



Operational Traffic Management Plan

Blakebrook Quarry

MP07_0020

February 2024

Operational Traffic Management Plan

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DOCUMENT HISTORY

Revision	Date	Prepared By (Name)	Reviewed By (Name)	Change Remarks
1.0	May 2010	LCC & ERM Australia	Manager Commercial Services & ERM Australia	Final draft
Rev A	June 2010	LCC & ERM Australia	Manager Commercial Services ERM Australia Diretor General of DoP	Sub plan draft
Rev B	April 2011	LCC & ERM Australia	Manager Commercial Services ERM Australia Diretor General of DoP	Sub plan draft
2.0	Dec 2017	LCC & ERM Australia	Manager Business Development ERM Australia Secretary of DPE	Traffic Management Plan
3.0	March 2018	LCC & ERM Australia	Manager Business Development ERM Australia Secretary of DPE	Update as per CoA
3.1	August 2018	LCC & ERM Australia	Compliance Manager, Manager Commercial Services DPE Secretary	Final plan
4.0	Sept 2022	LCC & ENV Solutions	Compliance Manager, Manager Commercial Services DPE Secretary	Update as per CoA
4.1	Feb 2023	LCC	Compliance Manager Manager Commercial Services DPE Secretary	Address comments in Post Approval Review
4.2	Feb 2024	LCC	Compliance Manager Head of Roads and Quarry DPE Secretary	Address comments in Post Approval Review

[Abstract]

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DEFINITIONS

Term	Definition
Audit	Systematic, independent and documented process for obtaining evidence and objectively evaluating it to determine the extent to which environmental management system meets the criteria set.
Auditor	Person with appropriate training and competence to perform an audit
Contractor	Contractor engaged by LCC in order to achieve improvements in overall environmental performance
Environment	Surroundings in which Contractor operates including air, water, land, natural resources, flora, fauna, humans, heritage and their interrelation.
Environmental Aspect	Element of organisational activities or products that can interact with the environment.
Environmental Impact	Any changes to the environment, whether adverse or beneficial, wholly or partially resulting from an organisational aspect.
Environmental Management	The management system used to develop and implement the environmental system policy and manage environmental aspects.
Environmental Objective	Overall environmental goal, consistent with the environmental policy that an organization sets itself to achieve.
Environmental Performance	Measurable results of an organisation's management of environmental aspects.
Integrated Management System	A single system designed to manage multiple aspects of an organisations operations in line with multiple standards, such as those for quality, environmental and health and safety management.
Non-conformance	Non fulfilment of a requirement.
Performance Indicators	Indicators that have been developed as leading or lagging to monitor and assess performance.
Procedure	Specified way to carry out an activity or process.
Subcontractor	Any company, body or person who is contracted to the Contractor for the purpose of supplying services or goods.

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ABBREVIATIONS

Abbreviation	Meaning
CoA	Conditions of Approval
DP	Deposited Plan
DPE	Department of Planning and Environment
EAR	Environmental Assessment Report
EMP	Environmental Management Plan
EMS	Environmental Management Strategy
EPA	NSW Environment Protection Authority
EPL	Environmental Protection Licence
ERM	Environmental Resources Management
ISO	International Organisation for Standardisation
LCC	Lismore City Council
LEP	Local Environmental Plan
LGA	Local Government Area
NHVR	National Heavy Vehicle Regulator
OHWP	Out of Hours Work Protocol relating to Asphalt operations
OTMP	Operational Traffic Management Plan
SEE	Statement of Environmental Effects (Mitchel Hanlon)
TIA	Traffic Impact Assessment (from SEE, Mitchel Hanlon)
TfNSW	Transport for NSW

Operational Traffic Management Plan

1 INTRODUCTION

This Operational Traffic Management Plan (OTMP) has been prepared by ENV Solutions Pty Ltd (ENV) on behalf of Lismore City Council in order to manage operational traffic at Blakebrook Quarry (the Quarry).

The plan has been developed to address in part, the sites Traffic Management Plan, specifically for ongoing operational activities associated with asphalt production and quarrying operations and to satisfy Schedule 3, condition 23 of the Project Approval 07_0020 – Mod 3.

Blakebrook Quarry (the Quarry) is operated by Northern Rivers Quarry (NRQ), which is a commercial entity owned by Lismore City Council (LCC). The Quarry is located at 550 Nimbin Road, Blakebrook, approximately seven (7) kilometres north-west of Lismore on Lot 53 DP 1254990 for Extraction Areas and Lot 54 DP 1254990 for Asphalt Plant an ancillary activity.

The site occupies an area of approximately 128 ha (incorporating 45ha rezoned to C2 Environmental Conservation (gazetted on 18 December 2020), providing long term security for the biodiversity offset area). Surrounding land is used for agricultural and rural purposes. The location of the Quarry is as shown in *Figure 1*.

The Quarry is identified as a State Significant Development (SSD) and provides a range of quarry products to northern NSW on behalf of Council including:

- Aggregates
- Drainage rock
- Road base
- Basalt products
- Metal dust
- Fill material
- Bituminous products including hot mix and cold mix – blended according to mix design

The operations consist of an active pit and associated run of mine (ROM) pad for the storage of liberated material which is subsequently crushed and screened onsite in addition to an area designated for the manufacture of asphalt. The site also contains a hardstand for site offices, a laydown yard, maintenance and weighbridge facilities.

1.1 Purpose

The purpose of this OTMP is to provide a reference document to maximise safety of all road users and project personal by implementing “best practice” management strategies to road and traffic safety.

The OTMP will:

- Describe how Council will manage and control risks associated with traffic management during operational activities associated with the Quarry
- Address the requirements of applicable legislation
- Provide a code of conduct that details safe and quiet driving practices that drivers are to follow
- Meet the Project Conditions of Approval (CoA)
- Address the requirements of the EAR (ERM, 2009) and Statement of Environmental Effects (Mitchel Hanlon 2019) relating to Traffic Management

This OTMP has been prepared in consultation with Transport for New South Wales (TfNSW formerly RMS: Roads and Maritime Services) and produced in accordance with the recommendations provided within Transport for NSW's (2022) 'Traffic Control at Work Sites', Version 6.1 and AUSTRROADS (2019) Guide to Traffic Management.

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1.2 Objectives

The objectives of the OTMP are to:

- Identify relevant obligations and legislative requirements to be enacted for the Quarry;
- Describe the specific traffic management requirements and identify the “best practice” methods to be implemented;
- Ensure compliance with the Code of Conduct (Driver Induction) by all heavy vehicle drivers using the Quarry;
- Outline record keeping and management plan monitoring requirements
- Consult with the relevant parties during the preparation and implementation (as required) of this OTMP
- Define key roles and responsibilities.

1.3 Review Schedule

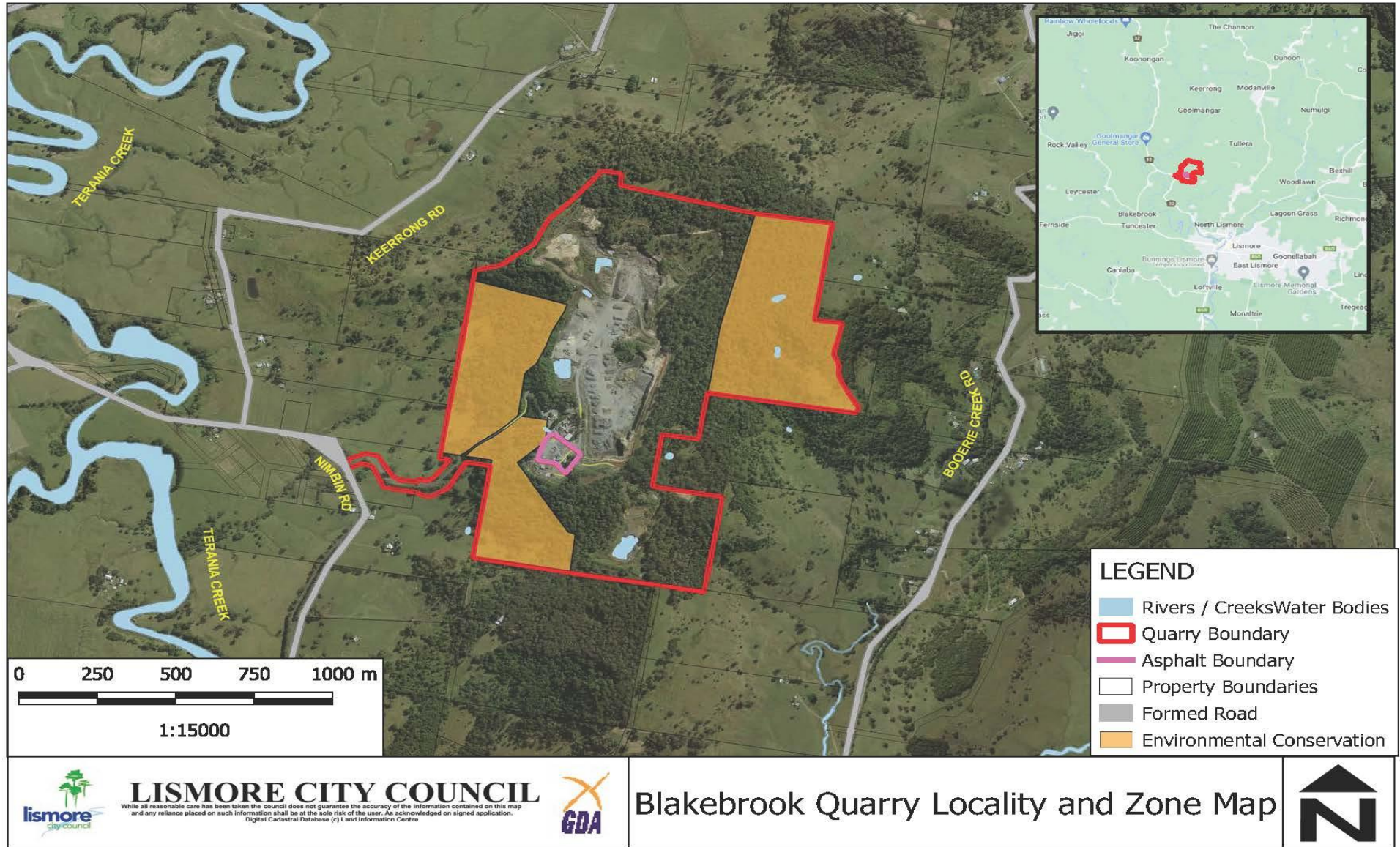
In accordance with the CoA Schedule 5, condition 11, this OTMP will be formally reviewed by LCC each year, as part of the annual review and reporting process. An official update will be submitted to the DPE at minimum every three (3) years. Noting minor administrative corrections will be undertaken without EPA, DPE or relevant agency consultation. A copy will be provided to all parties for record.

Accordingly, the next reviews are listed in *Table A*. Full requirements for document revisions are listed in Section 9.3.

Table A: Review Schedule

No.	Date	Review Type	Reviewer
R2	18-Dec-2017	Submission of Draft Amended TMP	LCC / DPE
R3.1	03 Aug-2018	Revision (Submission of Amended TMP / OTMP)	LCC / DPE
R3.1	18-Dec-2018	Internal Review	LCC
R3.1	18-Dec-2019	Internal Review	LCC
R3.1	18-Dec-2020	Internal Review	LCC
R4	30 Sept 2022	Revision (extension granted by DPE)	LCC / DPE
R4.2	28 Feb 2025	Internal Review	LCC
R4.2	28 Feb 2026	Internal Review	LCC
R5	28 Feb 2027	Revision	LCC / DPE

Figure 1: Project Locality & Land zoning map



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2 QUARRY OPERATION

2.1 Background

The Quarry has an identified resource of approximately 13.6 million tonnes which, based on an extraction rate of 600,000 tonnes per annum, would allow for quarrying for approximately 22 years. The maximum proposed extraction rate was not expected to be achieved in all years of quarrying. Project approval was therefore sought for an area sufficient for 30 years of quarrying with maximum extraction rate of 600,000 tonnes per annum, continuing in the existing main pit (herein also referred to as the 'North Pit'), and a new smaller pit (herein also referred to as the 'South Pit') located to the south of the existing main pit.

In accordance with the State Conditions of Approval MP07_0020 (CoA) the Quarry may carry out quarrying and asphalt plant operations on the site until 31 December 2039. Additionally, the Environmental Protection Licence EPL3384, authorises extractive or processed activities annually scaled between >100,000 tonnes – 500,000 tonnes. Quarry extraction depths must not exceed 55 m AHD in the North Pit or 105 m AHD in the South Pit (as prescribed in conditions listed in Appendix A).

In August 2017, LCC submitted a Modification Application to the DPE in order to mine up the first 10 metres of the cap rock in the South Pit at the Quarry. The South Pit was previously unable to be mined until late 2018, at the completion of the detailed groundwater assessment. On 18 September 2017, approval was granted to LCC to undertake these works, in accordance with revised CoA.

On 11 January 2019, LCC submitted a Modification Application to amalgamate the approvals for the Asphalt Plant and the Quarry. This application was subsequently approved (Modification 3) by the Minister of Planning in July 2021.

2.2 Operational Overview

Quarrying initially commenced laterally in the existing North pit from 2009. Initial excavation works within the South Pit commenced in late 2014 under a temporary approval to service a specific state government project. These initial works within the South Pit have been completed. No further excavation works for the South Pit are scheduled in the immediate future unless specific rock is needed. Extraction areas within the North Pit are chosen based on the present rock type and quality for supply. Mobile crushing and screening plant equipment is currently utilised for Quarry operations.

Initially, it was expected that over the initial 10 years of the 30 year life of the Quarry that production will average approximately 450,000 tonnes per annum including extraction of high quality product from the southern pit. The production was expected to increase beyond 10 years to the maximum 600,000 tonnes per annum. Production tonnages to date have been substantially less than originally projected as result of changing market demands, cost of production and unprecedented weather events impacting operational performance.

Asphalt operations were amalgamated into the Mod 3 CoA as of 20 July 2021, and include asphalt operations can be undertaken for limited campaign works.

Asphalt operations are conducted during standard work hours to the fullest extent, however require the additional operating hours to cope with the current demands of the region.

The Asphalt Plant is permitted to transport up to 50,000 tonnes of Asphalt from the Quarry each calendar year. An Out of Hours Work Protocol (OHWP) was developed to undertake limited campaign Asphalt operations as required by the Mod 3 CoA, this was approved by DPE in February 2022.

