

BORG PANELS PTY LTD

VISUAL IMPACT ASSESSMENT
TIMBER PROCESSING FACILITY (PARTICLE BOARD)

124 LOWES MOUNT ROAD, OBERON

MAY 2016

BORG PANELS PTY LTD

VISUAL IMPACT ASSESSMENT

TIMBER PROCESSING FACILITY (PARTICLE BOARD)

124 LOWES MOUNT ROAD, OBERON

PROJECT NUMBER: 14.023

ISSUE	DATE	DESCRIPTION	AUTHOR
A	11/04/16	First Draft	NS
B	11/05/16	Final	NS
C	17/05/16	Amended Figure 3 & Plans	NS
D	19/05/16	Amended Figures 3 & 4	NS

Report prepared by:

THE DESIGN PARTNERSHIP

TDP2 Pty Ltd ATF The Design Unit Trust T/A The Design Partnership

Central Coast – PO Box 6110 Long Jetty NSW 2261

Hunter Region – PO Box 277 Charlestown NSW 2290

T 02 4324 8554

E info@thedesignpartnership.com.au

W www.thedesignpartnership.com.au

Disclaimer | This report has been prepared based on the information supplied by the Client and investigations undertaken by The Design Partnership and other consultants. Recommendations are based on professional judgement and whilst every effort has been taken to provide accurate advice, the Client should be aware that Council, Government Agencies and other regulatory bodies may not concur with the recommendations within this report. The preparation of this report does not guarantee approval of any application.

Copyright | This document and the information contained therein is solely for the use of the authorized recipient. This document may not be used, copied or reproduced in whole or in part for any purposes other than that for which it was supplied by The Design Partnership. The Design Partnership makes no representation, undertakes no duty and accepts no responsibility to any third party who may use or rely on this document for the information contained therein.

CONTENTS

1.0 INTRODUCTION	1
2.0 METHODOLOGY	1
3.0 LOCATION.....	2
4.0 THE PROJECT	5
5.0 LANDSCAPE CONTEXT.....	8
6.0 VISUAL LANDSCAPE CHARACTER ASSESSMENT	9
6.1. METHOD	9
6.2. ASSESSMENT	10
7.0 VIEW POINTS.....	12
8.0 VISIBILITY	15
8.1. METHOD	15
8.2. ASSESSMENT	16
9.0 VISUAL ABSORPTION CAPACITY	18
9.1. METHOD	18
9.2. ASSESSMENT	18
10.0 VISUAL IMPACT RATING.....	19
11.0 RECOMMENDED MITIGATION MEASURES	20
12.0 CONCLUSION.....	21

LIST OF FIGURES

Figure 1: Location of the Subject Site (Source: The Design Partnership)	3
Figure 2: Aerial Map of the Subject Site and Surrounds (Source: Google Earth)	4
Figure 3: The Project (Source: Borg Panels).....	6
Figure 4: North and South Elevations of the Project (Source: Borg Panels)	7
Figure 5: Aerial Map of Oberon; the industrial area is clearly visible north of Albion Street (Source: Google Earth)	8
Figure 6: Viewshed of the Existing Facility (Source: Google Earth)	10
Figure 7: Viewshed of the Proposed Additions (Source: Google Earth)	10
Figure 8: Viewshed with Limits for Immediate, Local and District (Source: Google Earth)	11
Figure 9: Photograph Locations (Source: Google Earth)	12
Figure 10: View Points (Source: Google Earth).....	13
Figure 11: View Points, Zoomed Map (Source: Google Earth)	14

LIST OF TABLES

Table 1: Viewshed Limits and Viewing Zones	11
Table 2: View Point Locations	13
Table 3: Visibility Categories	15
Table 4: Visibility Assessment Criteria	15
Table 5: Visibility Assessment	17
Table 6: Visual Absorption Categories.....	18
Table 7: Visual Absorption Capacity	18
Table 8: Visual Impact Matrix	19

LIST OF APPENDICES

APPENDIX A PHOTOGRAPHS

APPENDIX B PLANS

1.0 INTRODUCTION

The Design Partnership has been engaged by Borg Panels Pty Ltd to prepare a Visual Impact Assessment (VIA) for the proposed expansion of the existing Medium-Density Fibreboard (MDF) processing facility at 124 Lowes Mount Road, Oberon. The need for this report arose as a result of the Secretary's Environmental Assessment Requirements, which specifically requested an assessment of visual amenity, "including an assessment of the potential visual impacts of the proposed development on the amenity of the surrounding area".

2.0 METHODOLOGY

The VIA process includes the following elements:

- Describe the location (Section 3.0)
- Define the project (Section 4.0);
- Assess the landscape context (Section 5.0);
- Identify, document and analyse the visual character of the surrounding landscape (Section 6.0);
- Identify and assess the potential View Points at which the proposed impact may have a visual impact (Section 7.0);
- Assess the visibility of the site from each View Point (Section 8.0);
- Assess the Visual Absorption Capacity (VAC) of the site and project (Section 9.0);
- Calculate the Visual Impact Rating (VIR) and identify potential adverse and positive visual impacts (Section 10.0); and
- Recommend mitigation measures where appropriate (Section 11.0), which may include:
 - Siting, scale, footprint, form and materials options; and
 - Vegetation alteration.

The purpose of all of the above is to ensure that the project is of a physical form which will have the lowest practical visual impact on its landscape setting, when viewed from viewpoints available to the public.

Visual management objectives provide the basis for determining the degree of intervention required to modify any identified adverse visual and landscape impacts.

A site visit was conducted by The Design Partnership's Andrew Neil (Director – Planning and Heritage) and Nicola Stainton (Urban Planner) on Friday 25 March 2016. This involved identification and documentation of various views of the site from the surrounding area.

3.0 LOCATION

The subject land is located on the outskirts of Oberon within the Oberon Local Government Area (Figure 1).

The site entry is approximately 1 kilometre north of Oberon Post Office. The development site comprises several lots, as follows:

- Lot 26 DP1200697
- Lot 24 DP1148073
- Lot 1 and 2 DP 1085563
- Lot 1 DP1076346

The site is largely flat, with an average elevation of 1090m and a high point of 1100m in the centre of the site (Figure 3). Lowes Mount Road forms the western boundary of the site. A sporting field and various light industrial sites are located to the south. Land to the north and east is presently undeveloped.

Consistent with the major industries of farming and forestry, the locality is generally characterised by rolling fields interspersed with areas of State Forest. Development within the town of Oberon is generally single detached houses of varying age on quarter acre blocks.



Figure 1: Location of the Subject Site (Source: The Design Partnership)



Figure 2: Aerial Map of the Subject Site and Surrounds (Source: Google Earth)

4.0 THE PROJECT

The Project is the expansion of the existing Borg Panels timber processing facility (Figure 3). The components of the expansion which have potential visual impacts are:

- New plant and buildings in the south-west corner of the site (items 10-18 below)
- Additions to the western side of the existing building (items 19-21 below)
- Additions to the northern side of the existing building (items 22 and 25 below)
- A new on-grade car park in the north-west corner of the site
- New basins and a new hardstand area east of the existing waste recycling plant

The remainder of the alterations and additions are inside the existing buildings.

Of the new plant and buildings, the largest will be two new silos (13) at a height of 42.5m and the new warehouse (22) at a height of 35.0m. Both of these additions are large in scale as well as height. However, there are existing structures on the site that are taller than these new features (Figure 4).

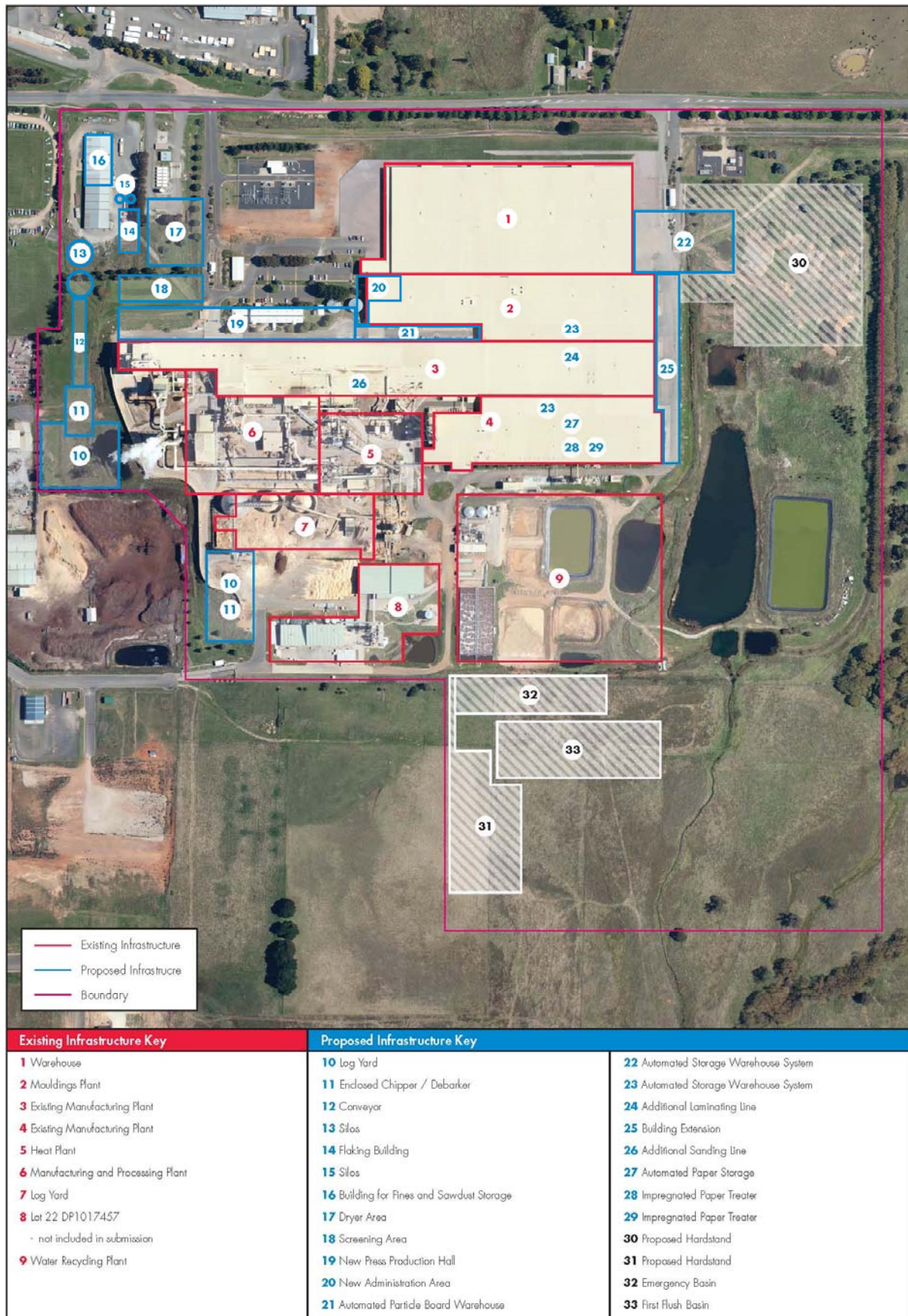


Figure 3: The Project (Source: Borg Panels)

