

# APPENDIX L

## Traffic Assessment



**PGH Bricks & Pavers Ltd**

**Traffic Assessment  
for:  
Andersons Clay Mine  
Environmental Impact Statement  
November 2018**

Prepared by:  
**VGT Environmental Compliance Solutions Pty Ltd**



**PGH Bricks & Pavers Ltd**

**Traffic Assessment  
for:  
Andersons Clay Mine  
Environmental Impact Statement  
November 2018**

**Prepared by:**

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Report Number:	3618_AN_EIS_TA_F0	
Report Authorised by:	Tara O'Brien	27/11/2018
	Joe Gauci	27/11/2018
Checked by:	Rich Mason	27/11/2018

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## Section 1.Introduction

### 1.1. Background

The subject land is described as Lot 2, DP 856969, 253 Shaw Street, 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 Traffic and Transport.

**Table 1. SEARs Traffic and Transport Issues to be Addressed**

Key Issue	Where Addressed in this Document
Accurate predictions of the road traffic generated by the construction and operation of the development, including a description of the types of vehicles likely to be used for transportation of quarry products.	Section 4 & Section 5
An assessment of potential impacts on the capacity, condition, safety and efficiency of the local and State road networks, detailing the nature of the traffic generated, traffic routed, traffic volumes and potential impacts on local and regional roads.	Section 5
A description of the measures that would be implemented to maintain and /or improve the capacity, efficiency and safety of the road network (particularly the proposed transport routes) over the life of the development.	Section 5
Evidence of any consultation with relevant roads authorities, regarding the establishment of agreed contributions towards road upgrades or maintenance; and	Section 4.8
A description of access roads, specifically in relation to nearby Crown roads and fire trails.	Section 4.6 & 5.5



## 1.2.2. Council Requirements

**Table 2. Albury City Council Traffic Issues to be Addressed**

Key Issue	Where Addressed in this Document
The EIS should include an assessment of all potential impacts of the proposed development on the existing environment (including cumulative impacts where relevant and appropriate).	-
<ul style="list-style-type: none"> <li>Access and Traffic- consideration of generation and demands, access to and from the site including addressing the standard of the existing unsealed road as well as internal movement through the site.</li> </ul>	Section 4 & Section 5

## 1.2.3. NSW Transport-Roads and Maritime Services Requirements

**Table 3. NSW Transport- Roads and Maritime Services Issues to be Addressed**

Key Issue	Where Addressed in this Document
A traffic assessment should be prepared to outline measures to address and manage traffic related issues generated by the development. The document submitted should address;	-
<ul style="list-style-type: none"> <li>The potential impacts on the road network associated with the development during the lifetime of the projects.</li> </ul>	Section 5
<ul style="list-style-type: none"> <li>The works required to the existing road infrastructure.</li> </ul>	Section 5
<ul style="list-style-type: none"> <li>The measures to be implemented to maintain the standard and safety of the road network including driveway access.</li> </ul>	Section 5
<ul style="list-style-type: none"> <li>The procedures to monitor and ensure compliance.</li> </ul>	Section 7
A transport management plan may be required to outline measures to manage traffic related issues generated by the development.	Section 4.5 & 5.4
The level of detail required of the traffic assessment for the proposal is dependent on the level of impact resulting from traffic generated by the proposed quarry, the rate of extraction of material and the standard of construction of, and current usage characteristics of, the public roads servicing the proposed quarry sites. For road safety reasons the haulage route particularly intersections should be assessed for compliance with the Austroads criteria for intersection design.	Section 4 & Section 5
Roads and Maritime emphasises the need to minimise the impacts on the existing road network and maintain the level of safety, efficiency and maintenance along the existing road network. <b>Any Traffic Impact Assessment needs to address the impacts of traffic generated by this development upon the nearby road network, particularly intersections.</b>	Section 4 & Section 5