The mobile asphalt plant (operated by RPQ as an ancillary activity) offers a quieter and more efficient operation, with a production capacity of 80 tonnes per hour. The Quarry and Asphalt plant are situated on separate lots within the same deposited plan (DP) and operate within the same site footprint. As such, the Quarry supply aggregate, tested to asphalt specification requirements to the asphalt plant, where it is stockpiled

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Trucks are used to haul asphalt aggregate out of the pit, while most material is hauled directly off-site. All truck loading and unloading is to take place within the property boundaries of the site during operating hours. The Quarry is restricted to 120 laden truck movements per day until the intersection at Nimbin Road is upgraded to a Type CHR-S to the satisfaction of TfNSW (until the completion of Schedule 3, condition 21 (f)).

On-site parking is utilised by staff/contractors for all vehicles, plant and equipment associated with the Quarry and/or Asphalt operations whilst engaged in activities for the site.

Maintenance of Quarry plant, equipment and vehicles is managed and undertaken by LCC Fleet Services during business hours.

In accordance with EPL 3384, waste management is handled as per Section 6.2.1 and Section 6.2.2 of the EMS v4.3. Transport and impact of vehicular movements in management of these wastes are to align with all traffic management practices outlined in this OTMP.

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3 STATUTORY REQUIREMENTS

3.1 Legislation & Policies

The applicable legal and other requirements related to construction and operational traffic management are outlined in *Table B*.

Table B: Legislation & Policies of Relevance

Legislation and Policies	
Commonwealth Legislation	<ul style="list-style-type: none">• Environment Protection and Biodiversity Conservation Act 1999
New South Wales Legislation	<ul style="list-style-type: none">• Environment Planning and Assessment Act 1979• Protection of the Environment Operations Act 1997• Protection of the Environment Operations (Clean Air) Regulation 2021• Protection of the Environment Operations (General) Regulation 2022• Protection of the Environment Operations (Waste) Regulation 2014• Work Health and Safety (Mines and Petroleum Sites) Regulation 2022• Dangerous Goods (Road and Rail Transport) Act 2008• Heavy Vehicle National Law (NSW) 2013
Regional Planning Documents	<ul style="list-style-type: none">• North Coast Regional Plan 2036
Local Government Documents	<ul style="list-style-type: none">• Lismore Local Environmental Plan 2012

3.2 Approval Conditions

Ministers Conditions of Approval

Pursuant to the Environmental Planning and Assessment Act 1979 (EP&A Act), the Quarry expansion was declared to be a Project under Part 3A of the Act and Project Approval was granted by the Minister for Planning. Project Approval MP07_0020 is identified under a State Significant Development (SSD) under *Division 4.7 of the EP&A Act*.

Project Approval Conditions outline the requirements for transport associated with the Quarry, along with licence conditions pertaining to EPA licence 3384, as provided in Appendix A.

Out of Hours Work Protocol – Asphalt Operations

Management and staff responsible for asphalt plant operations, will notify in writing to LCC, EPA and local residents of the timing and expected duration of any out of hours construction works, prior to each instance. LCC will notify the EPA on behalf of the Asphalt plant operators.

Activities permitted under the OHWP are asphalt operations consisting of bituminous products (hot or cold mix) during the hours of 6pm to 7am Monday to Sunday. Out of hours operations are anticipated to occur approximately 5 nights per month.

Works will be forward planned with notification of out of hours work provided to the EPA via info@epa.nsw.gov.au at least 7 working days prior to activities being undertaken. A register for all work undertaken will be kept, containing:

- Identify the location, duration and description of works
- Provide a contact number of the Asphalt site manager during the out of hours campaign.

The OHWP (located on the DPE Planning website <https://www.planningportal.nsw.gov.au/major-projects/projects/blakebrook-quarry>) provides management strategies for potential noise sources involving asphalt operations and truck movements. The evening and night project-specific noise level criterion is 35 dB(A) LAeq (15 minute).

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Increased Production Limits, Hours of Operation and Vehicle Movement

During catastrophic regional flooding in 2022, LCC requested an exemption relating to limits on production, operating hours and truck limits for a three month period, this was granted by DPE however was not enacted upon (Appendix C). Quarry operations may require exceedances to EPL and/or CoA for, but not limited to, production limits, hours of operation and vehicle movements. These exceedances may be requested by LCC during times of emergency or extreme unforeseen circumstances. The DPE must receive the request from LCC outlining the reasons for the request, detail the proposed change in activity or limit and the time frame for the activity or limit to remain in force. On approval being received by DPE, it is the responsibility of LCC to advise all sensitive receivers of the temporary approved amendments as per Section 8.6.

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3.3 Guidelines & Standards

Relevant project environmental standards, policies and guidelines, applicable to this management plan are provided in *Table C*.

Table C: Environmental Standards, Policies and Guidelines

Guidelines and Standards
TfNSW Traffic Control at Worksites 2022
TfNSW Supplements to AUSTRROADS Guides
AS 1742 (Manual of Uniform Traffic Control Devices)
AS 1743 (Road Signs Specifications)
AUSTRROADS Guide to Traffic Management 2020

3.4 Related Management Plans

This OTMP forms part of an overarching Environmental Management Strategy (EMS) for the Quarry. Where relevant, reference is made to the other management plans, as listed in *Table D*.

Table D: Blakebrook Quarry Management Plans

Reference No.	Management Plan
EMS	Environmental Management Strategy
EMS-MP1	Noise and Blast Management Plan
EMS-MP2	Air Quality Management Plan
EMS-MP3	Soil and Water Management Plan
EMS-MP4	Biodiversity and Rehabilitation Management Plan
EMS-MP5	Aboriginal Heritage Management Plan

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4 BASELINE ASSESSMENT

4.1 Existing Traffic Generation

Road improvements carried out by LCC to meet the specifications required under Schedule 3, condition 21 (a – e), permits the maximum transport of 120 truck movements of quarried materials offsite per day as approved within Schedule 2 Condition 8 (c). Under Schedule 3, condition 21 (f) a maximum of 150 truck movements per day are permissible once the Quarry Access intersection at Nimbin Road has been upgraded from the current Type AUR intersection to a Type CHR-S (Shortened Channelised Right Hand Turn).

The volume of trucks transporting quarried material offsite is variable and is dependent on supply and demand metrics. The Quarry is permitted to generate a maximum of 120 laden trucks per day, as authorised under the relevant CoA, however this number may change based on future amendments made to the Project Approval.

Of these trucks 80% are truck and trailer combinations and the remaining 20% are single unit tippers. The number of trucks travelling on Nimbin Road is double these figures as the empty trucks return to the quarry upon delivery.

The current weighbridge capacity at the Quarry is limited to 25 outbound trucks per hour, however the current permitted truck numbers mentioned above fall well below the weighbridge capacity. The weighbridge is not planned to be upgraded as part of this project, Commitment to adherence of truck limits are provided in Table G.

Road safety has been reviewed and accident data obtained, which shows that the current operation of the road network in this location is safe and acceptable. The prior modification to consent for the quarry operations included a number of road upgrades that have since been completed, to ensure the heavy vehicle movements (up to 120 per day maximum) could be accommodated within the road network.

4.2 Existing Road Networks and Traffic

Following the traffic study conducted by RoadNet (2008), a Traffic Impact Assessment was undertaken as part of the Statement of Environment Effects (SEE) by Mitchel Hanlon in 2019, which focussed on the haulage route between the Quarry and Wilson Street, Lismore, along Nimbin Road. This 5.3km long section of Nimbin Road is part of a winding, undulating, rural sealed road that connects Lismore and Nimbin. The width of the sealed section is approximately 6.0 - 7.0 metres and has narrow gravel shoulders. The road has centreline markings, guideposts and speed advisory signposting on curves. Several dwellings on rural properties are located close to the road along the route.

Significant upgrades to the road network have occurred since the initial assessment (RoadNet 2008) whereby the road surface has been completely replaced and signage upgrades along its length to meet current guidelines.

The RoadNet (2008) survey identified that Nimbin Road had an average weekday traffic volume of 2,700 vehicles north of the quarry access, increasing to 3,200 vehicles near Wilson Road. These volumes are composed of Light Trucks (including single unit tippers) and Buses accounting for 5.2% of the traffic stream and heavy trucks accounting for 2.2%.

A study conducted by Geocounts (2022) on traffic volumes utilising Nimbin Road to the north and south of the quarry access indicated average weekday (7am-7pm) traffic volume of 2338 vehicles north of the quarry access (Keerrong Road) increasing to 2375 vehicles south of the quarry access. Truck Volumes (including single unit tippers and buses) account for 13% (average) of the traffic stream and heavy trucks (articulated) accounting for 1.2% (average) in both directions from the quarry access

Currently, quarry operators estimate that 5% of product is transported to the north. The remaining material is transported to Lismore, south of the quarry. From this material, approximately 30% is taken along Terania Street. Approximately 70% of the material is transported via Wilson Street and distributed regionally via the arterial road network (Bruxner Highway or Ballina Road).

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4.2.1 Existing Intersections

Quarry Access/Nimbin Road Intersection

This intersection into the Quarry has been upgraded since October 2012, to meet the requirements of Schedule 3 condition 21 (a & e) whereby the roadway has been redesigned to include a 150m long auxiliary turning lane for right turning traffic (AUR) into the site, along with the realignment of Nimbin Road north of the site entry to meet the sight distance requirements specified within the AUSTROADS guidelines for vehicles travelling at the sign posted speed limit of 80km/h.

The key intersection of Nimbin Road and the Quarry Access Road has been assessed against Austroads Guidelines and sight lines exceed the requirements of this guide. There is a minimum of 190 metres of visibility available to the left (south) out of the site access and approximately 240 metres to the right (north) of the site access. The haulage route has been assessed to ensure adequate safety, with the current intersections providing sufficient signage and capacity to cater for the turn movements associated with the heavy vehicles used for the material haulage.

On 12 September 2018 (TIA) observations on site during the morning peak hour indicate that the intersection of Nimbin Road and the Quarry Access Road operates very well with relatively low traffic flows through the area. As such, sight distance out of the Quarry Access Road satisfies the requirements of Austroads. Intersection roadworks were completed, following the 6-month defect liability period the asset ownership was transferred to LCC Civic Services in 2014 (as per Appendix C).

Booerie Creek Road / Nimbin Road Intersection

The intersection between the main throughfare (Nimbin Road) and connector road (Booerie Road) has been upgraded to meet the requirements of Schedule 3 condition 21 (b) whereby a Basic Right Turn (BAR) treatment has been installed to accommodate the passing of vehicles turning right into Booerie Road. Adequate sight distances in both directions from the intersection are met as per the AUSTROAD guidelines. Intersection roadworks were completed, following the 6-month defect liability period the asset ownership was transferred to LCC Civic Services in 2013 (as per Appendix C).

Old Quarry Road / Nimbin Road Intersection

This intersection has very low rural traffic usage and although sight distance to the north is poor, the intersection is considered adequate.

Stockpile site / Nimbin Road Intersection

This intersection comprises of an auxiliary turning lane for both eastbound (AUL) and westbound (AUR) and meets the sight distances required under the permitted speed limit within the area (50km/h) as specified within the AUSTROAD guidelines.

Wilson Street / Nimbin Road Intersection

This intersection has been upgraded to meet the requirements of Schedule 3 condition 21 (d) whereby the roadway has been redesigned to include a 40m long channelised right turn treatment (CHR) into Wilsons Road. Following the 6-month defect liability period the asset ownership was transferred to LCC Civic Services in 2013 (as per Appendix C).

Sight distances at this intersection are approximately 90m in each direction and conform with the requirements specified within the AUSTROADS guidelines for vehicles travelling at the sign posted speed limit of 50km/h.

4.3 Road Safety Audit

RoadNet (2008) undertook a road safety audit on Thursday 11th October 2007, as a part of the approved traffic impact assessment. The key findings of this road safety audit were:

- the cross section and alignment of the road network is adequate for all traffic including the quarry trucks. The road pavement is between 6.0 and 7.0m wide with narrow road shoulders approximately 1.0m;
- the quarry access with Nimbin Road has sight distance deficiencies;
- deficiencies were identified at the intersection of Nimbin Road and Wilson Street, including a lack of line marking/delineation and a passing lane that ends at the intersection;

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- the pavement was in fair condition with some rough patches that were not considered to be hazardous;
- centreline markings are provided for the full length of the road network with overtaking permitted in some locations. The length of these overtaking lanes appeared to be inadequate in some locations;
- advisory curve signage in relation to the curves appeared inconsistent in some locations;
- signage was missing in a few locations but overall was considered to be satisfactory; and
- the roadway approaching Booerie Creek Bridge requires guard rails

4.3.1 Accident History

An initial assessment of the accident history of the quarry road network between the quarry access road and Wilson Street for the period between January 2000 and March 2006 was undertaken by RoadNet (2008). The key findings of the accident data from this period were:

- there were 42 accidents on the haulage road network;
- 13 injury accidents resulting in 25 injuries;
- 32 single vehicle accidents;
- 31 accidents occurred on a curve;
- no distinct pattern was determined for the most common time of day for accidents to occur;
- 36% of accidents occurred on the weekend, with Sunday having the highest number of accidents (9) of any day;
- 10 accidents occurred in the dark;
- Six accidents involving light trucks; and
- One accident involving a bus (on the reverse curve 1.3km south of the quarry access.)

Analysis of the location of the accidents identified clusters of accidents at:

- the curves both sides of the quarry access: nine accidents;
- the sharp curve 1.6km south of the quarry access: three accidents;
- Booerie Creek Road and Bridge: six accidents;
- the narrow section at the property accesses 0.7km north of Wilson Street: three accidents; and,
- Wilson Street: five accidents.

A review of the accident data provided by the TfNSW (formerly RMS), for the period between July 2012 to June 2017, has found a total of 27 accidents occurred along the main quarry route on Nimbin Road between the quarry access and Wilson Street. Of these accidents:

In the year of 2013 there were 17 accidents were recorded. It is noted that since 2014 (inclusive), when all road upgrades associated with the conditions of consent for the previous expansion of Quarry operations had been completed, there have been 9 accidents based on the current road layout. Of these 9 accidents:

- No accidents occurred at the intersection of Nimbin Road and Wilson Street.
- No accidents occurred at the intersection of Nimbin Road and the Quarry Access Road.
- No accidents involved heavy vehicles larger than light trucks.
- 5 injury accidents resulting in 7 total injuries.
- Speeding was determined as a contributing factor for 7 of the 9 accidents. Fatigue was determined as a contributing factor for 1 of the 9 accidents. Only 2 of the 9 accidents did not identify a contributing factor.
- The vast majority of accidents related to vehicles going off-road accounting for 8 out of 9 which could relate to speeding, with the remaining accident being a head on collision.
- 8 out of 9 involved a single vehicle which could again relate to speeding, with 1 accident including 2 vehicles.