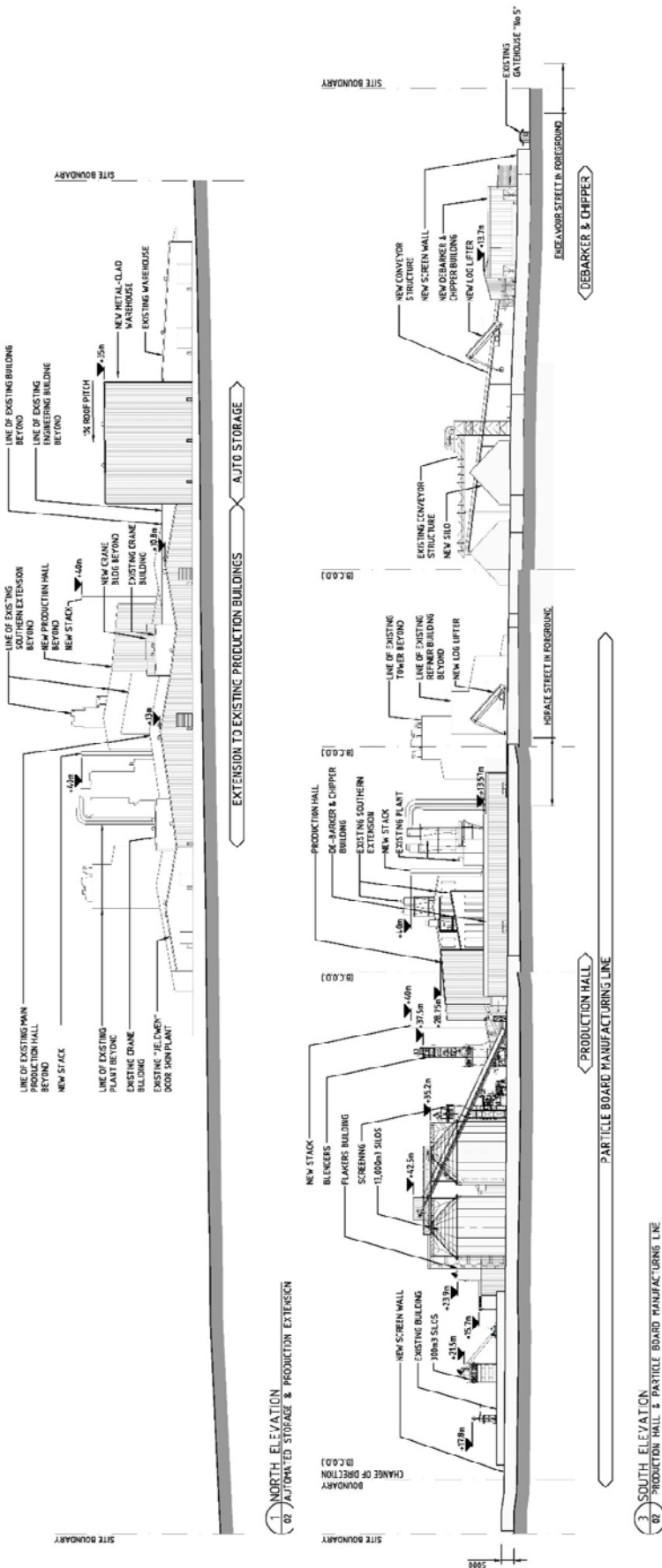


Figure 4: North and South Elevations of the Project (Source: Borg Panels)

5.0 LANDSCAPE CONTEXT

The subject site is located on the northern outskirts of Oberon. Historically, the primary local industries have been farming, forestry and wood products. Originally known as Bullock Flat by early pioneers, Oberon began to attract permanent settlers in the 1820s who used the land for grazing. From the 1930s onwards, native hardwood timbers were harvested from the local area; replanting with pine has sustained the timber industry in the locality. The surrounding area is generally characterised by grassy rolling hills interspersed with State Forest including Blenheim, Essington, Hampton and Lowes Mount. Most of the roads in the district are flanked with trees on both sides.

Oberon's industrial area is located in the north of the town, along Albion Street and the streets leading off it to the north (Figure 5). The subject site is located at the northern extent of the industrial area. Another large timber processing facility, Highland Pine Products, is located to the south-west of the Borg Panels site, and is bounded by Lowes Mount Road and Albion Street. Other uses in the area include warehousing, wholesale, retail, engineering and transport, many of which are related to the timber industry. The industrial area is characterised by very large warehouse type buildings, generally Colorbond in subdued shades of cream, beige and green, reflecting the surrounding landscape, interspersed with a few brighter reds and blues.

The use of the subject site for timber processing predates the original 1995 development consent.



Figure 5: Aerial Map of Oberon; the industrial area is clearly visible north of Albion Street (Source: Google Earth)

The town of Oberon is generally characterised by single storey detached houses of varying age on quarter acre blocks. The main street is primarily single storey; many of the shops have high parapets which help to block views of the timber processing facility.

6.0 VISUAL LANDSCAPE CHARACTER ASSESSMENT

6.1. METHOD

For the purposes of this Visual Impact Assessment:

- *Viewing Zones* means the distances (or locations) from the site from which it is possible to view the site
- *Viewshed* refers to the extent of views, which depends on how far distant the site remains visible and whether topographical features, bends in roads or physical structures prevent views of the site

In relation to the subject site, three Viewing Zones are necessary:

- Immediate vicinity (< 1.5 km)
- Local area (1.5 – 3.5 km)
- District area (3.5 – 10 km)

To assess the visual landscape character we carry out the following steps:

- Identifying the Viewsheds (or visual limits) of the project, including identifying the locations where viewers are likely to be affected by visual changes brought about by development of the site
- Identifying the visual character of each Viewshed. Character is then rated based on scenic quality as determined by positive and negative features of the landscape including vegetation, topography, land disturbance, urban forms, architectural character, and urban design:
 - Highest Quality Landscape
 - High Quality Landscape
 - Good Quality Landscape
 - Ordinary Quality Landscape
 - Poor Quality Landscape

The Viewing Zones and Viewsheds are identified and documented in a three-step process:

- A desktop review, including:
 - review of contours and topography of the site and surrounds
 - review of surrounding land uses and key road linkages
 - generation of viewshed maps using Google Earth to identify potential viewing sites (these viewshed maps, when located in regional areas, are generally based on topography as Google Earth does not yet have 3D models of buildings and vegetation for regional towns; consequently, the viewshed must be investigated further)
- A site visit to verify the findings of the desktop review and investigate further viewing sites
- Taking photographs in order to identify whether the proposed works could be seen from identified viewing sites

6.2. ASSESSMENT

Figures 6 and 7 show the overall viewsheds for the existing development on site (based on the tallest element, the 48m stacks) and the proposed development (based on the tallest element, the 42.5m silos). The majority of roads around Oberon are tree-lined so the subject site is generally not visible from most roads, only becoming visible where there are breaks in the trees or from particularly high vantage points. Within the town, the facility is mostly visible from the industrial area, Lowes Mount Road, and at intersections within the town. The limits of the viewsheds within each viewing zone are described in Table 1 and shown in Figure 8. Generally, the landscape is of a high quality within the district where views to the existing timber complex are brief and distant. The landscape is good to ordinary within the local area, and generally poor within the immediate vicinity of the site. This is due not only to the site itself but to the industrial area in general.

