SUPPLEMENTARY REPORT – Joint Regional Planning Panel (Northern Region)

JRPP Ref: 2014NTH009

KSC Ref: DA T6-14-122

Applicant: Townplanning Consultants and Drafting Services Pty Ltd

Proposed Development: Extractive Industry – Sand Quarry

Subject Land: Lot 323 DP855616 and Lot 1324 DP785874, Belmore River Right Bank Road, McGuire's Crossing

Date: 27 April 2016

1. Introduction

Council is in receipt of an email submission dated 26 April 2016 from Nicholas Gonsalves. The email comprises a petition with 29 names as well as a copy of a document titled *Belmore River Right Bank Road Traffic Safety Improvement Plan, To:-Kempsey Shire Council Local Traffic Committee, By:- Local Residents, November 2015, S Rowe.* The issues raised on the petition and comments regarding the abovementioned document are provided below.

Council has also had telephone conversations with the applicant (Steve Wink of Townplanning Consultants and Drafting Services Pty Ltd) and Paul Cooney (a property owner), regarding two of the draft conditions of consent Council prepared. These discussions and Council's opinion on these are also detailed within this supplementary report.

Council has also identified a condition was not included in the draft conditions of consent in error.

2. Consideration of Issues

a) Petition

The petition comprises 29 names of local residents concerned with the proposed development. Some residents provided a comment within the petition. These comments are summarised below and Council comment also provided.

Comment on Petition	Council Comment
Road needs to be upgraded to meet current and future use.	Belmore River Right Bank Road meets the Austroads Standard for a rural road. A Traffic Impact Assessment (TIA) was prepared by the applicant's consultant RoadNet. The application was referred to the Roads and Maritime Services (RMS) as well as internally to Council's Development Engineers. Neither the TIA, RMS or Council's Development Engineer identified any safety issues or road works that would prevent the proposed development being carried out (other than potentially relocating the intersection of the quarry access road and Belmore River Right Bank Road further South). This is further discussed in *Table 5.1* and *Section 6.6.2* of Council's Assessment Report.
The road is dangerous/ safety concerns/ does not meet specifications.	As above.

Road is narrow/ no shoulder on river side of road in some locations/ trucks drive on footpath.	As above.
Tourist Drive use increases traffic in the holidays.	As above.
Trucks damage the road surface.	The applicant will be required to pay developer contributions towards the maintenance of local roads (refer to *Section 6.6.3* of Council's Assessment Report).
Haul trucks servicing the existing quarry speed.	Speeding is a Police matter and Council has no powers regarding this. If approved, the draft consent conditions require the applicant to prepare a Drivers Code of Conduct (refer to *Table 5.6* in Council's Assessment Report), which is aimed to encourage truck drivers to drive safely and abide by road rules.

b) Traffic Safety Improvement Plan (November, 2015)

The residents of Belmore River Right bank Road have submitted a document titled *Belmore River Right Bank Road Traffic Safety Improvement Plan, To:-Kempsey Shire Council Local Traffic Committee, By:- Local Residents, November 2015, S Rowe.* This document was provided to Council's Infrastructure Services Department by the residents in 2015. Council's Manager Technical and Civic Services provided a response to Mr S. Rowe dated 13 April 2016 stating that works on Belmore River Right Bank Road were scheduled in Councils 10 year works program between 2020 and 2024.

Council's Infrastructure Services Department determines the timing and need for road works and upgrades within the LGA. As stated in Section 2a) above, neither Council's Development Engineer, the RMS or the TIA prepared by RoadNet identified any safety issues or required road works (other than potentially relocating the intersection of the quarry access road and Belmore River Right Bank Road further South).

c) Draft Consent Conditions C2 and C3 – Consolidation of Lots

Council has included draft consent conditions requiring the applicant to consolidate the two lots that the proposed quarry is located on into a single lot and then provide a survey plan to Council detailing the lot boundaries as well as the 'approximate mining area'. These conditions state:

C2. *Prior to commencement of the development, Lot 1324 DP785874 and Lot 323 DP855616 shall be consolidated into a single lot.*

C3. *A survey plan prepared by a registered surveyor identifying the lot boundaries of the consolidated lot and the extremities of the 'approximate mining area', as shown on the plan titled 'Proposed Staging Plan with Finished Contours and Existing Groundwater Levels' by Dennis Partners (25/5/15) shall be submitted to Council.*

The intent of condition C2 is to prevent one lot being sold, essentially containing half of the proposed quarry, with the remainder potentially under different ownership.