A further 7 accidents were recorded in the vicinity of the roundabout intersection of Wilson Street and Casino Street in the same period, with 6 different crash types determined indicating there are no obvious safety concerns at this intersection.

Given the spread of accident types, as well as the distribution over the length of the route studied, it is considered the road layout provides an adequate level of safety for road users. There were no accidents recorded at the key intersections on Nimbin Road, whilst the roundabout intersection of Wilson Street and Casino Street recorded no accidents involving heavy vehicles larger than light trucks.

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5 TRAFFIC IMPACTS & RISK ANALYSIS

5.1 Road and Intersection Upgrades

Schedule 3, Condition 21 of the Minister's CoA requires LCC to undertake a number of road upgrade works, as detailed in the Environmental Assessment Report (EAR), and to the satisfaction of TfNSW.

LCC has completed the following road upgrade works:

- a) upgrade the intersection of the Quarry Access and Nimbin Road to a 'Type AUR Intersection Treatment', prior to 31 December 2010;
- b) upgrade the guard rails on the approaches to Booerie Creek Bridge prior to 31 December 2010;
- c) upgrade the Booerie Creek Road and Nimbin Road intersection to a 'Type BAR Right Turn Treatment on the Through Road' prior to 31 December 2010;
- d) upgrade the Wilson Street and Nimbin Road intersection to a 'Type CHR Right Turn Bay Treatment' prior to 31 December 2010; and
- e) re-align Nimbin Road and the Quarry Access intersection to meet the AUSTROADS sight distance requirements for vehicles travelling in both directions through the intersection prior to 31 December 2011.

LCC is yet to complete the following road upgrade works. This will be completed before any truck movement increases.

- f) upgrade the intersection at Nimbin Road and the Quarry Access from the current Type AUR intersection to a Type CHR-S (Shortened Channelised Right Hand Turn) to the satisfaction of TfNSW, if truck movements are forecast to exceed 120 laden trucks from the site on any calendar day as required by Condition 8(d) of Schedule 2.

Note: The road works must be constructed in accordance with the relevant TfNSW or AUSTROADS standards, and signposted and lit in accordance with AS:1742 – Manual of Uniform Traffic Control Devices and AS/NZ 1158:2020 – Lighting for Roads and Public Spaces.

5.1.1 Current Status of Works

Road and intersection upgrade works required for the expansion of the Quarry were completed in accordance with the relevant approvals. Refer to Appendix C for verification of completed works:

- Schedule 3, conditions 21 (a, b and d) completed in 2013
- Schedule 3, condition 21(c) completed in 2013
- Schedule 3, condition 21(e) completed in 2014
- Schedule 3, condition 21(f) is not triggered until forecast truck volumes offsite are to exceed 120 per day as specified within Schedule 2, condition 8(d).

5.2 Operational Phase Impacts

Based on the approved annual production thresholds (600,000 tonnes of quarried material and 50,000 tonnes of asphalt), the number of laden trucks required to move this material offsite vary, between truck and truck/trailer combos (depending on the configuration), not exceeding the current approved truck limits per day. Truck volumes (Geocounts 2022) recorded north and south of the Quarry Access Intersection indicates that the quantity of site related trucking movements required to meet these production targets will increase future trucking activity on Nimbin Road by approximately 25 – 35% (truck combination dependant).

Accordingly, a Code of Conduct (Driver Induction) has been developed to manage practices used by drivers transporting products to and from the Quarry. This Driver Induction is detailed in Section 7.2.2.

Payment of contributions to LCC under Section 7.11 (formerly Section 94) of the EP&A Act and LCC S94 Contribution Plan, is calculated on dispatched tonnages from the Quarry site annually. The levy is recognised as a contribution towards maintenance and upgrade of roads utilised by heavy vehicles associated with the site.

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5.2.1 Public Transport Services

There is minimal public transport, with no formal bus stops or facilities in this location reflecting the rural nature of the site. School bus services run by Wallers Bus Service, Singh's Bus Service and Bruce's Bus Service utilise Nimbin Road. These bus services are concentrated around school drop off and pick up times. Tourist coaches and the Community Transport buses also use the road network comprising the haul route.

Should any impacts to public transportation routes be identified during the operation of the Quarry additional traffic management planning will be undertaken to ameliorate these impacts. UHF radio systems are expected to be utilised by both the quarry truck drivers and the garbage collection truck drivers as a tool for notification of potential road hazards and vehicle movements.

5.2.2 Garbage Collection

LCC has a garbage collection service for the residential properties on Nimbin Road. RoadNet (2008) indicated that in some locations along Nimbin Road, there is insufficient area for these trucks to stop when collecting the garbage and as a consequence may cause a hazard to other larger vehicles. UHF radio systems are expected to be utilised by both the quarry truck drivers and the garbage collection truck drivers as a tool for notification of potential road hazards and vehicle movements.

5.2.3 Effect on Traffic Movement on Adjoining Street

The key haulage route will be from the quarry along Nimbin Road to Wilson Street. A number of residential accessways intersect with Nimbin Road, as does Boeerie Creek Road. Should the need for any relevant activities to occur outside standard working hours, consultation will be undertaken with any residents who may be affected. Trucks and vehicles are to minimise use of local roads (i.e. residential streets) to gain access to construction sites

Nearly all the vehicles travelling to and from the quarry use the Wilson Street/Nimbin Road intersection. Approximately 70% of these trucks turn right into Wilson Street. The majority of the material from the quarry is transported to the south into Lismore and distributed regionally. The remaining material is transported north. The number of trucks transporting material to the north is to remain at current levels following the increase in production.

5.3 Risk Analysis

Given that the activities undertaken at the Quarry have the potential to impact on the surrounding environment, the commensurate level of risk associated with these impacts is identified so as to better ensure that it can be mitigated and managed to an acceptable level via means of this management plan.

Accordingly, *Table E* summaries the likely risk level associated with each of the prospective traffic impacts, assuming that no mitigation measures or controls are put in place to manage the impacts. The risk assessment process is in accordance with that described in the EMS for the Quarry.

By implementing measures outlined in this OTMP, these impacts and associated risks can be managed to an acceptable level, such that the risk would be considered negligible.

Table E: Traffic Impact Risk Analysis

ID	Aspect	Impact	Risk
T1	Traffic and Transport	Increased production from quarry will lead to higher number of trucks on Nimbin Road to transport quarried aggregate and asphalt products.	High

NOTE:

Risk Ratings: High (serious impacts and potential repercussions)
Medium (significant impacts and potential repercussions)
Low (minor impacts and potential repercussions)

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Additionally the Quarry has invested significantly towards adaptive management practices, through the development and identification of risk management on site regarding traffic movements and impacts, through accreditation of ISO 45001, ISO 14001, ISO 9001 and compliance with *Work Health and Safety (Mines and Petroleum Sites) Regulation 2022* and associated Principal Hazard Management Plans and site risk registers.

As part of the Quarry IMS compliance schedule, Quality, Safety and Environmental Risk Registers have been developed for task specific activities on site. The risk registers are reviewed six (6) monthly by Quarry operations and Compliance staff, to ensure a proactive approach towards identification and controlling of risks.

Actions relating to any identified exceedances of CoA criteria will be managed as per Section 9.2.

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6 PERFORMANCE CRITERIA AND INDICATORS

The intention of this OTMP is to ensure the safety of all road users and minimise the impacts associated with large haulage vehicles on the road network.

In order to achieve this intent, the following Performance Criteria and Indicators have been developed to guide operational traffic management for the Quarry (refer to *Table F*).

Table F: Performance Criteria and Indicators

Performance Criteria	Performance Indicator	Management/Control
C1: Comply with all applicable legislation, regulations, standards, codes and licenses that relate to the project.	I1.1: Complete road and intersection upgrade works in accordance with the CoA (Mod 3) for the Blakebrook Quarry expansion.	Section 5.1.1 Appendix C
	I1.2: Compliance with operational requirements as stipulated in the CoA (Mod 3) and the management and mitigation controls stated in this OTMP.	Section 5.3 Section 7.2 Table H Section 9.1
C2: No significant degradation to the surrounding environs or existing roadways as a result of traffic movements	I2.1: Adherence to the specified hours of works for construction activities.	Section 3.2 Table G
	I2.2: Onsite driveways, access aisles and parking areas must be provided with a suitable pavement, constructed and maintained	Table G
	I2.3: Development of a Driver Code of Conduct (induction), incorporating Dust and Material management controls for all heavy vehicle drivers using the quarry.	Section 7.2.2 Section 8.3
C3: Maximise the safety of all road users and construction staff	I3.2: Use of a radio communication system to facilitate better communication between drivers and other road users (e.g. public transport) and/or quarry staff.	Section 5.2.1 Section 5.2.2 Section 7.2. Section 7.2.3
	I3.3: Development of, and adherence to, specific Traffic Control Plans where work involves traffic control or restriction	Section 7.2 Table G
	I3.4: Development of, and adherence to, an Emergency Incident Protocol, to be followed in the event of an emergency incident	Table G
C4: No significant traffic incidents or major traffic delays caused by the project activities	I4.1: Construction trucks and vehicles are to minimise use of local roads (i.e. residential streets) to gain access to construction sites	Section 5.2.3 Table G
	I4.2: Construction works are to be staged to ensure minimum disruption to traffic	Section 7.2 Table G
	I4.3: Use of the correct Traffic Control Plan based on calculation of average daily traffic (ADT)	Section 7.2 Table G
C5: Implementation of measures listed in the Statement of Commitments (refer to Appendix D).	I5.1: Complete outstanding road and intersection upgrade works (when required) in accordance with the Statement of Commitments for the Blakebrook Quarry expansion	Section 4.2.1 Section 5.1.1

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7 MANAGEMENT AND MITIGATION CONTROLS

7.1 “Best Practice” Management Approach

In managing the Quarry, LCC is seeking to ensure that a “Best Practice” management approach is used across all areas of potential impact management. This approach involves incorporating a suite of site-specific mitigation measures and management controls (like those provided in the sections below) in accordance with the most relevant guidelines and standards to minimise, mitigate and manage traffic impacts associated with Quarry and Asphalt operations.

Such guidelines, policies and standards include:

- ‘Traffic Control at Worksites’, Version 6.1 (TfNSW 2022)
- ‘Austroads Guide to Traffic Management’ (Austroads, 2020)
<https://austroads.com.au/publications/traffic-management/agtms-set>
- TfNSW Supplements to Austroads Guides
<https://roads-waterways.transport.nsw.gov.au/business-industry/partners-suppliers/document-types/supplements-austroads-guides/index.html>

7.2 Proposed Management Controls

The list of work practices that will be used to control traffic impacts during Quarry and Asphalt operations are provided below:

It is intended that all works are to be managed by a combination of three management control components:

- Issue-Specific Management Strategies & Work Practices;
- Drivers’ Code of Conduct (Driver Induction);
- Citizen Band (CB) Radio Communication System

7.2.1 Issue-Specific Management Strategies and Work Practices

The issue-specific management strategies and work practices to be implemented at the Quarry to control traffic impacts are detailed in *Table G*.

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Table G: Management Strategies & Work Practices

Issue	Strategy/Practice						
Acoustic & Amenity Impacts	<p>Hours of Operation</p> <table border="1" style="width: 100%;"> <tr> <td style="width: 60%;">Quarrying operations, Asphalt plant operations and loading and dispatch of laden trucks</td> <td>7 am to 6 pm Monday to Friday 7 am to 3 pm Saturday At no time on Sundays or public holidays</td> </tr> <tr> <td>Blasting</td> <td>10 am to 3 pm Monday to Friday (except public holidays) At no time on Sundays or public holidays</td> </tr> <tr> <td>Maintenance</td> <td>May be conducted at any time, provided that these activities are not audible at any privately-owned residence</td> </tr> </table>	Quarrying operations, Asphalt plant operations and loading and dispatch of laden trucks	7 am to 6 pm Monday to Friday 7 am to 3 pm Saturday At no time on Sundays or public holidays	Blasting	10 am to 3 pm Monday to Friday (except public holidays) At no time on Sundays or public holidays	Maintenance	May be conducted at any time, provided that these activities are not audible at any privately-owned residence
	Quarrying operations, Asphalt plant operations and loading and dispatch of laden trucks	7 am to 6 pm Monday to Friday 7 am to 3 pm Saturday At no time on Sundays or public holidays					
	Blasting	10 am to 3 pm Monday to Friday (except public holidays) At no time on Sundays or public holidays					
	Maintenance	May be conducted at any time, provided that these activities are not audible at any privately-owned residence					
<p>The following activities may be carried out outside working hours:</p> <ul style="list-style-type: none"> • delivery or dispatch of materials as requested by Police or other authorities • emergency work to avoid the loss of lives, property or to prevent environmental harm; • operation of the Asphalt Plant with the permission of LCC for emergency or specific works where a traffic management problem is involved. • maintenance and repair of public infrastructure where disruption to essential services and/or considerations of worker safety do not allow work within standard hours; • public infrastructure works that shorten the length of the project and are supported by the affected community; and • works where a proponent demonstrates and justifies a need to operate outside the recommended standard hours. <p>Should the need for any such relevant activities to occur outside standard working hours, works will be undertaken in accordance with the OHWP</p>							
<p>Work Practices for Amenity</p> <p>Several work practices are to be implemented during the operational phase to reduce the likelihood for impacts on surrounding residents. Practices are to include:</p> <ul style="list-style-type: none"> • limiting compression braking; • avoiding bunching of quarry vehicles along the product transport route; • minimising heavy dust generation along the product transport route by: <ul style="list-style-type: none"> ○ ensuring that all laden trucks entering or exiting the site have their loads covered, with the exception of loads consisting solely of boulders greater than one tonne in weight; ○ ensuring that all laden trucks exiting the site are cleaned of material that may fall from vehicles, before leaving the site by visual inspection of weighbridge staff and drivers . 							
Provisions for Emergency Vehicles, Heavy Vehicles, Cyclists & Pedestrians	<p>Emergency Incidents</p> <p>As per recommendations in TfNSW(2020) Traffic Control at Work Sites Technical Manual, in the event of an emergency incident the following general procedures will be adopted:</p> <ul style="list-style-type: none"> • the works crew is to stop work and activate all flashing lights; • immediately begin warning other road users in the safest means possible; • use an appropriate TCP and use traffic controllers and signage where necessary • if a queue will be generated by the emergency incident, provide warning signs to inform road users and minimise the potential for end of queue collisions. 						