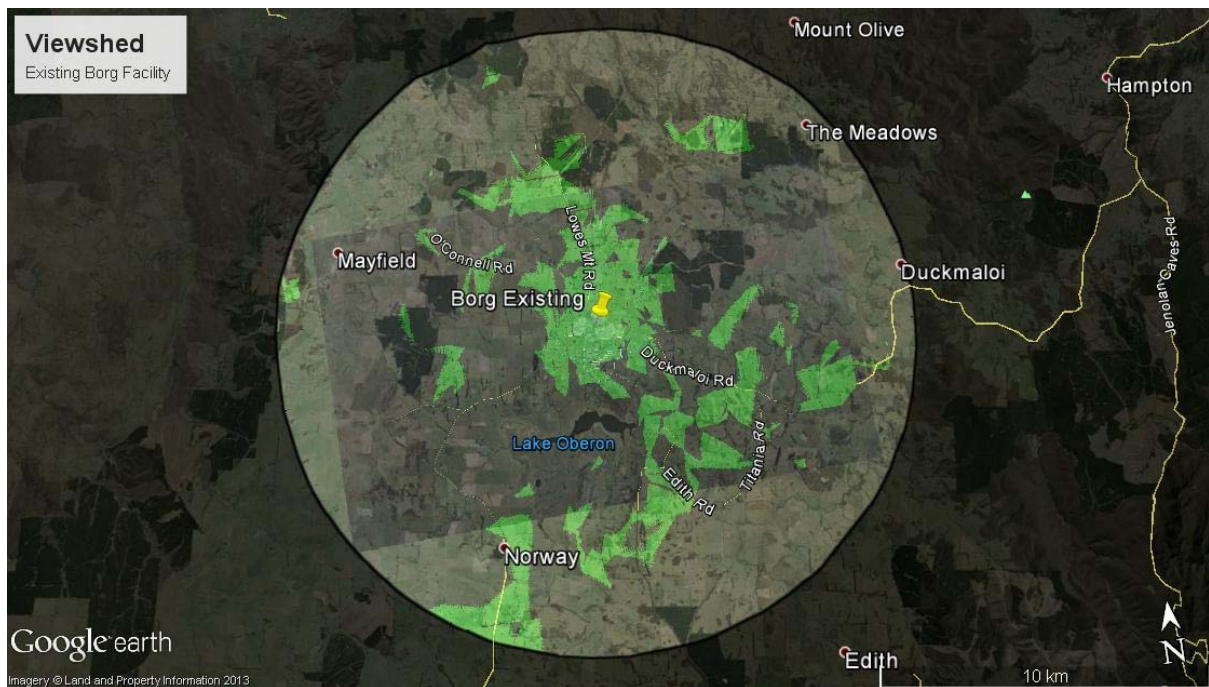


Figure 6: Viewshed of the Existing Facility (Source: Google Earth)

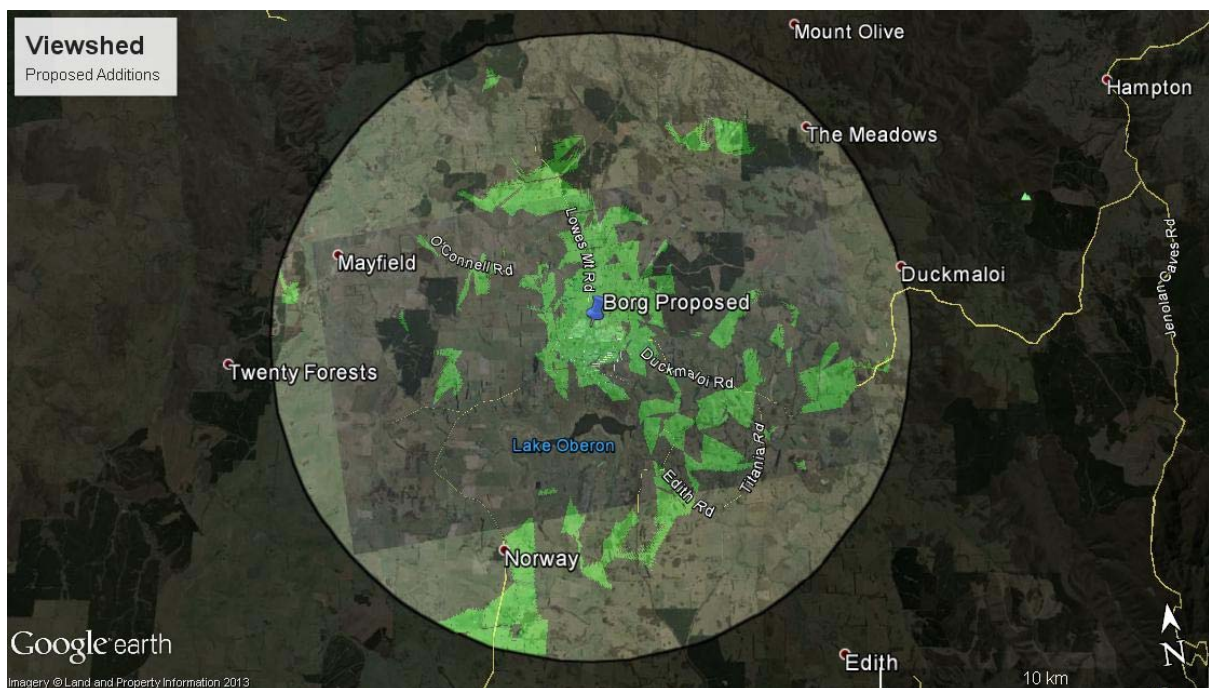


Figure 7: Viewshed of the Proposed Additions (Source: Google Earth)

Table 1: Viewshed Limits and Viewing Zones

	Immediate Vicinity (<1.5km) (red on map)	Local Area (1.5-3.5km) (yellow on map)	District Area (3.5-10km) (green on map)
North	Lowes Mount Rd, Clover Lane junction, 1km north of the site <i>Landscape Quality: Ordinary</i>	Rutters Ridge Rd, 3.0km north of the site <i>Landscape Quality: Good</i>	n/a – site not visible (from public areas) <i>Landscape Quality: High</i>
North East	n/a – site not visible (from public areas) <i>Landscape Quality: Poor</i>	Hazelgrove Rd, 1.5km north-east of the subject site <i>Landscape Quality: Ordinary</i>	n/a – site not visible (from public areas) <i>Landscape Quality: High</i>
East	n/a – site not visible (from public areas) <i>Landscape Quality: Poor</i>	Hazelgrove Rd, 1.75km east of the subject site <i>Landscape Quality: Good</i>	n/a – site not visible (from public areas) <i>Landscape Quality: High</i>
South East	Albion St, nr Hawken St junction, 1km south-east of the site <i>Landscape Quality: Poor</i>	Tarana Cr, 1.8km south-east of the site, outside Motel Titania <i>Landscape Quality: Ordinary</i>	Duckmaloi Rd, 8.0km south-east of the site <i>Landscape Quality: High</i>
South	Oberon St, junction with North St, 1.3km south of the site <i>Landscape Quality: Ordinary</i>	Ross St, 2.2km south of the site, near Oberon Golf Club entrance <i>Landscape Quality: Ordinary</i>	Edith Rd, 4.0km south of the site <i>Landscape Quality: Good</i>
South West	North St, Crete St junction, 1.3km south-west of the site <i>Landscape Quality: Poor</i>	The Reef Rd, 2.4km south-west of the site <i>Landscape Quality: Good</i>	Abercrombie Rd, 7.0km south-west of the site <i>Landscape Quality: High</i>
West	Lowes Mount Rd, southern entrance to the site <i>Landscape Quality: Poor</i>	O'Connell Rd, 1.5km west of the subject site <i>Landscape Quality: High</i>	n/a – site not visible (from public areas) <i>Landscape Quality: High</i>
North West	Lowes Mount Rd, northern entrance to the site <i>Landscape Quality: Ordinary</i>	O'Connell Rd, 2.5km north-west of the subject site <i>Landscape Quality: Ordinary</i>	n/a – site not visible (from public areas) <i>Landscape Quality: High</i>

* N.B. Distances from site are approximate

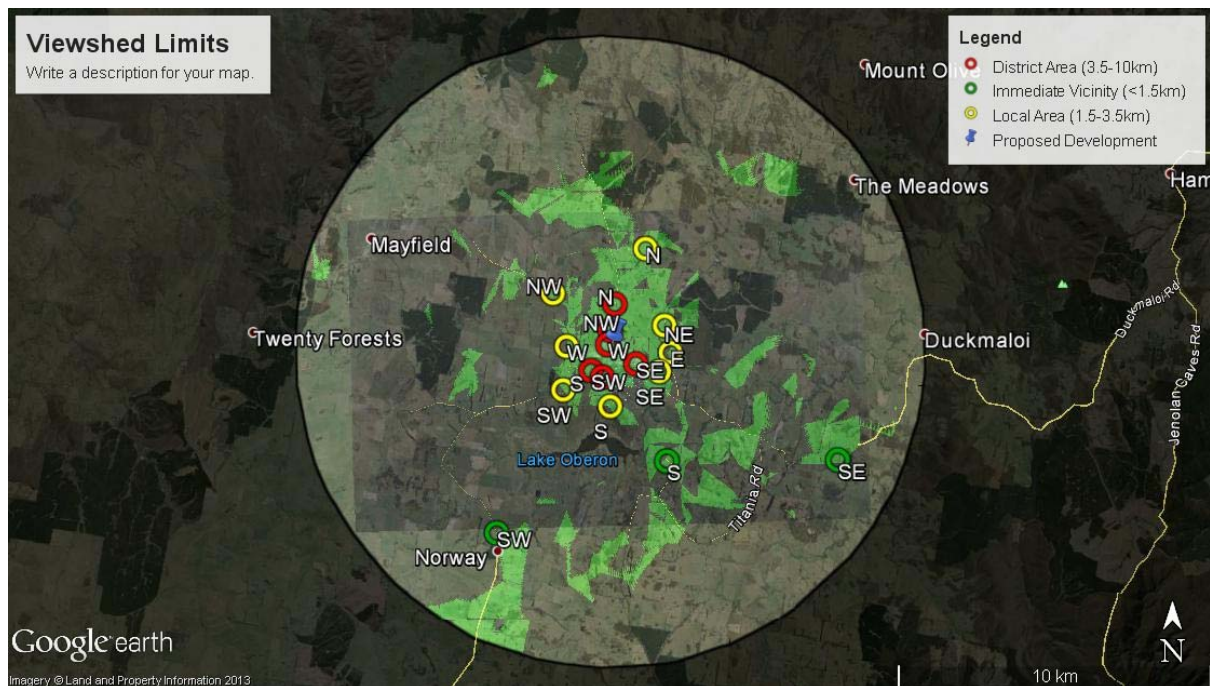


Figure 8: Viewshed with Limits for Immediate, Local and District (Source: Google Earth)

7.0 VIEW POINTS

For the purposes of this Visual Impact Assessment:

- *View Points* are key locations which most clearly convey the visual effects of the Project and the viewer groups potentially affected. View Points are determined based on a combination of Viewing Zones and Viewsheds.

