Department Principal:
Tegan Smith
Project Contact:
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Date: 9/02/2016
Ref: 1837.DA1.021

Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

Attention: Mr Howard Reed, Director – Resources Assessments

Dear Mr Reed

Response to Submissions

Coraki Quarry Project (SSD 7036)

Groundwork Plus continue to act on behalf of Quarry Solutions Pty Ltd (Quarry Solutions) and write in response to the letter from the Department of Planning and Environment (the Department) dated 11 December 2015 regarding the Coraki Quarry Project (SSD 7036) (the project).

Following lodgement of the Environmental Impact Statement (EIS) for the project, public notification was undertaken. The notification period ended on 18 December 2015 and a total of ten (10) submissions were received during the exhibition period including three (3) public submissions and seven (7) relevant Government agency submissions, including the Richmond Valley Council (Council). As requested, we provide the following response to the matters raised in those submissions.

Department of Industry – Geological Survey of New South Wales

Quarry Solutions has no objections to the requirement to provide annual production data for the project to the New South Wales Department of Industry.

Environment Protection Authority

As part of the submission package, the Environment Protection Authority (EPA) provided the General Terms of Approval for the project. It is noted that an amended Environment Protection Licence (EPL) for the existing Petersons Quarry has also been issued recently by the EPA.

As both the Petersons Quarry and the project will be operating in tandem for the life of the project a comparison of the EPA General Terms of Approval for the project against the conditions of the Petersons Quarry EPL was undertaken to ensure the conditions are consistent. A comparison table of the two sets of conditions has been prepared with comments identifying that certain amendments are necessary to achieve consistency and clarity (refer **Attachment 1 – EPL Conditions Comparison**). This has been provided to the EPA and we understand that revised General Terms of Approval will be issued in due course by the EPA.

In addition to the above, we have liaised with the EPA regarding hours of operation for the project. The EPA General Terms of Approval for the project limited the hours of operation to the standard hours of 7am to 6pm Monday to Friday and 8am to 1pm on Saturday. However, as the Department and the EPA are aware, the project is to support the construction of the Woolgoolga to Ballina section of the Pacific Highway Upgrade Project (reference: SSI-4963). Accordingly, we provide the following further justification to the EPA for the extended hours of operation sought for the project.

The approval for the Pacific Highway Upgrade Project includes the following conditions:

B15. Construction activities associated with the SSI shall be undertaken during the following standard construction hours:

(a) 7:00am to 6:00pm Monday to Friday, inclusive; and
(b) 8:00am to 5:00pm Saturday; and
(c) at no time on Sunday or public holidays.

B16. Construction works outside the standard construction hours may be undertaken in the following circumstances:

(a) Construction works that generate noise that is:
  i. no more than 5 dB(A) above rating background level at any residence in accordance with the Interim Construction Noise Guideline (DECC, 2009); and
  ii. no more than the noise management levels specified in Table 3 of the Interim Construction Noise Guideline (DECC 2009) at other sensitive receivers; or
(b) For the delivery of materials required outside the standard construction hours by the NSW Police Force or other authorities for safety reasons;
(c) Where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm; or
(d) Between 6:00am and 7:00am and 6:00pm and 7:00pm Monday to Friday (except public holidays) in sparsley populated areas (these construction hours may be reviewed and/or revoked by the Secretary in consultation with the EPA in the case of unresolved noise complaints); or
(e) Low noise impact activities and work between:
  i. 6:00am to 7:00am Monday to Friday; and/or
  ii. 6:00pm to 7:00pm Monday to Friday; or
(f) Works approved through an EPL; or
(g) Works approved by a Construction Environment Management Plan or Construction Noise and Vibration Management Plan for the SSI.

We note that the Delivery Partner has made it clear to Quarry Solutions and other suppliers that it intends to rely upon the above clauses to facilitate delivery of quarry materials outside the standard construction hours identified in condition B15, including on Saturdays. For example the Delivery Partner will establish stockpile laydown areas along the full length of the project to facilitate the above clauses including B16 (a) (i) and (ii). Specifically we understand there will be circumstances and periods of the Pacific Highway Upgrade Project where deliveries will be required from 7am to 6pm on Saturdays aligning with the standard Monday to Friday construction hours stated in condition B15. To ensure on-time delivery of quarry materials, allowance must be made for up to an hour travel time from the project to the delivery point along the Pacific Highway Upgrade Project (eg. where the project is occurring at the southern end of the works). Accordingly, trucks must be able to exit the project from as early as 6am to ensure on time delivery for 7am, and similarly, for the last delivery of the day to be completed by 6pm allowing the truck to return by 7pm consistent with the proposed hours of operation for the project of 6am to 7pm Monday to Saturday.

The EIS included detailed noise modelling which confirmed compliance with the relevant noise criteria for all of the proposed hours of operation. This is evidence that the proposed hours of operation for the Coraki Quarry are appropriate in this instance.

However, in the event that the EPA is not willing to support the proposed hours of operation we have requested that at least the same wording is inserted into the project conditions as that provided for the Petersons Quarry EPL, which allowed extended hours of operation to occur where permission was obtained from the property owners of R1 through to R9 as shown on Figure 2 - Aerial Photograph Showing Surrounding Residences of the Noise and Dust Assessment by MWA Environmental which was Attachment 6 of the EIS for the project.

Richmond Valley Council

A meeting with the Richmond Valley Council (Council) was held on 21 January 2016 to discuss the matters raised by Council during the public notification period. Following the meeting, a response letter was prepared and issued to Council on 2 February 2016 (refer **Attachment 2 – Response to Council Comments**). Subsequently, the Council provided a revised letter and draft conditions on 9 February 2016 (refer **Attachment 3 – Council Draft Conditions Correspondence**). Quarry Solutions has no objections to the revised conditions.

Heritage Division of the Office of the Environment and Heritage

Dr Julie Dibden of New South Wales (NSW) Archaeology Pty Ltd has confirmed potential historic heritage values were considered whilst undertaking the investigations, site visit and assessment for potential aboriginal cultural heritage. Accordingly, to address the matters raised by the Heritage Division of the Office of the Environment and Heritage (OEH), Dr Dibden has provided a letter of clarification confirming that the site holds no historic heritage values (refer **Attachment 4 – Heritage Assessment Response**).

New South Wales Rural Fire Service

As mentioned in the EIS, the site will have a water truck fitted with a minimum 1,000 litre water tank, pump and 19mm hose reel at all times and will be available to authorised officers of the rural fire service in the event of an emergency. In response to the submission from the NSW Rural Fire Service, a Bushfire Management Plan has been prepared to assist with the management of risk to life and property at the project in the event of a bushfire (refer **Attachment 5 – Bushfire Management Plan**).

Office of Environment and Heritage

An addendum to the Biodiversity Assessment has been prepared by Biodiversity Assessment and Management Pty Ltd to address the recommendations outlined in the OEH letter (refer **Attachment 6 – Addendum to Biodiversity Assessment Report**). The addendum includes details of the following:

- maintenance, ongoing management, and timeframes for the sustainable management of the *Macadamia tetraphylla* and the surrounding buffer; and
- description of a suitable offset to compensate for the direct loss of native vegetation (including Koala food trees) and potential impacts to surrounding biodiversity values from the operation of the project.

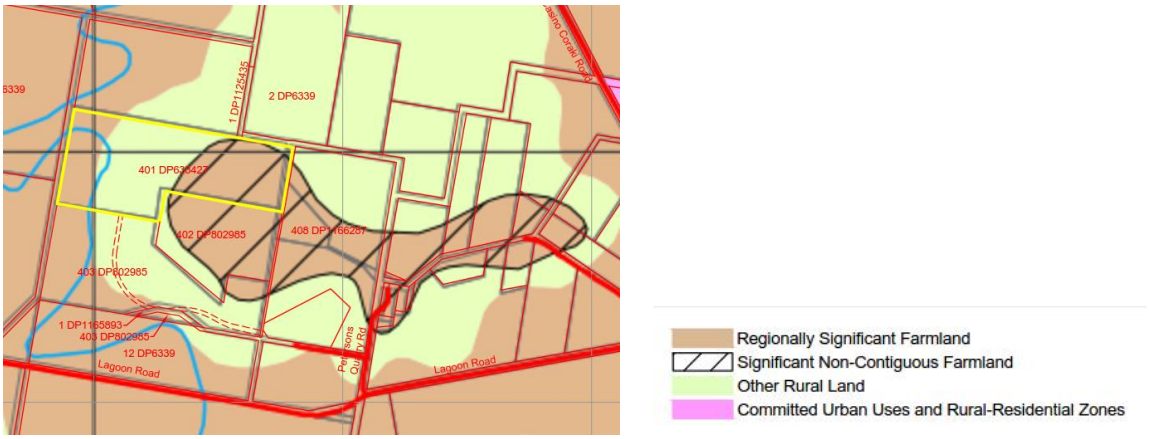
The submission from OEH recommends an update to the Environmental Management Plan (EMP) to ensure commitments are unambiguous. No objection is held to this. However, we note that the EMP is a document that guides the operation of the project and thus will be updated from time to time in accordance with the relevant legislative requirements and any conditions of approval. Therefore, Quarry Solutions commit to updating the EMP prior to the commencement of the use to reflect all relevant conditions of approval. The EMP will also be updated at that time to ensure all commitments made are unambiguous. No objection is held to a condition of consent addressing this matter.

As requested and noted in the submission from OEH, an Aboriginal Cultural Heritage Assessment has been prepared by NSW Archaeology Pty Ltd. Quarry Solutions has no objections for a condition of consent to require the implementation of the recommendations outlined in the assessment.

Department of Primary Industries (DPI)

DPI Agriculture

The total site area for the project (including the existing Petersons Quarry) is approximately 100ha and approximately 50% of the overall project area is mapped as comprising regionally significant farmland on the Northern River Farmland project mapping.



As shown above and outlined in the EIS, the portion of Lot 401 DP633427 (Lot 401) containing the extractive resource is mapped under the Northern Rivers Farmland project as 'Regionally Significant Farmland (Significant Non-Contiguous Farmland)'. It is also noted that the full extent of the extractive resource of the existing Petersons Quarry (Lot 402 DP802985 and Lot 408 DP1166287 is also mapped as 'Regionally Significant Farmland (Significant Non-Contiguous Farmland)' despite being an existing quarry with no topsoil within the quarry pit and operational areas. This is clearly a mapping error.

The report prepared for the Northern Rivers Farmland project, contains criteria for the mapping and identification of regionally significant farmland, including the following relevant items:

- Slope of generally less than 15%.
- Soils are generally deeper than 1 metre.

The mapped areas do generally have a slope of less than 15% but this is due to the natural formation of the extractive resource, being a basalt flow of a relatively uniform thickness which then slopes down to the surrounding flood plain which also has a slope of less than 15%. However, the resource assessment conducted for the project and included as Attachment 9 of the EIS identifies that the soil and overburden depth is less than 1m across the identified extractive resource on Lot 401. As identified above, it is also noted that the existing Petersons Quarry is highly modified with limited or no topsoil depth across the existing quarry pit, stockpile and operational areas which have been mapped in error by the Northern Rivers Farmland project. On this basis it is clear that mapped extent of 'Regionally Significant Farmland (Significant Non-Contiguous Farmland)' is not correct in this instance. As the mapped extent is not correct the project will not have a detrimental impact on the availability and operation of regionally significant farmland.

DPI Water

A revised Surface Water Assessment (dated 4 February 2016) has been prepared by Calibre Consulting to address the comments from the DPI Water Department (refer **Attachment 7 – Surface Water Assessment**). As requested, Table 7 of the Surface Water Assessment now includes a summary of all inflow and outflows included in the detailed site water balance and the matter of water use for rehabilitation purposes has been clarified.

Watercourse Management
Quarry Solutions has no objection for the Department to include a condition requiring the nominated 40m buffer to be maintained as it will minimise any potential impact to the watercourse from the quarry.

Sediment Basin
Quarry Solutions has no objection to a condition requiring water to be treated prior to discharge and to carry out water quality testing. It is also noted that the EPA General Terms of Approval and the existing Petersons Quarry EPL include relevant conditions that regulate the treatment of water prior to discharge.

Groundwater
As outlined in the EIS, the proposed quarry is unlikely to intercept groundwater. Quarry Solutions has no objection to a condition requiring the necessary licenses to be obtained if groundwater is encountered.

DPI Land

Quarry Solutions has been liaising with Richmond Valley Council with regards to the transfer of Seelems Road from a Crown public road to a Council road and also the preparation of a road closure application for the Crown road adjoining Lot 401.

We note that Council is aware of the current ownership of Seelems Road and is in the process of preparing a transfer application. It is understood this will be resolved within the next 20 business days. Whilst it is noted that the western portion of Seelems Road is currently under Enclosure Permit 22505, the proposed development will not use that section of Seelems Road as the haul route diverts into Lot 403 DP802985.