## 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.

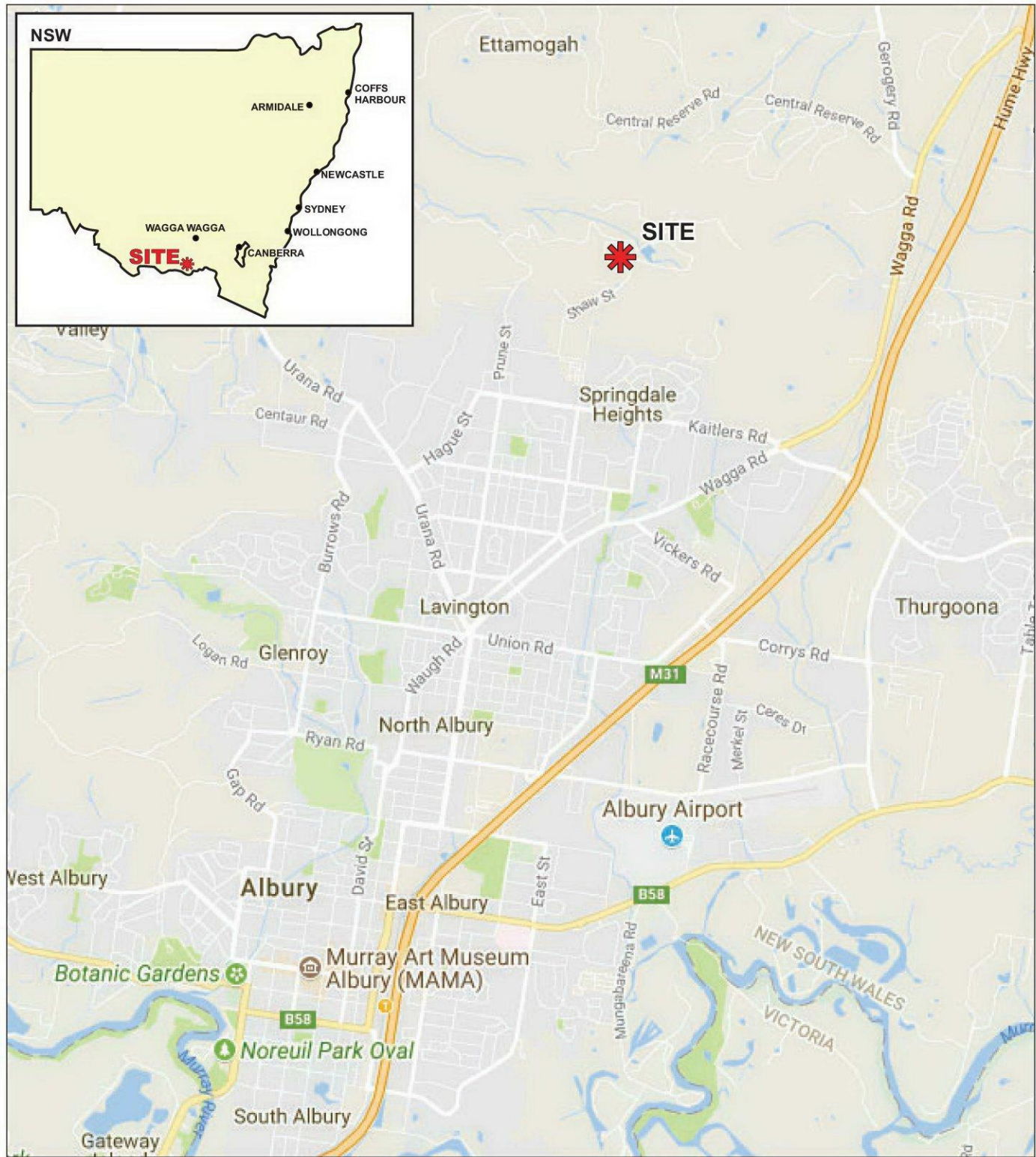
Council consent conditions that pertain to the management of Traffic and Transport are reproduced below.