Based on the topography and land uses of the locality, we took the approach of identifying view points by reviewing the surrounding area by sector based on compass points and viewing zones. The desktop review and site visit indicated that due to topography and vegetation the site could not be viewed from a public place in the district area to the north, north-east, east, west or north west, nor could it be viewed in the immediate vicinity from the north-east or east, as this land is owned by Borg Panels. Figure 9 shows the locations of the photographs taken during the site visit.

One View Point was selected for each of the 24 sectors (Table 2), except for the immediate vicinity south sector in which two View Points were chosen, and those sectors where the site cannot be viewed from a public place. Generally, the View Point chosen is the one with the clearest or closest view of the subject site, or the one with the highest number of viewers. In total, 18 View Points were identified in order to investigate the potential impacts of the proposed development on the visual landscape character (Figures 10 and 11).

Appendix A includes detailed descriptions of each View Point with maps and photographs.

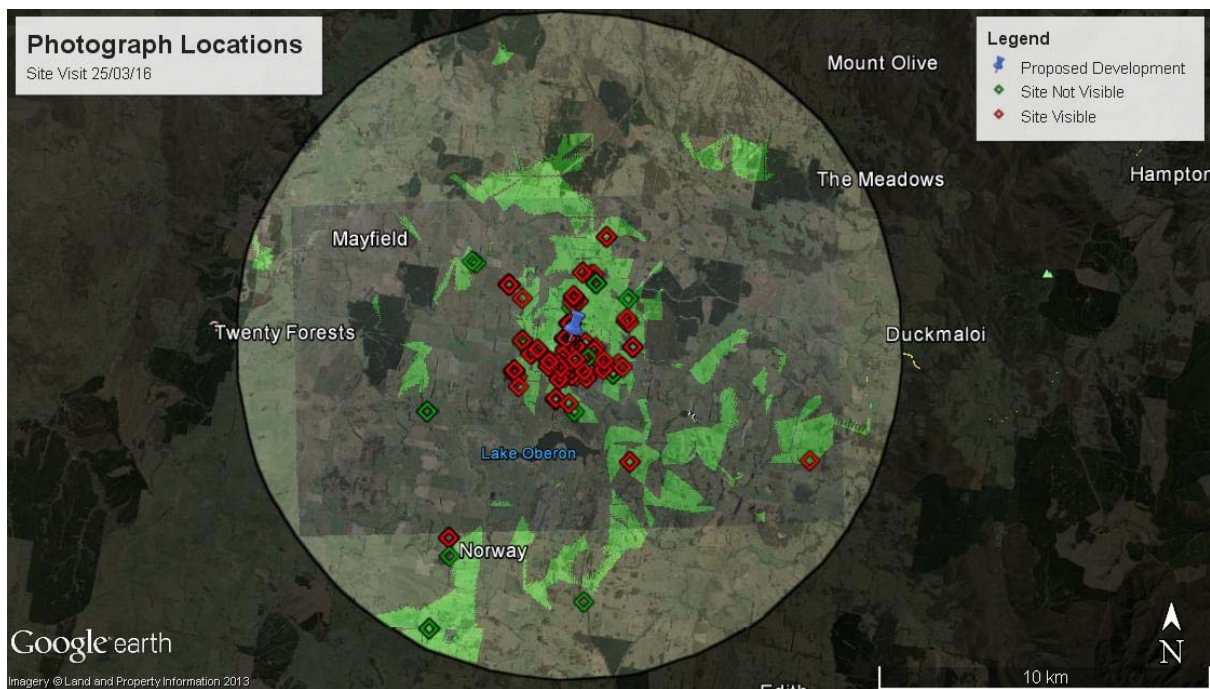


Figure 9: Photograph Locations (Source: Google Earth)

Table 2: View Point Locations

	Immediate Vicinity (<1.5km) (red on map)	Local Area (1.5-3.5km) (yellow on map)	District Area (3-10km) (green on map)
North	VP12 – Lowes Mount Rd, Clover Ln junction, 1km north of the site	VP4 – Rutters Ridge Rd, 3.0km north of the site	n/a
North East	n/a	VP5 – Hazelgrove Rd, 1.5km north-east of the site	n/a
East	n/a	VP6 – Hazelgrove Rd, 1.75km east of the site	n/a
South East	VP13 – Albion St, nr Hawken St junction, 1km south-east of the site	VP7 – Albion Rd, Tarana Rd junction, aged care facility, 1.6km south-east of the site	VP1 – Duckmaloi Road, 8.0km south-east of the site
South	VP14A – Oberon St, Ross St junction VP14B – Oberon St, North St junction	VP8 – Ross St, 2.2km south of the site, near Oberon Golf Club entrance	VP2 – Edith Road, 4.0km south of the site
South West	VP15 – football oval, Lowes Mount Rd, 600m south-west of the site	VP9 – Abercrombie/O’Connell/Albion roundabout, 1.5km south-west of the site	VP3 – Abercrombie Road, 7.0km south-west of the site
West	VP16 – Lowes Mount Rd, southern entrance to the site	VP10 – O’Connell Road, 1.5km west of the site	n/a
North West	VP17 – Lowes Mount Rd, northern entrance to the site	VP11 – O’Connell Road, 2.5km north-west of the site	n/a

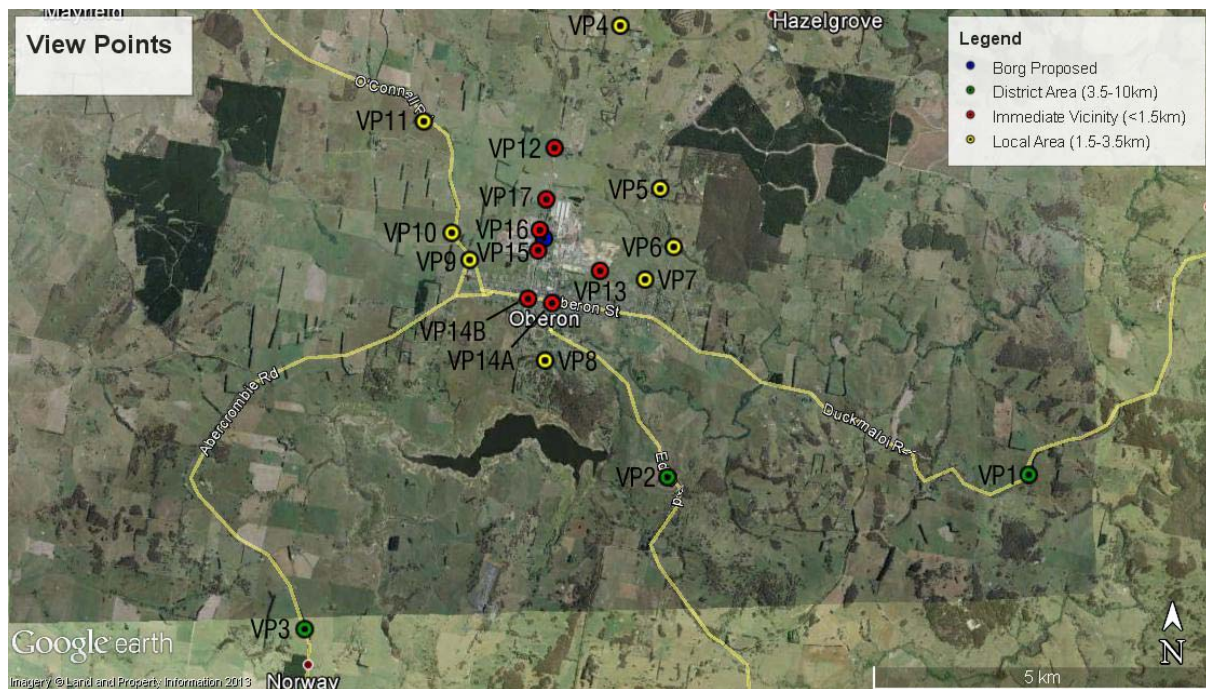


Figure 10: View Points (Source: Google Earth)

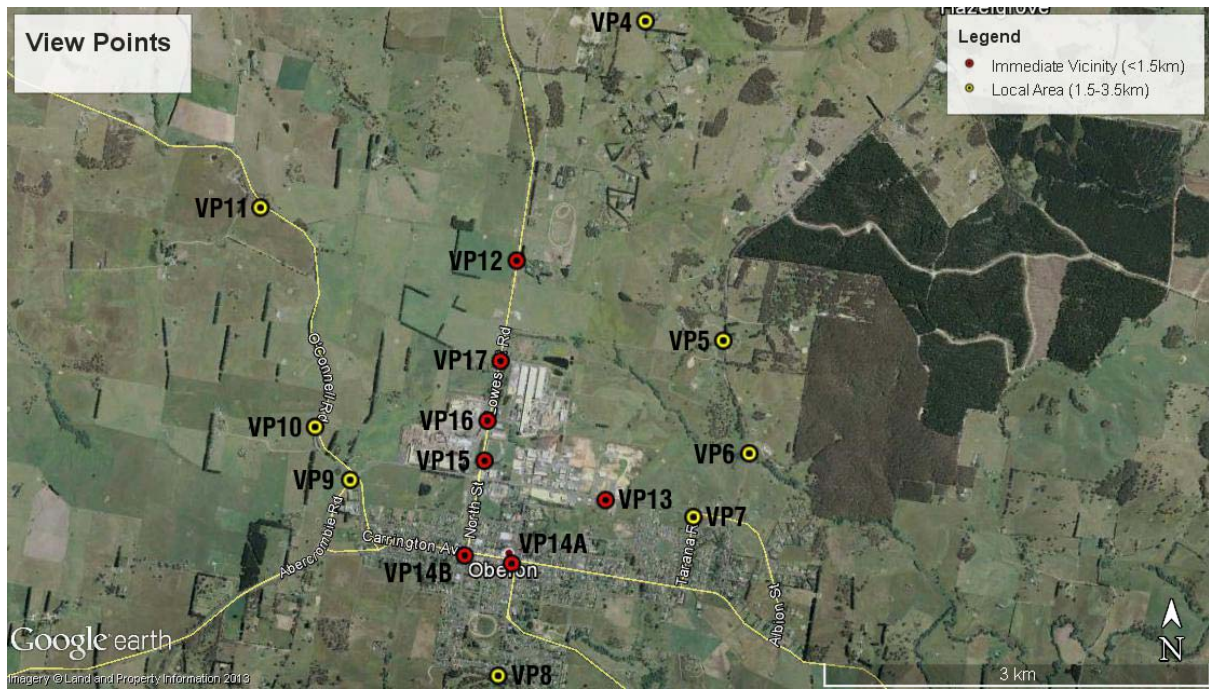


Figure 11: View Points, Zoomed Map (Source: Google Earth)

8.0 VISIBILITY

8.1. METHOD

Visibility is a measure of the extent to which particular activities/components of a proposal may be visible from surrounding areas, the relative number of viewers, the period of view, viewing distance and context of view. The rationale for the assessment is that if a proposal is not visible the impact is nil; if the number of people who would potentially see the proposal is low, then the visual impact would be lower than if a large number of people have the same view.