Council has also confirmed that it had previously resolved to progress the closure of the road reserve between Lot 401 and the Petersons Quarry. Quarry Solutions will be assisting Council with the preparation of the application. No objection is held to a condition requiring that no activities other the pedestrian and vehicular access occur within the road reserve until the road closure has been completed.

Public submissions

Submission 1

The MRCagney response letter has addressed the issues raised in the first public submission including details of sight distance assessment and details of traffic generation (refer **Attachment 8 – MRCagney Response Letter**). The sight distance assessment undertaken confirms that, whilst that there is a sight distance deficiency, which is common in regional NSW, the deficiency can be managed by the Driver Code of Conduct prepared by Quarry Solutions, included as Attachment C of the MRCagney Response Letter.

Submission 2

The MRCagney response letter has addressed the issues raised in the second public submission which respond to the submitter's concern with regards to the speed limit along Coraki – Woodburn Road and safety within the school zone (refer **Attachment 8 – MRCagney Response Letter**). More specifically, to ensure road safety is maximised and the impact of trucks on other road users is minimised, the Driver Code of Conduct states as follows, "*Ensure you comply with the 40KPH school Zones and keep a 50 metre distance from all school buses travelling in your direction, whether the bus is moving or parked."* Therefore, it is confirmed that appropriate management strategies will be implemented regarding interactions with school buses and other road users.

Submission 3

The submission has raised issues in relation to traffic impact, noise and dust impact and amenity impact similar to submission 1 and 2. The MRCagney response letter has addressed the associated traffic impacts raised in the submission (refer **Attachment 8 – MRCagney Response Letter**). Regarding the more general comments made by the submission we note that, the Noise and Dust Impact Assessment included in the EIS appropriately addresses the potential noise and dust impacts and the EIS also addresses visual amenity impacts which will be minimised by management measures such as bunding and vegetation screening.

Department of Planning and Environment

In addition to the above submissions, an e-mail dated 1 February 2016 was received from the Department with additional assessment queries.

Ecological

The Department requested further details regarding native vegetation impacts and management strategies to be implemented for the project. Details of the anticipated removal of 10 native trees and proposed replanting and management strategies to mitigate those impacts are included in an addendum to the Biodiversity Assessment which has been prepared (refer **Attachment 6 – Addendum to Biodiversity Assessment Report**).

Surface water

The Department requested clarification regarding assessment of water quality impacts associated with the project. We note in response that the existing Petersons Quarry includes controlled and uncontrolled discharges to Seelems Creek. The EPA have included conditions within the Petersons Quarry EPL regulating water quality release criteria. The water quality release criteria stated in Condition L2.4, a pH of 6.5-8.5 and Total suspended solids of 50mg per Litre, is consistent with the NSW Water Quality and River Flow Objectives (OEH 2015) for the Richmond River Catchment.

The EIS and Surface Water Assessment addressed the same objectives. The EIS and Surface Water Assessment also note that samples were taken at the Petersons Quarry which confirmed compliance with the objectives. Accordingly, it is considered that sufficient evidence has been provided that the project will achieve the same outcomes required of the existing Petersons Quarry and thus further assessment and comparison is not required.

It is also noted that the EPA have issued General Terms of Approval for the project which adopt the same objectives. This is evidence that the EPA are comfortable with the detailed provided in the EIS and Surface Water Assessment. We also note that the General Terms of Approval for the project and the existing EPL for Petersons Quarry includes a condition confirming that the water quality release criteria do not apply after a certain rainfall event which is consistent with the requirements of the Managing Urban Stormwater Soils and Construction: Volume 1 and 2E.

We also take the opportunity to direct the Department to the drawings within the EIS and Surface Water Assessment which show that the water release points from each sediment basin are more than 50m from Seelems Creek. The water release points will consist of an overflow point which will then be released as sheet flow over grassed areas before eventually entering the watercourse further improving the water quality above and beyond the required objectives.

We are of the opinion that the assessment undertaken to date for the EIS and the relevant conditions of the Petersons Quarry EPL and EPA General Terms of Approval for the project provide sufficient surety to the Department that the relevant water quality and quantity objectives will be achieved.

Having considered the above, we look forward to the finalisation of the assessment of the project by the Department. Should you have any questions or require any additional clarification, please feel free to contact me on 07 3871 0411 or e-mail jlawler@groundwork.com.au.

Yours sincerely,

Jim Lawler
Team Leader - Planning
Groundwork Plus

Enc:

Attachment 1 – EPL Conditions Comparison
Attachment 2 – Response to Council Comments
Attachment 3 – Council Draft Conditions Correspondence
Attachment 4 – Heritage Assessment Response
Attachment 5 – Bushfire Management Plan
Attachment 6 – Addendum to Biodiversity Assessment Report
Attachment 7 – Surface Water Assessment
Attachment 8 – MRCagney Response Letter

Attachment 1

EPL Conditions Comparison

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Memorandum

To:	Janelle Bancroft	From:	Jim Lawler
	NSW Environment Protection Authority		Groundwork Plus
File Ref.:	1837.DA1.026	Date:	4 February 2016
Re:	EPL Conditions Comparison		

Petersons Quarry Conditions		Coraki Quarry Conditions (draft)		Comments
A1.2	Further to condition A1.1, the scale of the scheduled activities at the premises is limited to the 'extraction limit' of 250,000 tonnes per annum, being the amount equivalent to the quantity approved in the development consent. Extraction quantities are calculated on the basis of the anniversary date of this Environmental Protection Licence. Extraction is to occur from Lots 402 and 408 only.	Special Condition 1	The extraction, processing or storage within Lot 401 is limited to 1,000,000 tonnes of material per annum. Extraction of material from Lot 401 is to cease by July 2022. Extraction, processing and storage from Lot 402 and Lot 408 is limited to 250,000 tonnes of material per annum.	Proposed condition: The scale of the scheduled activities at the premises is limited to: · extraction of 250,000t per annum from Lots 402 and 408, being the amount equivalent to the quantity approved in the development consent for the Petersons Quarry; and · extraction of 1,000,000t per annum from Lot 401, being the amount equivalent to the quantity approved in the development consent for the Coraki Quarry. Extraction of material from Lot 401 is to cease within 7 years of commencement of extraction from Lot 401.

<table>
<tr>
<td>L2.4</td>
<td>Water and/or Land Concentration Limits
POINT 1,2
<table><tr><th>Pollutant</th><th>Units of Measure</th><th>50 percentile concentration limit</th><th>90 percentile concentration limit</th><th>3DGM concentration limit</th><th>100 percentile concentration limit</th></tr><tr><td>Oil and Grease</td><td>Visible</td><td></td><td></td><td></td><td>nil</td></tr><tr><td>pH</td><td>pH</td><td></td><td></td><td></td><td>6.5 - 8.5</td></tr><tr><td>Total suspended solids</td><td>milligrams per litre</td><td></td><td></td><td></td><td>50</td></tr></table></td>
<td>L2.4</td>
<td>Water and/or Land Concentration Limits
DISCHARGE POINT 1 (Sediment Basin Discharge 1 through to 4))
<table><tr><th>Pollutant</th><th>Units of measure</th><th>100 % concentration</th></tr><tr><td>Total Suspended Solids</td><td>mg/L</td><td>50</td></tr><tr><td>pH</td><td>pH units</td><td>6.5 - 8.5</td></tr><tr><td>Oil and grease</td><td>mg/L</td><td>Nil</td></tr></table></td>
<td>The units of measure for oil and grease should be updated to be visible instead of mg/L.</td>
</tr>
<tr>
<td>L5.3</td>
<td>Sensitive receivers R1 through to R9 are to be given at least 24 hours notice when blasting is to be undertaken.</td>
<td>L5.4</td>
<td>All sensitive receivers are to be given at least 24 hours notice when blasting is to be undertaken.</td>
<td>Amend Coraki condition to reflect Petersons condition referring to R1 to R9.</td>
</tr>
<tr>
<td>L6.2</td>
<td>Activities covered by this licence must only be carried out between the hours of 7am to 6pm Monday to Friday, and 8am to 1pm Saturday, and at no time on Sundays and Public Holidays.

This condition does not apply if written permission from the property owners of sensitive receivers R1 to R9 for an extended hours of operation has been provided to the EPA.</td>
<td>L6.1

L6.2</td>
<td>Activities covered by the EPA's general terms of approval, or a licence under the Protection of the Environment Operations Act 1997, must only be carried out between the hours of 7:00 am and 6:00 pm Monday to Friday, and 8:00 am and 1:00 pm Saturday, and at no time on Sundays and Public Holidays.

This condition does not apply to the delivery of material outside the hours of operation permitted by condition L6.1 if that delivery is required by police or other authorities for safety reasons; and/or the operation or personnel or equipment are endangered. In such circumstances, prior notification must be provided to the EPA and affected residents as soon as possible, or within a reasonable period in the case of emergency.</td>
<td>The proposed hours of operation are 6am to 7pm. The proposed development is to support the Pacific Highway upgrade project. Extended hours are required to align with the approved hours for the Pacific Highway upgrade project. Assessment provided as part of the EIS confirmed compliance with the relevant noise criteria for the proposed hours of operation. Accordingly, justification of the extended hours have been provided.

As a minimum, the wording of the Petersons Quarry should be adopted for Coraki Quarry to make provision for extended hours of operation with written permission from R1 to R9.</td>
</tr>
<tr>
<td>M2.2</td>
<td>Water and/ or Land Monitoring Requirements
POINT 1,2
<table><tr><th>Pollutant</th><th>Units of measure</th><th>Frequency</th><th>Sampling Method</th></tr><tr><td>Oil and Grease</td><td>Visible</td><td>Special Frequency 1</td><td>Visual Inspection</td></tr><tr><td>pH</td><td>pH</td><td>Special Frequency 1</td><td>Probe</td></tr><tr><td>Total suspended solids</td><td>milligrams per litre</td><td>Special Frequency 1</td><td>Grab sample</td></tr></table></td>
<td>M2.1</td>
<td>Requirement to monitor concentration of pollutants
<table><tr><th>Pollutant</th><th>Units of measure</th><th>Frequency</th></tr><tr><td>Total Suspended Solids</td><td>mg/L</td><td>Special Frequency 1.</td></tr><tr><td>pH</td><td>pH units</td><td>Special Frequency 1</td></tr><tr><td>Oil and grease</td><td>mg/L</td><td>Special Frequency 1</td></tr></table></td>
<td>The units of measure for oil and grease should be updated to be visible instead of mg/L.</td>
</tr>
</table>

Attachment 2

Response to Council Comments

Department Principal:
Tegan Smith
Project Contact:
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E: info@groundwork.com.au

Date: 2/02/2016
Ref: 1837.DA1.025

Richmond Valley Council
Locked Bag 10
Casino NSW 2470

Attention: Angela Jones, Director Infrastructure and Environment

Dear Angela,

Council Response to Comment Letter
Coraki Quarry (SSD 7036)

Groundwork Plus acts on behalf of Quarry Solutions Pty Ltd (Quarry Solutions) and writes to the Richmond Valley Council (Council) in relation to the proposed Coraki Quarry (the project) (reference: SSD 7036). An Environmental Impact Statement (EIS) was lodged with the Department of Planning and Environment (DP&E) relating to the establishment of an extractive industry at the premises which includes utilisation of part of the adjoining Petersons Quarry. During the exhibition period, comments were received from various government agencies including the Council. Following receipt of Council's letter dated 9 December 2015, further liaison has been undertaken with Council in relation to the matters raised in the letter. A response to the items raised is provided below.

Condition of Woodburn Coraki Road

We note Council's comments regarding the existing condition of the Woodburn Coraki Road. Council identified potential closure or imposition of temporary load limits in the event of inundation of the road. We understand that Council was referring to is obligation to the public in the event of a natural disaster and that any road closure or load limitation would not be targeted at the project alone, but rather would apply to the general public. We acknowledge Council's obligation to protect the safety of the public by closing public roads in the event of a natural disaster. As this obligation is to the wider public and not limited to extractive industries and not specific to the project we suggest there is no need for Council to address this matter through the development assessment process.

Seelems Road

We note Council's comments and recommended condition to seal Seelems Road to a point 200m west of the entrance to 30 Seelems Road. As discussed, we hold no objection to such a requirement as this action was included as an undertaking within the EIS. On this basis we suggest there is no need for Council to provide specific comment on that matter and simply include the recommended condition of approval.

Traffic loadings

The EIS outlined proposed hours of operation based on our early discussions with the Delivery Partner for the Pacific Highway Upgrade Project.

As discussed, the proposed hours of operation for the project are 6am to 7pm Monday to Saturday with no operation on Sundays and Public Holidays.

As Council is aware, approval has been granted for the Woolgoolga to Ballina section of the Pacific Highway Upgrade Project (reference: SSI-4963). The approval includes Condition B15 and B16 as follows:

B15. Construction activities associated with the SSI shall be undertaken during the following standard construction hours:

(a) 7:00am to 6:00pm Monday to Friday, inclusive; and
(b) 8:00am to 5:00pm Saturday; and
(c) At no time on Sunday or public holidays.

