Kyogle Council SUPPLEMENTARY

Development Assessment Report



Proposed Major Project

JRPP No:	2011NTH004
Application	
Number:	DA 2011-34
Proposed	Establishment and Operation of an Extractive Industry in stages
Development:	with maximum extraction of 47,000m ³ per annum
Applicants	
Name:	RJ and K Graham
Report	John Hession, Director Planning and Environmental Services,
Author:	Kyogle Council

18 May 2012

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1 Summary/Purpose

The aim of this report is to provide a sound and unbiased planning assessment of a development application for an Integrated Development, Designated Development and Major Project which has been lodged with Kyogle Council for submission to and determination by the Northern Region Joint Regional Planning Panel. This report has been prepared following a request by the Joint Regional Planning Panel on 1 November, 2011 for Council to provide a supplementary report in accordance with the issues as summarised in the correspondence of that date and is to be utilised in addition to the previous Development Assessment Report provided in July 2011. Note that it is to be read in conjunction with the Assessment Report previously prepared by the author and dated 20 July, 2011.

2 Background Information

On 5 October, 2010 a development application for a Designated Development /Integrated Development for the Establishment and Operation of an Extractive Industry was lodged with Kyogle Council. Details of the development application are outlined as follows:-

Application Number:	DA 2011-34
Proposed Development:	Establishment and Operation of an Extractive Industry in stages with maximum extraction of 47,000m ³ per annum
Owners Name:	PA and RD Carlill
Applicants Name:	RJ and K Graham
Lodgment Date:	October 5, 2010
Statutory Days:	60 days
Subject Land:	Lot 12 DP582916 and Lot 1 DP366036
Property Address:	904 Edenville Road, Cedar Point
Zone:	Non Urban 1A
Locality:	Cedar Point
Zoning Requirements:	Permissible with Consent
Report Author:	John Hession, Director Planning and Environmental Services, Kyogle Council

Upon lodgement of the development application, all Councillors were notified and an invitation was forwarded by the applicant and land owners to the elected representatives to inspect the site and discuss the proposal. This inspection was undertaken on 22 November, 2010.

That Council request the Joint Regional Planning Panel give opportunity for the owners to be in attendance at any site inspection if that is in keeping with the Joint Regional Planning Panel Code of Conduct and standard procedures.

Following the public exhibition periods, review of submissions, preparation of an Assessment Report, review of the Assessment Report including a Peer Review of the Assessment Report by Umwelt, appointed by the Joint Regional Planning Panel, a number of issues were raised which were verified by the Panel at a Meeting held on 20 September, 2011 following which Kyogle Council and the applicant were requested to further address the outstanding matters in the form of a Supplementary Report. Initially the Supplementary Report was to be finalised by 17 February, 2012. However two further extensions were requested by the applicant and Council due to the timeframe in which the various Consultants were undertaking the preparation of their specialist reports, with the final extension granted until 30 April, 2012 with the Supplementary Report to be submitted to the Joint Regional Planning Panel by 18 May, 2012. This deadline has been met with the completion and submission of this Supplementary Report.

3 Issues Raised in the Umwelt Peer Review

3.1 Zoning of the subject site

As outlined in the Peer Review the development assessment report had incorrectly stated the zone of the subject site as follows, (Refer Section 4.1.1 of the July 2011 Development Assessment Report).

"Interim Development Order No. 1-Shire of Kyogle ("IDO")

The site is currently zoned "2(v) Village" under the IDO. Pursuant to Clause 3(b) of the IDO the proposed development is permissible subject to development consent".

Response

Note that this inclusion was an oversight and the correct zoning of the subject land is as per the zone outlined in Section 2 - Background Information, of the development assessment report, being Non Urban 1A.

3.2 **Proposed development details**

Confirmation of proposed development details, including the total resource to be extracted, production rate, quarry design and staging, in light of the assessment to date and outcomes of further assessment outlined below.

Response

The applicant has confirmed that the proposed development is for an extraction rate of 47,000 cubic metres per annum over the 43 year life of the extraction, equating to 2.021 million cubic metres of material to be extracted. Calculations have also been determined on the lower rate of 23,500 m3 per year as per the Development Assessment Report by Kyogle Council.

3.3 Noise Assessment

Further noise assessment, by a qualified noise specialist, in accordance with relevant guidelines, to provide adequate certainty in relation to the predicted effects on private residences, confidence in relation to the likely success of proposed noise attenuation and mitigation measures and a sound basis for compliance monitoring if the proposed development is approved.

Response

The landowner, in correspondence dated 6 October, 2011 to the Chairman, Northern Joint Regional Planning Panel submitted the following.

The background noise levels are relatively high in the subject location due to the proximity to the Summerland Way, the junction of the eastern road to Lismore and the coast and the Sydney – Brisbane railway line.

In addition a Consultant, Advitech Environmental was appointed to prepare and submit a Background Noise Assessment Report which resulted in similar background noise levels being recorded as were provided in the original Noise Impact Assessment.

Additional background noise testing was undertaken at the closest dwellings. The results were similar to those previously recorded in the original Noise Impact Assessment. The difference, up to 4db higher, was stated as not being unexpected due to the locations at which recordings were undertaken being slightly different.

Based on the more conservative background noise levels to determine the design goals for the management of the quarry, a new plan was prepared showing the area of the plateau where drilling and machine work can occur on the surface of the plateau, with the installation of noise bunds and still be within the more conservative Advitech P/L design goals (Refer Potential Initial Cut Area plan).

Comment

Whilst the intent of the new plan which outlines the proposed drilling / machining area and installation of noise bunds is supported, due to the variations of distances to sensitive receptors outlined in the report and the likelihood of noise impacts being greater due to lesser distances being established, it will be recommended that no blasting is to be undertaken at a distance closer than 500 metres to a sensitive receptor and that all other activities meet the recommended limits of 40dB(A) for operational noise and a maximum of 45dB(A) at neighbouring dwellings or 60dB(A) for the LAeq 1 hr for road traffic noise.

3.4 Air Quality Assessment

Additional air quality assessment, including predictive modelling by an appropriately qualified air quality specialist, in accordance with relevant guidelines.

Response

A Consultant, ERM was appointed to undertake the additional air quality assessment. The Consultant stated that as the NSW Environmental Protection Authority does not monitor particulate matter in this location or the surrounding area, it has utilised recordings in the Tamworth area, which would generally appear to be higher than that experienced at Cedar Point. The Consultant indicates concentration contours showing that the highest impacts are centered around the site, decreasing rapidly beyond the 500m mark. This is of concern due to two sensitive receptors being located closer than 500 metres to the proposed activity.

Comment

Due to the potential impacts of dust emissions on at least two sensitive receptors, this reinforces the need to ensure that no blasting occurs at a distance of less than 500 metres from a sensitive receptor or other activities which will result in particulate matter of less than 10 micron recording of greater than 45 ug/m3 being experienced at any sensitive receptor. Note that the 10% reduction on the maximum allowable level is recommended in order to provide greater certainty and a more conservative approach.

3.5 Blast Design

Provision of further detail in relation to the assessment conducted in relation to the proposed blast design and confirmation of the quarry and blast design that ensures the relevant criteria can be met at each of the nearest surrounding private residences. Confirmation of the proposed approach to avoiding safety hazard from blast flyrock.

Response

The landowner, in correspondence dated 6 October, 2011 to the Chairman, Northern Joint Regional Planning Panel submitted the following.

- Once the quarry pit is established and deepens, blasting and noise emissions will diminish.
- I was present at the trial blast undertaken on 18 June, 1996 when 2000 tonnes of solid basalt rock was dislodged wherein no flyrock was experienced.

In addition the Consultant, Greg Alderson prepared and submitted a Blast Impact Assessment dated April 2012 which concluded:-

Blasting is proposed to be undertaken at the site up to four times per year in order to win the hard basalt rock, which would then be crushed on-site at other times.

Blasting has the potential to impact the surrounding environment through producing flyrock and environmental effects of blasting being ground vibration and airblast. AS 2187.2-2006 recognises that ground vibration and air blast has the potential to:

Cause human discomfort;

Cause damage to structures, architectural elements and services;

Airblast is normally the cause of more complaints than ground vibration

3.1 Ground Vibration and Airblast Overpressure Limit Criteria

The blasting criteria is set in accordance with AS 2187.2 -2006 Section J. Blasting is required to win the raw material and the blasting times will be restricted to the hours between 10am to 3pm, Monday to Friday.