***Condition 11-*** *the permit holder shall ensure that no operations, including cartage of material, shall take place outside the daytime hours between 6:00am and 6:00pm Monday to Saturday inclusive, nor on a Sunday, Christmas Day or Good Friday, except for essential plant maintenance.*



<b>Plan of:</b>	Traffic Assessment for Andersons Clay Mine Environmental Impact Statement 2018 - Site Location	<b>Location:</b>	253 Shaw Street, Springdale Heights, NSW	<b>Source:</b>	nearmap - Image Date 01/05/2018 & Google Maps 2018	<b>Our Ref:</b>	3618_BAN_TA_DA17_C001_V1_F1.cdr
<b>Figure:</b>	ONE	<b>Council:</b>	Albury Wodonga Shire Council	<b>Survey:</b>	N/A	<b>Plan By:</b>	JD
<b>Sheet:</b>	1 of 1	<b>Tenure:</b>	Permit Number N72	<b>Projection:</b>	N/A	<b>Project Manager:</b>	TO
<b>Version/Date:</b>	V1 04/10/2018	<b>Client:</b>	PGH Bricks & Pavers Pty Ltd	<b>Contour Interval:</b>	N/A	<b>Office:</b>	Thornton

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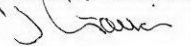
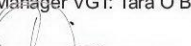
Approx Scale: 0 1 2km

**Legend**

- Site (Lot 2 DP 856969)
- N72 Consent Boundary
- Lot Boundary




Approx Scale: 0 150m

Manager/Authorisation Holder PGH Bricks & Pavers Pty Ltd: Joe Gauci  
Signed:   
Date: 27/11/2018  
  
Project Manager VGT: Tara O'Brien  
Signed:   
Date: 27/11/2018




<b>Plan of:</b>	Traffic Assessment for Andersons Clay Mine Environmental Impact Statement 2018 - Site Layout	<b>Location:</b>	253 Shaw Street, Springdale Heights, NSW	<b>Source:</b>	nearmap - Image Date 01/05/2018 & Landair Surveys	<b>Our Ref:</b>	3618_BAN_TA_DA17_C002_V1_F2.cdr
<b>Figure:</b>	TWO	<b>Council:</b>	Albury - Wodonga Shire Council	<b>Survey:</b>	Landair Surveys - Image Flown 08/02/2017	<b>Plan By:</b>	SK/JD
<b>Sheet:</b>	1 of 1	<b>Tenure:</b>	Permit Number N72	<b>Projection:</b>	MGA	<b>Project Manager:</b>	TO
<b>Version/Date:</b>	V1 04/10/2018	<b>Client:</b>	PGH Bricks & Pavers Pty Ltd	<b>Contour Interval:</b>	1m	<b>Office:</b>	Thornton

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






0 50m





Manager/Authorisation Holder PGH Bricks & Pavers Pty Ltd: Joe Gauci  
Signed:   
Date: 27/11/2018  
  
Project Manager VGT: Tara O'Brien  
Signed:   
Date: 27/11/2018

LEGEND	
Feature/Domain	
	Property Boundary
	Consent Boundary (N72)
	Water Management Area
	River/Major Drainage Line
	Road
	Contour
	Area of Disturbance



## 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. There will be no change to the consented extraction depth of 50 metres. Operating hours will also remain identical.

There will be no change to the currently consented extractions rates, mining campaign frequency and duration and transportation due to this mine extension.

## **Section 4.Existing Environment**

### **4.1. Extraction Rates**

As stated above, the rate of extraction from the site does not exceed 50,000 tonnes per annum. There are no limits placed on the extraction within the current conditions of consent. It is presumed the tonnages extracted formed part of the development application that was originally granted in 1979 (N72). Correspondence from Albrick, the then owner of the Jindera Brickworks, to Albury Council in response to a request for additional information, indicates that the production levels from the adjacent PML1 site were estimated to be 30,000 cubic yards per annum. The extension of PML1 to the current site was required as the PML1 pit was nearing exhaustion. It is not known what production rate was applied for in the development application however it appears that Council recommendations to approve the extension was based on those annual usage tonnages. This usage translates to approximately 25,000 cubic metres or 50,000 tonnes per annum assuming a density of 2.0kg/m<sup>3</sup>.

