GEOSCAPES
LANDSCAPE ARCHITECTS

BOWRAL BRICKS - PROPOSED NEW BRICK FACTORY
416 & 524 Berrima Road, Moss Vale NSW 2577

LANDSCAPE AND VISUAL IMPACT ASSESSMENT REPORT
Report Ref: **190722_SSD_RPT_LAN_LVIA01**

Prepared for

australbricks®

Prepared by

Ben Gluszkowski
Director
Registered Landscape Architect #5868

GEOSCAPES Landscape Architecture
Suite 215, 284 Victoria Avenue
Chatswood NSW 2067

Geoscapes Pty Ltd
ABN 84 620 205 781
ACN 620 205 781

Document Status

REV	Description	Initial	Date
D	Issued for SSD submission	BG	22.04.2020
C	Issued for SSD submission	BG	03.03.2020
B	Issued for SSD submission	BG	28.02.2020
A	Draft 75% Issue	BG	20.12.2019
-	Draft 50% Issue	BG	29.11.2019

CONTENTS

List of Figures

1.0 INTRODUCTION

1.1 Project Background

This Landscape and Visual Impact Assessment (LVIA) relates to the proposed Austral Brickmaking facility at 416 - 524 Berrima Road, Moss Vale, NSW.

A request for Secretary's Environmental Assessment Requirements (SEARs) was submitted to the Department of Planning, Industry and Environment (DPIE) in August of 2019. SEARs were provided by the DPIE on the 11th February 2020. The SEARs relevant to this assessment include:

Visual Including :

- height, scale, signage and lighting, particularly from nearby public receivers and vantage points of the broader public domain (i.e. roads); and

- landscaping to minimise visual impacts and/or offset any clearing. All species used for landscaping shall be listed within the 'Southern Highlands Shale Woodlands' endangered ecological community.

This assessment seeks to satisfy the above requirement.

1.2 This Report and Author

Geoscapes Pty Ltd, has been commissioned by the Austral Brick Company, to produce a Landscape Visual and Impact Assessment (LVIA) for the above mentioned development. This LVIA has been written by Ben Gluszkowski (Director and Registered Landscape Architect) who has over 16 years' experience in the field of Landscape Architecture. He has previously been involved in high profile LVIAs on developments within the UK, including the M1 & M62 motorway road widening, several wind farms and energy from waste facilities (EFW).

Within Australia, Ben has completed LVIA's and VIA's for number of large scale industrial projects . Many of these were submitted as part of an Environmental Impact Assessment (EIA) for State Significant Development (SSD) to the Department of Planning and Environment. He has also recently written VIA's for Snackbrands Australia, Jaycar, Altis, Frasers, AirTrunk and Cadence.

Geoscapes have also prepared landscape design drawings and design reports. These documents detail landscape treatments to the site, and should be read in conjunction with this assessment.

2.0 METHODOLOGY OF ASSESSMENT

2.1 Guidelines

VIA or LVIA does not follow prescribed methods or criteria. This assessment is based on the principles established and broad approaches recommended in the following documents:

- Guidelines for Landscape and Visual Impact Assessment (GLVIA) – Third Edition (LI/IEMA 2013)
- The Landscape Institute Advice Note 01 (2011) Photography and Photomontage in Landscape and Visual assessment.

In accordance with GLVIA3 the assessment methodology is tailored to the specific requirements of the Proposed Development, its specific landscape context and its likely significant effects. The methodology used for this assessment reflects the principal ways in which the Proposed Development is considered likely to interact with existing landscape and visual conditions as a result of:

· The permanent introduction of a brickmaking facility into the existing landscape/townscape and visual context.

Landscape assessment is concerned with changes to the physical landscape in terms of features/elements that may give rise to changes in character. Visual appraisal is concerned with the changes that arise in the composition of available views as a result of changes to the landscape, people's responses to the changes and to the overall effects on visual amenity. Changes may result in adverse (negative) or beneficial (positive) effects.

The nature of landscape and visual assessment requires both objective analysis and subjective professional judgement. Accordingly, the following assessment is based on the best practice guidance listed above, information and data analysis techniques, uses subjective professional judgement and quantifiable factors wherever possible, and is based on clearly defined terms (refer to glossary).

As stated in paragraph 1.20 of the GLVIA:

"The guidance concentrates on principles while also seeking to steer specific approaches where there is a general consensus on methods and techniques. It is not intended to be prescriptive, in that it does not follow a detailed 'recipe' that can be followed in every situation. It is always the primary responsibility of any landscape professional carrying out an assessment to ensure that the approach and methodology adopted are appropriate to the particular circumstances."

This VIA written by Geoscapes is considered to use a methodology and approach that is appropriate to this type of development.

2.2 Computer Generated Visualisations - Photomontages

It is possible that any receptor with a view toward the development, could potentially receive visual impacts with a resulting high, moderate or low impact. However, it is not feasible or practical to prepare a photomontage for each and every residential dwelling, public road or public open space within the project viewshed.

Photography for the photomontages was undertaken by Geoscapes using a Canon 60D (DSLR) camera. A 50 mm fixed focal length prime lens was attached to the Canon.

Photomontages have been prepared to create "simulated" views of the proposed development. Although these do not claim to exactly replicate what would be seen by the human eye, they provide a useful "tool" in analysing potential visual impacts from receptor locations.

Those viewpoints selected for photomontages, have been presented in this report as before and after images on the same sheet for ease of comparison. For the purposes of most VIAs, photomontages are taken to be the 'residual effects' of the development. Residual effects are those which are likely to remain on completion of the development and are to be given the greatest weight in planning terms. Any visual impacts determined from viewpoint locations (which have been assessed in section 8.0 of this report), are based on the residual effects. In many photomontages, landscaping may not be seen this could be due to the development being partially obscured, that there is no proposed landscaping on a particular side of a development or that landscaping would be hidden behind existing landscaping in the foreground.

The horizontal field of view within the photomontages exceeds the parameters of normal human vision. However, in reality the eyes, head and body can all move and, under normal conditions, the human brain would 'see' a broad area of landscape within a panoramic view. Each of the photomontage panoramas within this report has a horizontal viewing angle of 67°, a single photographic image from a 50mm lens has a horizontal viewing angle of 39.6°.

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

An extract taken from the Photography and Photomontage in Landscape and Visual Impact Assessment, Landscape Institute Advice Note 01/11 states that:

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

In instances where baseline photography was not possible, (i.e access denied to private property by a landowner or a landowner not present) a photomontage was therefore, also not possible. In certain circumstances a Google Earth image showing the existing terrian and massing of the proposal maybe presented. Although the Google generated images are not as 'life-like' as a 3D rendered photomontage, they are still useful in predicting likely visual impacts as they will demonstrate whether a not a proposed development is hidden behind natural topography.

2.3 Sensitivity of the Landscape Resource

A number of factors influence professional judgement when assessing the degree to which a particular landscape receptor can accommodate change arising from a particular development. Sensitivity is made up of judgements about the value attached to the receptor determined at baseline stage and the susceptibility of the receptor to the type of change arising from the development proposal.

The table below provides an indication of the criteria by which the sensitivity of any landscape receptor is determined by combining judgements of the value of the receptor and its susceptibility to the type of change or development proposed. A degree of professional judgement applies in arriving at the sensitivity for receptors. Wherever sensitivity is judged, the specific combinations of factors that have influenced that judgement are described. The table has been adapted from the GVLIA with terms used as more appropriate for assessment of Australian landscape.

Table: Landscape Receptor Sensitivity Criteria

Category	Landscape Receptor Criteria
Very High	Nationally designated/valued landscape and landscape features; strong/distinctive landscape characteristics: absence of landscape detractors. Rare receptor in excellent condition. A landscape receptor extremely sensitive to disturbance or change in character due to the development proposals. No potential or very limited potential for substitution or replacement.
High	Locally designated valued landscape and features: many distinctive landscape characteristics: very few landscape detractors. Uncommon receptor in good condition. A landscape receptor sensitive to disturbance or change in character due to the development proposals. Limited potential for substitution or replacement.
Medium	Undesignated landscape and features: some distinctive landscape characteristics: few landscape detractors. A relatively common receptor in fair condition. A landscape receptor with a moderate level of sensitivity to disturbance or change in character due to the development proposals. Some potential for substitution or replacement.
Low	Undesignated landscape and features: few distinctive landscape characteristics: presence of landscape detractors. A common receptor in poor condition. A landscape receptor with limited sensitivity to disturbance or change in character due to the development proposals. Clear potential for substitution or replacement.
Very Low	Undesignated landscape and features: absence of distinctive landscape characteristics: presence of many landscape detractors. A common receptor in very poor condition. A landscape receptor with very limited sensitivity to disturbance or change in character due to the development proposals. Good potential for substitution or replacement.