The applicant has requested this condition be reworded to avoid consolidation of the lots as this may extinguish the dwelling entitlements of each of the lots have. Council has indicated to the applicant this may be acceptable provided any new condition prevents one lot be sold prior to the completion of quarrying and rehabilitation works. Council has not received any draft amended condition from the applicant, however did advise the applicant this could be addressed at the JRPP meeting.

The aim of condition C3 is to provide Council with a detailed survey of the location of the lot boundaries and intended quarrying area, which was also requested by the OEH. If condition C2 is amended, condition C3 will also need to be amended. It would be Council's preference that a detailed survey plan still be provided.

d) Draft Consent Condition B5 – Truck Movements

Council has provided a draft consent condition limiting the number of haul truck movements to and from the site in any one day:

> *B5. Truck movements shall not exceed 12 loads (24 truck movements) in any one day. "Truck movements" includes truck and dog movements.*

One of the quarry owners has contacted Council requesting this condition be amended to a maximum of 20 trucks in and 20 trucks out of the quarry on any given day, with an average of 12 trucks in and 12 trucks out averaged over a two (2) week period.

The above consent condition was based on the information provided within the EIS and accompanying Traffic Impact Assessment (RoadNet, 2013) and Noise Impact Assessment (ERM, 2010) which both assumed a 'worst case scenario' of 12 truck trips per day.

- Noise Impacts

An updated noise report {*Technical (Acoustics) Report, ERM, 2015*} was submitted to Council as part of the applicant's response to Council's information request (dated 26 May 2015). This report did not mention road traffic noise, and therefore it is assumed the results and modelling undertaken in the original noise report, in regards to road traffic noise, remain unchanged.

However, Council is in receipt of further information regarding road traffic noise which was submitted in relation to another DA (T6-06-85 Rev 02). This is a modification application for an increase in the extraction limit for the existing sand quarry, under similar ownership, to the south of the site. This information was also provided by ERM (February 2016) and states that an increase in trucks to up to 24 trips into the quarry and 24 trips from the quarry per day (total of 48 truck movements) would not exceed the 'NSW Road Noise Policy' (2011). The haul route from this quarry is almost exactly the same as the proposed new sand quarry, with the only exception being the far eastern end of the haul route for the proposed quarry, which extends further north to the site. A copy of the information provided by ERM (2016) is provided in regards to DA T6-06-85 (Rev 02) is provided in *Appendix A* of this supplementary report.

Council considers that the above results regarding road traffic noise would most likely be the same in regards to the proposed new quarry for an increase in truck trips to a maximum 20 per day from the quarry however, confirmation in regards to this DA (T6-14-122) should be sought from the noise consultant to confirm this.

- Traffic Impacts

In Section 4 – Conclusion of the Traffic Impact Assessment point 4 states:

> *The hourly generation is calculated to be approximately five to six (laden) trips a day depending on truck size or 10 to 12 truck movements as a worst case scenario.*

As a result Council assumes the results and recommendation in the TIA are based on a maximum of 12 laden trucks leaving the quarry (24 total truck movements). No additional information has been submitted to Council outlining the potential road and traffic impacts of a maximum of 20 truckloads in and 20 truckloads leaving the proposed quarry (40 truck movements in total). The proposed increase from a maximum of 12 laden trucks leaving the quarry to 20 laden trucks leaving the quarry is a 60%.

Therefore it is considered that the impacts of the proposed change to a maximum of 20 laden trucks leaving the quarry on any given day have not been assessed, and Council is unable to determine if this will result in significant impacts to the local road and traffic network. Recommendations provided by RMS and Council's Development Engineer are also based on a maximum of 12 laden trucks leaving the quarry per day.

If the applicant intended that up to 20 laden trucks would leave the quarry on any given day this should have been clearly stated in the EIS and supporting documents.