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Issue	Strategy/Practice
<p>Control of Site Related Truck Movements</p>	<p>Truck Movements The following items shall be implemented to mitigate impacts associated with site related trucks movements:</p> <ul style="list-style-type: none"> • Permanent road signage for trucks entering the site, is maintained for visibility of road users. • Quarry Manager to review onsite driveways, access aisles and parking areas and to schedule necessary maintenance works • Trucks, site plant and the weighbridge office will be fitted with UHF radios to allow for communications and co-ordination of truck movements. • Quarry UHF channel 15 must be used when moving around on site. • Asphalt UHF channel 12 is only to be utilised whilst within the Asphalt Plant site; • Co-ordination of movements within the quarry, over the UHF system from the weighbridge office, will ensure that trucks queue within the available space of the quarry prior to being released from site to limit congestion and queueing on external roads; • A driver induction will outline the use of the UHF radio to co-ordinate truck movements and outline any daily truck volume limits applicable to external roads • Drivers are to ensure that a visual inspection of the vehicle is undertaken (to identify loose materials) after loading and prior to travelling the Quarry haul road and subsequent public roads • Prestart meetings will be held at the beginning of each day and quarry truck movements (based on specific understanding of likely truck volumes due to booked quantities) can be outlined. • To comply with relevant truck limits, reports will be generated each operational shift by weighbridge staff to ensure traffic exceedances do not occur. If truck limits for that business day are reached, then trading will cease for that day. • LCC will use its best endeavours to ensure that appropriate signage is displayed on all trucks used to transport product from the project so they can be easily identified by road users.

7.2.2 Driver Code of Conduct Induction

A Driver Code of Conduct Induction that is applicable to all heavy vehicle drivers, including haulage operators (full time employees, contractors, or otherwise) working at the Quarry is provided in Appendix E.

To minimise traffic impacts and ensure the implementation of the above management strategies the Driver Induction will include specific controls to be enforced:

- Drivers are to ensure prior to leaving the boundaries of the quarry that loads are securely fastened to prevent dust and material tracking onto Quarry and public roadways.
- Drivers to limit compression braking to reduce noise to neighbours where possible.
- Drivers are to ensure that subsequent to tipping, the tailgate is securely locked prior to leaving the quarry site to prevent any uncontrolled material spills.
- All care is to be taken by drivers and/or quarry staff by visual inspection, to ensure that loose debris from the body of the vehicle and wheels is removed prior to leaving the quarry site.
- The Quarry Manager (and/or delegate) is to monitor loose material along the haulage route and take the appropriate action (i.e. removal or suppression) on a regular basis, and ensure that all laden trucks entering or exiting the site have their loads covered, with the exception of loads consisting solely of boulders greater than one tonne in weight.
- The Quarry Manager (and/or delegate) is responsible to actively monitor the actions and activities of vehicles and trucks during operations. Any non-conformance to the Drivers Induction is to be recorded in the Daily/Weekly Inspection Checklist.

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- Daily truck movements are limited by the project approval conditions. In the event that these limits are reached, trading will cease that day.

7.2.3 Citizen Band (CB) Radio Communication System

The winding alignment of the roads to and from the Quarry, combined with the narrow road shoulders, creates safety hazards when vehicles need to pass and stop – especially larger vehicles such as buses and garbage trucks.

Opening a line of communication between the bus drivers, garbage collectors and quarry truck drivers using a CB radio system is recommended for the safe road use of these frequently stopping vehicles and the quarry trucks. Accordingly, a system of CB radio communication is encouraged for use by:

- the garbage collection contractors;
- Bruce's Bus Company
- Singh's Bus Company;
- Wallers Bus Company;
- Northern Rivers Busline
- any other bus services or relevant parties that may benefit from the CB radio communication system.

UHF radio systems are expected to be utilised by both the quarry truck drivers and the garbage collection truck drivers as a tool for notification of potential road hazards and vehicle movements.

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8 ENVIRONMENTAL AND OPERATIONAL PERFORMANCE

8.1 Roles and Responsibilities

The Quarry Manager will be responsible for the implementation of this OTMP under the direction of the Head of Roads and Quarry.

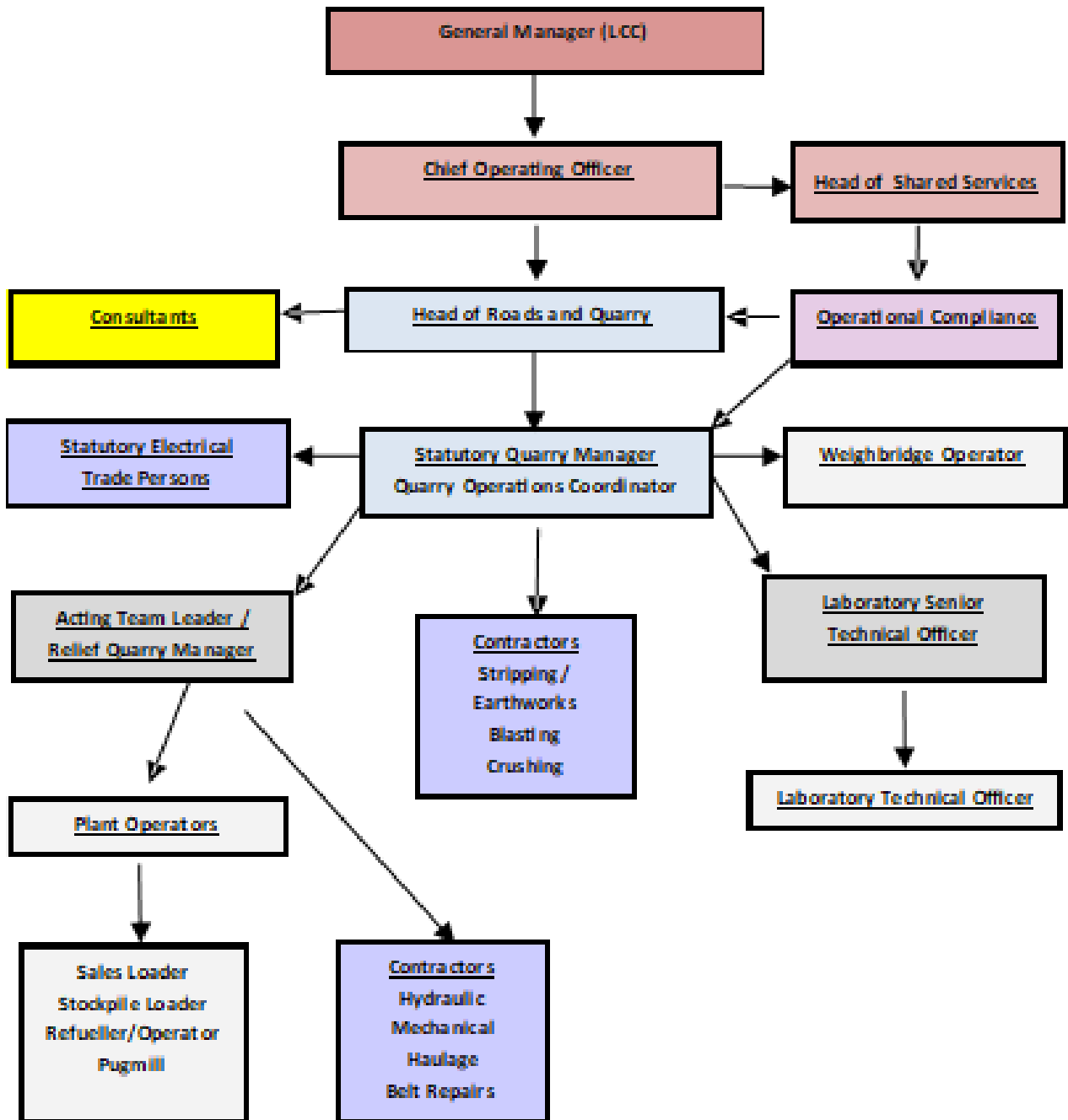
All Quarry staff and contractors are accountable through conditions of employment or contracts with each individual responsible for ensuring that their work complies with the procedures outlined in this OTMP. Further details of the responsibilities of staff are provided in *Table H*. A diagram outlining the organisational structure for implementing this OTMP is provided at *Figure 2*.

Table H: Roles and Responsibilities

Head of Roads and Quarry		
Action No.	Action	Timing
TMCS.MBS.01	Ensure that CoA Project Commitments and any other approval conditions are adhered to when working in designated quarry expansion areas, including but not limited to truck movements..	At all times.
Blakebrook Quarry Manager		
Action No.	Management Procedure	Timing
TMCS.OC.01	Ensure that CoA Project Commitments and any other approval conditions are adhered to when working in designated quarry expansion areas, including but not limited to truck movements.	At all times
TMCS.OC.02	During construction phases associated with intersection upgrades, TCPs are to be developed and implemented to ensure best traffic management practices.	Prior to commencement of works
TMCS.OC.03	Implement "best practice" traffic management and adhere to the management and mitigation measures and statement of commitments as stated within this OTMP.	At all times
TMCS.OC.04	Ensure weekly inspections and regular monitoring is conducted during the road upgrade construction phase.	During the road upgrade construction phase
Quarry Staff and Contractors		
Action No.	Management Procedure	Timing
TMCS.QP.01	All staff/contractors to be inducted and made aware of any road safety requirements and traffic hazards. Staff/contractors are to comply with the induction requirements.	Induction prior to commencement of works and compliance with traffic safety requirements throughout term of employment
TMCS.QP.02	All heavy vehicle operators to ensure communication with other heavy vehicles such as buses and garbage trucks using CB radios.	At all times

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Figure 2: Organisational Structure



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8.2 Stakeholder Consultation

The CoA prescribes the regulatory authorities be consulted in the preparation of the OTMP. These requirements are summarised in *Table I*.

Table I: OTMP Consultation Requirements

Regulatory Authority	Interest
Department of Planning & Environment (DPE)	DPE is the lead agency in ensuring compliance with the requirements of the CoA and will review and approve amendments to the OTMP.
Transport for NSW (formerly RMS)	TfNSW is to be involved in the preparation and revision of the OTMP to ensure that it complies with the requirements of the CoA and other NSW legislation, policy, and technical requirements. TfNSW was involved in approving the road upgrade works necessitated under the CoA and Project Commitments

Draft copies of the OTMP will be provided to TfNSW and DPE for consultation and feedback considerations with a final version prepared taking into consideration comments received. The final draft copy of the OTMP is provided to the LCC Head of Roads and Quarry for consultation and feedback considerations prior to DPE submission.

8.3 Training and Awareness

LCC will provide training to its employees with respect to the expansion works for the Quarry. The objective of the training will be to provide a base level understanding of their individual role in complying with the OTMP. Training will also be provided for specific tasks to ensure employees are competent to perform their required duties.

Verification of Competencies (VOC) is undertaken for all plant operators as per the LCC Corporate & IMS Training & Competency Procedure. Training records are maintained through the Quarry IMS Training Register and LCC corporate records.

All staff, contractors, and haulage truck operators are made aware of their responsibilities in managing fugitive dust emissions from the site and along haulage routes through the induction process.

In accordance with the EMS, LCC will also undertake the following with respect to training and awareness:

- Induct all employees, contractors, subcontractors and visitors (as relevant to their roles), prior to commencing works (and conduct annual refresher inductions);
- Ensure that the Drivers' Induction is completed by all heavy vehicle drivers, prior to undertaking work at the quarry;
- Hold daily pre-start/toolbox talks;
- Hold WHS/staff meetings as required
- Issue Project Environmental Alerts (if required)

8.4 Record Keeping and Document Control

Records are to be maintained for all traffic management measures used for the project, including records of all laden truck movements to and from site with time of arrival or dispatch. To prevent an oversight of Asphalt records, a quarterly reconciliation between Asphalt and Quarry weighbridge reporting systems will ensure correct tonnes are captured to prevent any exceedances on annual production limits.

Records shall be published on LCC website six (6) monthly via <https://www.lismore.nsw.gov.au/Council/Northern-Rivers-Quarry>. All records shall be kept for a minimum of seven (7) years, with record keeping and document control managed in accordance with the requirements set forth in the EMS.

To ensure that the correct procedures and plans are used on site, issue of the EMS, CoA, and/or other relevant document, and any associated amendments that may be required, will be controlled using a document register and stored in LCC's record management system (TRIM).

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8.5 Site Inspections

Weekly inspections of work areas will be conducted by the Quarry Manager to monitor work practices and identify non-conforming areas and activities or work practices which could lead to potential environmental harm.

It is noted that weekly inspections of work sites also provide an opportunity for the Quarry Manager to address issues raised by Staff, Contractors or Consultants and assist in the implementation of environmental controls to manage traffic impacts. Often this continued support leads to better ownership of environmental management and becomes a coaching exercise for field staff to improve their skills in this specialised and complex discipline.

A 'Site Daily and Weekly Checklist' will be used to record and report any improvements required. The purpose of the inspections is to:

- Provide a surveillance tool to ensure that safeguards are being implemented;
- Identify where problems might be occurring (or have the potential to occur);
- Identify where sound environmental practices are not being implemented;
- Facilitate the identification and early resolution of problems.

Any non-conformance with the Site Daily and Weekly checklist will be recorded in the Quarry Non conformance & Improvement Register.

8.6 External Communication and Notification

General information regarding the environmental performance of the quarry and contact details regarding complaints will be available at all times through LCC website <https://www.lismore.nsw.gov.au/Council/Northern-Rivers-Quarry>

Community meetings will be held at least once per annum, where information regarding the activities being undertaken at the Quarry as well as environmental performance information will be detailed.

LCC will ensure that regulatory submissions and reports are submitted to the relevant agencies in accordance with the CoA conditions, including but not limited; to Extractive Material Return (formerly known as MEG).