Table 1: Blasting Criteria Time of Blasting	Blast Overpressure (dBL)	Peak Component Particle
		Velocity (mm/s)
Monday - Saturday	115	5
9am to 3 pm		

Blasting is permitted to exceed the limits as shown in Table 1 for 5% of blasts per year, with an upper limit to be 120dBL for blast over pressure and 10 mm/s for peak component particle velocity. However, blasts will be limited to an average of 4 blasts per year for the life of the quarry, hence at no times can the blast exceed the criteria as presented in **Table 1**.

In addition, the Consultant has recommended cover in the form of mats and overburden is to be placed over the area in which blasting is to occur in order to reduce impacts, including flyrock.

Comment

The proposed new initiatives for blasting and flyrock management are supported. However, due to the calculated estimates of velocity of Peak Component Particle being close to the upper limit allowable and similarly the blast overpressures predicted at 113 and 114 dBL, it will be recommended that no blasting is to be undertaken at a distance closer than 500 metres to a sensitive receptor.

3.6 Upgrade and Replacement of Edenville Road (Cedar Point) Bridge

Resolution of the trigger for, and funding of, the upgrade or replacement of Edenville Road Bridge. Further traffic assessment in relation to Council's proposed reduction in production until such time the bridge is upgraded or replaced, and confirmation of the road upgrades that are required at such a reduced level of traffic, if this approach is adopted. Clarification of heavy vehicle haulage contributions.

Response

Consultant Greg Alderson and Associates has prepared and submitted a response addressing the "trigger" for the upgrading or replacement of the Cedar Point bridge. The response outlines:

Assuming a conservative speed for a haulage truck over the bridge of 20 kph, then 120 vehicles per hour could Arrive at the bridge with an acceptable delay time. Given the background traffic volume of 30 vph and proposed volume of traffic of 12 vph as a result of the quarry, these figures are well below the conservative design figure of 120 vph.

In order to arrive at a suitable trigger for the point at which the bridge should be upgraded, then this should be 120 vph. That is, the traffic volume when the bridge should be widened to two lanes.

The percentage impact on the bridge as a result of the quarry is 10%. It is therefore reasonable to require a 10% contribution by the quarry towards widening the bridge, paid over a 51.28 year period.

There is no need for a trigger with respect to the lifting of the load limit on the Cedar Point Bridge. A fundamental principle of the development application has been the proposal to use small trucks, with quarry product loads such that the truck does not exceed the load limit of the bridge.

Comment

The response is considered to be simplistic in that it does not address the condition, lifespan or structural integrity of the Cedar Point Bridge, which will be integral aspects for ongoing monitoring to ensure the safety of all users and to plan for the upgrading of the bridge at the most appropriate time.

The Umwelt report identified three areas for further consideration. The applicant has responded as shown above, and the following comments are provided against each of the areas;

Resolution of the trigger for, and funding of, the upgrade or replacement of Edenville Road Bridge.

It is important to note that there is no developer contributions plan which meets the requirements of S94 of the EP&A Act, and as such charges cannot be levied under this act, without the correct process being completed for the preparation of a relevant plan. It is agreed that it would be ideal to already have had a contributions plan in place that resolves the trigger for, and funding of, the upgrade or replacement of the Cedar Point Bridge. However, the plan does not exist, so other control measures must be implemented.

Council proposes a condition that allows the development application to be assessed and approved on its own merits, and not unnecessarily restrict the assessment process by attempting to impose a contribution amount that has not been determined in accordance with Section 94 of the EP&A Act.

It is important to note that the development application proposes that the haulage vehicles be limited to 20t gross weight. The Cedar Point Bridge is capable of handling such loads without risk of failure. The weight limit is imposed because the structure was assessed against current design guidelines and found to be prone to buckling. There are no structural defects, damage, or other issues with the existing bridge. The weight limit is imposed due to restrictions in its original design, and appropriate factors of safety have been used to determine the imposed weight limit. As such, there is no limit to the frequency to which the bridge can take the nominated 20t load limit.

However, there are concerns with the frequency of truck movements, in particular, the possibility of queues forming on the eastern side of the single lane bridge that could put passing traffic on the Summerland Way at risk.

What is proposed by way of the conditions drafted is to allow the development to proceed at a reduced intensity, which the developer has no objection to, until such time as the bridge is upgraded or replaced. This will allow the development to

commence while Council prepares and finalises a contributions plan for the replacement of the bridge, if it chooses to do so. The draft conditions will allow for a planning agreement to be prepared at a later date between the quarry proponent and Council to fund the replacement of the bridge. The applicant may also elect to replace the structure completely at their own cost if Council is not willing to fund the replacement either at all, or in say the next 20 years.

The use of Section 5.1 of the Austroads Guide to Traffic Management to assess the queue lengths provided in the applicants response, is less than ideal for the case at hand. This section of the guide relates to the assessment of metered flow, which occurs on interrupted flow facilities when vehicles arriving at a given point on the road are required to pass through it in accordance with certain rules. Typical examples of metered flow are at toll booths, at various drive-in facilities (such as bottle shops, bank teller points, take-away food outlets and parking stations), at points where a reduction in the number of traffic lanes requires traffic to merge, and at freeway entrance ramps where a traffic control signal may be used to restrict the volume of traffic entering the freeway. It is not intended to be used in cases where there is traffic flowing in both directions around the metering point. The theoretic assessment applied using these principles is therefore not reliable in the case of a one lane bridge, where traffic flow in the opposite direction is an additional variable that can significantly alter the outcome. Having said this, there is no reliable modelling readily available for this situation. The approach taken by Council initially was a precautionary one, as it was not improbable that a situation would arise where the queue length on the bridge approach could cause a stationary vehicle to be within the carriageway of the Summerland Way in a location where a northbound vehicle on the Summerland Way would not have the sight distance to avoid either rear end collision, or going onto the wrong side of the road to avoid a rear end collision.

The reason that the extraction rates could be expanded if either the bridge was upgraded to two lanes (in which case the current design requirements would also mean that no load limits would apply), or the bridge was upgraded to remove the load limit, is that the two lanes remove the restriction to traffic flow, and the removal of the load limit would mean the use of larger trucks resulting in less movements per hour (by a factor of 3), reducing the risk of long queues developing.

Further traffic assessment in relation to Council's proposed reduction in production until such time the bridge is upgraded or replaced, and confirmation of the road upgrades that are required at such a reduced level of traffic, if this approach is adopted.

The current standard of the proposed haulage road does not meet Councils minimum requirement for a two lane road (i.e. 6m seal, 8m pavement) and passing of heavy vehicles and school buses and other vehicles would present a significant risk in its present state. As such, it is proposed to require the upgrade of the haulage route back to the Summerland Way to provide the minimum required width. This minimum standard would need to be met regardless of whether the extraction rate was 47,000m³ or 23,500m³.

The upgrade of the intersection of the Summerland Way and Edenville Road was specified by the Roads and Traffic Authority, now the Roads and Maritime Services. The requirement for the CHR(S) channelized right turn treatment and the AUL

auxiliary left turn treatment results from an assessment of the hourly through traffic and turning traffic. Based on Austroads Guide to Road Design Part 4A, Figure 4.9 for speeds at or exceeding 100km per hour, regardless of whether the turning traffic volume is 6vph or up to 28vph, these turning treatments will still be required. It is also worth noting that the existing turning traffic volume of 15vpd in each direction (assuming a 50/50 split) warrants the same level of intersection treatment. The BAL basic left turn treatment is required to allow for the swept path of the proposed haulage vehicle without the vehicle passing onto the wrong side of the road. Similarly for the proposed upgrade of the intersection of Omagh Road and Edenville Road to provide a simple left turn treatment. As such, these treatments are warranted for any increase in traffic volumes along Edenville Road and should not be reduced regardless of the approved extraction rate.

Clarification of heavy vehicle haulage contributions.

Documents reviewed by Umwelt during the preparation of their report lists the Section 94 Contributions Plan Urban and Rural Roads (2001 amended 2008) but does not list the Section 94 Contributions Plan 2008 Residential, Rural Residential and Heavy Haulage Development which is used to calculate Heavy Haulage Contributions.