B16. Construction works outside the standard construction hours may be undertaken in the following circumstances:

(a) Construction works that generate noise that is:
    i. no more than 5 dB(A) above rating background level at any residence in accordance with the Interim Construction Noise Guideline (DECC, 2009); and
    ii. no more than the noise management levels specified in Table 3 of the Interim Construction Noise Guideline (DECC 2009) at other sensitive receivers; or
(b) For the delivery of materials required outside the standard construction hours by the NSW Police Force or other authorities for safety reasons;
(c) Where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm; or
(d) Between 6:00am and 7:00am and 6:00pm and 7:00pm Monday to Friday (except public holidays) in sparsley populated areas (these construction hours may be reviewed and/or revoked by the Secretary in consultation with the EPA in the case of unresolved noise complaints); or
(e) Low noise impact activities and work between:
    i. 6:00am to 7:00am Monday to Friday; and/or
    ii. 6:00pm to 7:00pm Monday to Friday; or
(f) Works approved through an EPL; or
(g) Works approved by a Construction Environment Management Plan or Construction Noise and Vibration Management Plan for the SSI.

The Delivery Partner has made it clear to Quarry Solutions and other suppliers that it intends to rely upon of the above clauses to facilitate delivery of quarry materials outside the standard construction hours including on Saturdays. For example the Delivery Partner will establish stockpile laydown areas along the full length of the project that will facilitate the above clauses including B16 (a) (i) and (ii).

Accordingly, the project will be required to deliver quarry materials outside the standard construction hours outlined in condition B15. Specifically we understand there will be circumstances and periods of the Pacific Highway Upgrade Project where deliveries will be required from 7am to 6pm on Saturdays aligning with the standard construction hours for Monday to Friday. To ensure on-time delivery of quarry materials, allowance must be made for up to an hour travel time from the project to the delivery point along the Pacific Highway Upgrade Project (eg. where the project is occurring at the southern end of the works). Accordingly trucks must be able to exit the project from as early as 6am to ensure on time delivery for 7am, and similarly, for the last delivery of the day to be completed by 6pm allowing the truck to return to site by 7pm consistent with the projects proposed hours of operation for the project of 6am to 7pm Monday to Saturday.

The Delivery Partner has also informed Quarry Solutions and other suppliers that all weather access will be provided to the Pacific Highway Upgrade Project to facilitate uninterrupted delivery of quarry materials as this is a component of the project that can continue irrespective of weather conditions. This uninterrupted supply of quarry materials will ensure that construction activities at the Pacific Highway Upgrade Project can recommence with minimal delays. Accordingly, the EIS adopted a 50 week working year rather than 40 weeks which is more commonly seen in standard construction projects.

The above information had a direct bearing on the formulation of the proposed hours of operation outlined in the EIS and we believe it will be necessary to operate the quarry, including haulage activities offsite from 6am to 7pm Monday to Saturday to meet the requirements of the Delivery Partner.

MRCagney undertook the traffic impact assessment (TIA) for the project. We have sought advice from MRCagney regarding Council's comment that the EIS did not include the cumulative impacts from the existing Petersons Quarry and the Moonimba Quarry off Boggy Creek Road. MRCagney have highlighted to us that the survey undertaken on Thursday 21 May 2015 would include traffic generated by the Moonimba Quarry and based on the results of intersection performance analysis (SIDRA analysis) included in Section 6 of the TIA it is clear that all affected intersections have ample reserve capacity with and without the proposed development in the design year. Specifically all intersections along the haul road to the Pacific Highway would operate satisfactorily even if the total traffic volume generated was to double. Therefore, MRCagney have advised us that there are no operational constraints with the Petersons Quarry, Moonimba Quarry and the project operating simultaneously.

Accordingly, we believe the above information provides sufficient clarification on the matter and suggest that there is no need for Council to comment on this matter other than to recommend reasonable and relevant conditions of approval.

Road Traffic Noise

As discussed above, as the traffic loadings presented in the EIS are accurate there is no need to re-assess the road traffic noise results.

Proposed Conditions

Council's letter included a number of recommended conditions of consent. Upon review of the proposed conditions and discussion with Council, we propose the following amendments be made to the recommended conditions.

Condition 1 Traffic Management Plan and Code of Conduct

No objection is held to the proposed condition. However, we note that some references to 'log books' and 'identification markings on trucks' are out of date and have been replaced by modern GPS tracking technology which will be implemented for the project. Accordingly we suggest the condition be amended to read as follows:

> *The proponent shall prepare and enforce a Drivers Code of Conduct ~~Truck Management Plan and Code of Conduct for drivers~~. The document shall be submitted to and approved by Richmond Valley Council prior to commencement of ~~transport operations~~ the use.*
>
> *The document ~~Management Plan~~ must include but may not necessarily be limited to:*
>
> - *A driver training and induction procedure. This shall include a requirement for drivers / contractors to sign a Code of Conduct acknowledgement that they agree to comply with the requirements and ongoing education about requirements.*
> - *Complaint investigation procedure and procedure for dealing with non-compliant drivers.*
> - *Method of monitoring truck speeds by the operator.*
> - *Method of record keeping including ~~any proposal to keep log books of~~ truck ~~journeys~~ haul route, complaints, monitoring carried out by quarry operator, and outcomes of investigations of any breaches and providing copies of such records to Council.*
> - *~~Identification markings on trucks contracted to haul / work for the quarry operator~~.*
> - *~~A Driver Code of Conduct that~~ Details of the approved haulage route, operation hours for travel to and from the site, speeds, measures to reduce traffic noise, safe distances between trucks, traffic safety and courteousness, locations of sensitive receivers, identification and enforcement.*
>
> *The proponent is responsible for managing speed limits of quarry trucks to ensure compliance with this condition. The proponent shall ensure all drivers adhere to the Code of Conduct, promptly address any complaints or community issues and shall take or implement any reasonable mitigations measures as required.*

Condition 2 Community Relations

We request that reference to 'Operational Plan of Management' be replaced with 'Environmental Management Plan'. The Environmental Management Plan (EMP) forms part of the EIS documentation and will be relied upon for day to day management of the project and compliance with the requirements of the Environment Protection Licence (EPL) for the project. Otherwise no objection to this condition is raised.

Condition 3 Performance Reporting and Operational Plan of Management

We request that reference to 'Operational Plan of Management' be replaced with 'Environmental Management Plan'. The EMP forms part of the EIS documentation and will be relied upon for the day to day management of the project and compliance with the requirements of the EPL for the project. We also request that reference to 'Performance and Environmental Management Report' be replaced with 'Annual Report' and the timing for the annual report to be within 20 business days of the anniversary date of the EPL for the project. This will align with the annual reporting requirements under the EPL for the Environment Protection Authority (EPA). This avoids duplication of data and ensures Council and the EPA receive timely and consistent data on the performance of the project. Otherwise no objection to this condition is raised.

Condition 4 to Condition 14

No objection or proposed amendments.

Condition 15

The requirement to measure and document the axle mass for each individual axle for each heavy vehicle exiting the project is onerous and not standard practice. If this requirement was to be imposed the existing weighbridge previously installed by Council at the Petersons Quarry would have to be replaced. We understand this requirement does not currently apply to any other quarry within Council's jurisdiction and does not currently apply to the Petersons Quarry. No objection is held to provision of data regarding size of truck loads exiting the project. In addition, we note that the Quarry Solutions weighbridge system will not issue a ticket for an overweight truck thereby preventing overloaded trucks from leaving the project. Accordingly, we request that the condition be amended to read as follows:

The developer shall ensure that the ~~axle~~ mass for each heavy vehicle is measured and documented prior to leaving the quarry site to ensure that it does not exceed the limits prescribed by the Heavy Vehicle (Mass, Dimension and Loading) National Regulation 2013. Records shall be submitted to Richmond Valley Council quarterly with the heavy haulage quarterly returns.

Condition 16 and 17

No objection or proposed amendments.

Condition 18 and 19 Environmental Health

No objection is raised to condition 18 and no amendment is requested as Quarry Solutions is committed to implementing and maintaining the noise control measures outlined in the Noise and Dust Assessment prepared by MWA Environmental.

However, we hold concern regarding the practicality of condition 19 which requires a report to be submitted to the EPA to confirm that the noise control measures have been implemented and that the EPA approve that report before issue of the EPL for the project. We take this opportunity to inform Council that the EPA have provided general terms of approval for the project to the DP&E. The general terms of approval include the following:

> *Special Condition 2 Installation of noise mitigation works.*
> *The noise mitigation works identified in section 2.6.2 of the report, Noise and Dust Assessment Proposed Coraki Quarry, Seelems Road, Coraki, prepared by MWA Environmental dated 4 November 2015 must be installed prior to the commencement of quarrying activities at Lot 401. A report documenting these completed works is to be submitted to the EPA prior to quarrying at Lot 401.*

It is suggested that Council does not need to regulate this matter as the EPA have included a suitable condition under their authority. However, in the event that Council did wish to retain proposed condition 19 we request that the timing for approval of the report by the EPA be 'prior to quarrying at Lot 401' to align with the EPA's requirement which is more practicable than prior to the issue of the EPL. As Council is aware the project must first hold the EPL to carry out the noise control measures prior to commencement of the use.

We take this opportunity to thank Council for their assistance to date on this project and acknowledge the willingness of Council staff to work with Quarry Solutions in an open, transparent and professional manner.

Should you have any questions with regards to the information provided, please feel free to contact me on 07 3871 0411 or e-mail jlawler@groundwork.com.au.

Yours sincerely,
Groundwork Plus

Jim Lawler
Team Leader - Planning

Attachment 3

Council Draft Conditions Correspondence

Council's Reference:
L33811 - AJ/smc

Telephone Enquiries to:
Stephen McCarthy

9 February 2016

The Director - Resource Assessments
Planning Services
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Sir/Madam

Application No. SSD 7036 - Seelems Road, Coraki
Applicant: Quarry Solutions Pty Ltd
Consent Authority: Minister for Planning

Thank you for the opportunity to comment on the proposal for the new Coraki Quarry.

Council has been in discussion with the proponent's consultants regarding the suggested draft conditions in correspondence dated 9 December 2015. Upon review, Council has revised its draft conditions and request that the below proposed conditions replace the draft conditions detailed in previous correspondence.

Proposed Conditions

Council has prepared a number of consent conditions that it believes are applicable to this quarry development, given the scale of the operations and the impacts on local amenity and local infrastructure.

Traffic Management

1. The proponent shall prepare and enforce a Drivers Code of Conduct. The documents shall be submitted to and approved by Richmond Valley Council **prior to commencement of use**.

   The document must include but may not necessarily be limited to:
   - A driver training and induction procedure. This shall include a requirement for drivers/contractors to sign a Code of Conduct acknowledgement that they agree to comply with the requirements and ongoing education about requirements.
   - Complaint investigation procedure and procedure for dealing with non-compliant drivers.
   - Method of monitoring truck speeds by the operator.

- Method of record keeping including truck haul route, complaints, monitoring carried out by quarry operator and outcomes of investigations of any breaches and providing copies of such records to Council.
- Details of the approved haulage route, operation hours for travel to and from the site, speeds and measures to reduce traffic noise, safe distances between trucks, traffic safety and courteousness, locations of sensitive receivers, identification and enforcement.

The proponent is responsible for managing speed limits of quarry trucks to ensure compliance with this condition. The proponent shall ensure all drivers adhere to the Code of Conduct, promptly address any complaints or community issues and shall take or implement any reasonable mitigation measures as required.

Reason: *To protect the amenity of the area, traffic safety, ensure management of truck speed limits and noise impacts from transport operations*

Community Relations

2. **Prior to commencement of operations** the proponent shall:
   a) submit to Richmond Valley Council and include within the Environmental Management Plan the name and contact details for a person with the responsibility and authority to respond to Council and/or members of the public in regard to complaints, compliance with this consent and any Plan or report associated with the development. This person must respond to community complaints promptly and effectively.

   b) erect a sign at the entrance of the quarry with the phone number and permanent site contact details so that complaints concerning the operation of the quarry can be received and addressed in a timely manner. The sign must remain in place and contain accurate details at all times.

   The proponent shall ensure the contact details provided above remain current at all times and are updated if any changes occur.