### **4.2. Transportation Volumes**

There will be no changes to the frequency of transportation of the material won from the site to the Jindera Brickworks. Haulage from the site to the Jindera Brickworks is undertaken periodically using 33 tonne road haul trucks. Based on a maximum usage of 50,000 tonnes per annum, it would take up to 1,515 loads, or 3,030 truck movements per annum to move this material to the brickworks. Haulage is undertaken on a campaign basis and not spread evenly throughout the year.

### **4.3. Transportation Hours**

Cartage of material only takes place within the consented hours of 6:00am and 6:00pm Monday to Saturday inclusive. No transportation is undertaken on Sundays, Christmas Day or Good Friday, except for essential plant maintenance.

### **4.4. Transportation Routes**

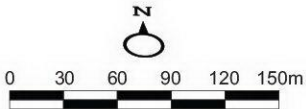
Haul trucks leaving the site travel south down Shaw Street, turn right onto Strauss Street, Left onto Prune Street, turn right onto Kaitlers Road. Proceeding along this road it becomes Hague Street to the south before intersecting with Urana Road. Trucks then turn right onto Urana Road which continues to Jindera. The complete route is approximately 12km one way (see Figure Three).

The route commences on the unsealed portion of Shaw Street for approximately 1km before it reached the sealed portion of the road. The remaining portion of the route to Jindera is sealed. Approximately 3km of the journey is through suburban housing with the remaining portions through rural or rural residential areas.