The authors of the Umwelt report claim to have calculated a higher heavy haulage contribution than Council, but do not provide the basis for this calculation. The heavy haulage contributions calculated by Council in accordance with the 94 Contributions Plan 2008 Residential, Rural Residential and Heavy Haulage Development were as follows;

Peak Annual Extraction Rate	= 47,000m3 / year x density factor of 2.22
	= 104,340t/year
Distance to Main Road	= 0.957km
Cost per year	= 104,340 t/y x 0.957km x \$0.048/t/y
	= \$4,792/y

3.7 Offsite Water Discharge

Further assessment of the need for, and nature of, any proposed off site water discharge, including further clarity on location, volume, impacts and proposed controls for such discharge.

Response

The landowner, in correspondence dated 6 October, 2011 to the Chairman, Northern Joint Regional Planning Panel submitted the following.

Surface water runs off the plateau in times of heavy rainfall, following which the runoff finds its way to small stony gullies that fall away over the edge of the plateau and this will not change with the establishment of the quarry. The quarry will be surrounded by an earth bund and rainfall within the quarry pit will be impounded for quarry operations. Excess water will be pumped over the edge into one location only and then into a further sedimentation pond after which it will flow into a mostly dry gully for approximately 500 metres before entering an unnamed creek which runs

intermittently throughout the year, for another 1000 metres before eventually entering the Richmond River.

In addition, Consultant Greg Alderson and Associates prepared Stormwater Management Report dated 4 April, 2012. This report outlines the following:-

- the quarry is to be developed as a closed system due to the pit style excavation;
- A sediment pond of volume 740 m3 and a sump pond of volume 450 m3 are to installed at each work cell;
- A point of discharge to a constructed pond, outside the work area will recive stormwater through manual pumping of the settled water from the sump pond. Discharge will only be permitted when water quality is achieved in accordance with Australian and New Zealand *Guidelines for Fresh and Marine Waters Quality* (ANZECC & ARMCANZ, 2000) or as amended;
- The soil and water management plan will be constructed and implemented in accordance with Plans 09094 01/01 and 09094 04/04.

Comment

It is considered that the report represents an appropriately constructed and managed means of controlling stormwater on the site.

3.8 Aboriginal and non-Aboriginal Heritage

Further consultation with relevant Aboriginal stakeholders in accordance with OEH (2010 Aboriginal Cultural Heritage consultation requirments for applicants, and assessment of cultural significance of the site). Assessment of non-Aboriginal Heritage of the site.

Response

Heritage Consultants, Everick were appointed to prepare a Cultural Heritage Assessment and also an Historical (Non-Indigenous) Cultural Heritage report which have been submitted.

The Cultural Heritage Assessment of Indigenous outlined the following:

- undertaking of a desktop study which identified 67 recorded sites for the broader search area and 3 within close proximity to the Project Area;
- Consultation undertaken with Githabul Elders Council and Bundjalung representatives;
- Members of the Githabul Elders Council, following a request to and agreement by the landowner, camped on the site on the weekend of 24-26 February, 2012;
- The closest place of cultural significance to the Project Area is believed to be an Aboriginal contact site and mission at Stony Gully, south east of the Project Area;
- Following input from the above contacts and reviewing the evidence available, it recommended that the Project proceed, with a number of recommendations to be imposed, being:

- 1. That the proponent continue to consult with the Aboriginal stakeholders over potential impact mitigation activities and other social benefits that may result from the Project.
- 2. The culturally scarred trees be protected by means of the following management strategies:
 - a permanent fence to be constructed around the trees to prevent inadvertent damage during the course of the activities.
 - Staff and Contractors of the Proponent to be instructed as to the cultural significance of the trees and advised of the offence provisions detailed in Section 86 of the NPW Act.
- 3. That staff and contractors be inducted prior to commencement of works, including:
 - an introduction to Aboriginal culture and tradition, including why
 - evidence of Aboriginal occupation is important to Aboriginal people.
 - a summary of the requirements under New South Wales cultural heritage legislation.
 - a brief introduction on how to identify Aboriginal Objects; and
 - a review of procedures in the event that Aboriginal cultural heritage is identified during the course of undertaking the project.
- 4. It is recommended that if human remains are located at any stage during earthworks within the Project Area, all works must halt in the immediate area to prevent any further impacts to the remains. It is also recommended that in all dealings with Aboriginal human remains, the Proponent should use respectful language, bearing in mind that they are the remains of Aboriginal people rather than scientific specimens.
- 5. It is recommended that if it is suspected that Aboriginal material has been uncovered as a result of development activities within the Project Area:
 - work in the surrounding area is to stop immediately.
 - A temporary fence is to be erected around the site, with a buffer zone of at least 10 metres around the known edge of the site.
 - an appropriately qualified archeological consultant is to be engagegd to identify the material.

- If the material is found to be of Aboriginal origin, the Aboriginal community is to be consulted in a manner as outlined in the OEH guidelines: Aboriginal Cultural Heritage Consultation Requirements for Proponents (2010).

- 6. It is recommended that if Aboriginal cultural materials are uncovered as a result of development activities within the Project Area, they are to registered as Sites in the Aboriginal Heritage Information Management System ('AHIMS') managed by the OEH. Any management outcomes for the site will be included in the information provided to the AHIMS.
- 7. It is recommended that all effort must be taken to avoid any impacts on Aboriginal Cultural Heritage values at all stages during the development works. If impacts are unavoidable, mitigation measures should be negotiated between the Proponent, OEH and the Aboriginal Community.

Non Indigenous Heritage

After undertaking two phases of Historical Assessment for the Project lands, Everick Heritage concluded that they do not contain any items, objects or places of Historical Cultural Heritage Significance.

Comment

Condition 16 of the proposed consent is to be amended to include the above recommendations. There are no identified non-Aboriginal Heritage issues which have been identified either in the application, in the comprehensive Heritage Assessment undertaken as part of the preparation of the Draft Kyogle Local Environmental Plan or similarly in the gazetted LEP No. 18 for the whole of the Kyogle Local Government Area.

3.9 Ecological Assessment

Clarification of the detail of ecology survey methodology, further assessment of potential koala habitat and completion of 'tests of significance' in accordance with Section 5A of the Environmental Planning and Assessment Act. Review of the biodiversity offset package and confirmation that it meets the relevant OEH principles for ecological offsets.

Response

The landowner, in correspondence dated 6 October, 2011 to the Chairman, Northern Joint Regional Planning Panel submitted the following.

It was due to my many years of knowledge and observation on the site which was passed on to the Consultants investigating and preparing an analysis of species which enabled the extent of species to be identified in the Environmental Impact Statement.

In addition, a Consultant, Australian Wetlands Consulting Pty. Ltd. Prepared and submitted an Ecological Report in response to the peer review, concluding:-

Survey Methodology

The random meander method used in the original Ecology report prepared by Landpartners Limited, although it did not complete quadrat surveys as recommended in the DEC Threatened Biodiversity Survey and Assessment Guidelines (2004), is still considered appropriate for the site given the significant disturbance and modification to native vegetation which has been historically cleared and underscrubbed and with these disturbances ongoing.

SEPP 44 Assessment

Searches for koala scats did not record any signs of koalas at the site based on random scat searches of various koala feed trees inclusive of planted swamp mahogany and Tallowwood. A recent search of the NSW Atlas of Wildlife still indicates only one documented koala record within 5 km of the site. The landowner did not report any koala records when discussing other threatened species at the site during the on-site assessment.

Further the site does not occur within any well-connected corridor of sclerophyll forest due to significant historical land clearing and fragmentation which has reduced sclerophyll tree cover.

In combination, these matters suggest there are not historical records of a population at the site. Therefore core koala habitat does not occur at the site and no further assessment under the Policy and under the guidelines of Circular B35, no further assessment under the Policy is required.

Assessment of Significance under Section 5A of the EP&A Act

These were completed for four Endangered Ecological Communities and 11 threatened fauna species recorded at the site or considered as potentially occurring in the Landpartners Limited Report (refer to Appendix A). The Assessment concluded that the proposal was not likely to result in a significant impact on threatened species, communities or their habitats and hence a Species Impact Statement is not required.

Ecological Offsets

Umwelts review considered that the proposed ecological restoration works would not meet 'improve or maintain' principles for rehabilitation works and that the restoration works would not allow for consideration of the structure, function and composition of the affected ecological community. The Consultant considered this to be a spurious point due to the structure and composition of the affected community within the quarry footprint being significantly degraded by farming practices and replicating this community is not desirable.

Replacement of the vegetation within the proposed footprint can be achieved by appropriate species selection and inclusion of a variety of tree and shrub species (inclusive of koala feed tree species), with planting density able to achieve structural complexity.