   Reason: *To ensure the development responds to community concerns.*

Annual Report and Environmental Management Plan

3. **Prior to commencement of operations**:
   a) the Environmental Management Plan shall be amended where applicable to be consistent with this consent and any report, approval or plan associated with this consent and shall include any other additional matters as determined by Richmond Valley Council.

   b) Within one month of the end of every annual reporting period, or other timing as may be agreed with Council, the proponent shall submit to Richmond

Valley Council an Annual Report and Environmental Management Plan Report. The Report must review the environmental performance of the development including:

i. A description of the development carried out in the previous year, and development that is proposed to be carried out over the next year including quarry production and transport data, details of proposed working areas, areas to be opened and or closed and rehabilitation works.
ii. A review of the Environmental Management Plan and a description of any proposed amendments to the current Environmental Management Plan.
iii. An assessment of rehabilitation works completed during the year against the Environmental Management Plan and review of the importation of fill. A fill balance calculation shall be undertaken to ensure sufficient soil is available for ongoing rehabilitation works over the life of the quarry.
iv. A comprehensive review of the monitoring results and complaints records of the development over the previous year, which includes a comparison of these results against the:

    a) the relevant statutory requirements, limits or performance measures/criteria;
    b) requirements of any plan or program required under this consent, including the Drivers Code of Conduct
    c) the monitoring results of previous years;
    d) the relevant predictions in the EIS; and
    e) a copy of the annual return submitted to the Environmental Protection Authority for the current year

v. A statement of compliance with each of the relevant conditions of this consent including identification of any non - compliance over the last year, description of what actions were taken and will continue to be taken to ensure compliance. Identified actions shall be included in an amending Environmental Management Plan.
vi. Identification of any trends in the monitoring data over the life of the development.
vii. Identification of any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies.
viii. A description of measures that will be implemented over the next year to improve the environmental performance of the development.
ix. Monitoring and environmental reporting is to be completed by an independent and appropriately qualified person

c) Following submission of the Annual Report and Environmental Management Plan (and subject to approval by Richmond Valley Council), the Environmental Management Plan may be replaced with an amending Plan.

An Environmental Management Plan remains current until such time as an amending plan is approved by Richmond Valley Council.

Reason: *To monitor performance of the development and provide flexibility in the progressive working of cells over the life of the development.*

Infrastructure

4. Any damage caused to public infrastructure (roads, footpaths, kerb and gutter, stormwater, water and sewer mains, power and telephone services etc) during construction of the development shall be repaired to the satisfaction of the Director Infrastructure and Environment (and delegated staff). The repairs shall be carried out **prior to commencement of operations of the quarry**.

   Council shall be notified in writing, **prior to commencement of works**, of any existing damage to roads, stormwater drainage, kerb and gutter or footpaths. Absence of notification signifies that no damage exists, and the applicant is therefore liable for the cost of reinstatement of any damage found at the completion of the works.

   Reason: *To protect the existing and future amenity of the locality and to formally record any pre-existing damage to existing assets.*

5. Utilities, services and other infrastructure potentially affected by construction and operation shall be identified prior to construction to determine requirements for access to, diversion, protection, and/or support. Construction is to be in accordance with Council's standards, or the affected asset owners standards, and shall be completed **prior to commencement of operations of the quarry under this consent**.

   Reason: *To protect existing services.*

6. Works within any part of the road reserve which will impact on pedestrians or traffic flow (including temporary site fencing which restricts pedestrian access, temporary disruption to traffic, etc.) requires the preparation of a **Traffic Control Plan(s)**.

   The Plan(s) shall be submitted to Richmond Valley Council **prior to commencement of works in the road reserve.**

   Reason: *To ensure works carried out in the road reserve are carried out in a safe environment.*

7. Application (under Section 138 of the Roads Act) for approval to carry out any work within the road reserve shall be made to Council by any contractor proposing to carry out any such works prior to any such works commencing.

   Reason: *To comply with Section 138 of the Roads Act 1993.*

8. A defects liability bond (Bank Guarantee) shall be lodged with Council for any civil works which will become Council's assets. The bond shall be based on 10% of the value of the works which will become Council's asset and shall only be released by advice from Richmond Valley Council that both the defects liability period has been completed, and that the works have been completed and are satisfactory at the end of the defects liability period.

   If applicable, the bond shall be paid to Council **prior to commencement of operations of the quarry under this consent.**

   Reason: *To provide adequate funds for the rectification of non-compliances, or failure to carry out maintenance during the maintenance period.*

9. A Civil Engineering assessment fee shall be paid to Council, **prior to the issue of a Construction Certificate** for any civil works (roadworks, intersection etc) associated with this consent, for the assessment of plans, issue of a Construction Certificate, and inspection of civil works which will become Council's assets. Rates are as detailed in Council's Revenue Policy (Fees and Charges), with quantities assessed from approved plans detailing such civil works.

   Reason: *To ensure engineering works are designed and constructed to Council standards.*

10. All building and construction work by private contractors in NSW, costing $25,000 or more, is liable for the payment of the **Long Service Levy** to the Long Service Levy Payments Corporation. This is a State Government Levy and is subject to change. Construction work includes civil construction such as roads and bridges, pipelines, fuel gas and water storage and distribution infrastructure, sewerage drainage and treatment systems, retaining walls, electrical distribution infrastructure, etc. Confirmation of the payment to the Corporation (Council is an agent) is to be submitted to Council **prior to commencement of operations**. (Payments through Council are to be made payable to Richmond Valley Council. Cheques payable to the Corporation cannot be accepted by Richmond Valley Council.)

    Reason: *To ensure the long service levy on private contractor constructed works is paid in accordance with State Government legislation.*

11. A contribution under Section 94 (1)(b) of the Environmental Planning and Assessment Act 1979, amounting to $1.12 per tonne (rate as @ 17/12/2015) of material transported to and from the site is to be paid to Richmond Valley Council. Contributions under this Plan shall be levied quarterly and be based upon lodgement of quarterly returns itemising extraction/importation tonnages for the previous quarter. The rate shall be CPI's in accordance with the adopted Section 94 Heavy Haulage Plan 2013.

    Reason: *To provide funds for the road maintenance in accordance with Richmond Valley Council's Section 94 Heavy Haulage Contributions Plan 2013.*

12. Plans showing all civil engineering works which will become Council's assets, eg roads, kerb and gutter, stormwater drainage, water, sewer, footpaths, etc., shall be submitted to Richmond Valley Council. Council approval of the plans is required **prior to the issue of the Construction Certificate** for the civil works (roadworks, intersection etc) associated with this consent. Such works shall be designed and documented in accordance with Council's Standards.

    ***Reason**: To Provide adequate services for the development.*

13. Measures shall be put in place to control stormwater runoff for any road and intersection construction works. These control measures shall be in place **prior to commencement of construction works** and shall prevent soil erosion and transport of sediments from the development site into either:
    - adjoining land
    - natural drainage courses
    - constructed drainage systems, and
    - waterways

    The methods to be used shall be designed in accordance with the book ***'Managing Urban Stormwater: Soils & Construction' also known as 'the Blue Book' published by NSW Landcom.***

    All control measures are to be maintained in an operational condition at all times during construction and until vegetation or permanent structures can satisfactorily control stormwater runoff. Control measures shall be regularly cleared of sediment and debris build-up, to ensure continued operation.

    During construction works all motor fuels, oils and other chemicals are to be stored and used on site in a manner which ensures no contamination of stormwater. No incidents of visible pollution leaving the construction site. No litter placed in a position where it may be blown or washed off site.

    ***Reason:** To minimise erosion and sediment and associated impacts in accordance with the Protection of the Environment Operations Act, and to protect the capacity of downstream drainage networks (both constructed and natural)*

14. The developer shall construct the following road and intersection works in accordance with Council's Northern Rivers Development and Design Manual and the Northern Rivers Local Government Construction Manual and the Austroads Guide to Road Design Part 4A. All designs shall accommodate the swept paths of two opposing haulage trucks.

    Design plans are to be submitted to and approved by Richmond Valley Council **prior to the issue of the Construction Certificate** for the civil works (roadworks, intersection etc) associated with this consent. (The approved design plans form the basis of the calculation of the Civil Assessment Fee.) Road works shall be completed to the satisfaction of Richmond Valley Council **prior to commencement of operations of the quarry under this consent**.

- Seelems Road is to be constructed and sealed as a 6 metre two coat bitumen seal with 1 metre gravel shoulders from Petersons Quarry Road to a point 200 metres west of the entrance to the industrial building at 30 Seelems Road.
- The Petersons Quarry Road/Lagoon Road intersection shall be sealed with AC/hot mix for heavy vehicle tyre drag control.
- The Lagoon Road/Casino Coraki Road intersection shall be sealed with AC/hot mix for heavy vehicle tyre drag control.
- The Woodburn Coraki Road/Pacific Highway intersection shall be sealed with AC/hot mix for heavy vehicle tyre drag control.

Reason: *To ensure an adequate road network construction standard in accordance with adopted standards and protect the amenity of the residence at 200 Lagoon Road.*

15. The developer shall ensure the mass for each heavy vehicle is measured and documented prior to leaving the quarry site to ensure it does not exceed the limits prescribed by the *Heavy Vehicle (Mass, Dimension and Loading) National Regulation 2013.* Records shall be submitted to Richmond Valley Council quarterly with the heavy haulage quarterly returns.

Reason: To protect Council's pavement assets.

16. Upon completion of any works to be vested in Council, ***Work as Executed*** drawings and plans in digital format shall be submitted to and approved by Richmond Valley Council **prior to commencement of operations of the quarry under this consent**.

Reason: *To provide adequate records of services for the development.*

17. Inspection and Testing of the civil engineering works which will become Council's assets is required. The Inspection and Testing shall be in accordance with the Northern Rivers Local Government Development and Design Manual and the Northern Rivers Local Government Construction Manual.

Reason: *To ensure engineering works are constructed to Council standards.*

<u>Environmental Health</u>

18. Noise control measures recommended in Section 2.6.2 of the report *Noise and Dust Assessment Proposed Coraki Quarry Seelems Road Coraki* (MWA Environmental 4 November 2015) must be implemented and complied with.

Reason: *To protect the amenity of nearby sensitive land uses*

19. A report from a suitably qualified acoustic engineer detailing that all recommendations outlined in Section 2.6.2 of the report *Noise and Dust Assessment Proposed Coraki Quarry Seelems Road Coraki* (MWA Environmental 4 November 2015) have been implemented must be submitted to and approved by the NSW Environment Protection Authority prior to quarrying at Lot 401.

    Reason: *To protect the amenity of nearby sensitive land uses*

Council thanks the Department for the opportunity to contribute towards this project and in the event you should have any queries please do not hesitate to contact Angela Jones, Director Infrastructure and Environment by telephoning on 6660 0262 or alternatively email angela.jones@richmondvalley.nsw.gov.au

Yours faithfully

Angela Jones
Director Infrastructure and Environment

Richmond Valley Council

Attachment 4

Heritage Assessment Response

New South Wales Archaeology Pty Ltd ABN 53106044366

PO Box 2135
Central Tilba NSW 2546
ph 02 44737947
0427074901
www.nswarchaeology.com.au

9 February 2016

Jim Lawler
GROUNDWORK Plus
6 Mayneview Street
MILTON QLD 4064

Dear Jim

Re: Coraki Quarry, Seelems Road, Coraki NSW - Response to Submissions: submission from Heritage Division of OEH regarding Historic Heritage

Searches have been conducted for previous heritage listings in and around the Coraki Quarry. These searches have included all of the relevant heritage registers for items of local through to world significance. No items of known or potential historic and/or environmental heritage are listed for the Coraki Quarry area.

A field assessment of the Coraki Quarry proposal area was conducted in 2015 over a two and a half day period by a suitably qualified heritage consultant (as documented in Dibden 2015). A total of approximately 44 hectares was inspected during the field work. The land is occupied by the existing Petersons Quarry excavations and dumps, and otherwise is given over to grazing paddocks. During the survey no potential heritage items, buildings, works, relics, gardens, landscapes or views were identified.

An interview has been conducted with Mr Owen McGeary, the land owner (since 1957) of Lot 401 DP633427, and long term resident of the local area. He asserts that the land has only ever been used for grazing and has never had any buildings or other erections. It is therefore the case, that subsurface archaeology of historic value is unlikely to be present.

The following specific requests made by the NSW Heritage Council are addressed:

Include a statement of heritage impact for all heritage items (including significance assessment): - not applicable as no heritage items are present.

Outline the proposed mitigation and management measures (including measures to void significant impact and an evaluation of the effectiveness of the mitigation measures): - not applicable as no heritage items are present.

Consider impacts including, but not limited to, vibration, demolition, archaeological disturbance, altered historical arrangements and access, landscape and vistas, and architectural noise treatment (as relevant): - not applicable as no heritage items are present.

Where potential archaeological impacts have been identified develop an appropriate archaeological assessment methodology, including research design, to guide physical archaeological test excavations and include the results of these test excavations. In the event that archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council's Endorsed Excavation Director criteria): - not applicable as no heritage items are present.

I trust this information is satisfactory.