Authorities will be kept informed regarding the operation and environmental performance of the Quarry through the Annual Reporting requirements of the CoA and EPL.

8.7 Complaint Investigation and Response

Complaints regarding the Quarry or Asphalt operations (including limited campaign asphalt operations relating to the OHWP) will be managed via LCC existing complaints management system. Quarry and Asphalt complaints must be received via telephone to LCC Contact Centre 02 6625 0500.

Details that are to be logged by Council staff include:

- complainants name;
- telephone number / email address / postal address;
- date of contact;
- nature of complaint;

The details of the complaint will be passed onto the Quarry Compliance Division. Management will be committed to rectifying an activity that has caused a complaint as soon as possible, with a response being provided, to the complainant within five (5) days of receipt of the complaint. The Quarry will undertake actions to identify and initiate appropriate action in response to the complaint to resolve (where practicable).

Records of all complaints received are to be kept within LCC Complaints Management System and added to the Quarry's Non-conformance and Improvements Register.

All Quarry staff are responsible for reporting any complaints to the Quarry Manager. Complaints must be made through the correct channel to the LCC Customer Contact Centre in order to ensure correct record keeping and response.

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8.8 Dispute Resolution Process

In the case that a dispute between the complainant and LCC arises with respect to the management and/or outcomes of the Complaint Investigation and Response (Section 8.7), either party may refer to the matter to the DPE for resolution.

If a matter is referred to the DPE, and the DPE are satisfied that the dispute is genuine, the DPE will then commence an independent dispute resolution process in order mediate between the two parties, in order to arrive at an agreed outcome.

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9 REVIEW AND REPORTING

Annual review and reporting are required to assess the outcomes of the OTMP, review its effectiveness, and consider works undertaken against annual budgets and targets.

Any issues noted regarding the success of management works must also be relayed to the site manager on an ongoing basis so that relevant improvements can be made.

9.1 Contingency Planning

Should at any time the management results of the OTMP be determined to be negatively impacting on surrounding sensitive receptors for the Quarry and Asphalt expansion, then the OTMP management controls may need to be intensified to allow better identification and understanding of the impacts, and facilitate design of appropriate mitigation measures.

Before any significant changes are made to the OTMP, LCC will consult with DPE and TfNSW to obtain their feedback. Once feedback from DPE and TfNSW has been incorporated into the OTMP, it will be uploaded to the Major Projects Portal for approval by the Secretary.

9.2 Incident and Non-Compliance Reporting

All incident and non-compliance will be reported in accordance with the requirements of the CoA that relate to incident and non-compliance reporting (Schedule 5, conditions 8 and 9 – refer Appendix A) and EPL (condition R2).

- **Incident:** *An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance.*

Where an *incident* has occurred, relevant Agencies are to be notified immediately of the incident becoming known to the licensee. The notification must be in writing via the DPE Major Projects Portal and via telephone to the EPA Hotline 131 555. A written report is to be provided to both Agencies within 7 days, stating the relevant license condition that has been exceeded, the reason for the incident and mitigating actions to address the incident.

- **Non-compliance** – *An occurrence, set of circumstances or development that is a breach of this consent.*

Where a *non-compliance* against the limits/performance criteria in the CoA or EPL has occurred, the relevant agencies will be notified in writing within 7 days of the non-compliance becoming known to the licensee. EPA is to be notified via telephone to the Hotline 131 555 to generate a reference number. The licensee will provide details on the non-compliance and mitigating actions to address the non-compliance, which will be submitted to DPE via the Major Projects Portal and to the EPA via info@epa.nsw.gov.au.

LCC will undertake an investigation into the cause of the incident or non-compliance according to the IMS *Incident Reporting Investigation and Notification Procedure*, with strategies to prevent reoccurrence being implemented. All procedures and documents are maintained within LCC's electronic records management system (TRIM).

In addition, in the event of an exceedance that has affected nearby landowners, the Quarry will follow conditions as set out in the CoA, Schedule 4, condition 1 – Notification of Landowners where applicable. As soon as practicable and no longer than 7 days LCC will notify the affected landowners in writing of the exceedance, and provide regular monitoring results, at least every 3 months, to each affected landowner until the project is again complying with the relevant criteria.

LCC will meet the requirements of the DPE to address the cause or impact of any incident or non-compliance within the required period as defined by the DPE. LCC will maintain a record of incidents and non-compliances in the Quarry Non Conformance & Improvement Register.

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9.3 Reviews

9.3.1 Internal Auditing

An internal review of this OTMP will be undertaken by LCC on an annual basis or within 3 months of the below triggers. The purpose of the review is to determine the appropriateness of the OTMP in achieving environmental objectives and performance goals throughout the Quarry and Asphalt expansion and ensure that the system is meeting the requirements of relevant legislation, standards, policies, licences, permits, approvals and objectives. A report will be provided to the Compliance Manager with any recommendations for improvement. The Compliance Manager will review and approve changes to the system (as required).

LCC will notify DPE when a review triggered by the below has been undertaken:

- an incident report
- annual environmental monitoring review
- independent environmental audit
- any modification to the CoA

Following the outcome of a review, if a document revision is substantiated, it will be submitted via the Major Projects Portal for approval of the Secretary within six (6) weeks.

9.4 External Reporting

All external reporting required by the CoA or other obligation for the Quarry will be approved by Quarry Management. This includes management documentation associated with this OTMP.

Truck movement reports are made available on the LCC website six (6) monthly. Truck movement reports and adherence to this management plan are internally audited and reviewed as part of the Annual Environmental Monitoring Report and overall compliance audited every 3 years as part of the Independent Environmental Audit (IEA).

9.5 Annual Environmental Monitoring Review

In accordance to the Minister's CoA, an annual environmental monitoring review (AEMR) is to be prepared to the satisfaction of the DPE in accordance with CoA Schedule 5, condition 11 (Refer Appendix A).

The Head of Roads and Quarry will review and approve the outcome and recommendations in the report, which will be submitted via the Major Project Portal by the end of March annually. The AEMR will be submitted to LCC for awareness (via the Head of Roads and Quarry) and must be made available to the Community Consultative Committee or any interested person.

LCC will make available on the website via <https://www.lismore.nsw.gov.au/Council/Northern-Rivers-Quarry> any records that are relevant to enable assessment of the environmental performance of the site, relating to the CoA and EPL.

9.6 Independent Environmental Audit

Within three years of quarrying operations, and every three (3) years thereafter, an independent environmental audit (IEA) will be undertaken by a suitably qualified, experienced and independent team of experts who have been endorsed by the Secretary, to assess what, if any, environmental impacts have occurred as a result of the expanded operations at the Quarry. Consultation with Agencies and the CCC is included in the assessment of the report. The Head of Roads and Quarry will review the outcome and recommendations in the report. Recommendations will be reviewed against the approved CoA and this management plan, with a response to audit recommendations and an implementation timetable (if required) will be submitted to the Secretary via the Major Project Portal within 12 weeks of commencing the audit. The report will be submitted to LCC for awareness (via the Head of Roads and Quarry).

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10 REFERENCES

Department of Planning, Industry and Environment, 2021, Blakebrook Quarry Part 3A Approval No.07_0020 (Mod 3).

Environmental Resources Management Australia (ERM 2009), Blakebrook Quarry Expansion Environmental Assessment Report

Lismore City Council Statement of Environmental Effects (SEE), Mitchel Hanlon 2019, Blakebrook Quarry Asphalt Plant: Traffic Impact Assessment

Geocounts, 2022, Traffic Study Nimbin Road, Lismore, NSW.

RoadNet 2008, Traffic Impact Study: Proposed expansion of Blakebrook Quarry, Nimbin Road, Lismore, NSW.

Transport for New South Wales (TfNSW) (2020). Traffic Control at Worksites

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APPENDIX A - DOCUMENT COMPLIANCE

CoA Condition	Compliance reference
<p>Schedule 2, condition 6 Limits on Approval</p> <p>The Proponent may carry out quarrying operations and Asphalt plant operations on the site until 31 December 2039. <i>Note: Under this approval, the Proponent is required to rehabilitate the site and carry out additional requirements and undertakings to the satisfaction of the Secretary. Consequently, this approval will continue to apply in all respects other than the right to conduct quarrying operations until the rehabilitation of the site and those requirements and undertakings have been carried out to the standard required by the applicable conditions.</i></p>	Section 2.1
<p>Schedule 2, condition 7 Limits on Approval</p> <p>The Proponent must not undertake quarrying operations below 55 m AHD in the northern pit or 105 m AHD in the southern pit. <i>Note: Drainage sumps may be constructed below this level with the agreement of the Secretary.</i></p>	Section 2.1 – refer Appendix A
<p>Schedule 2, condition 8 Limits on Approval</p> <p>The Proponent must not:</p> <ul style="list-style-type: none"> (a) transport more than 600,000 tonnes of quarry products from the site per calendar year; (b) transport more than 50,000 tonnes of asphalt from the site per calendar year; (c) dispatch more than 120 laden trucks from the site on any calendar day prior to the completion of intersection upgrade required by Condition 21(f) of Schedule 3 to the satisfaction of TfNSW; and (d) dispatch more than 150 laden trucks from the site on any calendar day following completion of the intersection upgrade required by Condition 21(f) of Schedule 3 to the satisfaction of TfNSW. <p><i>Note: Dispatch of laden trucks is also controlled under condition 1 of Schedule 3.</i></p>	Section 2.1 Section 2.2 Section 4.1 Section 5.1 Section 5.1.1
<p>Schedule 2, condition 12 Operation of Plant and Equipment</p> <p>The Proponent must ensure that all the plant and equipment used at the site, or to monitor the performance of the project is:</p> <ul style="list-style-type: none"> (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner. 	Section 2.2 Section 8.3
<p>Schedule 2, condition 13 Section 94 contributions</p> <p>The Proponent must pay Council an annual financial contribution toward the maintenance of local roads used for haulage of quarry products. The contribution must be determined in accordance with the <i>Lismore City Council Section 94 Contribution Plan, 2004</i>, or any subsequent relevant contributions plan adopted by Council.</p>	Section 5.2
<p>Schedule 2, condition 15 Compliance</p> <p>The Proponent must ensure that all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities.</p>	Table H Figure 2 Section 8.3

Operational Traffic Management Plan

<p>Schedule 3, condition 1 Hours of Operation</p>	<p>The Proponent must comply with the operating hours set out in Table 1.</p> <table border="1" style="width: 100%;"> <thead> <tr> <th style="text-align: left;"><i>Table 1: Operating hours</i></th> <th style="text-align: left;">Activity</th> <th style="text-align: left;">Permissible Hours</th> </tr> </thead> <tbody> <tr> <td style="width: 30%;"></td> <td>Quarrying operations, Asphalt plant operations and loading and dispatch of laden trucks</td> <td>7 am to 6 pm Monday to Friday 7 am to 3 pm Saturday At no time on Sundays or public holidays</td> </tr> <tr> <td></td> <td>Blasting</td> <td>10 am to 3 pm Monday to Friday (except public holidays) At no time on Sundays or public holidays</td> </tr> <tr> <td></td> <td>Maintenance</td> <td>May be conducted at any time, provided that these activities are not audible at any privately-owned residence</td> </tr> </tbody> </table>		<i>Table 1: Operating hours</i>	Activity	Permissible Hours		Quarrying operations, Asphalt plant operations and loading and dispatch of laden trucks	7 am to 6 pm Monday to Friday 7 am to 3 pm Saturday At no time on Sundays or public holidays		Blasting	10 am to 3 pm Monday to Friday (except public holidays) At no time on Sundays or public holidays		Maintenance	May be conducted at any time, provided that these activities are not audible at any privately-owned residence	<p>Section 3.2 Table G</p>
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		Blasting	10 am to 3 pm Monday to Friday (except public holidays) At no time on Sundays or public holidays												
	Maintenance	May be conducted at any time, provided that these activities are not audible at any privately-owned residence													
<p>Schedule 3, condition 20 Monitoring of Product Transport</p>	<p>The Proponent must keep accurate records of all laden truck movements to and from the site (including time of arrival and dispatch) and publish a summary of records on its website every 6 months.</p>		<p>Table G Section 7.2.2 Section 8.4 Section 9.4</p>												
<p>Schedule 3, condition 21 Road Upgrades</p> <p><i>Note: The road works must be constructed in accordance with the relevant TfNSW or AUSTRROADS standards, and signposted and lit in accordance with AS:1742 – Manual of Uniform Traffic Control Devices and AS/NZ 1158:2005 – Lighting for Roads and Public Spaces.</i></p>	<p>The Proponent must undertake the following road upgrade works generally in accordance with the recommendations in the EA, and to the satisfaction of the TfNSW:</p>		<p>Section 4.2.1 Section 5.1.1</p>												
	<p>(a) upgrade the intersection of the Quarry and Nimbin Road to a 'Type AUR Intersection Treatment', prior to 31 December 2010;</p>		<p>Section 4.2.1 Section 5.1.1</p>												
	<p>(b) upgrade the guard rails on the approaches to Booerie Creek Bridge prior to 31 December 2010;</p>		<p>Section 4.2.1 Section 5.1.1</p>												
	<p>(c) upgrade the Booerie Creek Road and Nimbin Road intersection to a 'Type BAR Right Turn Treatment on the Through Road' prior to 31 December 2010;</p>		<p>Section 4.2.1 Section 5.1.1</p>												
	<p>(d) upgrade the Wilson Street and Nimbin Road intersection to a 'Type CHR Right Turn Bay Treatment' prior to 31 December 2010;</p>		<p>Section 4.2.1 Section 5.1.1</p>												
	<p>(e) re-align Nimbin Road and the Quarry Access intersection to meet the AUSTRROADS sight distance requirements for vehicles travelling in both directions through the intersection prior to 31 December 2011; and</p>		<p>Section 4.2.1 Section 5.1.1</p>												
<p>(f) upgrade the intersection at Nimbin Road and the Quarry Access from the current Type AUR intersection to a Type CHR-S (Shortened Channelised Right Hand Turn) to the satisfaction of TfNSW.</p>		<p>Section 5.1 Section 5.1.1</p>													