Comment

It is considered that the Ecological Report prepared by Australian Wetlands Consulting P/L has comprehensively addressed the aspects alleged by Umwelt to be outstanding and that the previously drafted conditions 2 and 13 of the proposed consent will achieve the most suitable outcome for the future regrowth and renewal/protection of habitat on the site.

3.10 Project Justification

Further project justification in terms of existing and future demand and supply for quarry products.

Response

The landowner, in correspondence dated 6 October, 2011 to the Chairman, Northern Joint Regional Planning Panel submitted the following.

Whilst there are other major quarries within the Region, the proposed Cedar Point quarry is the only one able to provide high quality aggregate that is suitable for concrete production and for surfacing bitumen roads. Currently this product is not available within the Kyogle Council area and is sourced outside the area at considerable expense. Graham's Concrete is an expanding business that will require additional basalt product with increasing demand coming from new road and highway construction and road maintenance and the increasing construction and building industries

In addition the applicant and Consultant Greg Alderson and Associates addressed this matter outlining the following:-

The primary reason for the establishment of the quarry is to provide high quality aggregate for Graham's Concrete for concrete products manufactured at Kyogle. Currently the suitable aggregate product is being imported from outside the Local Government Area such as from Blakebrook in Lismore or within Richmond Valley and Ballina Local Government Areas.

The Far North Coast Regional Strategy identifies the resource at the proposed location as being Regionally Significant. There will be employment opportunities as a result of the conduct of the quarry in addition to other employment opportunities in transporting and utilising the resource.

There is an increase in productivity at Graham's Concrete due to the demand for

- precast concrete grids;
- headwalls to RTA specifications;
- cattle troughs;
- accredited septic tanks;
- subsurface flow wetlands for wastewater management.

The product will primarily be used in the local area by the concrete plant. As there is a direct nexus of product to the market the cost of the product can be determined in order to ensure that the full lifecycle of the natural resources are recovered. There will be a cost saving by the local concrete company for the product they win from the site as haulage costs will be reduced.

Comment

It is considered that the project has been suitably justified in terms of procurement of a significant resource in the local area which will provide a sustained and sustainable product and benefit to the community and the region, cost savings and reduction in traffic movements and the benefit of ongoing employment opportunities in the Kyogle and surrounding areas in addition to servicing a projected increase in the product utilised in this location.

4.0 Conclusion

The applicant, their Consultants and the landowner have collectively provided additional details and submissions which predominantly further support the development application, despite the reality of the level of difficulty which arose from the submission of a variance of distances by each of the Consultants addressing Noise, Air and Blasting, from the proposed activities to the respective receptors. As a result of the above, the calculated emissions of dust, noise and impact from blasting and seeking the expertise of the Department of Trade and Investment – Division of Resources and Energy, it has been determined that a conservative approach be imposed and that the previously drafted conditions in relation to these particular aspects be strengthened accordingly due to the need to control and reduce the margins to a level of at least 10% of that which is acceptable at the State level.

As outlined in the previous Assessment Report, it is possible that some of the properties in close proximity will be adversely impacted upon by the proposed quarry, and that the limits proposed by DECCW and Council may not be met by the proponent. If this occurs and mitigation measures cannot be put in place to comply with the limits imposed, then the only way the quarrying activities could continue would be if the affected receptors were removed.

This could be done by either purchasing the receptors and retaining them in the same ownership as the quarry land and/or quarry operator, or by relocating the affected dwelling/s. This is considered to be the only way to resolve potential impacts on these receptors should the proposed mitigation measures fail to meet the required limits. A suitable condition highlighting a requirement to nevertheless open negotiations with affected landowners, is to be included.

5.0 Final Recommendation

It is recommended that the Joint Regional Planning Panel determine in favour of the development application submitted by R. & K. Graham to establish and operate an Extractive Industry – Hard Rock Quarry on land located at 904 Edenville Road, Cedar Point, being described as Lot 12 on DP582916 and Lot 1 on DP366036, subject to conditions.

6.0 Recommended Conditions

1. The development shall be in accordance with development application number 2011/0034 submitted on October 5, 2010 and in accordance with the following:

Environmental Impact Statement dated September 2010, as prepared by Greg Alderson & Associates on behalf of R. & K. Graham.

Addendum Report dated 22 March, 2011 prepared by Greg Alderson & Associates

except where otherwise provided by the conditions of this development consent.

- 2. In the event of any inconsistency between conditions of this consent and the drawings/documents referred to above, the conditions of this consent prevail.
- 3. This development consent is limited to a period of five (5) years in accordance with Section 95(1) of the *Environmental Planning and Assessment Act 1979*. Following the expiration of this period the consent will lapse unless work relating to the development is physically commenced before the date on which the consent would otherwise lapse.
- 4. Prior to commencement of quarry operations the applicant/owners shall enter into negotiations with adjoining land owners, Mr. SW & Mrs. TA Lynch Lot 1 DP 559560 and Mr. JA & Mrs. JJ Stuart lot 11 DP582916 for the purchase of their

adjoining property, to eliminate future land use issues associated with quarry operational activities.

- 5. Prior to the quarry commencement during the later Stages, i.e. 3 or 4 the applicant/owners are to enter into negotiations with adjoining landowners Mr. BJ & WJ Canty Lot 13 Section B DP 5080 for either part purchase of the subject property or relocation of a dwelling elsewhere within that allotment in order to eliminate future land use issues associated with quarry operational activities.
- 6. Apart from developer funded works, no improvements to existing roads, access and services will be provided by Council or any other utility authority.
- 7. That the subject parcels on which the extractive industry are to be undertaken, being Lot 12 DP582916 and Lot 1 DP366036 are to be consolidated into one allotment prior to any extracted material being transported from the site.
- 8. Lot 2 DP232453 is to be retained in the same ownership as the proposed quarry site and access being Lot 12 DP 582916 and Lot 1 DP 366036 whilst the quarry is operational.
- This consent is limited to the extraction, processing and haulage of materials from the subject site. It does not include any approval to import or haul sand or concrete/waste products for blending or recycling by back loading or any other means.
- 10. Where this development consent envisages the erection of a building or buildings (including the installation of a 6 metre high barrier wall), no temporary buildings shall be placed on the site and no site excavation, filling, removal of trees or other site preparation shall be implemented prior to the issue of a Construction Certificate concerning these buildings or structures.
- 11. Extraction is to be limited to 23,500 m3 per annum until such time as a two Lane bridge without load weight restrictions is constructed to replace the existing Edenville Road (Cedar Point) Bridge or the existing bridge is upgraded such that Council determines that the load weight restrictions are no longer required.
- 12. This consent shall lapse upon:
 - a) extraction of a total of 4,000,000 cubic metres of basalt material, OR
 - b) the extraction of all material within the approved extraction area,

whichever occurs first.

- 13. All crushing and screening of extracted material is to be undertaken within a suitable location of the work area which is to have appropriate noise bunds installed prior to the commencement of these uses.
- 14. Vegetation screening must be planted and maintained to provide a dense canopy between the development (including buildings, driveways and vehicle

bays, stockpiles, plant, drill rigs and barriers) and any public place. In order to obtain the desired density, landscaping must extend from the ridgeline of the development site to at least 15 metres below the ridgeline. All plantings shall:

- (a) be derived from seed or rootstock taken from provenance within the boundaries of the development site, or the vicinity of the site;
- (b) be of a species type and distribution that replicates the vegetation communities mapped by LandPartners in the plan entitled *Vegetation Map*, Drawing Number LM100006-PL3A, 22 June 2010;
- (c) be spaced and located to maximise screening whilst mimicking natural vegetation communities; and
- (d) be functional and safe.

The plantings must be undertaken prior to the commencement of quarry operations and shall be undertaken in accordance with a plan prepared by a suitably qualified practitioner to an auditable standard and endorsed by the consent authority detailing:

- (e) the use of seed or rootstock derived from provenance taken within the boundaries of the development site, or the vicinity of the site;
- (f) species type and distribution;
- (g) specifications for soil preparation, weed control, watering, fertilising and general maintenance during establishment;
- (h) provisions to preclude the impacts of farming activities and provide for sustainable vegetation communities; and
- (i) spacings and locations to maximise environmental benefits and be functional and safe.

The plan must be complied with at all times.