For the purpose of this Visual Impact Assessment, the general categories of visibility have been defined broadly and are presented in Table 3 below. In order to assess the Project, the following visibility categories have been used, and are based on the *Guidelines for Landscape and Visual Impact Assessment* (GLVIA) prepared by the Landscape Institute (UK), which are commonly used for Visual Impact Assessments within NSW.

Table 3: Visibility Categories

High	Where a large number of people would see the proposed development at short distance over a short, moderate or long period of time
Moderate	Where a small number of people would see the proposed development at a short or medium distance over a moderate or long period of time, or a moderate number of people would see the proposed new development at a medium distance over a short, moderate or long period of time, or a large number of people would see it at a medium or long distance over a short period of time
Low	Where a small number of people would see the proposed development at long distance over a short, moderate or long period of time.

For the purpose of this Visual Impact Assessment, the criteria listed in Table 4 have been determined and used in the visibility assessment for the site.

Table 4: Visibility Assessment Criteria

Category	Definition
Number of Viewers	
High Moderate Low	> 1,000 people per day 100 – 1,000 people per day < 100 people per day
View Distance	
Long distance Medium distance Short distance	> 3 km 1.5 km – 3 km < 1.5 km
Period of View	
Long term Moderate term Short term	> 120 minutes 1 – 120 minutes < 1 minute

8.2. ASSESSMENT

We assessed the site from the eighteen (18) identified View Points based on the Visibility Assessment Criteria shown in Table 4. A summary of this assessment is shown in Table 5; further commentary can be found in Appendix A. It is important to note that for some View Points, while the existing facility is visible, the new development will not be visible due to the direction of view and/or topography and/or vegetation. This is reflected in the visibility assessment.

Assessment of the number of potential viewers is based on the size of the local population (5,040 in Oberon LGA, 3,185 in Oberon State Suburb and 2,459 in Oberon Urban Centre) and traffic counts conducted by SMEC for a Traffic Assessment Report in late 2015.

The roads around Oberon are mostly flanked by trees. Generally, those views that were not in the immediate vicinity were between breaks in the trees. The speed limit on the roads around town ranges from 80km/h to 100km/h. Consequently, these views are both brief and limited to a small 'window' where there is a break in the vegetation. It is not unreasonable to assume that many drivers on these roads would not even see the existing facility as they would be travelling at speed and not looking in the direction of the view of the site.

The most common number of potential viewers is moderate. The most common distance of view is medium. The most common period of view is short. In summary, the overall site has MODERATE visibility to the public in general.

Table 5: Visibility Assessment

Site Viewed from VP1 (Duckmaloi Road): MODERATE number of potential viewers; LONG distance of view; and SHORT period of view.	Site Viewed from VP2 (Edith Road): MODERATE number of potential viewers; LONG distance of view; and SHORT period of view.
Site Viewed from VP3 (Abercrombie Road): NOT APPLICABLE - new development not visible from this location	Site Viewed from VP4 (Rutters Ridge Rd): LOW number of potential viewers; MEDIUM distance of view; and LONG period of view.
Site Viewed from VP5 (Hazelgrove Rd): MODERATE number of potential viewers; MEDIUM distance of view; and SHORT period of view.	Site Viewed from VP6 (Hazelgrove Rd): MODERATE number of potential viewers; MEDIUM distance of view; and SHORT period of view.
Site Viewed from VP7 (Albion Rd, Tarana Rd junction): MODERATE number of potential viewers; MEDIUM distance of view; and MODERATE period of view.	Site Viewed from VP8 (Ross St, nr Oberon Golf Club): MODERATE number of potential viewers; MEDIUM distance of view; and MODERATE period of view.
Site Viewed from VP9 (Abercrombie/O'Connell/Albion roundabout): MODERATE number of potential viewers; MEDIUM distance of view; and MODERATE period of view.	Site Viewed from VP10 (O'Connell Road): MODERATE number of potential viewers; MEDIUM distance of view; and SHORT period of view.
Site Viewed from VP11 (O'Connell Road): MODERATE number of potential viewers; MEDIUM distance of view; and SHORT period of view. N.B. Site temporarily visible during roadworks	Site Viewed from VP12 (Lowes Mount Rd, Clover Ln junction): MODERATE number of potential viewers; SHORT distance of view; and SHORT period of view.
Site Viewed from VP13 (Albion St, nr Hawken St junction): HIGH number of potential viewers; SHORT distance of view; and MODERATE period of view.	Site Viewed from VP14A (Oberon St, Ross St junction): HIGH number of potential viewers; SHORT distance of view; and MODERATE period of view.
Site Viewed from VP14B (Oberon St, North St junction): HIGH number of potential viewers; SHORT distance of view; and MODERATE period of view.	Site Viewed from VP15 (football oval, Lowes Mount Rd): HIGH number of potential viewers; SHORT distance of view; and LONG period of view.
Site Viewed from VP16 (Lowes Mount Rd, southern entrance to the site): HIGH number of potential viewers; SHORT distance of view; and MODERATE period of view.	Site Viewed from VP17 (Lowes Mount Rd, southern entrance to the site): MODERATE number of potential viewers; SHORT distance of view; and SHORT period of view.
Site Visibility Summary Number of Potential Viewers: Distance of View: Period of View:	Low 1 <u>Moderate 11</u> High 5 Total 17 Short 7 <u>Medium 8</u> Long 2 Total 17 <u>Short 8</u> Moderate 7 Long 2 Total 17

9.0 VISUAL ABSORPTION CAPACITY

9.1. METHOD

Visual Absorption Capacity (VAC) is the estimated capacity of the landscape to absorb development without creating significant visual change which results in a reduction in scenic quality. The capacity to absorb development is primarily dependent on vegetation cover, landform and the presence of other development. VAC increases where the development being assessed has visual forms which complement the existing environment.

Large footprint, large volume, highly coloured, sharp-edged structures will have less chance of achieving a high level of visual absorption into an unmodified natural environment than small, understated smooth-form structures coloured to blend into the existing environment. Table 6 details the criteria for the Visual Absorption Capacity of an area.

Table 6: Visual Absorption Categories

High	Landscape able to absorb development Low degree of visual contrast would result
Moderate	Landscape able to absorb some development Some visual contrast would result
Low	Landscape unable to absorb development High degree of visual contrast would result

It is important to note that the assessment of VAC is intended to relate to a landscape setting larger than simply the subject sites.

9.2. ASSESSMENT

From the majority of View Points there would be little visual contrast due to the distance of view. It is also important to note that many of the View Points are very specific locations where the site becomes briefly visible when travelling at speed and that for long distances either side of the identified View Point the site is not visible at all and the landscape will block views of the Project.

Where View Points are assessed as having a moderate VAC, the visual contrast results from an intensification of the existing landscape – more industrial development in an industrial area – rather than a change in landscape character. The site is not constantly visible around the industrial area, but is often blocked from view by other industrial development.

View Points assessed as having a high VAC are located in the closest proximity to the south-western corner of the subject site, where most of the new development is concentrated. Here the visual contrast is in replacing low-scale buildings with larger structures, rather than a change to the visual character of the landscape.

The VAC of the landscape is summarised in Table 7.

Table 7: Visual Absorption Capacity

View Point	VP 1	VP 2	VP 3	VP 4	VP 5	VP 6	VP 7	VP 8	VP 9	VP 10	VP 11	VP 12	VP 13	VP 14 A	VP 14 B	VP 15	VP 16	VP 17
Category																		
High	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓		✓				
Moderate							✓	✓					✓		✓			✓
Low																✓	✓	

On the basis of the above assessment, we conclude that the VAC for the site is HIGH.

10.0 VISUAL IMPACT RATING

The following matrix provides the means of setting the visibility rating for the site against the VAC, to arrive at a determination of the Visual Impact Rating (VIR).

In turn, it is this rating which determines whether or not any mitigation is required to reduce the visual impact to acceptable levels.

Table 8 is a matrix showing how the visibility and the visual absorption rating of the site combine to give the Visual Impact Rating. The Visibility of the site is based on the number of locations and distance it can be seen from, whilst the Visual Absorption Rating is the ability of the landscape and vegetation to shelter the project from view.

The Site has a MODERATE level of visibility and a HIGH VAC.

Using the matrix to align these two values, the result is a LOW Visual Impact Rating, as indicated by the shadings in the matrix below.

Table 8: Visual Impact Matrix

1. VISIBILITY		
LOW	MODERATE	HIGH

2. VISUAL ABSORPTION CAPACITY	3. VISUAL IMPACT RATING	
HIGH	LOW	MODERATE
MODERATE	MODERATE	HIGH
LOW	MODERATE	HIGH

11.0 RECOMMENDED MITIGATION MEASURES

Although the Project results in a low Visual Impact Rating, we recommend the following mitigation methods to ensure that this low rating is achieved.

