended project footprint moved further away from this dwelling, the project would be slightly less visible and less prominent. - Limited existing intervening vegetation.

		Project in the EIS				Amended project			
ID.	Address	Distance to EIS project footprint (metres)	EIS project footprint located on property (Y/N)	Potential visual impact	Details	Revised distance to amended project footprint (metres)	Amended project footprint located on property (Y/N)	Amended project impact level	Reasoning for change
A60	191 Ivydale Road	253	Y	Moderate	- Elevated location - View over and between existing transmission line structures.	-	Y	Moderate	No change.
B12	477 Gregadoo East Road	434	Y	High-moderate	- Limited intervening vegetation to east - Existing view to transmission lines - EIS project footprint closer than existing transmission lines - Existing two km section of Line 51 may be demolished and rebuilt - Proposed Gugaa 500 kV substation would be located mostly beyond landform and cut into slope.	-	Y	High-moderate	- Substation expanded slightly but location moved east and further from this dwelling. - Intervening landform continues to mostly screen the substation.
B3	848 Big Springs Road	108	Y	High	- Existing view to transmission lines - EIS project footprint closer than existing transmission lines - Existing two km section of Line 51 would be demolished and rebuilt - Primary view east, not towards the EIS project footprint.	-	Y	High	- No change to impact level. - Substation located further east and would be less visible from this location.
B15	1070 Livingstone Gully Road	805	Y	Moderate-low	- Some intervening vegetation - Existing view to transmission lines - Existing two km section of Line 51 may be demolished and rebuilt - EIS project footprint closer than existing transmission lines - View to proposed Gugaa 500 kV substation	-	Y	Moderate-low	- Substation located further east and towards this dwelling but would remain mostly screened by intervening landform and vegetation.
B18	1070 Livingstone Gully Road	325, 682 to substation	Y	High-moderate	- Some intervening vegetation - Existing view to transmission lines	-	Y	High-moderate	- Substation closer to viewer, however overall impact does not change.

		Project in the EIS				Amended project			
ID.	Address	Distance to EIS project footprint (metres)	EIS project footprint located on property (Y/N)	Potential visual impact	Details	Revised distance to amended project footprint (metres)	Amended project footprint located on property (Y/N)	Amended project impact level	Reasoning for change
					- Existing two km section of Line 51 may be demolished and rebuilt - EIS project footprint closer than existing transmission lines - View to proposed Gugaa 500 kV substation				
B21	8095 Tumbarumba Road	212	Y	High-moderate	- Limited intervening vegetation - Existing view to transmission lines - EIS project footprint beyond existing transmission lines	300	Y	Negligible	- The route has been moved so that the amended project footprint would be located to the south of intervening vegetation and largely out of view.
C4	107 Burkinshaws Lane	408	Y	Moderate	- Some intervening vegetation - Existing view to transmission lines - EIS project footprint beyond existing transmission lines	-	Y	Moderate	No change.
C10	171 Keajura Road, Tarcutta	413	Y	Moderate	- Some intervening vegetation - Existing view to transmission lines - EIS project footprint beyond existing transmission lines	-	Y	Moderate	No change.
C21	170 Wilds Road, Tarcutta	In EIS project footprint	Y	High	- Existing view to transmission lines - Project footprint closer than existing transmission lines	-	Y	High	No change.
C28	1725 Humula Road, Tarcutta	475	Y	Moderate-low	- Intervening vegetation (creek) - Existing view to transmission lines - EIS project footprint beyond existing transmission lines	-	Y	Moderate-low	No change.
C29	1615 Humula Road, Tarcutta	112	Y	High	- Some intervening vegetation - Existing view to transmission lines - EIS project footprint closer than existing transmission lines. - Very close range	-	Y	High	No change.

		Project in the EIS				Amended project			
ID.	Address	Distance to EIS project footprint (metres)	EIS project footprint located on property (Y/N)	Potential visual impact	Details	Revised distance to amended project footprint (metres)	Amended project footprint located on property (Y/N)	Amended project impact level	Reasoning for change
C35	1532 Humula Road, Tarcutta	491	N	Moderate	- Some intervening vegetation - Existing view to transmission lines - EIS project footprint closer than existing transmission lines.	-	N	Moderate	No change.
D8	3563 Westbrook Road, Oberne Creek	203	Y	High-Moderate	- Limited intervening vegetation - Existing view to transmission lines - EIS project footprint beyond existing transmission lines - Ridgeline crossing in view	-	Y	High-moderate	No change.
D9	3563 Westbrook Road, Oberne Creek	184	Y	High-Moderate	- Limited intervening vegetation - Existing view to transmission lines - EIS project footprint beyond existing transmission lines - Ridgeline crossing in view	-	Y	High-Moderate	No change.
D25	1154 Yaven Creek Road, Ellerslie	In EIS project footprint	Y	High	- Some intervening vegetation (dwelling) - EIS project footprint closer than existing transmission lines	-	Y	High	- Additional structures for the Transposition would be seen from this dwelling.
D29	Ellerslie Road, Ellerslie	-	-	N/A	- N/A	720	N	Low	- Additional structures for the Transposition would be seen from this dwelling.
D31	158 Westwood Road, Westwood	388	Y	Moderate	- Some intervening vegetation (creek) - Existing view to transmission lines - EIS project footprint beyond existing transmission lines	-	Y	Moderate	No change.
E61	Yesteryear plantations	209	Y	Low	- Dwelling oriented north and away from the project - Intervening vegetation - View to two existing transmission lines - EIS project footprint beyond existing transmission	10km+	N	Negligible	- Route moved east to Greenhills.

		Project in the EIS				Amended project			
ID.	Address	Distance to EIS project footprint (metres)	EIS project footprint located on property (Y/N)	Potential visual impact	Details	Revised distance to amended project footprint (metres)	Amended project footprint located on property (Y/N)	Amended project impact level	Reasoning for change
					- Would include intersecting / crossing existing lines and turning corner.				
E27	Batlow Road, Tumut	600	N	Moderate -low	- No existing transmission line in vicinity of EIS project footprint - EIS project footprint located on hillside, above the dwelling - Multiple structures would be visible elevated on hillside - Some intervening vegetation	670	N	Moderate -low	- Route refined and amended project footprint moves east and away from this dwelling.
E29	Batlow Road, Tumut	550	Y	High-moderate	- No existing transmission line in vicinity of the EIS project footprint - EIS project footprint located on hillside, above the dwelling - Multiple structures would be visible elevated on hillside - Limited intervening vegetation.	750	Y	Moderate	- Amended project footprint moves further away from this dwelling.
E68	Batlow Road, Tumut	350	Y	High-moderate	- No existing transmission line in vicinity of the EIS project footprint - EIS project footprint located on hillside, above the dwelling - Multiple structures would be visible elevated on hillside. - Limited intervening vegetation	725	Y	Moderate	- Amended project footprint moves further away from this dwelling.
H10	Batlow Road, Tumut	500	N	Moderate	- Some intervening landform and vegetation - No existing transmission line in vicinity of the EIS project footprint - EIS project footprint located on hillside, above the dwelling	806	N	Low	- Amended project footprint moves further away from this dwelling.

		Project in the EIS				Amended project			
ID.	Address	Distance to EIS project footprint (metres)	EIS project footprint located on property (Y/N)	Potential visual impact	Details	Revised distance to amended project footprint (metres)	Amended project footprint located on property (Y/N)	Amended project impact level	Reasoning for change
					- Multiple structures would be glimpsed elevated on hillside				
H13	Batlow Road, Tumut	300	Y	Moderate	- No existing transmission line in vicinity of EIS project footprint - EIS project footprint located on hillside, above the dwelling - Multiple structures would be visible	640	Y	Low	- Amended project footprint moves further away from this dwelling.
H16	Batlow Road, Tumut	200	Y	High-moderate	- No existing transmission line in vicinity of project footprint - Project footprint located on hillside, above the dwelling - Multiple structures would be visible	312 to 640	Y	Moderate	- Amended project footprint moves further away from this dwelling.
H19	Batlow Road, Windowie	266	N	Moderate	- Some existing intervening vegetation (around dwelling) - No existing transmission line in vicinity of EIS project footprint - EIS project footprint located on hillside, above the dwelling, more distant in primary view (view away from highway)	266+	Y	Moderate -low	- Amended project footprint moves further away from this dwelling as it crosses the hillside.
H20	Batlow Road, Windowie	460	Y	Moderate	- Some intervening vegetation (creek) - No existing transmission line in vicinity of project footprint - Viewed against hillside	-	Y	Moderate	No change.
H40	Batlow Road, Tumut	600	N	Moderate	- No existing transmission line in vicinity of EIS project footprint - EIS project footprint located on hillside, above the dwelling - Multiple structures would be visible elevated on hillside	900	N	Low	- Amended project footprint moves further away from this dwelling as it crosses the hillside.

		Project in the EIS				Amended project			
ID.	Address	Distance to EIS project footprint (metres)	EIS project footprint located on property (Y/N)	Potential visual impact	Details	Revised distance to amended project footprint (metres)	Amended project footprint located on property (Y/N)	Amended project impact level	Reasoning for change
H25	348 Gadara Lane, Windowie	319	Y	Moderate -low	- Some existing intervening landform and vegetation - No existing transmission line in vicinity of EIS project footprint - Viewed against hillside	-	Y	Moderate -low	No change.
H33	1393 Snowy Mountains Highway, Gadara	379	Y	Moderate	- Some existing intervening vegetation (around dwelling and adjacent fields) - No existing transmission line in vicinity of the EIS project footprint.	541	Y	Moderate -low	- Amended project footprint moves further away from this dwelling. - Some existing intervening trees would be avoided.
K21	676 Gocup Road, Gocup	426	Y	Moderate	- Some existing intervening vegetation - No existing transmission line in vicinity of the EIS project footprint	-	Y	Moderate	No change.
K26	Gocup Road	397	Y	Moderate	- Some existing intervening vegetation - No existing transmission line in vicinity of the EIS project footprint	-	Y	Moderate	No change.
K23	Gocup Road	190	N	High-moderate	- Some existing intervening vegetation (around dwelling) - No existing transmission line in vicinity of the EIS project footprint - Transmission line changing directions in mid ground of view.	-	N	High-moderate	No change.
K35	188 Cockatoo Road, Killimicat	272	Y	High-moderate	- Some existing intervening vegetation (around dwelling) - No existing transmission line in vicinity of the EIS project footprint - Transmission line changing directions near dwelling - Owners raised visual impact as a concern	-	Y	High-moderate	- Minor adjustments in the vicinity of this dwelling would not alter the potential visual impact. - Site access track would pass close to dwelling.

		Project in the EIS				Amended project			
ID.	Address	Distance to EIS project footprint (metres)	EIS project footprint located on property (Y/N)	Potential visual impact	Details	Revised distance to amended project footprint (metres)	Amended project footprint located on property (Y/N)	Amended project impact level	Reasoning for change
K41	133 Wee Jasper Road, Wyangle	350	Y	High	- Some existing intervening vegetation (around dwelling) - No existing transmission line in vicinity of the EIS project footprint - Removal of vegetation along project the EIS footprint - Would be viewed against vegetated backdrop - Potential corner structure, and change in direction	400	Y	High-moderate	- Realignment moves amended footprint slightly further away. - Realignment reduces angle and need for larger transmission structures in vicinity of dwelling. - Site access track would be moved further from dwelling.
N2	Brungle Creek Link Road Darbalara	251	Y	Moderate	- Intervening vegetation around dwelling - Dwelling orientation appears to be away from the EIS project footprint - Existing view to transmission lines - EIS project footprint closer than existing transmission lines - Viewed against forestry	-	Y	Moderate	No change.
N8	1675 Adjungbilly Road, Adjungbilly	306	Y	Moderate	- Some existing intervening vegetation (dwelling) - No existing transmission line in vicinity of EIS project footprint (not co-located near the Lower Tumut to Yass 330 kV transmission lines to the east) - View to EIS project footprint doesn't appear to be primary view - Potential view to	-	Y	Moderate	No change.
N11	977 Parsons Creek Road, Gobarralong	510	Y	High-moderate	- Some existing intervening vegetation - No existing transmission line in vicinity of EIS project footprint - Project in primary view from residence	-	Y	High-moderate	No change.

		Project in the EIS				Amended project			
ID.	Address	Distance to EIS project footprint (metres)	EIS project footprint located on property (Y/N)	Potential visual impact	Details	Revised distance to amended project footprint (metres)	Amended project footprint located on property (Y/N)	Amended project impact level	Reasoning for change
N13	866 Parsons Creek Road, Adjungbilly	400	Y	Moderate	- Some existing intervening vegetation - No existing transmission line in vicinity of EIS project footprint	-	Y	Moderate	No change.
N37	867 Parsons Creek Road, Adjungbilly	75	Y	Moderate	- No existing transmission line in vicinity of EIS project footprint	-	Y	Moderate	No change.
N25	1618 Childowla Rd, Bookham	In project footprint	-		- Not assessed	In project footprint	Y	High	- Derelict dwelling.
N28	1546 Childowla Road, Bookham	386	Y	High-moderate	- Some existing intervening vegetation - Existing view to transmission lines - EIS project footprint would add a third set of transmission lines	-	Y	High-moderate	No change.
N32	142 Talmo Road, Bookham	296	Y	High-moderate	- View across undulating rural fields to EIS project footprint, crossing Talmo Road and hillside in middle ground of view - No existing transmission line in vicinity of dwelling	-	Y	High-moderate	No change.
N33	142 Talmo Road, Bookham	490	Y	Moderate	- View across undulating rural fields to EIS project footprint, crossing Talmo Road and hillside in middle ground of view - No existing transmission line in vicinity of dwelling	-	Y	Moderate	No change.
O12	~~1623~~ 1599 Black Range Road, Woolgarlo	493	Y	Moderate	- Some existing intervening vegetation - Existing view to two sets of transmission lines - EIS project footprint closer than existing transmission lines	-	Y	Moderate	- Multiple access tracks proposed between the dwelling and the transmission structures.

		Project in the EIS				Amended project			
ID.	Address	Distance to EIS project footprint (metres)	EIS project footprint located on property (Y/N)	Potential visual impact	Details	Revised distance to amended project footprint (metres)	Amended project footprint located on property (Y/N)	Amended project impact level	Reasoning for change
O13	1381 Black Range Road, Woolgarlo	181	Y	High	- Some existing intervening vegetation - Existing view to two sets of transmission lines - EIS project footprint closer than existing transmission lines	-	Y	High	- Multiple access tracks proposed between the dwelling and the transmission structures.
O29	27205 Hume Highway, Bowning	388	Y	Moderate	- Limited existing intervening vegetation - No existing transmission line in vicinity of EIS project footprint	-	Y	Moderate	No change.
O31	230 Black Range Road, Bowning	142	Y	Moderate -low	- Limited existing intervening vegetation - No existing transmission line in vicinity of EIS project footprint - Close proximity	-	Y	Moderate -low	- Minor alignment refinement.
O43	561 Wargalla Road, Bango	269	Y	Moderate	- Some intervening landform and vegetation - Existing view to existing transmission lines - EIS project footprint beyond existing transmission lines with a change in direction	-	Y	High-Moderate	- Minor alignment refinement. - Updated impact level to reflect revised assessment - Some intervening vegetation - Existing view to existing transmission lines - EIS project footprint **closer*** than existing transmission lines with a change in direction (*Corrected error from EIS)
Q10	557 Fairy Hole Road, Bango	283	Y	Moderate	- Some intervening vegetation - Existing view to transmission lines - EIS project footprint closer than existing transmission lines	-	Y	Moderate	No change.
Q19	561 Fairy Hole Road, Bango	48	Y	High	- Some intervening vegetation - Existing view to transmission lines	-	Y	High	- No change. - Access track would be relocated to further away from this dwelling.

		Project in the EIS				Amended project			
ID.	Address	Distance to EIS project footprint (metres)	EIS project footprint located on property (Y/N)	Potential visual impact	Details	Revised distance to amended project footprint (metres)	Amended project footprint located on property (Y/N)	Amended project impact level	Reasoning for change
					- EIS project footprint closer than existing transmission lines and very close to dwelling				
Q62	Fairy Hole Road	140	Y	Moderate-low	- Limited existing intervening vegetation - Existing view to transmission lines - EIS project footprint further than existing transmission lines	-	Y	Moderate-low	No change.
Q27	787 Cooks Hill Road, Bango	218	Y	High-moderate	- Existing view to transmission lines - EIS project footprint closer than existing transmission lines - EIS project footprint close to dwelling and crossing driveway	-	-	High-moderate	No change.
Q36	Coolalie Road, Jerrawa	In project footprint	Y	High	- Existing view to transmission lines - EIS project footprint closer than existing transmission lines	-	Y	High	No change.
Q40	Bushs Road	320	Y	Moderate	- Existing view to transmission lines - EIS project footprint beyond existing transmission lines - Some intervening vegetation - Proposed house	-	Y	Moderate	- Minor refinement of corridor.
Q63	Bushs Road	220	Y	High-moderate	- Existing view to transmission lines - EIS project footprint closer than existing transmission lines - Some intervening vegetation	180	Y	High-moderate	- Amended project footprint slightly closer to dwelling.
Q44	Stink Pot Road, Broadway	In project footprint	Y	High	- Some intervening vegetation (around dwelling) - Existing view to transmission lines - EIS project footprint closer than existing transmission lines	-	Y	High	No change.

		Project in the EIS				Amended project			
ID.	Address	Distance to EIS project footprint (metres)	EIS project footprint located on property (Y/N)	Potential visual impact	Details	Revised distance to amended project footprint (metres)	Amended project footprint located on property (Y/N)	Amended project impact level	Reasoning for change
Q45	Flacknell Creek Road, Broadway	132	N	Moderate	- Some intervening vegetation (around dwelling) - Existing view to transmission lines - EIS project footprint closer than existing transmission lines	-	N	Moderate	No change.
Q53	Howards Road, Broadway	72	Y	High	- EIS project footprint through densely vegetated area limiting view, but requiring vegetation clearance - Existing transmission lines enclosed by vegetation - EIS project footprint closer than existing transmission lines and crossing driveway	-	Y	High	No change.
R3	1661 Rye Park Road, Broadway	79	Y	High	- Limited existing intervening vegetation - Existing view to transmission lines - EIS project footprint closer than existing transmission lines	-	Y	High	No change.
R5	1661 Rye Park Road, Broadway	257	Y	Moderate	- Limited existing intervening vegetation - Existing view to transmission lines - EIS project footprint closer than existing transmission lines	-	Y	Moderate	- Some additional vegetation may be removed for access track upgrades to the east of this dwelling.
R20	53 Felled Timber Road, Dalton	250	Y	High-moderate	- Limited existing intervening vegetation - Existing view to transmission lines	-	Y	High-moderate	No change.
R23	Felled Timber Road, Blakney Creek	Within project footprint	Y	High	- Limited existing intervening vegetation - Existing view to transmission lines	-	Y	High	No change.
R24	31 Felled Timber Road, Dalton	325	N	Moderate	- Limited existing intervening vegetation - Existing view to transmission lines	-	Y	Moderate	- Amended project footprint expands slightly in the vicinity of this dwelling.

		Project in the EIS				Amended project			
ID.	Address	Distance to EIS project footprint (metres)	EIS project footprint located on property (Y/N)	Potential visual impact	Details	Revised distance to amended project footprint (metres)	Amended project footprint located on property (Y/N)	Amended project impact level	Reasoning for change
									- Access track to be used as access track during construction.
R26	308 Rugby Road, Blakney Creek	Within project footprint	Y	High	- Limited existing intervening vegetation - Existing view to transmission lines - EIS project footprint closer than existing transmission lines	-	Y	High	No change.
R27	308 Rugby Road, Blakney Creek	50	Y	High	- Limited existing intervening vegetation - Existing view to transmission lines - EIS project footprint closer than existing transmission lines	-	Y	High	No change.
R40	812 Sapphire Road, Biala	260	Y	Moderate	- Some existing intervening vegetation - Existing view to transmission lines - EIS project footprint closer than existing transmission lines	-	Y	Moderate	No change.
R43	451 Clancys Road, Biala	413	Y	Moderate	- Some existing intervening vegetation - Existing view to transmission lines - EIS project footprint closer than existing transmission lines	-	Y	Moderate	No change.
R45	1755 Gurrundah Road, Gurrundah	385	Y	Moderate	- Some existing intervening vegetation - Existing view to transmission lines	-	Y	Moderate	- Access tracks in the vicinity of this dwelling.
R46	1755 Gurrundah Road, Gurrundah	492	Y	Moderate	- Some existing intervening vegetation - Existing view to transmission lines	-	Y	Moderate	No change.
R50	1016 Bannister Lane, Gurrundah	In project footprint	Y	High	- Limited existing intervening vegetation - Existing view to transmission lines - EIS project footprint closer than existing transmission lines	-	Y	High	No change.
S3	Bannister Lane, Gurrundah	125	Y	High	- Limited existing intervening vegetation - Existing view to transmission lines	-	Y	High	No change.

		Project in the EIS				Amended project			
ID.	Address	Distance to EIS project footprint (metres)	EIS project footprint located on property (Y/N)	Potential visual impact	Details	Revised distance to amended project footprint (metres)	Amended project footprint located on property (Y/N)	Amended project impact level	Reasoning for change
					- EIS project footprint closer than existing transmission lines				
S29	2811 Range Road, Bannister	199	Y	High-moderate	- No existing intervening vegetation - Existing view to transmission lines - EIS project footprint closer than existing transmission lines	-	Y	High-moderate	No change.
T3	2611 Crookwell Rd, Pejar 2583	161	Y	Moderate-low	- Some existing intervening vegetation - Existing view to transmission lines - EIS project footprint closer than existing transmission lines	-	Y	Moderate-low	- Access tracks in the vicinity of this dwelling.
T32	Middle Arm Road, Middle Arm	118	Y	Moderate	- Limited existing intervening vegetation - Existing view to transmission lines	-	Y	Moderate	No change.
T39	172 Back Arm Road, Middle Arm	43	Y	High	- Limited existing intervening vegetation - Existing view to transmission lines	-	Y	High	- Minor refinements to amended project footprint and access tracks in the vicinity of this dwelling.
T49	1367 Rhyanna Road, Chatsbury	189	Y	Moderate	- Some existing intervening vegetation - Existing view to transmission lines - Some vegetation removal	-	Y	Moderate	- Minor refinements to amended project footprint and access tracks in the vicinity of this dwelling.
T50	1325 Rhyanna Road, Chatsbury	150	Y	High-moderate	- Some existing intervening vegetation - Existing view to transmission lines - Some vegetation removal	-	Y	High-moderate	- Minor refinements to amended project footprint and access tracks in the vicinity of this dwelling.
T54	1363 Rhyanna Road, Middle Arm	350	Y	Moderate-low	- Dense existing intervening vegetation - EIS project footprint closer than existing transmission lines and crossing driveway	-	Y	Moderate-low	No change.
U24	703 Hillcrest Road Myrtleville	265	Y	High-moderate	- Some existing intervening vegetation (dwellings and fields) - Existing view to transmission lines	185	Y	High-moderate	- Amended project footprint expanded in the vicinity of this dwelling.

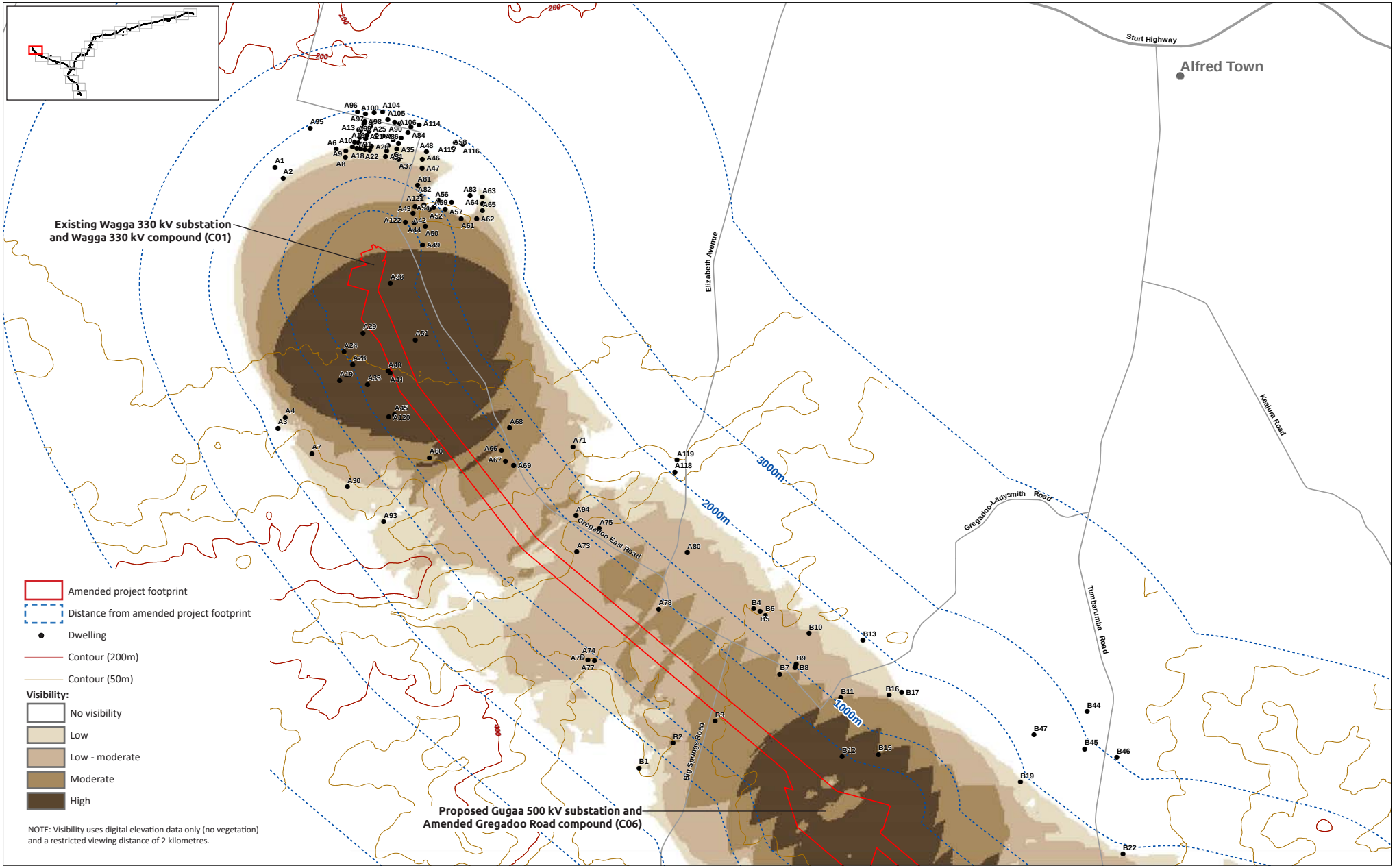
		Project in the EIS				Amended project			
ID.	Address	Distance to EIS project footprint (metres)	EIS project footprint located on property (Y/N)	Potential visual impact	Details	Revised distance to amended project footprint (metres)	Amended project footprint located on property (Y/N)	Amended project impact level	Reasoning for change
U25	Menzies Lane, Myrtleville	190	Y	High-moderate	- Some intervening vegetation reduces visibility to the south-west - Likely existing view to transmission lines to the south-east - EIS project footprint beyond existing transmission lines - Project footprint changes direction in this view	-	Y	High-moderate	- Access tracks in the vicinity of this dwelling.
U27	152 Soldiers Settlement Road South, Myrtleville	460	Y	Moderate	- Intervening vegetation - Existing view to transmission lines - EIS project footprint beyond existing transmission lines	-	Y	Moderate	No change.
V10	1344 Bannaby Road Bannaby	336	N	High-moderate	- Limited existing intervening vegetation - No existing transmission lines in view	-	N	High-moderate	- Minor change to the project footprint in the vicinity of this dwelling.
V28	365 Hanworth Road, Bannaby	260	Y	High-moderate	- Some existing intervening vegetation - Existing view to transmission lines - EIS project footprint closer and parallel to existing transmission lines - Close proximity	-	Y	N/A	Not a dwelling.
V29	409 Hanworth Road, Bannaby	400	Y	Moderate	- Some existing intervening vegetation - Existing view to transmission lines - EIS project footprint closer and parallel to existing transmission lines	-	Y	Moderate	- Access tracks in the vicinity of this dwelling.
V46	Hanworth Road, Bannaby	-	-	-	Newly identified dwelling	440	Y	Moderate	- Elevated viewing location. - Some existing intervening vegetation. - Existing view to transmission lines - Amended project footprint further away than existing transmission lines, parallel and then moving away from this dwelling.

		Project in the EIS				Amended project			
ID.	Address	Distance to EIS project footprint (metres)	EIS project footprint located on property (Y/N)	Potential visual impact	Details	Revised distance to amended project footprint (metres)	Amended project footprint located on property (Y/N)	Amended project impact level	Reasoning for change
U19	427 Hillcrest Road, Myrtleville	-	Y		Newly identified dwelling	In project footprint	Y	High	- Limited existing intervening vegetation. - Existing view to transmission lines.
T11	Woodhouselee Road, Woodhouselee	-	Y		Newly identified dwelling	400	Y	Negligible	- Existing intervening vegetation surrounding the dwelling. - Existing view to transmission lines and wind farm.
T18	Woodhouselee Road, Woodhouselee	-	Y		Newly identified dwelling	360	Y	Low	- Some existing intervening vegetation. - Existing view to transmission lines and wind farm.
T53	Woodhouselee Road, Woodhouselee	-	Y		Newly identified dwelling	575	Y	Low	- Limited existing intervening vegetation. - Existing view to transmission lines and wind farm.
T25	2544 Middle Arm Rd, Roslyn	-	Y		Newly identified dwelling	600	Y	Negligible	- Intervening vegetation. - Landform likely to limit visibility. - Parallel to existing transmission lines.
R36	226 Cowpers Lane, Myrtleville	-	Y		Newly identified dwelling	500	Y	Low	- Intervening vegetation. - Project would be viewed against backdrop of hills. - Further away and aligned parallel to existing transmission lines.
R83	1473 Rye Park Road, Dalton	-	Y		Newly identified dwelling	600	Y	Low	- Some intervening vegetation and landform. - Further away and aligned parallel to existing transmission lines.
R78	Dawes Road, Broadway	-	Y		Newly identified dwelling	325	Y	Moderate	- Future dwelling. - No intervening vegetation. - View includes existing transmission line.

		Project in the EIS				Amended project			
ID.	Address	Distance to EIS project footprint (metres)	EIS project footprint located on property (Y/N)	Potential visual impact	Details	Revised distance to amended project footprint (metres)	Amended project footprint located on property (Y/N)	Amended project impact level	Reasoning for change
R79	Dawes Road, Broadway	-	-		Newly identified dwelling	395	Y	Moderate	- Future dwelling. - No intervening vegetation. - View includes existing transmission line.
R80	1661 Rye Park Road,	-	-		Newly identified dwelling	585	Y	Moderate	- No intervening vegetation. - View includes existing transmission line.
Q87	Flacknell Creek Road	-	-		Newly identified dwelling	676	N	Low	- Some intervening vegetation. - View includes existing transmission line.
Q88	Flacknell Creek Road, Broadway	-	-		Newly identified dwelling	170	Y	Moderate	- Scattered trees and blocks of intervening vegetation. - View includes existing transmission line.
Q89	337 Flacknell Creek Road, Broadway	-	-		Newly identified dwelling	70-100	Y	Moderate	- Scattered trees and blocks of intervening vegetation. - View includes existing transmission line.