The magnitude of change is determined through a range of considerations particular to each receptor and effect. In line with the GLVIA, the three main attributes considered are:

1. Scale of Change
2. Geographical Extent
3. Duration and reversibility

The table below provides an indication of the criteria by which the magnitude of change as a result of the development proposed upon a landscape receptor is judged within this assessment. These criteria provide a framework for assessment, and final conclusions are reached through clear and transparent use of reasoned professional judgement, taking into account a range of factors as described above.

Table: Landscape Receptor of Change Criteria

Category	Definition
Very High	Total loss of or major alteration to key elements/features/characteristics of the baseline condition. Addition of elements which strongly conflict with the key characteristics of the existing landscape. Large scale effects influencing several landscape types or character areas.
High	Notable loss or alteration to on or more key elements/features/characteristics of the baseline condition. Addition of elements that are prominent and may conflict with the key characteristics of the of the existing landscape. Effects at the scale of the landscape type or character areas within which the proposal lies.
Medium	Partial loss or alteration to one or more key elements/features/characteristics of the baseline condition. Addition of elements that may be evident but do not necessarily conflict with the key characteristics of the of the existing landscape. Effects within the immediate landscape setting of the site.
Low	Minor loss or alteration to one or more key elements/features/characteristics of the baseline condition. Addition of elements that may not be uncharacteristic within the existing landscape. Effects at the site level (within the development itself)
Very Low	Very Low Barely discernible loss or alteration to one or more key elements/features/characteristics of the baseline condition. Addition of elements not uncharacteristic within the existing landscape. Effects only experienced on parts of the site at a very localised level.

2.4 Visual Receptor Sensitivity and Magnitude of Change

People's (visual receptors) overall visual sensitivity has been assessed by combining consideration of their visual susceptibility with the value or importance that they are likely to attribute (or not) to their available views.

Factors which influence professional judgement when assessing the degree to which a particular view can accommodate change arising from a particular development, without detrimental effects would typically include:

- Judgements of value attached to views take into account recognition of the value attached to particular views e.g. heritage assets or through planning designations; and
- Judgements of susceptibility of visual receptors to change is mainly a function of the occupation or activity of people experiencing the view at particular locations; and the extent to which their attention or interest may therefore be focused on the views and the visual amenity they experience at particular locations.

Assessment of the sensitivity of visual receptors may be modified (either up or down) by consideration of whether any particular value or importance is likely to be attributed by people to their available views. For example, travelers on a highway may be considered likely to be more sensitive due to

its scenic context or residents of a particular property may be considered likely to be less sensitive due to its degraded visual setting. Typically, sensitivity of visual receptors may be judged to be very high, high, medium, low or very low. Definitions of these indicative categories as appropriate to this assessment are set out in the table below.

Table: Visual Receptor Sensitivity

Category	Definition
Very High	Designed view to or from a heritage / protected asset. Key protected viewpoint e.g. interpretive signs. References in literature and art/or guidebooks and tourist maps. Protected view recognised in planning policy designation [LEP, DCP, DoPE]. Views from the main living space of residential properties, state public rights of way e.g. bush trails and state designated landscape feature with public access. Visitors to heritage assets of state importance.
High	View of clear value but may not be formally recognised e.g. framed view of high scenic value from an individual private dwelling or garden. It may also be inferred that the view is likely to have value e.g. to local residents. Views from the secondary living space of residential properties and recreational receptors where there is some appreciation of the landscape e.g. golf and fishing. Local public rights of way and access land. Road and rail routes promoted in tourist guides for their scenic value.
Medium	View is not promoted or recorded in any published sources and may be typical of the views experienced from a given receptor. People engaged in outdoor sport where an appreciation of the landscape has little or no importance e.g. football and soccer. Road users on main routes (Motorway/Freeway/Highway) and passengers on trains.
Low	View of clearly lesser value than similar views experienced from nearby visual receptors that may be more accessible. Road users on minor roads. People at their place of work or views from commercial buildings where views of the surrounding landscape may have some importance.
Very Low	View affected by many landscape detractors and unlikely to be valued. People at their place of work or other locations where the views of the wider landscape have little or no importance.

For the visual receptors identified, the factors above are examined and the findings judged in accordance with the indicative categories below in the table to determine the magnitude of change.

Table: Visual Receptor Magnitude of Change Criteria

Category	Definition
Very High	There would be a substantial change to the baseline, with the proposed development creating a new focus and having a defining influence on the view. Direct views at close range with changes over a wide horizontal and vertical extent.
High	The proposed development will be clearly noticeable and the view would be fundamentally altered by its presence. Direct or oblique views at close range with changes over a noticeable horizontal and or/vertical extent.
Medium	The proposed development will form a new and recognisable element within the view which is likely to be recognised by the receptor. Direct or oblique views at medium range with a moderate horizontal and/or vertical extent of the view affected.
Low	The proposed development will form a minor constituent of the view being partially visible or at sufficient distance to be a small component. Oblique views at medium or long range with a small horizontal/vertical extent of the view affected.
Very Low	The proposed development will form a barely noticeable component of the view, and the view whilst slightly altered would be similar to the baseline situation. Long range views with a negligible part of the view affected.

In some cases, there may be no magnitude of change and the baseline view will be unaffected by the development (e.g development would be fully screened existing woodland). In this case a category of 'no change' or 'none' will be used.

2.5 Significance of the Impact

For each receptor type, the sensitivity of the location is combined with the predicted magnitude of change to determine the level of effect on any particular receptor. Having taken such a wide range of factors into account when assessing sensitivity and magnitude at each receptor, the level of effect can be derived by combining the sensitivity and magnitude in accordance with the matrix in the table below.

Receptor for Sensitivity	Magnitude of Change				
	Very High	High	Medium	Low	Very Low
Very High	Substantial	Major	Major/Moderate	Moderate	Moderate/Minor
High	Major	Major/Moderate	Moderate	Moderate/Minor	Minor
Medium	Major/Moderate	Moderate	Moderate/Minor	Minor	Minor Negligible
Low	Moderate	Moderate/Minor	Minor	Minor Negligible	Negligible
Very Low	Moderate/Minor	Minor	Minor Negligible	Negligible	Negligible/None

In all cases, where overall effects are predicted to be moderate or higher (shaded grey), this will result in a prediction of a significant effect in impact terms. All other effects will be not significant. If a view from a receptor is judged to be 'no change' in the category of Magnitude of Change, then the significance of impact will automatically be none.

In certain cases, where additional factors may arise, a further degree of professional judgement may be applied when determining whether the overall change in the view or effect upon landscape receptor will be significant or not and, where this occurs, it is explained in the assessment.

Visual effects are more subjective as people's perception of development varies through the spectrum of negative, neutral and positive attitudes. In the assessment of visual effects, Geoscapes will exercise objective professional judgement in assessing the significance of effects and will assume, unless otherwise stated, that all effects are adverse, thus representing the worst-case scenario. The significance of visual impacts are assessed against the proposed development in isolation only.

2.6 Site Visit and Analysis of Zone of Visibility

Site visits were conducted on the 20th of November 2019 and the 21st February 2020 by Geoscapes. The consultant team carried out a site inspection to verify the results of a desktop study and to evaluate the existing visual character of the area. Analysis from inside the site boundary and at vantage points from the surrounding landscape was undertaken to approximate the Zone of Visibility. Figures 6 to 9 show panoramic photographs taken at eye level by Geoscapes. The eye level photographs demonstrate that the development site is well enclosed, either by existing vegetation or topography. This would suggest that lower parts of the development are likely to be well screened and will not be visible to the large majority of potential visual receivers. In order to gain a complete understanding of potential visibility, drone photography was used. It is important to note that it is simply unfeasible to photograph every single possible view corridor to and from the site.

A drone was used to take panoramic photographs looking north, south, east and west within the site boundary. A height was flown by the drone to generally represent the building with the highest elevation within the proposed development. The height of the roof line of the raw materials and storage building is proposed to be 20m AGL and therefore, was selected to represent a worst case scenario and the maximum Zone of Visual Influence (refer to figures 10 to 17). It is noted that the main stack does extend up to a height of 35m however, due to its size in width, any location

only able to see the top of the stack would not experience any significant visual impacts.

The drone flight photography was performed on the 7th November 2019 by Pixel Media Productions, weather conditions at the time were clear and with good visibility.

These photographs allow a judgement to be made on which receptors in the wider context, will be able to see the upper parts of the development if not the all of the development. Not all residential properties or public open spaces that potentially have a view of the development are highlighted on figures 10 to 21. However, the locations that have been shown, will provide an indication of receptors within the surrounding context, that the development will be most visible to. In some cases it is reasonable to assume for example, that a number of properties close to a selected receptor would experience a very similar type of view. I.e. adjacent properties with similar aspect or those one or two streets away.

In some cases, it was not possible to visit an identified receptor to take photographs looking back at the site (e.g. within private property, private gardens or windows where access was denied). In these cases views have been taken from other properties in a similar location where access was granted. A judgement has then been made on the likely visual impacts from a selection of the receptors identified in figures 10 to 17 (refer to section 8.0 Visual Assessment).