LANDSCAPING

1. Provide screening vegetation where possible along the boundary and/or around the new warehouse in the northern part of the site.
2. Provide screening vegetation along the western boundary of the site in the south-west corner to screen new development when viewed from the road. The aim should be to replicate the effect of the existing screen planting along Lowes Mount Road.
3. Add screening vegetation along the southern boundary of the site in the south-west corner to soften the impact of the acoustic wall in this location when viewed from the oval. The aim should be to replicate the effect of the screening vegetation on the western boundary of the site.

MATERIALS AND COLOURS

For the proposed buildings within the Project Area select:

4. Facade materials that are of low reflectivity.
5. A colour palette that matches the existing development. This will enable the built form to blend in with its landscape context and reduce its visibility from View Points with a medium and long distance of view, such as VP2 and VP9.

VISUAL INTEREST

6. Provide an entry feature at the southern entrance on Lowes Mount Road (Gate 4). This could be a landscape statement, a signage element or a public art element. This feature should provide visual interest in the landscape and enhance views along Lowes Mount Road (VP16).

LIGHTING

7. The facility operates twenty hour hours per day. Lighting must be designed to minimise impacts on surrounding residential development and local roads. Recommended mitigation measures are:
 - only lighting required spaces within the Project Area;
 - focusing lights down, not up or out;
 - providing minimum lux levels to achieve the desired outcomes of safety and security;
 - minimising reflective material throughout the Project Area.

12.0 CONCLUSION

The proposed development is an extension of an existing timber processing facility. The Project Area is primarily located in the north-west and south-west corners of the site. The existing facility is visible from a number of locations in all directions and at various distances. However, it tends to be visible from very specific View Points where there are breaks in vegetation, rather than visible for long periods of time when travelling around the town. Within the industrial area, the subject site often disappears from view behind other industrial buildings.

The Project has a MODERATE level of visibility and a HIGH Visual Absorption Capacity, giving it an overall low Visual Impact Rating.

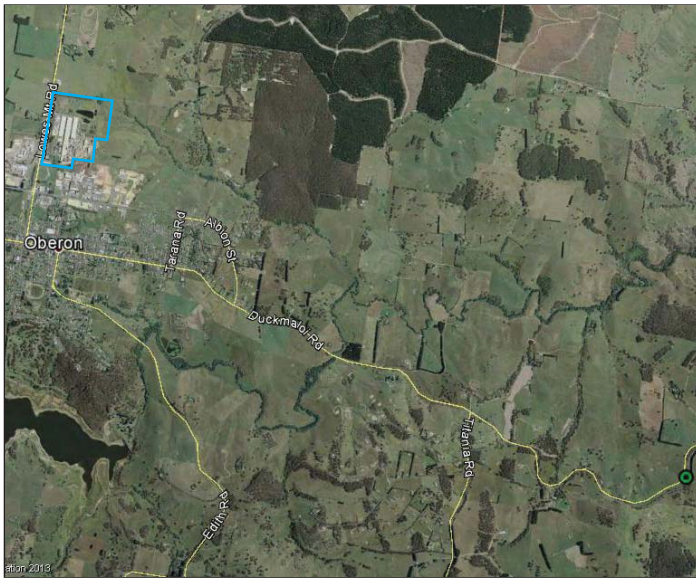
The most significant potential visual impacts are within the immediate vicinity at the southern entrance on Lowes Mount Road (Gate 4) (VP16) and from the football oval on Lowes Mount Road (VP15). There will also be some impacts close to the northern entrance (Gate 6) and when the site is viewed from the north. The proposed mitigation measures aim to minimise impacts on these locations in particular.

If the Project incorporates the proposed mitigation measures, the visual impact on the surrounding area will be minimal.

APPENDIX A

VIEW POINTS

VIEW POINT 1 - DUCKMALOI ROAD



Location of View Point

Location Coordinates:

Latitude: 33°43'37.92"S

Longitude: 149°56'4.00"E

Visibility Assessment

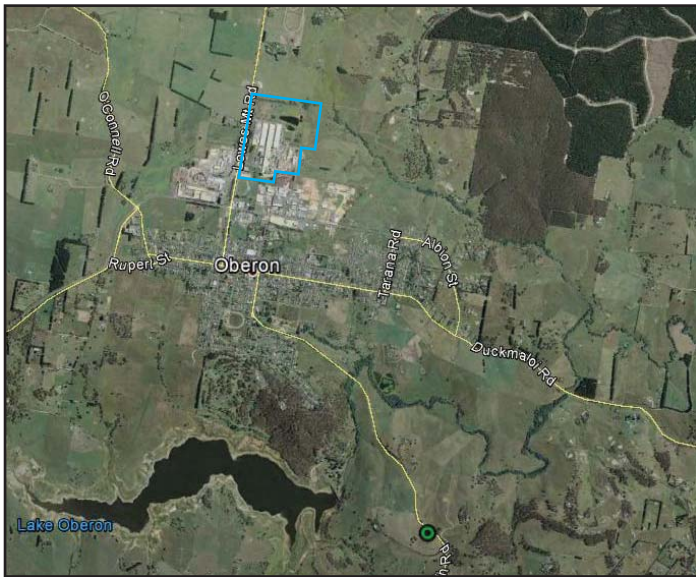
- MODERATE number of potential viewers
- LONG distance of view
- SHORT period of view

The existing facility briefly comes into view when travelling on Duckmaloi Road, approximately 8km from the subject site. From this vantage point, the new warehouse and new plant and buildings would be visible above the building line of the existing facility. However, at this distance, the visual contrast would be negligible.



Photograph from View Point

VIEW POINT 2 - EDITH ROAD



Location of View Point

Location Coordinates

Latitude: 33°43'39.12"S

Longitude: 149°52'35.33"E

Visibility Assessment

- MODERATE number of potential viewers
- LONG distance of view
- SHORT period of view

The existing facility briefly comes into view when travelling on Edith Road, approximately 4km from the subject site. From this vantage point, the new warehouse and new plant and buildings would be visible above the building line of the existing facility. However, at this distance, the visual contrast would be negligible.



Photograph from View Point

VIEW POINT 3 - ABERCROMBIE ROAD



Location of View Point

Location Coordinates

Latitude: 33°44'52.19"S

Longitude: 149°49'6.49"E

Visibility Assessment

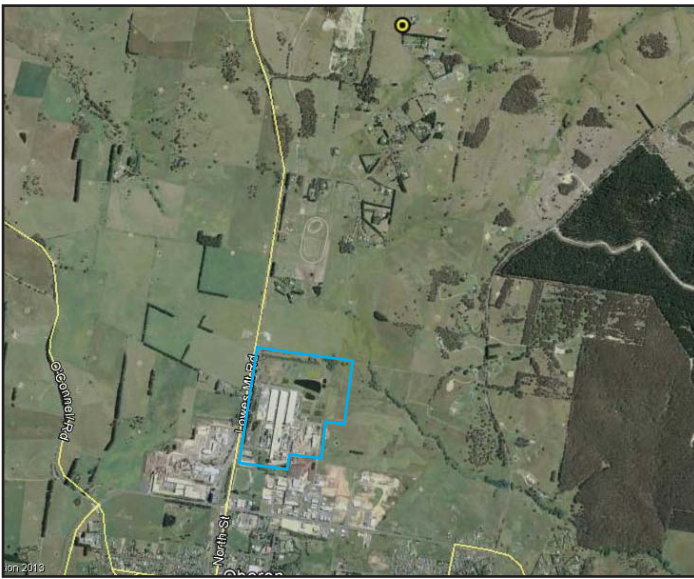
- NOT APPLICABLE - new development not visible from this location

The existing facility comes briefly and intermittently into view through gaps in the trees along this stretch of Abercrombie Road, approximately 7km from the subject site. By taking a 10x zoom photograph it is possible to discern the tallest parts of the existing site above the tree line. As the new additions are lower in height than the existing plant, it is highly unlikely that the new development would be visible from this location.



Photograph from View Point

VIEW POINT 4 - RUTTERS RIDGE ROAD



Location of View Point

Location Coordinates

Latitude: 33°40'3.04"S
Longitude: 149°52'8.17"E

Visibility Assessment

- LOW number of potential viewers
- MEDIUM distance of view
- LONG period of view

Rutters Ridge Road is a no through road lined with farms and smallholdings. The existing facility is visible from several points along this road. As this View Point is north of the subject site, the new warehouse would be visible to the right of the existing plant shown in the highlighted section of the photograph below.



Photograph from View Point

VIEW POINT 5 - HAZELGROVE ROAD



Location of View Point

Location Coordinates

Latitude: 33°41'20.92"S

Longitude: 149°52'31.90"E

Visibility Assessment

- MODERATE number of potential viewers
- MEDIUM distance of view
- SHORT period of view

The existing facility becomes briefly visible at this point on Hazelgrove Road where there is a break in the vegetation. The new warehouse in the north of the subject site would be hidden from view by the tree in the right of the highlighted section of the photograph below. The uppermost parts of some plant equipment would be visible amongst the existing development. At this distance, very little visual contrast would result.



Photograph from View Point

VIEW POINT 6 - HAZELGROVE ROAD



Location of View Point

Location Coordinates

Latitude: 33°41'49.23"S

Longitude: 149°52'38.98"E

Visibility Assessment

- MODERATE number of potential viewers
- MEDIUM distance of view
- SHORT period of view

The existing facility becomes briefly visible at this point on Hazelgrove Road where there is a break in the vegetation. The new warehouse in the north of the subject site would not be visible. Some plant equipment would be visible amongst the existing development. At this distance, very little visual contrast would result.