- 15. Compensatory plantings of the open woodland (Swamp Box, Broad-leaved Apple, Pink Bloodwood) must be undertaken prior to the commencement of any land clearing operations. The plantings shall target the floodplain in the northeast of the site in order to capture similar ecological characteristics to the area affected by the development, and shall be subject to a detailed rehabilitation plan that addresses, but is not necessarily limited to:
 - (a) the use of seed or rootstock derived from provenance taken within the boundaries of the development site, or the vicinity of the site;
 - (b) measures to provide a 1:1 offset ratio at maturity at a minimum;
 - (c) species type and distribution to replicate the endangered ecological community "Subtropical coastal floodplain forest of the NSW North Coast bioregion;"
 - (d) specifications for soil preparation, weed control, watering, fertilising and general maintenance during establishment;
 - (e) provisions to preclude the impacts of farming activities and provide for sustainable vegetation communities; and
 - (f) spacings and locations to maximise environmental benefits and be functional and safe.

The plans/specifications must be prepared by a suitably qualified practitioner to an auditable standard and, subject to endorsement, must be complied with at all times. Land clearing must be undertaken in stages, with each stage to be limited to the minimum necessary to quarry the cell the subject of the stage. No land clearing shall be undertaken outside six (6) months of the commencement of quarry operations in a new cell.
 Note. For the purposes of this condition, each cell is as defined by the plan

entitled *Figure 8: Quarry Plan of Management*, prepared by Greg Alderson and Associates Pty Ltd for Grahams Concrete.

- 17. The quarry operator must apply for and obtain a licence under the *Protection of the Environment and Operations Act 1997* prior to the commencement of any quarrying operations. Quarrying operations are to be undertaken in accordance with the licence conditions as required by the relevant NSW Government agency.
- 18. Prior to the commencement of any works a plan of management for Aboriginal cultural heritage on the land must be prepared by a suitably qualified practitioner in conjunction with the Local Aboriginal Land Council. The plan must ensure that the conservation of the Aboriginal place of heritage significance and its setting is facilitated by the development consent and shall address matters such as offsets for development from the scar trees. The plan is subject to the approval of the consent authority and must be complied with at all times.

The following practices are also to be implemented in the conduct of the quarry:-

- a) That the proponent continue to consult with the Aboriginal stakeholders over potential impact mitigation activities and other social benefits that may result from the Project.
- b) The culturally scarred trees be protected by means of the following management strategies:
 - a permanent fence to be constructed around the trees to prevent inadvertent damage during the course of the activities.
 - Staff and Contractors of the Proponent to be instructed as to the cultural significance of the trees and advised of the offence Provisions detailed in Section 86 of the NPW Act.
- c) That staff and contractors be inducted prior to commencement of works, including:
 - an introduction to Aboriginal culture and tradition, including why evidence of Aboriginal occupation is important to Aboriginal people.
 - a summary of the requirements under New South Wales cultural heritage legislation.
 - a brief introduction on how to identify Aboriginal Objects; and
 - a review of procedures in the event that Aboriginal cultural heritage is identified during the course of undertaking the project.
- d) It is recommended that if human remains are located at any stage during earthworks within the Project Area, all works must halt in the immediate area to prevent any further impacts to the remains. It is also recommended that in all dealings with Aboriginal human remains, the Proponent should use respectful language, bearing in mind that they are the remains of Aboriginal people rather than scientific specimens.

- e) That if it is suspected that Aboriginal material has been uncovered as a result of development activities within the Project Area:
 - work in the surrounding area is to stop immediately.
 - A temporary fence is to be erected around the site, with a buffer zone of at least 10 metres around the known edge of the site.
 - an appropriately qualified archeological consultant is to be engaged to identify the material.
 - If the material is found to be of Aboriginal origin, the Aboriginal community is to be consulted in a manner as outlined in the OEH guidelines: Aboriginal Cultural Heritage Consultation Requirements for Proponents (2010).
- f) That if Aboriginal cultural materials are uncovered as a result of development activities within the Project Area, they are to registered as Sites in the Aboriginal Heritage Information Management System ('AHIMS') managed by the OEH. Any management outcomes for the site will be included in the information provided to the AHIMS.
- g) That all effort must be taken to avoid any impacts on Aboriginal Cultural Heritage values at all stages during the development works. If impacts are unavoidable, mitigation measures should be negotiated between the Proponent, OEH and the Aboriginal Community.

QUARRY PRODUCTION AND OPERATION

- 19. An Operational Plan of Management is to be prepared for the approval of Council prior to commencement of extraction works on the site. The Operational Plan of Management is to include:
 - a) projected date of an annual audit of quarry operations to be undertaken, including planting of vegetation, noise attenuation, monitoring and bunding or screening (including that surrounding the site office), details of volumetric surveys, discharges from sedimentation ponds, projected dates for blasting to be undertaken on site;
 - b) ground and surface hydrology and water quality management;
 - c) Soil and Water Management Plan;
 - d) Occupational Health and Safety and NSW Workcover matters and requirements to be implemented;
 - e) a detailed landscaping and revegetation plan (including noise mounds) to avoid any adverse impacts on the scenic amenity of the locality and vegetation regeneration on the site;
 - f) waste disposal, including that of disused plant and equipment from the site;
 - g) air quality management and monitoring;
 - h) Aboriginal archaeology procedures;
 - i) procedures on the receipt of complaints against operations and action to be taken in response to complaints;
 - j) truck movement and traffic/haulage management, including a code of conduct for drivers to adhere to that includes, but is not limited to, the

prohibition of using compressed air brakes near houses close to haulage roads or access points, the prohibition of tailgating and the limiting of all trucks to within the posted weight limits and speed limits;

- k) benchmarks for progressive reporting on staged rehabilitation, including provision and ongoing maintenance of landscaping and revegetation;
- performance reviews of quarry operations, including soil and water management, compliance with *Protection of the Environment and Operations Act 1997* licence terms and conditions of consent (Non compliance may result in additional works to be carried out by others at full cost to the quarry operator to ensure compliance, or even the cessation of operations); and
- m) measures to be incorporated into the operation of the quarry to reduce greenhouse gas emissions.
- 20. The proponent shall engage, at the proponent's cost, a registered surveyor to prepare and sign a plan of survey to delineate and peg accurately the proposed limit of disturbance/extraction as nominated in the Environmental Impact Statement and the Statement of Environmental Effects Carlill's Quarry, dated 27/5/2010. This plan shall be completed and submitted to Council prior to the commencement of works, including any land clearing. The delineation pegs are to be monitored and protected for the duration of this consent. Any pegs removed during the operation shall be replaced by the registered surveyor and a new signed plan resubmitted indicating the placed peg and the date of that replacement.
- 21. Prior to the commencement of any quarry operations the proponent must submit to the consent authority a sub-surface assessment of geology and material properties undertaken by a suitably qualified practitioner.
- 22. Council musty be notified in writing within seven (7) days of the commencement of the extractive industry the date on which the industry commenced.
- 23. Every twelve (12) months after the commencement of the extractive industry, the owner/operator shall submit to Council a volumetric survey report from a registered surveyor. The report shall indicate the extent of material extracted from the site and the extent of overburden stock piled on the site for rehabilitation. The report must be submitted to Council within thirty (30) days of this period passing.
- 24. No topsoil or overburden shall be sold or otherwise removed from the site.
- 25. All topsoil shall be progressively stripped from areas to be excavated and stockpiled separately. Stockpiles are to be located away from the general operation of the quarry in a location to assist in noise mitigation and be preserved for the future rehabilitation of the quarry. Topsoil that is stripped is to be stockpiled in a suitable location with appropriate sedimentation management practices.
- 26. All overburden extracted from the approved extraction area shall be stockpiled separately. Stockpiles are to be located away from the general operation of the

quarry in a location to assist in noise mitigation and be preserved for the future rehabilitation of the quarry. Overburden stockpile are to be sited in a suitable location with appropriate sedimentation management practices.

- 27. All hazardous materials are to be appropriately stored so as to prevent environmental damage in case of spillage. Oils and lubricants must be stored in an impermeable bunded and roofed area with:
 - (a) a holding capacity of 110% of the capacity of the largest container, or
 - (b) a holding capacity equal to the capacity of the largest tank plus the volume that would be displaced by other tanks or structures within the bund area, whichever is the greater volume, at a minimum. Re-fuelling areas shall be

located upslope from sedimentation dams and shall be indicated in the plan of management. No waste fuels or oils or grease containers are to be disposed of on-site. All repairs and major services must be carried out at the respective depot for each machine.