Yours faithfully

Dr Julie Dibden
New South Wales Archaeology Pty Limited

References:

J. Dibden 2015 Coraki Quarry, Seelems Road, Coraki NSW Aboriginal Cultural Heritage Assessment Report.

Attachment 5

Bushfire Management Plan

GROUNDWORK plus

CORAKI QUARRY
BUSHFIRE MANAGEMENT PLAN

Prepared for:
Quarry Solutions Pty Ltd

Date:
2/02/2016

Reference:
1837.DA1.022

Document Control

Project/ Report Details

Document Title:	Coraki Quarry Bushfire Management Plan
Principal Author:	Nancy Hsiao
Client:	Quarry Solutions Pty Ltd
Ref. No.	1837.DA1.022

Document Status

Issue	***Description***	***Date***	***Author***	***Reviewer***
0	Bushfire Management Plan	February 2016	Nancy Hsiao	Jim Lawler

Distribution Record

Recipient	
Department of Planning and Environment	1e
Quarry Solutions Pty Ltd	1e

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Table of Contents

ATTACHMENTS

1. Introduction

This Bushfire Management Plan has been prepared for Quarry Solutions Pty Ltd to assist with the management of life and property in the event of a bushfire at the Coraki Quarry (Site). The Site encompasses the existing Petersons Quarry and therefore this Bushfire Management Pan also applies to the existing Petersons Quarry.

1.1 Site Details

The Site is known as the Coraki Quarry and comprises of 10 lots described as Lot 401 DP633427, Lot 402 DP802985, Lot 403 DP802985, Lot 408 DP1166287, Lot A DP397946, Lot A DP389418, Lot 3 DP701197, Lot 2 DP954593, Lot 1 DP954592 and Lot 1 DP310756. The Site is located at Seelems Road and Petersons Quarry Road, Coraki NSW 2471, approximately 2.5 kilometres to the northwest of the Coraki Township.

The Coraki Quarry layout is shown in **Attachment 1 – Bushfire Management Plan** with details of the internal haul route, location of water storages, fuel storage and other operational areas.

1.2 Contact Details

External Contacts:

1. Emergency Services – 000
2. New South Wales Rural Fire Service – 1800 679 737
3. Environment Protection Authority – 13 15 55
4. Public Health Unit — Lismore — 02 6620 7585 or (0417 244 966 after hours)
5. Richmond Valley Council — 02 6660 0300
6. Essential Energy – 13 20 80

Internal Contacts:

1. Site Manager
   Bob Boss
   Phone: 0427 978 964
   E-mail: bob.boss@quarrysolutions.com.au

2. General Manager
   Doug Howard
   Phone: 02 6671 2300
   E-mail: doug.howard@quarrysolutions.com.au

3. Special Projects Manager
   Terry Woods
   Phone: 0411 019 290
   E-mail: terry.woods@quarrysolutions.com.au

1.3 Assessment of Bushfire Risk

The potential bushfire risk to the Site is considered to be low due to the existing Petersons Quarry and the surrounding rural landscape being largely devoid of vegetation other than scattered isolated patches of trees separated by significant areas of grazing and cropping land.

2. Management Procedures

The general strategies/mitigation measures for the management of bushfire on the Site will be:

- Ensure sufficient water storage is available on site for firefighting purposes.
- Ensure the operational areas are tidy and potential ignition sources are kept away from potential bushfire risk areas.
- Maintain a site attendance register.
- Maintain a communications system with all on-site personnel.
- Maintain existing access to fire maintenance trails.

2.1 Management of Fire Ignition

The main potential fire ignition for the Site include heated components of vehicles and machinery being operated within the Coraki Quarry and potentially inappropriate disposal of cigarettes by staff and visitors. However, vehicle usage will be limited to dedicated roads and hard stand areas will be maintained to be devoid of vegetation which could be ignited. Smoking will only be permitted within designated areas away from fuel storage areas and also away from vegetation which could be ignited. It is also noted that the storage of fuel and chemicals is within a bunded structure complying with Australia Standard AS1940 and the storage location is within a hardstand area which will act as an asset protection area. Furthermore, boundary fences and access tracks will be maintained to assist in movement of Rural Fire Services officers in the event of a fire.

2.2 Protection of Quarry Assets

In the event of bushfire, the quarry assets will be relocated to be away from the fire source in the designated fire separation areas. Instructions will be given by the responsible personnel for the relocation of quarry assets. The designated fire separation areas include the quarry pit, processing area and weighbridge yard. Responsible personnel will determine the most appropriate area depending on the movement and approaching direction of the fire.

2.3 Incident and Accident Reporting

In the event that an injury is sustained or an incident occurs to an employee, contactor or visitor, the following contingencies have been put into place:

- Trained and accredited First Aid Officers will be in the workplace and shall be present on every shift.
- Contact number of the First Aid Officer is displayed on the Site office.
- All injuries shall be reported to the supervisor immediately and recorded on the injury report form as soon as practicable after injury.
- All injuries will also be investigated immediately and corrective actions instigated in accordance with Quarry Solutions Work Health and Safety Management Plan.

2.4 Emergency Management

2.4.1 Key Responsibilities (pre-emergency)

The Quarry Manager or delegate is responsible for:

- The effectiveness and accuracy of the Emergency Plan, procedures and relevant emergency documentation.
- Maintenance of staff training in emergency preparedness, emergency information lists and emergency related plant and equipment necessary for emergency evacuation compliance.

- Co-ordination of evacuation exercises.
- Post-emergency/exercise review.

2.4.2 Management Methods

- The Site has an emergency plan.
- A complete copy of the plan shall be displayed in all the main work areas.
- This plan forms part of the Work Place Health and Safety Plan.

2.4.3 Chief Emergency Controller (during and post-emergency)

The Emergency Controller for the Coraki Quarry is:

- Quarry Manager – Bob Boss 0427 978 964.

Responsibilities include:

- Immediately responding to any emergency situation.
- Ascertaining the nature of the emergency and determining appropriate actions.
- Ensuring the appropriate emergency services have been notified.
- Co-ordinating the deployment of staff and any internal specialist resources.
- Where safe to do so take steps to contain or control the hazard.
- Ensuring that appropriate senior management are kept updated on the situation.
- Co-ordinating post-incident recovery strategies.

2.4.4 Staff, Employees and Contractors

Responsibilities include:

- Attendance of any emergency preparedness training.
- In the event of emergency event, report all emergency incidents to the Quarry Manager
- Follow instructions given in the event of an emergency.
- Co-operate with emergency personnel in the event of an emergency.
- When safe to do so take steps to contain or control the hazard.

2.5 Emergency Resources

2.5.1 Emergency Warning and Communications System

- Radios in all plant, weighbridge and vehicles, mobile phones, verbal.
- Communication with staff.
- In the event of a failure of the radio, landline telephone, emergency warning system and messages may be relayed via mobile phone or runner/driver.

2.5.2 Fire-Fighting Appliances

The Site facilities are equipped with various fire-fighting appliances which are strategically located throughout the Site offices and plant as per the Emergency Response Plan.

2.5.3 Location of Extinguishers

Fire extinguishers are found in the following locations:

- On plant and in all Site offices as required.
- Next to fuel installation.
- The equipment shall comply with the relevant Australian Standards and be appropriately signposted.

All employees and contractors shall be competent in the use of the equipment.

All fire-fighting equipment shall be regularly checked and serviced. This will involve both internal inspections as well as external tests conducted by approved experts.

The Quarry Manager acts as the Fire Warden.

2.5.4 Incident and Accident Reporting

In the event that an injury is sustained to an employee or an incident occurs, contactor or visitor, the following contingencies have been put into place:

- Trained and accredited First Aid Officers will be in the workplace and shall be present on every shift.
- Contact number of the First Aid Officer is displayed on the Site office.
- All injuries shall be reported to the supervisor immediately and recorded on the injury report form as soon as practicable after injury.
- All injuries will also be investigated immediately and corrective actions instigated in accordance with Quarry Solutions Work Health and Safety Management Plan.

2.5.5 First Aid Equipment Locations

- Site Office.
- Quarry Vehicle.
- Loader.

2.6 Bushfire Emergency Response and Evacuation Plan

2.6.1 Response Procedure

- Designated Fire Warden to consult the NSW RFS website, 1800 NSW RFS, smart phone applications and local firefighting resources for fire situation and updates.
- Designated Fire Warden to take control.
- Inform staff of the situation.
- Move persons away from danger (if safe to do so) to designated area.
- Ensure all persons are accounted for.
- Contact relevant emergency services (i.e. Ambulance/Fire/Police) to confirm that early advice will be required in the event of an evacuation being necessary.
- Maintain situational awareness through radio, NSW RFS website, 1800 NSW RFS, smart phone applications and local firefighting resources.
- In the event of an evacuation the Fire Warden is to advise the local emergency service evacuation is occurring, how many people are evacuating and where they are going.
- The Fire Warden is ensure all persons are accounted for and safe following the evacuation and advise the local emergency service accordingly.

2.6.2 Reporting an Emergency Externally

When reporting an emergency to an external agency, the following information should be included:

- Name of organisation.
- Exact nature of emergency - are there any casualties?
- Exact location (including address and location on Site).
- Name of person reporting emergency.
- Contact number (where applicable).

This information is on display in the Site office. External reporting is to be carried out by the Quarry Manager, but, in that person's absence, may be effected by their delegate.

2.6.3 Evacuation Alert

Verbal instructions for evacuation are effected by calling out "emergency, emergency, emergency" over the radio system or verbal directive issued by the appropriate personnel from the Quarry Manager will constitute the evacuation signal.

2.6.4 Assembly Areas

In the event of an evacuation, persons should assemble at the nearest safe assembly area or as directed by the local emergency services.

2.6.5 First Aid

If First Aid assistance is required contact the relevant First Aid attendant. First Aid attendant lists can be found in the Site office. Any injured people who can be moved safely should be taken to the nearest assembly area (whichever is more appropriate) for treatment. Those people who are trapped or unable to be removed immediately must be protected and given First Aid on the spot (providing it is safe to do so).

2.6.6 Post event procedure

When the bush fire threat has passed and the area is deemed safe by emergency services:

- No person should re-enter the area until advised by the emergency services.
- The Fire Warden should arrange the movement of persons back to the site (if required)
- All person are to be accounted for on their return
- Inform emergency service of the return of person to the site.

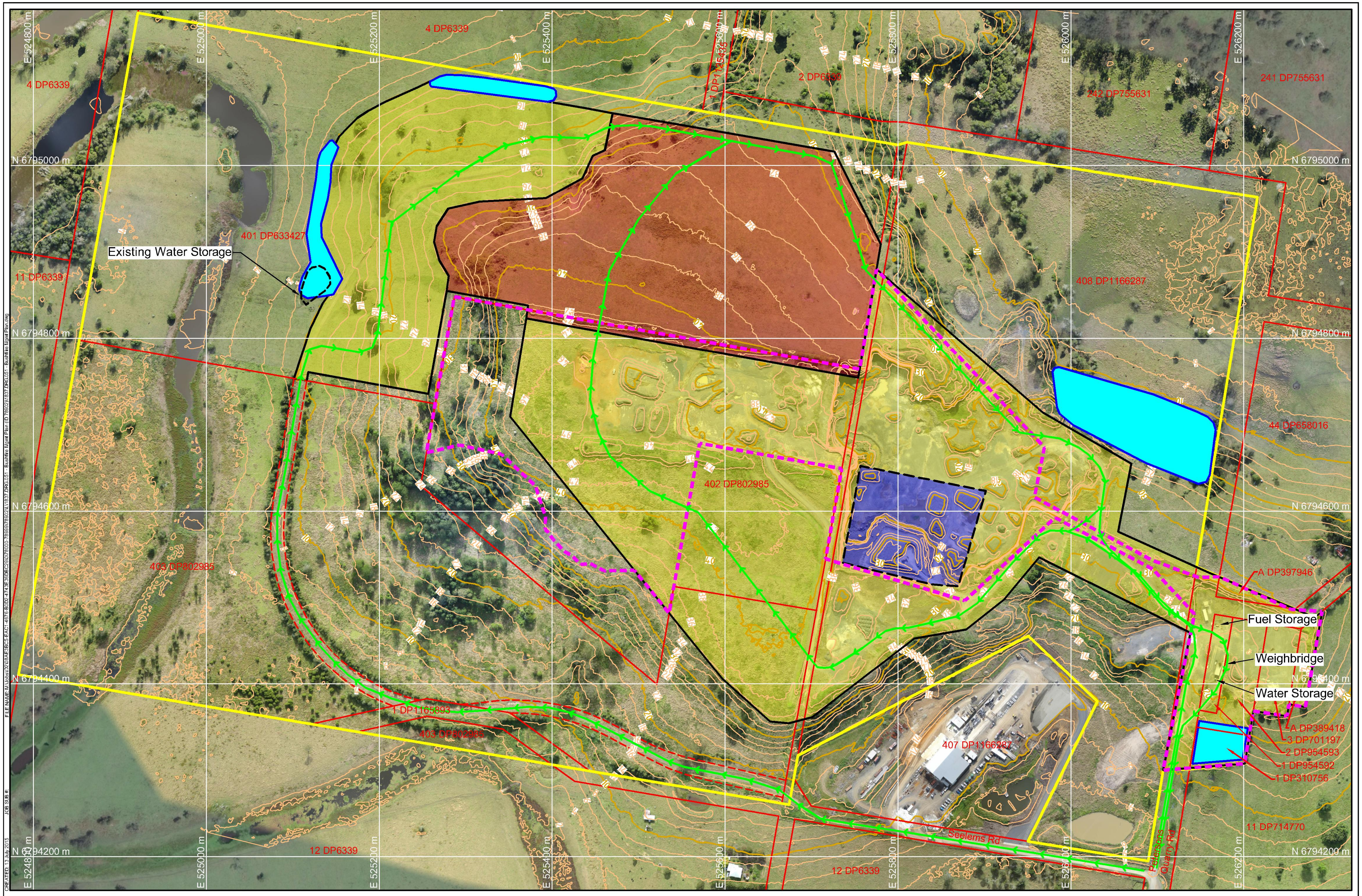
3. Conclusion

This Bushfire Management Plan has been prepared to ensure appropriate management measures will be implemented in the event of a bushfire at the Coraki Quarry, which includes the Petersons Quarry. The Coraki Quarry will also operate in accordance with the existing Petersons Quarry Pollution Incident Response Management Plan (PIRMP) which includes a detailed pollution incidence response procedure.