Attachment H

Visibility of structures within two kilometres



Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT H - **Visibility of transmission line structures within 2 kilometres** (Wagga Wagga to Gregadoo)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011

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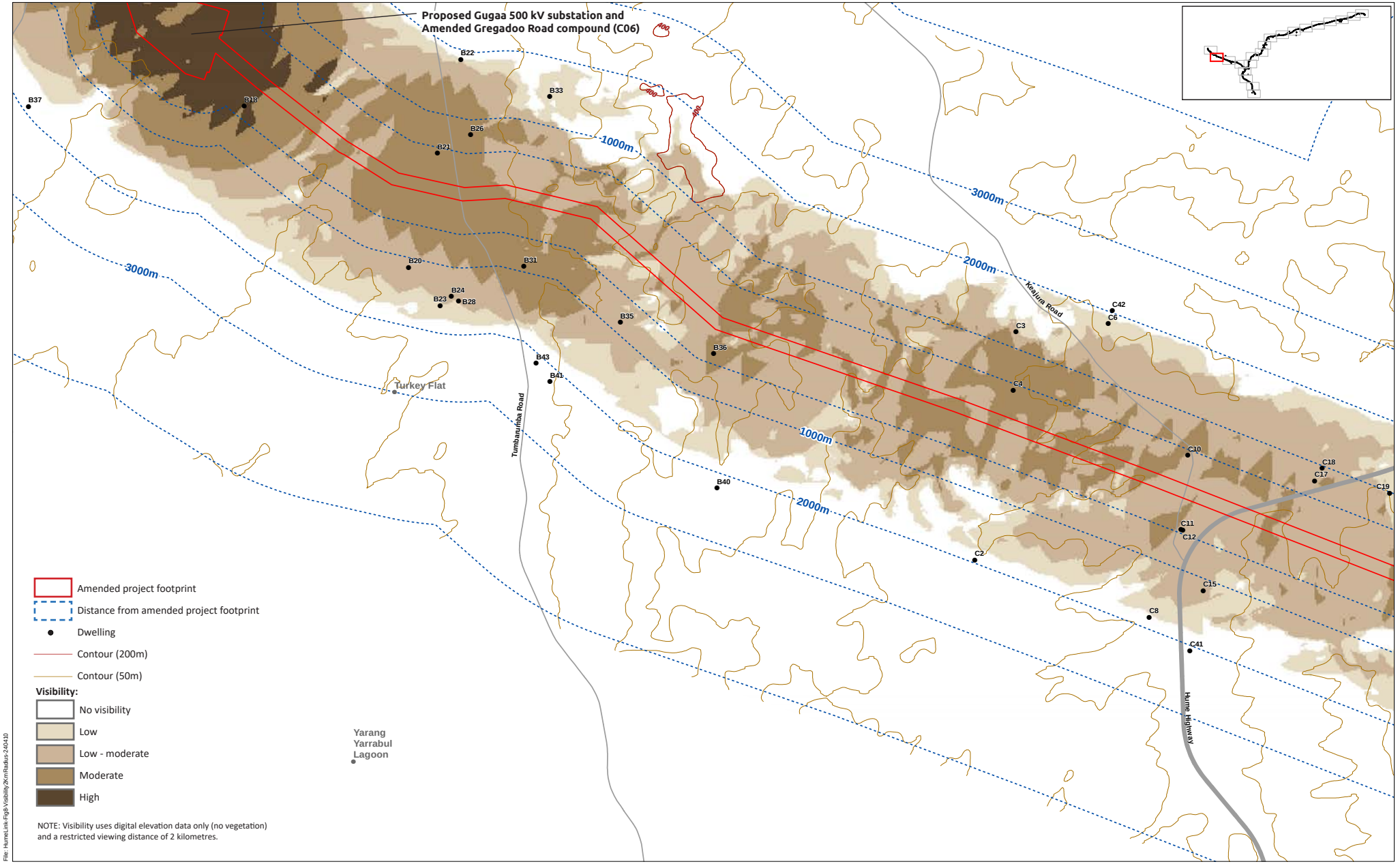

Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT H - **Visibility of transmission line structures within 2 kilometres** (Gregadoo to Tarcutta)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011

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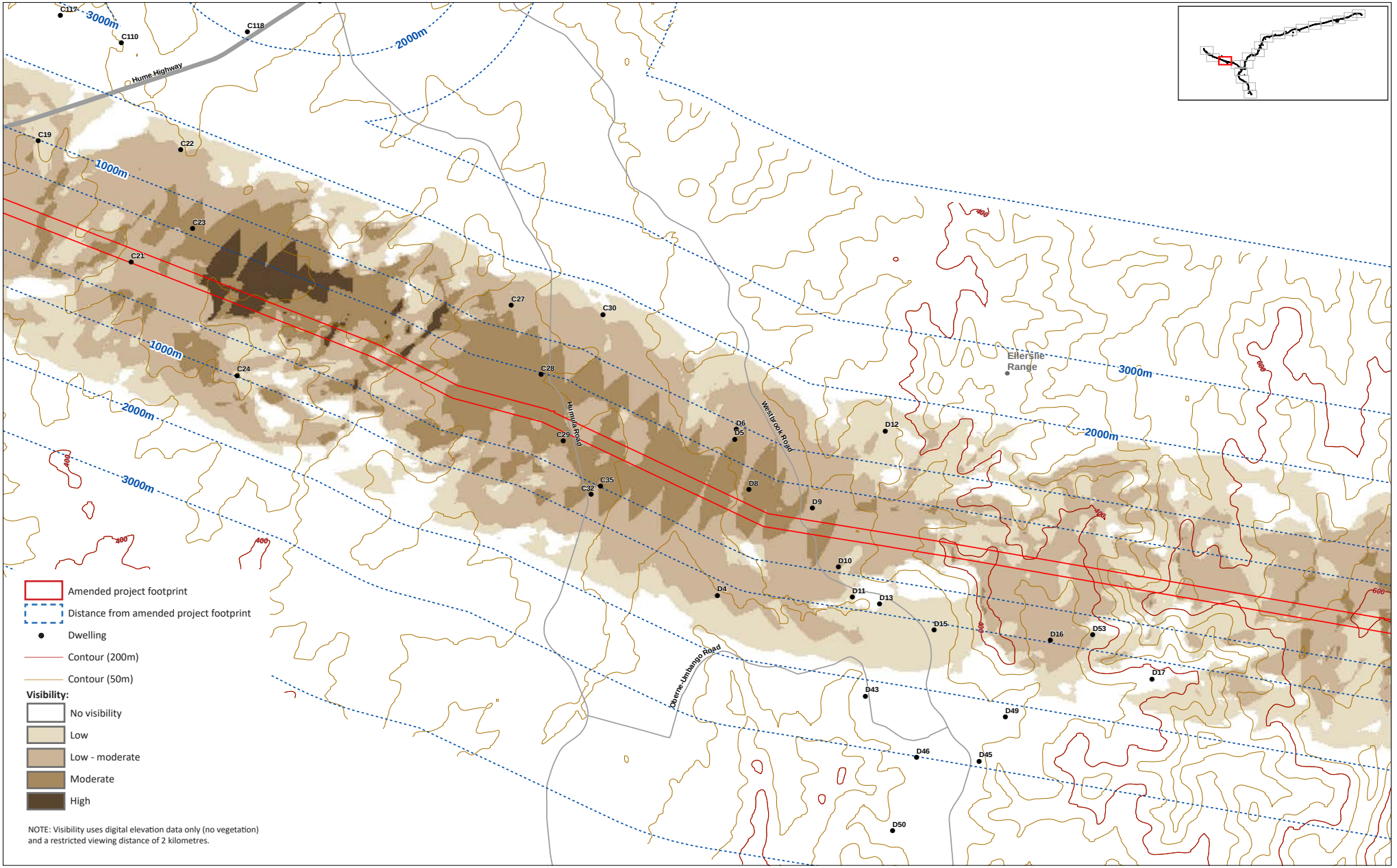

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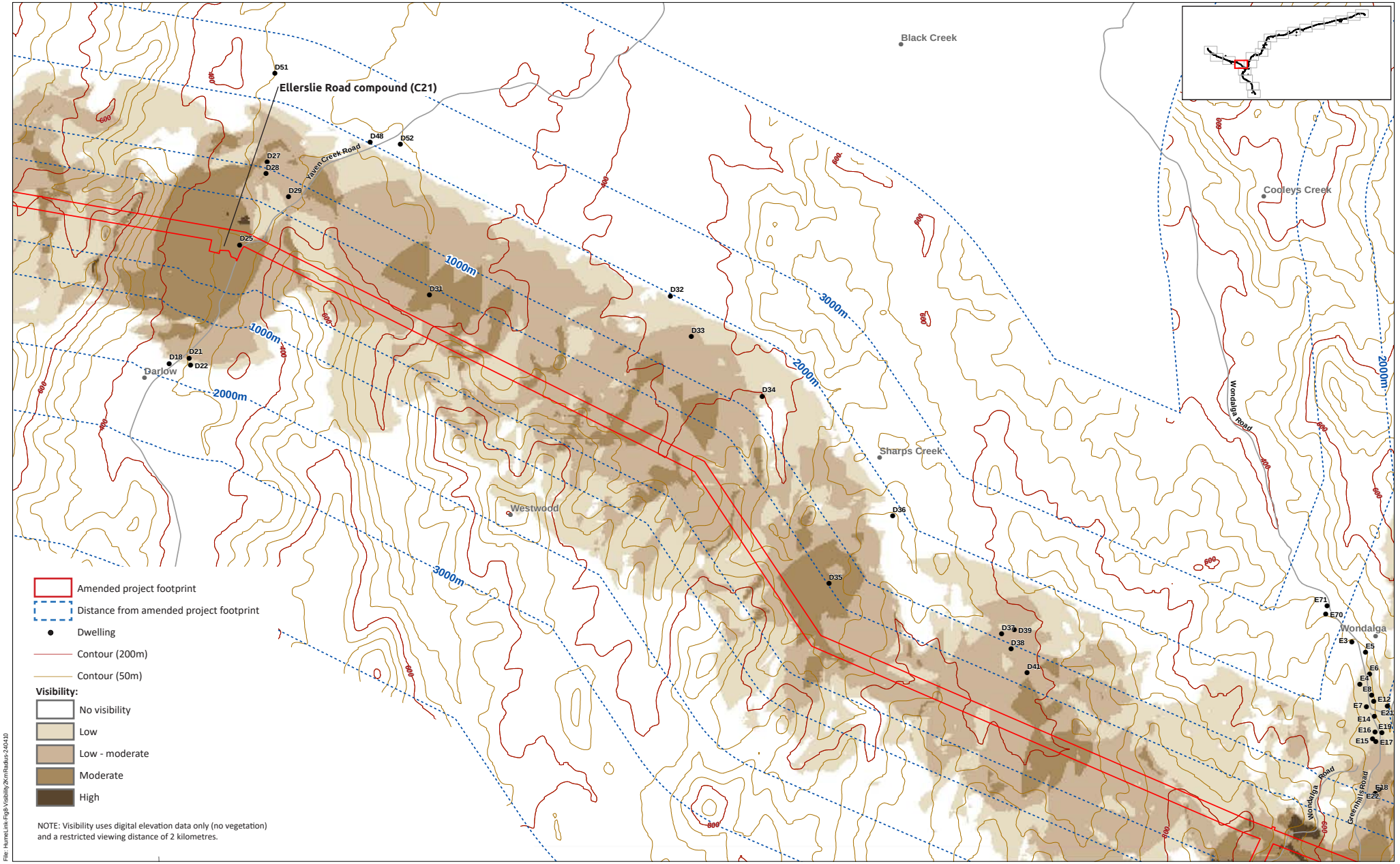
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT H - **Visibility of transmission line structures within 2 kilometres** (Tarcutta to Ellerslie Range)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT H - **Visibility of transmission line structures within 2 kilometres** (Tarcutta to Ellerslie Range)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011

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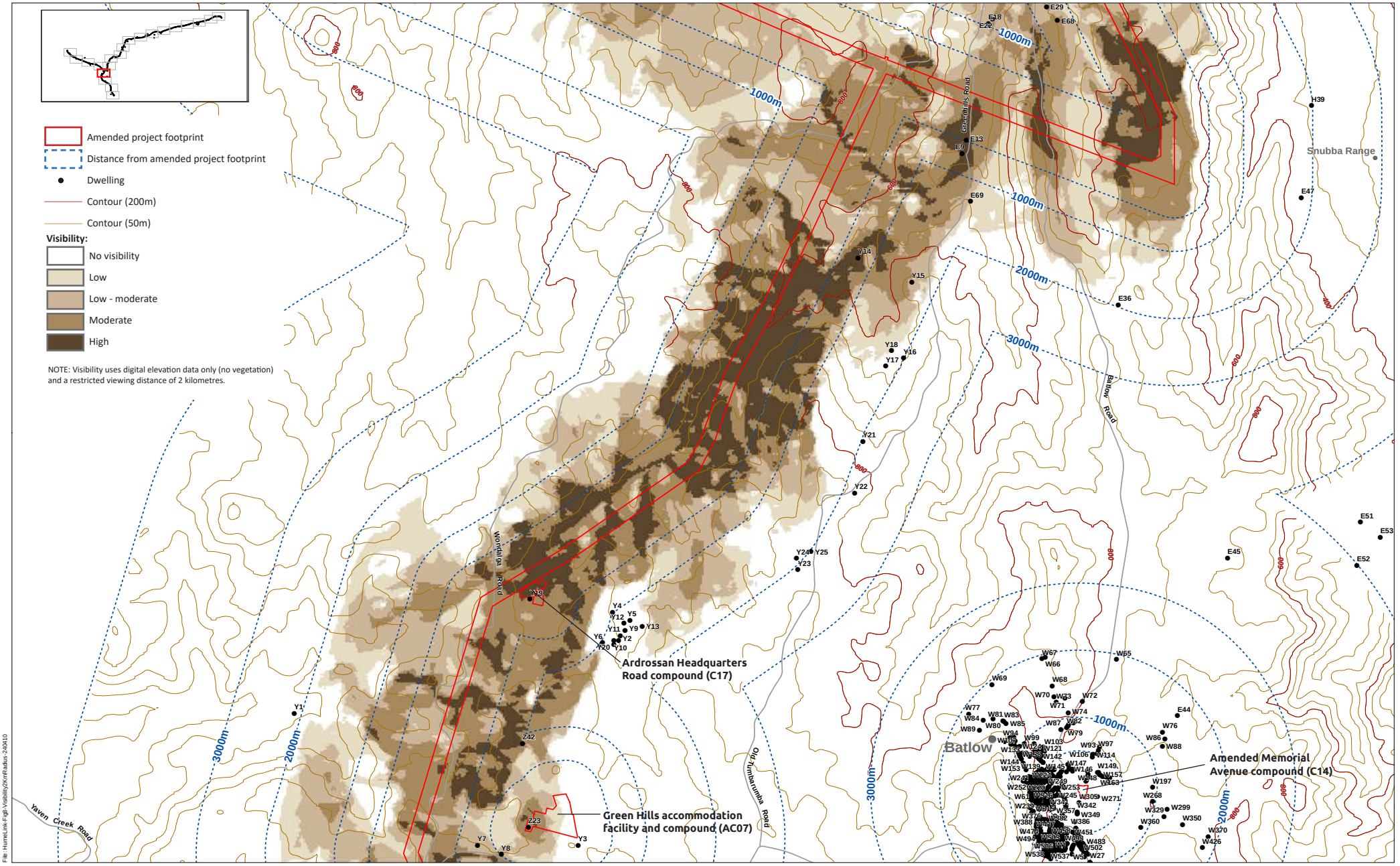

File: HumeLink-Fig6-Visibility2KmRadius-240410

Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT H - **Visibility of transmission line structures within 2 kilometres** (Wondalga to Batlow)

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011

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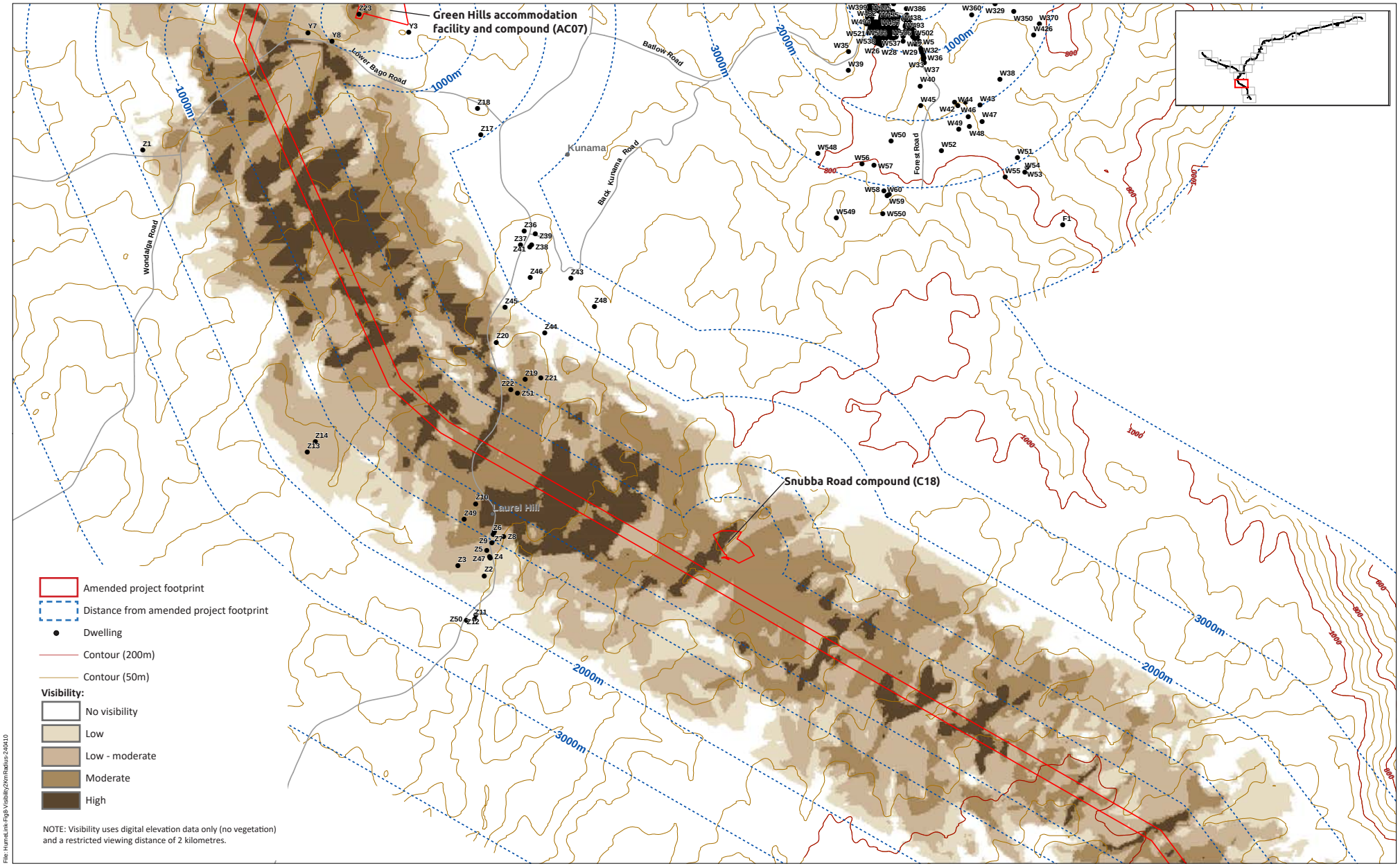


iris

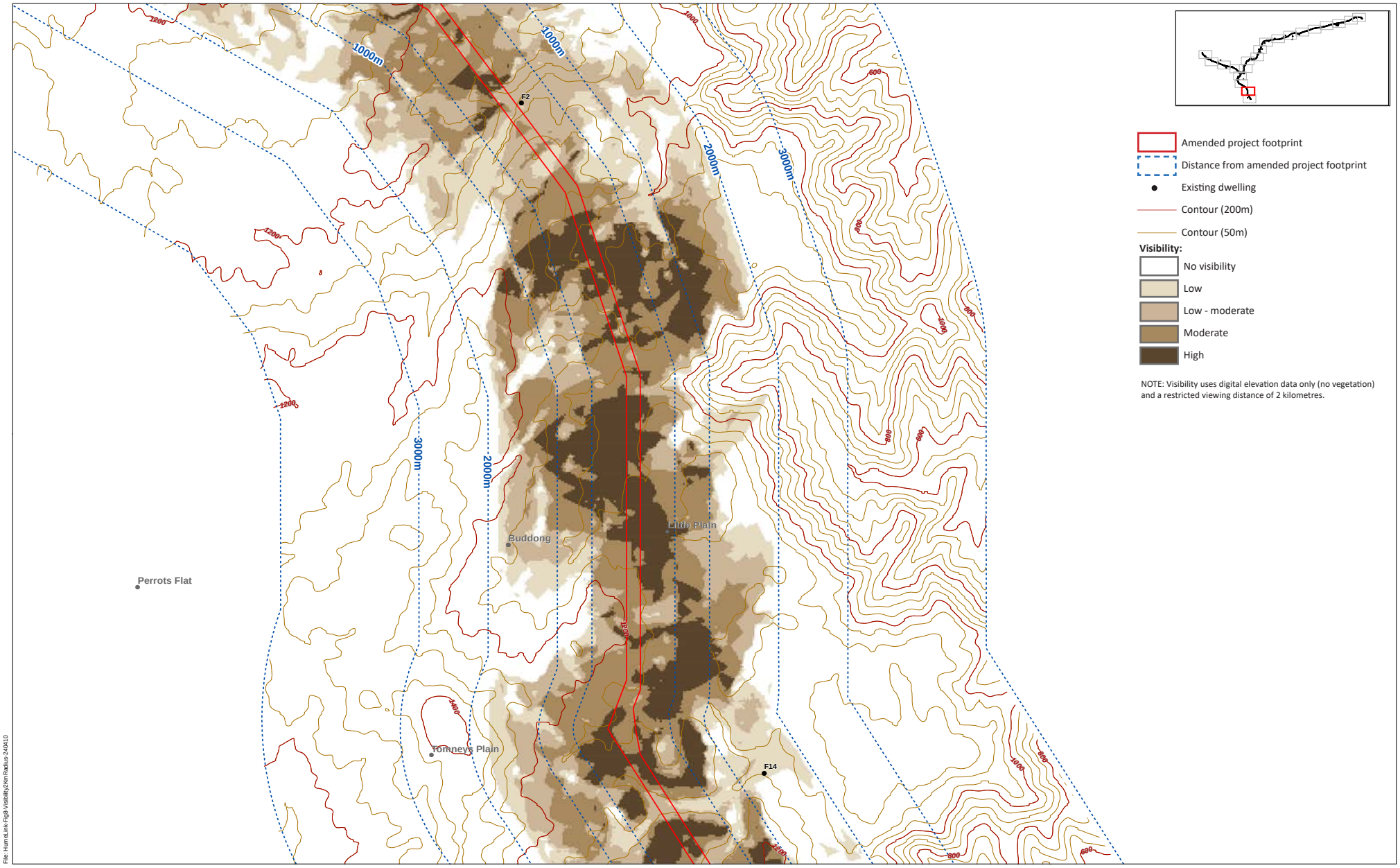
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT H - **Visibility of transmission line structures within 2 kilometres** (Batlow to Snubba Road)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



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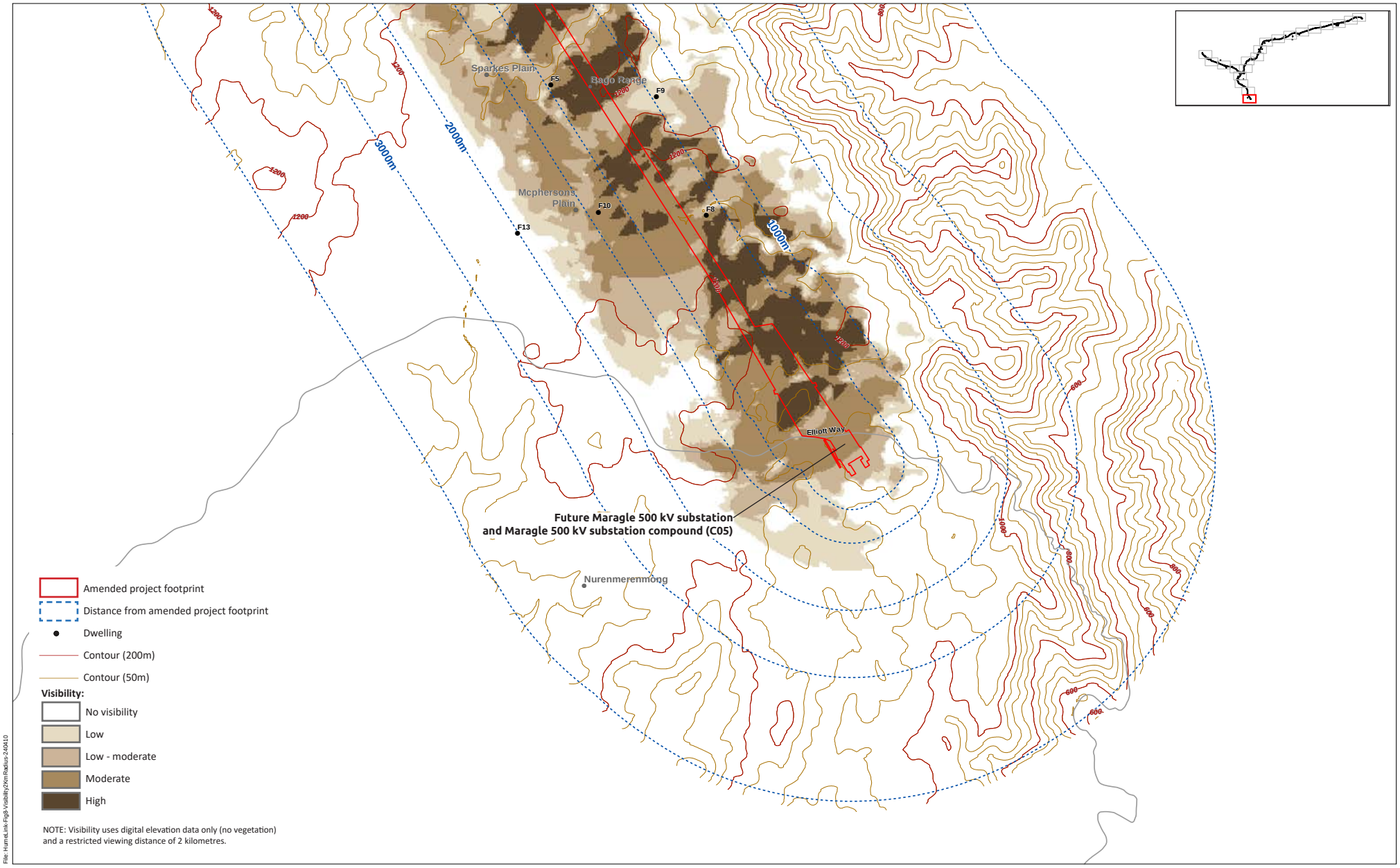
Humelink Landscape and visual impact assessment - Amendment Report

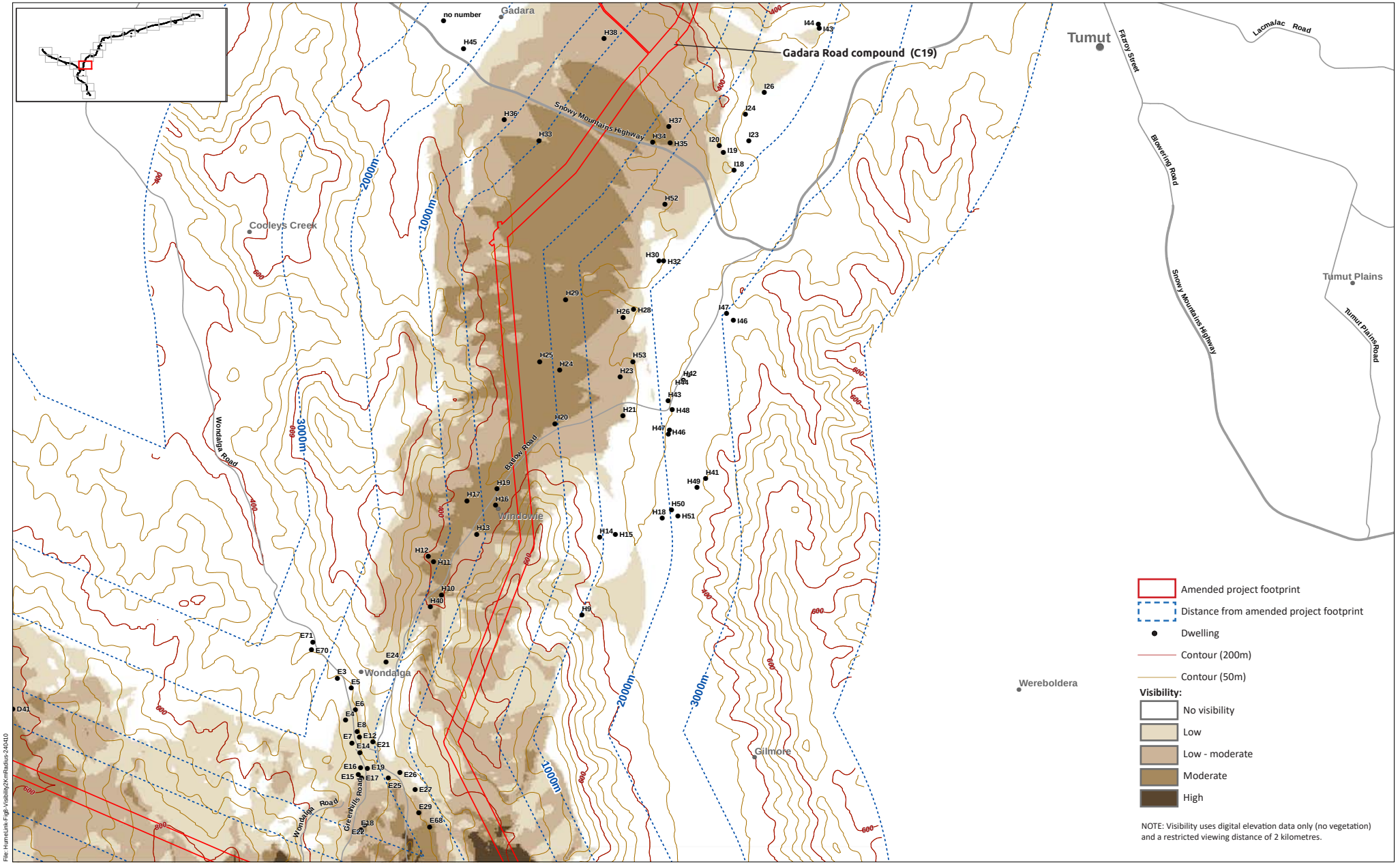
ATTACHMENT H - **Visibility of transmission line structures within 2 kilometres** (Snubba Road to Nurenmerenmong)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011


Sparkes Plain
Bago Range
Mcphersons Plain
F5
F9
F10
F8
F13
1000m
2000m
3000m
Elliott Way
Future Maragle 500 kV substation
and Maragle 500 kV substation compound (C05)
Nurenmerenmong
Amended project footprint
Distance from amended project footprint
Dwelling
Contour (200m)
Contour (50m)
Visibility:
No visibility
Low
Low - moderate
Moderate
High
NOTE: Visibility uses digital elevation data only (no vegetation)
and a restricted viewing distance of 2 kilometres.
File: HumeLink-Fig8-Visibility2KmRadius-240410



File: HumeLink-Fig6-Visibility2kmRadius-240410

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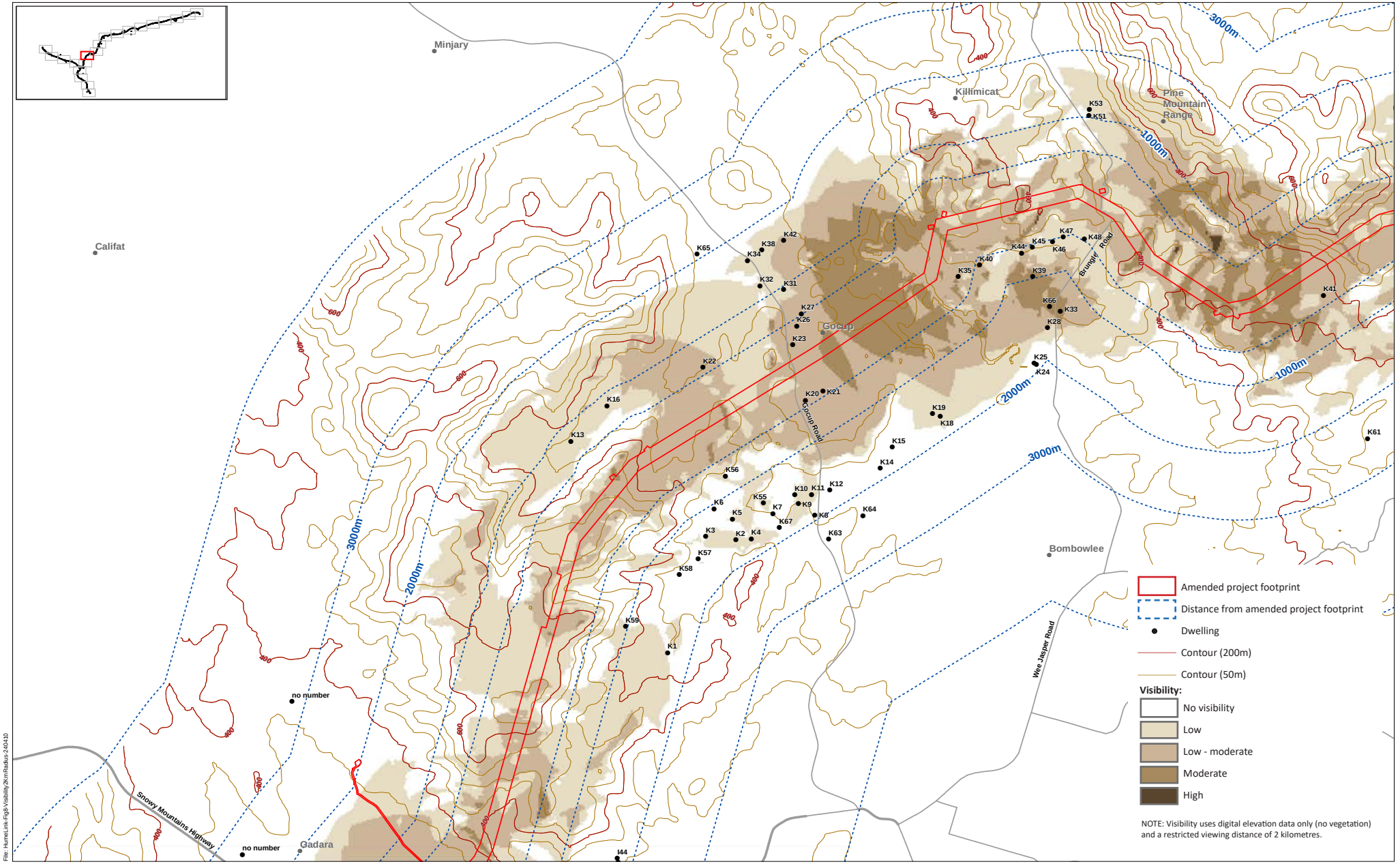
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT H - **Visibility of transmission line structures within 2 kilometres** (Wondalga to Tumut)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



File: HumeLink-Fig9-Visibility 2km Radius-240410

Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT H - **Visibility of transmission line structures within 2 kilometres** (Tumut to Killimicat)