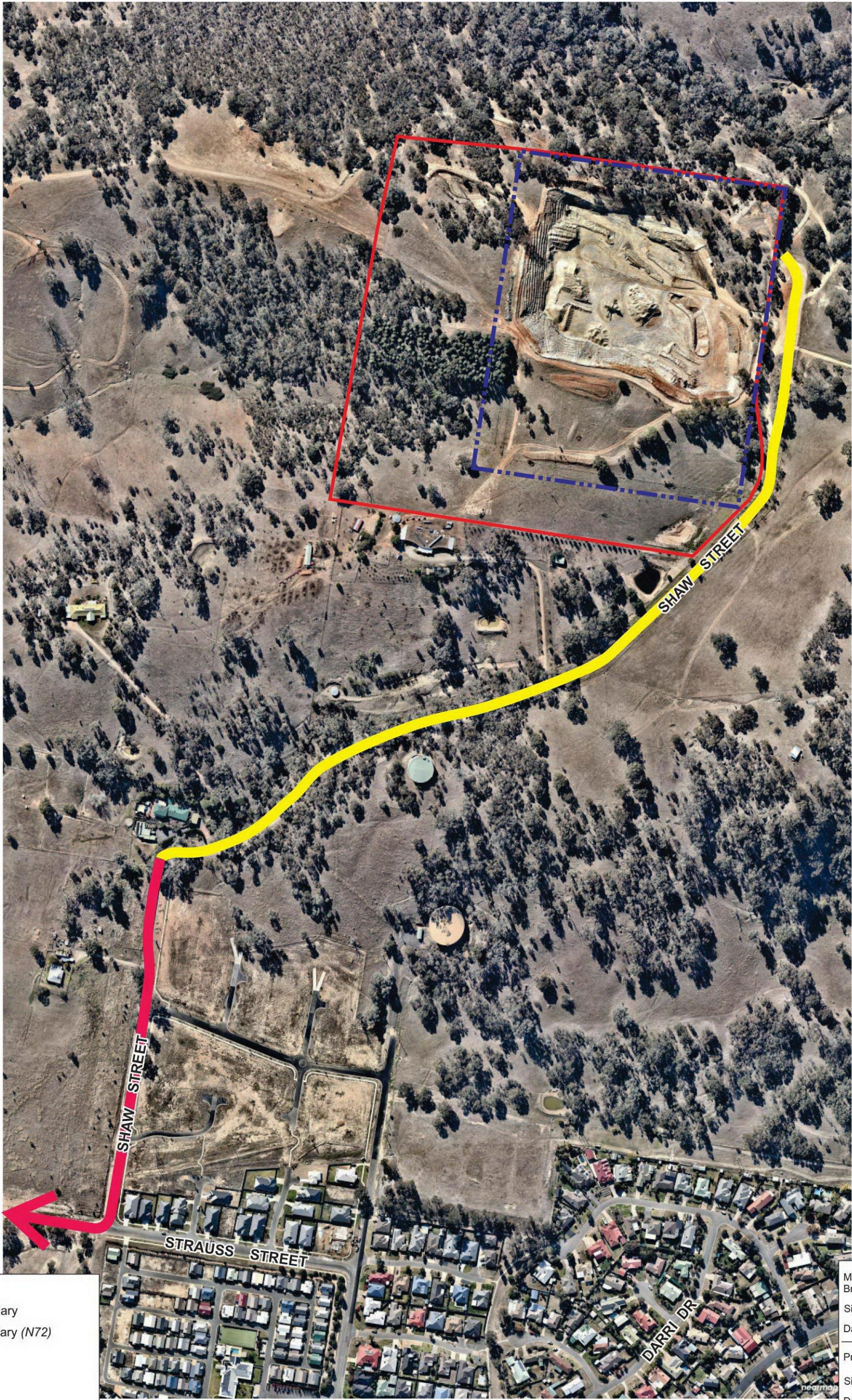


Plan of:	Traffic Assessment for Andersons Clay Mine Environmental Impact Statement 2018 - Truck Route/Road Surface Plan
Figure:	THREE
Sheet:	1 of 1
Version/Date:	V1 04/10/2018

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Location:	253 Shaw Street, Springdale Heights, NSW	Source:	nearmap - Image Date 01/05/2018	Our Ref:	3618_BAN_TA_DA17_C003_V1_F3.cdr
Council:	Albury - Wodonga Shire Council	Survey:	N/A	Plan By:	JD
Tenures:	Permit Number N72	Projection:	N/A	Project Manager:	TO
Client:	PGH Bricks & Pavers Pty Ltd	Contour Interval:	N/A	Office:	Thornton



- Legend**
- Property Boundary
  - Consent Boundary (N72)
- Truck Route**
- Dirt Road
  - Sealed Road

Manager/Authorisation Holder PGH  
Bricks & Pavers Pty Ltd: Joe Gauci  
Signed:   
Date: 27/11/2018  
Project Manager VGT: Tara O'Brien  
Signed:   
Date: 27/11/2018