attachments

Attachment 1

Bushfire Management Plan (*Drawing No 1837.051R1*)



REV	DESCRIPTION	DATE	BY

Data Sources:
Photography: UAV Survey 2015-07-02; Google. Image date: 2014-12-18
Topography: UAV Survey 2015-07-02
Cadastre:
Ecosystem:
Other:

Legend:
- Site Boundary
- Cadastral Boundary
- Approved Quarry Expansion Footprint
- Haul Route
- Water Storage
- Pit Area / Extraction Footprint
- Processing Plant Area
- Stockpile Area

N

PROJECT: Coraki Quarry

TITLE: Bushfire Management Plan

CLIENT: Quarry Solutions Pty Ltd

GROUNDWORK plus
PH: +61 7 3871 0411
WWW.GROUNDWORK.COM.AU

SCALE: 1:4,000 When Printed On A3 — 0 80

DRAWING NUMBER: 1837.051

REVISION:

DATE: 8 February 2016 | DRAWN: LT

PRINTED: 9 February 2016 | CHECKED:

DATUM: HORIZONTAL / VERTICAL / ZONE — MGA / AHD / 56

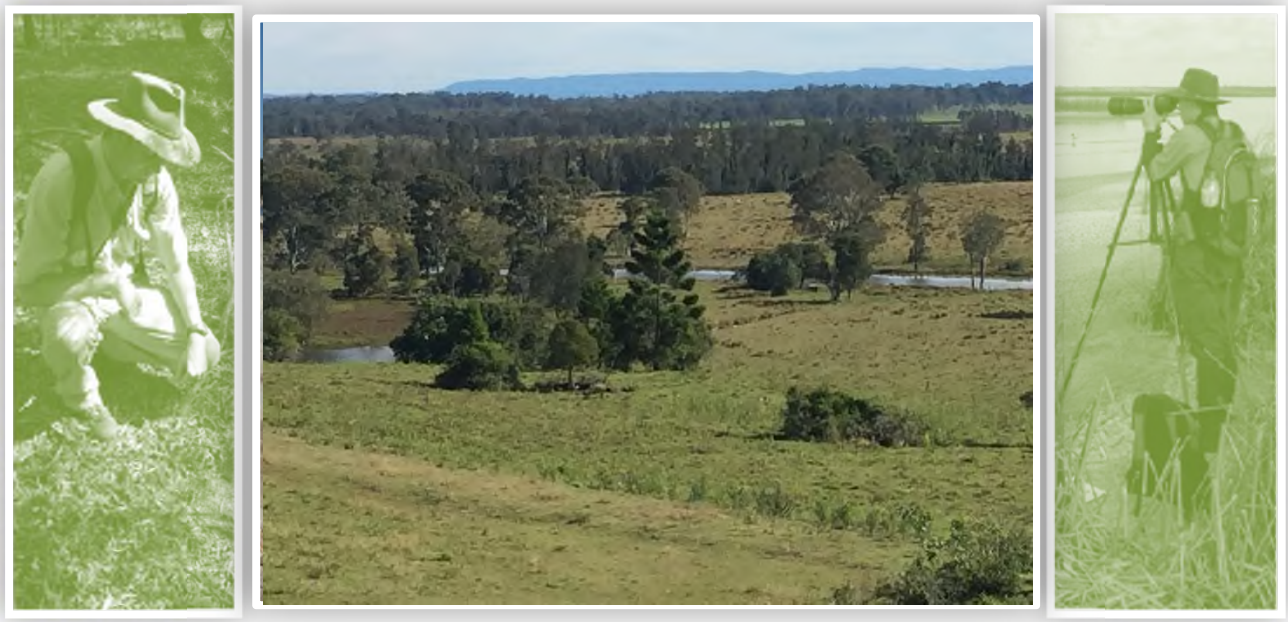
Attachment 6

Addendum to Biodiversity Assessment Report

ADDENDUM TO BIODIVERSITY ASSESSMENT REPORT

CORAKI QUARRY, CORAKI, NSW

Prepared for
Groundwork Plus on behalf of Quarry Solutions Pty Ltd



Biodiversity Assessment and Management Pty Ltd
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February 2016

BAAM ECOLOGICAL CONSULTANTS

Specialised ecological knowledge that reduces your risk

Document Control Sheet

File Number: 0049-074

Project Manager/s: Jedd Appleton

Client: Groundwork Plus on behalf of Quarry Solutions Pty Ltd

Project Title: Addendum to Biodiversity Assessment Report: Coraki Quarry, Seelems Road, Coraki, NSW

Project Author/s: Jedd Appleton

Project Summary: Provision of further information regarding the intended function of a designated buffer surrounding existing *Macadamia tetraphylla* specimens, and proposed measures to compensate for the loss of native trees as a result of the proposed development of the site.

Draft Preparation History:

Draft No.	Date draft completed	Reviewed by	Issued by
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Revision/ Checking History Track:

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Signed on behalf of Date: 08/02/2016

Biodiversity Assessment and Management Pty Ltd

Director

ADDENDUM TO BIODIVERSITY ASSESSMENT REPORT

CORAKI QUARRY, SEELEMS ROAD, CORAKI, NSW

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Table of Terms and Abbreviations

BAAM	Biodiversity Assessment and Management Pty Ltd
BAR	Biodiversity Assessment Report
EEC	Endangered Ecological Community
EPBC Act	Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*
NSW	New South Wales
OEH	New South Wales Office of Environment and Heritage
TSC Act	New South Wales *Threatened Species Conservation Act 1995*

1.0 INTRODUCTION

Biodiversity Assessment and Management Pty Ltd (BAAM) prepared a Biodiversity Assessment Report (BAR) for Groundwork Plus on behalf of Quarry Solutions Pty Ltd to document an assessment of the biodiversity values in and around the proposed development footprint for an Extractive Industry at Seelems Road (via Petersons Quarry Road), Coraki in New South Wales (the "study area"), and to inform decision making regarding the avoidance and mitigation of impacts of the project on significant biodiversity values (BAAM 2015).

Four specimens of *Macadamia tetraphylla* (Rough-shelled Bush Nut) were recorded during the field survey undertaken to inform the BAR. This species is currently listed as Vulnerable under both the New South Wales *Threatened Species Conservation Act 1995* (TSC Act) and Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). In response to this survey result, the original footprint was redesigned to avoid the clearing of these specimens, with a 25 m buffer proposed to be established and maintained around the plants.

The assessment also confirmed the presence of four native vegetation types within or in close proximity to the study area, all of which are recognised as Endangered Ecological Communities (EECs) in New South Wales. However, these native vegetation communities all occur outside of the proposed development footprint and will not be directly impacted.

Habitat to the north-east of the study area showed evidence of use by Koala (*Phascolarctos cinereus*) (Vulnerable: TSC Act and EPBC Act), and although no such evidence of Koala occurrence was found within the study area, it is possible this species may occasionally utilise scattered food trees occurring within the proposed development footprint.

Otherwise, the proposed development footprint was found to be largely devoid of native vegetation and has been used for grazing livestock and existing quarrying operations. Native vegetation to be removed occurs as scattered paddock trees or as minor components within otherwise heavily disturbed and exotic-dominated patches of regrowth.

Following a review of the BAR, the New South Wales Office of Environment and Heritage (OEH) requested further information on the management of potential impacts to the identified biodiversity values on the site (**Appendix 1**). Specifically, it was recommended that the following be provided:

- Further detail regarding the maintenance, ongoing management and timeframes for the sustainable management of the *Macadamia tetraphylla* specimens and the surrounding buffer.
- Description of a suitable offset to compensate for the direct loss of native vegetation (including Koala food trees) and potential impacts to surrounding biodiversity from the operation of the site.

This addendum has been prepared to document the additional information requested/recommended by OEH.

2.0 INTENDED MANAGEMENT OF *MACADAMIA TETRAPHYLLA* SPECIMENS AND THE SURROUNDING BUFFER

2.1 BACKGROUND

The four recorded specimens of *Macadamia tetraphylla* occur together within the centre of Lot 401 on DP633427, adjacent to a clump of other scattered, paddock trees and outside of any of the recognised native vegetation zones on the study area (**Figure 2-1**). These plants are either relicts of a dry rainforest or forested wetland community that once occupied this part of the site, or they have propagated from seeds dispersed from nearby communities.

As outlined in BAAM (2015), the original footprint has been redesigned to avoid the clearing of these *Macadamia tetraphylla* specimens. Taking into account site constraints and the necessary size of the stockpiling area to meet operational requirements, the revised footprint incorporates the retention of these specimens and a 25 m buffer (**Figures 2-1**). This far exceeds the minimum tree protection zone recommended within AS 4970-2009 "Protection of trees on development sites", which specifies a buffer radius equivalent to 12 times the stem diameter at breast height to minimise direct impacts to tree canopies and root zones (Standards Australia 2009). A larger (25 m) buffer is appropriate for this site, given the threatened status of the plants and the scale of the adjacent development and associated, potential impacts from dust and soil compaction.

2.2 INTENDED OUTCOME

Recognised activities to assist in the protection and recovery of *Macadamia tetraphylla* focus on the protection and expansion of rainforests and other native habitats (OEH 2015). Accordingly, the intended outcome for the buffer area is to achieve a pocket of native, self-sustaining rainforest habitat, which not only protects the exiting *Macadamia tetraphylla* specimens but could also act as a "stepping stone" for fauna travelling between larger parches of habitat elsewhere on the site and in the local landscape.

2.3 POTENTIAL THREATS TO BE MANAGED

Recognised threats to *Macadamia tetraphylla* (OEH 2015) include:

- Clearing and fragmentation of habitat for coastal development, agriculture and roadworks.
- Risk of local extinction due to low numbers.
- Grazing and trampling by domestic stock.
- Fire.
- Invasion of habitat by weeds.
- Loss of local genetic strains through hybridisation with commercial varieties.
- Reduction of genetic diversity as a result of fragmentation.

Threats currently present on the site include invasion of habitat by weeds, and grazing and trampling (of seedlings) by domestic stock. While domestic stock will no longer represent a threat during the operation of the quarry, continued or increased invasion of the buffer by weeds is likely to occur in the absence of appropriate management, which can change vegetation community composition, out-compete native plants and, in some cases, increase the intensity of fire, leading to further community degradation. Other potential impacts (if left unmanaged) during the operation of the quarry could include:

- accidental disturbance to the plants and/or adjacent habitat due to uncontrolled or unintentional vehicle/machinery access;
- accidental disturbance to the plants and/or adjacent habitat due to uncontrolled or unintentional stockpiling of quarried material within the buffer;
- incursion of stockpiled material due to structural failure of adjacent stockpile mounds and/or erosion and sedimentation following rainfall, which could smother the plants and/or adjacent habitat;
- incursion of dust from adjacent clearing, earthworks, vehicle movements, wind and blasting, which can inhibit plant growth; and
- impacts on plant health from altered water flow patterns and/or an increase or decrease in water availability.