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011

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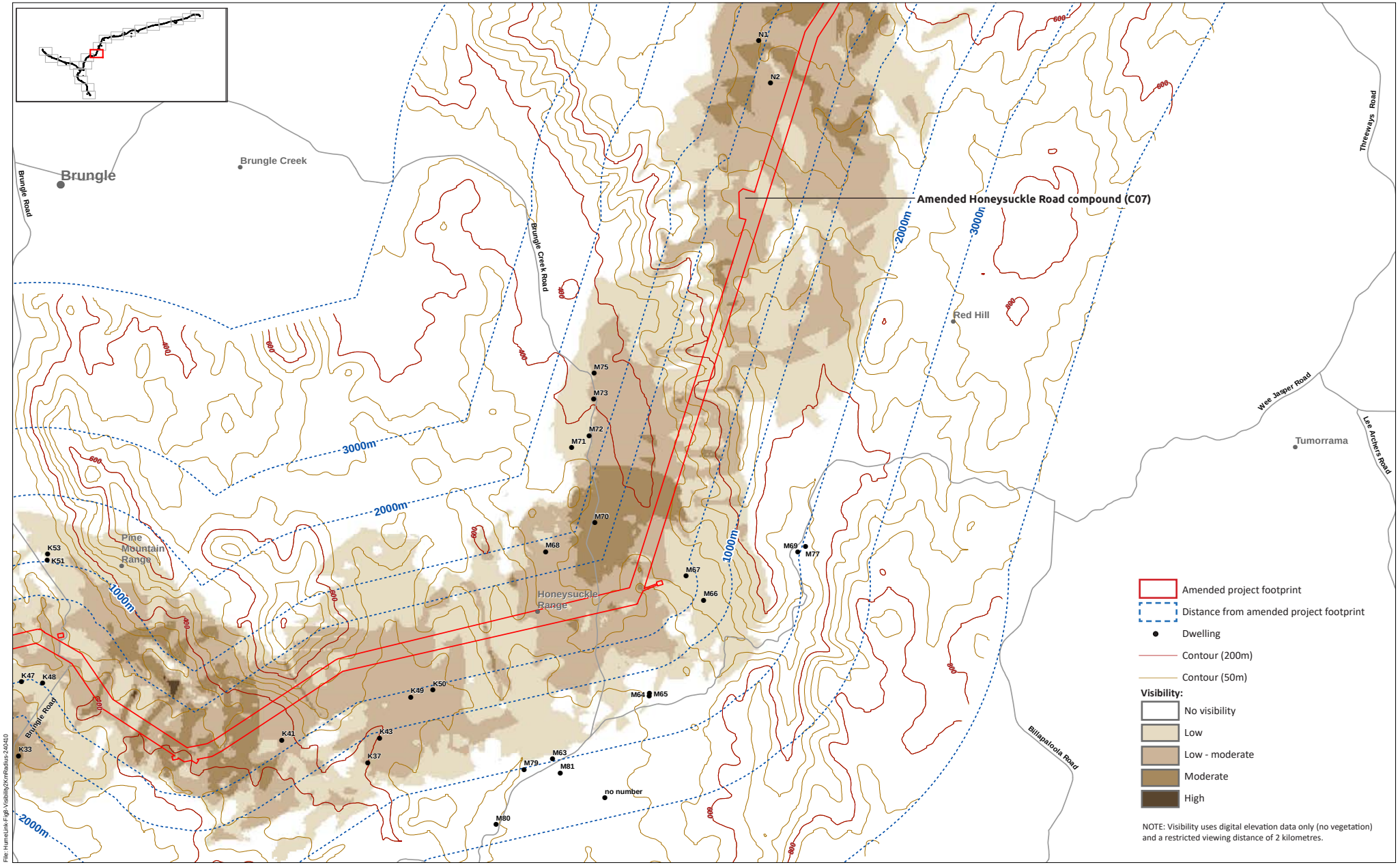

Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT H - **Visibility of transmission line structures within 2 kilometres** (Killimicat to Red Hill)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011

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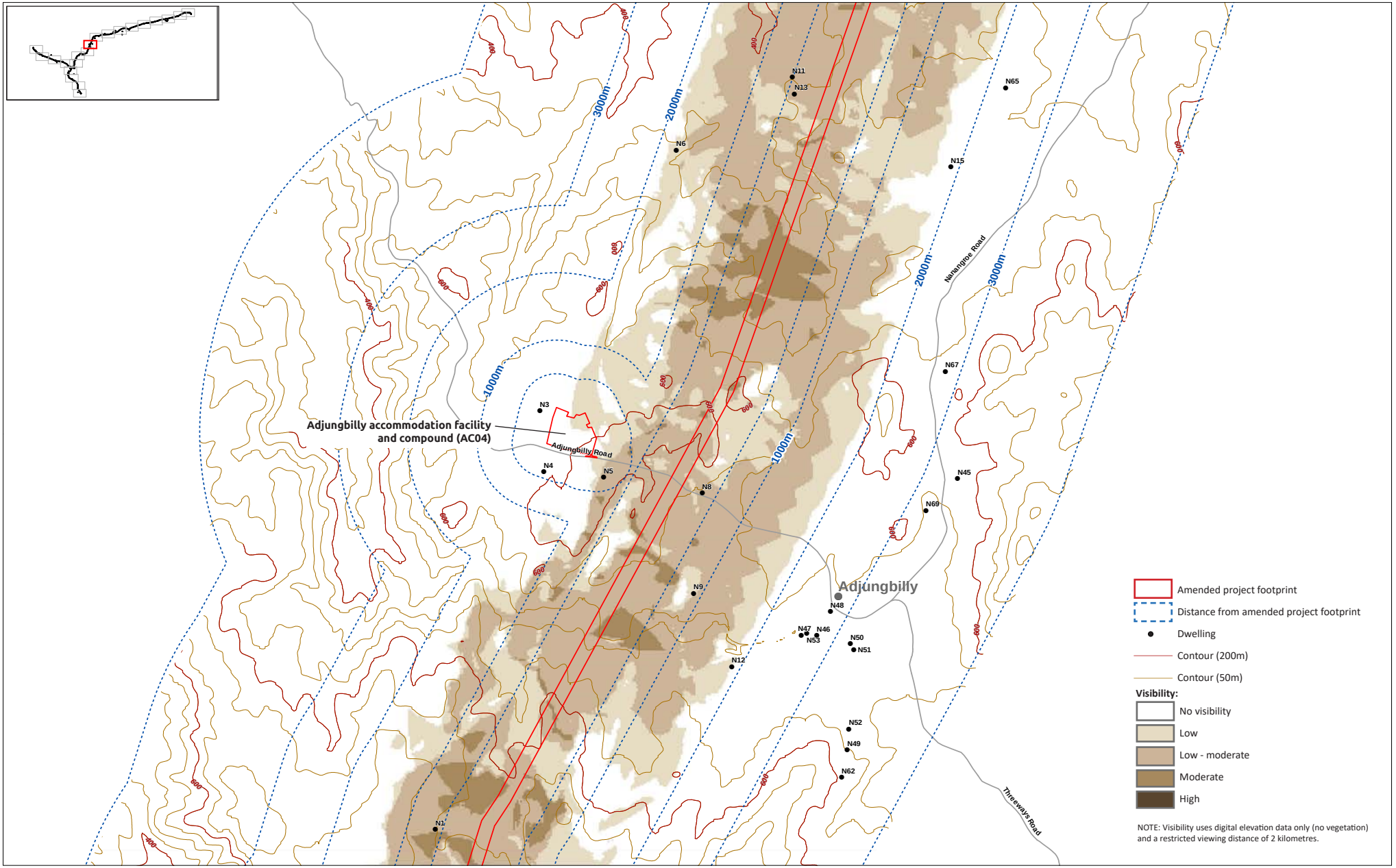

File: HumeLink-Fig9.1Visibility 2Km Radius-240410

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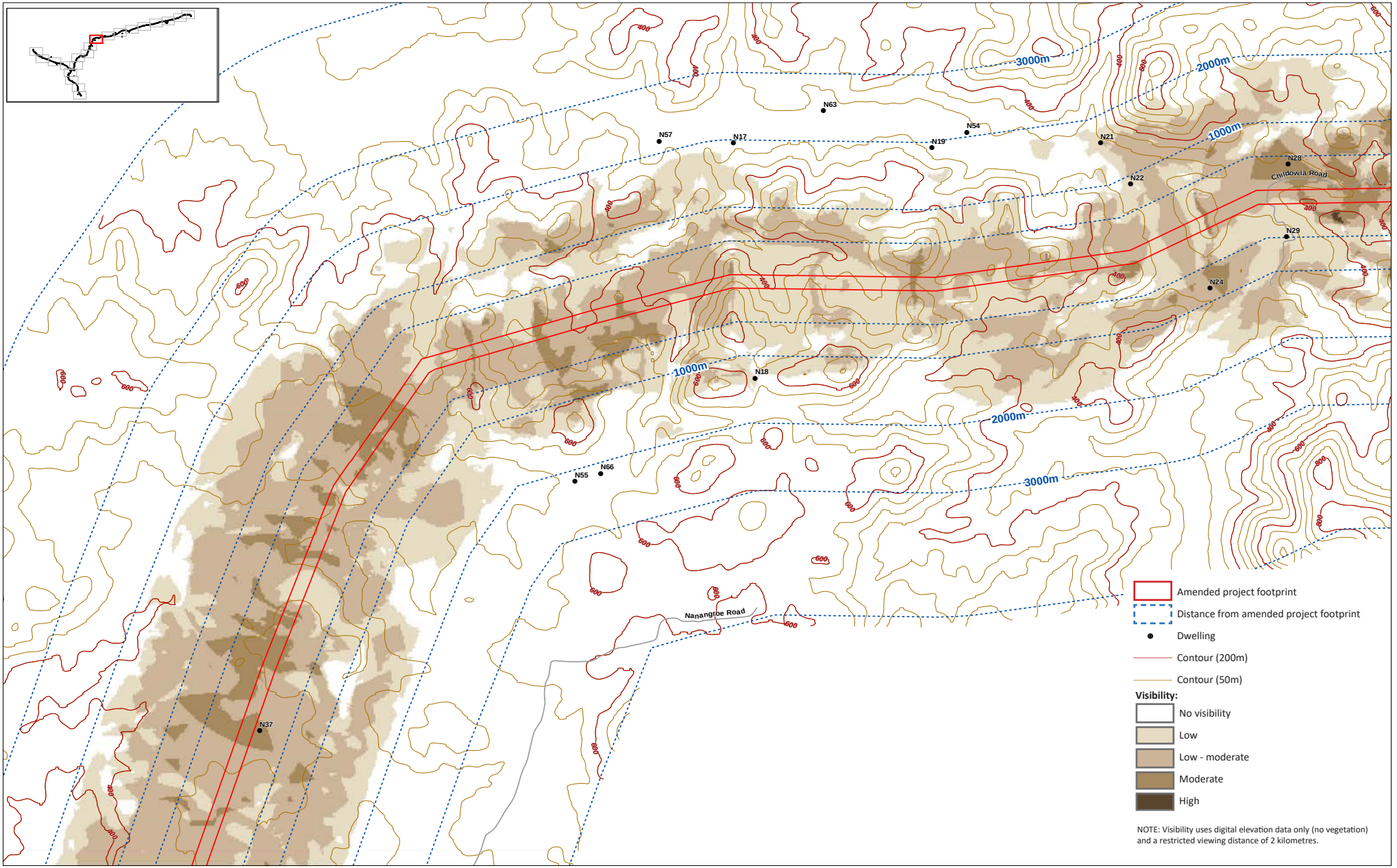
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT H - **Visibility of transmission line structures within 2 kilometres** (Red Hill to Adjungbilly and Bungongo)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



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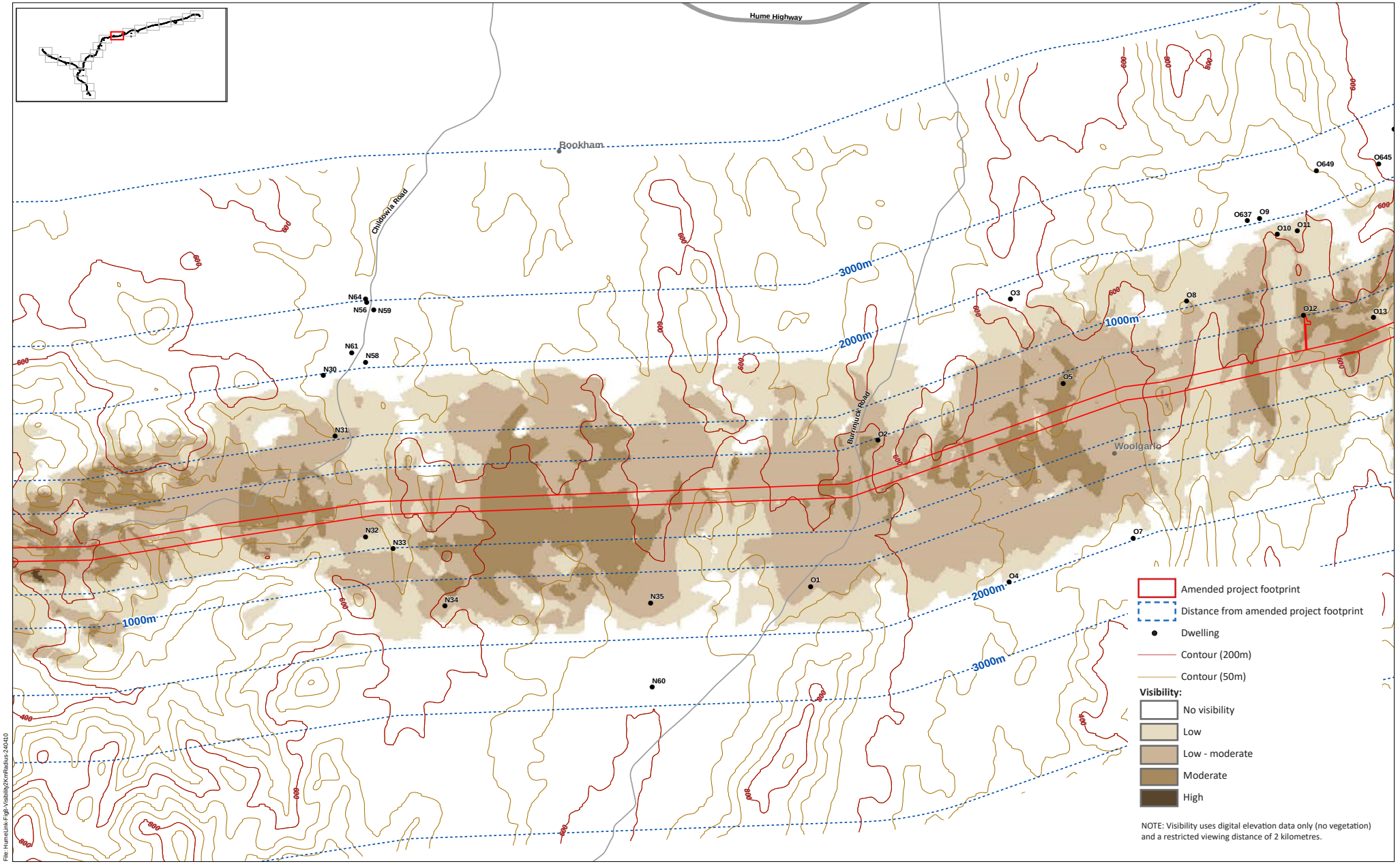
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT H - **Visibility of transmission line structures within 2 kilometres** (Bungongo to Burrinjuck)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



Humelink Landscape and visual impact assessment - Amendment Report

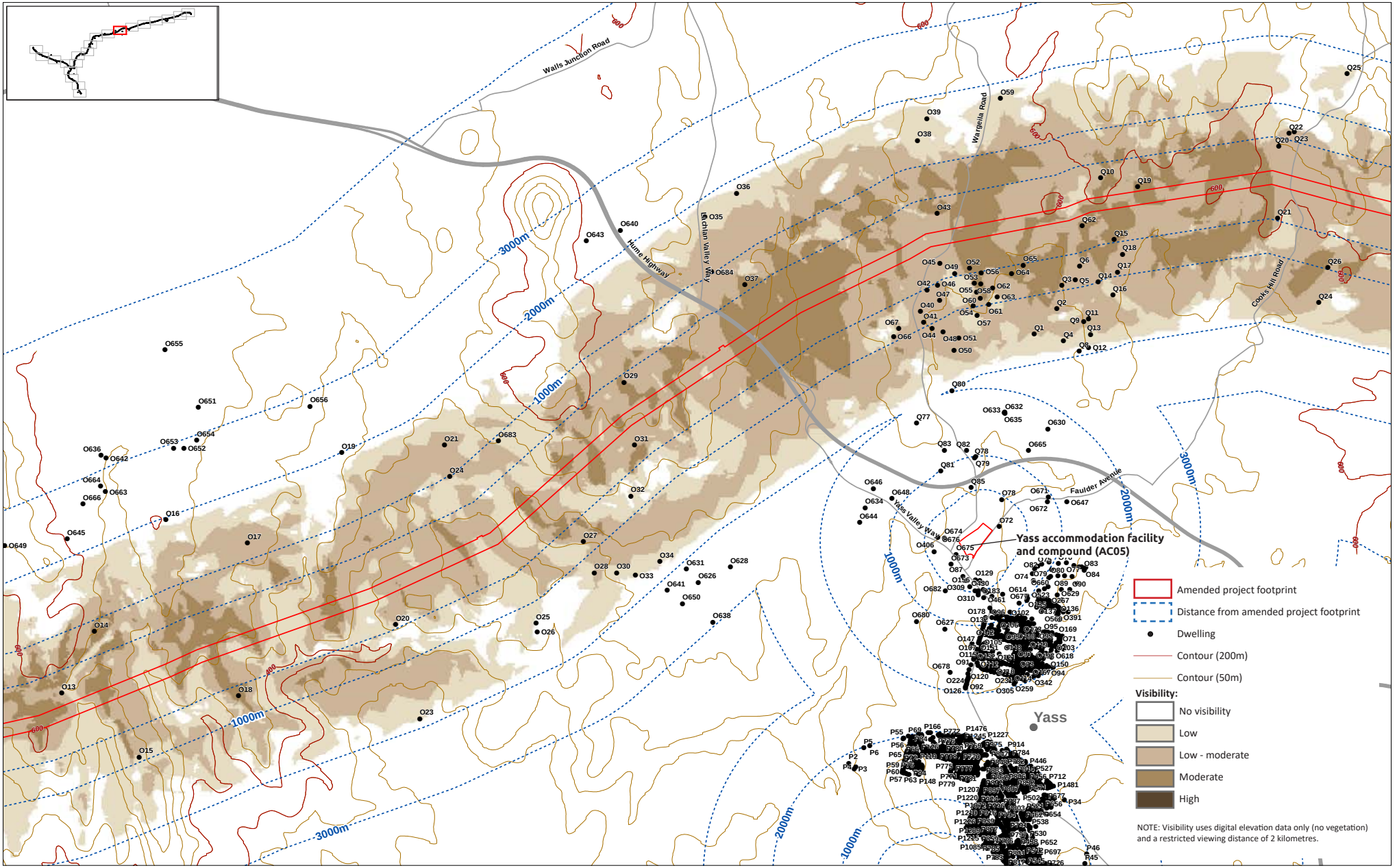
ATTACHMENT H - **Visibility of transmission line structures within 2 kilometres** (Burrinjuck to Woolgarlo)

0 0.5 1 1.5 2 2.5km

north

iris

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



0 0.5 1 1.5 2 2.5km

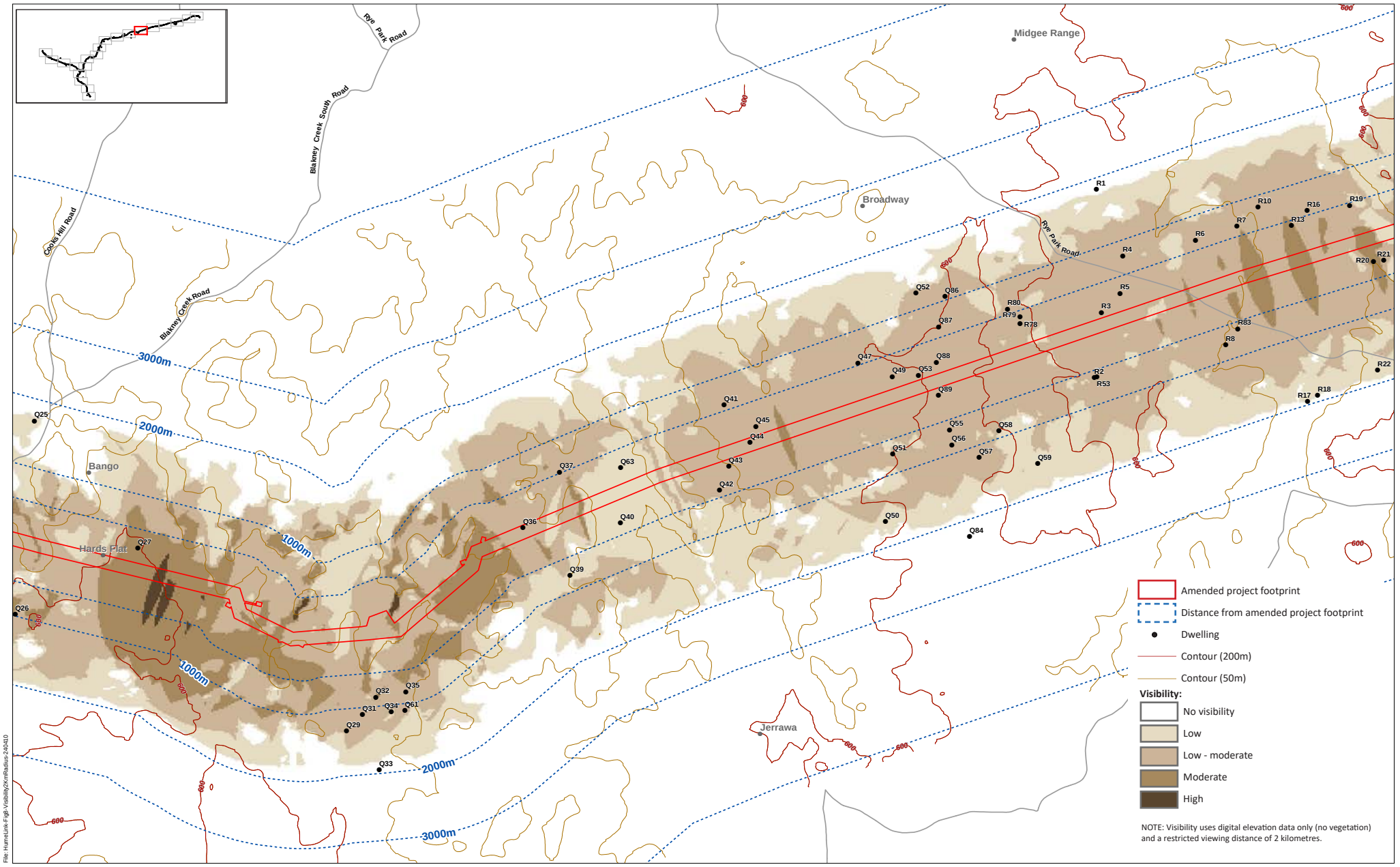
north

iris

Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT H - **Visibility of transmission line structures within 2 kilometres** (Woolgarlo to Yass and Bango)

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



iris

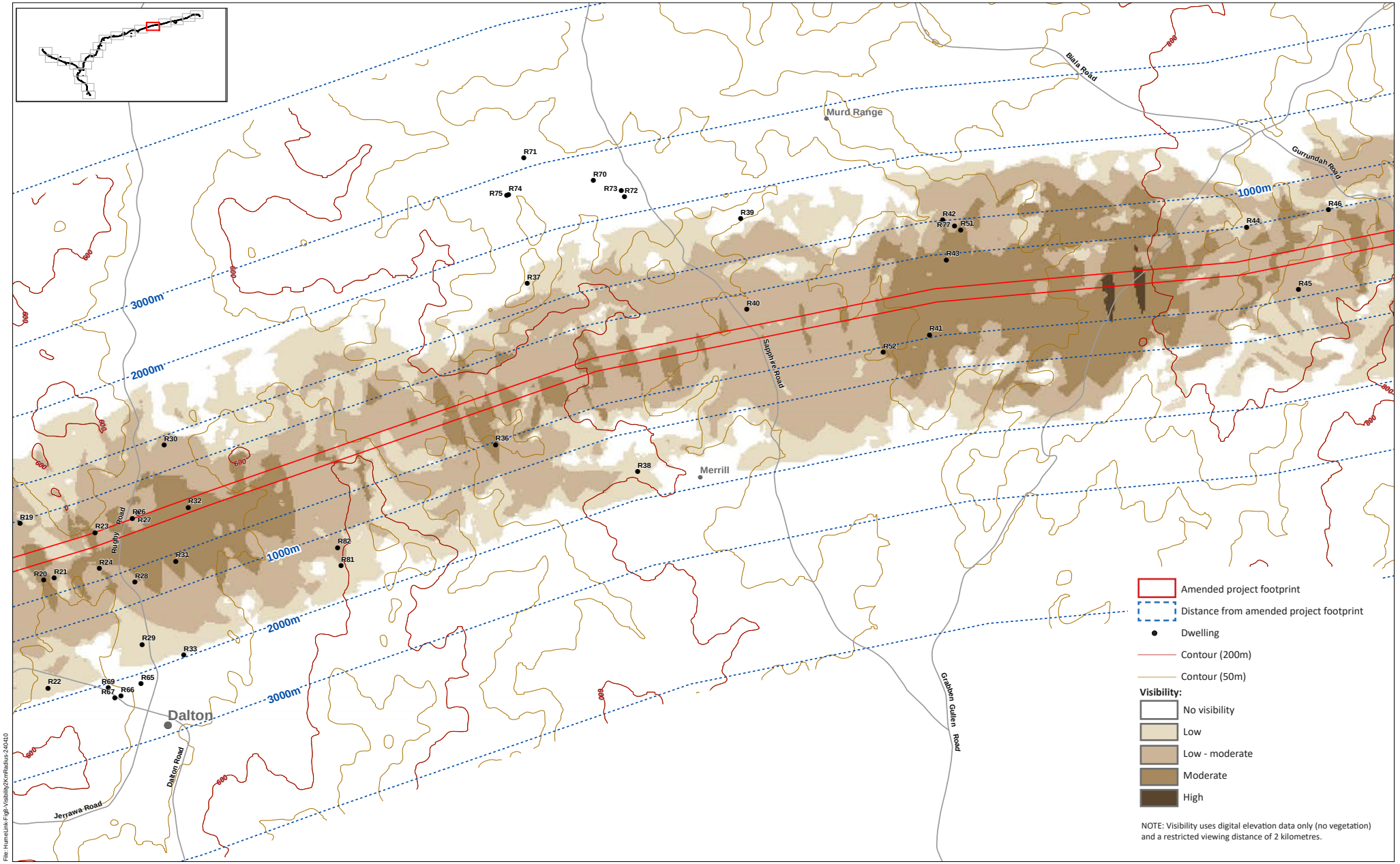
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT H - **Visibility of transmission line structures within 2 kilometres** (Bango to Broadway and Dalton)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



iris

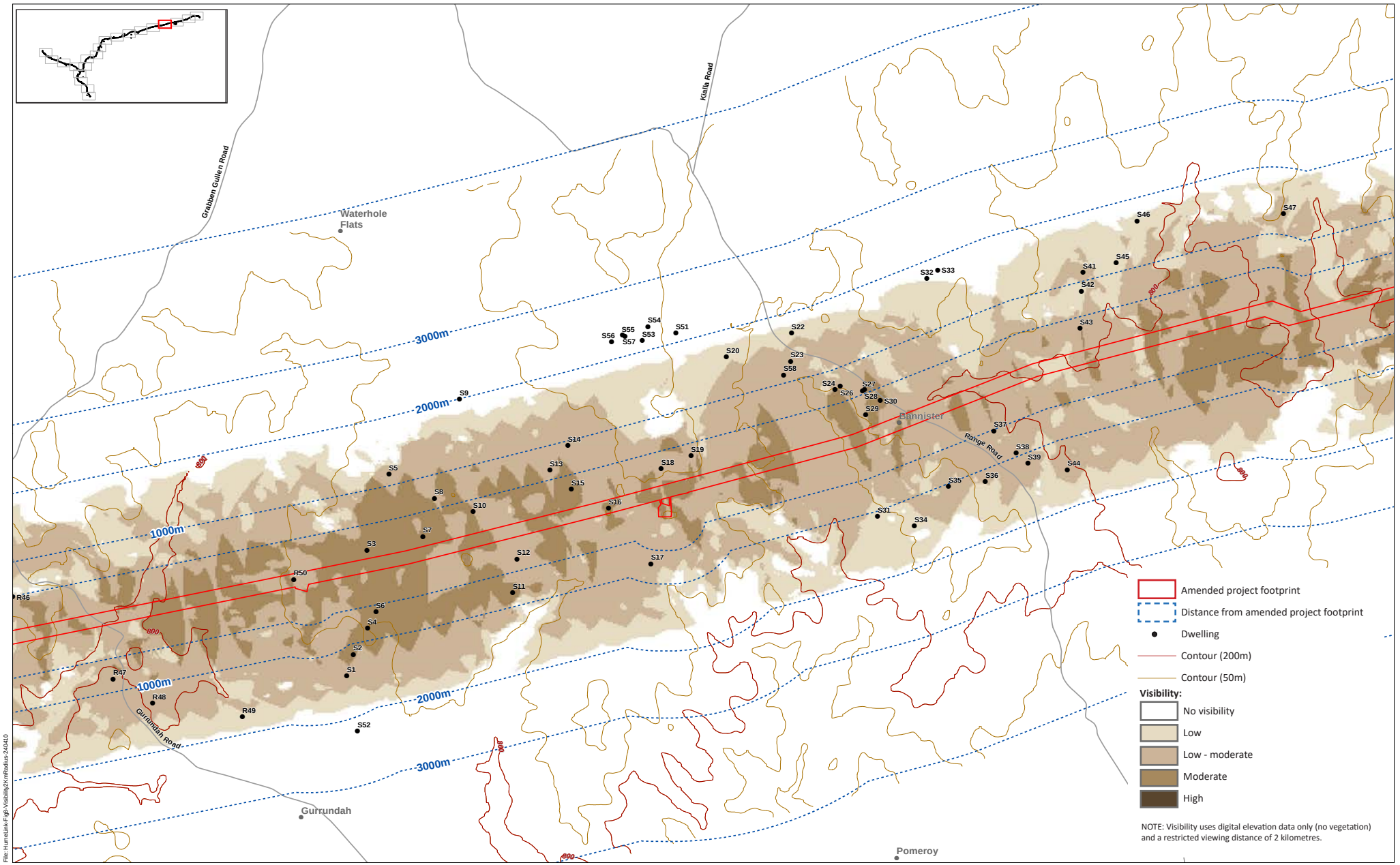
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT H - **Visibility of transmission line structures within 2 kilometres** (Dalton to Merrill and Grabben Gullen)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