- 28. All vehicles and machines used as part of the operation must comply with the *Protection of the Environment Operations Act 1997* and all regulations made under that Act and be fitted with properly maintained emission controls relevant to their date of manufacture.
- 29. The boundary of the quarry must be appropriately fenced along areas easily accessible in a manner to discourage unauthorized entry and maintained at all times to accord with NSW Work Cover specifications. Regenerated areas are to be permanently fenced to exclude stock from grazing in these areas and avoid damage to newly planted trees.
- 30. Annual audits shall be carried out of quarry operations against the approved Operational Plan of Management, inclusive of the Environmental, Noise, Soil and Water and Rehabilitation Management Plans and consent and licence conditions. The audit shall be undertaken by an independent, suitably qualified practitioner and shall identify areas of non-compliance and management responses to the same. An annual report of audit findings shall be submitted to Council prior to the 31st January following the date of this consent.

Where non-compliance is identified the proponent shall identify amelioration works to be implemented and shall undertake monthly monitoring until the amelioration measures have been completed and compliance demonstrated.

- 31. Industry and Investment or its successor must be provisioned with annual production data on the prescribed form at the end of each financial year. The data must detail the quantity and value of construction materials produced.
- 32. An annual update of the Operational Plan of Management shall be submitted to council by 31 January in each year. This update must include:
 - (a) the quantity of material extracted in the immediately preceding calendar year;

- (b) the area of land used in quarry operations in the immediately preceding calendar year (this is to be related to the survey undertaken for the current year);
- (c) the rehabilitation undertaken in the immediately preceding calendar year and the rehabilitation program for the current year;
- (d) results from the water quality monitoring program of sedimentation dams and ground water bores for the immediately preceding calendar year;
- (e) details of all sedimentation ponds constructed during the immediately preceding calendar year or proposed to be constructed during the current year; and
- (f) two (2) volumetric surveys of the development site from a certified surveyor for the immediately preceding calendar year.
- 33. All discharges from the sedimentation ponds shall meet the requirements of the *Protection of the Environment Operations Act 1997* and the relevant criteria of the appropriate NSW Government agency. Design details shall cater for the one in ten year Average Recurrence Interval storm for 24 hours, with all discharges to contain less then 50 mg/L of non-filterable residue, no visible oil or grease, less than 10 mg/L of oil and grease, and a pH in the range 6.5 8.5 unless an alternative standard is approved in writing by the DECCW, in which case all discharges shall comply with the DECCW standard as applicable at the time of discharge. The soil and water management plan will be constructed and implemented in accordance with Plans 09094 01/01 and 09094 04/04.

BLASTING

- 34. Blasting activities shall comply with the criteria of the DEH in relation to over blast pressure and ground vibration and amelioration measures are to be used as described in the Quarry Operational Management plan section 4.5 (blasting) and the Blast Impact Assessment dated April 2012.
- 35. The following shall be undertaken prior to any blast on the site.
 - (a) A minimum of three days prior to any blast, written notification shall be given to the occupants of all dwellings within 1,000 m of the quarry and notice to Kyogle Council of the impending closure of Edenville and Omagh roads 1km from the proposed blast site before blasting taking place.
 - (b) A minimum buffer of 500m to be maintained to all residents' residential developments where blasting is undertaken and a vibration disturbance limit of 5mm/s.
- 36. A minimum of 1 in 3 blasts (other then those associated with 'popping' boulders) shall be monitored for peak particle velocity and blast over pressure at the four (4) nearest residences. As a part of the monitoring process, the following

records shall be kept and made available to Council and the public, if requested:

- (a) date and time of blast, and name of the person responsible for the blast;
- (b) location of blast and blast drilling pattern;
- (c) type and weight of explosive used in each hole;
- (d) Maximum Instances Charge (MIC) weight;
- (e) climatic conditions generally, including wind direction and extent of cloud cover;
- (f) vibration and air blast emission levels recorded; and
- (g) a record of the blast, including yield.

For each blast event the proponent shall monitor noise, air blast over pressure and ground vibration at a different boundary location approximately 250m from blast site. Licensed drilling and blasting contractors must always be used in the quarry. No flying rock is permitted to travel past the property boundary or more than 250 meters from the blast site.

- 37. In the event that any structural damage is demonstrated to have occurred as a consequence of the quarry operations, the operator shall either compensate the respective property owners or carry out satisfactory repairs to make new or restore the structures to their previous state.
- 38. The air blast overpressure level from blasting operations in or on the premises must not exceed:
 - (a) 115 dB (Lin Peak) for more than 5% of the total number of blasts during each reporting period; and
 - (b) 120 dB (Lin Peak) at any time

at the most affected residence or noise sensitive location that is not owned by the quarry land owner and/or quarry operator, or subject to a private agreement between the owner of the residence or noise sensitive location and the quarry operator as to an alternative overpressure level.

GROUND VIBRATION

- 39. The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed:
 - (a) 5mm/s for more than 5% of the total number of blasts carried out on the premises during each reporting period; and
 - (b) 10 mm/s at any time

at the most affected residence or noise sensitive location that is not owned by the quarry land owner and/or quarry operator, or subject to a private agreement between the owner of the residence or noise sensitive location and the quarry operator as to an alternative ground vibration peak particle velocity. 40. Hours of operation for the development shall not exceed the following table:

Activity	Monday to Friday	Saturday
Quarry extraction	7AM - 6PM	Nil
Crushing, Washing and Screening	8AM - 5PM	Nil
Routine Maintenance (satisfying EPA noise design goals)	7AM - 6PM	8AM - 1PM
Haulage vehicle entrance/exit	7AM - 6PM	Nil
Blasting	10AM - 3PM	No Blasting
Drilling	9AM - 3PM	No Drilling

There shall be no quarrying, processing or transportation on Sundays or statutory public holidays. Council may permit access and operation outside of the periods identified in this consent for emergency purposes only.

NOISE

- 41. The proposed landuse shall not result in the emission of offensive noise. Offensive noise means noise that by reason of its level, nature, character or quality, or the time at which it is made, or any other circumstance, is likely to:
 - a) be harmful to,
 - b) be offensive to,
 - c) interfere unreasonably with the comfort or repose of,

a person who is:

(i) if the offensive noise is made in premises that are not a public place - outside those premises,

or

- (ii) if the offensive noise is made in premises that are a public place within or outside those premises.
- 42. Where the affected sensitive receptors are in ownership other than the quarry land owners and/or the quarry operators, intrusive Noise impact from the premises shall not exceed sound pressure level (LA _{eq}15minute ≤ rating background level plus 5 dB A) as presented in 5.4.3 of Advitech Background Noise Assessment for the Receptors as described below:

R2	= 42 dB (A)
R3	= 40 dB (A)
R4	= 42 dB (A)

during the day (7am to 6pm) Monday to Friday and 8am to 1pm Saturday, where L_{Aeq} means the equivalent continuous noise level - the level of noise equivalent to the energy-average of noise levels occurring over a measurement period.

43. Where the affected sensitive receptors are in ownership other than the quarry land owners and/or the quarry operators, all noise attenuation measures as provided for in the EIS appendix B Quarry Operational Management Plan section 4.4 and 4.5 – Carlills Quarry, dated September 2010, shall be

implemented to meet the recommended limits of 40dB(A) for operational noise and a maximum of 45dB(A) at neighbouring dwellings or 60dB(A) for the L_{Aeq} 1 hr for road traffic noise.

Note: Noise from the premises is to be measured at the most affected point on or within the residential property boundary or, if this is more than 30m from the residence, at the most affected point within 30m of the residence to determine compliance with this condition.

DUST AND AIR POLLUTION

- 44. All trucks carrying quarry or crusher products from the site shall ensure their loads are fully covered by a suitable material to prevent spillage or dust falling from the truck.
- 45. Internal unsealed roadways, quarry floor and stockpiles shall be watered as required to ensure that dust generation does not impact on the natural or built environment.
- 46. Screening, crushing and blending activities shall have water sprays installed and operated to minimise the generation of dust.
- 47. Accidental spillage occurring from haulage trucks on site shall be cleaned up by the proponent as soon as practicable.
- 48. Burning of site refuse and materials is prohibited and all such materials shall be prevented from escaping onto adjoining land and shall be maintained in a tidy manner while on site at all times.