As with any VIA, due to the number of receptors that may have views of the development, it is not possible to provide viewpoints for every single possible visual receiver (refer to section 2.7 and 4.4 for details on viewpoint selection).

2.7 Viewpoint Selection and Baseline Photographic Recording

From desktop study, site visits and photography, several locations were identified that would potentially be subject to visual impacts from the proposal. These viewpoints were selected in consultation with the project team. Some viewpoints have been intentionally chosen to demonstrate and provide evidence that from those receptors there are no or negligible visual impacts.

Photographs were taken by Geoscapes Landscape Architects from the selected viewpoints looking towards the development site using a Canon 60D DSLR Camera and a 50mm lens. These are intended to represent what a person of average height (1.75m) would see standing at the same location. Photographs were stitched and blended together using an automated software process, however, no perspective correction was used. GPS recordings were taken and locations marked using digital mapping data. This information was later used to create the photomontages.

As with the eye-level viewpoint photographs, drone photography has also been stitched together to increase the field of view (see figures 10 to 21). As the drone uses a wide-angle lens (23mm), in some cases there may be some distortion present where two images join and particularly in the foreground. However, as these images are used only for analysis and identifying potential visual receptors, this does not affect the validity of their use within this report.

2.8 Visualisation of the Development

Morphmedia were engaged to produce photomotages using a digital three-dimensional model provided by SBA. The output images were produced using Autodesk 3Ds Max. The model included all aspects of the proposed development including facade treatments.

Views were generated from the model that matched the camera positions of photographs taken from selected viewpoints. These were then combined with the photographs to create simulated views of the proposal.

Photomontage or Google Earth figures are intended to be printed at A3 and to be held at a comfortable distance by the viewer, this is generally accepted by current guidelines to be anywhere from 300mm to 500mm away from the eyes and held in a flat projection.

For some viewpoint locations where it was clear that the development would either be hidden or only a very small part visible, Google Earth Pro was used instead of photomontages. This tests visibility using a basic SketchUp massing model of the development and wireframe views have been presented for VP2 and VP8.

2.9 Assessment of Visual Impact

The visual impact from each selected receptor has been assessed based on the criteria described in Sections 2.4 and 2.5. The following list of visual receptors are judged to potentially have the highest sensitivity to the development:

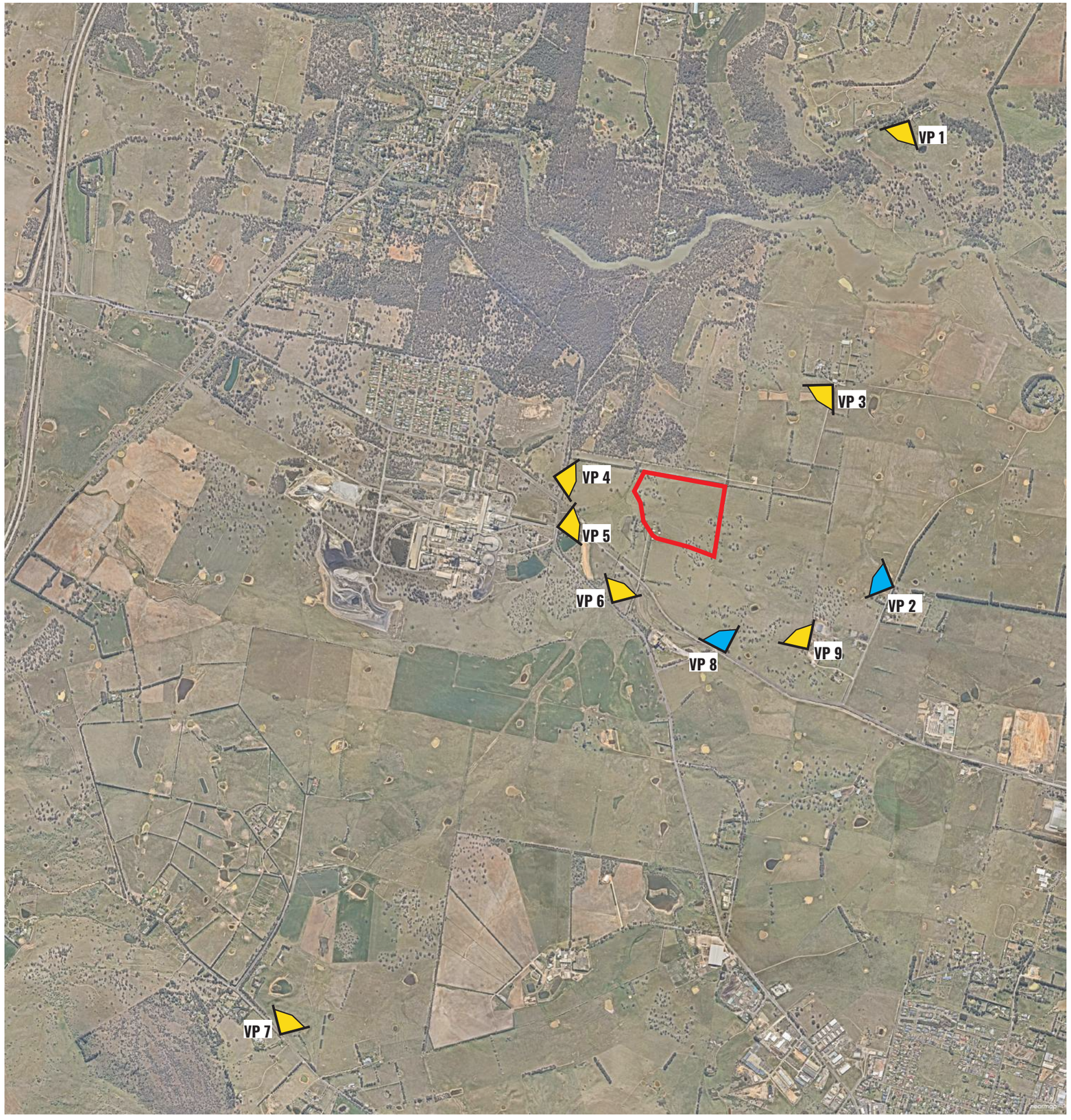
- 441 Oxleys Hill Road, Berrima (VP1)
- 563 Oxleys Hill Road, Berrima (VP2)
- 64 Brookdale Road, Berrima (VP8)

In total 7 viewpoint locations have been selected for photomontage and 2 for Google Earth Pro massing analysis. Refer to section 8.0 for a detailed visual impact assessment from the receptors.

Legend

- Site Boundary
- Drone Position (20m AGL) GPS - 33°48'18.011" S 150°53'14.543" E
- Drone Position (20m AGL) GPS - 33°48'18.011" S 150°53'14.543" E
- Drone Position (120m AGL) GPS - 33°48'18.011" S 150°53'14.543" E
- Ground Eye Level Position

Figure 1: Ground Level & Drone Panoramic Photograph Positions



LEGEND

- SITE BOUNDARY
- VP — PHOTOMONTAGE LOCATION WITH VIEWPOINT NO.
- VP — GOOGLE EARTH LOCATION WITH VIEWPOINT NO.

SCHEDULE OF VIEWPOINTS

VP Number	Address	Southings	Eastings	Elevation AHD
1	441 Oxleys Hill Road, Berrima	34°29'19"S	150°21'55"E	733m
2	Adjacent to 54 Carribee Road, Moss Vale	34°30'52.6"S	150°21'47.7"E	678.5m
3	524 Berrima Road, Berrima	34°30'8"S	150°21'38"E	674.8m
4	New Berrima Sports Ground	34°30'25"S	150°20'34"E	679.8m
5	Berrima Road Near Railway Crossing	34°30'34"S	150°20'35"E	663.8m
6	Berrima Road Near Inghams Factory	34°30'49"S	150°20'47"E	662.85m
7	341 Oldbury Road, Sutton Forest	34°32'10"S	150°19'32"E	693.7m
8	Douglas Road, Moss Vale	34°30'59"S	150°21'14"E	672m
9	15 Carribee Road, Moss Vale	34°30'58"S	150°21'32"E	700m

Figure 2: Viewpoint Locations

3.0 THE SITE AND ENVIRONS

3.1 Location

The development site is located at 416 and 524 Berrima Road and is located within the Wingecarribee Shire Council Local Government Area. Figure 4 provides the site's location. Figure 5 provides the site's context.

3.2 Site Description

The site description is summarised in the Figure below.

Figure 3 – Site Description

Component	Description
Address	416 and 524 Berrima Road, Moss Vale NSW
Legal description	Lot 1 DP785111 and Lot 1 DP414246
Site area	178,658m2 (17.86ha)
Building footprint	33,545m2
Current use	Agricultural and rural residential purposes

3.3 Context

The development site is situated close to the east of New Berrima and is located approximately 50 kilometres' west of Wollongong. The precinct already contains Boral Cement Works and a number of adjacent lands are zoned IN1 General Industrial. It has tributaries of Stony Creek running through it and is located within a bushfire zone.