Humelink Landscape and visual impact assessment - Amendment Report

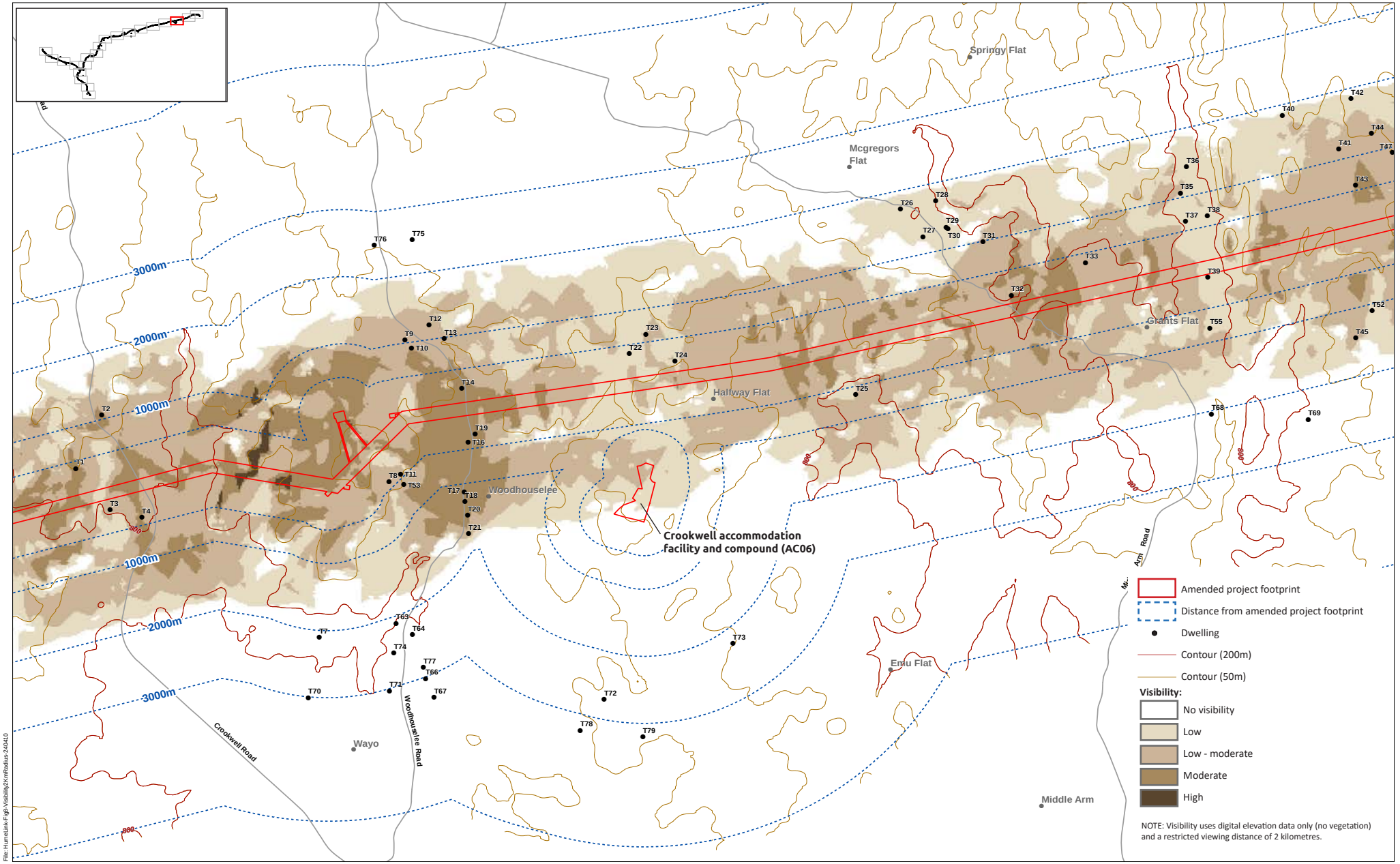
ATTACHMENT H - **Visibility of transmission line structures within 2 kilometres** (Grabben Gullen to Bannister)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011

iris

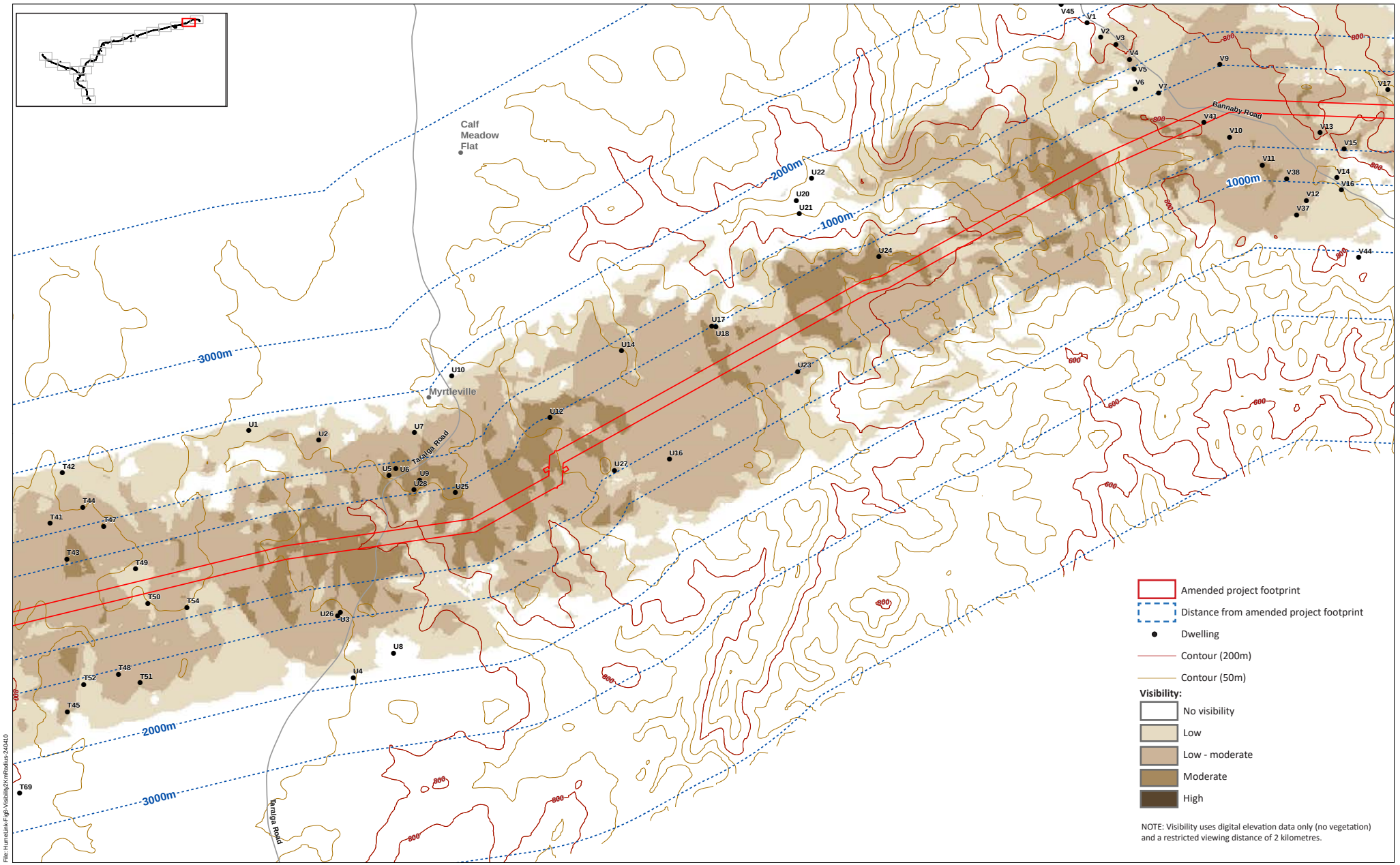


Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT H - **Visibility of transmission line structures within 2 kilometres** (Bannister to Chatsbury)

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011

iris



Humelink Landscape and visual impact assessment - Amendment Report

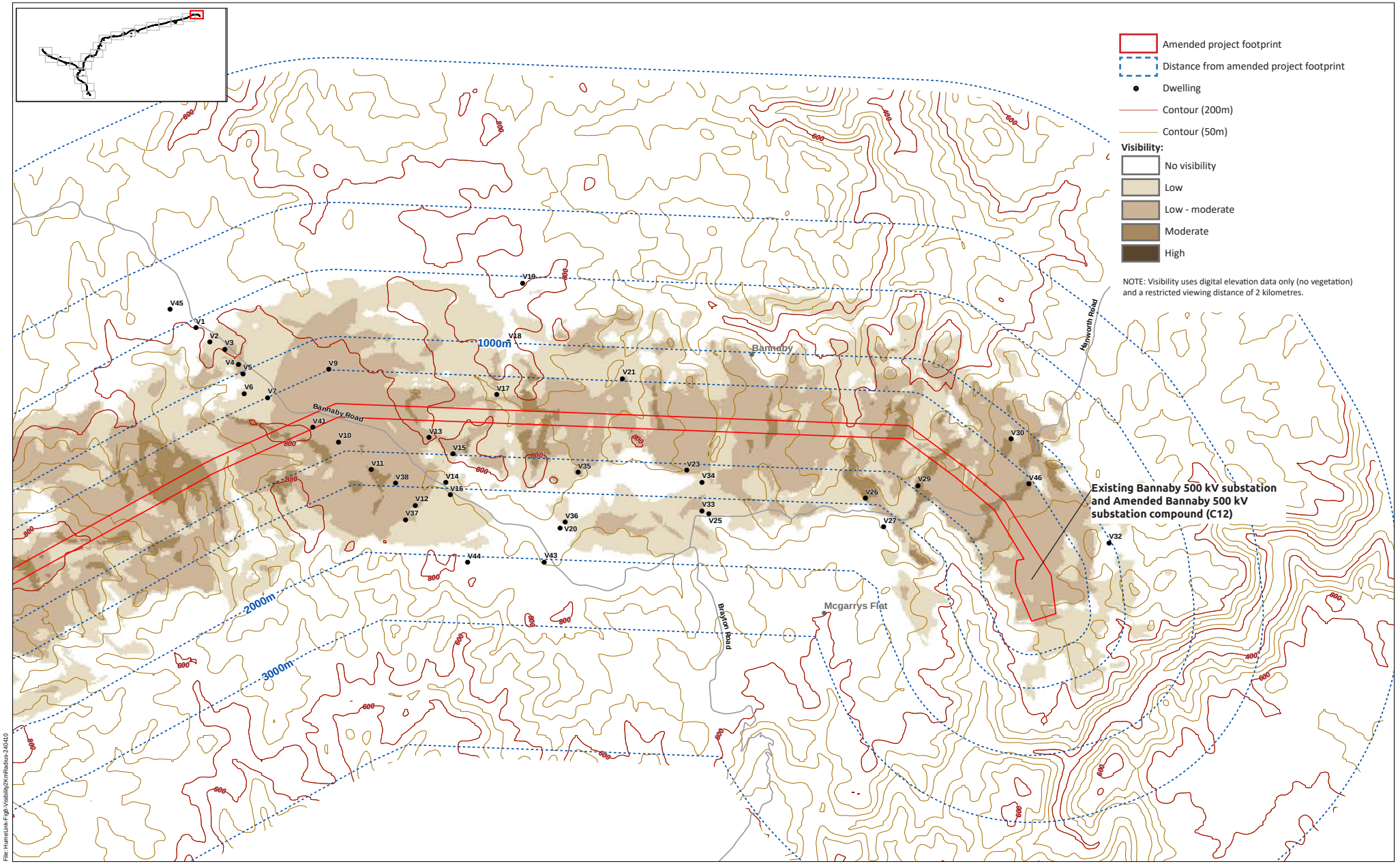
ATTACHMENT H - **Visibility of transmission line structures within 2 kilometres** (Chatsbury to Tarlo River)

0 0.5 1 1.5 2 2.5km

north

iris

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



File: HumeLink-Fig8-Visibility2KmRadius-240410

Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT H - **Visibility of transmission line structures within 2 kilometres** (Tarlo River to Bannaby)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011

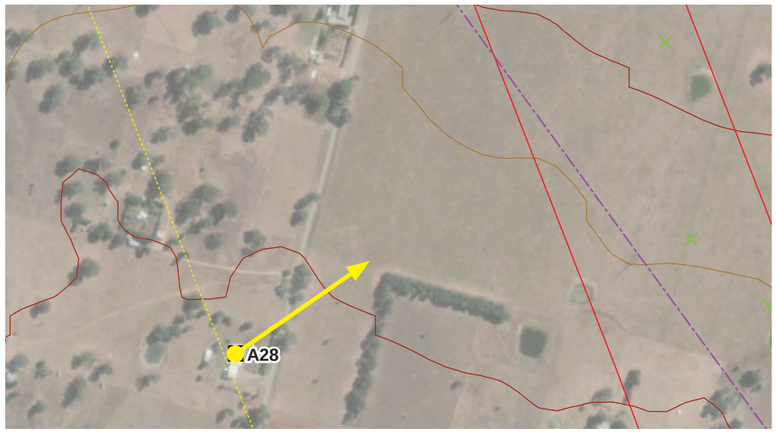
iris

Attachment I

Accompanying detail for the assessment of visual impact from private residences including photomontages

Dwelling A28

Address: 216 Ashfords Road, Gregadoo	Affected view: Primary view from deck near living area
Revised distance to amended project footprint: 475 metres	Potential level of visual impact of the amended project: **Low**
View details: • Existing vegetation provides screening • Amended project visible through gap in trees from living areas	Changes in amended project: • Amended project footprint moved further away from this dwelling and would be less visible and less prominent.



Existing view

Photomontage showing indicative location of the amended project

Location: 35°16’6.43”S, 147°29’3.57”E
Focal length: 50mm

Dwelling A28

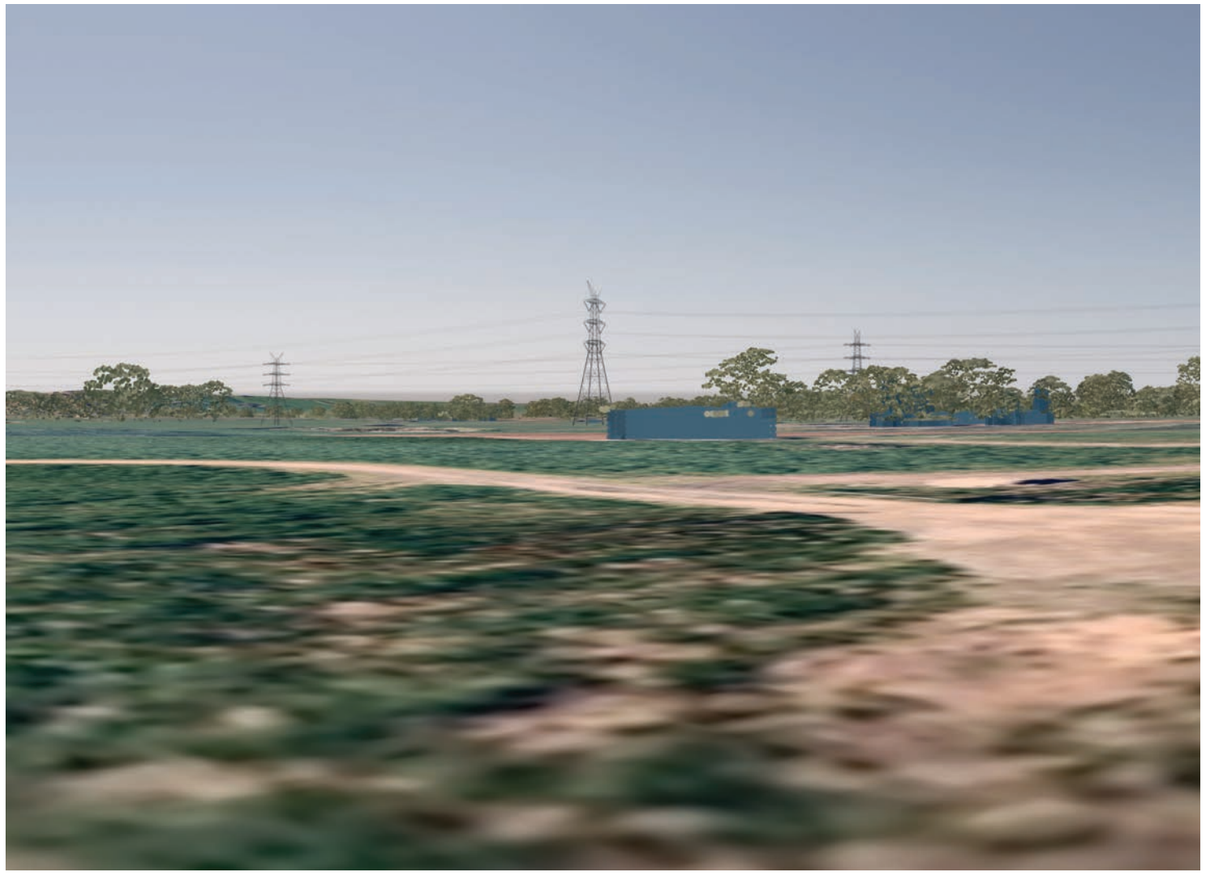
Indicative location of the project as shown in the EIS

Indicative location of the amended project

Dwelling A33

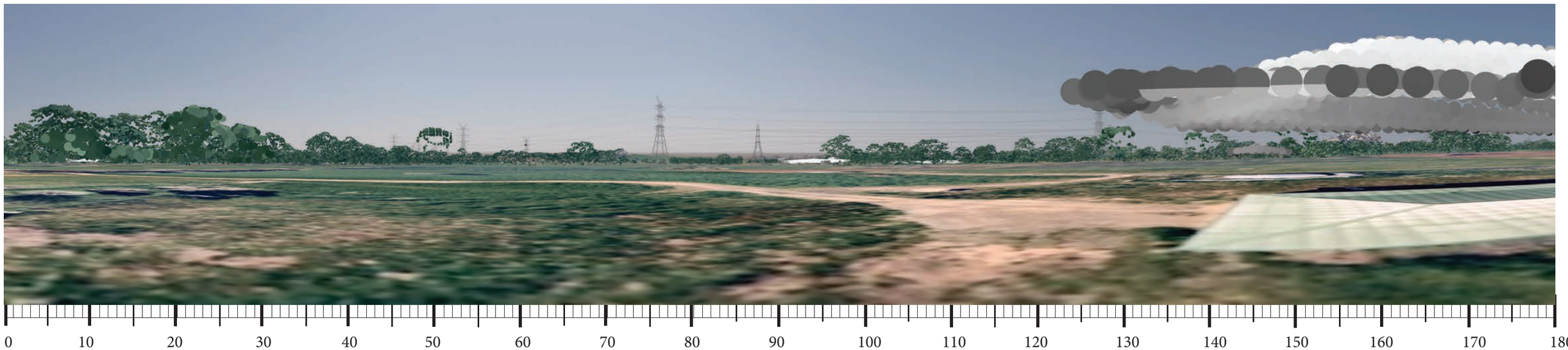
Address: 216 Ashfords Road, Gregadoo	Affected view: View from northern garden oriented towards the project footprint
Revised distance to project footprint: 390 metres	Potential level of visual impact of the amended project: **Moderate**
View details: • Project footprint located parallel and front of existing easement • would be visible and alignment angle would change direction.	Changes in amended project: • Project footprint moved further away from this dwelling, the project would be slightly less visible and less prominent.

Indicative location of the project as shown in the EIS (green - vegetation, light grey - buildings, grey - project)

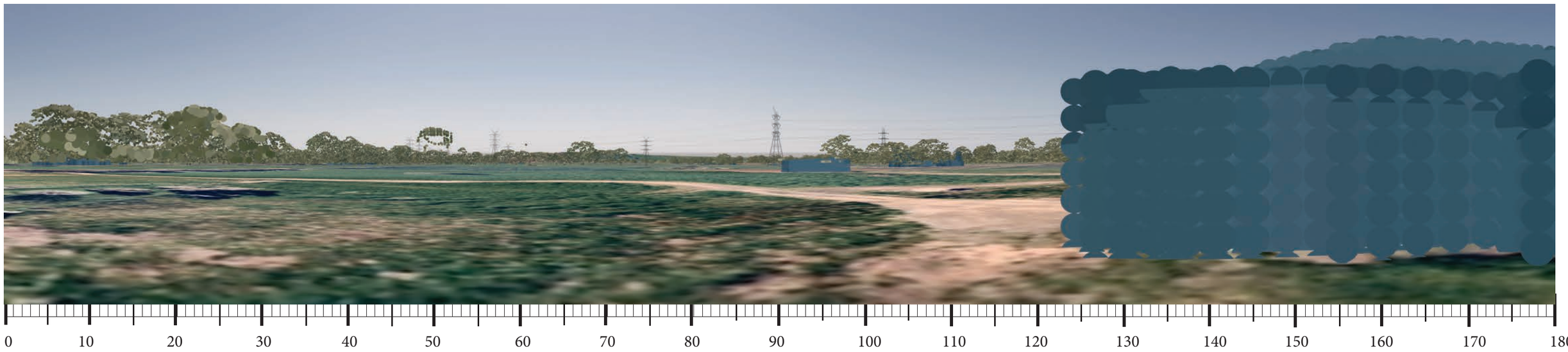


Indicative location of the amended project (green - vegetation, blue - buildings, grey - project)

Dwelling A33



Indicative location of the project as shown in the EIS (green dots - vegetation, light grey dots represent the roofline of building, dark grey - the project)



Indicative location of the amended project (green dots - vegetation, dark grey dots - buildings)

Dwelling A51

Address: 10 Ivydale Road, Gregadoo	Affected view: Southerly view from rear of dwelling and rear garden near pool, across fields to some existing transmission.
Revised distance to amended project footprint: 200 metres	Potential level of visual impact of the amended project: **High-moderate**
View details: • Amended project footprint, located beyond and parallel to existing easement • New structures would range between about double to triple height of existing structures, further detracting from the otherwise rural views, and further disrupt views to the backdrop of hills • Some existing vegetation would screen or filter views to lower section of structures.	Changes in amended project: • Amended project footprint moved closer to this dwelling, and the amended project would be slightly more visible and more prominent.

Existing view

Photomontage showing indicative location of the amended project

Location: 35°16’6.43”S, 147°29’3.57”E
Focal length: 50mm

Dwelling A51

Indicative location of the project as shown in the EIS

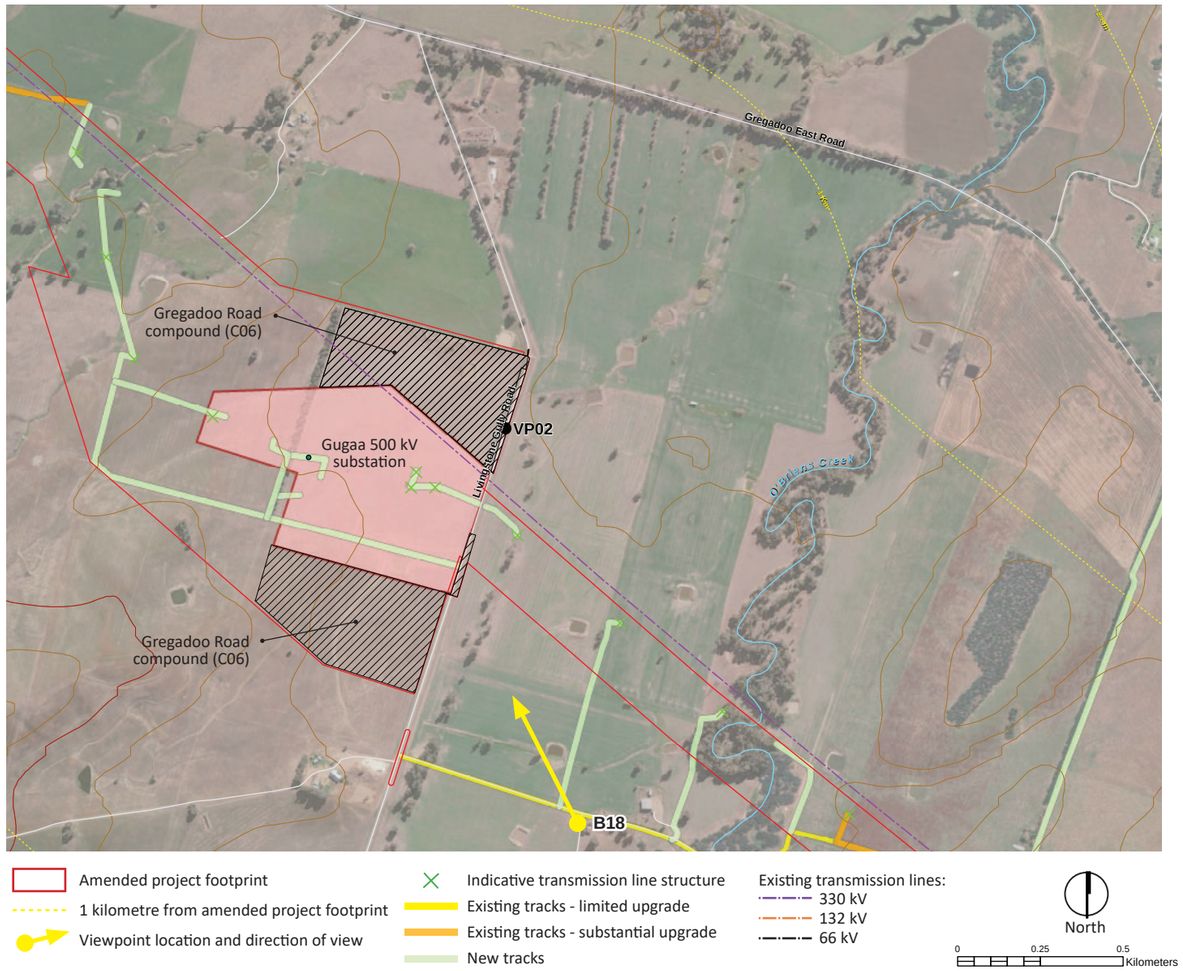
Indicative location of the amended project

Note: This page has been redacted due to sensitive information.

Note: This page has been redacted due to sensitive information.

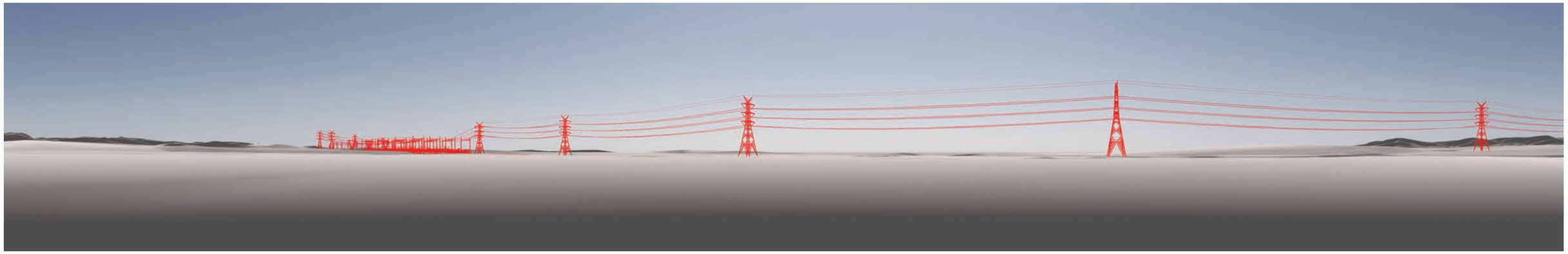
Dwelling B18

Address: 1070 Livingstone Gully Rd, Gregadoo	Affected view: North-westerly view from dwelling and rear garden
Revised distance to amended project footprint: No change (325 metres)	Potential level of visual impact of the amended project: **High-moderate**
View details: • Some intervening vegetation • Existing view to transmission lines • Existing 2 km section of Line 51 may be demolished and rebuilt • Amended project footprint closer than existing transmission lines • Proposed Gugaa 500 kV substation would be visible in front of the new transmission structures.	Changes in amended project: • Substation closer to viewer, however overall impact does not change



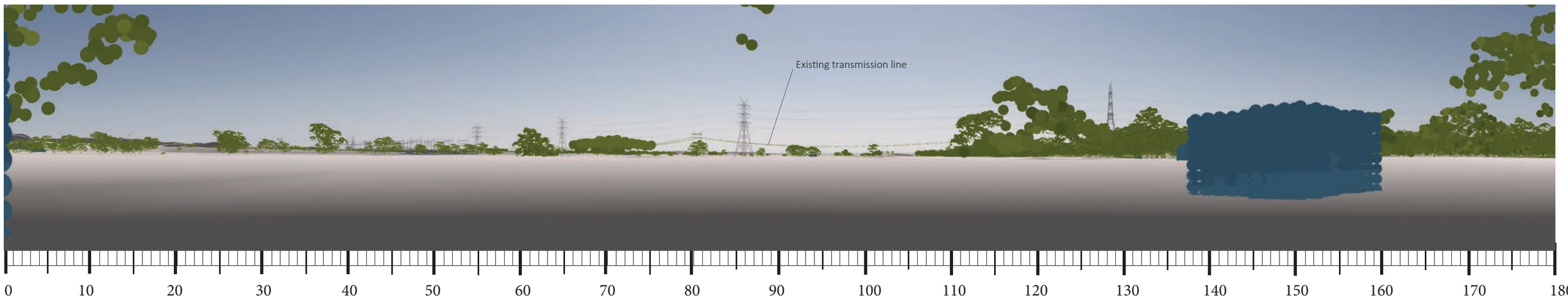
Dwelling B18

Indicative location of the amended project - Bare earth render (landform - grey, project - red)



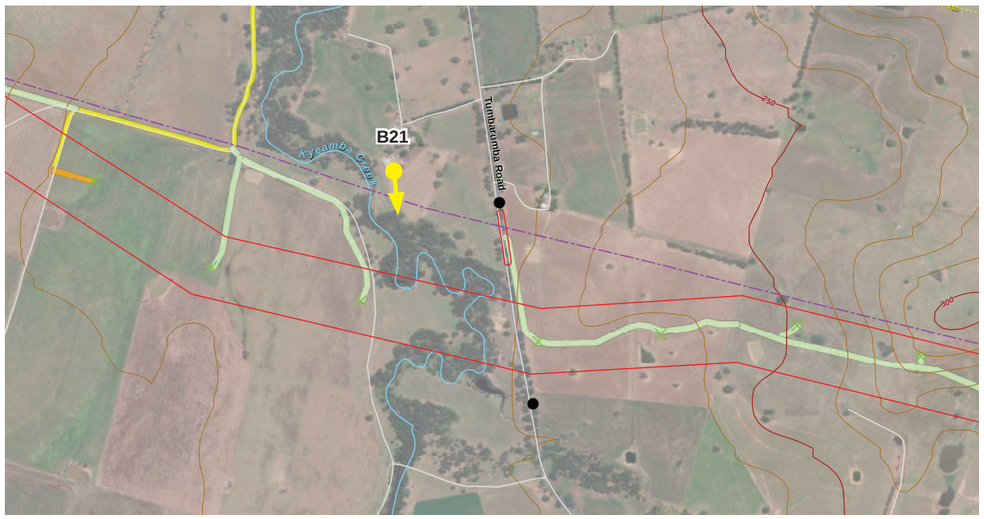
Indicative location of the amended project - 3D modelled view (landform - grey, buildings - blue, vegetation - green, project - red)

Indicative location of the amended project (landform - grey, buildings - blue, vegetation - green, project - dark grey)



Dwelling B21

Address: 8095 Tumbarumba Road	Affected view: South-westerly view from dwelling and rear garden
Revised distance to amended project footprint: 300 metres	Potential level of visual impact of the amended project: **Negligible**
View details: • View across field to amended project footprint, located beyond and parallel to existing easement • Tree clearing within new easement would be prominent and open up view • Vegetation to the south-west and large shed would limit views to the new transmission line structures somewhat.	Changes in amended project: • The alignment has been moved so that the amended project would be located to the south of intervening vegetation and largely out of view.

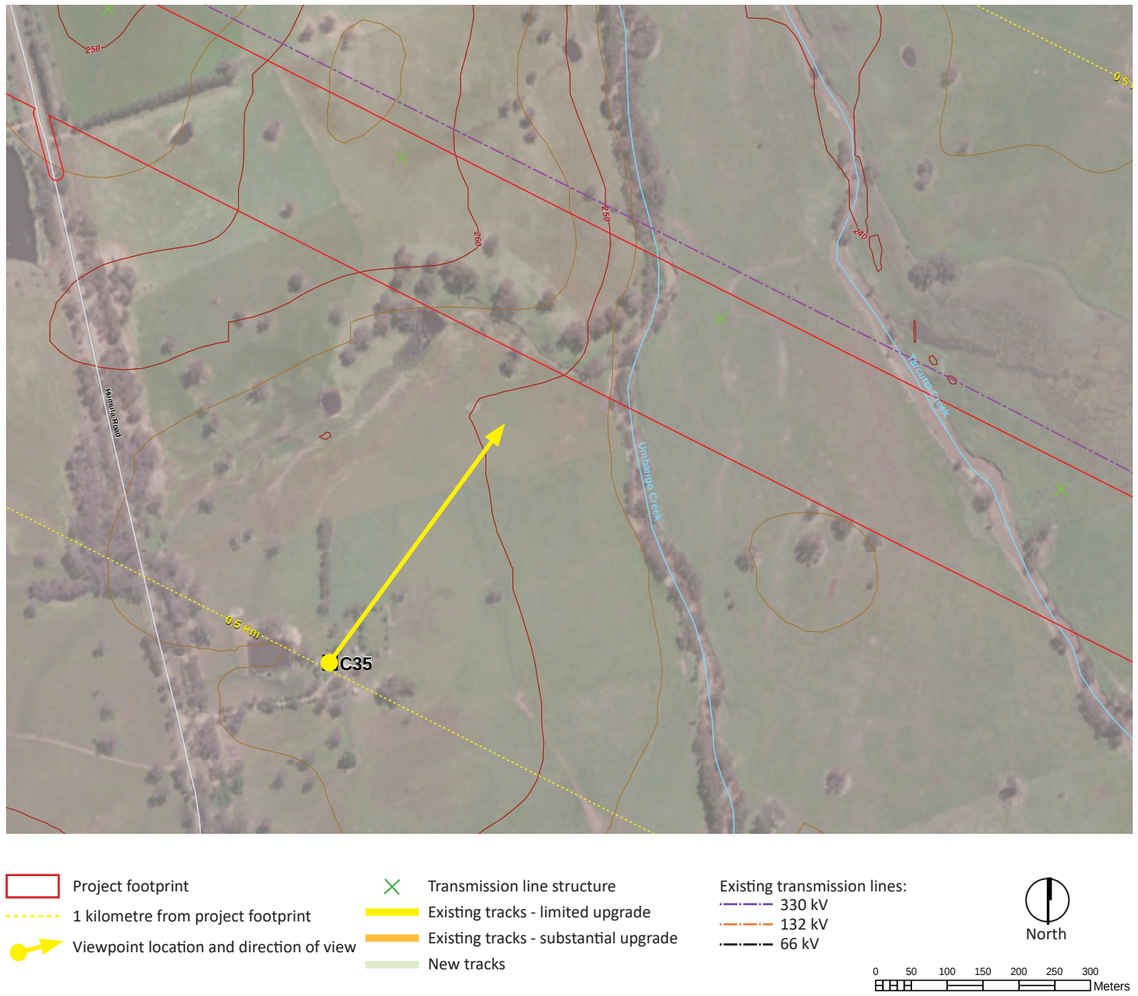


Amended project footprint
Viewpoint location and direction of view
Transmission line structure
Existing tracks - limited upgrade
Existing tracks - substantial upgrade
New tracks
Existing transmission lines:
330 kV
132 kV
66 kV
North
0 0.25 0.5 Kilometers

Panorama showing view from Tumbarumba Road towards the amended project footprint and existing transmission line

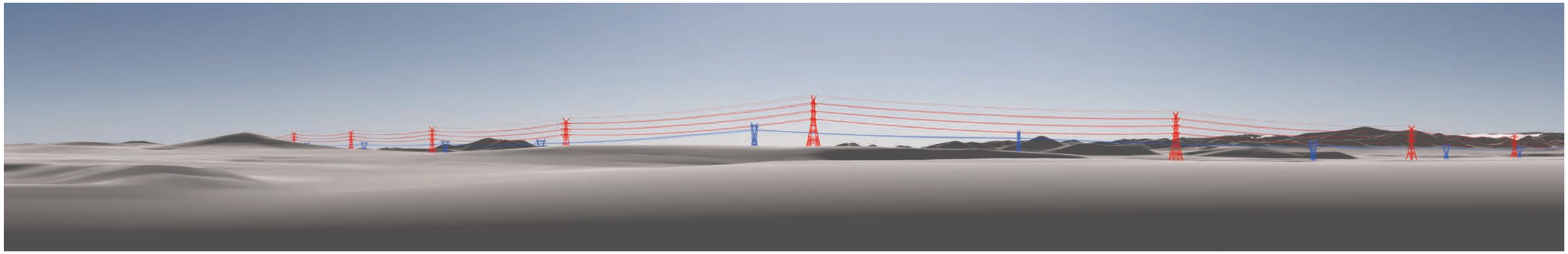
Dwelling C35

Address: 1532 Humula Road, Tarcutta	Affected view: North-easterly view from dwelling and garden
Revised distance to amended project footprint: No change (491 metres)	Potential level of visual impact of the amended project: **Moderate**
View details: • Some intervening vegetation • Existing view to transmission lines • Amended project footprint closer than existing transmission lines.	Changes in amended project: • No changes.