WATER AND WASTE

- 49. Existing ground water bores on the property known as GW 30087 and GW 046190 shall be tested prior to undertaking any works and shall be tested annually thereafter for contamination and changes in water quality. All results must be submitted to Council within one month of test completion. The following parameters shall be tested:
 - pH;
 - Conductivity;
 - total dissolved salts;
 - total suspended solids;
 - BOD_{5; and}
 - TPH.
- 50. Bottled potable water must be made available to all personnel at the development site. Where rain water is to be harvested on site, a first flush device must be incorporated in the plumbing of the water storage tank to prevent the first portion of runoff from being conveyed to the storage tank. This water shall only be used for flushing of toilets and cleaning purposes and all tanks shall bear a sign a minimum of 450mm wide by 250mm high stating that the water is "not for drinking."

Non-potable water from sedimentation ponds may be used for dust suppression within the quarry cells and watering of rehabilitated landscaped areas only.

- 51. All waste materials generated from construction and demolition works must be disposed at waste management facilities capable of receiving the waste as classified under the NSW Department of Environment and Climate Change (EPA) guideline document *Waste Classification Guidelines: Part 1 Classifying Waste 2008* and the *Protection of the Environment Operations Act 1997* and waste regulations there under.
- 52. All stormwater from the site shall be disposed of without causing nuisance to adjoining properties or pollution to natural waterways.

DILAPIDATION SURVEY

53. Within six (6) months of the date of this consent, a dilapidation survey by a suitably qualified structural engineer, architect or building surveyor shall be undertaken and submitted to Council. The dilapidation survey shall cover all buildings nominated as sensitive receptors 1-4 described in section 3.1.1 of the QOMP dated September 2010.

GENERAL CONDITIONS

- 54. The proponent shall ensure that all State and Federal statutory requirements are met, with copies of all issued licenses, approvals and notices to be provided to Council within fourteen (14) days of their issue.
- 55. Council reserves the right to restrict the days and hours of operation described under condition 34 to minimise the emission of "offensive noise" as defined in the *Protection of the Environment Operations Act 1997* and its Regulations.
- 56. The proponent shall install signs within the site, as required by the Department of Mineral Resources, alerting the public to any potential hazards. The signs shall be located, designed and constructed to the satisfaction of Council's Director Planning and Environmental Services.
- 57. The applicant shall ensure that the site is secure during non-working hours by the means of appropriate lockable gates and fencing, in accordance with the requirements of the Department of Mineral Resources.
- 58. Where any staff member or contractor undertakes any task or performs any function on or around the site and where a person or company must be an authorised, licensed or otherwise approved person to do that task then that person or company must hold all current valid approvals and licences and authorisations.
- 59. All exploration holes shall:
 - (a) be sealed or otherwise supported to prevent collapse of surrounding surfaces; and
 - (b) be permanently sealed upon completion of use with cement plugs to prevent surface discharge to ground waters.

Where any drill hole meets natural gas, methane or other noxious vapour or gas the hole must be immediately plugged to prevent their escape. The incident must be reported immediately to Council.

Where any drill hole meets artesian or sub-artesian flow the hole must be immediately plugged and sealed to prevent contamination of aquifers. The incident must be reported immediately to Council.

Once any drill hole ceases to be used the hole, the land in which it is constructed and its immediate vicinity must be left in a clean, neat, tidy and stable condition.

BULK EARTHWORKS

- 60. Measures shall be put in place to control stormwater runoff. These control measures shall be in place prior to the commencement of works and shall prevent soil erosion and the transport of sediment from the development site into either:
 - adjoining land
 - natural drainage courses
 - constructed drainage systems, or
 - waterways.

All disturbed areas shall be stabilised and revegetated. Turfing or another approved seeding method shall be undertaken in each part of the development within 14 days of completion of earthworks.

61. Sediment shall not be tracked by vehicles onto any public road.

IMPORTED MATERIAL CONDITIONS

62. No material such as clay, gravel, sand, soil or rock fines shall be introduced into or onto the development site unless that material is required to comply with the consent. All material so imported must be clean and free from any contamination within the meaning of the *Managing Land Contamination – Planning Guidelines – SEPP55 – Remediation of Land* document published in 1998 by the NSW Government. All material must be Virgin Excavated Natural Material as defined in the *Protection of the Environment Operations Act 1997*.

Written verification from the supplier certifying the volume of material provided and that all the materials are free from contamination must be obtained by the proponent. Prior to undertaking any work with the material details demonstrating compliance with this condition must be submitted to and approved by the Certifying Authority.

A copy of the approved documentation must be submitted to the Consent Authority for record purposes.

MONITORING OF QUARRY OPERATIONS

- 63. Accurate records of sales shall be kept and maintained and be available for inspection by authorised council officers on request. The method of sales recording and the location where records are to be kept are to be outlined in the Plan of Management and be to the satisfaction of Council's Director Planning and Environmental Services.
- 64. This approval allows for extraction only of material produced on-site. No imported quarry or waste bi-products are permitted to be deposited on the site without subsequent approval from Council.
- 65. The Plan of Management must be updated at least once every 5 years and a fully amended and updated plan must be formally lodged with Council for approval. All works must comply with the amended Plan of Management as endorsed by Council.
- 66. All site rehabilitation shall occur in accordance with the approved Site Rehabilitation Management Plan and the following:
 - (a) any soil contaminated as a result of the development must be remediated in accordance with the relevant guidelines (including guidelines under section 145C of the *Environmental Planning and Assessment Act 1979* and the *Contaminated Land Management Act 1997*);
 - (b) the final profile must be safe;
 - (c) the final profile must be designed to preclude prime habitat for the cane toad *Bufo marinus*; and
 - (d) all plantings must mimic the existing vegetation community found on the land.
- 67. The use must not involve exposure to view from any adjacent premises or from any public place of any unsightly matter.
- 68. The premises shall be maintained in a clean and tidy state at all times.
- 69. The industry must be conducted in such a manner so as not to interfere with the amenity of the neighbourhood by reason of the emission of discharge of noise, fumes, vapour, steam, soot, ash, dust, waste water, waste products, grit, oil or other harmful products of the industry.
- 70. The operator must not use mercury, cyanide or any other mineral recovery chemical agent without the prior written approval of the Department of Environment and Heritage and the Council.
- 71. In the event of an incident on the premises that has caused, is causing, or is likely to cause harm to the environment, the proponent shall report the event to Council immediately it becomes known to the proponent or the proponent's agent.

HEAVY HAULAGE CONDITIONS

72. Haulage route for loaded vehicles leaving the quarry must be via Edenville Road directly to the Summerland Way in all cases except for local deliveries on Edenville Road between Rural Road Numbers 224 and 880 and Omagh Road between Rural Road Numbers 361 and 800.

- 73. The quarry operator and the truck drivers shall be responsible for ensuring vehicles leaving the site are loaded so as not to exceed the legal weight limitations in force on the Edenville Road (Cedar Point) Bridge at the time.
- 74. Hinged truck entering warning signs shall be erected on each approach to the quarry access on Edenville Road and displayed during quarry operational hours.
- 75. Payment of heavy haulage contributions under Section 94 of the Environmental Planning and Assessment Act 1979 and the Kyogle Council Section 94 Contributions Plan Urban and Rural Roads 2002 (as amended) are required. Kyogle Council levies these contributions for the provision of public amenities and services in such a manner as will meet the increased demand for those amenities and services arising from this development.

The rate and amount to be paid as at the date of this notice is **\$4,792** per annum, as described in the Schedule, to be paid in two (2) equal half yearly instalments. The first instalment is to be paid within six (6) months of the date of this consent notice or within six (6) months of the development commencing operation, whichever is the latter (in this condition the term 'commencing operations' means the physical commencement of the use of the development and not the 'commencement' of the Development Consent Notice).

The levy is to be increased annually in accordance with the Consumer Price Index for Brisbane commencing January each year for the life of the development.

Where the total contribution payable exceeds \$10,000, payment to Council must be by bank cheque or cash (personal cheques are not acceptable).

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 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 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.

