



Down to Earth
Geotechnical & Environmental

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7th July 2017

Our Ref: Rinltr8

Central Coast Council
49 Mann Street
Gosford NSW 2250

Attention: Antonia Stuart,

**RE: APPLICATION TO MODIFY DEVELOPMENT CONSENT (SECTION 96),
DEVELOPMENT APPLICATION NO 42409/2012,
LOT 2 DP:362339, 620 WISEMANS FERRY ROAD, SOMERSBY, NSW**

This letter has been prepared with reference your Council correspondence dated 14th June 2017. Preparation of this letter has been carried out on behalf of Rindean Quarries Pty Ltd (RQ).

Following review of your letter, this office makes the following comments;

1. Councils Letter Point 2.

Refer to the amended fill volume drawing enclosed. Council should note that the quantities provided are approximate volumes. RQ cannot rule out an increase or decrease with regards to the final fill volumes required to complete the initial earthworks phase of the project.

2. Councils Letter Point 3.

Refer to noise/traffic management plan enclosed.

3. Councils Letter Point 4

a. Effect on Agri-Business from importation of Excavated Natural Material (ENM)

With regards to returning the site back to its original state for agricultural purposes. The maximum allowable concentrations for contaminants when classifying ENM and the current material approved for importation (Virgin Excavated Natural Material) is carried out under the same Resource Recovery Order prepared by Environment Protection Agency (EPA).

ENM and VENM can be considered the same type material (from a chemical/contamination point of view), as both material classifications can be made through the same Resource Recovery Order. The same process for rehabilitation and reinstatement of topsoil when importing VENM may be adopted for ENM in accordance with the current strategy, therefore, no implications to potential Agri-Business will result from importing ENM.

b. Sourcing ENM

The quantity of fill material required to complete the earthworks phase of the Quarry will not be readily available from a single source. Material will need to be sourced from various locations to make up the short fall. Given the fast moving nature of the construction and earthworks sector, material sourced today for importation may not still be available for importation when a decision with regards to the section 96 modification is made by the Joint Regional Planning Panel (JRPP).

Therefore, a Fill Importation Protocol will be developed in order to manage the quality of material imported during the earthworks phase of the Quarry development. A Fill importation Protocol will outline the minimum requirements for the assessment and classification of material to be imported to the site, which will allow RQ to judge whether potential imported material is suitable, or otherwise, by an independent Environmental Consultant based on the provided documentation, the apparent reliability, or otherwise, of the documentation, and its conformance with this Fill Importation Protocol. The approval process may include source site visits and confirmation sampling, as necessary.

Furthermore, the final decision for the acceptance or rejection of material, from a contamination perspective, rests with the Environmental Consultant. Under the circumstances that material imported to the site appears inconsistent with the provided classification report, or the results of onsite confirmation sampling are inconsistent with the provided classification report, the material will be rejected and will require removal from the site.

For and on behalf of D2E and RQ

A handwritten signature in dark ink, appearing to be 'N. Smith', with a long horizontal stroke extending to the right.

N. Smith
Laboratory Manager

Attachments

- *Fill Volume Drawing*
- *Traffic Management Plan (REF: SBMG01570-00)*

Traffic Management Plan

620 Wisemans Ferry Road, Somersby

Quarry Development

Prepared for: Rindean Quarry

Prepared By: Matthew Young
RMS Design & Inspect Traffic Control Plans
Certificate #: 2243017058 Exp:06/02/2018

Monday, 26 June 2017
Document Number: SBMG01570-00

Table of Contents

1 Project Details	3
1.1 Project Summary.....	3
1.2 Revisions	3
1.3 Location Map	3
1.4 Construction Phase.....	4
1.5 Driver Induction process	4
2 Proposed Management of Construction Vehicles	5
2.1 Construction Phase.....	5
3 Impact of Project.....	6
3.1 Residents	6
3.2 Pedestrians	6
3.3 Cyclists	6
3.4 Local Traffic	6
3.5 Emergency Services.....	6
3.6 Public Transport	6
3.7 Noise.....	6
Appendix A – Site Plans	6
Appendix B – Traffic Control Plans.....	6