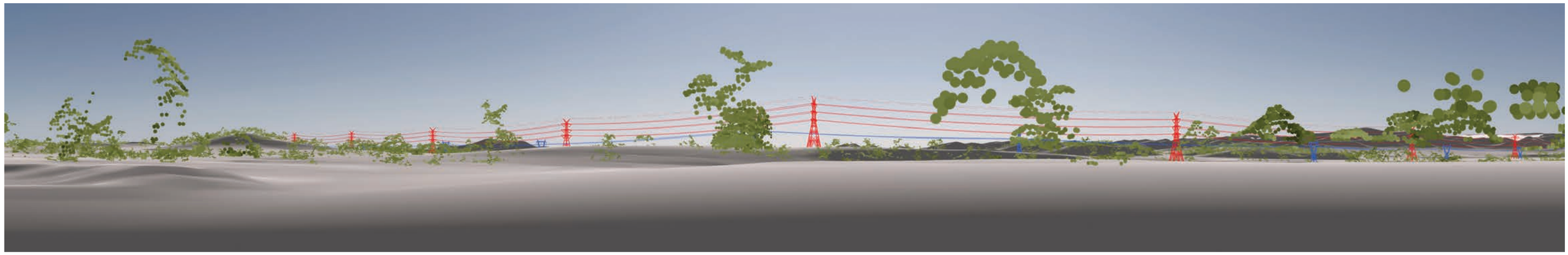


Dwelling C35

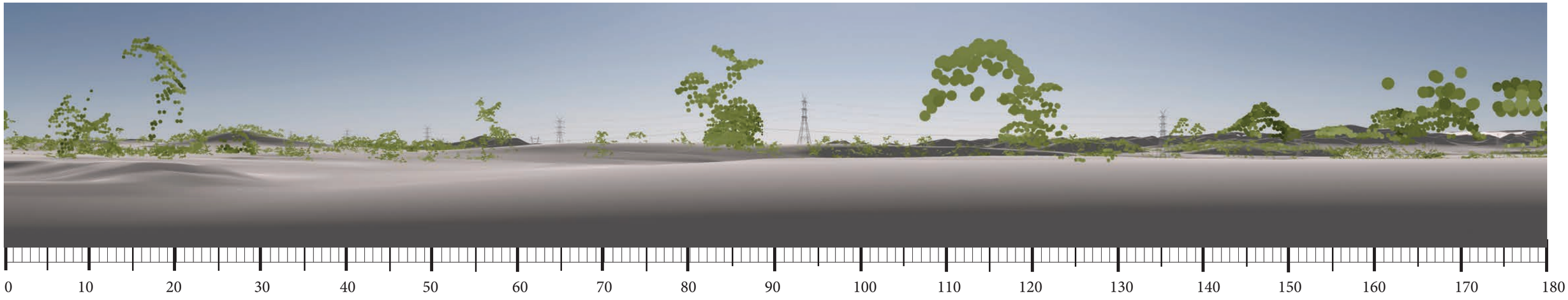
Indicative location of the amended project - Bare earth render (landform - grey, indicative model of existing transmission - blue, project - red)



Indicative location of the amended project - 3D modelled view (landform - grey, vegetation - green, indicative model of existing transmission - blue, project - red)

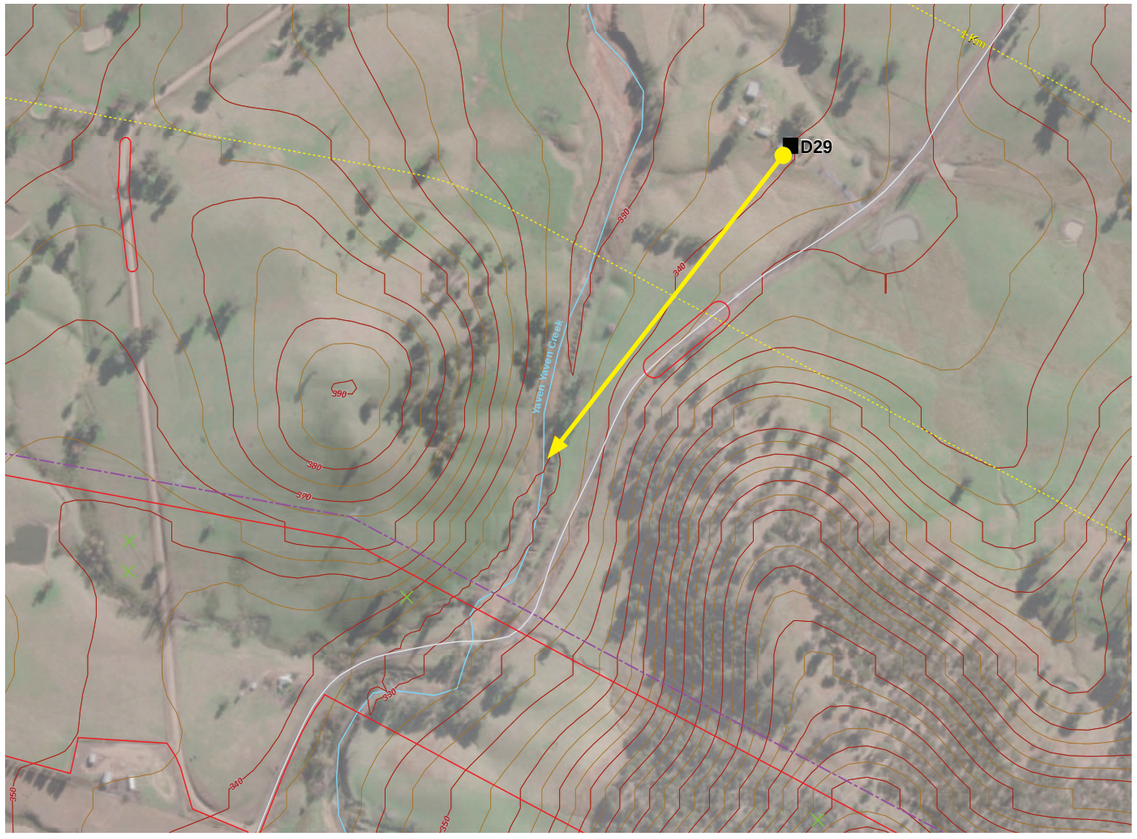


Indicative location of the amended project (landform - grey, vegetation - green, indicative model of existing transmission - dark grey, project - dark grey)



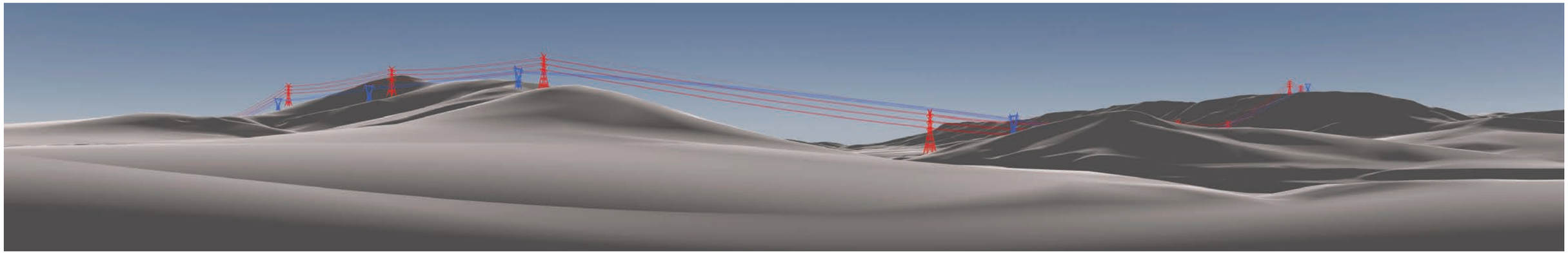
Dwelling D29

Address: 902-1064 Yaven Creek Rd, Darlow	Affected view: South-westerly view from dwelling and garden
Revised distance to amended project footprint:720 metres	Potential level of visual impact of the amended project: **Low**
View details: • View through Yaven Creek valley to amended project footprint • Existing transmission line seen in view • New transmission line structures would cross and be viewed against rural hillsides.	Changes in amended project • Additional structures for the transposition would be out of view.

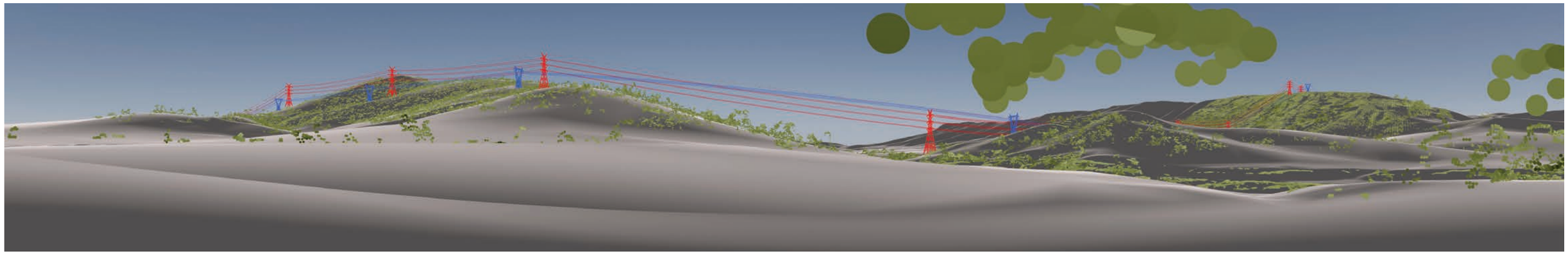


Dwelling D29

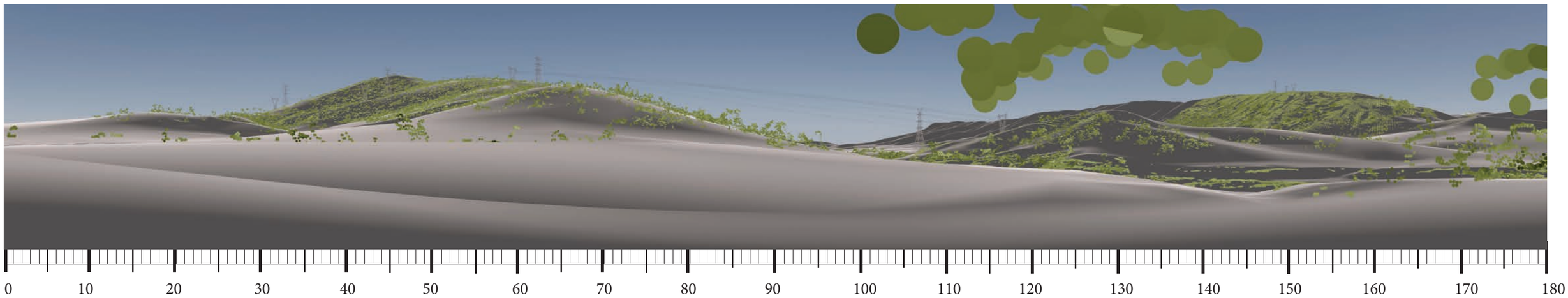
Indicative location of the amended project - Bare earth render (landform - grey, indicative model of existing transmission - blue, project - red)



Indicative location of the amended project - 3D modelled view (landform - grey, vegetation - green, indicative model of existing transmission - blue, project - red)



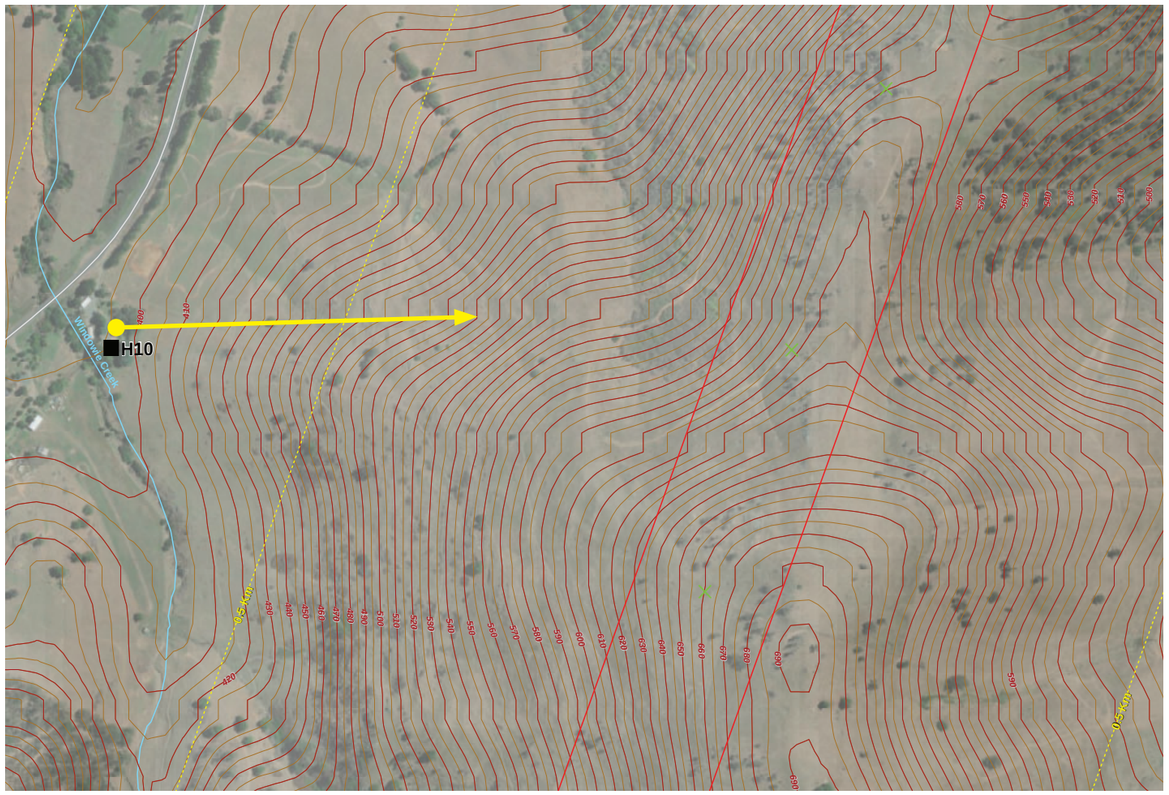
Indicative location of the amended project (landform - grey, vegetation - green, indicative model of existing transmission - dark grey, project - dark grey)



NOTE: Degrees represent horizontal field of view

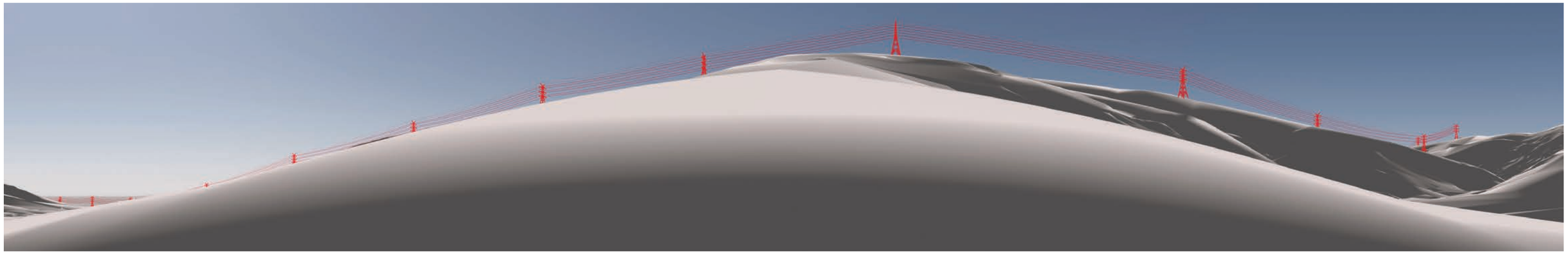
Dwelling H10

Address: Batlow Road, Tumut	Affected view: Easterly view from dwelling and garden
Revised distance to amended project footprint: 806 metres	Potential level of visual impact of the amendment: **Low**
View details: • View from Windowie Creek valley to amended project footprint • No existing transmission line in vicinity of dwelling • New transmission line structures would cross hillsides and be viewed against skyline.	Changes in amended project: • Amended project footprint moves further away from this dwelling.

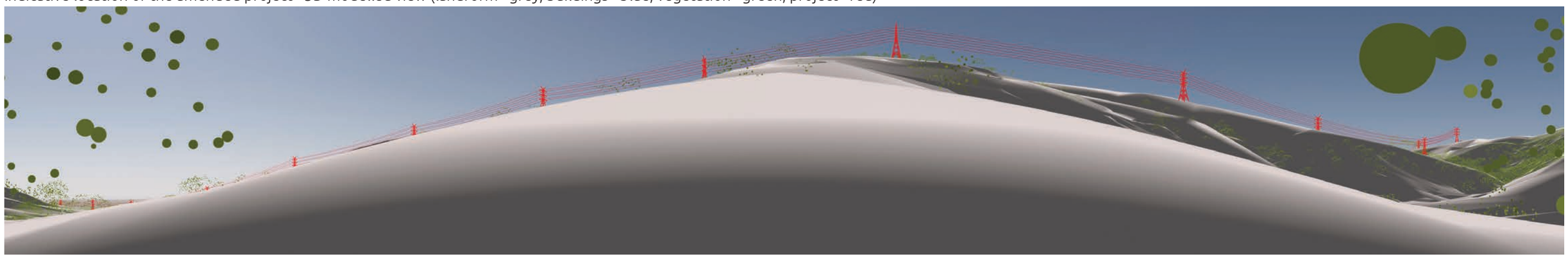


Dwelling H10

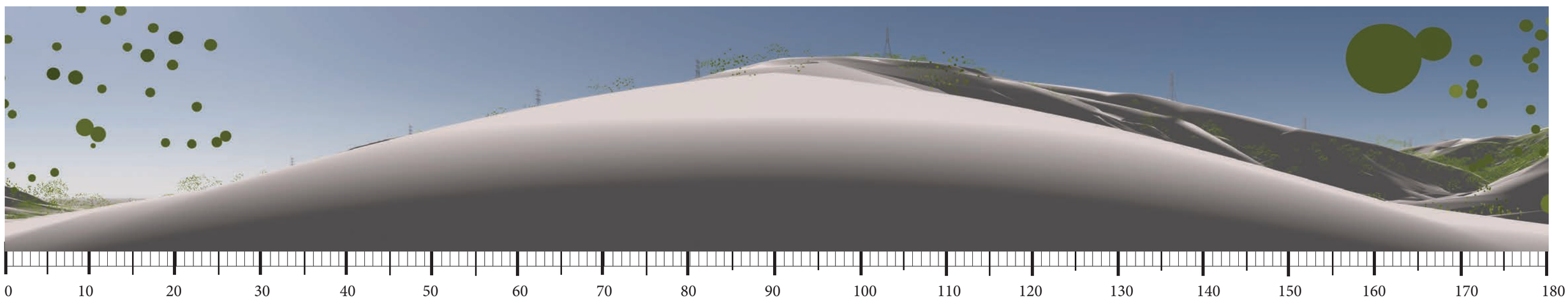
Indicative location of the amended project - Bare earth render (landform - grey, project - red)



Indicative location of the amended project - 3D modelled view (landform - grey, buildings - blue, vegetation - green, project - red)

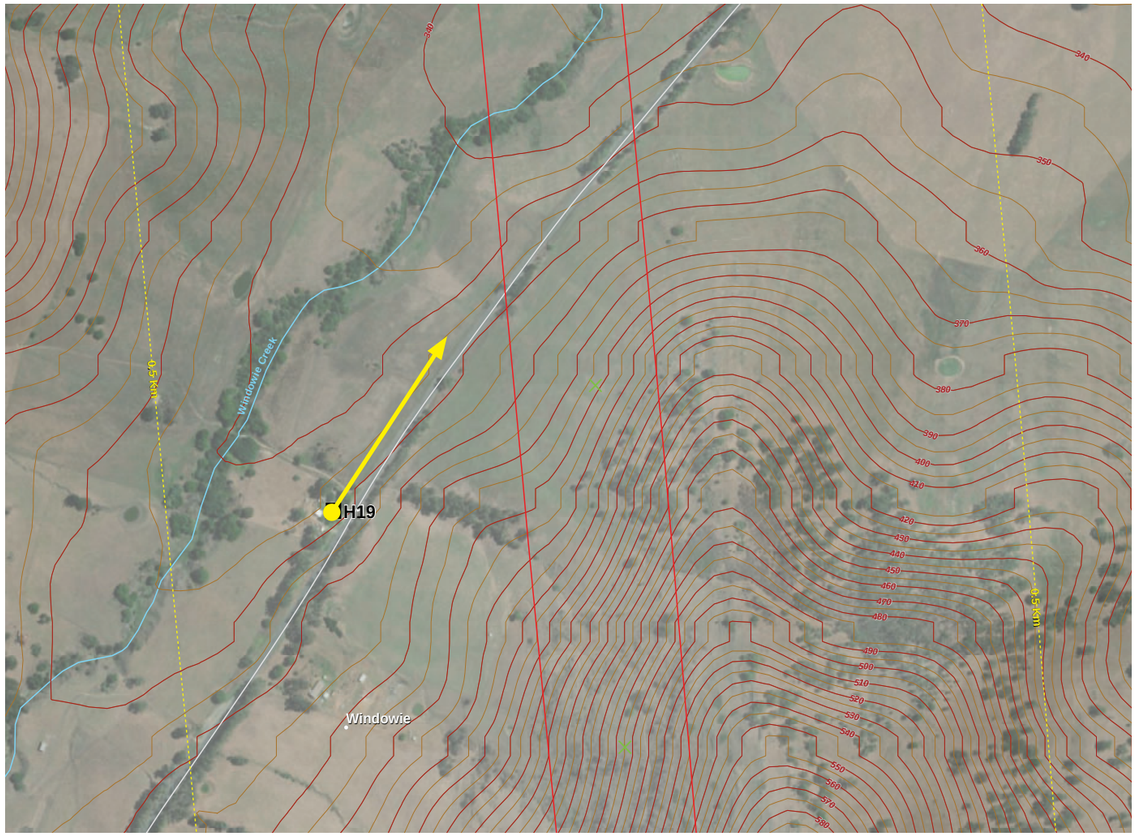


Indicative location of the amended project (landform - grey, buildings - blue, vegetation - green, project - dark grey)



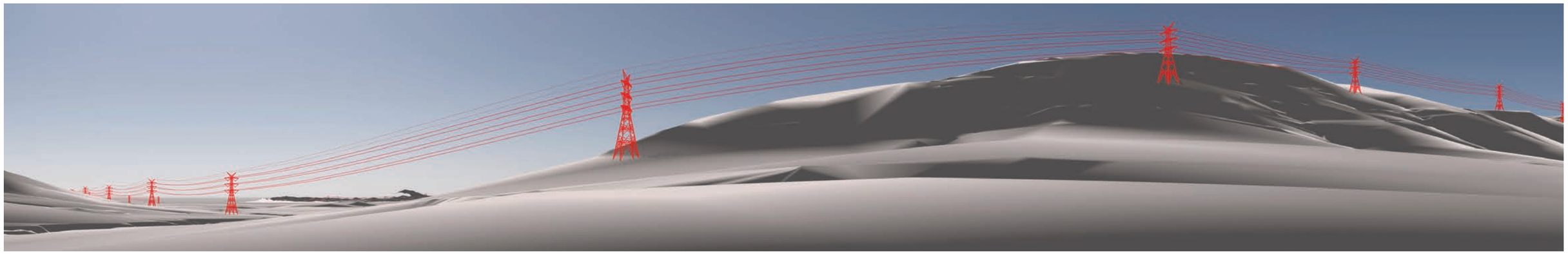
Dwelling H19

Address: Batlow Road, Windowie	Affected view: North-easterly view from dwelling and garden
Revised distance to amended project footprint: 266+ metres	Potential level of visual impact of the amended project: **Moderate-low**
View details: • View along Windowie Creek valley to amended project footprint • No existing transmission line in vicinity of dwelling • New transmission line structures would cross hillsides and extend through Windowie Creek valley.	Changes in amended project: • Amended project footprint moves further away from this dwelling as it crosses the hillside.

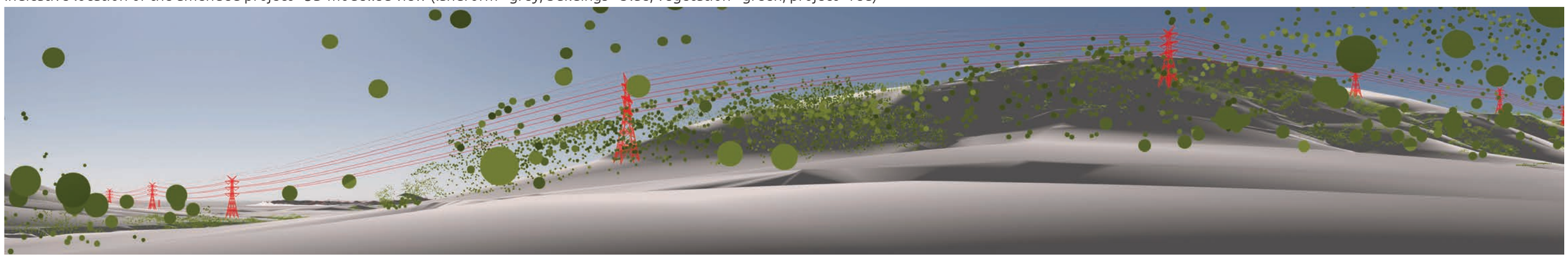


Dwelling H19

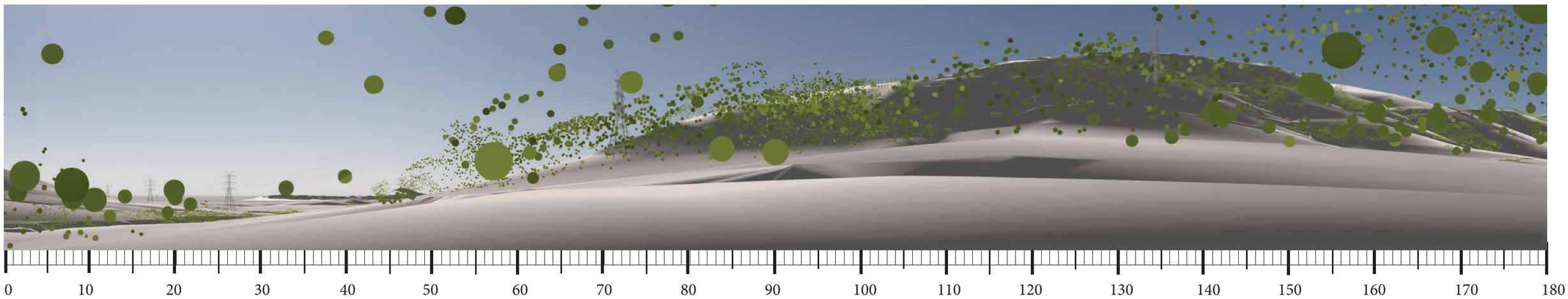
Indicative location of the amended project - Bare earth render (landform - grey, project - red)



Indicative location of the amended project - 3D modelled view (landform - grey, buildings - blue, vegetation - green, project - red)

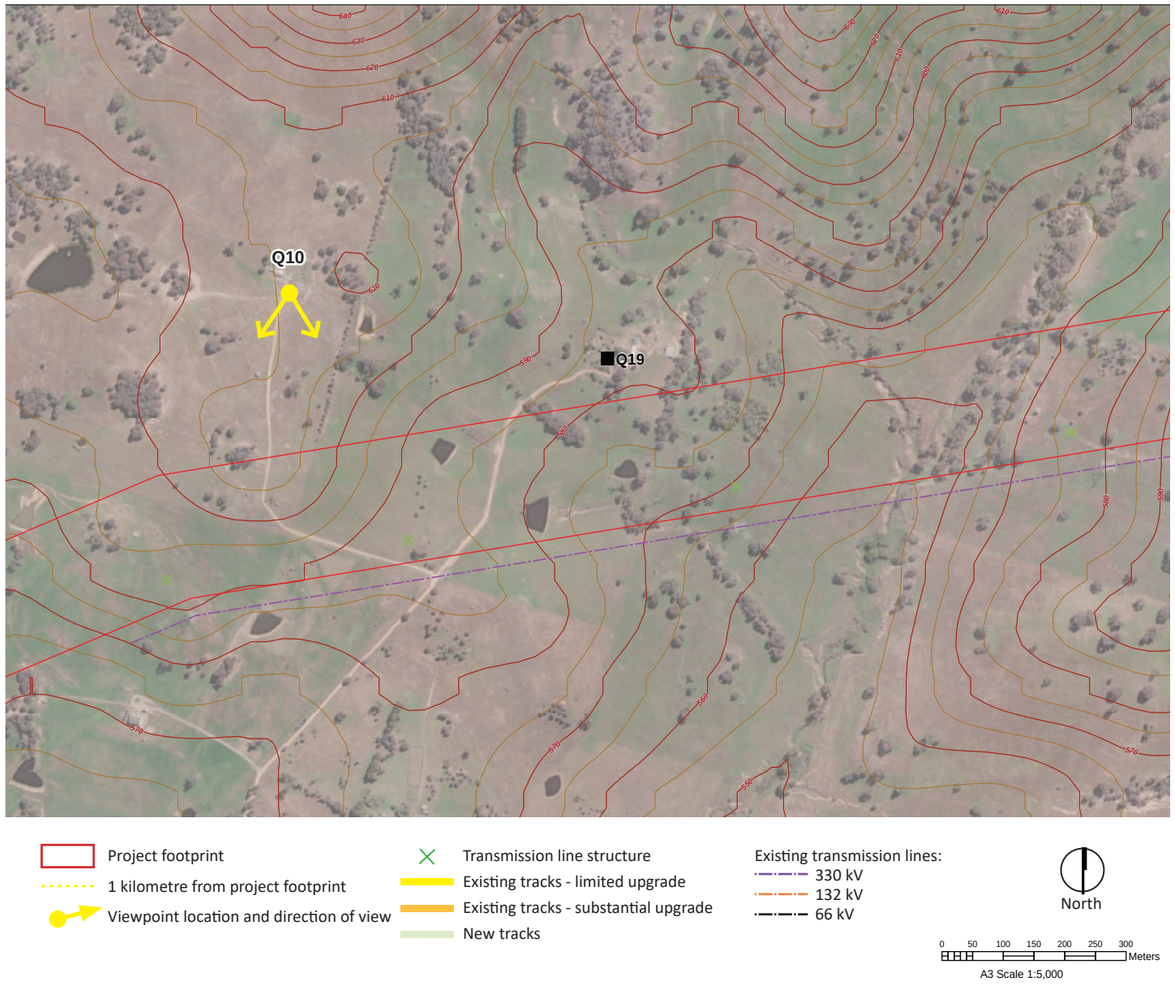


Indicative location of the amended project (landform - grey, buildings - blue, vegetation - green, project - dark grey)



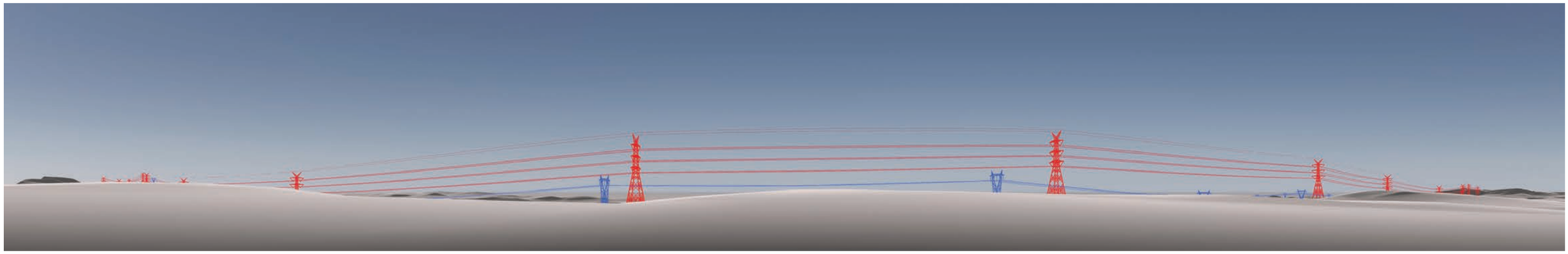
Dwelling Q10

Address: 557 Fairy Hole Road, Bango	Affected view: Southerly view from dwelling and garden. Appears to be secondary view.
Revised distance to amended project footprint: No change (283 metres)	Potential level of visual impact of the amended project: **Moderate**
View details: • Some intervening vegetation • Existing transmission lines • Amended project footprint closer than existing transmission lines	Changes in amended project: • No change.