VEHICULAR ACCESS

- 76. The proponent must make written application to Council (accompanied by a location plan) for a vehicular access to the development and construct it in accordance with Council's approval (refer to Council's Property Access and Addressing Management Plan). No other accesses may be constructed or opened onto a Council road without the prior written approval of Council.
- 77. The proposed access to the quarry must be constructed to meet the requirements for a BAR basic right turn treatment with sealed widened shoulders in accordance with Figure 7.5 of Austroads Guide to Road Design 2009 Part 4A: Unsignalised and Signalised Intersections.
- 78. An all weather vehicular access shall be constructed and maintained from the point of connection to Councils road network to the proposed quarry site in accordance with Council's Property Access and Addressing Management Plan and the Northern Rivers Development and Design Manuals. This requires that the grade of the access does not exceed a grade of 1 in 6 or 16.67% within the road reserve, and does not exceed a grade of 1 in 4 or 25% within private property. Any section of the access that exceeds a grade of 1 in 8.3 or 12% shall be provided with a sealed surface on a suitable pavement. The access road is to be a minimum of 6m wide, with a minimum pavement depth of 300mm of compacted gravel, a maximum crossfall of 10%, and the radius on the inside of any bends shall not be less than 6m. Note that the proposed access at the top of the ridge line is to be moved to the north as far as is practical in order to provide maximum separation between the access road and the scar trees which are to be preserved on the site.
- 79. All loading and unloading shall take place within the property boundaries, including the parking of construction and private vehicles associated with the development.
- 80. Vehicles using any off-street loading/unloading and/or parking area must enter and leave in a forward direction. All driveways and turning areas shall be kept clear of obstructions that prevent compliance with this condition.
- 81. All allotments where access is obtained from a sealed road shall have a sealed vehicular access from the roadway to the boundary of private property in accordance with Council's Property Access and Addressing Management Plan.

ROADS GENERAL

- 82. The proponent shall provide the following roadworks with associated stormwater drainage structures that have been designed and constructed in accordance with the requirements of the Roads and Traffic Authority. The proponent shall be responsible for any costs associated with the provision of the works and compliance with the requirements of the Roads and Traffic Authority. Required roadworks are:
 - (1) The intersection of Edenville Road and the Summerland Way is to be upgraded to provide for the following treatments;

(a) CHR(S) channelized right turn treatment with a short turn slot in accordance with Figure 7.6 of Austroads Guide to Road Design 2009 Part 4A: Unsignalised and Signalised Intersections,

(b) BAL basic left turn treatment in accordance with Figure 8.2 of Austroads Guide to Road Design 2009 Part 4A: Unsignalised and Signalised Intersections, and

(c) AUL auxiliary left turn treatment in accordance with Figure 8.4 of Austroads Guide to Road Design 2009 Part 4A: Unsignalised and Signalised Intersections.

83. The proponent shall provide the following roadworks with associated stormwater drainage structures that have been designed and constructed in accordance with the Northern Rivers Local Government Development, Design and Construction Manual. The proponent shall be responsible for any costs associated with the provision of the works. Required roadworks are:

(1) The intersection of Edenville Road and Omagh Road must be upgraded to meet the requirements of a Simple Left Turn Treatments for Rural Intersections in accordance with Figure D1.8 of the Northern Rivers Local Government Development and Design Manual Part D1 Geometric Road Design (Urban and Rural); and

(2) Edenville Road must be upgraded from the intersection with the Summerland Way to 150m west of the proposed quarry access (excluding Edenville Bridge) to meet the requirements for a Minor Road 150-500 AADT in accordance with the Carriageway and seal widths for rural roads shown in Table T1.27 of the Northern Rivers Local Government Development and Design Manual Part D1 Geometric Road Design (Urban and Rural), ie a 6m seal with 1m shoulders.

- 84. Full design plans of the proposed engineering works shall be submitted to and approved by Council prior to commencement of these works. Such plans shall be accompanied by the fee, as adopted at the time of the relevant payment, as indicated in Council's Fees and Charges.
- 85. No tree in the road reserve shall be damaged, destroyed or removed without the written consent of the Council.
- 86. Prior to carrying out any works within a public road reserve, the proponent shall complete an application under Council's Road Reserve Management Plan and receive written approval from Council. Satisfactory arrangements for restoration with Council's Technical Services Department shall also be required, with all works constructed according to Council's Development, Design and Construction Manuals (as amended). All costs shall be the responsibility of the proponent.
- 87. The proponent shall provide 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. The plan shall include all requirements of Council's Road Reserve Management Plan. This

plan of management shall be lodged with Council prior to the commencement of works.

- 88. A certified "Works as Executed" plan from a suitably qualified Engineer or Registered Surveyor must be submitted before the commencement of extraction operations certifying that the works have been constructed in accordance with the drawings and to the levels specified.
- 89. A maintenance period and Construction Bond shall apply to all construction carried out where the ownership of the asset is to pass to Council. The Construction Bond is to be paid upon completion of the works. The maintenance period shall extend from the completion of the construction and subsequent approval by Council, for six months. Within that time the developer is responsible for any omissions or defects. At the end of the maintenance period Council will inspect the asset and any work found not conforming to the plans and specifications shall be the responsibility of the developer to rectify. The maintenance bond shall be returned at the completion of the maintenance period and subsequent defect free approval by Council.

Construction (contract) price Bond

up to \$50,000 - 10% of contract price (minimum bond \$1,000) over \$50,000 \$5,000 plus 5% of balance over \$50,000

- 90. Where the existing physical road encroaches on the subject land, this area must be surveyed out and dedicated as public road. If the existing road is not contained within a public road reserve, the area is to be dedicated as public road with a suitable width. This must be done for the full area of the site at no cost to Council. A registered surveyor must provide confirmation in writing that this condition has been met, and no further encroachments exist before the commencement of extraction operations.
- 91. Plant, equipment or materials of any kind shall not be placed or stored upon the roadway unless approved by Council in writing.

ADVISORY NOTES

The Applicant is requested to take note of the following advice and where pertinent to convey the advice to future owners or users.

- 1. It is still possible that some of the Receptors in close proximity will be impacted upon by the proposed quarry, and that the limits proposed by DECCW and Council may not be met. If this is found to be the case during the Operational Management Plan auditing process or by the contact by or receipt of complaints from nearby residents and it is established that mitigation measures cannot be put in place to comply with the limits imposed, the only way the quarrying activities could continue would be if the affected receptors were removed. This could be done by either purchasing the receptors and retaining them in the same ownership as the quarry land and/or quarry operator, or by relocation of the affected dwelling/s.
- 2 The proponent must apply for an Aboriginal Heritage Impact Permit in accordance with the *National Parks & Wildlife Act 1974* (NPW Act) prior to disturbing, damaging or destroying Aboriginal objects that occur on the land.

If Aboriginal cultural objects are uncovered due to development activities, all works should halt in the immediate area to prevent any further impacts to the find or finds, to resume only in accordance with the requirements of the Office of Environment and Heritage and the NPW Act.

- 3 Clearing native vegetation shall require a clearing consent from the Northern Rivers Catchment Management Authority under the *Native Vegetation Act* 2003 prior to the conduct of works.
- 4 The proponent should ensure that the development accords with the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).
- 5 Approval under the *Threatened Species Conservation Act* 1995 may be required to clear native vegetation consisting only of groundcover.
- 6 Water extracted under Basic Landholder Rights in the *Water Management Act* 2000 cannot be used for commercial purposes and the NSW Office of Water should be contacted prior to undertaking any such extraction.
- 7 The NSW Office of Water regulates groundwater under the provisions of the *Water Management Act* 2000.
- 8 A separate application must be made for a licence under *Protection of the Environment Operations Act 1997*.
- 9 A section 68 approval under the Local Government Act 1993 is required to install and operate an on-site waste management system.
 Note: Any Effluent and Waste Water Management system must be designed by a qualified soil scientist, geotechnical engineer or water scientist or other suitably qualified person.
- 10 To protect the health, safety and welfare of people working in the extractive industry, compliance with the *Mine Health and Safety Act 2004* and the *Mine Health and Safety Regulation 2007* is required.
- 11 To protect, secure and promote the health, safety and welfare of people at work, compliance with the *Occupation Health and Safety Act 2000* and the *Occupation Health and Safety Regulation 2001* is required.
- 12 If the quarry is to service the Queensland market then the potential to minimise the need for travel by truck and to maximise movement of freight by rail should be investigated and used if found viable (based on an assessment of the triple bottom line).
- 13 Industry and Investment NSW advises :-
 - that ongoing protection of the wetland at the southwestern edge of the subject property is to be consistent with the I&I NSW Policy for Protection of Key Fish Habitats;

- The subject site is to be managed in conformity with the Primefact entitled, "Agricultural Issues for Extractive Industries on Rural Lands".