The site is surrounded by the following specific land uses:

- Directly north of the site is agricultural lands, an existing quarry access road and a historic shooting club (previously used as a military training range during WWI and WWII). Further north is Wingecarribee River which is a tourist attraction for walkers.
- Directly south of the site are rural land uses zoned IN1 and the Blue Circle Rail Line.
- Directly to the east are agricultural land uses zoned IN1, further east is town of Burradoo.
- Directly west of the site are agricultural land uses zoned IN1 and the town of New Berrima.

3.4 Aerial Photography

During the drone photography that was carried out within the site boundary on the 6th Nov 2019, (refer to section 2.5) aerial shots were also taken at an AGL of 120m. These prove useful in the following ways:

- Demonstrating the site context in which the development sits;
- Highlighting key features of the surrounding landscape;
- Analysing the surrounding landscape character;
- Help in identifying locations of potential individual receptors that are difficult to identify from ground level or 20m AGL drone shots alone.

See figures 18-21 for 120m AGL Drone photography.

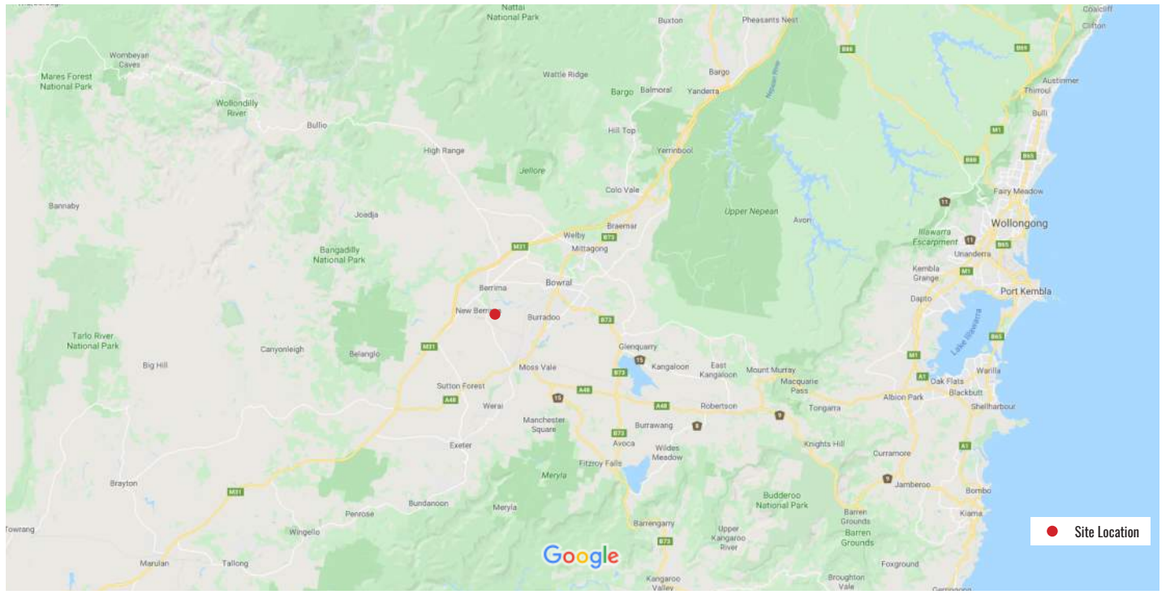


Figure 4: Site Location (Source: Google Maps)

Figure 5: Site Context (Source: Nearmap 2019)