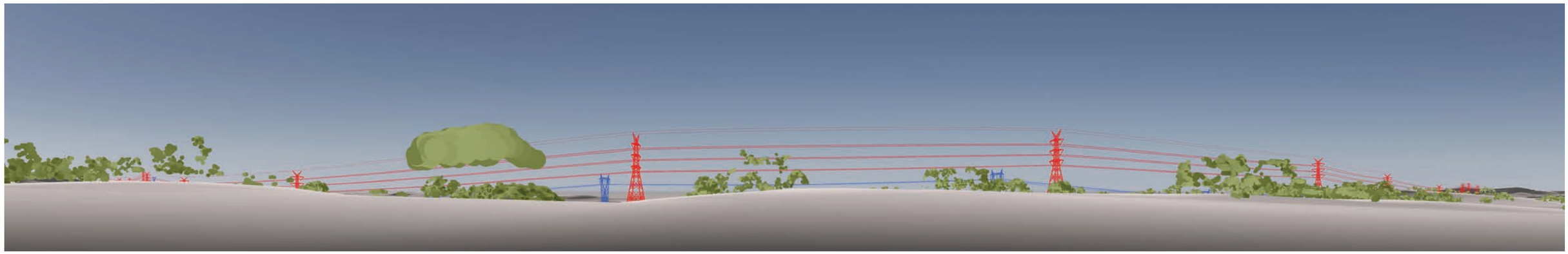


Dwelling Q10

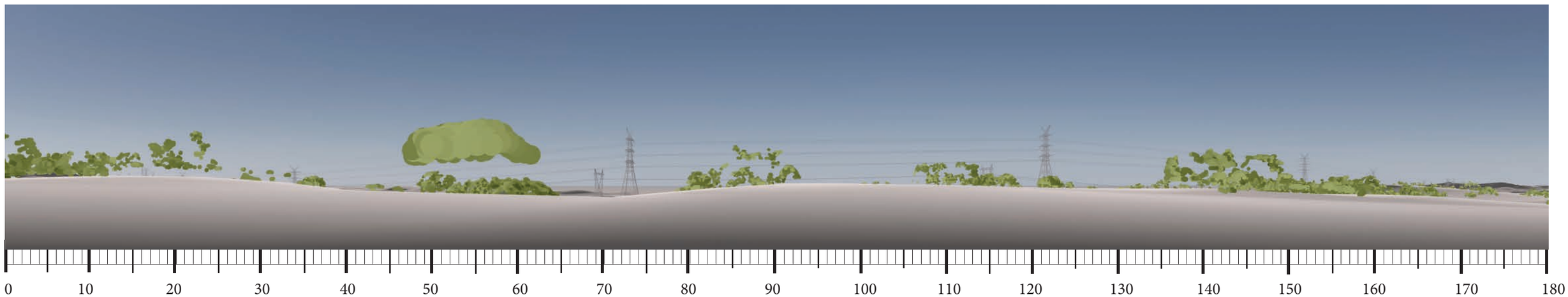
Indicative location of the amended project - Bare earth render (landform - grey, indicative model of existing transmission - blue, project - red)



Indicative location of the amended project - 3D modelled view (landform - grey, vegetation - green, indicative model of existing transmission - blue, project - red)



Indicative location of the amended project (landform - grey, vegetation - green, indicative model of existing transmission - dark grey, project - dark grey)



Dwelling R24

Address: 31 Felled Timber Road, Dalton	Affected view: Northerly view from dwelling and garden
Revised distance to amended project footprint: No change (325 metres)	Potential level of visual impact of the amended project: **Moderate**
View details: • Limited existing intervening vegetation • Existing view to transmission lines.	Changes in amended project: • No change.

Project footprint
1 kilometre from project footprint
Viewpoint location and direction of view
Transmission line structure
Existing tracks - limited upgrade
Existing tracks - substantial upgrade
New tracks

Existing transmission lines:
330 kV
132 kV
66 kV

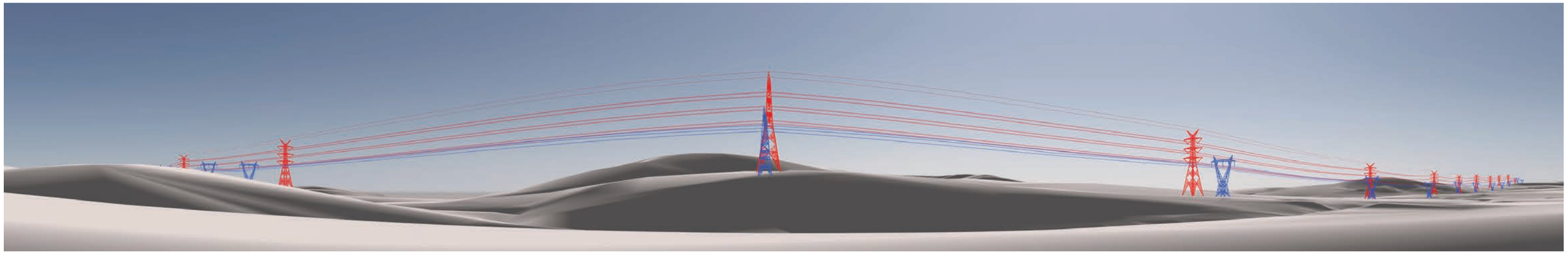
North

0 50 100 150 200 250 300 Meters

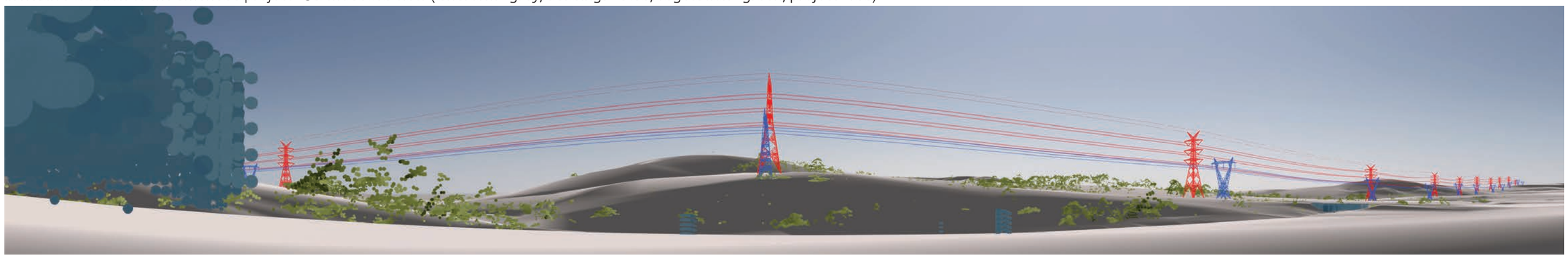
A3 Scale 1:5,000

Dwelling R24

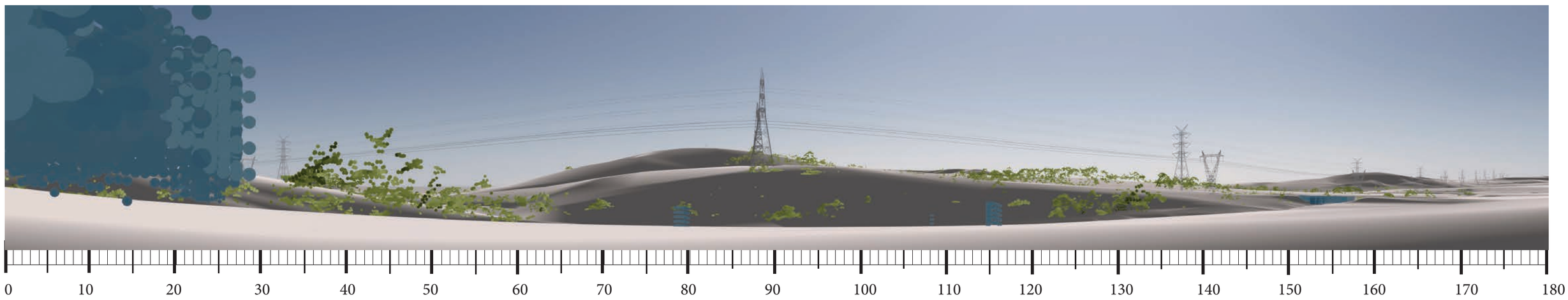
Indicative location of the amended project - Bare earth render (landform - grey, project - red)



Indicative location of the amended project - 3D modelled view (landform - grey, buildings - blue, vegetation - green, project - red)

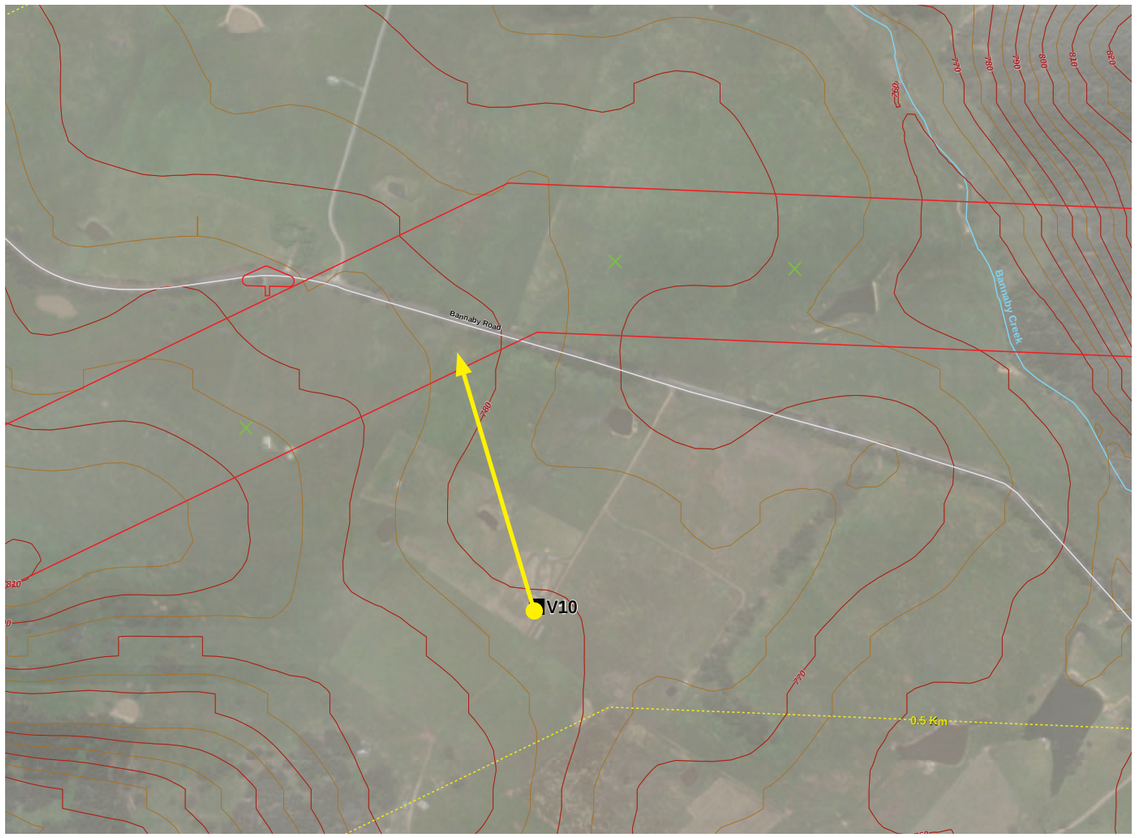


Indicative location of the amended project (landform - grey, buildings - blue, vegetation - green, project - dark grey)



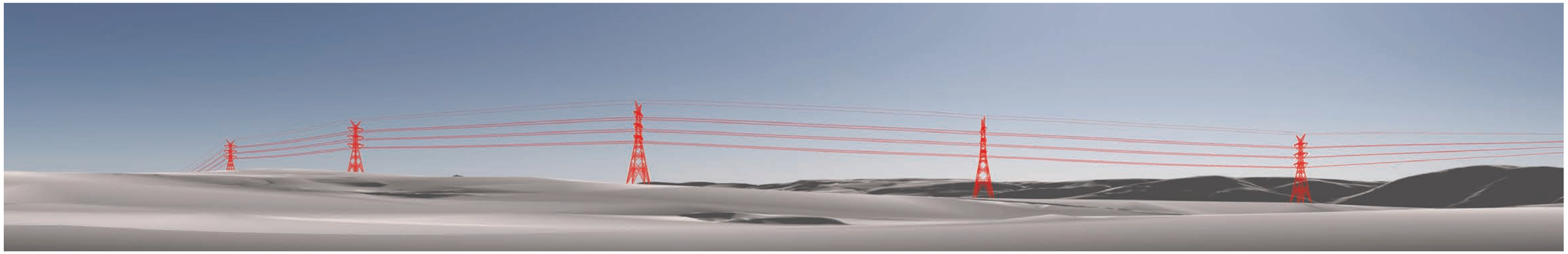
Dwelling V10

Address: 1344 Bannaby Road, Bannaby	Affected view: Northerly view from dwelling and garden
Revised distance to amended project footprint: No change (336 metres)	Potential level of visual impact of the amended project: **High-moderate**
View details: • Limited existing intervening vegetation • Existing view to transmission lines.	Changes in amended project: • No change.

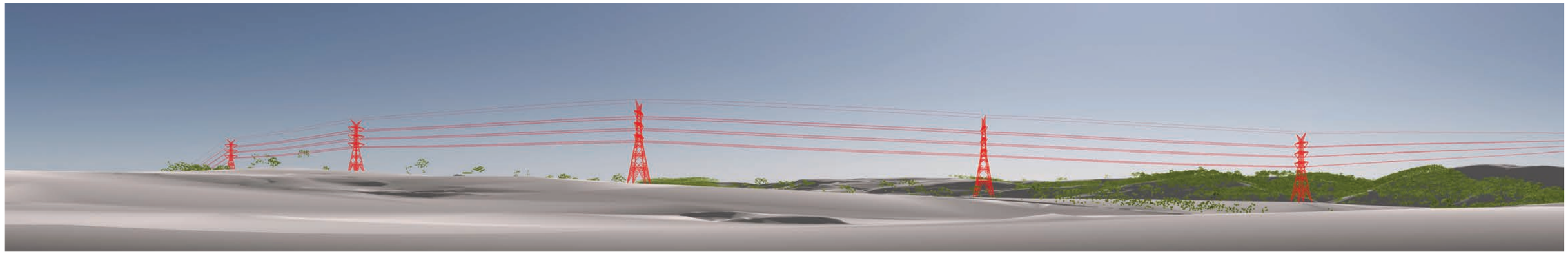


Dwelling V10

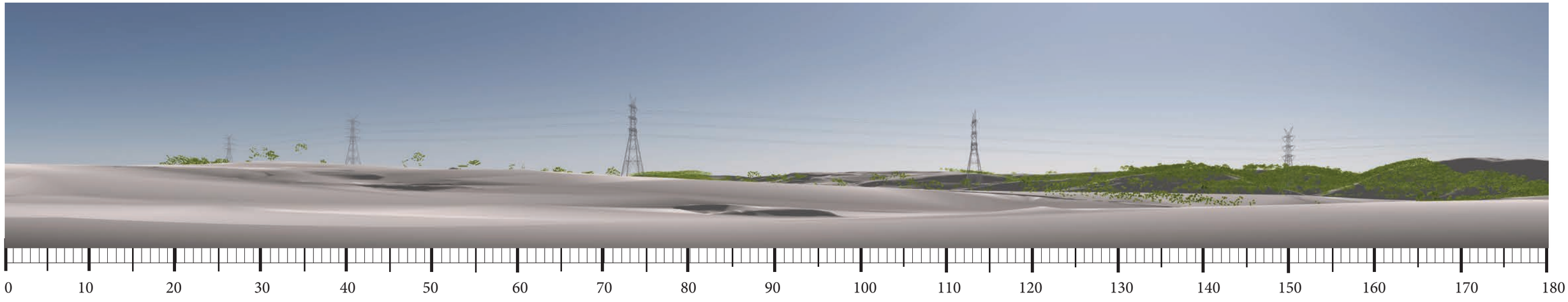
Indicative location of the amended project - Bare earth render (landform - grey, project - red)



Indicative location of the amended project - 3D modelled view (landform - grey, buildings - blue, vegetation - green, project - red)

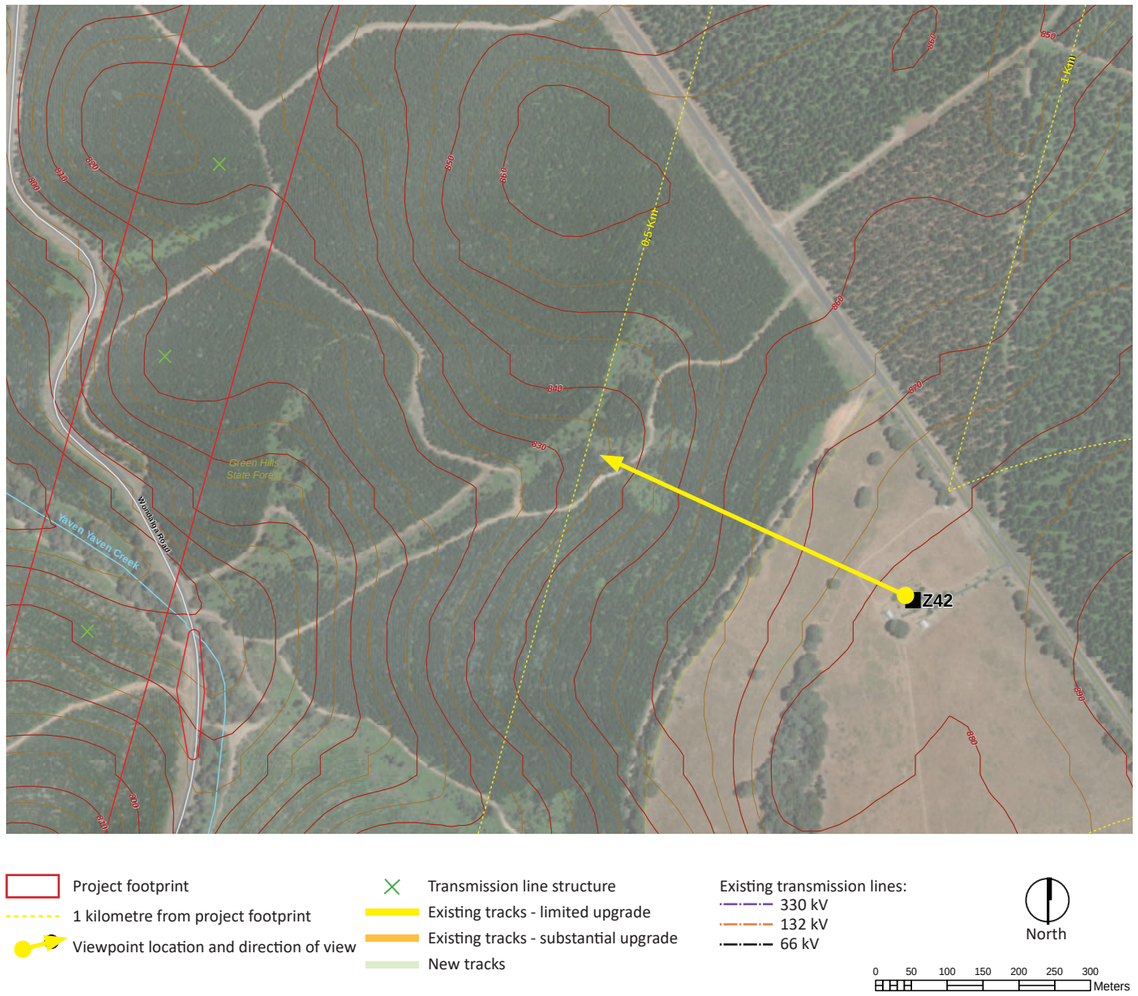


Indicative location of the amended project (landform - grey, buildings - blue, vegetation - green, project - dark grey)



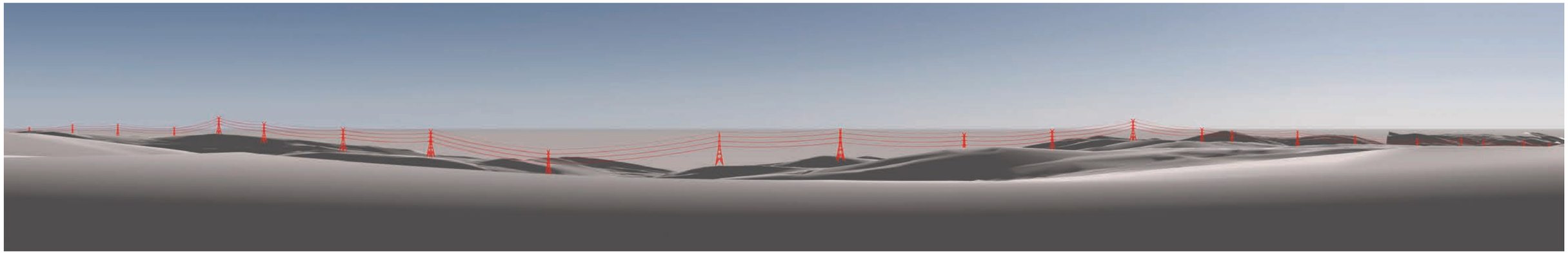
Dwelling Z42

Address: 323 Green Hills Access Road, Kunama	Affected view: Westerly view from dwelling and garden
Revised distance to amended project footprint: 892 metres	Potential level of visual impact of the amended project: **Low**
View details: • Some intervening vegetation • View to forestry • Distance reduces visual effect.	Changes in amended project: • New Green Hills section of the amended project.

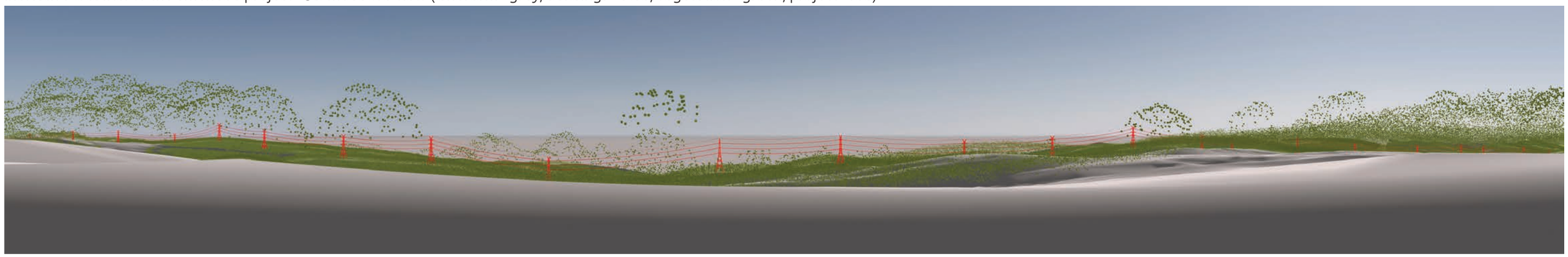


Dwelling Z42

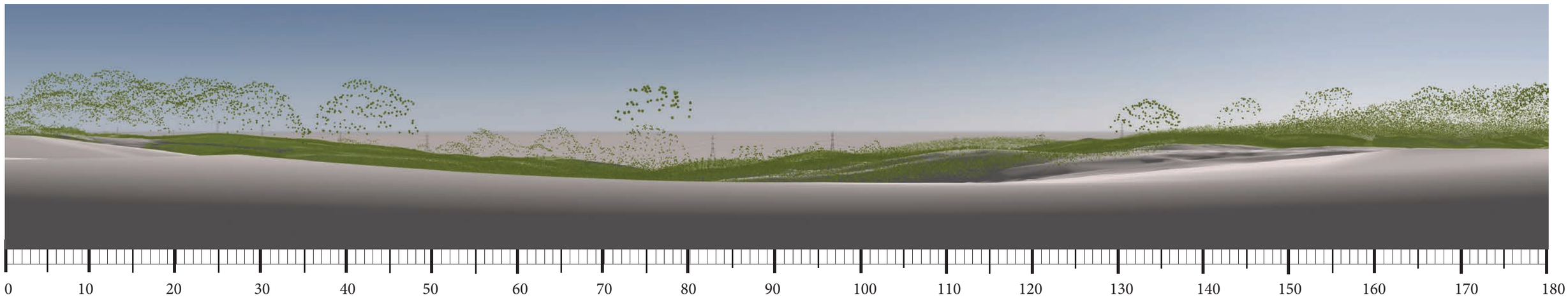
Indicative location of the amended project - Bare earth render (landform - grey, project - red)



Indicative location of the amended project - 3D modelled view (landform - grey, buildings - blue, vegetation - green, project - red)



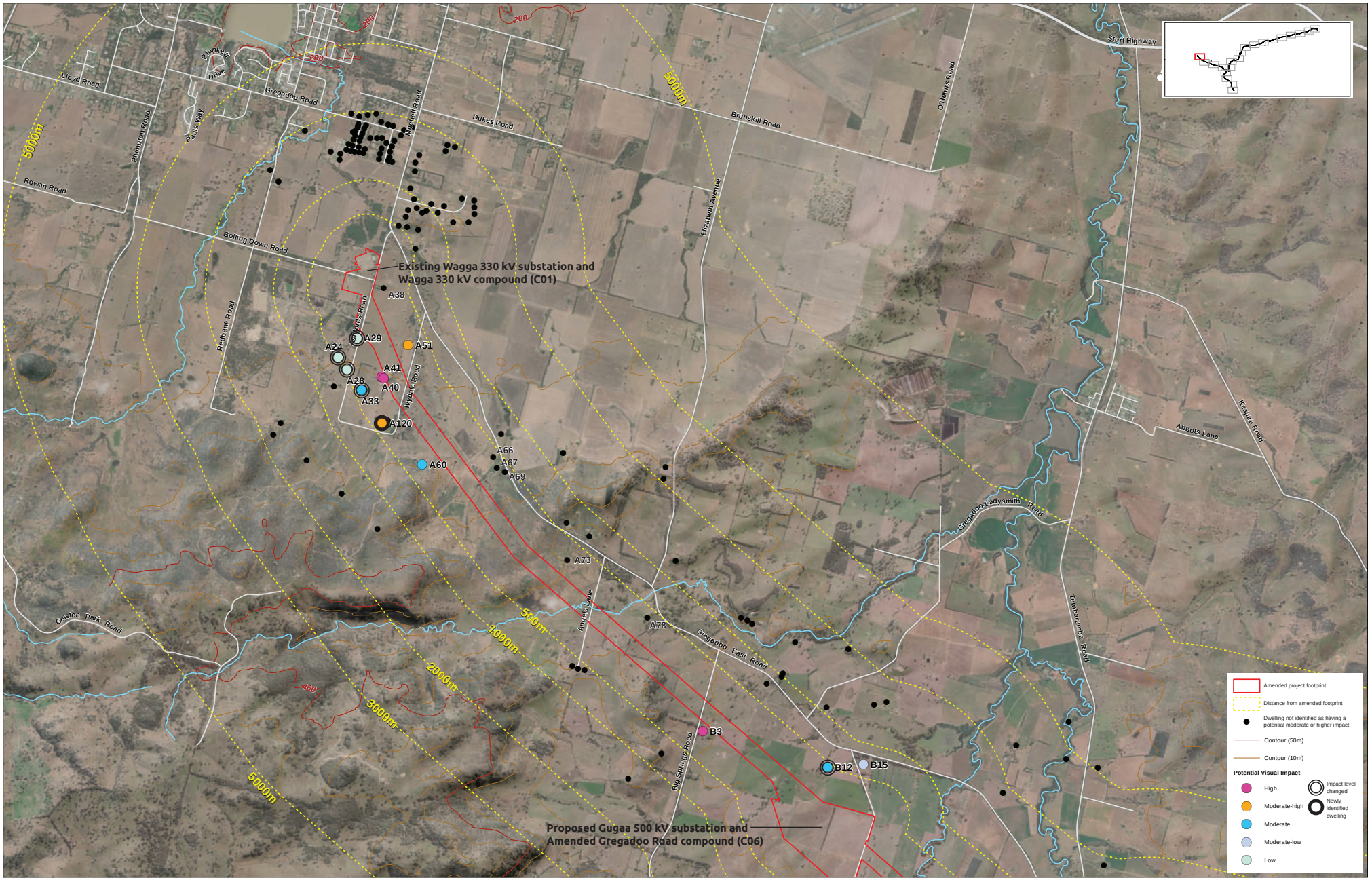
Indicative location of the amended project (landform - grey, buildings - blue, vegetation - green, project - dark grey)



NOTE: Degrees represent horizontal field of view

Attachment J

Private residence impact level plans



File: HumeLink-Fig4- SensitiveReceivers-240220

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Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT J - **Private dwelling assessment** (Wagga Wagga to Gregadoo)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011

File: HumeLink-Fig4- SensitiveReceivers-240220

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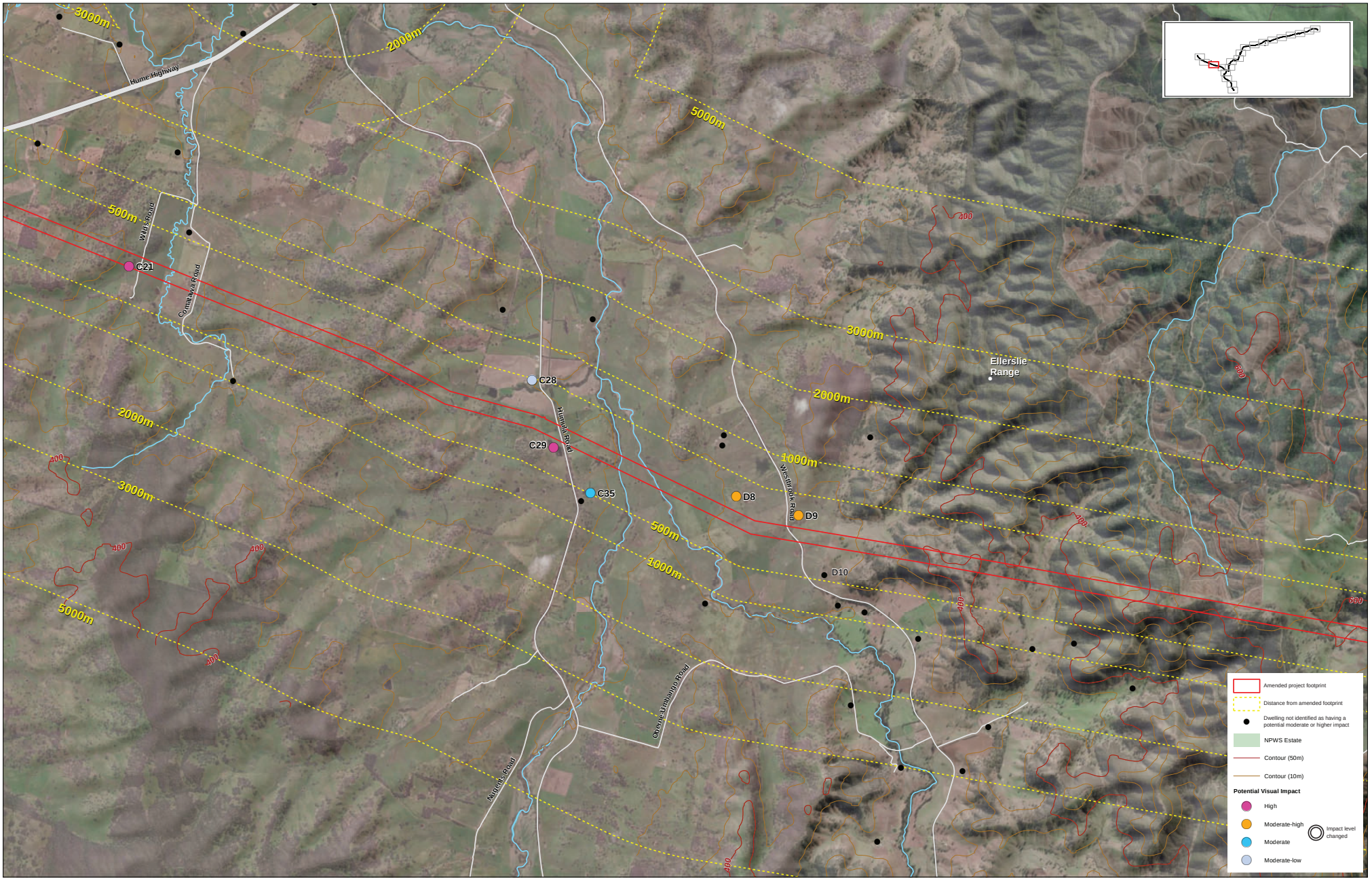
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT J - **Private dwelling assessment** (Gregadoo to Hume Highway, Tarcutta)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