Photograph from View Point

VIEW POINT 7 - ALBION STREET, TARANA ROAD JUNCTION



Location of View Point

Location Coordinates

Latitude: 33°42'4.75"S

Longitude: 149°52'21.97"E

Visibility Assessment

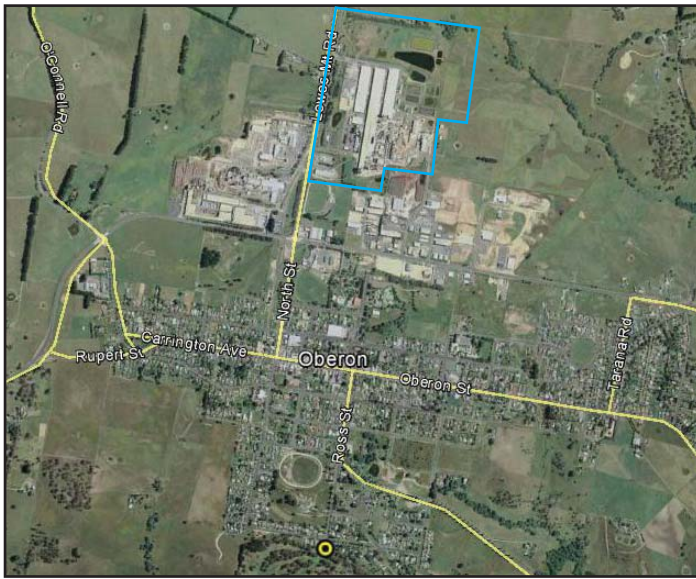
- MODERATE number of potential viewers
- MEDIUM distance of view
- MODERATE period of view (SHORT for drivers/riders, LONG for residents)

This viewpoint is located adjacent to a new aged care facility. A new bicycle path traverses this corner. A new housing estate and a motel are also located in the vicinity, resulting in viewer numbers at the upper end of moderate. The existing facility is visible from this View Point; other industrial sites are located closer to the viewer. New plant, buildings and warehouse are anticipated to be visible in the short term amongst the existing development until the trees along Albion Street grow taller.



Photograph from View Point

VIEW POINT 8 - ROSS STREET, NEAR ENTRANCE TO OBERON GOLF CLUB



Location of View Point

Location Coordinates

Latitude: 33°42'43.11"S

Longitude: 149°51'24.79"E

Visibility Assessment

- MODERATE number of potential viewers
- MEDIUM distance of view
- MODERATE period of view

This View Point is located at the crest of a hill in the southern part of town, close to the entrance of Oberon Golf Club. From this location, the new warehouse in the northern part of the site will not be visible. New plant and buildings in the southern part of the site will be visible clustered around the existing development.



Photograph from View Point

VIEW POINT 9 - ABERCROMBIE/O'CONNELL/ALBION ROADS ROUNDABOUT



Location of View Point

Location Coordinates

Latitude: 33°41'54.60"S

Longitude: 149°50'41.80"E

Visibility Assessment

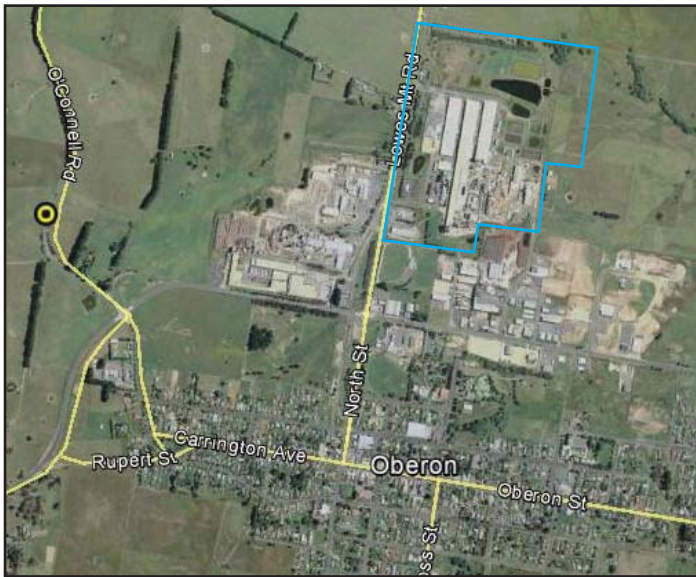
- MODERATE number of potential viewers
- MEDIUM distance of view
- MODERATE period of view

This busy roundabout is used by a great number of vehicles accessing Oberon's Industrial Area. The site becomes visible on a few hundred metres south-west on Abercrombie Road and remains visible amongst the Industrial Area along Albion Street. A small part of the new warehouse may be visible from this View Point; new plant will be visible above the roof line of the Highland Pine Products facility located between the viewer and the Borg Panels site.



Photograph from View Point

VIEW POINT 10 - O'CONNELL ROAD



Location of View Point

Location Coordinates

Latitude: 33°41'42.40"S

Longitude: 149°50'31.43"E

Visibility Assessment

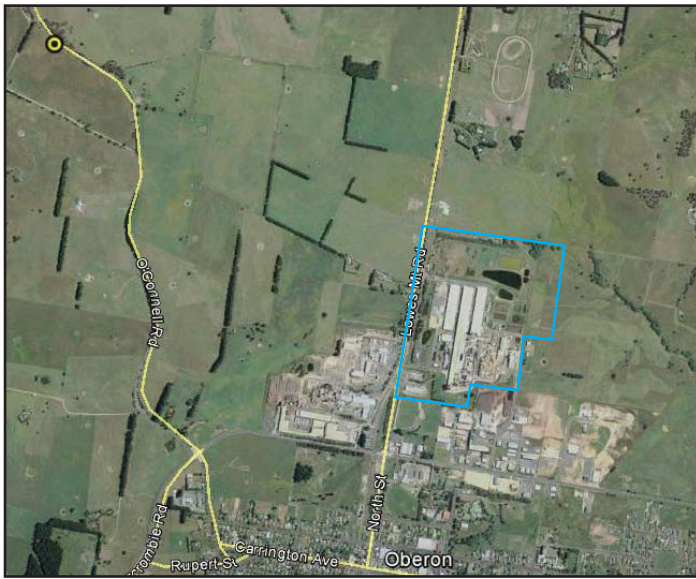
- MODERATE number of potential viewers
- MEDIUM distance of view
- SHORT period of view

The subject site becomes briefly visible on O'Connell Road where there is a break in the trees. From this location, the Highland Pine Products facility is located between the viewer and Borg Panels. The new warehouse will be blocked from view by the vegetation left of the highlighted section of the photograph below. New plant and buildings will be just visible above the tree line in the centre of the highlighted section below.



Photograph from View Point

VIEW POINT 11 - O'CONNELL ROAD



Location of View Point

Location Coordinates

Latitude: 33°40'48.89"S

Longitude: 149°50'15.95"E

Visibility Assessment

- MODERATE number of potential viewers
- MEDIUM distance of view
- SHORT period of view

One of the tallest parts of the existing facility becomes visible in this location. This section of O'Connell Road is currently being widened. Until the roadworks commenced, the subject site was blocked from view by trees. When the vegetation is reinstated at the completion of the roadworks, the facility will no longer be visible. Due to topography and vegetation, it is unlikely that the new development will be visible from this View Point.



Photograph from View Point

VIEW POINT 12 - LOWES MOUNT ROAD, CLOVER LANE JUNCTION



Location Coordinates

Latitude: 33°41'1.22"S

Longitude: 149°51'30.41"E

Visibility Assessment

- MODERATE number of potential viewers
- SHORT distance of view
- SHORT period of view

Generally the existing facility is hidden view along Lowes Mount Road and only becomes visible at intersections, entrances to the site, and when there are breaks in the trees. The tallest parts of the existing facility are visible above the tree line in this location. The new warehouse would be partly visible through the trees.

Location of View Point



Photograph from View Point

VIEW POINT 13 - ALBION STREET, NEAR HAWKEN STREET JUNCTION



Location of View Point

Location Coordinates

Latitude: 33°42'0.31"S

Longitude: 149°51'56.61"E

Visibility Assessment

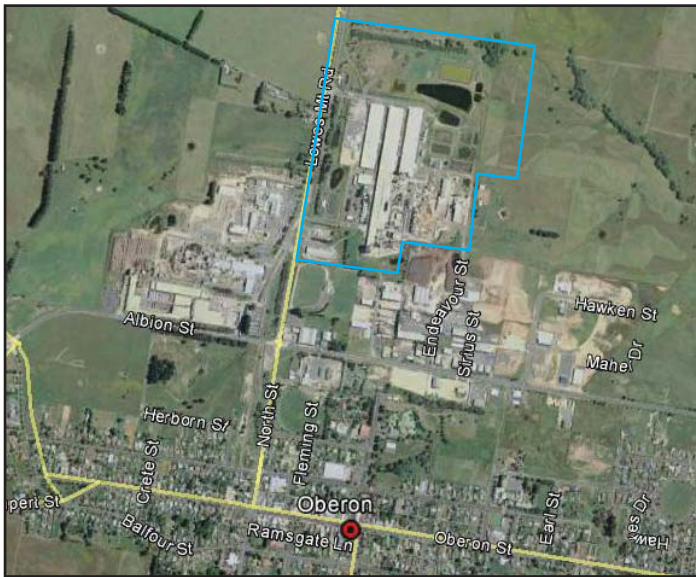
- HIGH number of potential viewers
- SHORT distance of view
- MODERATE period of view

The existing facility is visible along much of Albion Street. Other industrial facilities can be seen in the foreground and background. It is unlikely that the new warehouse in the northern part of the site will be visible from this View Point. New plant and buildings in the south part of the site will be visible. However, given the industrial nature of this viewshed, little visual contrast will result.



Photograph from View Point

VIEW POINT 14A - OBERON STREET, ROSS STREET JUNCTION



Location of View Point

Location Coordinates

Latitude: 33°42'15.73"S

Longitude: 149°51'28.56"E

Visibility Assessment

- HIGH number of potential viewers
- SHORT distance of view
- MODERATE period of view

The existing facility is visible above the tree line from this major intersection on Oberon's main street. The new warehouse in the northern part of the site will not be visible from this location. The tallest element of the new development in the southern part of the site, the silos, will be hidden behind the trees to the left of the highlighted section in the photograph below. Consequently, visual contrast from this View Point will be negligible.