Given the level of community concern regarding this issue, Council considers any increase in truck movements from what is proposed in the EIS and TIA should be properly assessed in an additional (or addendum) TIA.

e) Additional Draft Condition of Consent

Council has realised an error was made and a draft consent condition requiring the upgrade of the quarry access road/ Belmore River Right Bank Road intersection in accordance with the plan titled *Proposed Access Plan, Project no. 0749-DP (04), Sheet 02* prepared by Dennis Partners (21/05/2015) was not included. Council requests the following condition be inserted as Consent Condition C15:

> *C15 The intersection of the quarry access road and Belmore River Right Bank Road shall be upgraded as shown on the plan titled 'Proposed Access Plan, Project no. 0749-DP (04), Sheet 02' prepared by Dennis Partners (21/05/2015).*

Appendix A

Technical (Acoustics) Report (ERM, 2016) for DA T6-06-85 (Rev 02)

ENVIRONMENTAL RESOURCES MANAGEMENT AUSTRALIA PTY LTD

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ERM

Technical (Acoustics) Report

Project Number:	0296155	**Date:**	17 February 2016
Project Name:	Belmore River Road Sand Quarry Noise Impact Assessment	**Subject:**	Modification – Belmore River Quarry
From:	Andrew Morris	**Reference:**	0296155_Technical Report_Belmore Sands_modification.docx
Copied To:	Murray Curtis	**Client:**	Crescent Heads Sands

1. INTRODUCTION

Crescent Head Sands Pty Ltd proposes to modify the existing sand quarry located at 153 Tea Tree Lane, Belmore River, New South Wales (NSW). Townplanning Consultants and Drafting Services Pty Ltd (Townplanning) have prepared and submitted the proposed modification of T6-06-85 (T4-97-78), Extractive Industry on Lot 5 DP1018286 (Lot1321 DP785874) to Kempsey Shire Council (KSC)

Environmental Resources Management Australia Pty Ltd (ERM) was engaged to respond to KSC letter addressed to John Phillips dated 4 February 2016. The letter from KSC was in reference to the proposed modification of the quarry submitted by Townplanning T6-06-85 (T4-97-78). KSC required confirmation that the results presented in ERMs report titled *Noise Impact Assessment, Belmore River Road via Gladstone Village, Kempsey Shire* for *Grandia Investments Pty Ltd* (September 2010) are applicable to the proposed modification.

ERM revised the 2010 operational noise model in 2015 following the availability of new data within report titled *Technical (Acoustics) Report (May 2015) for Crescent Head Sands Pty Ltd*. This report was provided to KSC who had requested Townplanning provide clarification of ERMs 2010 noise report. KSC had concerns regarding the intended construction of a 3m noise barrier. The revised modelling re-evaluated the position of quarry plant, noise sources and operational layout in relation to the quarry footprint using detailed elevation data. Following the remodelling of the proposed quarry it was identified that the 3m barrier (stockpile mound) was not required.

Both the 2010 and 2015 ERM acoustic assessments were based an average annual extraction up to 20,000 cubic metres.

2. PROPOSED MODIFICATION

The current proposed modification to the existing sand quarry is to temporarily increase the extraction from 20,000 cubic metres per annum to 40,000 cubic metres per annum for a period of two years. It is understood that the quarry will have no changes to machinery (processing plant). With no increase in operational plant the increase in extraction limit will require the on-site operations to work for a longer duration within the approved working hours of the quarry.

3. OPERATIONAL NOISE

ERMs 2015 operational noise model adopted, in accordance with the Industrial Noise Policy (INP) 2000, an intrusive noise criterion $L_{Aeq(15\ minute)}$ of 35dBA (rating background level plus 5). The ERM noise model calculated the received noise levels within any 15-minute period of production at the quarry (worst case with all plant operational) for assessed nearest sensitive receivers along Belmore River (right bank) Road which are approximately 2km from the proposed quarry.

The results of the ERM 2015 noise model for the proposed quarry expansion predicted noise levels at the nearest receiver of $L_{Aeq(15\ minute)}$ 30 to 32dB(A), that is 3-5dB below the adopted INP intrusive noise criteria criterion.

The existing quarry is also measured at approximately 2km from the nearest sensitive receivers and is situated in similar topography. Therefore it is anticipated that the resultant noise levels received at the nearest sensitive receivers would not significantly change from those predicted in the ERM 2015 report as a result of on-site operational noise. Hence the use of the same machinery at the existing quarry are predicted to result in received noise levels below the adopted noise criterion of $L_{Aeq(15\ minute)}$ of 35dBA.