Operational Traffic Management Plan

<p>Schedule 3, condition 22 Operating Conditions</p>	<p>The Proponent must: (a) restrict truck movements from the quarry to an average of 50 laden trucks a day until all road upgrades works required by condition 21 (a) – (e) of Schedule 3, are met or unless otherwise approved by the Secretary;</p>	<p>Section 2.2 Section 4.1 Table G Section 7.2.2 Table H</p>
	<p>(b) ensure that all laden trucks entering or exiting the site have their loads covered, with the exception of loads consisting solely of boulders greater than one tonne in weight;</p>	<p>Table G Section 7.2.2</p>
	<p>(c) ensure that all laden trucks exiting the site are cleaned of material that may fall from vehicles, before leaving the site; and</p>	<p>Table G Section 7.2.2</p>
	<p>(d) use its best endeavours to ensure that appropriate signage is displayed on all trucks used to transport product from the project so they can be easily identified by road users.</p>	<p>Table G</p>
<p>Schedule 3, condition 23 Traffic Management Plan</p> <p><i>The Proponent must implement the approved Traffic Management Plan as approved from time to time by the Secretary.</i></p>	<p>The Proponent must prepare a Traffic Management Plan for the project to the satisfaction of the Secretary. This plan must: (a) be prepared in consultation with the TfNSW and Council;</p>	<p>Section 8.2 Appendix B</p>
	<p>(b) be submitted to the Secretary for approval within 3 months of the determination of Modification 1, unless otherwise agreed by the Secretary;</p>	<p>Appendix C</p>
	<p>(c) describe the processes in place for the control of truck movements entering and exiting the site;</p>	<p>Table G Section 7.2.2</p>
	<p>(d) include a Drivers' Code of Conduct that details the safe and quiet driving practices that must be used by drivers transporting products to and from the quarry;</p>	<p>Table G Section 7.2.2 Appendix E</p>
	<p>(e) describe the measures to be put in place to ensure compliance with the Drivers' Code of Conduct; and</p>	<p>Section 7.2.2 Section 8.5</p>
	<p>(f) propose measures to minimise the transmission of dust and tracking of material onto the surface of the public road from vehicles leaving the quarry.</p>	<p>Table F Table G Section 7.2.2 Section 8.3 Appendix E</p>
<p>Schedule 5, condition 2 Evidence of Consultation</p>	<p>Where consultation with any State or local agency is required by the conditions of this approval, the Proponent must: (a) consult with the relevant agency prior to submitting the required document to the Secretary for approval;</p>	<p>Appendix B</p>
	<p>(b) submit evidence of this consultation as part of the relevant document;</p>	<p>Appendix B</p>
	<p>(c) describe how matters raised by the agency have been addressed and any matters not resolved;</p>	<p>Appendix B – no comment</p>
	<p>(d) include details of any outstanding issues raised by the agency and an explanation of disagreement between any agency and the Proponent.</p>	<p>Appendix B – no comment</p>

Operational Traffic Management Plan

<p>Schedule 5, condition 3 Management Plan Requirements</p> <p><i>Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.</i></p>	The Proponent must ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include:(a) detailed baseline data;	Section 3.3 Section 4
	(b) a description of: <ul style="list-style-type: none"> • the relevant statutory requirements (including any relevant approval, licence or lease conditions); • any relevant limits or performance measures/criteria; and • the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures; 	Section 3.2 Table F
	(c) a description of the measures that to be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;	Table G Section 7.2.2 Appendix E
	(d) a program to monitor and report on the: <ul style="list-style-type: none"> • impacts and environmental performance of the project; and • effectiveness of any management measures (see (c) above); 	Section 8.5 Section 9 Section 9.5
	e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;	Section 9.1
	(f) a program to investigate and implement ways to improve the environmental performance of the project over time;	Section 8.5 Section 8.7
	(g) a protocol for managing and reporting any: <ul style="list-style-type: none"> • incidents; • complaints; • non-compliances with statutory requirements; and • exceedances of the impact assessment criteria and/or performance criteria; and 	Section 8.7 Section 9.2
	(h) a protocol for periodic review of the plan.	Section 9.3.1
<p>Schedule 5, condition 4A Revision of Strategies, Plans & Programs</p> <p><i>Note: The purpose of this condition is to ensure that strategies, plans and programs are regularly updated to incorporate any measures recommended to improve environmental performance of the project.</i></p>	4A. Within 3 months of the submission of an:(a) incident report under condition 9 below;	Section 9.3.1
	(b) Annual Review under condition 11 below;	Section 9.3.1 Section 9.5
	(c) audit report under condition 12 below; and	Section 9.3.1 Section 9.6
	(d) any modifications to this approval <i>the Proponent must review the strategies, plans and programs required under this approval, to the satisfaction of the Secretary. The proponent must notify the Department in writing of any such review being undertaken. Where this review leads to revisions in any such document, then within 6 weeks of the review the revised document must be submitted for the approval of the Secretary.</i>	Section 9.3.1

Operational Traffic Management Plan

Schedule 5, condition 6 Adaptive Management	The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and performance measures in this consent. Any exceedance of these criteria or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation. Where any exceedance of these criteria or performance measures has occurred, the Applicant must, at the earliest opportunity:(a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;	Section 5.2
	b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action;	Section 9.2
	(c) implement reasonable remediation measures as directed by the Planning Secretary.	Section 9.2
Schedule 5, condition 8 Incident Reporting	The Proponent must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be in writing via the Major Projects Website and identify the development (including the development application number and name) and set out the location and nature of the incident.	Section 9.2
Schedule 5, condition 9 Non-Compliance Notification	Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the non-compliance. The notification must be in writing via the Major Projects Website and identify the development (including the development application number and name), set out the condition of this consent that the development is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.	Section 9.2
Schedule 5, condition 10 Regular Reporting	The Proponent must provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval.	Section 8.6 Section 9.5
Schedule 5, condition 11 Annual Review <i>The Proponent must ensure that copies of the Annual Review are submitted to Council and are available to the Community Consultative Committee (see condition 7 of Schedule 5) and any interested person upon request.</i>	By the end of March each year, or other timing as may be agreed by the Secretary, the Proponent must submit a review to the Department reviewing the environmental performance of the project to the satisfaction of the Secretary. This review must: (a) describe the project (including any progressive rehabilitation) that was carried out in the previous calendar year, and the project that is proposed to be carried out over the current calendar year;	Section 9.5
	(b) include a comprehensive review of the monitoring results and complaints records of the project over the previous calendar year, which includes a comparison of these results against the: <ul style="list-style-type: none"> • relevant statutory requirements, limits or performance measures/criteria; • requirements of any plan or program required under this approval; • monitoring results of previous years; and • relevant predictions in the documents listed in condition 2(a) of Schedule 2; 	Section 9.5
	(c) evaluate and report on: <ul style="list-style-type: none"> • the effectiveness of the air quality and noise management systems; and • compliance with the performance measures, criteria and operating conditions in this approval. 	Section 9.5

Operational Traffic Management Plan

	(d) identify any non-compliance over the past calendar year, and describe what actions were (or are being) taken to ensure compliance;	Section 9.5
	(e) identify any trends in the monitoring data over the life of the project;	Section 9.5
	(f) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies;	Section 9.5
	(g) describe what measures will be implemented over the current calendar year to improve the environmental performance of the project.	Section 9.5
Schedule 5, condition 12 Independent Environmental Audit	Within three years of the date of grant of this project approval, and every 3 years thereafter, unless the Secretary directs otherwise, the Proponent must commission, commence and pay the full cost of an Independent Environmental Audit of the project. This audit must: (a) be led and conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;	Section 9.6
	(b) include consultation with the relevant agencies and the CCC;	Section 9.6
	(c) assess the environmental performance of the project and whether it is complying with the relevant requirements in this approval and any relevant EPL or necessary water licences for the project (including any assessment, strategy, plan or program required under these approvals);	Section 9.6
	d) review the adequacy of strategies, plans or programs required under the abovementioned approvals;	Section 9.6
	(e) recommend appropriate measures or actions to improve the environmental performance of the project, and/or any assessment, strategy, plan or program required under the abovementioned approvals; and	Section 9.6
	(f) be conducted and reported to the satisfaction of the Secretary.	Section 9.6
Schedule 5, condition 13 Independent Environmental Audit	Within 12 weeks of commencing this audit, or as otherwise agreed by the Secretary, the Proponent must submit a copy of the audit report to the Secretary and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of these recommendations as required. The Proponent must implement these recommendations, to the satisfaction of the Secretary.	Section 9.6

Operational Traffic Management Plan

<p>EPL 3384 – L6.1 Hours of Operation</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Activity</th> <th style="text-align: left;">Permissible Hours</th> </tr> </thead> <tbody> <tr> <td>Quarrying activities, asphalt plant operations and loading and dispatch of laden trucks</td> <td>07:00 to 18:00 Monday to Friday; 07:00 to 15:00 on Saturday and at no time on Sundays and Public Holidays</td> </tr> <tr> <td>Blasting</td> <td>10:00 to 15:00 Monday to Friday and at no time on Saturday, Sunday and Public Holidays</td> </tr> <tr> <td>Maintenance</td> <td>May be conducted at any time provided that these activities are not audible at any privately-owned residence</td> </tr> </tbody> </table>	Activity	Permissible Hours	Quarrying activities, asphalt plant operations and loading and dispatch of laden trucks	07:00 to 18:00 Monday to Friday; 07:00 to 15:00 on Saturday and at no time on Sundays and Public Holidays	Blasting	10:00 to 15:00 Monday to Friday and at no time on Saturday, Sunday and Public Holidays	Maintenance	May be conducted at any time provided that these activities are not audible at any privately-owned residence	<p>Section 3.2 Table G</p>
Activity	Permissible Hours									
Quarrying activities, asphalt plant operations and loading and dispatch of laden trucks	07:00 to 18:00 Monday to Friday; 07:00 to 15:00 on Saturday and at no time on Sundays and Public Holidays									
Blasting	10:00 to 15:00 Monday to Friday and at no time on Saturday, Sunday and Public Holidays									
Maintenance	May be conducted at any time provided that these activities are not audible at any privately-owned residence									
<p>EPL 3384 – L6.2 Hours of Operation</p>	<p>The following activities may be carried out outside the hours specified in Condition L6.1 above:</p> <ul style="list-style-type: none"> • delivery or despatch of material outside the hours of as requested by police or other public authorities • emergency work to avoid the loss of lives, property or to prevent environmental harm • operation of the asphalt plant with the permission of Lismore City Council for emergency or specific works where a traffic management problem is involved. <p>In such circumstances, prior notification must be provided to the EPA and affected residents as prior to undertaking the activity or as soon as possible thereafter.</p> <p>Note: Where a blast failure has occurred or there are compelling safety reasons, the EPA may permit a blast to occur outside the above hours. The licensee must provide prior notice of any such blast to the EPA by contacting 131 555.</p>	<p>Section 3.2 Table G</p>								
<p>EPL 3384 – L6.3 Hours of Operation</p>	<p>Out of hours work implemented in accordance with conditions of approval</p> <p>The licensee may also undertake limited campaign asphalt plant operations (within the limits imposed under Application No: 07_0020, Mod 3, condition 8, Schedule 2), outside of the operating hours prescribed in condition L6.1, as requested by public authorities.</p> <p>In such circumstances, the licensee must prepare an Out of Hours Work Protocol. This protocol must:</p> <ol style="list-style-type: none"> 1. be prepared in consultation with the EPA and any residents who may be affected by the noise generated by these works; and 2. be approved by the NSW Department of Planning and Environment Secretary prior to the commencement of any out of hours asphalt plant operations 	<p>Section 2.2 Section 3.2</p>								
<p>EPL 3384 – O1.1 Operating Conditions</p>	<p>Activities must be carried out in a competent manner</p> <p>O1.1 Licensed activities must be carried out in a competent manner. This includes:</p> <ol style="list-style-type: none"> a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity. 	<p>Section 2.2 Section 5.2.2 Table G Section 7.2.2 Section 8.3 Section 8.5</p>								

Operational Traffic Management Plan

<p><i>EPL 3384 – O2.1 Operating Conditions</i></p>	<p>Maintenance of plant and equipment O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity: a) must be maintained in a proper and efficient condition; and b) must be operated in a proper and efficient manner.</p>	<p>Section 2.2 Section 8.3</p>
<p><i>EPL 3384 – O3.2 Dust</i></p>	<p>Trucks entering and leaving the premises that are carrying loads must be covered at all times, except during loading and unloading.</p>	<p>Table G Section 7.2.2 Appendix E</p>

Operational Traffic Management Plan

APPENDIX B - TFNSW CONSULTATION

FW: Transport for NSW Response - Operational Traffic Management Plan - Blakebrook Quarry



Rob Todhunter <rob.todhunter@envsolutions.com.au>

To Leonie Lockhart; Eleisha Went
Cc Kingsley Baldwin

You replied to this message on 06/10/2022 9:00 AM.



Thu 06/10/2022 8:16 AM

Good afternoon Rob,

Transport for NSW (TfNSW) appreciates the opportunity to provide feedback during the preparation of the Blakebrook Quarry Operational Traffic Management Plan (OTMP) as required by Schedule 3, Condition 23(a) of Project Approval 07_0020.

TfNSW has reviewed the Operational Traffic Management Plan (OTMP) prepared by Leonie Lockhart and dated September 2022, including Appendix E for the Blakebrook Quarry Project and considers that the impacts of the project on public roads, transport customers and infrastructure can be appropriately mitigated where the OTMP is effectively implemented in coordination with the conditioned upgrades and in ongoing consultation with the relevant Road authorities, and have no further comments on the OTMP.

If you have any further enquiries regarding the above comments please do not hesitate to contact Court Walsh, Development Services Case Officer on 1300 207 783 or via email at: development.north@transport.nsw.gov.au

Kind regards,

Leisa Sedger

A/ Team Leader, Development Services
Community and Place | Region North
Regional and Outer Metropolitan
Transport for NSW

T 1300 207 783 T (02) 9549 9485 E development.north@transport.nsw.gov.au

W transport.nsw.gov.au

Grafton Regional Office, Region North
Level 1, 76 Victoria Street, Grafton NSW 2460
PO Box 576, Grafton NSW 2460



**Transport
for NSW**

Operational Traffic Management Plan

APPENDIX C - CORRESPONDENCE

a)



Planning Services
Resource Assessments
Contact: Jack Murphy
Phone: 8217 2018
Email: jack.murphy@planning.nsw.gov.au

Mr Louis Penny
Senior Town & Environmental Planner
ERM
PO Box 1400
Spring Hill QLD 4000

Email: Louis.Penny@erm.com

Dear Mr Penny,

Blakebrook Quarry Modification 1 (07_0020) Environmental Management Plans

I refer to your emails dated 3 and 24 August 2018, submitting a revised environmental management strategy and revised environmental management plans for the Blakebrook Quarry. The Department has reviewed the following documents and considers they have fulfilled the requirements of their respective conditions:

- Aboriginal Heritage Management Plan dated August 2018 (condition 24, Schedule 3);
- Air Quality Management Plan dated August 2018 (condition 12, Schedule 3);
- Environmental Management Strategy dated August 2018 (condition 1, Schedule 5);
- Traffic Management Plan Dated August 2018 (condition 23, Schedule 3);
- Noise Management Plan dated August 2018 (condition 5, Schedule 3); and
- Blast Management Plan dated August 2018 (condition 9, Schedule 3).