1 Project Details

1.1 Project Summary

Project: Quarry Development

Location: 620 Wiseman Ferry Road, Somersby NSW

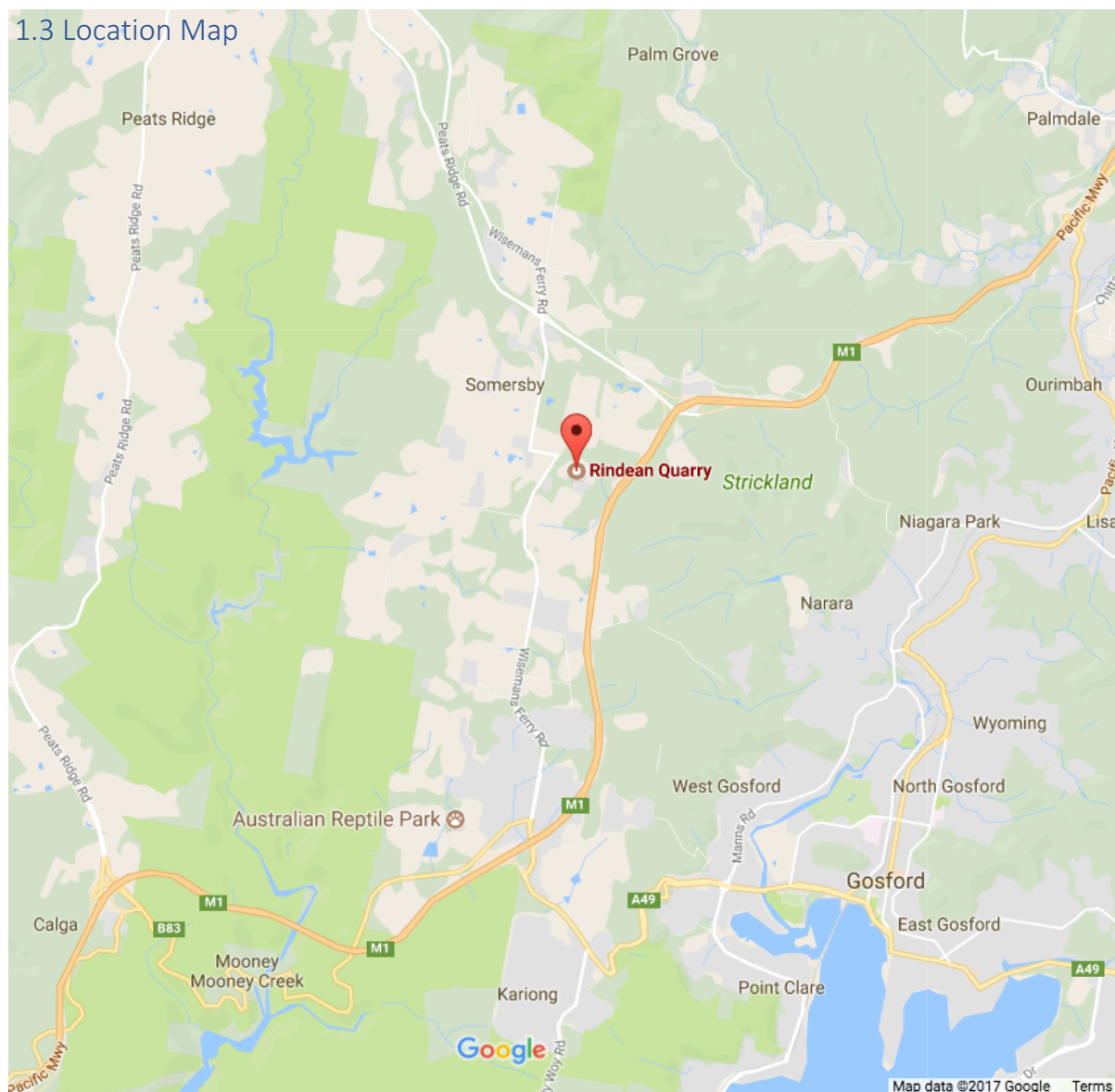
Hours of Operation: Monday to Friday 7am – 5pm
 Saturday 8am – 1pm
 No work on Sunday or Public Holidays

Scope of Work: Construction of a noise barrier using material delivered to the site.