## 4.5. Traffic Management Plan

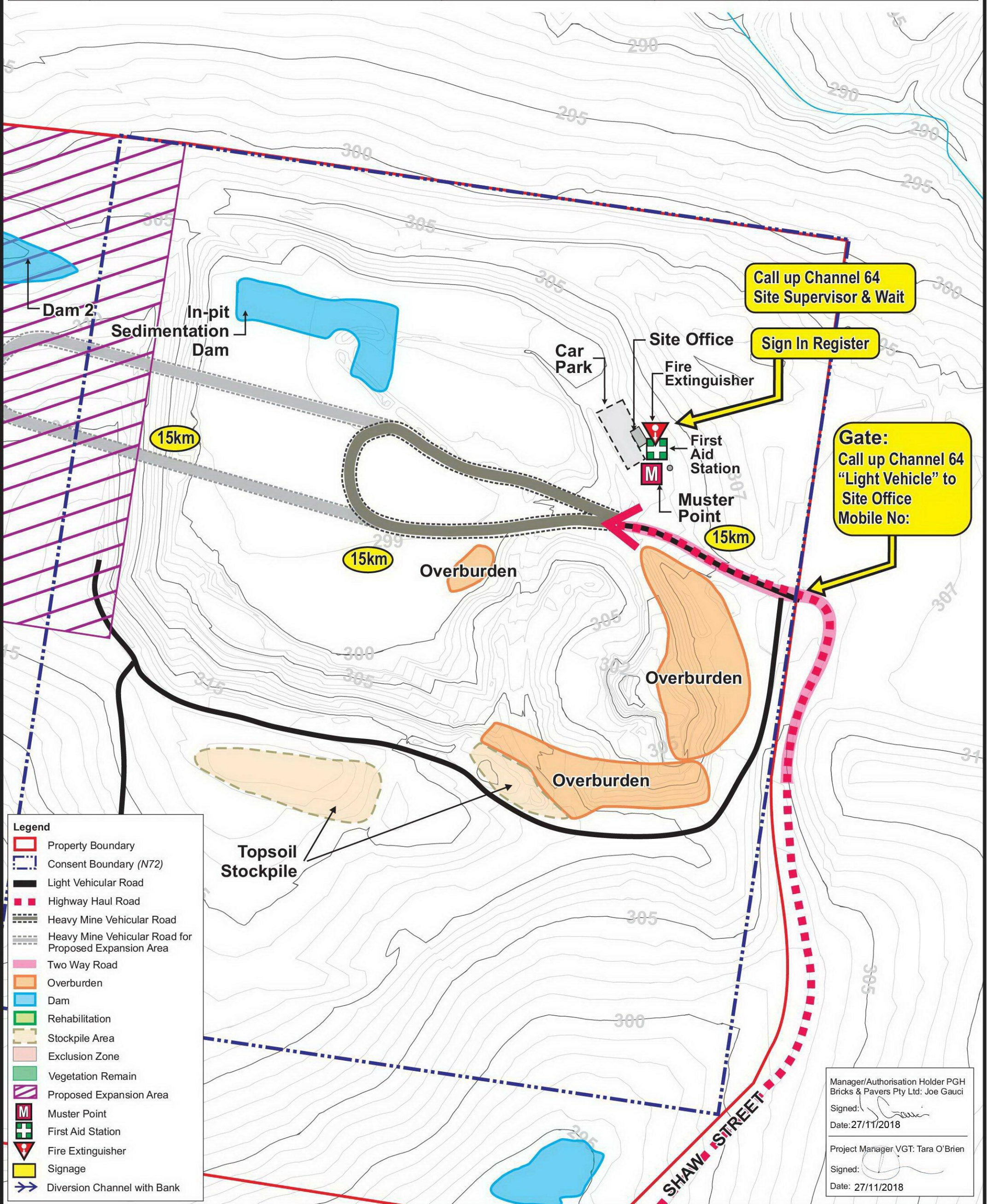
The current onsite traffic plan is shown in *Figure Four* below. Heavy vehicles are required to maintain contact on via radio and access is restricted to the pit floor for loading and hauling. All vehicles are required to maintain a speed limit of 15km/hr. Light vehicles must make radio contact with any heavy vehicles on the site before entering and must proceed to the site office to register. Parking for light vehicles is provided at the site office. Should light vehicles require access to the pit floor, contact both visually and by radio, with heavy vehicles and plant must be made. Visitors to the site must follow all safety instructions and directions given by PGH staff.

**Photography 1: Locked Entrance Gate with Signage**





<b>Plan of:</b>	Traffic Assessment for Andersons Clay Mine Environmental Impact Statement 2018 - Existing & Proposed Traffic Management Plan				
<b>Figure:</b>	FOUR				
<b>Sheet:</b>	1 of 1				
<b>Version/Date:</b>	V1 04/10/2018				
<b>Location:</b>	253 Shaw Street, Springdale Heights, NSW	<b>Source:</b>	nearmap - Image Date 10/10/2017	<b>Our Ref:</b>	3618_BAN_TA_DA17_C004_V1_F4.cdr
<b>Council:</b>	Albury - Wodonga Shire Council	<b>Survey:</b>	Landair Survey Flown 08/02/2017	<b>Plan By:</b>	JD
<b>Tenures:</b>	Permit Number N72	<b>Projection:</b>	MGA	<b>Project Manager:</b>	TO
<b>Client:</b>	PGH Bricks & Pavers Pty Ltd	<b>Contour Interval:</b>	1m	<b>Office:</b>	Thornton





**Photography 2: Site Office and Visitor Parking Signage**



**Photography 3: Speed Limits and PPE Signage**





## **4.6. Access Roads and Fire Trails**

There are no identified fire trails within or adjacent to the site, however there are a number of access tracks within the site, some of which link to neighbouring properties. The access tracks are generally used to access water management areas, dust monitoring gauges and to maintain perimeter fencing. They also provide access to overburden and topsoil emplacement areas during and after construction.