File: HumeLink-Fig4- SensitiveReceivers-240220

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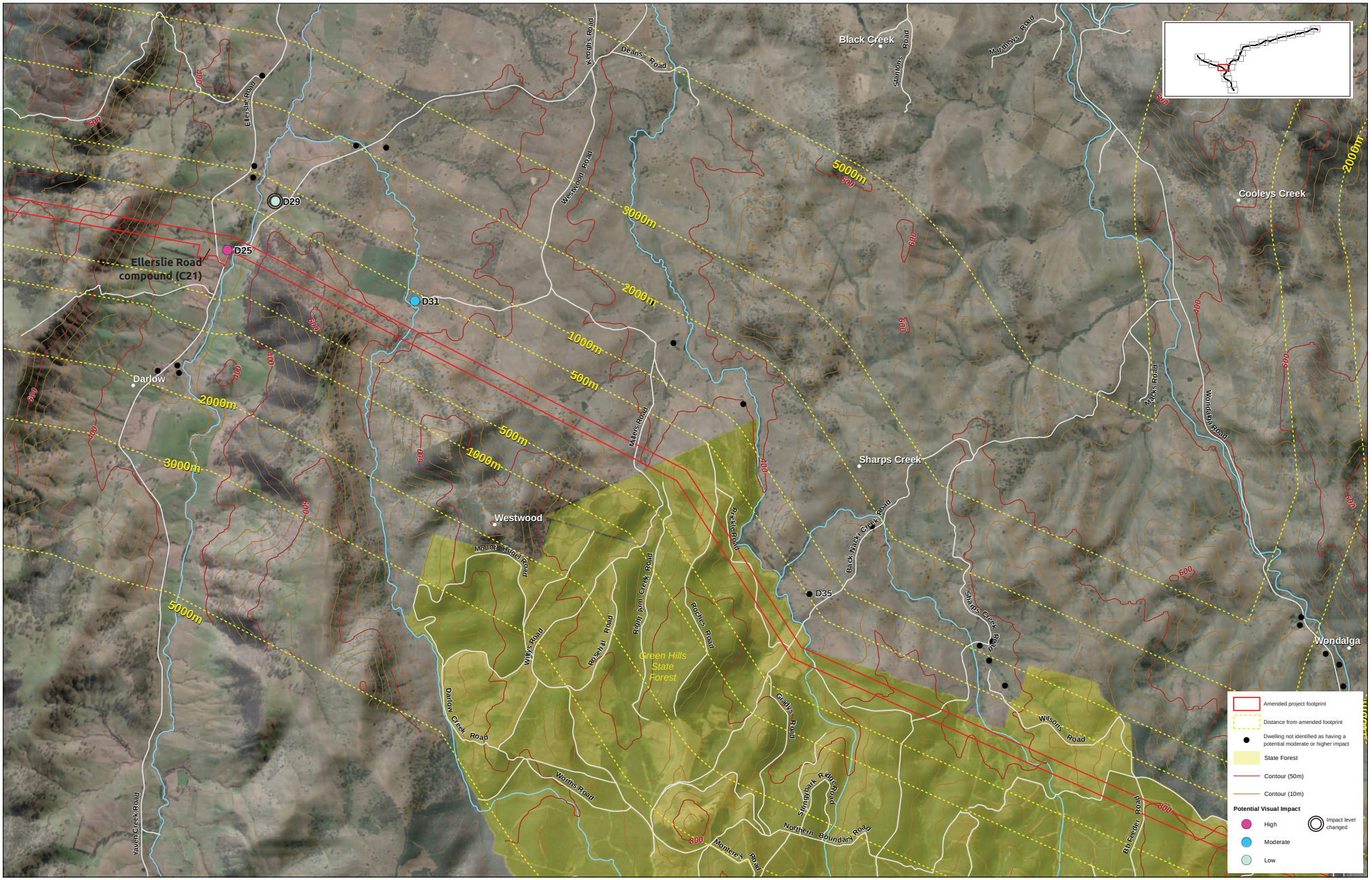
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT J - **Private dwelling assessment** (Hume Highway, Tarcutta to Tumut and Ellerslie Range)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



File: HumeLink-Fig4- SensitiveReceivers-240220

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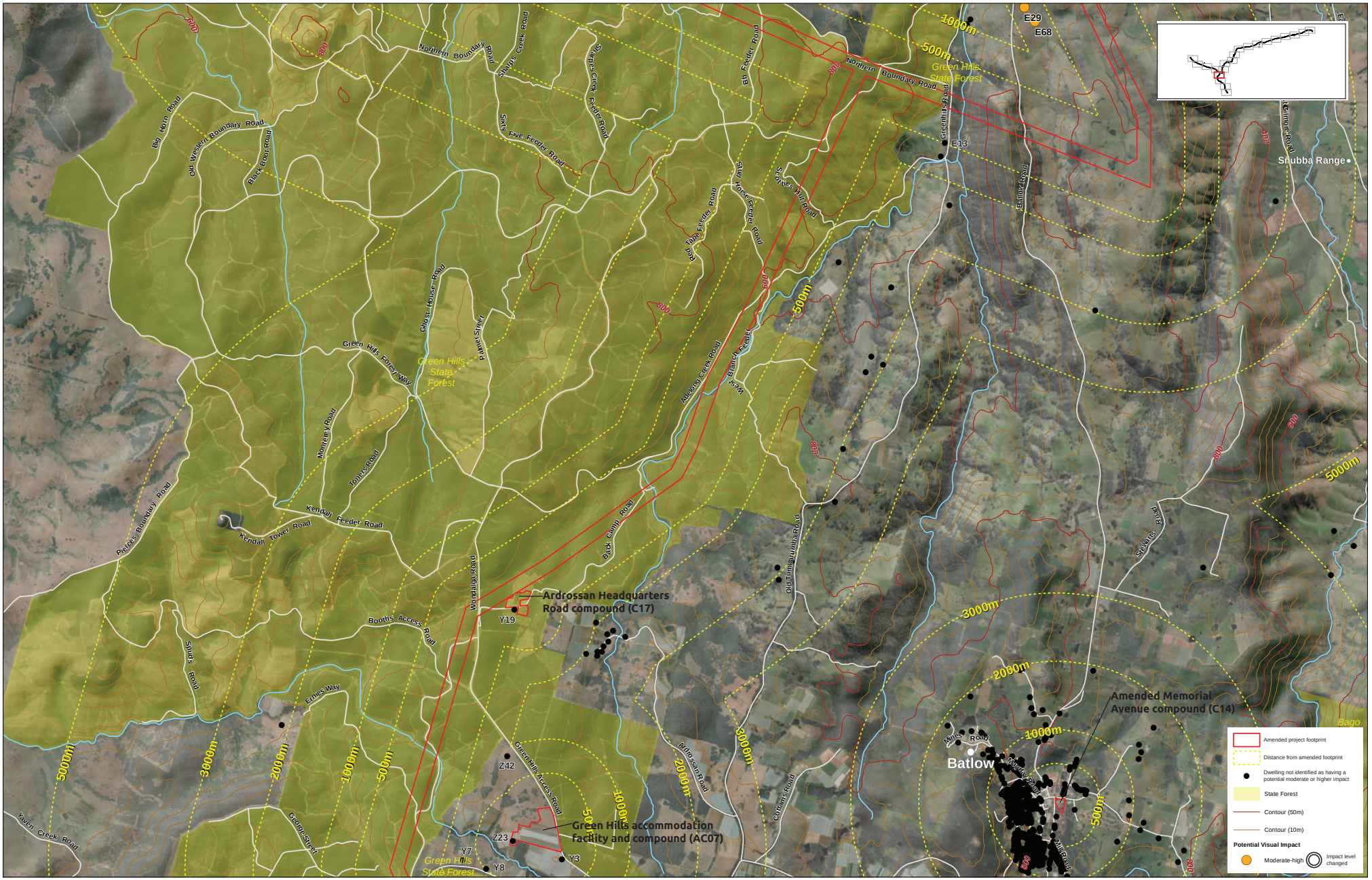
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT J - **Private dwelling assessment** (Ellerslie Range to Wondalga)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



File: HumeLink-Fig4- SensitiveReceivers-240220

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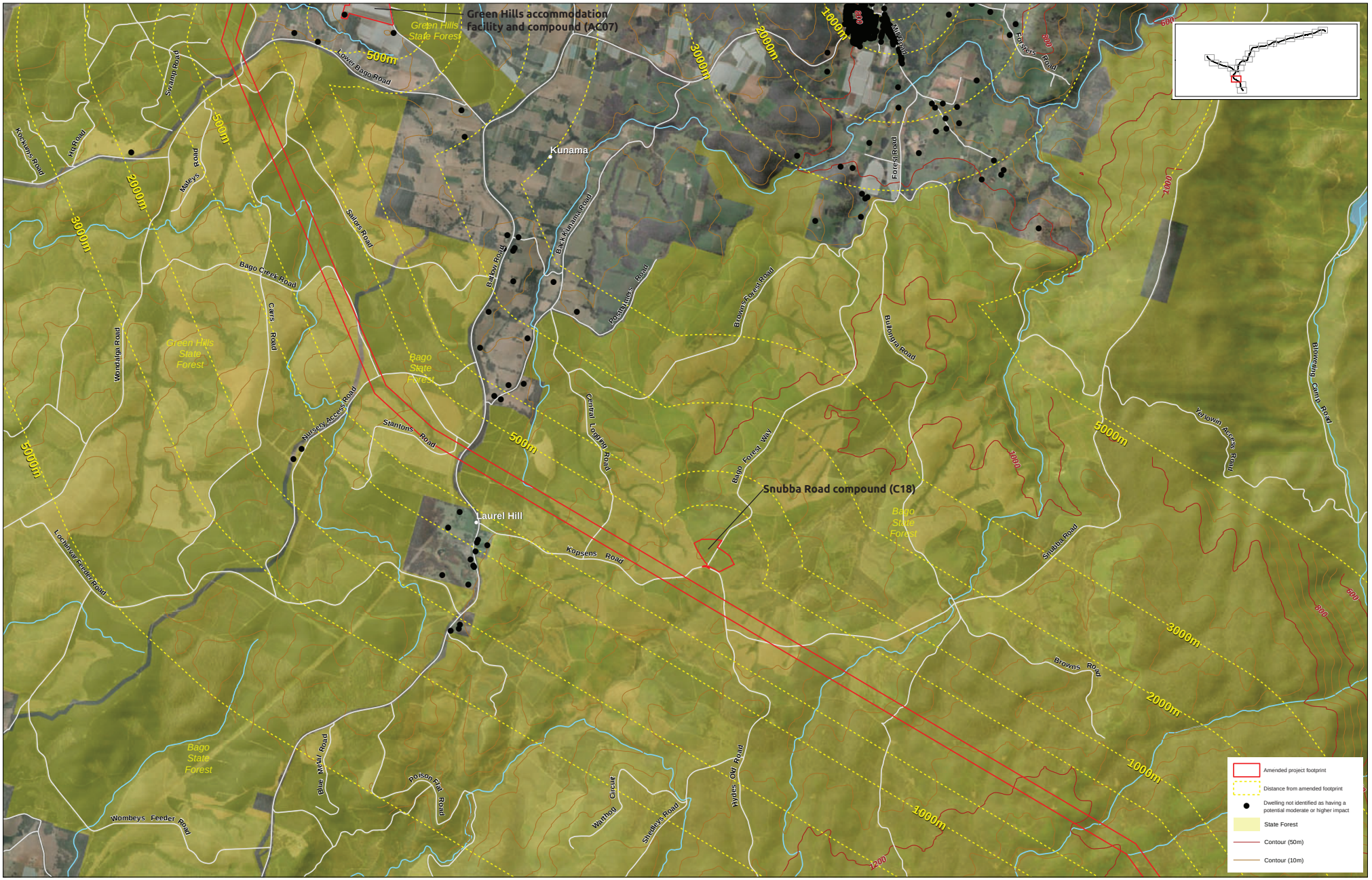
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT J - **Private dwelling assessment** (Wondalga to Batlow)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



File: HumeLink-Fig4- SensitiveReceivers-240220

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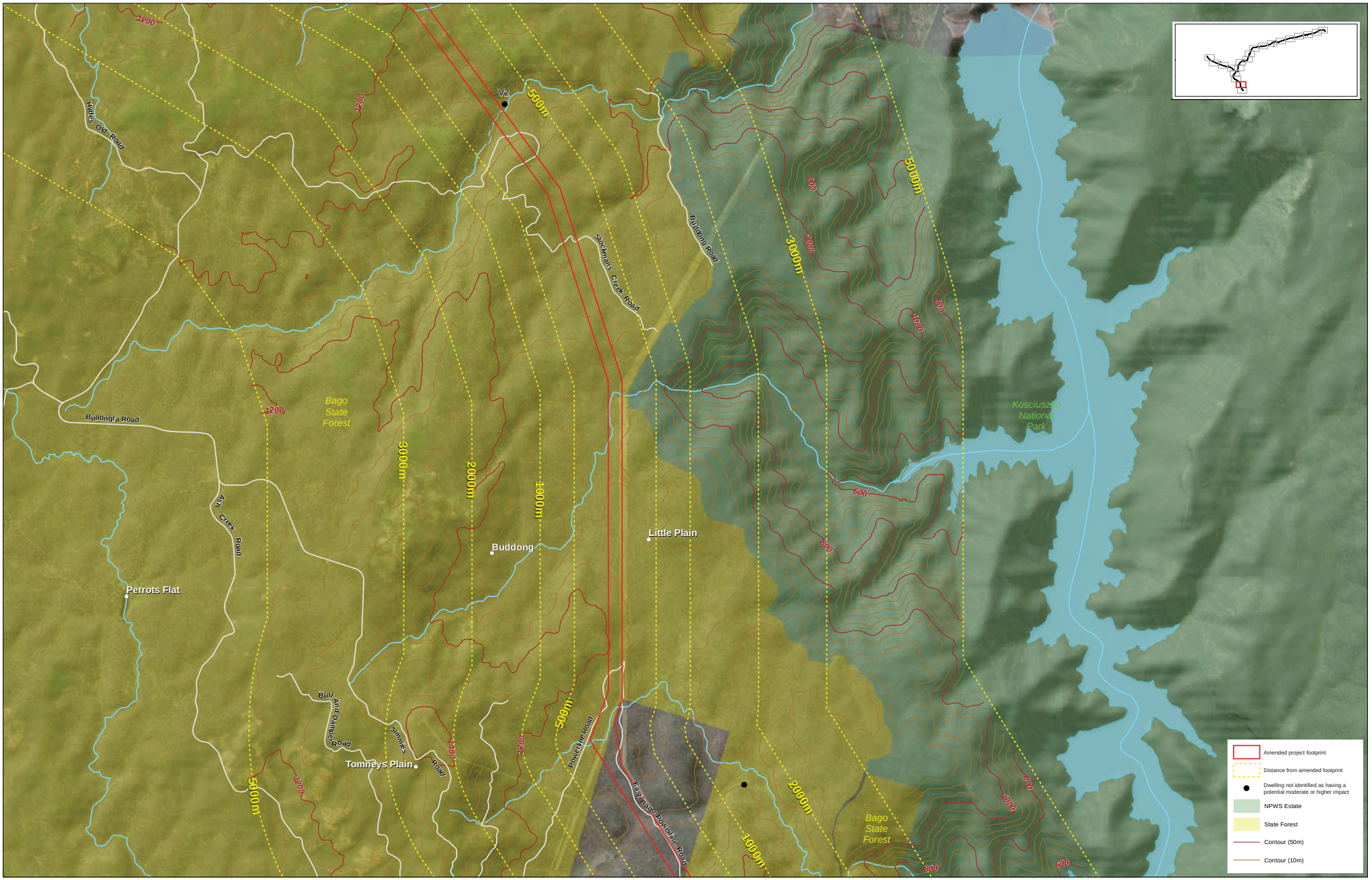
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT J - **Private dwelling assessment** (Batlow to Snubba Road)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



File: HumeLink-Fig4- SensitiveReceivers-240220

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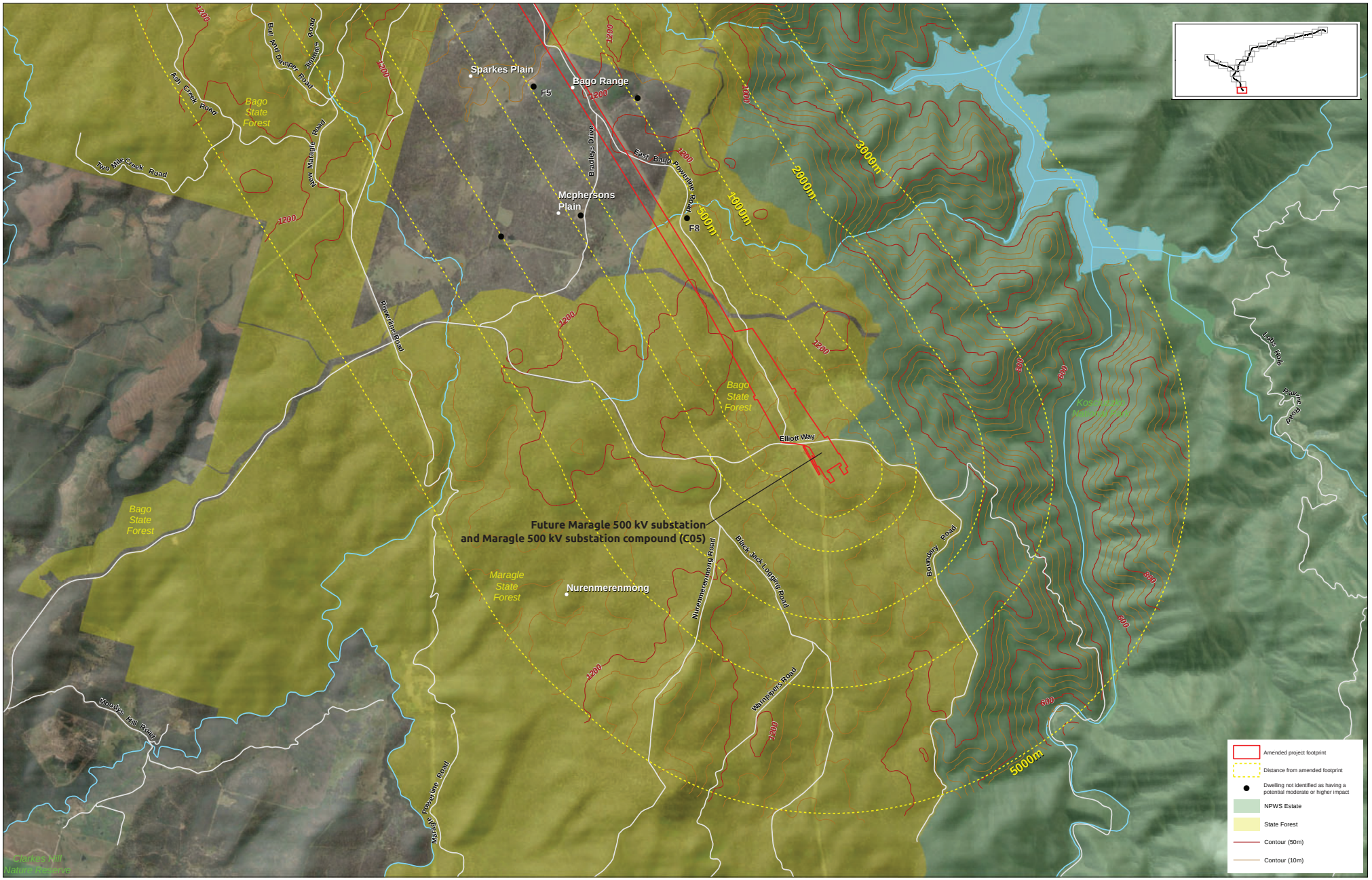
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT J - **Private dwelling assessment** (Snubba Road to Nurenmerenmong)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



File: HumeLink-Figs- SensitiveReceivers-240220

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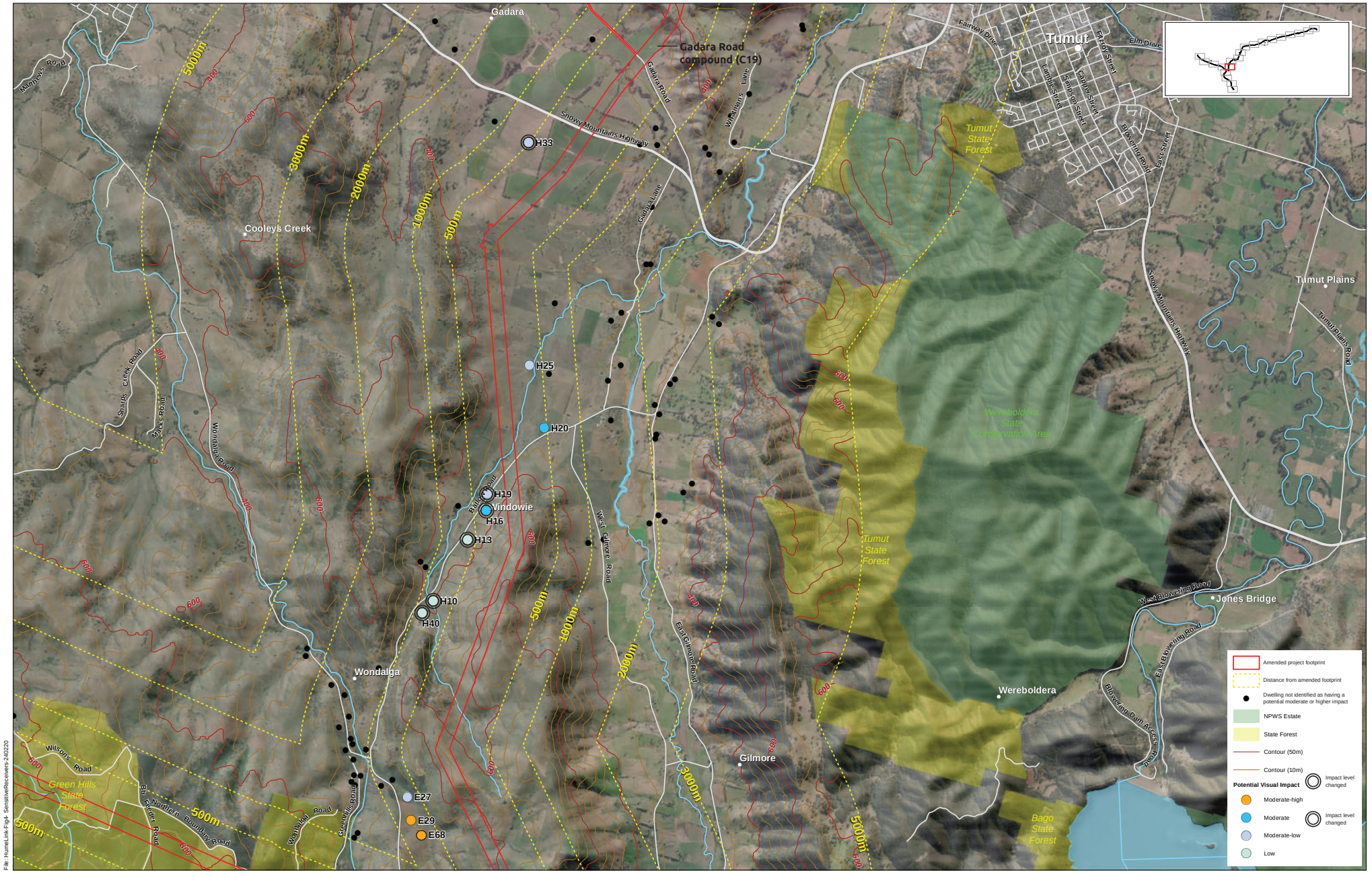
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT J - **Private dwelling assessment** (Nurenmerenmong to Maragle)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



File: HumeLink-Figs4- SensitiveReceivers-240220

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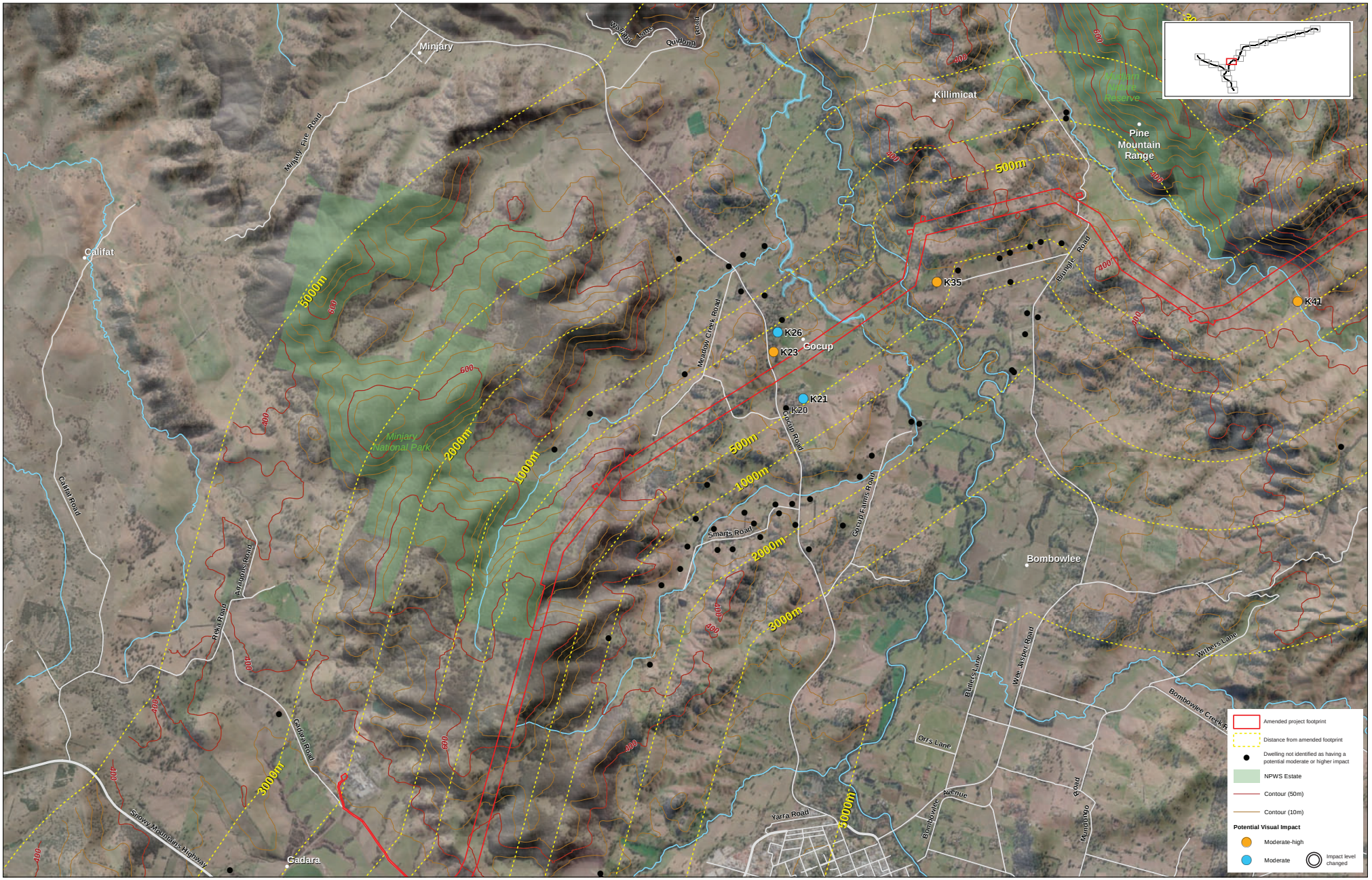
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT J - **Private dwelling assessment** (Wondalga to Tumut)

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



File: HumeLink-Fig4- SensitiveReceivers-240220

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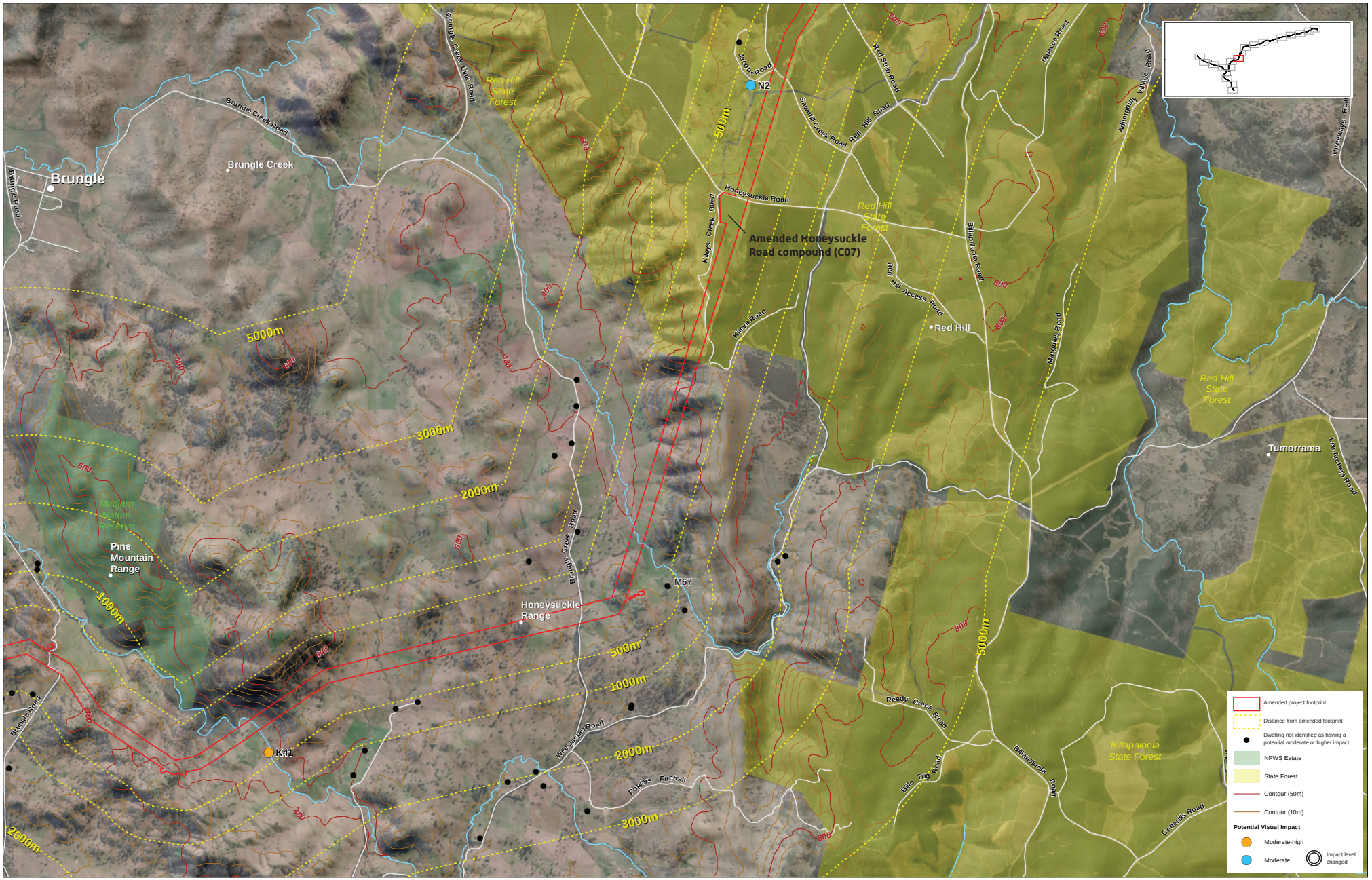
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT J - **Private dwelling assessment** (Tumut to Killimicat)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



File: HumeLink-Figs- SensitiveReceivers-240220

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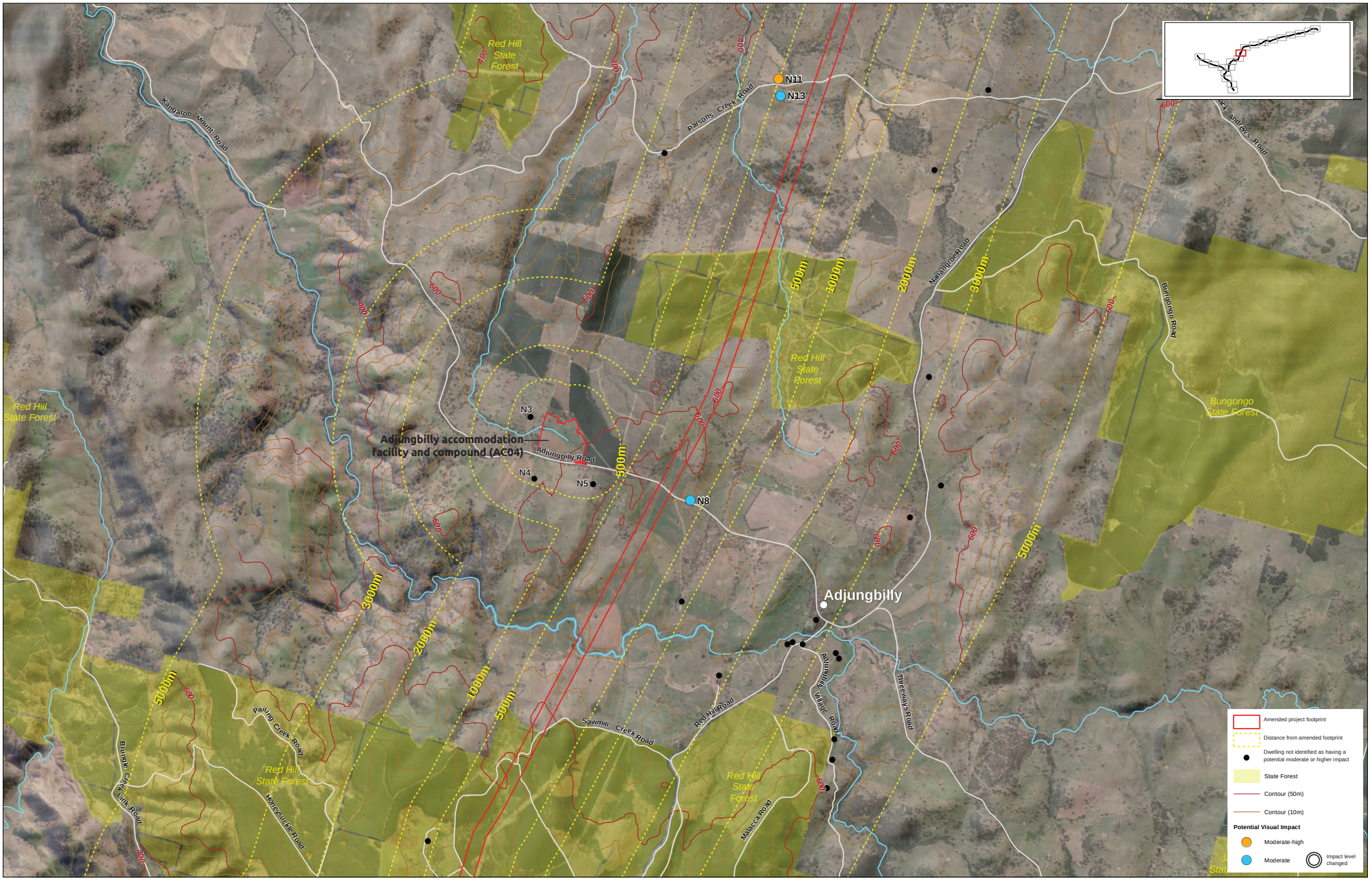
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT J - **Private dwelling assessment** (Killimicat to Red Hill)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