4. ROAD TRAFFIC NOISE

The Development Consent for the existing quarry stipulates that the transportation of materials by road is not to exceed a $L_{Aeq(24hour)}$ of 50 dB(A). The current NSW Road Noise Policy (RNP) (2011) provides a criterion for local roads during the day period as $L_{Aeq(1hour)}$ of 55 dB(A). The RNP is considered the more conservative of the two criteria given the Development Consent criterion is averaged over 24 hours and the approved daytime only operating hours of the quarry.

It is anticipated that any increase in truck movements as a result of increased quarry extraction from the existing quarry will meet both the Development Consent conditions and the RNP criterion. Road Traffic Noise (RTN) results were calculated using the US Environment Protection Agency's method for prediction the L_{Aeq} noise levels from heavy vehicle movements.

The ERM 2010 report for the existing quarry approval predicted noise levels from quarry related traffic using a worst-case scenario of 12 truck loads per hour (12 to and 12 from the site). The resultant noise levels were calculated to have a $L_{Aeq(1hour)}$ of 49.5 dB(A). Using the same inputs into the calculation as the ERM 2010 calculations and doubling the number of truck loads per hour to 24 loads resulted in a $L_{Aeq(1hour)}$ of 52.4 dB(A), which is below the adopted RNP criterion.

5. DISCUSSION

ERM completed a review of the 2010 noise model for the existing quarry and the revised noise model completed in 2015 for the proposed quarry expansion. The current assessment is based on the existing quarry utilising no additional plant to process the extracted material within the currently approved daytime hours and the distance to the sensitive receivers is of a similar distance to the proposed expanded quarry as assessed in 2015. Therefore it is determined that the operation of the existing quarry with an increase in quarry extraction limit from 20,000 cubic metres per annum to 40,000 cubic metres per annum is not predicted to generate noise levels that exceed the adopted noise criterion at the nearest sensitive receivers.

The traffic noise impact assessment for the existing quarry (ERM 2010) was based on a peak of 12 truck loads of quarry product transported per hour. The traffic noise assessment for this report assumed a doubling of peak truck loads to 24 per hour. The results indicate that Road Traffic Noise from quarry product transportation is not predicted to exceed the RNP criteria of $L_{Aeq(1\ hour)}$ of 55 dB(A) and the Development Consent condition of $L_{Aeq(24hour)}$ of 50 dB(A).

It should be noted that the number of truck movements per hour will be limited by the existing quarry plant's ability to load the won material. As such it is not expected that the number of truck movements would result in traffic noise exceedance of the RNP or the Development Consent criteria. It is considered daytime operating hours of the quarry is the most appropriate measure to minimise impacts of transportation noise to the community.

As recommended within the previous noise report, consideration should be given to the completion of compliance noise monitoring within the first three months of the increase in extraction at the existing quarry. The

compliance monitoring is recommended to occur during peak periods of truck movements to and from the quarry.

6. CONTACTS

ERM trust this information meets Crescent Head Sands Pty Ltd requirements. Any questions or queries regarding the data presented in this document please do not hesitate to contact Andrew Morris on +61 434 181 414 or 02 4903 5500 or via email at andrew.morris@erm.com.

for Environmental Resources Management Australia Pty Ltd

Andrew Morris
Project Manager

Murray Curtis
Partner

ACID SULFATE SOIL
POCAS – METHOD 21 (VERSION 2.1, Nov. 1996)
ASSMACTC APPROVED 29.8.97

Client Name: MR SANDS	Client Number: K-2208
Location: QUARRY	Report Number: CH-2158
Sampled By: CLIENT	Date: 25/06/2013
Tested By: H WELLS	Date: 22/08/2013

Description of the proposed works:

Sample Number	Sample Depth (mm)	Texture	Colour	Mottle Colour	Stones or Shells	Watertable Depth (mm)	pH_F (1)	pH_{Fox} (2)	Peroxide Reaction (3)
1	NK	SAND	WHITE	*	NIL	NK	4.71	4.30	1
*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*	*	*

Comments:

NOTES:
1) pH_f = In-situ pH on saturated soil sample (Calibrated electrode)
2) pH_{fox} = In-situ pH with 30% peroxide reaction. (Calibrated electrode)
3) Peroxide ratings is as follows: 0 - No reaction after 5 minutes
1 - Slight reaction within 5 minutes
2 - Medium reaction within 5 mins
3 - Strongly effervescent within 5 mins

Hackett Laboratory Services Pty Ltd: