

# **APPENDIX N**

# **Visual Assessment**



# **PGH Bricks & Pavers Ltd**

Visual Amenity Assessment for: Andersons Clay Mine Environmental Impact Statement November 2018

Prepared by:

VGT Environmental Compliance Solutions Pty Ltd



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# Visual Amenity Assessment for: Andersons Clay Mine Environmental Impact Statement November 2018

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# Section 1.Introduction

## 1.1. Background

The subject land is described as Lot 2, DP 856969, 253 Shaw Road, Springdale Heights, located in the suburb of Springdale Heights, approximately 7km north east of Albury, see *Figure One.* 

The land contains a functioning mine known as Anderson's Clay Mine.

The property is owned by PGH Bricks and Pavers Pty Ltd under freehold title.

A development application is being sought for the proposed expansion of an existing clay mine located at 253 Shaw Street, Springdale Heights. The proposed development is deemed to be a Designated Development in Schedule 3 of the Environmental Planning and Assessment Regulation 2000 and a request for the Secretary's Environmental Assessment Requirements (SEARs) was made in April 2017. The SEARs were issued by the Secretary on the 18<sup>th</sup> of May 2017.

The aim of this report is to provide additional information, as guided by the SEARs to assist the Department and relevant authorities in determining the development application.

## 1.2. Secretary's Requirements

#### 1.2.1. SEARs

The SEARs require that the EIS, which will include this report, shall address the following issues relating to visual amenity.

Table 1.         SEARs Visual Amenity Issues to be Addressed	Table 1.	SEARs Visual	Amenity Issues	to be	Addressed
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Key Issue	Where Addressed in this Document
Visual – including an assessment of the likely visual impacts of the development on private landowners in the vicinity of the development and key vantage points in the public domain, including with respect to any new landforms;	Section 5

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#### 1.2.2. Council Requirements

Key Issue	Where Addressed in this Document
The EIS should include an assessment of all potent development on the existing environment (including relevant and appropriate).	
<ul> <li>Visual impact and consideration and manage potential amenity impact(s) on nearby reside development and residential areas.</li> </ul>	

#### Table 2. Albury City Council Visual Amenity Issues to be Addressed

# Section 2. Statutory Requirements and Guidelines

#### 2.1. Environmental Planning and Assessment Act 1979

The clay extraction activities will continue to be subject to the provisions of the EP&A Act for any subsequent changes or modifications to the operations. Additionally the operations will need to be able to demonstrate compliance against the current Conditions of Approval issued under the provisions of the EP&A Act.

#### 2.1.1. Current Council Consent Conditions

In August 1983, the Albury -Wodonga Development Corporation granted a permit (number N72), which approved the mining of clay brick within the north-eastern portion of the subject land. The activity involved an area of 7.975 hectares. The permit did not include an end date to the approval.

Council consent conditions that pertain to the management of Visual Amenity are reproduced below.

**Condition 18-** '.....Soil required to comply with the requirements of Condition 14(ii) is to be stored within the excavation area and excess topsoil should be placed as far as possible along the southern boundary of the current and proposed mining operations. This is to be sown with grasses to prevent erosion and so as to **provide an aesthetic and effective screen** on approach from Albury.....'

Plan of:	Visual Amenity Assessment for Andersons Clay Mine Environmental Impact Statement 2018 - Site Location	Location:	253 Shaw Street, Springdale Heights, NSW	Source:	nearmap - Image Date 01/05/2018 & Google Maps 2018	Our Ref:	3618_BAN_VA_DA17_C00
Figure:	ONE	Council:	Albury Wodonga Shire Council	Survey:	N/A	Plan By:	JD
Sheet:	1 of 1	Tenure:	Permit Number N72	Projection:	N/A	Project Manager:	ТО
Version/Date:	V1 04/10/2018	Client:	PGH Bricks & Pavers Pty Ltd	Contour Interval:	N/A	Office:	Thornton





Approx Scale:	0	150m
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Date: 27/11/2018
Project Manager VGT: Tara O'Brien
Signed:
Date: 27/11/2018

Plan of:	Visual Amenity Assessment for Andersons Clay Mine Environmental Impact Statement 2018 - Site Layout	Location:	253 Shaw Street, Springdale Heights, NSW	Source:	nearmap - Image Date 01/05/2018 & Landair Surveys	Our Ref:	3618_BAN_VA_DA17_C00
Figure:	TWO	Council:	Albury - Wodonga Shire Council	Survey:	Landair Surveys - Image Flown 08/02/2017	Plan By:	SK/JD
Sheet:	1 of 1	Tenure:	Permit Number N72	Projection:	MGA	Project Manager:	ТО
Version/Date:	V1 04/10/2018	Client:	PGH Bricks & Pavers Pty Ltd	Contour Interval:	1m	Office:	Thornton



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# **Section 3. Proposed Development**

The proposal is for the extension of an existing mine to extract and process a maximum of 50,000 tonnes of clay/shale in any year for a period of up to 20 to 30 years.

Mining campaigns are undertaken approximately three times each year, with each campaign lasting around four weeks. Up to 50,000 tonnes (approx. 25,000m<sup>3</sup>) is currently mined per annum. Mining is undertaken using a combination of a dozer, dump truck and excavator which rip the shale and push the raw material up into one or more internal stockpiles within the mine floor. The stockpile is managed by a front end loader which is also used to load trucks when transporting the clay/shale to the Jindera brickworks. As the material can be quite hard, screening of the material will be undertaken within the pit floor so as to reduce the volume of oversize material transported to the brickworks and make more efficient use of the material won.

The extension of the mine will increase the footprint of the mine from 4.7Ha to approximately 11Ha (see *Figure Three*). There will be no change to the consented extraction depth of 50 metres. Operating hours will also remain identical.

Plan of:	Visual Amenity Assessment for Andersons Clay Mine Environmental Impact Statement 2018 - Proposed Extension Area	Location:	253 Shaw Street, Springdale Heights, NSW	Source:	nearmap - Image Date 01/05/2018 & Landair Surveys	Our Ref:	3618_BAN_VA_DA17_C07
Figure:	THREE	Council:	Albury - Wodonga Shire Council	Survey:	Landair Surveys - Image Flown 08/02/2017	Plan By:	SK/JD
Sheet:	1 of 1	Tenure:	Permit Number N72	Projection:	MGA	Project Manager:	ТО
Version/Date:	V0 05/10/2018	Client:	PGH Bricks & Pavers Pty Ltd	Contour Interval:	1m	Office:	Thornton



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# **Section 4.Existing Environment**

# 4.1. General Topographical Description

The mine is located along a ridgeline north of Albury with elevations ranging from 320m RL in the south west and down to 300m RL in the north. The north of the site is characterised by natural woodland leading to the Humbug Gully drainage line before rising again to Mount Miser at approximately 350m RL. The south of the site leads downslope to grazing land before levelling into the outer suburbs of Albury. To the west the ridgeline continues through woodland and grazing land for approximately 900m before gradually dropping back into a gully along which Prune Street follows. The east of the site leads to the tributaries of Bardwell Gully commencing at the foothills of One Tree Hill at approximately 470m RL.

The mine itself is set into the ridgeline with the void presently at about 300m RL, 10 to 15 metres below the natural ground level.

## 4.2. Street Views

As can be seen from the photography below, the mine is topographically shielded from view from publically accessible streets surrounding the mine. The mine faces are somewhat visible from that front gate at the termination of Shaw Street (see *Photography 2* below), however this is not a commonly used road.



#### Photography 1: View of Mine from Shaw Street North

Photography 2: View of Mine from Entrance





Photography 3: View of Mine Ridgeline from Strauss Street



Photography 4: View of Mine Ridgeline from Corner of Strauss and Goldsworthy Street



Photography 5: View of Western Mine Ridgeline from Prune Street





# 4.3. Sensitive Receptor Views

Whilst it has not been possible to access nearby resident's properties to ascertain the visual amenity, elevation profiles have been estimated using Nearmaps data for each resident.

#### 4.3.1. R1 Elevation Profile

The resident approximately 200m to the south of the current mine site is down slope of the mine therefore the active mine faces are not visible. A number of overburden and topsoil stockpiles have been placed as acoustic and visual screening between the residence and the active pit. These have been revegetated and would not have a negative impact on the resident's visual amenity, as shown in *Figure Four*.

#### 4.3.2. R2 Elevation Profile

Sensitive receptor R2 is located approximately 500m to the north east of the site is at an approximate elevation of 360m RL. Due to the elevation of the residence it is likely that it has distal views of the active western and southern mine faces. The view is likely to be somewhat filtered by vegetation located in the north east of the site as shown in *Figure Five*.



#### Photography 6: View of Sensitive Receptor R2

## 4.3.3. R3 and R4 Elevation Profile

These residents are approximately 600m to the west of the site is located downslope of the mine therefore the active mine faces are not visible as shown in Figure Six and *Figure Seven*.



### 4.3.4. R5 and R6 Elevation Profile

Both these residences are located downslope of the mine and are approximately 500 to 600 distant. The mine is not visible to these residents as shown in Figure Eight and *Figure Nine.* 

# 4.4. Albury Views

The views of the mine are obscured from Albury due to the topography with Albury located at a much lower elevation as shown in *Figure Ten*.

Plan of:	Visual Amenity Assessment for Andersons Clay Mine Environmental Impact Statement 2018 - R1- R1' ( South-North) Elevation Profile	Location:	253 Shaw Street, Springdale Heights, NSW	Source:	nearmap - Image Date 1 May 2018 & Elevation Profile from nearmap tool	Our Ref:	3618_BAN_VA_DA17_C0
Figure:	FOUR	Council:	Albury - Wodonga Shire Council	Process/Manipulation:	Using our cross section base, I matched elevation profile generated by nearmap	Plan By:	TO/JD
Sheet:	1 of 1	Tenure:	Permit Number N72		& traced lines appropriately for end	Project Manager:	то
Version/Date:	V1 05/10/2018	Client:	PGH Bricks & Pavers Pty Ltd		result	Office:	Thornton









Plan of:	Visual Amenity Assessment for Andersons Clay Mine Environmental Impact Statement 2018 - R2 - R2' (East-West) Elevation Profile	Location:	253 Shaw Street, Springdale Heights, NSW	Source:	nearmap - Image Date 1 May 2018 & Elevation Profile from nearmap tool	Our Ref:	3618_BAN_VA_DA17_C00
Figure:	FIVE	Council:	Albury - Wodonga Shire Council	Process/Manipulation:	Using our cross section base, I matched elevation profile generated by nearmap		TO/JD
Sheet:	1 of 1	Tenure:	Permit Number N72		& traced lines appropriately for end	Project Manager:	то
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Plan of:	Visual Amenity Assessment for Andersons Clay Mine Environmental Impact Statement 2018 - R3 - R3' (East-West) Elevation Profile	Location:	253 Shaw Street, Springdale Heights, NSW	Source:	nearmap - Image Date 1 May 2018 & Elevation Profile from nearmap tool	Our Ref:	3618_BAN_VA_DA17_C00
Figure:	SIX	Council:	Albury - Wodonga Shire Council	Process/Manipulation:	Using our cross section base, I matched elevation profile generated by nearmap	Plan By:	TO/JD
Sheet:	1 of 1	Tenure:	Permit Number N72		& traced lines appropriately for end	Project Manager:	то
Version/Date:	V1 05/10/2018	Client:	PGH Bricks & Pavers Pty Ltd		result	Office:	Thornton







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Plan of:	Visual Amenity Assessment for Andersons Clay Mine Environmental Impact Statement 2018 - R4 - R4' (East-West) Elevation Profile	Location:	253 Shaw Street, Springdale Heights, NSW	Source:	nearmap - Image Date 1 May 2018 & Elevation Profile from nearmap tool	Our Ref:	3618_BAN_VA_DA17_C00
Figure:	SEVEN	Council:	Albury - Wodonga Shire Council	Process/Manipulation:	Using our cross section base, I matched elevation profile generated by nearmap	Plan By:	TO/JD
Sheet:	1 of 1	Tenure:	Permit Number N72		& traced lines appropriately for end	Project Manager:	то
Version/Date:	V1 05/10/2018	Client:	PGH Bricks & Pavers Pty Ltd		result	Office:	Thornton







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Plan of:	Visual Amenity Assessment for Andersons Clay Mine Environmental Impact Statement 2018 - R5- R5' ( South-North) Elevation Profile	Location:	253 Shaw Street, Springdale Heights, NSW	Source:	nearmap - Image Date 1 May 2018 & Elevation Profile from nearmap tool	Our Ref:	3618_BAN_VA_DA17_C0
Figure:	EIGHT	Council:	Albury - Wodonga Shire Council		Using our cross section base, I matched elevation profile generated by nearmap	Plan By:	TO/JD
Sheet:	1 of 1	Tenure:	Permit Number N72		& traced lines appropriately for end	Project Manager:	то
Version/Date:	V1 05/10/2018	Client:	PGH Bricks & Pavers Pty Ltd		result	Office:	Thornton





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Plan of:	Visual Amenity Assessment for Andersons Clay Mine Environmental Impact Statement 2018 - R6- R6' ( South-North) Elevation Profile	Location:	253 Shaw Street, Springdale Heights, NSW	Source:	nearmap - Image Date 1 May 2018 & Elevation Profile from nearmap tool	Our Ref:	3618_BAN_VA_DA17_C00
Figure:	NINE	Council:	Albury - Wodonga Shire Council	Process/Manipulation:	Using our cross section base, I matched elevation profile generated by nearmap		TO/JD
Sheet:	1 of 1	Tenure:	Permit Number N72		& traced lines appropriately for end	Project Manager:	то
Version/Date:	V1 05/10/2018	Client:	PGH Bricks & Pavers Pty Ltd		result	Office:	Thornton







Plan of:	Visual Amenity Assessment for Andersons Clay Mine Environmental Impact Statement 2018 - R7- R7' (South-North) Albury Elevation Profile		253 Shaw Street, Springdale Heights, NSW	Source:	nearmap - Image Date 1 May 2018 & Elevation Profile from nearmap tool	Our Ref:	3618_BAN_VA_DA17_C0 cdr
Figure:	TEN	Council:	Albury - Wodonga Shire Council	Process/Manipulation:	Using our cross section base, I matched elevation profile generated by nearmap	Plan By:	TO/JD
Sheet:	1 of 1	Tenure:	Permit Number N72		& traced lines appropriately for end	Project Manager:	то
Version/Date:	V1 05/10/2018	Client:	PGH Bricks & Pavers Pty Ltd		result	Office:	Thornton







# **R7'**

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Date:	27/11/2018
Project	Manager VGT: Tara O'Brien
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Date:	27/11/2018



# 4.5. Consultation

PGH has conducted a letter drop in May 2018 to nearby residents to outline the proposed mine extension and provided contact details should residents require more information. To date no responses have been received.

No complaints regarding visual impacts have ever been received during the period of time PGH has owned the property.



# **Section 5.Impacts and Mitigation**

In general there will be very little change to the visual impact of the site development to the neighbouring residents and the City of Albury. As can be seen by the elevation profiles, the only sensitive receptor that currently has direct views of the site is approximately 500m to the north east (R2). The extension of the mine will slightly increase the visible active faces for this resident however, distance and vegetation will provide adequate shielding.

Other sensitive receptors will not be impacted by the mine extension due to the topographical shielding afforded by the ridgeline where the mine is located. This is demonstrated in the figures above where the line of sight is not lowered or otherwise altered sufficiently to allow the mine void to be visible even at the full extent of the development.

#### 5.1.1. Mitigation

As mining progresses, topsoil and overburden stockpiles will be emplaced on the perimeter of the site as visual and acoustic bunds. These will provide additional shielding to nearby residents and the City of Albury. All stockpiles and bunds will be vegetated to stabilise the soil which provides an additional benefit of visually blending the bunds into the surrounding landscape. Where possible, trees and shrubs may be planted on the perimeter of the site to provide some visual filtering, particularly for the resident in the north east (R2). It is unlikely that vegetation screen will totally obscure the view of the active mine faces for this resident, however some filtering should be achievable.

Rehabilitation of the site will also afford some visual relief as the mining is completed. The final void, which is envisaged to be predominately native pasture and grassland with some isolated tree stands, will be visible to the R2 resident. The views of the rehabilitated site will be in keeping with the surrounding rural landscape.

There is a phone number displayed at the front gate to allow the public to make complaints if necessary.

## 5.2. Cumulative Impacts

There are no cumulative impacts expected from the development as there are no other quarries or similar land disturbing activities being undertaken within the visual landscape of the area. As mentioned previously the resident R2 will have slightly expanded views of mine as the extension area and currently consented areas are opened up to extraction. The distance from the mine and progressive rehabilitation will mitigate some of the visual impacts for this resident.

# **Section 6. Monitoring and Maintenance**

Regular inspections from Shaw Street Strauss Street will be undertaken to determine if additional measure are required to reduce visual impacts.



# **Section 7.References**

**Ref. 1.** New South Wales Department of Trade & Investment – Resources and Energy (September 2013) *ESG3: Mining Operations Plan (MOP) Guidelines* 

VGT Environmental Compliance Solutions Pty Ltd - Environmental & Geological Assessments - Environmental Monitoring & Management - Quarry/Mine Plans & Rehabilitation Plans

- CPESC Endorsed Sediment & Erosion Plans

- Annual Reports

- NATA Accredited Laboratory

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