Photograph from View Point

VIEW POINT 14B - OBERON STREET, NORTH STREET JUNCTION



Location of View Point

Location Coordinates

Latitude: 33°42'13.58"S

Longitude: 149°51'14.66"E

Visibility Assessment

- HIGH number of potential viewers
- MEDIUM distance of view
- MODERATE period of view

This intersection was chosen as it is reasonably busy due to the presence of a service station. The existing facility is visible above the tree line from this intersection on Oberon's main street. The new warehouse in the northern part of the site will not be visible from this location. New plant and buildings will be visible above the tree line, generally in the left portion of the highlighted section of the photograph below.



Photograph from View Point

VIEW POINT 15 - FOOTBALL OVAL, LOWES MOUNT ROAD



Location of View Point

Location Coordinates

Latitude: 33°41'50.29"S

Longitude: 149°51'20.87"E

Visibility Assessment

- HIGH number of potential viewers
- SHORT distance of view
- LONG period of view

The football oval is immediately adjacent to Borg's landholdings. The number of viewers here will be high due to passing traffic and users of the oval. The new plant and buildings in the south-western section of the subject site will be highly visible from this location. The shed on the left of the photograph below will be demolished to make way for the new silos, which will be large in scale. This location will have one of the highest degrees of visual contrast; however, this is clearly an existing industrial landscape.



Photograph from View Point

VIEW POINT 16 - LOWES MOUNT ROAD, SOUTHERN ENTRANCE TO BORG PANELS SITE



Location of View Point

Location Coordinates

Latitude: 33°41'40.49"S

Longitude: 149°51'20.60"E

Visibility Assessment

- HIGH number of potential viewers
- SHORT distance of view
- MODERATE period of view

This View Point has a high number of viewers, comprising employees of Borg and Highland Pine, and passing traffic. The period of view will be short for passing traffic and longer for employees. The majority of the low-scale buildings in the photograph below will be demolished and replaced with larger scale plant and buildings. A high degree of visual contrast will result in this location; however, it is a matter of scale rather than usage, as this is clearly an industrial landscape.



Photograph from View Point

VIEW POINT 17 - LOWES MOUNT ROAD, NORTHERN ENTRANCE TO BORG PANELS SITE



Location of View Point

Location Coordinates

Latitude: 33°41'25.84"S

Longitude: 149°51'24.75"E

Visibility Assessment

- MODERATE number of potential viewers
- SHORT distance of view
- SHORT period of view

A new on grade car park will be constructed on the left of the photograph below behind the existing gas infrastructure. This will not be visible from the street. The new warehouse will be built adjacent to the existing warehouse; the gatehouse will be demolished to make way for it. At 35m tall, the new warehouse will result in a high degree of visual contrast. As with View Point 16, this relates to scale rather than character.



Photograph from View Point

APPENDIX B

PLANS

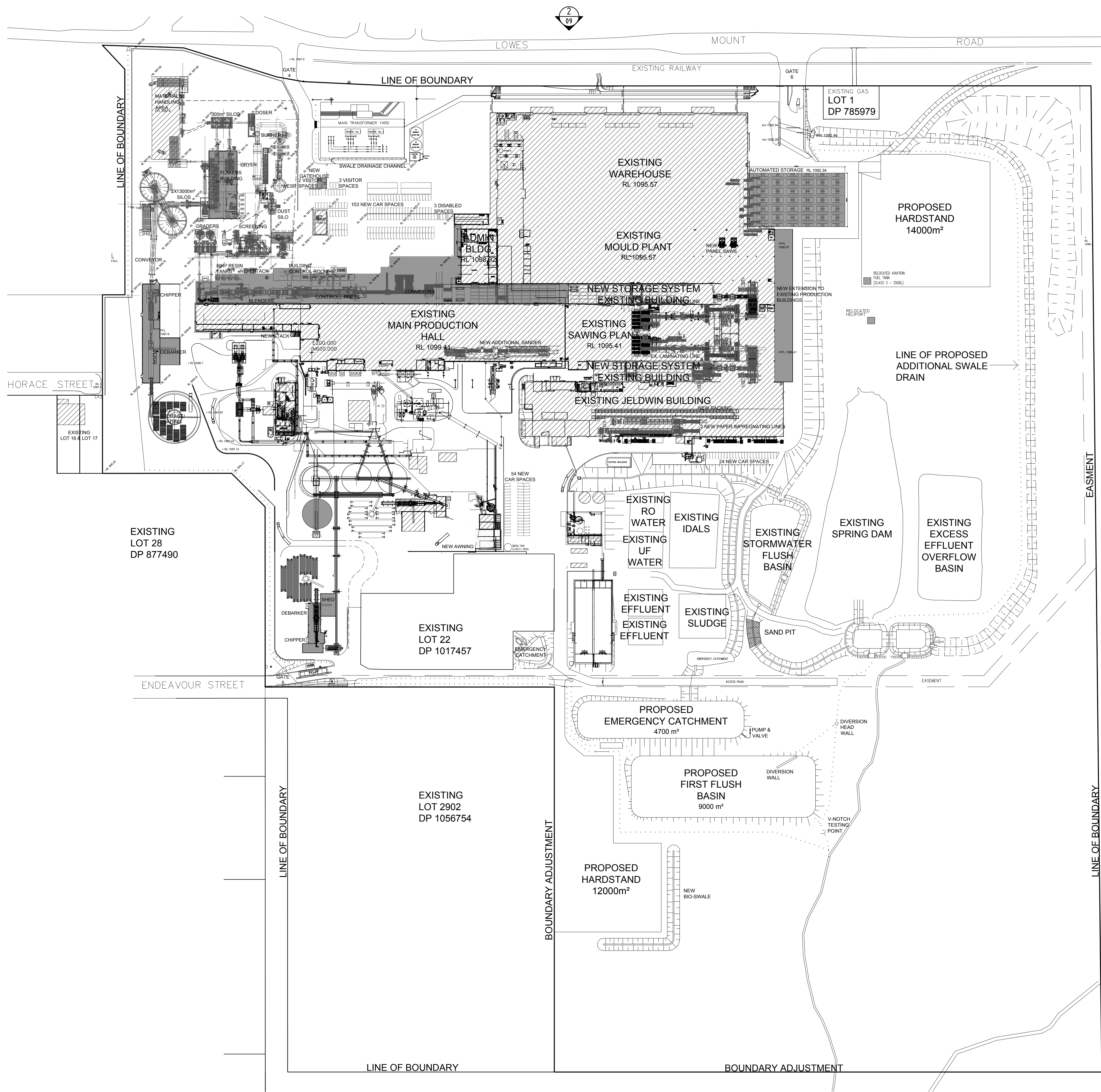
2
09

3
09

1
09

NOTE:
LOT BOUNDARIES FOR CONSOLIDATION ARE NOT SHOWN ON THIS PLAN (FOR CLARITY) - REFER DA 04 CONSOLIDATION PLAN FOR DETAIL
REFER TO KEY PLAN FOR REFERENCES TO DOCUMENTATION OF NEW WORKS

- LEGEND:
- EXISTING BUILDINGS
 - PROPOSED NEW BUILDINGS
 - NEW SWALE
 - NEW PIPE
 - VALVE



P10	PRELIMINARY	13/5/16		
P9	PRELIMINARY	4/5/16		
P8	PRELIMINARY	27/4/16		
P7	PRELIMINARY	28/4/16		
P6	PRELIMINARY	18/4/16		
P5	PRELIMINARY	15/4/16		
P4	PRELIMINARY	12/4/16		
P3	PRELIMINARY	12/4/16		
P2	PRELIMINARY	24/3/16		
P1		18/3/16		
Issue	Description	Date	Drawn	Auth

BORG
CONSTRUCTION

OFFICE:
2 WELLS WAY SOMERSBY, N.S.W. 2250 AUSTRALIA
Tel: 02 4340 9800 Fax: 02 4340 8293

COPYRIGHT:
THIS DRAWING AND THE INFORMATION CONTAINED ARE THE PROPERTY OF THE COPYRIGHT OWNER BORG CONSTRUCTIONS Pty. Ltd. AND MAY NOT BE COPIED OR REPRODUCED WITHOUT WRITTEN PERMISSION

Project
PROPOSED PARTICLE BOARD MANUFACTURING PLANT & ADDITIONAL WORKS.
Location
124 LOWES MOUNT ROAD, OBERON
NEW SOUTH WALES
Drawing
SITE PLAN

Scale APPROX 1:1750 (@ A1)	Stage DA
Project Number 19	Drawing Number DA 02
	Issue P10



LEGEND:

	NEW WORKS: WAREHOUSE & PRODUCTION BUILDINGS
---	--

P4	PRELIMINARY	13/5/16			
P3	PRELIMINARY	13/5/16			
P2	PRELIMINARY	29/4/16			
P1	PRELIMINARY	20/4/16			
Issue	Description	Date	Drawn		Auth

BORG
CONSTRUCTION

OFFICE:
2 WELLA WAY SOMERSBY, N.S.W. 2250 AUSTRALIA
Tel: 02 4340 9800 Fax: 02 4340 8293

COPYRIGHT:
THIS DRAWING AND THE INFORMATION CONTAINED ARE THE PROPERTY
OF THE COPYRIGHT OWNER 'BORG CONSTRUCTIONS Pty. Ltd.' AND MAY
NOT BE COPIED OR REPRODUCED WITHOUT WRITTEN PERMISSION

Project	PROPOSED PARTICLE BOARD MANUFACTURING PLANT & ADDITIONAL WORKS
---------	--

Location
124 LOWES MOUNT ROAD, OBERON
NEW SOUTH WALES

Drawing SITE ELEVATIONS

Scale 1:1000 (@ A1)		Stage DA
Project Number 19	Drawing Number DA 09	Issue P4