1.2 Revisions

Rev	Date	Description
0	26/06/17	Initial Submission

1.3 Location Map



1.4 Construction Phase

Largest Truck Size: Truck and Trailer (approx. 19m in length)

Estimated Number of Deliveries: 9422 truck loads (approx. 330 000 Tonne of material)

General Type of Works:

- Delivery of material onto the site.
- Positioning of delivered material for construction of the noise barrier using onsite plant and equipment.

1.5 Driver Induction process

- Prior to a driver approaching the site in a heavy vehicle. A signed copy of the approved traffic management plan is to be received by Rindean Quarry.
- Each driver must sign their own copy of the traffic management plan to ensure they are aware of proposed approach and departure routes and any impact reducing measures.

2 Proposed Management of Construction Vehicles

2.1 Construction Phase

- a) Approach and Departure Routes (Primary Access Route)
 - Approach Route – Traveling along the Pacific Highway, turn onto Wisemans Ferry Road and then turn right into the site in a forward-facing direction.
 - Departure Route – In a forward-facing direction exit the site and turn left onto Wisemans Ferry Road and then turn onto the Pacific Highway.
- b) Approach and Departure Routes (Alternative Route)
 - Approach Route – Traveling along the Pacific Highway, turn onto Peats Ridge Road, turn left onto Wisemans Ferry Road and then turn left into the site in a forward-facing direction.
 - Departure Route – In a forward-facing direction exit the site and turn right onto Wisemans Ferry Road, turn right onto Peats Ridge Road and then turn onto the Pacific Highway.

NOTE: Where possible these alternative routes will not be utilised during School Zone Hours.

- c) Site Access
 - Vehicle to enter and exit the site the existing driveway off Wisemans Ferry Road.
- d) Vehicle movements within the site
 - Sufficient area within the site boundary to allow vehicle to turn around and exit in a forward direction.
- e) Loading and Unloading of Vehicles
 - All vehicles to be unloaded within the site boundary.
- f) Vehicle Queuing
 - Vehicles to queue within the site boundary only.
- g) Vehicles exiting from site
 - All vehicles exiting the site must go via the temporary wheel wash prior to exit to minimise the contamination of the public road with site material.
- h) Standing Plant
 - All plant and equipment to be operated within the site boundary only.
- i) Parking for Site Workers
 - Site workers to park within site boundaries only.
- j) Storage for Material
 - All storage to be located within the site boundaries only.
- k) Traffic Lanes
 - 2-way traffic along Wisemans Ferry Road to be maintained as per existing conditions.

3 Impact of Project

3.1 Residents

- Existing Access to surrounding properties maintained throughout the project.
- 2-Way access along Wisemans Ferry Road maintained throughout works.

3.2 Pedestrians

- No existing footpaths along Wisemans Ferry road past the site.

3.3 Cyclists

- No significant cyclist impact due to the project; existing access to remain as per normal conditions.

3.4 Local Traffic

- All vehicle queuing contained within the site.
- During school zone hours, vehicles avoid using the alternative routes where possible as per 2.1b) to mitigate impact to Somersby Public School. All drivers are advised of this via the induction process (see item 1.5).

3.5 Emergency Services

- Access along Wisemans Ferry Road maintained throughout the project with access to surrounding properties also as per existing conditions.
- Emergency vehicles are given priority access as per normal road rules.

3.6 Public Transport

- Existing public transport infrastructure unaffected by this project.