Consequently, the Secretary has approved the above documents. Please ensure finalised copies of these documents are made available on the company's website.

Should you have any enquiries in relation to this matter, please contact Jack Murphy.

Yours sincerely,

A handwritten signature in blue ink that reads 'Howard Reed'.

Howard Reed 28.8.18
Director
Resource Assessments
as nominee of the Secretary

Operational Traffic Management Plan

b) DPE correspondence



Department of Planning and Environment

Ms Eleisha Went
Compliance Manager, Commercial Services
Lismore City Council

Ref. ED22/6741

60 BRUNSWICK STREET
LISMORE NSW 2480

Via email: Eleisha.went@lismore.nsw.gov.au

Dear Ms Went

Blakebrook Quarry - Flood Emergency Request (MP07_0020) Extension of Time Request

Thank you for your correspondence to the Department of Planning and Environment (the "Department") dated 3 & 12 March 2022 seeking an extension of time for the submission of reports required under the conditions of consent and additionally, seeking increased limits on hours of operation, production, and vehicle movements for the Blakebrook Quarry (MP07_0020) to enable Council to repair necessary infrastructure.

The Department acknowledges that the Lismore region and its residents have been significantly impacted by the recent unprecedented flooding and associated impacts to infrastructure. The Department wishes to assist in any way possible to support Council and the community that have been impacted by this tragic event.

Reports and Environmental Management Plans

The Department has considered your request for the extension of time for the submission of the following reports and management plans;

- Annual Environmental Management Review (AEMR); and
- Modification 3 Management Plan revisions (including Site Water Balance)

Accordingly, the Planning Secretary has approved your request for an extension of time until 30 June 2022 for the submission of the Annual Environmental Management Review, and until 30 September 2022 for the submission of revised Management Plans required under Modification 3 (including the Site Water Balance).

Increased production limits, hours of operation and vehicle movements

In relation to your request seeking increased hours of operation, production limits, and vehicle movements, the Department provides assurance that it will not take enforcement action for

Operational Traffic Management Plan



Department of Planning and Environment

these exceedances for an initial period of 3 months and will review the Council's circumstances at that time in determining whether this period should be extended.

The Department notes that the Council has committed to the following measures:

- Continue to monitor and record tonnages of quarry products and asphalt leaving the site;
- Continue to monitor and record the number of laden truck movements exiting the site;
- Limit hours of operation wherever possible;
- Record and respond to any complaints; and
- Continue to meet the requirements of management plans and programs.

Additionally, the Department considers that blasting activities at the site should be undertaken within the approved hours unless considered critical for production or for safety reasons (such as a misfire). The Department further requests that the Council conducts engagement with sensitive receivers prior to increasing production, truck movements or conducting operations outside of the approved hours.

Finally, the Department requests that a short monthly summary report be provided during the period of works, outlining the works conducted outside of the limits of consent, whether complaints have been received and the Council's response to such complaints.

Should you wish to discuss the matter further, please contact Mr Phillip Rose, Compliance Officer at the Department on 6670 8657 or phillip.rose@planning.nsw.gov.au

Yours sincerely

A handwritten signature in black ink, appearing to read 'Ben Harrison'.

Ben Harrison
Director Compliance
As nominee of the Planning Secretary

16.3.2022

Operational Traffic Management Plan

c) Letter of confirmation – Upgrade works completed



All communication to
GENERAL MANAGER

Our Ref: DP:RP12/22:R2801-09

Your Ref:

Contact:

12 April 2013

Mr Phil Kelpzig
Manager
Commercial Services
Lismore City Council
Via email: phil.kelpzig@lismore.nsw.gov.au

Dear Phil

Blakebrook Quarry Upgrade Works Nimbin Road

Reference is made to the recent road upgrades works carried out by Northern Rivers Quarry and Asphalt on Nimbin Road, as detailed below:

- (a) Upgrade of the intersection of the 'Quarry Access and Nimbin Road' to a 'Type AUR Intersection treatment'.
- (b) Upgrade the 'Guard Rails' on the approaches to Booerie Creek Bridge.
- (c) Upgrade the 'Booerie Creek Road and Nimbin Road Intersection' to a 'Type BAR Right Turn' treatment on the through road. This was upgraded to a AUR left turn type intersection. (This work is still in its six months defects period)
- (d) Upgrade the Wilson Street and Nimbin Road intersection to a 'Type CHR Right Hand Turn Treatment'.

Nimbin Road is a regional Lismore City Council road which the Council controls and maintains. It is not a State Road controlled by RMS.

Lismore City Council is satisfied that Northern Rivers Quarry and Asphalt have carried out the upgrade works to Council Standards and have taken over the assets since the defects period have been completed without failure for (a), (b) and (d).

Item (c) Booerie Creek Intersection works is currently under its six months 'Defects Liability Period' and until that is concluded, Lismore City Council will not take over responsibility for the upgrade works at this intersection.

Yours faithfully

A handwritten signature in black ink, appearing to read "D. Patch", written over a white rectangular background.

Darren Patch
Manager Works

43 Oliver Avenue, Goonellabah • PO Box 25A, Lismore New South Wales 2480
A.B.N. 8008332837 • Tel 1300 87 83 87 • Fax 02 8625 0400 • www.lismore.nsw.gov.au • council@lismore.nsw.gov.au

Lismore City Council acknowledges the people of the Bundjalung Nation, traditional custodians of the land on which we work.

Operational Traffic Management Plan



Our ref: DP:RP12/22-R2801-09

Your ref:

Contact:

16 December 2019

Mr David Hanna
Manager Commercial Services
Lismore City Council
Via email: david.hanna@lismore.nsw.gov.au

|
Dear Mr Hanna

Blakebrook Quarry upgrade Works Nimbin Road

Reference is made to road upgrade works carried out by Northern Rivers Quarry and Asphalt on Nimbin Road and in particular to the following section of works:

Upgrade the 'Boorie Creek Road and Nimbin Road intersection to a 'Type BAR right Turn' treatment on the through road. This was upgraded to a AUR type intersection.

Lismore City Council is satisfied that Northern Rivers Quarry and Asphalt have carried out the upgrade works to Council standard and as such, have taken over the asset since the defects liability period has been completed without failure.

Yours faithfully

A handwritten signature in black ink, appearing to read "D. Patch".

Darren Patch
Manager - Civic Services

www.lismore.nsw.gov.au

43 Oliver Avenue, Goonellabah NSW 2480 • PO Box 23A, Lismore NSW 2480 • T: 1300 87 83 87 • E: council@lismore.nsw.gov.au • ABN: 60080932837

Lismore City Council acknowledges the people of the Bundjalung Nation, traditional custodians of the land on which we work.



Operational Traffic Management Plan



Our ref: BG:MS:R2801-09

Contact: Barry Goodwin

27 February 2023

Mr Ashley Wing
Manager Commercial Services
Lismore City Council

Via email: ashley.wing@lismore.nsw.gov.au

Dear Mr Wing

Blakebrook Quarry Upgrade Works – Nimbin Road

Reference is made to road upgrade works carried out by Northern Rivers Quarry and Asphalt on Nimbin Road and in particular to the following section of works, required by CoA, Schedule 3, Condition 21 (e):

- *Re-align Nimbin Road and the Quarry Access intersection to meet the AUSTRROADS sight distance requirements for vehicles travelling in both directions through the intersection.*

Lismore City Council is satisfied that Northern Rivers Quarry and Asphalt carried out the upgrade works in January 2014 to Council's standard and as such, has taken over the asset since the defects liability period was completed without failure.

Yours faithfully

A handwritten signature in black ink that reads "S. Turner". The signature is written in a cursive style with a large initial 'S'.

Scott Turner
Manager City Services

www.lismore.nsw.gov.au

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Operational Traffic Management Plan

APPENDIX D - STATEMENT OF COMMITMENTS

2	Roads	Responsibility	Timing	Comment
2.1	The proponent shall provide the following roadworks with associated stormwater drainage structure that have been designed and constructed in accordance with Council's Development, Design and Construction Manual (as amended). The proponent shall be responsible for any costs, including maintenance, for a period of six months from the date of approval of completion of the work. Required roadworks include:	Lismore City Council	Prior to the operation of the expanded quarry.	CoA 2009 historical commitment – completed in 2014
2.1.1	Construction of a type CHR intersection layout at the junction of the quarry access and Nimbin Road in accordance with AUSTRROADS Pt 5 " <i>Intersections at Grade</i> " giving particular attention to sight distance. The access road will remain sealed from at least 50m back from Nimbin Road to prevent fouling of the road surface, as per existing conditions.	Lismore City Council	Prior to the operation of the expanded quarry.	CoA 2009 historical commitment – completed in 2013
2.1.2	Construction of a type CHR intersection layout at the junction of Nimbin Road and Wilson Street in accordance with AUSTRROADS Pt 5 " <i>Intersections at Grade</i> ".	Lismore City Council	Prior to the operation of the expanded quarry.	CoA 2009 historical commitment – completed in 2013
2.1.3	Construction of a 1m wide gravel shoulder and repair existing pavement of Nimbin Road for a length of 200 metres at a location 2.8 kilometres north of the intersection of Nimbin Road and Wilson Street as recommended within Appendix G, Traffic Impact Study, of the Environmental Assessment.	Lismore City Council	Prior to the operation of the expanded quarry.	CoA 2009 historical commitment – completed in 2013
2.1.4	Installation of a guard rail in accordance with the relevant standard at Booerie Creek Bridge approaches as recommended within Appendix G, Traffic Impact Study, of the Environmental Assessment.	Lismore City Council	Prior to the operation of the expanded quarry.	CoA 2009 historical commitment – completed in 2013
2.1.5	Works identified in Tables 1 and 2 of Appendix G, Traffic Impact Study, of the Environmental Assessment that have not been individually detailed within conditions of consents.	Lismore City Council	Prior to the operation of the expanded quarry.	CoA 2009 historical commitment – completed
Prior to the operation of the expanded quarry the applicant shall obtain a certificate of completion for the above works from Council. Prior to obtaining this certificate a practicing qualified surveyor or engineer shall submit to Council for approval, a "works-as-executed" set of plans, completed asset record forms and construction certification. The certification shall certify that all roads, drainage and civil works required by this development consent and the approved design plans have been completed in accordance with Council's Development and Construction Manual (as amended).				
2.2	The proponent shall provide the following roadworks with associated stormwater drainage structures that have been designed and constructed in accordance with the Council's Development, Design and Construction Manual (as amended). The proponent shall be responsible for any costs, including maintenance, for a period of six months from the date of approval of completion of the work. Required roadworks include:			

Operational Traffic Management Plan

2.2.1	Construction of a type BAR intersection layout at the junction of Nimbin Road and Boorie Creek Road in accordance with AUSTRROADS Pt 5 “ <i>Intersections at Grade</i> ”.	Lismore City Council	Once production rates reach 350,000 tonnes/annum. Once production rates reach 350,000 tonnes/annum.	CoA 2009 historical commitment – completed in 2014
Prior to exceeding an annual extraction rate of 350,000 tonnes in any one year the applicant shall obtain a certificate of completion for the above works from Council. Prior to obtaining this certificate a practicing qualified surveyor or engineer shall submit to Council for approval, a “works-as-executed” set of plans, completed asset record forms and construction certification. This certification shall certify that all roads, drainage and civil works required by this development consent and the approved design plans have been completed in accordance with Council’s Development and Construction Manual (as amended).				
2.3	Prior to the operation of the expanded quarry a review of the Road Safety Audit contained within Tables 1 and 2 of Appendix G, Traffic Impact Study, of the Environmental Assessment shall be undertaken. All required works identified within the review that are not individually detailed within conditions of consents shall be completed prior to operation of the expanded quarry,	Lismore City Council	Prior to the operation of the expanded quarry. Prior to the operation of the expanded quarry.	CoA 2009 historical commitment – completed in 2014
2.4	Prior to the operation of the expanded quarry hinged “Truck Entering” warning signage, W5-22 signs, shall be erected at suitable locations, approximately 200 metres either side of the access, upon Nimbin Road advising of the traffic hazard. Signs shall be displayed during hours of haulage operations only.	Lismore City Council	Prior to the operation of the expanded quarry. Prior to the operation of the expanded quarry.	Refer to section 7.2.1 - Table G
2.5	Prior to the commencement of works required by the above conditions the applicant shall obtain approval under section 138 of the Roads Act for the works upon the public road. For this approval full design plans of the proposed engineering works required upon the public road shall be submitted to and approved by Council. Plans shall include details of works required to satisfy condition(s) RD1. Such plans shall be accompanied with the fee, as adopted at the time of the relevant payment as indicated in Councils Fees and Charges.	Lismore City Council	Prior to the commencement of works required by the above conditions. Prior to the commencement of works required by the above conditions.	CoA 2009 historical commitment – completed
2.6	Prior to the issue of the section 138 approval for works upon the public road the proponent shall have approved by Council a plan of management for the construction of all civil works outside the real property boundaries of the proposed development. The plan shall table scheduling of works so as to be completed in the shortest possible time with minimal impact on the general community. Such plan shall include a Traffic Control Plan prepared by an RTA accredited person. All works shall comply with the Occupational Health and Safety Act.	Lismore City Council	Prior to the issue of the section 138 approval for works upon the public road. Prior to the issue of the section 138 approval for works upon the public road.	CoA 2009 historical commitment – completed
2.7	The plan of management for the operation of the quarry shall incorporate a code of practice for trucking operations associated with the development. This code shall include a requirement for the use of CB radios for communication with buses and garbage trucks	Lismore City Council	Prior to the issue of the section 138 approval for works upon the public road	Section 7.2.1 - Table G Section 7.2.3 Appendix E