Access roads are unsealed and maintained in a condition that permits light vehicles access. Additional roads or modifications to access roads are undertaken as the need arises such as changes to the pit footprint, changes to emplacement areas and water management. Internal roads are not accessible by the public or neighbours with locked gates maintained along the property boundaries.

## **4.7. Road Contribution**

There is currently no requirement in the consent conditions or otherwise for a contribution for road maintenance. A Section 94 contribution maybe required as part of this development application to be advised by Council.

## **4.8. 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.

One complaint regarding dust and noise impacts from haulage trucks has been received during the period of time PGH has owned the property. Fuge Earthworks, the mining contracting company, was contacted by an Albury Council Officer regarding a complaint received by a neighbour regarding noise and dust. Upon notification, Fuge Earthworks and PGH committed to increasing the frequency of the water cart along the unsealed portion of Shaw Street during hauling operations and further limited the speed of trucks on Shaw Street to 30km/hr. No further complaints were received.

Consultation with the RMS was sought by the DPE through the development of the SEARs and the RMS response was included in the SEARs Requirements and are summarised in *Section 1.2.3*.

## **Section 5.Impacts and Mitigation**

### **5.1. Transportation Volumes**

As stated previously there will be no changes to the frequency of transportation of the material won from the site to the Jindera Brickworks due to the development. Haulage will continue to be undertaken on a campaign basis and not spread evenly throughout the year.

### **5.2. Transportation Hours**

There will be no changes to the transportation hours and therefore no additional impact due to the development.

### **5.3. Transport Routes**

As there will be no changes to the volume of traffic nor the traffic route due to the development, there is no additional impact to the road network. The road network is currently maintained by the Council and this is expected to continue.

### **5.4. Traffic Management Plan**

There will be no major changes to the Traffic Management Plan for the site. Safety of personnel, contractors and visitors to the site will be managed according to PGH procedures and policies. These procedures and policies, including traffic management and safety are updated from time to time as required.

As the pit progresses to the west, haulage vehicles may be required to drive further in to the pit floor to reach the stockpiles for loading. This change does not impact the environment or nearby residents and has no impact on the local roads. Safety issues will be taken into consideration with any change to the Traffic Management Plan, however low impact to the safety of personnel with regard to traffic and transport is expected.

### **5.5. Access Roads and Fire Trails**

As stated previously no impacts to the accessibility of the site via internal roads is expected and there are no identified fire trails on or adjacent to the site. Changes to the location and number of internal access roads is dependent on the progress of the extraction and other activities such as material emplacement, monitoring and inspection requirements. Internal roads will continue to be maintained for accessibility in the same manner as currently undertaken.

### **5.6. Road Condition**

As there is no change to the traffic volumes or traffic routes for the development the impact of the development on the local roads will not be any greater than what is currently experienced. Council is responsible for the repair and maintenance of public roads external to the site, including Shaw Street. Internal access roads are maintained by PGH.

## **Section 6.Cumulative Impacts**

There are no cumulative impacts expected with regards traffic and transport as there are no additional traffic movements with regard to this development.

## **Section 7.Monitoring and Maintenance**

Monitoring will be undertaken on a regular basis according to the site MSMP, MOP, PHMP and any other management and safety plans developed for the site. When mining and hauling operations are undertaken, the Site Supervisor will:

- Ensure access by the public is restricted and that all gates are locked outside of working hours;
- Ensure that all road haulage vehicles are registered and roadworthy;
- Ensure staff and contractors are inducted and understand and comply the traffic management plan;
- Ensure drivers are familiar with the haulage route; and
- Ensure haul truck movements and tonnages hauled are recorded.

At other times the Site Supervisor shall ensure:

- Access by the public is prevented via maintenance of adequate fencing and ensuring the gates are locked;
- Ensure internal access tracks and roads are maintained a trafficable condition and that overhanging vegetation is trimmed; and
- Review the MSMP and PHMP and any other safety plans at least annually and update as required.

## Section 8.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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Compliance  
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