Figure 6: On Site at Eye-Level - Looking North

Figure 7: On Site at Eye Level - Looking East

Figure 8: On Site at Eye-Level - Looking South

Figure 9: On Site at Eye-Level - Looking West

Figure 10: Drone at 20m AGL Position 1 - Looking North

Figure 11: Drone at 20m AGL Position 1 - Looking South

Figure 12: Drone at 20m AGL Position 1 - Looking East

Figure 13: Drone at 20m AGL Position 1 - Looking West

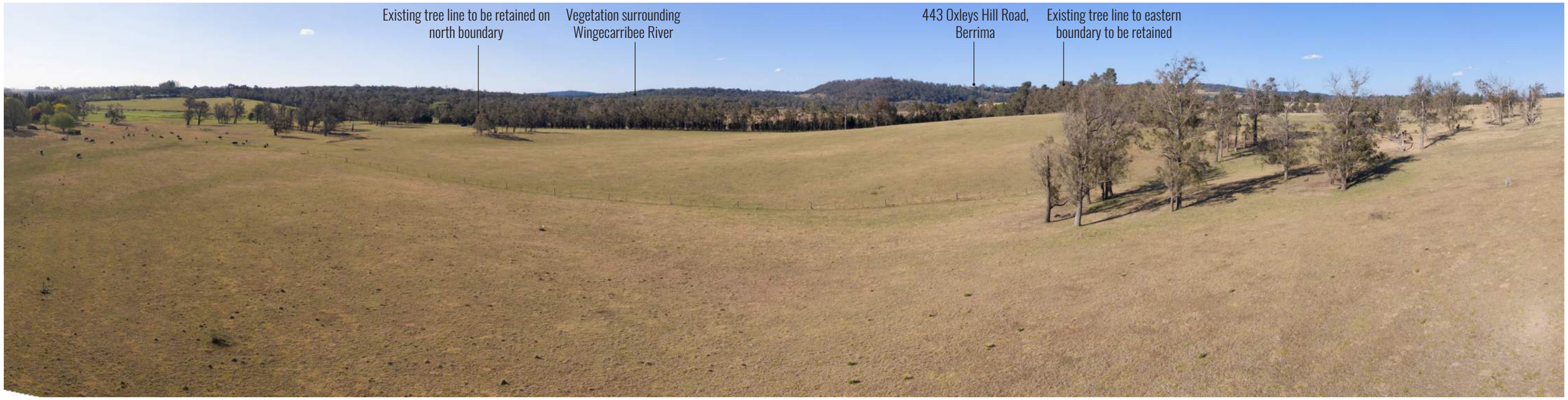


Figure 14: Drone at 20m AGL Position 2 - Looking North

Figure 15: Drone at 20m AGL Position 2 - Looking South

Figure 16: Drone at 20m AGL Position 2 - Looking East

Figure 17: Drone at 20m AGL Position 2 - Looking West

Figure 18: Drone at 120m AGL - Looking North

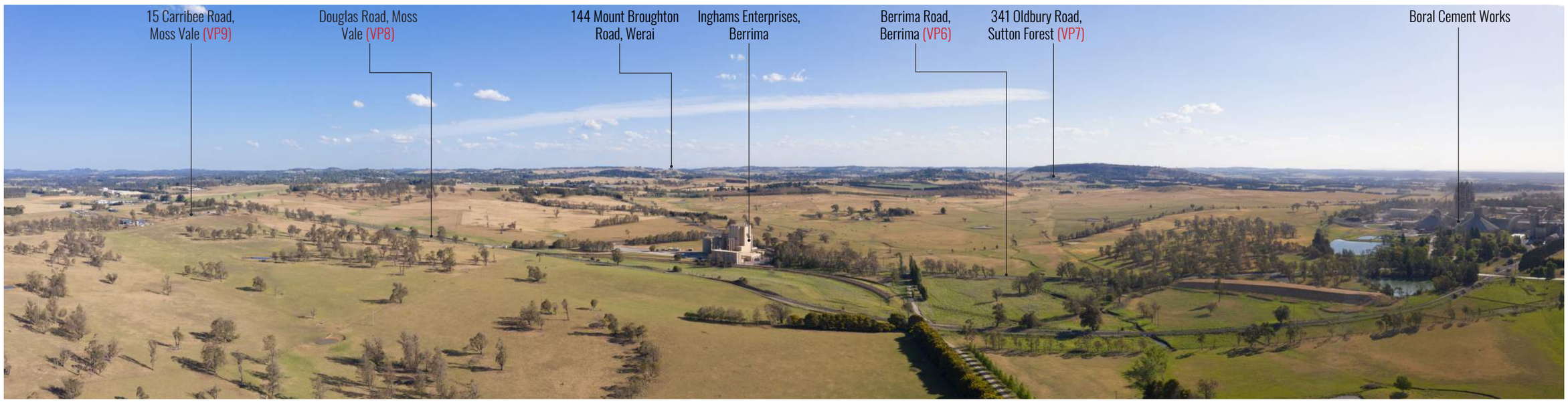


Figure 19: Drone at 120m AGL - Looking South

Figure 20: Drone at 120m AGL - Looking East

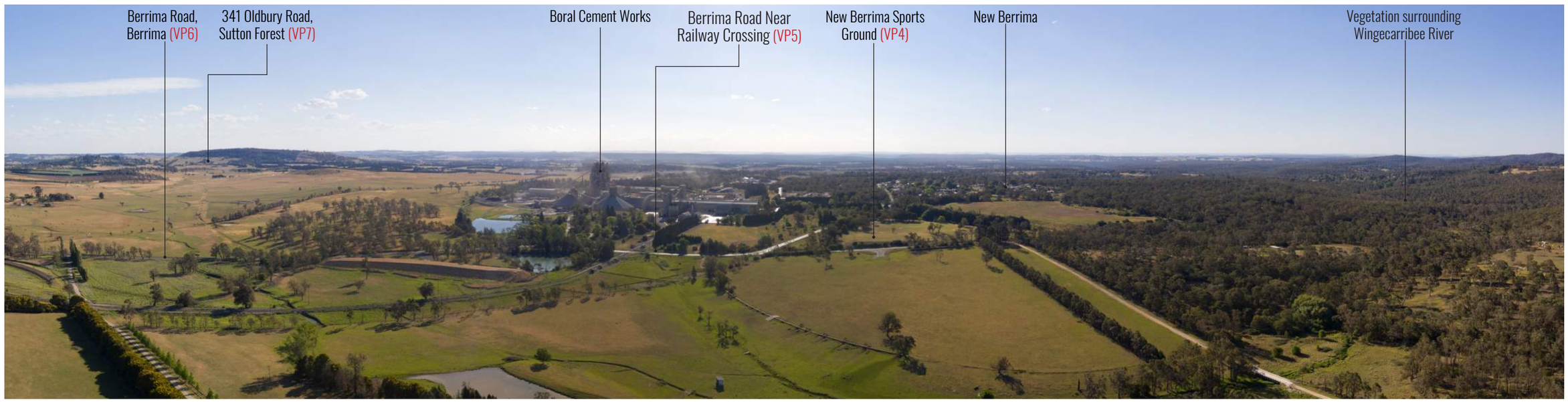


Figure 21: Drone at 120m AGL - Looking West

4.0 BASELINE DESCRIPTION

4.1 Planning Context

The following current state, regional and local planning controls, have been considered in the preparation of this report:

Wingecarribee Local Environmental Plan 2010
Moss Vale Enterprise Corridor Development Control Plan 2008
Sydney-Canberra Corridor Regional Strategy 2006-2031
Environmental Planning and Assessment Act 1979 (EP&A Act)

The site is currently zoned for general industrial (IN1) under the Wingecarribee Local Environmental Plan 2010 (WLEP 2010). See Figure 18 below.

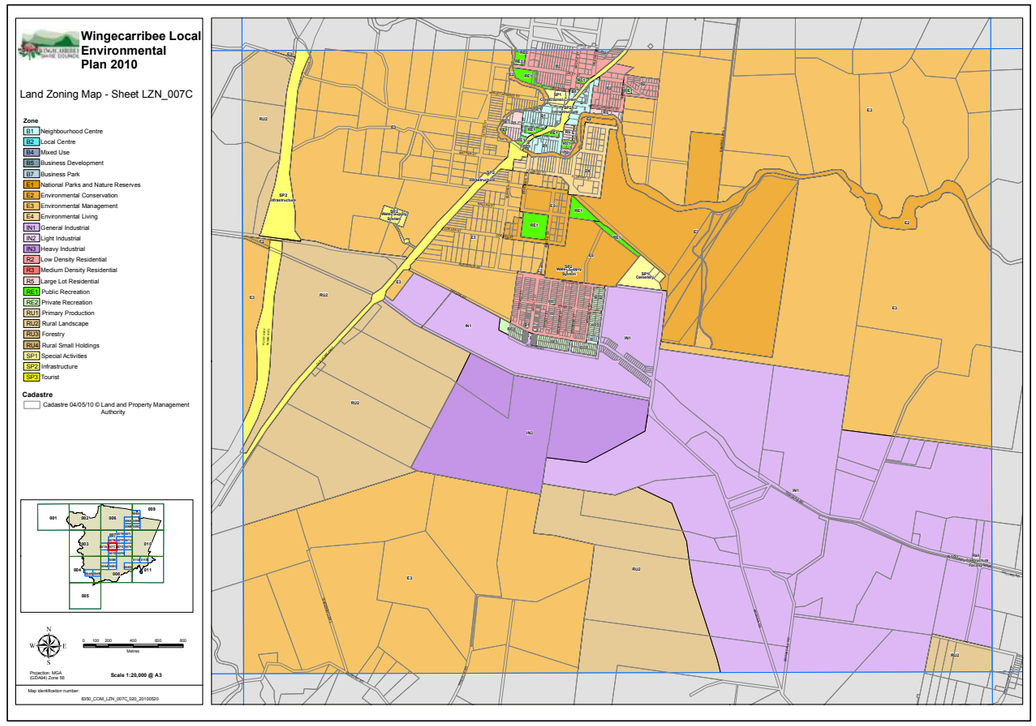


Figure 22: Land Zoning Map (Source: WLEP 2010)

4.2 Landscape Character

The landscape character of the area can be described as being generally rural and agricultural, with an influence of industrial development. It has high scenic qualities with rolling hillsides, changes in topography with natural rivers and bushland.

As State and Council planning dictates, lands in the immediate surrounding area are either zoned for industrial or enterprise uses. Therefore, the nature of the development proposed will not contradict the future character of the area. Landscape plans to supplement this VIA report and the EIS submission, have been provided by Geoscapes. The designs are intended to respond to local character in the use of endemic plant species to maintain and increase biodiversity, and to provide visual mitigation to potential visual receivers. Refer to section 5.0 for further details.

4.3 Sensitivity of the Landscape

Willow Tree Planning prepared the Request for Secretary's Environmental Assessment Requirements. Within this document the following text describes the site:

'Lot 1 DP785111 has been most recently used for agricultural and rural residential purposes, supporting the Chesley Park Pastoral Land homestead (refer to Figure 1). It comprises an area of 51.68ha and currently contains paddocks and derived grasslands, scattered and landscaped mature trees, a storage dam, tributaries of Stony Creek, an internal access road and minor agricultural structures supporting the dominant use of cattle farming. There is an existing above ground water main traversing Lot 1 DP785111 from the north-west and traveling in a curvature to the north-east.'

The site in it's current form does not have any statutory designations within the SEPP which attribute Landscape or Environmental value to the site.

A significant local value may be held by visual receptors with high sensitivity and residential properties which are in close proximity to the site These views are likely to be based on perceptual aspects such as wilderness, tranquillity, land use, environmental value and green open space.

The site can be categorised as a being a relatively common receptor in fair condition. It is a landscape receptor with a moderate level of sensitivity to disturbance or change in character due to the development proposals, with some potential for substitution or replacement Therefore, the sensitivity of the landscape is judged as being **medium.**

4.4 Selected Viewpoints – Receptor Locations

The symbols and numbering in Figure 2 (page 9), indicate the viewpoints, photomontages and Google Earth views that have been selected for a Visual Impact Assessment (VIA). Viewpoints have been taken from publicly accessible areas and also private residential dwellings.

A sample of receptors which are closest in proximity to the proposed development, those with vantage points at higher elevations and those with views at further distances have been selected. It would be impractical to provide a VIA for every single possible visual receiver of the development, therefore a sample has been selected. For visual receptors not selected for an individual viewpoint assessment (i.e. from inside a private dwelling), a representative view for that location has been assessed in terms of a likely significance of visual impact.

From viewpoint locations, photomontages have been generated to represent as closely as possible, views of the proposed development immediately following construction and at year 15. Year 15 images include proposed landscape mitigation.

Refer to the visual impact assessment at Section 8.0 of this report and the corresponding viewpoints 1 to 9.

5.0 DEVELOPMENT PROPOSALS

The following information is based on an assessment of drawings provided by SBA Architecture.