153°16'E

28°58'S

28°59'S

Ficus obliqua

2 x Ficus obliqua,
1 x Hoop pine,
4 x Macadamia tetraphylla

Silky oak

Brush box

Cupaniopsis parvifolia

Hoop pine

Hoop pine

Eucalyptus teretecornis

Flindersia australis

Angophora floribunda

Camphor laurel

Flindersia australis

Seelems Creek

planted screen either side of road

Coordinate System: GDA 1994 MGA Zone 56
Projection: Transverse Mercator
Datum: GDA 1994
False Easting: 500,000.0000
False Northing: 10,000,000.0000
Central Meridian: 153.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter

1:6,700 at A3

0 0.035 0.07 0.14 0.21 0.28 Kilometers

LEGEND

Areas within which proposed plantings and/or other rehabilitation activities are proposed:

- Dry Rainforest Rehabilitation
- Eucalyptus plantings
- Site Boundary
- Inner assessment circle (200 Ha)
- Indigenous heritage non-disturbance zone
- Previously recorded Black-Necked Stork nest
- Protected Macadamia trees and 25m buffer area

Ground-truthed Vegetation:

- Coastal freshwater meadows and forblands of lagoons and wetlands (Freshwater wetlands on coastal floodplains of the NSW North Coast, Sydney Basin and South East Corner bioregions EEC)
- Heavily disturbed vegetation dominated by exotics
- Hoop Pine - Yellow Tulipwood dry rainforest of the North Coast (Lowland Rainforest in the NSW North Coast and Sydney Basins Bioregions EEC)
- Paperbark swamp forest of the coastal lowlands of the North Coast (Swamp sclerophyll forest on coastal floodplains of the NSW North Coast, Sydney Basin and South East Corner bioregions EEC)
- Forest Red Gum - Swamp Box of the Clarence Valley lowlands of the North Coast (Sub-tropical Coastal Floodplain Forest of the NSW North Coast bioregion EEC)

Development site footprint

- Development site footprint
- Processing plant area
- Stormwater detention basin
- Extraction area
- Stockpile area
- Traffic off road
- Traffic on road

Drawn By: MG Reviewed by: AC Date: 8/02/2016

Document Location: D:\GIS\Jobs\0049-074 Coraki Quarry\GIS\MXDs\ReportMaps\Figure 2-1 Proposed macadamia buffer and rehab.mxdDate: 8/02/2016 2:16:50 PM

Figure:	**2-1**
Title:	Proposed Macadamia Buffer and Additional Planting and Rehabilitation Areas"
Project:	Addendum to Biodiversity Assessment Report - Coraki Quarry, Seelems Road, Coraki
Client:	Groundwork Plus on behalf of Quarry Solutions Pty Ltd

BAAM ECOLOGICAL CONSULTANTS

2.4 PROPOSED MANAGEMENT AND MAINTENANCE

2.4.1 Prior to Site Clearing and Operation

Protection of the *Macadamia tetraphylla* population will commence with the clear demarcation of the buffer boundary with the use of temporary fencing to facilitate onsite recognition, prevent direct impacts from grazing by domestic stock and other animals, and prevent inadvertent access by vehicles and machinery during initial onsite activities. The exact locations of the *Macadamia tetraphylla* specimens and the buffer boundary will then be recorded and incorporated into all relevant site and project documentation and communicated to all onsite personnel and contractors with details concerning the importance of the plants and their protection, and the intended outcome for the buffer area.

An initial collection and storage of seeds from the existing plants will also be undertaken as soon as possible as insurance against potential mortality due to quarrying operations.

Activities will then focus on the enhancement of the buffer area such that the initial phases of habitat development are established prior to the commencement of clearing, earthworks and operational activities in the surrounding area. This will initially involve the removal of existing environmental weeds (e.g. Lantana) from within the buffer boundary, utilising a low impact strategy that minimises disturbance to the existing native vegetation and minimises opportunities for re-infestation. That is:

- Work outwards from intact native vegetation areas towards areas of weed infestation;
- Make minimal disturbance to the existing native species and the soil;
- Weed control should involve primary weed removal, follow-up and long term maintenance; and
- Do not over clear; let native plant regeneration dictate the rate of weed removal.

In general, manual removal of herbaceous weeds, regrowth and seedlings is preferred to minimise disturbance to soil stability and existing native species, while chemical removal can be utilised for larger weeds and areas of large infestation containing few natives.

Replacement and supplementary plantings will then be undertaken to minimise the re-establishment of weeds and facilitate the establishment of a self-sustaining, native rainforest community. The primary focus will be to quickly establish a native canopy to shade out weed regrowth and provide suitable conditions for other rainforest plants to thrive. To this end, priority will be given to fast growing, larger pioneer tree species for making up the initial plantings. Once the canopy starts shading out the weeds, a broader selection of other tree species will be planted between the pioneer species to increase species diversity and habitat complexity/availability for native fauna. As the more diverse canopy begins to establish, shrubs, vines and groundcovers will then be introduced.

A selection of suitable species and planting densities are provided in **Table 2.1**, based on the rainforest species observed growing as scattered individuals and/or within naturally occurring rainforest communities in the study area and some additional species known from them local area.

While plantings within the buffer will be arranged randomly at the minimum densities identified in **Table 2.1**, a 3m-wide “edge-seal” of thicker shrubs and groundcover species will be planted along the entire perimeter of the buffer to assist in preventing the encroachment of weeds from adjacent areas.

Further details regarding the planting strategy are provided in **Table 2.2**.

It is recommended the initial weed control and planting activities are completed at least three to six months prior to the commencement of surrounding clearing and earthworks to enable the new plants to establish and any preliminary issues to be identified.

Table 2.1. Planting schedule – species and densities

Stratum / Species	Common Name	Density**
Pioneer tree species (initial plantings)*		
Acacia melanoxylon	Blackwood	3-4m centres
Alphitonia excelsa	Red Ash	3-4m centres
Commersonia bartramia	Brown Kurrajong	3-4m centres
Glochidion ferdinandi	Cheese tree	3-4m centres
Guioa semiglauca	Guioa	3-4m centres
Jagera pseudorhus	Foambark	3-4m centres
Mallotus phillipensis	Red Kamala	3-4m centres
Tree layer (secondary plantings)		
Alectryon tomentosum	Hairy Alectryon	2m centres
Araucaria cunninghamii	Hoop Pine	5m centres
Archidendron pruinosum	Laceflower	2m centres
Cryptocarya triplinervis var. pubens	Three-veined Laurel	2m centres
Cupaniopsis parviflora	Small-leaved Tuckeroo	2m centres
Drypetes deplanchei	Yellow Boxwood	2m centres
Dysoxylum fraserianum	Rosewood	2m centres
Dysoxylum mollisimum subsp. molle	Red Bean	2m centres
Elaeocarpus obovatus	Hard Quandong	2m centres
Ficus obliqua	Small-leaved Fig	5m centres
Flindersia australis	Crow's Ash	2m centres
Melia azederach	White Cedar	2m centres
Polyscias elegans	Celerywood	2m centres
Streblus brunonianus	Whalebone Tree	2m centres
Shrub layer		
Alchornea ilicifolius	Native Holly	1-2m centres
Breynia oblongifolia	Breynia	1-2m centres
Notelaea longifolia	Mock Olive	1-2m centres
Pittosporum revolutum	Hairy Pittosporum	1-2m centres
Vine / ground layer		
Dioscorea transversa	Native Yam	1m centres
Eustrephus latifolius	Wombat Berry	1m centres
Lomandra longifolia	Spiny-head Mat-rush	1m centres
Pandorea baileyana	Wonga Vine	1m centres
Smilax australis	Sarsaparilla	1m centres
Stephania japonica var. discolor	Snake Vine	1m centres

*****Rapidly growing, pioneer species recommended by McMinn (http://www.davidmcminn.com/ngc/pages/fastrainforest.htm) and otherwise known to be suitable pioneer species.

**3-4m spacings are recommended by McMinn (http://www.davidmcminn.com/ngc/pages/fastrainforest.htm) for initial plantings of fast-growing, larger pioneer species, followed by inter-plantings with slower-growing trees. An overall planting density of 1-2m spacings is recommended to achieve earlier canopy closure (Catterall and Harrison 2006). Lower densities are recommended for larger trees such as Hoop Pines and figs.

Table 2.2. Planting strategy

Task	Details
Preparation of Planting Areas	Remove weeds as described. Particular care must be taken to avoid poisoning native species, particularly young saplings, native grasses and herbaceous species. Follow up weed control in these areas will be undertaken every three months after the initial weeds removal. Collect and store seeds from existing *Macadamia tetraphylla* specimens as soon as possible for use as backup propagation source if mortality occurs during onsite activities.

Task	Details
Plant Supply	Plants shall be sourced from local provenance (locally sourced seed) stock where possible to enhance survival rates. Species and planting densities are listed in **Table 2.1**. Plant size should be "tube-stock" size. This size is cost effective and has higher survival rates and faster growth rates than advanced stock. Tube stock shall be provided in forestry tubes with a minimum plant height of 20cm and a well-developed root system. Seedlings are to be healthy and displaying signs of active growth – any plants displaying yellowing, disease, root curling or are root bound are not to be planted, nor are any plants with weeds growing in the pot. Seedlings must be moist at time of planting; if necessary, water stock prior to planting. Plant supplier should be instructed to "harden off" the plants before delivery to site to allow greater survival rates.
Mulch	Apply weed-free mulch to a depth of 100mm. Mulch should not touch the stem of plants.
Planting	Planting holes should be the same depth as the forestry tube, in a slight shallow. Planting holes should be watered with approximately 3-5L of water prior to installing plant. Plants to be placed into planting holes ensuring stem is not buried and the roots are not exposed, i.e. backfill soil into the planting hole around the plant to the same level as the forestry tube, making sure there are no air pockets. Arrange seedlings randomly at the minimum densities identified in **Table 2.1**, giving priority to fast growing, larger pioneer tree species for making up the initial plantings and creating canopy shade, followed by inter-plantings with slower growing species. Create a 3 m - wide "edge-seal" of thicker shrubs and groundcover species along the entire perimeter of the buffer to assist in preventing the encroachment of weeds from adjacent areas.
Watering	Seedlings are to be watered with a minimum of 5 – 10 litres of water each at the time of planting, then watered weekly (approximately 8-10 litres depending on weather conditions) for four weeks and then monthly or as necessary until seedlings are established (approximately 3 – 6 months). Avoid the creation of boggy conditions during watering, adjusting quantities as necessary. Once established, consider installation of a sprinkler system with mist-type spray nozzles set as high in the canopy as possible to simulate natural rainfall.
Maintenance and Monitoring	Maintenance will consist of ongoing weed control around plantings and watering when required (as noted above). Dead plants and depleted mulch will be replaced according to the methods described above. The health of the *Macadamia tetraphylla* specimens will be monitored during all scheduled maintenance activities.

2.4.2 During Site Clearing and Operation

Temporary fencing will be maintained around the perimeter of the buffer until such time that adjacent clearing and earthworks have been completed and stockpiling activities have commenced. Thereafter, permanent signage will be positioned at strategic locations (e.g. adjacent to haul roads) to notify or remind onsite personnel and contractors of the location and purpose of the buffer.

Once quarrying operations have commenced and the initial plantings have established, the focus of buffer management will shift to monitoring the health of the *Macadamia tetraphylla* specimens and surrounding vegetation, performing routine maintenance activities, identifying any current or imminent threats, and taking corrective action where necessary. Details regarding the management of impacts and the buffer maintenance and monitoring program are provided in **Table 2.3**.

Table 2.3. Impact management and buffer maintenance and monitoring program during site clearing and operation

Objective	Task	Details
Protect Macadamias and buffer vegetation from accidental clearing and other direct disturbance from site workers and machinery	Clearly demarcate the buffer boundary and record the location of the *Macadamia tetraphylla* specimens	Use temporary fencing around the perimeter of the buffer to facilitate onsite recognition, prevent direct impacts from grazing by domestic stock and other animals, and prevent inadvertent access by vehicles and machinery during initial onsite activities and buffer vegetation establishment. Maintain temporary fencing until such time that adjacent clearing and earthworks have been completed and stockpiling activities have commenced. Thereafter, erect permanent signage at strategic locations (e.g. adjacent to haul roads) to notify or remind onsite personnel and contractors of the location and purpose of the buffer. Ensure exact locations of the Macadamia tetraphylla specimens and the buffer boundary are recorded and incorporated into all relevant site and project documentation and inductions.
	Inform all site workers of their obligations with regard to *Macadamia tetraphylla* and buffer vegetation protection	Include information on the location and purpose of the buffer as part of onsite inductions. Arrange pre-start meeting to clearly define roles and the approach to *Macadamia tetraphylla* and buffer vegetation protection and management.
	Undertake regular inspections of the buffer perimeter for direct disturbance	Undertake weekly visual inspections of the buffer perimeter to identify any obvious disturbance due to vehicle/machinery access, dumping or incursion of stockpiled material or natural events (e.g. storm damage). Where any such disturbance is identified, this will trigger an assessment of the health of the Macadamia tetraphylla specimens and any necessary corrective actions.
Protect Macadamias and buffer vegetation from other potential impacts resulting from the operation of the site	Prevent incursion of stockpiled material due to structural failure of adjacent stockpile mounds and/or erosion and sedimentation following rainfall	Avoid the stockpiling of material immediately adjacent to the buffer perimeter, where possible. Ensure stockpile mounds in close proximity to the buffer perimeter are shaped and otherwise stabilised to avoid structural failure. Ensure measures are in place to prevent erosion of stockpiled material and direct sediment-laden runoff away from the buffer area, under the guidance of an erosion and sediment control plan.
	Prevent incursion of excessive dust from adjacent clearing, earthworks, vehicle movements and blasting	Avoid the undertaking of excessive dust-generating activities during strong winds and/or in close proximity to the buffer area, where possible. Ensure measures are in place to prevent the excessive generation of dust, under the guidance of a site environmental management plan.
	Prevent significant alterations in water availability within the buffer	Ensure measures are in place to prevent a significant increase of decrease in water availability within the buffer as a result of surrounding activities, under the guidance of a site environmental management plan.