3.7 Noise

- Compression breaking to be kept to a minimum when using local roads.
- Drivers are to ensure their vehicles are in good working order to ensure fitted noise reduction components are operational.
- Vehicles are not required to queue along local roads minimising the need for the stopping and starting of vehicles or prolonged idling thereby reducing excessive engine noise.

Appendix A – Site Plans

SBMG01570-01 – Approach and Departure Routes – Primary Route
SBMG01570-02 – Approach and Departure Routes – Alternative Route
SBMG01570-03 – Site Overview – Construction Phase




Appendix B – Traffic Control Plans

SBMG01570-04 – Material Deliveries

APPROACH & DEPARTURE ROUTES

ALTERNATIVE ACCESS ROUTE



-  SITE BOUNDARY
 SITE APPROACH ROUTE
 SITE DEPARTURE ROUTE

NOTES:

1. ALL SIGNAGE TO BE INSTALLED IN ACCORDANCE WITH RMS "TRAFFIC CONTROL AT WORKSITES" MANUAL AND AS1742.3.
2. ALL SIGNAGE AND DELINEATION MUST BE INSTALLED BY RMS CERTIFIED TRAFFIC CONTROLLER(S) ONLY.
3. SITE VEHICLE TO ENTER AND EXIT THE SITE IN A FORWARD FACING DIRECTION ONLY.

RECOMMENDED MAXIMUM SPACING OF CONES AND BOLLARDS			RECOMMENDED TAPER LENGTH			
Purpose an usage	Approach Speed (km/h)	Max Spacing (m)	Approach speed (km/h)	Traffic control at start	Lateral shift taper	Merge taper
All purposes on residential or commercial streets	<=50	4				
Center-line on approach to Traffic Controller position	All Cases	4				
Outer edge of traffic lane - i.e. working on shoulder	51-70 / >70	18 / 24	< 45	15	0	15
Separating opposing traffic on 2 lane 2 way road	51-70 / >70	12 / 18	46-55	15	15	30
separating opposing traffic on a multilane undivided road	51-70 / >70	12 / 18	56-65	30	30	60
adjacent to a closed lane on a multilane road	51-70 / >70	18 / 24	66-75	N/A	70	110
Merge tapers	51-70 / >70	9 / 12	76-85	N/A	80	130
Lateral shift tapers	51-70 / >70	12 / 18	86-95	N/A	90	140
Protecting freshly painted lines	51-70 / >70	24 / 60	96-105	N/A	100	160
FIGURES EXTRACTED FROM RTA TCWS MANUAL v4.0 (TABLES 5.1 & 5.2). REFER TO MANUAL FOR FURTHER INFO			> 105	N/A	110	180

SITE OVERVIEW
CONSTRUCTION PHASE



s | b | m | g

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Traffic Management Plans

Project/Event: QUARRY DEVELOPMENT

Location: 620 WISEMANS FERRY ROAD, SOMERSBY NSW

Client : RINDEAN QUARRY

Plan No. SBMG01570-03

A

Date: 26TH JUNE 2017

SCALE: NOT TO SCALE

←

N

PREPARED BY: MATTHEW YOUNG
RMS DESIGN & INSPECT TRAFFIC
CONTROL PLANS
CERTIFICATE No. 2243017058
Expiry: 06/02/2018

SIGNED: 

DATE		DESCRIPTION
	E	
	D	
	C	
	B	
26/01/17	A	INITIAL SUBMISSION

RECOMMENDED MAXIMUM SPACING OF CONES AND BOLLARDS			RECOMMENDED TAPER LENGTHS				
Purpose an usage	Approach Speed (km/h)	Max Spacing (m)	Approach speed (km/h)	Traffic control at start	Lateral shift taper	Merge taper	
All purposes on residential or commercial streets	<=50	4	< 45	15	0	15	
Center-line on approach to Traffic Controller position	All Cases	4	46-55	15	15	30	
Outer edge of traffic lane - i.e. working on shoulder	51-70 / >70	18 / 24	56-65	30	30	60	
Separating opposing traffic on 2 lane 2 way road	51-70 / >70	12 / 18	66-75	N/A	70	115	
separating opposing traffic on a multilane undivided road	51-70 / >70	12 / 18	76-85	N/A	80	130	
adjacent to a closed lane on a multilane road	51-70 / >70	18 / 24	86-95	N/A	90	145	
Merge tapers	51-70 / >70	9 / 12	96-105	N/A	100	160	
Lateral shift tapers	51-70 / >70	12 / 18	> 105	N/A	110	180	
Protecting freshly painted lines	51-70 / >70	24 / 60	FIGURES EXTRACTED FROM RTA TCWS MANUAL v4.0 (TABLES 5.1 & 5.2). REFER TO MANUAL FOR FURTHER INFO				

TRAFFIC MANAGEMENT PLAN

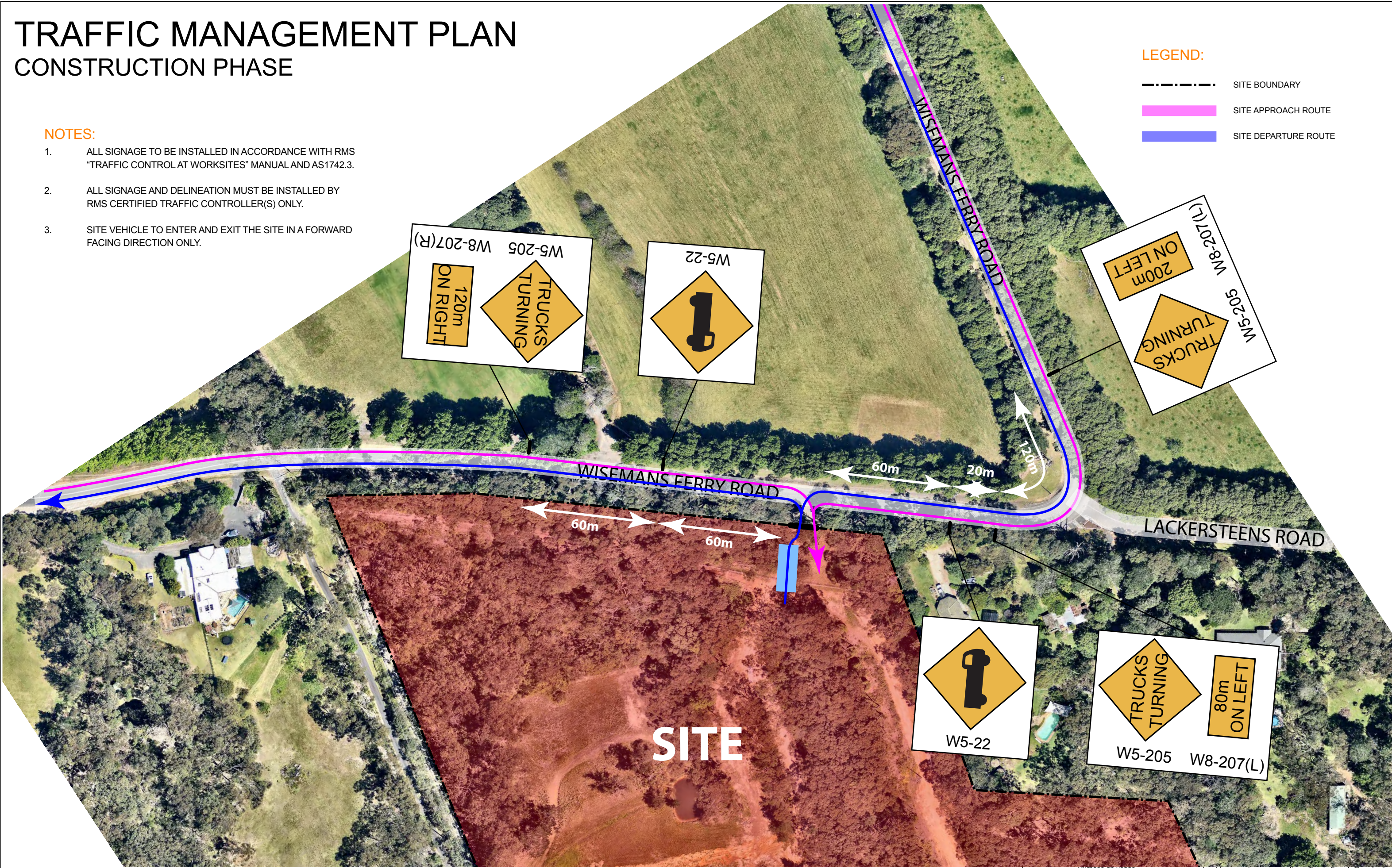
CONSTRUCTION PHASE

NOTES:

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3.
- SITE VEHICLE TO ENTER AND EXIT THE SITE IN A FORWARD FACING DIRECTION ONLY.

LEGEND:

- SITE BOUNDARY
- SITE APPROACH ROUTE
- SITE DEPARTURE ROUTE



s | b | m | g

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Traffic Management Plans

Project/Event: QUARRY DEVELOPMENT

Location: 620 WISEMANS FERRY ROAD, SOMERSBY NSW

Client : RINDEAN QUARRY

Plan No. SBMG01570-04


A

Date: 26TH JUNE 2017

SCALE: NOT TO SCALE

N

PREPARED BY: MATTHEW YOUNG
RMS DESIGN & INSPECT TRAFFIC
CONTROL PLANS
CERTIFICATE No. 2243017058
Expiry: 06/02/2018

SIGNED: 

DATE		DESCRIPTION
	E	
	D	
	C	
	B	
26/01/17	A	INITIAL SUBMISSION

Purpose an usage		Speed (km/h)	Spacing (m)	Approach speed (km/h)	Traffic control at start	Lateral shift taper	Merge taper
All purposes on residential or commercial streets		<=50	4	< 45	15	0	15
Center-line on approach to Traffic Controller position		All Cases	4	46-55	15	15	30
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separating opposing traffic on a multilane undivided road adjacent to a closed lane on a multilane road		51-70 / >70	18 / 24	76-85	N/A	80	130
Merge tapers		51-70 / >70	9 / 12	86-95	N/A	90	145