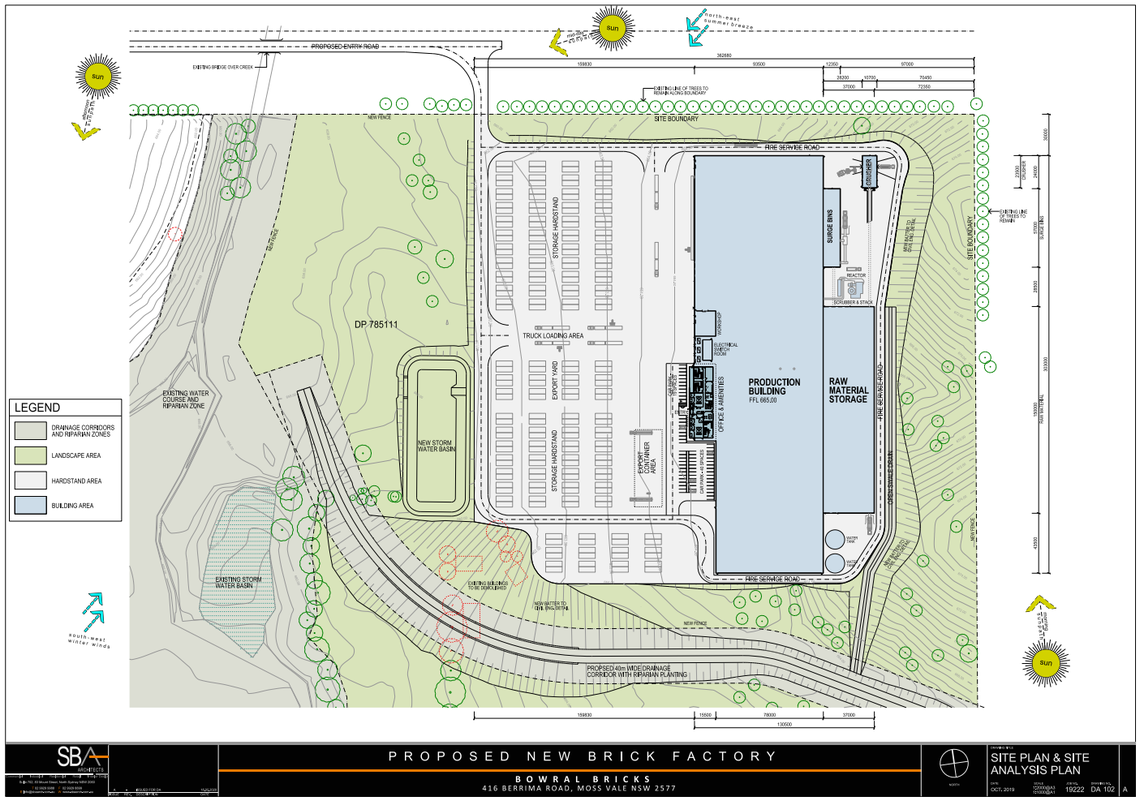


Figure 23: Proposed Brick Works Site Plan (Source: SBA)

5.1 Overall Design Proposals

Situated in the figure above is the proposed Brickworks Site Plan. This plan is used for the purpose of assessment within this LVIA report.

The design proposes a production building with office and amenities, a raw material storage building, surge bins, a crusher storage, hard stands and carpark. There will be landscape treatments to the remainder of the site including a 40m wide drainage corridor with riparian planting, a new storm water basin and endemic tree, shrub and ground cover planting complying with APZ requirements.

5.2 Height / Scale

The proposed developments main building has a ridge height of 16m AGL (681.00 RL). The raw material storage building and surge bins have a higher ridge height at 20m AGL (685.00 RL). The stack extends up to a height of 35m. The building creates a footprint of approximately 130m x 303m.

Height and scale has been addressed by siting the building as close to existing grade as possible, placing the building to the east of the site and providing a large amount of landscape area to provide screening.

5.3 Colour / Materials & Finishes

The colours, materials and finishes have been selected to address height and scale. Metal profiled cladding and sheeting is used in a palette of greys. The office building will be constructed using Boral bricks. The 35m high stack is the tallest element of the design and therefore, potentially the most visible component of the development. By painting this a dark colour, this should help to recess it against existing bushland and proposed landscaping.

5.4 Summary

Overall it is judged that the proposed brickworks has been well sited within the development boundary. There is naturally rising topography further east of the site boundary which helps to sit the main facility lower in the landscape, thus making it less visible. Neutral colours and materials have been selected so that the development blends into its surrounding context.

6.0 LANDSCAPE DESIGN

6.1 Strategy

Landscape design is intended to be sympathetic to the surrounding character of the area. Large areas of existing vegetation are proposed to be retained. This will be strengthened by planting of additional species which are locally indigenous to the area such as the Southern Highlands Shale Forest. Trees will be scattered in isolated groups similar to the plantings that are currently present on site. A riparian corridor exists to the south of the site, this will be planted with a fully structured riparian buffer. Refer to Landscape Design Report LDR01 for further details.

6.2 Detailed Landscape Proposals

Please refer to landscape design drawings LDA-00 to LDA-09 and Landscape Design Report LDR-01 prepared by Geoscapes, for detailed landscape proposals.

7.0 LANDSCAPE IMPACT ASSESSMENT

7.1 Significance of Impact

The sensitivity of the landscape has been assessed within the baseline to be **medium** (see section 4.0). From understanding the development proposals, mitigation and the existing industrial/enterprise zoning of adjacent landscape, the magnitude of change is judged to be **medium.** The significance of landscape impact therefore, is judged to be **moderate/minor.**

8.0 VISUAL IMPACT ASSESSMENT

8.1 Viewpoint 1

Viewing Location	441 Oxleys Hill Road, Berrima - Looking Southwest
GPS	34°29'19"S, 150°21'55"E
Elevation (Eye-level)	733m AHD
Date and Time	20th November 2019 - 13.25am
Baseline Photo and Photomontage Figure	Figure 24
Visual Description	
Approx. Viewing Distance from Site Boundary	2.3km
View Description & Prominence of the Development	This visual receptor is within private property and is situated at an elevated position to the northeast of the site. The adjacent property no. 443 would also experience a similar type of view and both are seen in the drone photography within figures 10,14 and 18. The baseline photograph opposite was taken from the western parking area of the property. In the foreground of the view, rolling hillsides and agricultural lands dominate, with scattered trees and bushland. Sutton Forest can been seen in the center of the shot in the distance. Both Inghams Enterprises and the Boral Cement works are visible and the view is fairly typical of those within the immediate area. The development site can be seen between Ingham's and the Cement works.
Visual Receptor Sensitivity	The view can be considered to have a high degree of scenic quality that would be held in high regard by the owners. Views would be experienced from a number of windows of the property or from garden areas. There is the presence of existing industrial development within the baseline however, this is partially obscured to some degree. On this basis, it is judged that the sensitivity for this receptor to the development would be **high.**
Magnitude of Change	The proposed development is likely to form a barely noticeable component of the view, and the view whilst slightly altered would be similar to the baseline situation. Therefore, the magnitude of change for this visual receptor is judged to be **very low.**
Significance of Visual Impact	The significance of the visual impact at this location is judged to be **minor.**

Approx Extent of Proposed Brickmaking Site

Baseline Photo

Photomontage Year 0

Photomontage Year 15

Figure 24: Viewpoint 1 - 441 Oxleys Hill Road, Berrima - Looking Southwest (Photomontage)

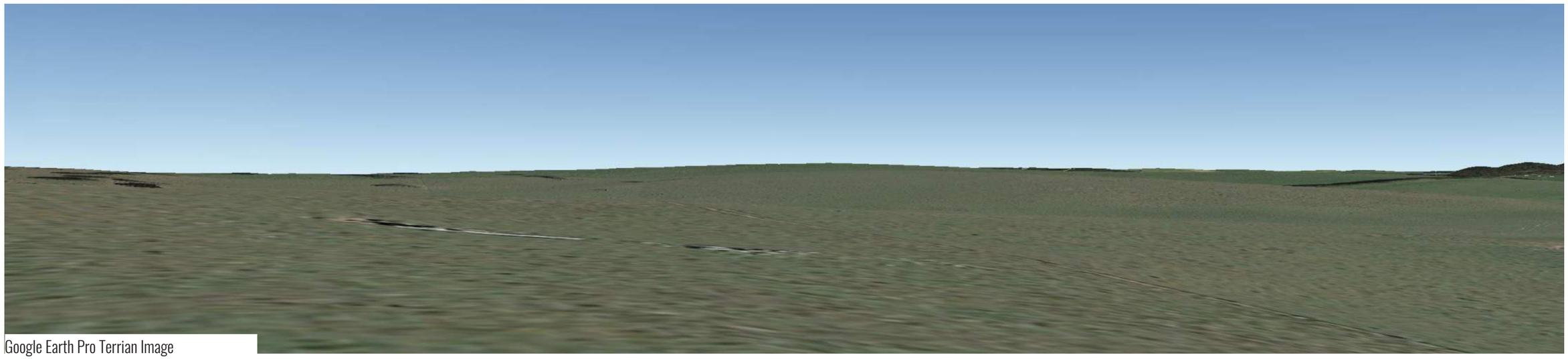
Approx Panoramic Angle of View - 67°

8.9 Viewpoint 2

Viewing Location	Adjacent to 54 Carribee Road, Moss Vale - Looking West
GPS	34°30'52.6"S, 150°21'47.7"E
Elevation (Eye-level)	678.5m AHD
Date and Time	21st February 2020 - 9.22am
Baseline Photo & Google Earth Figure	Figure 25
Visual Description	
Approx. Viewing Distance from Site Boundary	1km
View Description & Prominence of the Development	This view is taken opposite property No. 54 at the end of Carribee Road before it turns into a private track leading to properties in the north. It is likely that only a small amount of people would experience this view as the road is essentially used by landowners only. The owners of No 54, would experience this view when pulling out of their driveway onto Carribee Road. The baseline photograph demonstrates that there are long distance expansive views of pasture fields, scattered trees and bushland. The development is situated due east from this location at a distance of approximately 1km.
Visual Receptor Sensitivity	As can be seen in the baseline image, the outlook is pleasant, has scenic quality and is currently unaffected by industrial development. It would likely have scenic value to local residents, however, are most likely to be expericed from the track only. Therefore, it is judged that the sensitivity of this visual receptor is **medium.**
Magnitude of Change	As demonstrated in the Google Earth Terrian Wireframe and Streetview combined view in Figure 25, the development is expected to be screened by existing topography with the exception of the top of the 35m stack. This is likely to form a barely noticeable component of the view, and the view whilst slightly altered would be similar to the baseline situation. Therefore, the magnitude of change is judged to be **very low.**
Significance of Visual Impact	The significance of the visual impact at this location is judged to be **minor negligible.**