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	within all haulage vehicles as recommended within Appendix G, Traffic Impact Study, of the Environmental Assessment.		Prior to the issue of the section 138 approval for works upon the public road.	
2.8	The development shall provide adequate on site parking for all vehicles, plant and equipment associated with the development.	Lismore City Council	Prior to the operation of the expanded quarry	Section 2.2
2.9	The proposed access shall be sealed for the first 50 metre length from Nimbin Road. Driveways, access aisles and parking areas shall be provided with a suitable pavement, constructed and maintained in accordance with Council's Development, Design and Construction Manual (as amended)	Lismore City Council	Prior to the operation of the expanded quarry.	Section 7.2.1 - Table G
2.10	All loading and unloading shall take place within the property boundaries, as will the parking of construction and private vehicles associated with the development	Lismore City Council	Ongoing	Section 2.2
2.11	Vehicles using any off street loading/unloading and/or parking area must enter and leave in a forward direction in accordance with Councils Development Control Plan No.1, Part A, Chapter 7 – Off Street Parking Requirements. All driveways and turning areas shall be kept clear of obstructions that prevent compliance with this condition.	Lismore City Council	Ongoing	Not applicable - noted
2.12	The proponent shall provide MEG, on or before January 31, April 30, July 31 and October 31 in each year, with extraction figures detailing quantities of all material removed from the site for the previous quarter of operations	Lismore City Council	Ongoing	Section 8.6
2.13	Annual payment of contributions levied under Section 94 of the Environmental Planning and Assessment Act and Lismore City Council S94 Contributions Plan 2004 (as amended) are required. Such levies shall contribute towards the provision of public services and/or amenities identified. Such levies shall be calculated utilising dispatched tonnages with consideration to the below: Quarry Operations The rates and amounts applying at the date of this notice for the approved extraction rate of 600,000 tonnes, totalling \$560,628 annually, have been calculated as set out below for your information. Levies set out below shall be increased in accordance with the percentage increase as notified by the Consumer Price Index (Sydney) annually. Levies shall be paid within 30 days of the Council issuing an assessment for the preceding year. The contributions set out in the schedule are exclusive of any GST (if any) and where the provision of any services or the construction of any infrastructure or any other thing with those contributions occurs, then in addition to the amount specified above the Applicant	Lismore City Council	Ongoing	Section 5.2

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<p>will pay to the Council the GST (as defined below) which is payable by the Council in respect of the provision of such services or the construction of any infrastructure or any other thing. GST means any tax levy charge or impost under the authority of any GST law (as defined by the GST Act) and includes GST within the meaning of the GST Act. The GST Act means A New Tax System (Goods and Services Tax) Act 1999 or any amending or succeeding legislation. The levy shall be calculated in accordance with Councils adopted section 94 plan as at this date and be based on the following information:</p> <ul style="list-style-type: none"> • Road construction cost of \$369,000 per kilometre indexed for CPI annually from December 2003) • Average haulage distance of 15 kilometres • For use in calculations a conversion factor 1.7 from m3 to tonnes has been adopted • The first 5,000m3 (8,500 tonnes) per annum shall be exempt from levies. <p>Levy calculation for yearly extraction will be: $(\\$396,000/6.74 \times 10^6) \times 15\text{km} \times (\text{Annual tonnage extracted} - 8,500) \times 1.025 \times \text{CPI} = (396,000/6.74 \times 10^6) \times 15\text{km} \times (600,000 - 8,500) \times 1.025 \times 1.126 = \\$560,628$</p> <p>Asphalt Operations The levy shall be calculated in accordance with Councils adopted section 94 plan e.g. 10 cents for each tonne of bituminous mix produced, and road transported from the site. This levy will be increased annually in accordance with Consumer Price Index as calculated by the Australian Bureau of Statistics. The levy shall apply from the date of this consent and shall be paid in monthly instalments based on tonnage measured on the applicant's weighbridge. This condition does not in any way prevent the Council from increasing the abovementioned levy at any time if this were so agreed with the operator.</p>			
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Operational Traffic Management Plan

2.14	A Traffic Noise Management Strategy (TNMS) be developed by the proponent to ensure that feasible and reasonable noise management strategies for vehicle movements associated with the facility are identified and applied, that include but are not necessarily limited to the following:	Lismore City Council	Prior to the operation of the expanded quarry.	Section 6 & 7
2.14.1	Driver training to ensure that noisy practices such as the use of compression engine brakes are not unnecessarily used near sensitive receivers;			Section 7.2.2 Appendix E
2.14.2	Best noise practice in the selection and maintenance of fleet vehicles;			Section 2.2
2.14.3	Movement scheduling where practicable to reduce impacts during sensitive times of the day;			Table F, Table G, Table H
2.14.4	Communication and management strategies for non licensee/proponent owned and operated vehicles to ensure the provision of the TNMS are implemented;			Section 7.2.2 Appendix E Section 8.1 Table H Section 8.3
2.14.5	A system of audited management practices that identified non conformance, initiates and monitors corrective and preventative action (including disciplinary action for breaches of noise minimisation procedures) and assesses the implementation and improvement of the TNMS;			Section 5.3 Section 9.2 Section 9.3 Section 9.5 Section 9.6
2.14.6	Specific procedures to minimise impacts to identified sensitive receivers;			Section 7 Table F Table G
2.14.7	Clauses in conditions of employment, or in contracts, of drivers that require adherence to noise minimisation procedures and facilitate effective implementation of the disciplinary actions for breaches of the procedures.			Section 8.1 Table H

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APPENDIX E - DRIVER AND VISITOR INDUCTION

Northern Rivers Quarry Driver and Visitor Induction



This induction is to be used for Drivers and Visitors entering Northern Rivers Quarry (NRQ) for the purpose of inspections or purchasing goods and is valid for 12 months. This induction is to compliment the *WHS (Mines & Petroleum) Regulations 2022*, Project Approval conditions and Safety Management System of NRQ.

Name:	
Company:	
Address:	

1. All visitors must report to the Weighbridge and sign the Visitors Register when entering/leaving site.
2. Amenities - located as signed on the veranda.
3. Refreshments and First Aid are available in staff lunchroom.
4. All persons entering NRQ must wear correctly fitting PPE as a minimum: safety boots, hi-vis long sleeve shirt, long pants and hard hat.
5. All persons proceeding beyond the Weighbridge must wear a hard hat except when inside a vehicle or building.
6. All NRQ site signage to be obeyed at all times.
7. General road rules apply on site (e.g. no mobile phone use, wear seatbelts etc.).
8. A site speed limit of 40km/h must be adhered to.
9. Refer Traffic Management Plan Site Map (ED21/6777).
10. All vehicles require a **working flashing light and UHF radio**. For vehicles not fitted with these, units are available on loan from the Weighbridge while on site.
11. Vehicles must stop on the Weighbridge when entering NRQ to obtain goods (unless the vehicle tare weight has been recorded in the Weighbridge system).
12. **NRQ channel UHF 15** must be used when moving around on site. Use POSITIVE COMMS to indicate movements.
13. **Asphalt channel UHF 12** is only to be utilised whilst within the Asphalt operations.
14. Vehicles must always give way to NRQ plant/machinery.
15. A 20m '*no go zone*' is to be observed when behind heavy equipment for all pedestrians, light vehicles, and other heavy equipment and to allow direct line of sight through rear-vision mirrors.
16. Establish positive communication on UHF and visual contact with heavy equipment before approaching or passing.
17. All drivers **must call on UHF** when using the haul road and entering/exiting the stockpile area.
18. NO OVERTAKING on the Haul Road or Access Road.
19. All persons must remain inside their vehicle when being loaded and have direct communication with Front End Loader or Asphalt Batch plant operator.
20. ALL drivers and visitors are PROHIBITED from walking or entering the Hot Storage Load Out area of the Asphalt Plant, at any time.
21. ALL drivers are to minimise engine idling of vehicles that lead to greenhouse gas emissions.

Operational Traffic Management Plan

22. All trucks carting Quarry products are to untarp/tarp in the designated tarping bay located at the bottom of the haul road. Tarping of loads to be controlled from ground level. Drivers are permitted to be outside their vehicles if within the designated tarping area and must wear PPE at this time.
23. **All loads must be tarped before leaving NRQ site**, except for loads consisting solely of boulders greater than one (1) tonne in weight.
24. Before leaving site, all laden trucks are to be visually inspected and clean of material that may fall from vehicles.
25. Maintain 3-points of contact when climbing IN or OUT of your vehicle. Climbing in or on truck bodies is PROHIBITED.
26. Wash out vehicles in the Washdown area only. ONE WAY traffic system. Follow all signage.
27. All vehicles must STOP on the Weighbridge when exiting site.
28. Drivers to limit compression braking to reduce noise to neighbours where possible.
29. Avoid bunching of heavy vehicles along the transport route by staggering vehicles leaving the site.
30. UHF radio systems are expected to be utilised by both the quarry truck drivers and the garbage collection truck drivers as a tool for notification of potential road hazards and vehicle movements
31. Drivers must comply with NHVL – adhere to GVM limits, manage fatigue, and take breaks as required.
32. Truck movements for NRQ and Asphalt are limited to Project Approval conditions. In the event these limits are reached, trading will cease for that day.
33. Appropriate signage (where practicable) is to be displayed on all trucks used to transport product from NRQ, so they can be easily identified by road users.
34. All incidents, near misses or safety breaches to be reported immediately to NRQ Supervisors and all relevant documents completed.
35. During inclement weather or periods of reduced visibility (including but not limited to fog and rain) all drivers must exercise additional caution.
36. Firefighting equipment and first aid kits are available in all buildings and vehicles. Signage indicates locations where these are available.
37. NRQ is an official drug free, alcohol free, non-smoking site. Anyone under the influence of, or in possession of such, will be disciplined.
38. All persons must comply with NRQ emergency protocols and follow instructions given by staff.
39. Children under 15 years of age are not encouraged to enter NRQ. They must be accompanied by an adult and always remain in the vehicle.
40. Drivers/Visitors must give way to koalas and all other wildlife on site.

In the event of an emergency, all persons in the Quarry are to MUSTER AT THE END OF THE VERANDA (as signed). If the Muster Point is inaccessible, gather at the Main Gate (front road)

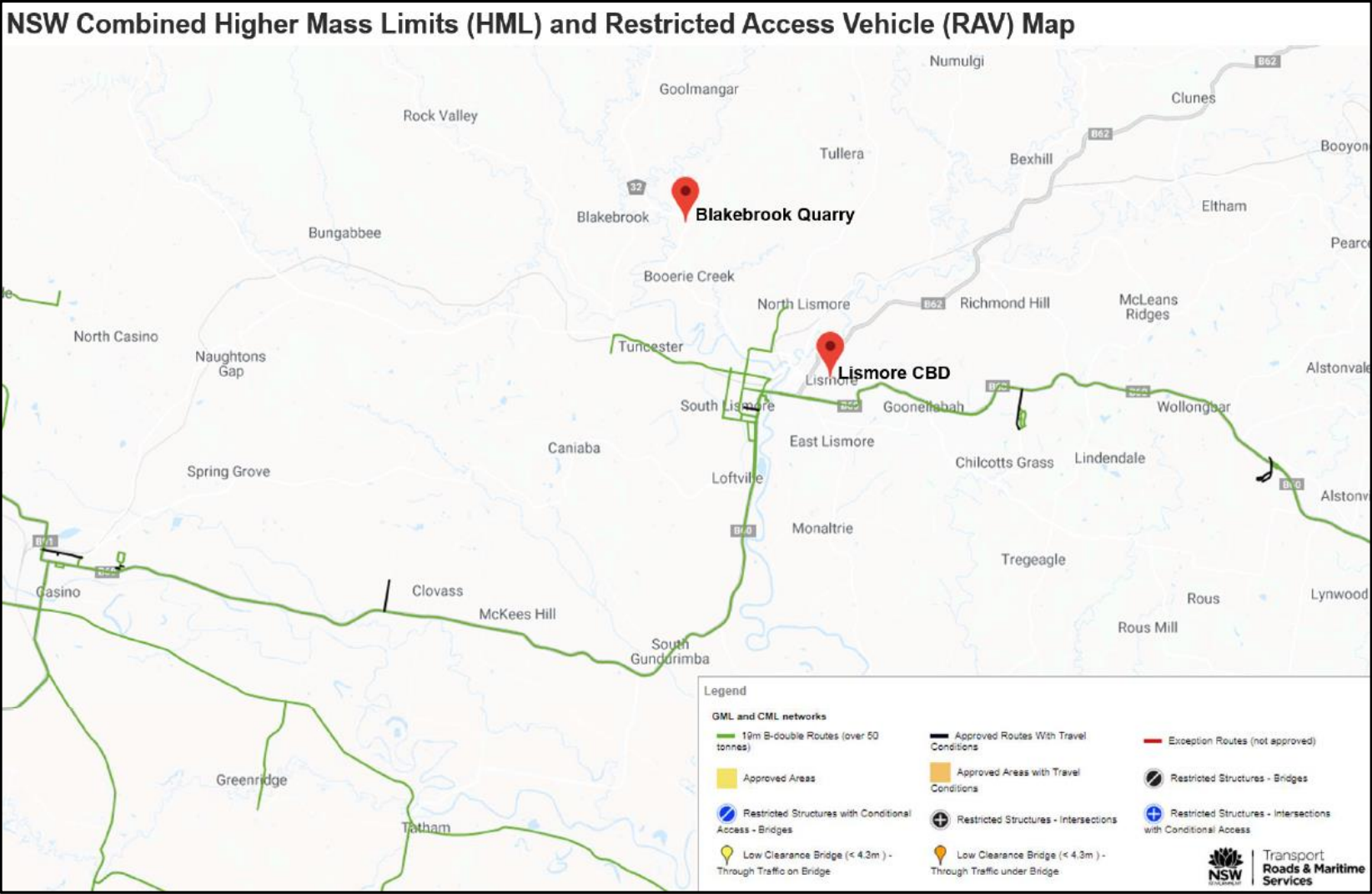
By completing this induction, you acknowledge that you understand and will abide by, the rules and conditions stated within and will always obey instructions from Quarry staff.

Inductee signature: _____ **Date:** _____

Inducted by (name): _____ **Signature:** _____

Copy of Inductee Drivers Licence attached

Operational Traffic Management Plan



APPENDIX F – TRAFFIC MANAGEMENT SITE MAP

Traffic Management Site Map