Lateral shift tapers		51-70 / >70	12 / 18	96-105	N/A	100	160
Protecting freshly painted lines		51-70 / >70	24 / 60	> 105	N/A	110	180

FIGURES EXTRACTED FROM RTA TCWS MANUAL v4.0 (TABLES 5.1 & 5.2). REFER TO MANUAL FOR FURTHER INFO

APPROXIMATE FILL VOLUME CALCULATIONS

Southern bund wall volume =

$$A = 1/2 * h * (a+b) * \text{length} + (b * c * \text{length})$$

$$A = 1/2 \times 4\text{m} \times (2\text{m} + 12.4\text{m}) \times 610\text{m} + B = (12.4\text{m} \times 3\text{m} \times 610\text{m})$$

$$= 40,260\text{m}^3$$

APPROXIMATE FILL VOLUME CALCULATIONS

Northern bund wall volume =

$$A = 1/2 * h * (a+b) * \text{Length} + (b * c * \text{Length})$$

$$A = 1/2 \times 4\text{m} \times (2\text{m} + 18/12.4\text{m}) \times 454\text{m} + B = (18/12.4\text{m} \times 3\text{m} \times 454\text{m})$$

$$= 39,407\text{m}^3$$

Purple line indicates the property boundary fenceline.

Northern Bund Wall

APPROXIMATE QUARRY FILL VOLUME CALCULATIONS

The bund wall will extend into the exposed quarry face, some filling adjacent to the quarry wall will be required to achieve an 18/12.4 metre wide bund

= length x width x height

$$= 100\text{m} \times 10\text{m} \times 20\text{m}$$

$$= 20,000\text{m}^3$$

Section through A & B
(not to scale)

2m (a)

A

B

3m (c)

18m/12.4m (b)

6m/4m (h)

Southern Bund Wall