Approx Extent of Proposed Brickmaking Site

Baseline Photo



Google Earth Pro Terrian Image

Baseline Image and Wireframe Combined

Figure 25: Viewpoint 2 - Adjacent to 54 Carribee Road, Moss Vale - Looking West (Google Earth Pro)

Approx Panoramic Angle of View - 67°

8.3 Viewpoint 3

Viewing Location	524 Berrima Road, Berrima - Looking Southwest
GPS	34°30'8"S, 150°21'38"E
Elevation (Eye-level)	674.8m
Date and Time	20th November 2019 - 11.02am
Baseline Photo & Photomontage Figure	Figure 26
Visual Description	
Approx. Viewing Distance from Site Boundary	850m
View Description & Prominence of the Development	This viewpoint has been taken from land and property which previously had uses as a stud farm, it has since been acquired by The Austral Brick Company. The site has approval from the minister to operate as a shale quarry and is due to be operational in the near future.
Visual Receptor Sensitivity	As this site is owned by the client, any views of the proposed brickworks would be only experienced by workers. It is judged that the sensitivity for this receptor to the development would be **very low.**
Magnitude of Change	Only the top half of the development including the stacks are likely to be seen. Existing vegetation, the natural topography of the land and proposed landscaping is likely to screen the majority of the proposal. Therefore, the magnitude of change for this visual receptor is judged to be **low.**
Significance of Visual Impact	The significance of the visual impact at this location is judged to be **negligible.**

Approx Extent of Proposed Brickmaking Site

Baseline Photo

Photomontage Year 0

Photomontage Year 15

Figure 26: Viewpoint 3 - 524 Berrima Road, Berrima - Looking Southwest (Photomontage)

Approx Panoramic Angle of View - 67°

8.4 Viewpoint 4

Viewing Location	New Berrima Sport Ground - Looking East
GPS	34°30'25"S, 150°20'34"E
Elevation (Eye-level)	679.8m AHD
Date and Time	20th November 2019 - 11.38am
Baseline Photo & Photomontage Figure	Figure 27
Visual Description	
Approx. Viewing Distance From Site Boundary	450m
View Description & Prominence of the Development	New Berrima Sports Ground is located to the west of the proposed development. It contains a cricket pitch and buildings used for amenities. The ground does not appear like it is extensively used and is most likely frequented by dog walkers and used for occasional sporting activities. The baseline photograph was taken from the upper embankment which faces the pitch and is close to Berrima Road. In this elevated position, the development site is clearly seen, with Ingham's Enterprises to the far right of the image.
Visual Receptor Sensitivity	People using New Berrima Sports Ground generally will be involved in sporting activities, spectating or dog walking. The appreciation of the landscape for these users groups may not be the prime focus during recreation activities. However, the setting that the park is within has some visually appealing qualities and there are elevated areas that present views of the wider landscape. It is judged that the sensitivity for this receptor to the development would be **medium.**
Magnitude of Change	From reviewing the photomontage opposite, it is clear that the development will form a new and recognisible element within the landscape, which is likely to be recognised by the receptor. Existing vegetation within the foreground combined with new landscape planting, should help to recess the building and reduce visual impacts following maturity. Therefore, the magnitude of change is expected to be **medium.**
Significance of Visual Impact	The significance of the visual impact at this location is judged to be **moderate/minor.**

Approx Extent of Proposed Brickmaking Site

Baseline Photo

Photomontage Year 0

Photomontage Year 15

Figure 27: Viewpoint 4 - New Berrima Sports Ground - Looking East (Photomontage)

Approx Panoramic Angle of View - 67°

8.5 Viewpoint 5

Viewing Location	Berrima Road Near Railway Crossing - Looking East
GPS	34°30'34"S, 150°20'35"E
Elevation (Eye-level)	663.8m AHD
Date and Time	20th November 2019 - 11.48am
Baseline Photo & Photomontage Figure	Figure 28
Visual Description	
Approx. Viewing Distance from Site Boundary	480m
View Description & Prominence of the Development	This visual receptor was selected to be a representational view of the development, that might be experienced from nearby roads that pass close to the site. The baseline photograph was along Berrima Road, near to the railway crossing. At this location there is a stop sign so that cars allow trains to enter or leave the Boral Cement Works plant. Motorists would have views of the site to the east over distance of approximately 340m. The baseline view is fairly typical of that seen driving around the area, with agricultural lands and scattered trees. The development site is situated in the center of the baseline image.
Visual Receptor Sensitivity	Motorists along this stretch of road would only experience a view corridor of approximately 340m in an easterly direction. They would also either be traveling past the Boral Cement Works or traveling towards it, therefore, the view will already have been affected somewhat by industrial development. It can be judged that the sensitivity for this receptor to the development would be **low.**
Magnitude of Change	The proposed development is likely to be partially visible within the view and would be recognised by the receptor. Existing vegetation would screen large parts of the development and new planting will further mitigate and filter views. Therefore, the magnitude of change is judged to be **low.**
Significance of Visual Impact	The significance of the visual impact at this location is judged to be **minor negligible**

Approx Extent of Proposed Brickmaking Site

Baseline Photo

Photomontage Year 0

Photomontage Year 15

Figure 28: Viewpoint 5 - Berrima Road Near Railway Crossing - Looking East (Photomontage)

Approx Panoramic Angle of View - 67°

8.6 Viewpoint 6

Viewing Location	Berrima Road, Near Inghams Factory - Looking Northeast
GPS	34°30'49"S, 150°20'47"E
Elevation (Eye-level)	662.85m AHD
Date and Time	20th November 2019 - 11.48am
Baseline Photo & Photomontage Figure	Figure 29
Visual Description	
Approx. Viewing Distance from Site Boundary	500m
View Description & Prominence of the Development	This view is similar to viewpoint 5 and is also taken along Berrima Road to the south of the site, close to the Inghams factory. Motorists may possibly experience glimpsed views of the development through the existing tree line. The baseline photograph was taken along the northern verge, in a gap within the existing vegetation line. In the foreground and to the right, the entrance to the site at 416 can be seen together with the tree lined avenue which leads to the existing property on the site.
Visual Receptor Sensitivity	Motorists along this stretch of road would only receive glimpsed views of the development behind existing vegetation. They would also either be traveling past the Inghams factory or traveling towards it, therefore, the view will already have been affected somewhat by industrial development. It can be judged that the sensitivity for this receptor to the development would be **low.**
Magnitude of Change	The proposed development will form a barely noticeable component of the view, with only very small view corridors likely due to the presence of significant existing vegetation. The view would be very similar to the baseline situation. Therefore, the magnitude of change is judged to be **low.**
Significance of Visual Impact	The significance of the visual impact at this location is judged to be **minor negligible.**

Approx Extent of Proposed Brickmaking Site

Baseline Photo

Photomontage Year 0

Photomontage Year 15

Figure 29: Viewpoint 6 - Berrima Road Near Inghams Factory - Looking Northeast (Photomontage)

Approx Panoramic Angle of View - 67°

8.7 Viewpoint 7

Viewing Location	341 Oldbury Road, Sutton Forest - Looking Southwest
GPS	34°32'10"S, 150°19'32"E
Elevation (Eye-level)	693.7m AHD
Date and Time	20th November 2019 - 2.43pm
Baseline Photo & Photomontage Figure	Figure 30
Visual Description	
Approx. Viewing Distance from Site Boundary	3.6km
View Description & Prominence of the Development	This baseline photograph is taken in front of a property that was identified by drone photography. The development would be more visible from the first floor balcony of the property however, access was not possible on the day as the property owner was not home. The view is again is typical of the area with rolling hillsides, agricultural lands, hedgerows and scattered trees. To the left of the image the cement works can be seen and to the far right sheds on Abbattoir Road.
Visual Receptor Sensitivity	Views at this location have high scenic qualities. Taking into account that views might be possible from living spaces of the two-storey residential dwelling at 341 Oldbury Road, it is judged that the sensitivity for this receptor to the development would be **high.**
Magnitude of Change	At road level the development is expected to be fully screened by existing vegetation. From analysis of drone photography within the site, it is possible that the residential dwelling at 341 Oldbury Road may see the top of the 35m stack above the existing tree line. However, this is likely to be a very small element within the view and therefore, the view would be very similar to the existing baseline situation. The magnitude of change is judged to be **very low.**
Significance of Visual Impact	The significance of the visual impact at this location is judged to be **minor.**