File: HumeLink-Fig4- SensitiveReceivers-240220

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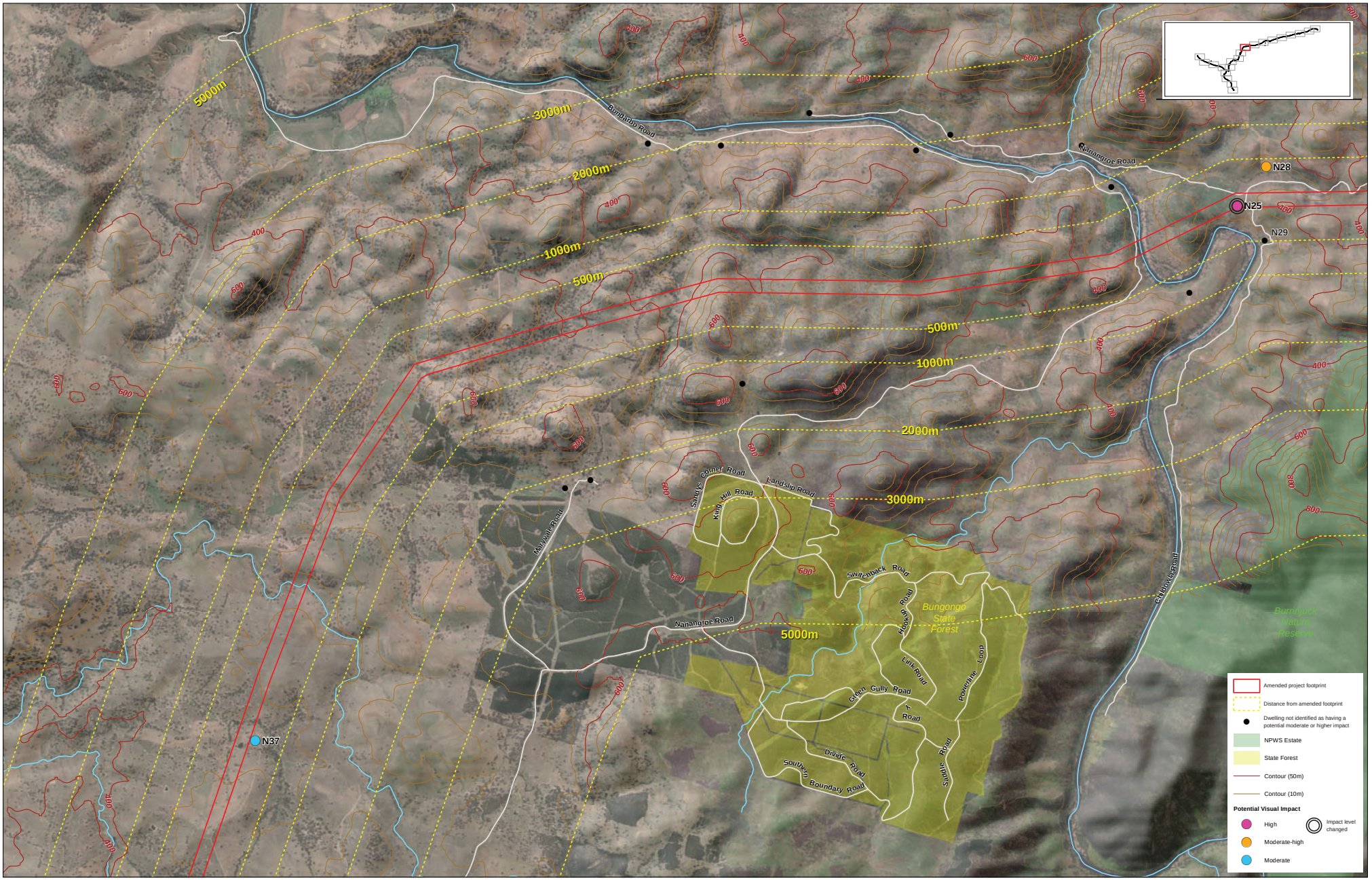
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT J - **Private dwelling assessment** (Red Hill to Adjungbilly and Bungongo)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



File: HumeLink-Fig4- SensitiveReceivers-240220

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Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT J - **Private dwelling assessment** (Bungongo to Burrinjuck)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011

File: HumeLink-Fig4- SensitiveReceivers-240220

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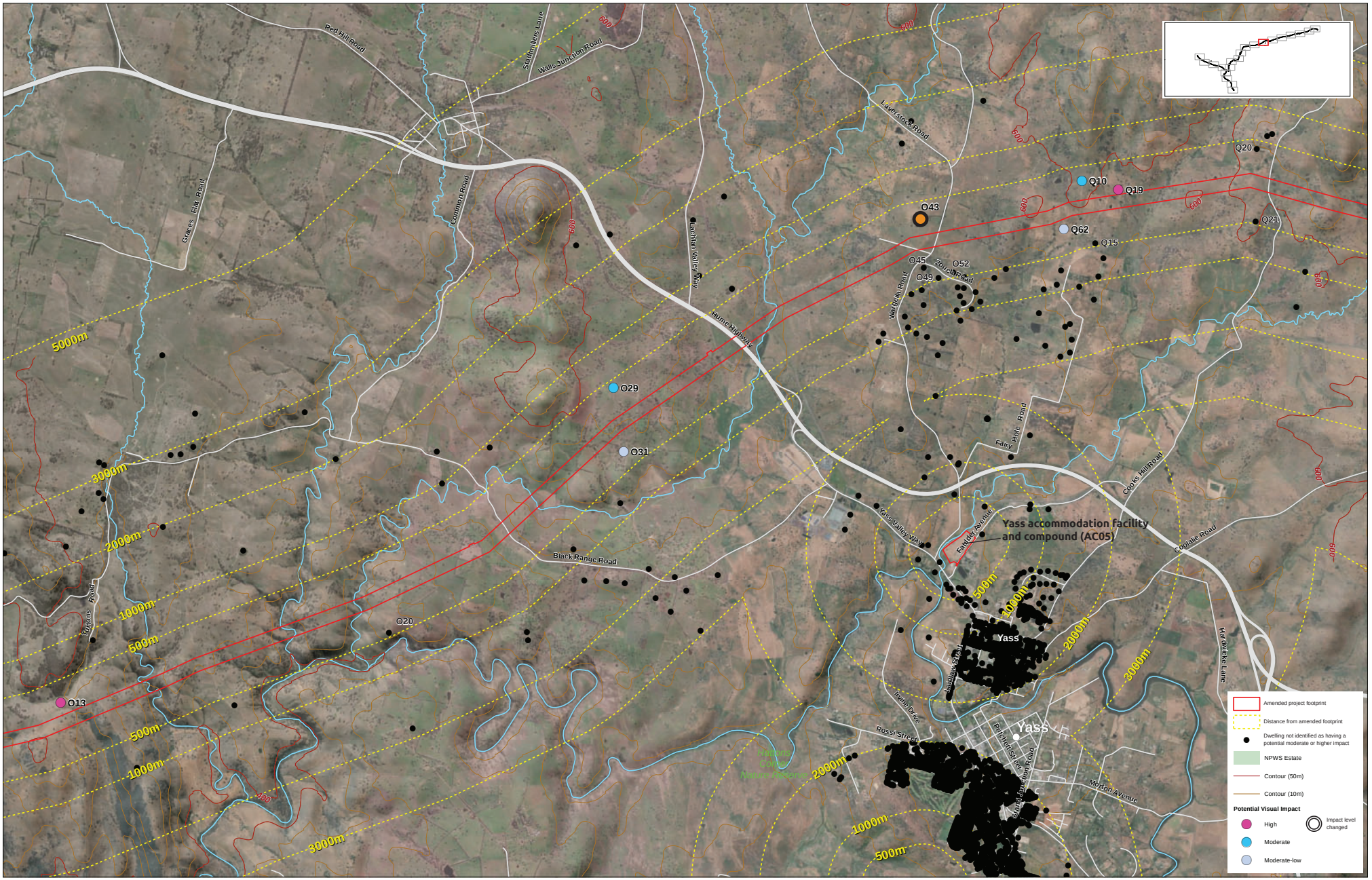
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT J - **Private dwelling assessment** (Burrinjuck to Woolgario)

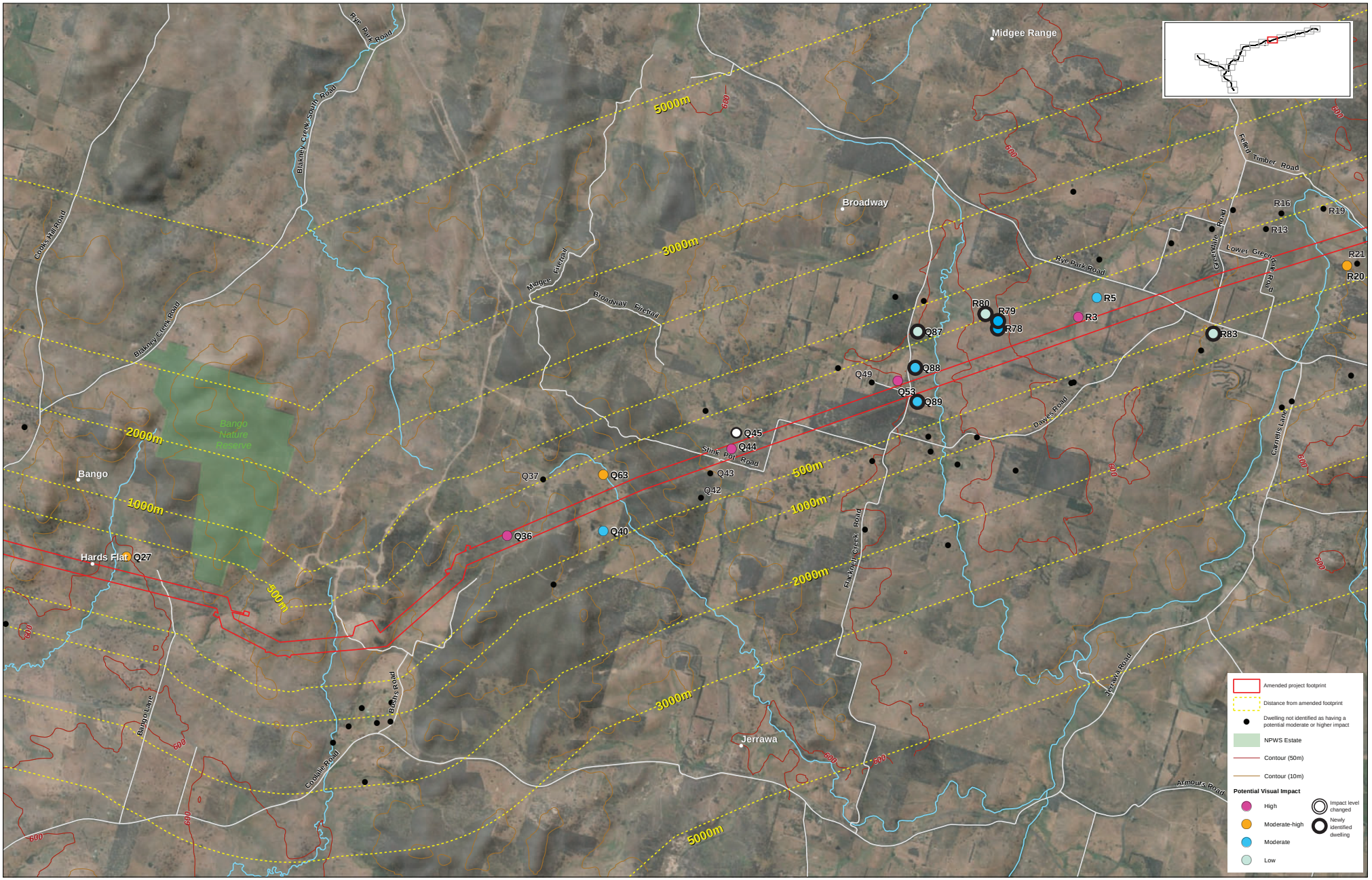
0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



File: HumeLink-Fig4- SensitiveReceivers-240220



File: HumeLink-Fig4- SensitiveReceivers-240220

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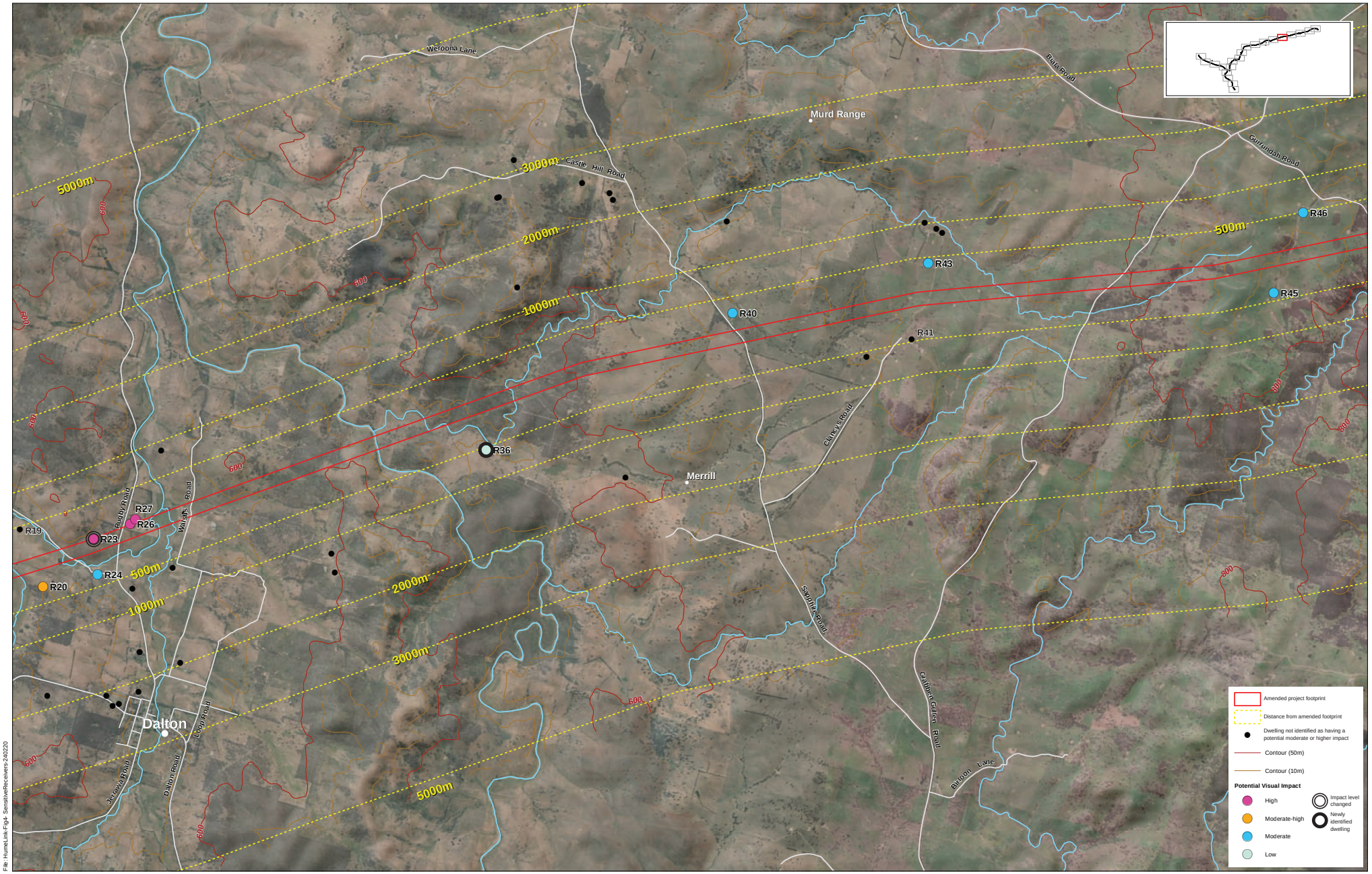
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT J - **Private dwelling assessment** (Bango to Broadway and Dalton)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



File: HumeLink-Fig4- SensitiveReceivers-240220

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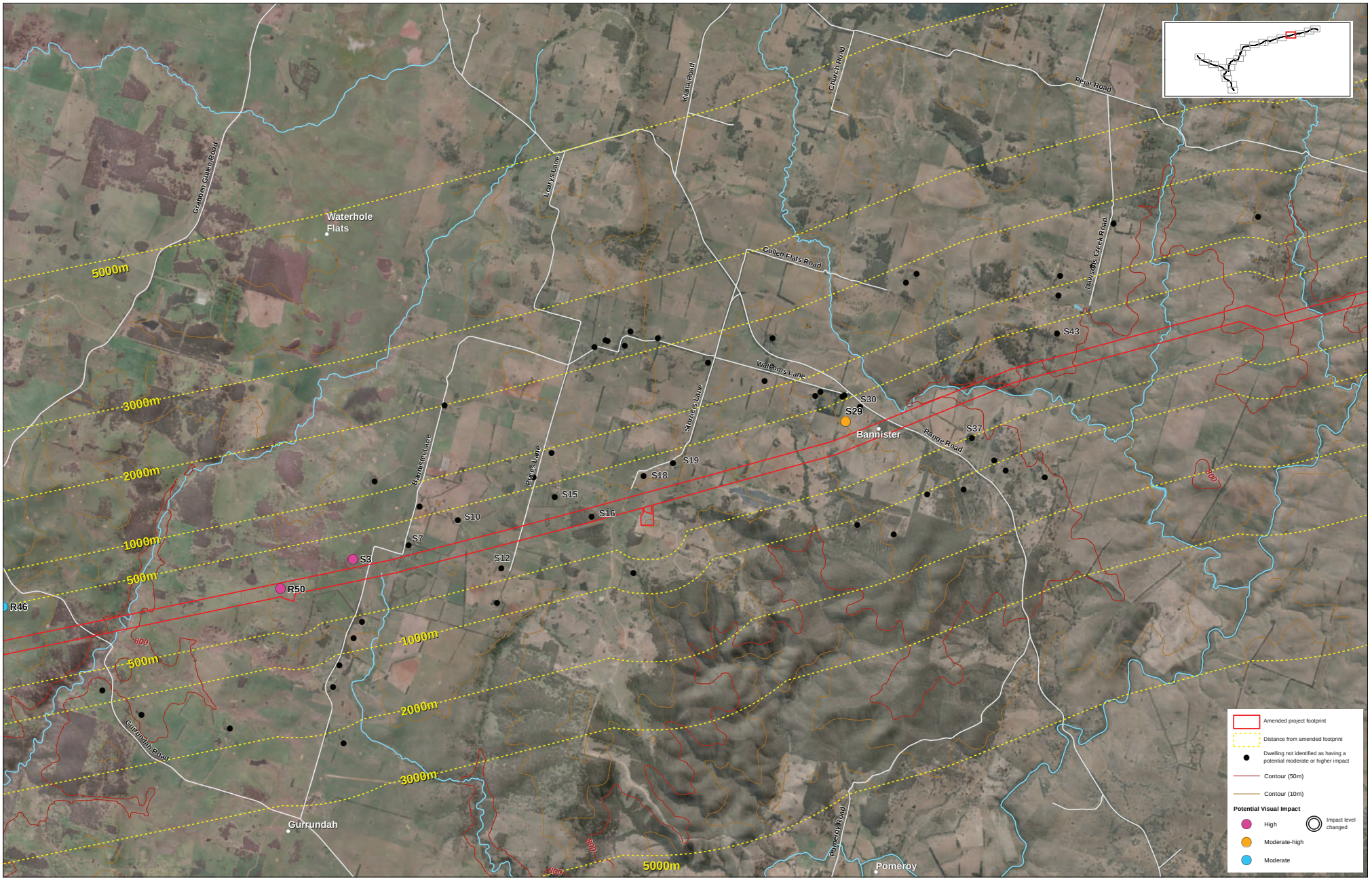
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT J - **Private dwelling assessment** (Dalton to Merrill and Grabben Gullen)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



File: HumeLink-Fig4- SensitiveReceivers-240220

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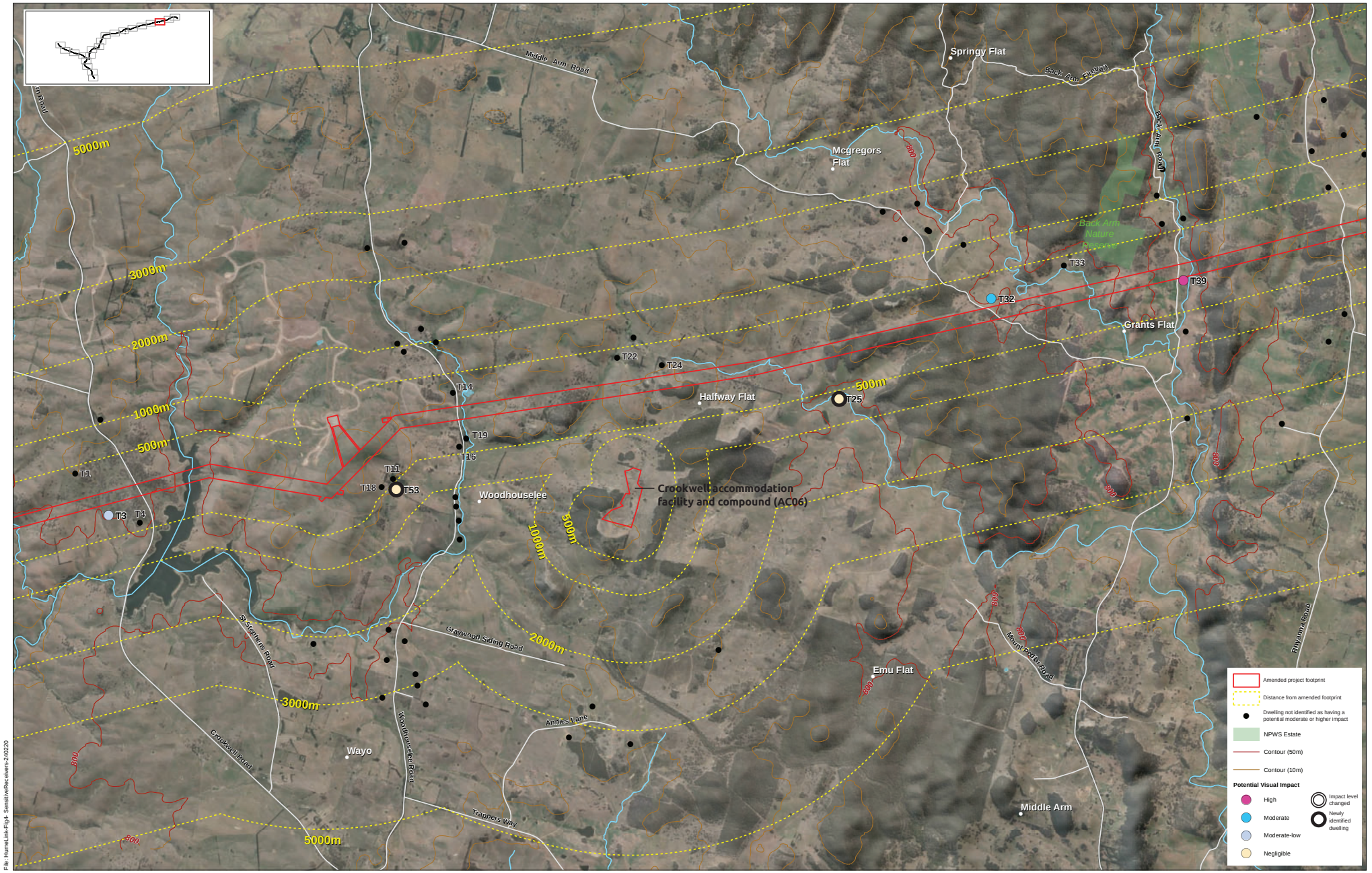
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT J - **Private dwelling assessment** (Grabben Gullen to Bannister)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



File: HumeLink-Fig4- SensitiveReceivers-240220

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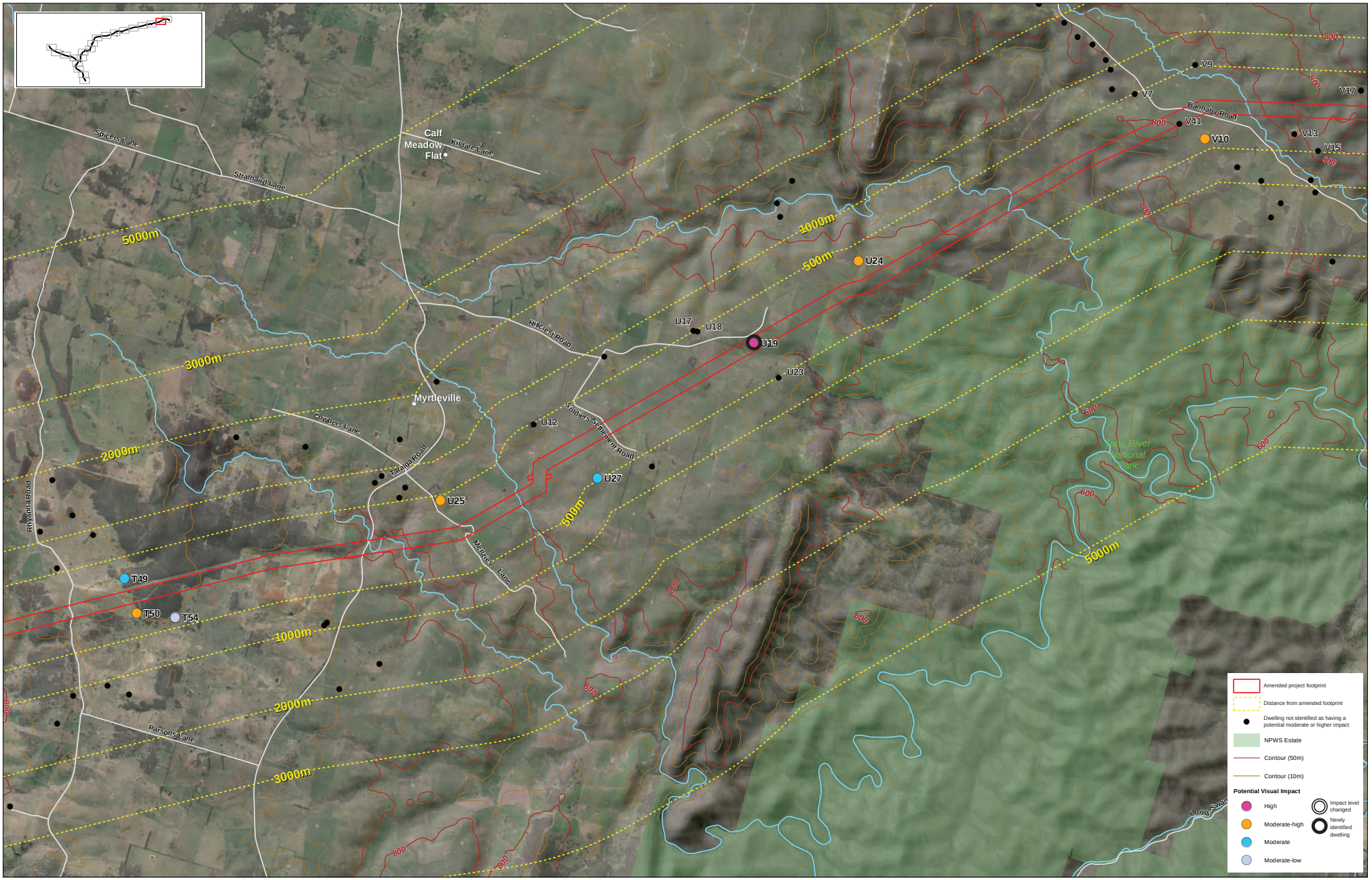
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT J - **Private dwelling assessment** (Bannister to Woodhouselee and Chatsbury)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



File: HumeLink-Fig4- SensitiveReceivers-240220

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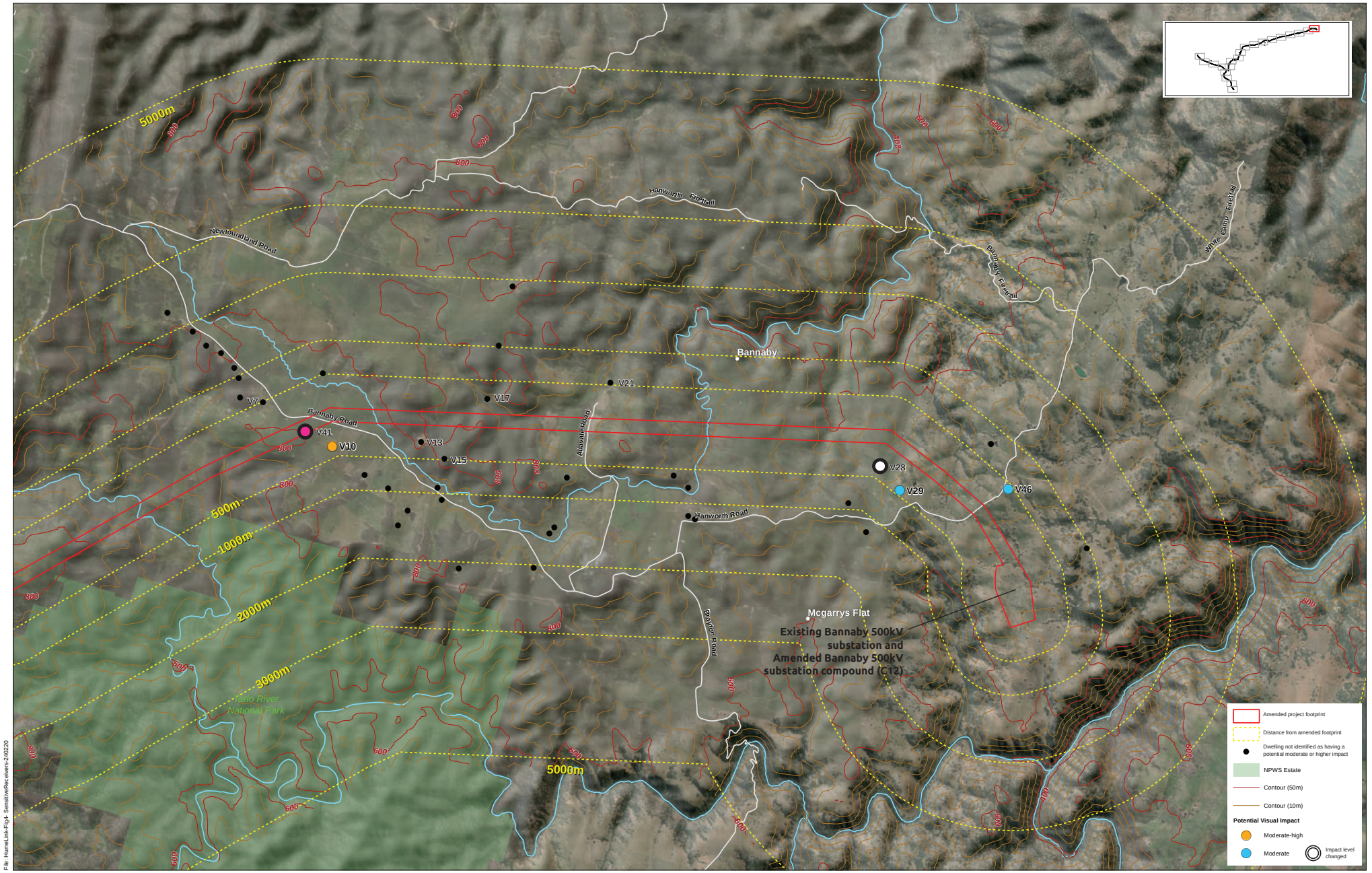
Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT J - **Private dwelling assessment** (Chatsbury to Tarlo River)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011



File: HumeLink-Figs- SensitiveReceivers-240220

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Humelink Landscape and visual impact assessment - Amendment Report

ATTACHMENT J - **Private dwelling assessment** (Tarlo River to Bannaby)

0 0.5 1 1.5 2 2.5km

north

Proposed Route: HumeLink - Footprint V13.2 - Aurecon February 2024
NPWS Estate: NSW National Parks and Wildlife 2021
State Forests:Forestry Corporation of NSW 2022
Imagery: Maxar 2018
Surface analysys: 1 second SRTM Derived Hydrological (DEM-H) version 1.0: G.S. Aust. 2011