Approx Extent of Proposed Brickmaking Site

Baseline Photo

Photomontage Year 0

Photomontage Year 15

Figure 30: Viewpoint 7 - 341 Oldbury Road, Sutton Forest - Looking Northeast (Photomontage)

Approx Panoramic Angle of View - 67°

8.9 Viewpoint 8

Viewing Location	Douglas Road, Moss Vale - Looking North
GPS	34°30'59"S, 150°21'14"E
Elevation (Eye-level)	672m AHD
Date (Google Streetview)	May 2015
Google Streetview & Google Earth Pro Figure	Figure 31
Visual Description	
Approx. Viewing Distance from Site Boundary	700m
View Description & Prominence of the Development	This view was generated from Google Streetview at Douglas Road on the approach to the crossing over the Boral train line. It is intended to demonstrate potential visibility of the development to motorists traveling towards New Berrima from the east. The view is dated 2015, but it has not changed significantly in this time. To the left of the image in the distance is the Boral Cement works, pasture lands and bushland. To the north of Douglas Road to the right of the image is rising topography and pasture lands with scattered trees. The development site is also to the right of the image.
Visual Receptor Sensitivity	The approach and drive along Douglas Road is pleasant and has scenic quality. The view is however affected by the Boral Cement works and motorists travelling along this route may not place high importance on the surrounding landscape. Therefore, it is judged that the sensitivity of this visual receptor is **medium.**
Magnitude of Change	As demonstrated in the Google Earth Terrian Wireframe and Streetview combined image in Figure 31, the development is expected to be screened by existing topography. Therefore, the magnitude of change is judged to be **none.**
Significance of Visual Impact	The significance of the visual impact at this location is judged to be **none.**

Approx Extent of Proposed Brickmaking Site

Google Streetview Baseline Image

Google Earth Pro Terrian Image

Google Earth Pro Terrain Wireframe and Google Streetview Combined

Figure 31: Viewpoint 8 - Douglas Road, Moss Vale - Looking North (Google Earth Pro)

Approx Panoramic Angle of View - 67°

8.9 Viewpoint 9

Viewing Location	15 Carriebee Road, Moss Vale - Looking Northwest
GPS	34°30'58"S, 150°21'32"E
Elevation (Eye-level)	700m AHD
Date and Time	20th November 2019 - 12.17pm
Baseline Photo & Google Earth Figure	Figure 32
Visual Description	
Approx. Viewing Distance from Site Boundary	800m
View Description & Prominence of the Development	This view is taken from a property at 15 Carriebee Road, it is currently owned by a building contractor. The photograph was taken from within storage areas to the western boundary of the property. In the foreground is adjoining agricultural lands with grazing animals and scattered trees. Undulating topography is visible in the distance with extensive bushland associated with Wingecarribee River. Berrima Road can be seen to the left of the image and the slip road to the current site entrance at 524 Berrima Road.
Visual Receptor Sensitivity	The residential property at this location is further back from where the baseline image was taken and is screened by existing vegetation. Therefore, it is not likely to experience views of the development. Working areas of 15 Carriebee Road, including storage areas and alike, will experience some views of the development. The outlook is pleasant and has scenic quality, therefore it is judged that the sensitivity of this visual receptor is **medium.**
Magnitude of Change	Following the maturity of proposed landscape planting, the development should blend into the surrounding context. This will likely make the buildings only partially viable and therefore, the magnitude of change is judged to be **low.**
Significance of Visual Impact	The significance of the visual impact at this location is judged to be **minor.**

Approx Extent of Proposed Brickmaking Site

Baseline Photo

Photomontage Year 0

Photomontage Year 15

Figure 32: Viewpoint 9 - 15 Carribee Road, Moss Vale - Looking Northwest (Photomontage)

Approx Panoramic Angle of View - 67°

9.0 CONCLUSIONS AND NON-TECHNICAL SUMMARY

The main purpose of this Landscape and Visual Impact Assessment is to address the relevant Secretary's Environmental Assessment Requirements, in relation to the proposed Boral Brickmaking Plant at 416 - 524 Berrima Road, Moss Vale.

Potential visual impacts have been assessed for a number of locations that are either in close vicinity to the proposed development, or at higher elevations with vantage points overlooking the site.

The landscape value of the development site itself, has been assessed based upon local planning designations, landscape ecological value and the character and context in which it is located. It has been concluded that the significance of the impact upon the landscape at the development site is **moderate/minor**. Although the site does present visual scenic qualities, this has to be considered against the immediate surrounding industrially/ enterprise zoned land. The surrounding landscape character will continue to be influenced by industrial development into the future.

It was concluded that locations generally in very close proximity to the site, actually have lower sensitivity. This is due to the type of user group at these locations either being motorists or people involved in sporting recreation.

The conclusions of potential visual impacts have been determined by site visits, desktop study, photographic, Google Earth and photomontage visual analysis. **None** of the visual impacts assessed are judged to be significant.

Through analysis conducted within this report, the following location is judged to receive **moderate/minor** visual impacts from the proposed Brickmaking Plant.

- New Berrima Sports Ground - (VP4)

The following locations and are judged to receive **minor** visual impacts from the proposed development:

- 441 Oxleys Hill Road, Berrima - (VP1)
- 341 Oldbury Road, Sutton Forest - (VP7)
- 15 Carribee Road, Moss Vale - (VP9)

The following locations and are judged to receive **minor negligible** visual impacts from the proposed development:

- Adjacent to 54 Carribee Road, Moss Vale - (VP2)
- Berrima Road Near Railway Crossing - (VP5)
- Berrima Road, Near Inghams Factory - (VP6)

The following locations and are judged to receive **negligible** visual impacts from the proposed development:

- 524 Berrima Road, Berrima - (VP3)

The following location is judged to receive **no** visual impacts from the propsoed development:

- Douglas Road, Moss Vale - (VP8)

One location have been assessed as potentially receiving **moderate/minor** visual impacts from the proposed development, this is not considered to be significant visual impact.

There are a number of public locations which are in close proximity to the development, these include Berrima Road and New Berrima Sports Ground. Due to the type of users at these locations, (i.e motorists or people participating in sports/recreational activities) their sensitivity is generally less and as a result the significance of the visual impact is also lower. Motorists are expected to only experience views of the proposed Brickworks for a short period of time.

This report has described the built form proposals within Section 5.0. It demonstrates that the architectural team have carefully selected the location of buildings, materials and colours to reduce visual impacts in terms of bulk and scale.

Landscape plans have been provided by Geoscapes to support the planning application. These include proposed scattered trees throughout the landscape and a fully structured 40m Riparian zone. To preserve the landscape character of the area and to be in accordance with bushfire guidance, proposed tree planting is to be in isolated groups. Although separated, these tree groupings will still help to filter views towards the development.

Conclusions drawn on the visibility of the proposed Boral Brickmaking Plant, indicate that only the stacks and upper parts of the building will potentially be seen from the majority of locations within the surrounding area. The development will be visually recessive through a combination of natural topography, existing vegetation and proposed planting which will screen the development from many locations in the immediate context.

Of the locations selected for visual impact analysis within this reports, none have been judged to be significant for the majority of people who will potentially receive them.

10.0 GLOSSARY OF TERMS

Term	Definition
SEARs	Secretary's Environmental Assessment Requirements
GLVIA	Guidelines for Landscape and Visual Impact Assessment (UK Landscape Institute)
LVIA	Landscape and Visual Impact Assessment
VIA	Visual Impact Assessment
DIPE	Department of Industries Planning and Environment
LEP	Local Environment Plan
DCP	Development Control Plan
Baseline	The existing current condition / character of the landscape or view
Landscape Receptor	The landscape of the development site
Landscape Sensitivity	How sensitive a particular landscape is to change and its ability to accept the development proposals.
Visual Receptor	A group or user experiencing views of the development from a particular location
Visual Sensitivity	The degree to which a particular view can accommodate change arising from a particular development, without detrimental effects.
Panoramic Angle of View or Field of View	Single DSLR 50mm lens photographs are stitched together to form a combined panoramic image. The angle of view is the extent of the image shown on the viewpoint sheet. A full frame single image is 39.6°
Viewing Distance	The distance from the point of projection to the image plane to reproduce correct linear perspective.
Magnitude of Change	The magnitude of the change to a landscape receptor or visual receptor
Significance of Impact	How significant an impact is for a landscape or visual receptor