Objective	Task	Details
Maintain Macadamia health and viability of surrounding habitat	Monitor and control weeds within the buffer area on a routine basis.	Following initial weed control activities during native plant establishment, undertake 3-monthly inspections of the buffer area to identify any new or recurring weed infestations. Many of the weeds that will affect the plantings will arise from within the buffer from either the soil seed bank or bird droppings. Tall grass may be the most competitive to plantings establishment, particularly in the absence of grazing. Remove weeds as described in **Section 2.4.1**. Continue maintenance activities until a self-sustaining rainforest community is achieved. Thereafter, monitor weeds on a six-monthly basis.
	Maintain appropriate conditions for plant establishment and ongoing habitat viability	Water plants monthly or as necessary until seedlings are established (approximately 3 – 6 months). Avoid the creation of boggy conditions during watering, adjusting quantities as necessary. Once established, consider installation of a sprinkler system with mist-type spray nozzles set as high in the canopy as possible to simulate natural rainfall. Following initial establishment, undertake 3-monthly inspections of the buffer area to identify any issues with plant health. Adjust watering regime, replenish mulch and undertake replacement plantings as necessary, as described in **Section 2.4.1**. Take corrective action to address any impacts from onsite activities, as required. Continue maintenance activities until a self-sustaining rainforest community is achieved. Thereafter, monitor plant health on a six-monthly basis.
	Monitor Macadamia health on a routine basis.	Monitor Macadamia health during all scheduled maintenance activities and take corrective actions to address notable declines, as necessary.
Insure against the loss of Macadamia specimens as a result of onsite activities	Collect backup propagation material from *Macadamia tetraphylla* specimens on a routine basis	Collect and store seeds from existing *Macadamia tetraphylla* specimens on an annual basis for use as backup propagation source if mortality occurs during onsite activities.

3.0 PROPOSED MEASURES TO COMPENSATE FOR IMPACTS TO BIODIVERSITY

3.1 BACKGROUND

The proposed site development footprint has been positioned to avoid the clearing and fragmentation of the relatively large, well-connected tracts of vegetation and associated habitat within the study area, and avoids all patches of vegetation recognised as native vegetation communities that have greatest value to the majority of known or potentially occurring terrestrial flora and fauna species (**Figure 2-1**). No EECs, wetlands or important habitat for threatened flora and fauna species will be directly impacted. Buffers will also be retained between the recognised vegetation communities (and associated EECs and wetlands) and the edge of the proposed site disturbance footprint to further prevent secondary impacts.

Nonetheless, approximately 10 scattered, native trees will be removed to accommodate the proposed development footprint, as indicated on **Figure 2-1**. This includes the known Koala habitat tree species Forest Red Gum *Eucalyptus tereticornis* and Brush Box *Lophostemon confertus*, as well as a number of dry rainforest species that may provide foraging and nesting resources for birds. Removal of some heavily degraded patches of vegetation (although dominated by exotics) will also remove some native plant species and habitat values for native fauna.

The increase in site activity may also have ongoing indirect impacts to biodiversity surrounding the site, for example due to noise, dust and vibration.

Although these biodiversity impacts are considered to be relatively low, compensatory measures have been requested to offset the overall reduction in habitat availability and suitability as a result of the proposed development.

3.2 PROPOSED MEASURES

The field survey identified four native vegetation types within or in close proximity to the study area, all of which are recognised as EECs, and all of which are experiencing some level of disturbance from weed invasion and grazing. Accordingly, OEH have indicated that some level of rehabilitation within these areas would provide a suitable offset for the biodiversity impacts of the proposal through improvements in habitat quality and availability.

Successful rehabilitation of the native wetland community associated with Seelems Creek in the western portion of the study area would be difficult to achieve, given the influence of upstream land uses as a source for re-occurring weed invasion.

The paperbark swamp forest and Forest Red Gum open forest to the north-east of the study area are currently subject to relatively low levels of disturbance, and retain a high proportion of native species and a number of valuable habitat trees.

As such, it is considered that rehabilitation efforts should focus on the Hoop Pine dry rainforest community within the centre of the study area, which would also complement the creation of a dry rainforest patch associated with the Macadamia buffer outlined in **Section 2.0**. This community is currently infested with exotic species on the margins, and is relatively low in native species richness compared to other communities that are representative of the Lowland Rainforest EEC. It is therefore proposed that rehabilitation efforts will focus on the control of existing weeds within and along the margins of this community, combined with supplementary plantings to increase overall diversity and specifically replace those dry rainforest tree species trees lost from within the footprint (at a ratio of 5:1 – i.e. approximately 40 trees).

These measures would ultimately create a higher quality patch of intact, dry rainforest habitat within the centre of the study area, which would benefit native fauna species known to utilise this community such as the Endangered Black-necked Stork and numerous small birds and ground-dwelling fauna. It is considered this would compensate for the loss of degraded patches and

individual, isolated rainforest trees elsewhere on the site.

Details regarding proposed rehabilitation methods would be provided as part of a stand-alone Rehabilitation Plan subsequent to Project approval, although it is considered these would be similar to the measures outlined for the Macadamia buffer in **Section 2.0**.

It is also proposed that plantings of dominant canopy tree species will occur along the upper margins of Seelems Creek adjacent to the proposed development footprint. Specifically, this would involve plantings of *Eucalyptus tereticornis* (one of the most significant Koala food trees in the local area) along the upper, eastern margin to replace those Koala habitat trees lost within the footprint (at a ratio of 5:1 – i.e. 10 trees) and facilitate Koala movement between larger habitat patches to the north and south of the site.

The general location within which the plantings are proposed are indicated on **Figure 2-1**. Details regarding proposed rehabilitation methods would be provided as part of a stand-alone Rehabilitation Plan subsequent to Project approval.

4.0 REFERENCES

BAAM (2015). Biodiversity Assessment Report – Coraki Quarry, Seelems Road, Coraki. Report prepared for Groundwork Plus on behalf of Quarry Solutions Pty Ltd.

Catterall, CP and Harrison, DA (2006). Rainforest Restoration Activities in Australia's Tropics and Subtropics. Cooperative Research Centre for Tropical Rainforest Ecology and Management. Rainforest CRC, Cairns, Australia (94 pp).

Office of Environment and Heritage New South Wales (OEH) (2015). Threatened Species Profiles Database. http://www.environment.nsw.gov.au/threatenedSpeciesApp/

Standards Australia (2009). AS 4970-2009 Protection of trees on development sites. Standards Australia, Sydney

APPENDIX 1

Comments from OEH

NSW GOVERNMENT | Office of Environment & Heritage

PCU063074

Our Ref: DOC15/444788; DOC15/449446
Your Ref: SSD 7036

Ms Swati Sharma
Planning Officer
Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

Dear Ms Sharma

Re: Exhibition of Coraki Quarry (SSD 7036)

Thank you for your email dated 9 November 2015 regarding the above proposal requesting comments from the Office of Environment and Heritage (OEH). I appreciate the opportunity to provide input.

The OEH has statutory responsibilities relating to biodiversity (including threatened species, populations, ecological communities, or their habitats), Aboriginal and historic heritage, National Parks and Wildlife Service estate, flooding and estuary management. The Environment Protection Authority (EPA) is no longer part of the OEH and so this response is not based on any consideration of matters relating to noise, air and water quality. If you do require information on these matters or any licensing requirements under the *Protection of the Environment Operations Act 1997* please contact the EPA separately.

We have reviewed the documents supplied and advise that, although we have no concerns about NPWS estate or flood management, a number of issues are apparent with respect to the assessments for biodiversity, and Aboriginal cultural heritage. These issues are discussed in detail in **Attachment 1** to this letter.

In summary, the OEH recommends that:

1. Further detail is to be provided about the maintenance, ongoing management, and timeframes for the sustainable management of the *Macadamia tetraphylla* and the surrounding buffer.

2. A suitable offset should be provided for the impacts to biodiversity, with preference for onsite rehabilitation of the EEC's to form part of the proposal.

3. The Environmental Management Plan should be re-written to ensure that all commitments are unambiguous.

4. The *Aboriginal cultural heritage assessment report* recommendations are implemented.

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If you have any further questions about this issue, Mr Krister Waern, Senior Operations Officer, Regional Operations, OEH, can be contacted on 6640 2503 or at krister.waern@environment.nsw.gov.au.

Yours sincerely

Dimitri Young 2 December 2015

DIMITRI YOUNG
Senior Team Leader Planning, North East Region
Regional Operations

Contact officer: KRISTER WAERN
6640 2503

Enclosure: Attachment 1 – Detailed OEH Comments – Corakl Quarry (SSD 7036)

Attachment 1: Detailed OEH Comments – Coraki Quarry (SSD 7036)

Biodiversity

The OEH has reviewed the Biodiversity Assessment Report dated 23 October 2015 and provides the following comments:

- We note the presence of four *Macadamia tetraphylla* on the site which are listed as threatened species under both state and commonwealth legislation. It is proposed to protect these plants on site and provide a 25m buffer. These plants and the buffer are located with the proposed stockpile area. It is unclear how this area will be managed sustainably into the future. The management of the plants and the buffer area should include the rehabilitation of other suitable rainforest plants and weed control to provide suitable habitat for flora and fauna and reduce indirect impacts.

- The proposal has documented the direct impacts to biodiversity and the potential future impacts associated with the operational phase. These impacts include the removal of native vegetation and reduction in koala food trees. Also, the increase in site activity may have ongoing indirect impacts to biodiversity surrounding the site. Although the biodiversity impacts are low, the proposal should provide a suitable offset to ensure biodiversity values are improved or maintained.

- We note that three Endangered Ecological Communities (EEC) occur on the property in a degraded condition adjacent to the proposed stockpile area. These areas would provide an ideal opportunity for rehabilitation and provide a suitable offset for the biodiversity impacts of the proposal. The rehabilitation and natural regeneration would increase species diversity and has the potential to provide habitat for a range of threatened species. The biodiversity benefit of rehabilitating these areas would be preferred to other mitigation measures such as installation of nest boxes and the regular monitoring of road kills as detailed in the Environmental Management Plan (EMP).

- The EMP details management plans for twelve environmental considerations, including for threatened species, fauna and flora, weeds, and cultural heritage. The EMP has many non-committal references to proposed mitigation measures such as 'as soon as possible', 'consideration should be given', and 'should'. All of these loose statements make it difficult to assess the current management plans and how effective they will be in mitigating impacts.

Recommendations

1. Further detail is to be provided about the maintenance, ongoing management, and timeframes for the sustainable management of the *Macadamia tetraphylla* and the surrounding buffer

2. A suitable offset should be provided for the impacts to biodiversity, with preference for onsite rehabilitation of the EEC's to form part of the proposal.

3. The Environmental Management Plan should be re-written to ensure that all commitments are unambiguous.

Aboriginal Cultural Heritage

The OEH has reviewed the *Aboriginal cultural heritage assessment report, Coraki Quarry, Seelems Road, Coraki, NSW* (30 September 2015) prepared by New South Wales Archaeology Pty Ltd to support the development application and provides the following comments.

We note the report indicates the known Aboriginal object within the project area is within an existing indigenous heritage non disturbance zone and will be avoided by the proposal. We also note the field assessment identified a sensitive archaeological landform within the project area but no additional Aboriginal objects within the proposed area of impact.

Based on the information provided, the OEH supports the implementation of the report recommendations being conditioned into any Department of Planning and Environment approval to provide adequate contingencies to manage Aboriginal cultural heritage values within the area. In particular, we support the recommendation to protect the known Aboriginal object and the sensitive archaeological landform through the mechanism of an Aboriginal heritage management plan developed by an archaeologist in consultation with the registered Aboriginal party and the OEH.

Recommendation

4. That the *Aboriginal cultural heritage assessment report* recommendations are implemented.

Attachment 7

Surface Water Assessment

Calibre Consulting (Qld) Pty Ltd
Ground Floor, 545 Queen Street
Brisbane QLD 4000
PO Box 10349 Adelaide Street
Brisbane QLD 4000
T +61 7 3895 3444
ABN 38 109 428 506

Our Ref: 15-001850.03L.AB.ab.docx
Contact: Mr. Adam Broit

4 February 2016

Quarry Solutions Pty Ltd
C/- Groundworks Plus
PO Box 1779
Milton QLD 4064

Attention: Jim Lawler

Dear Jim,

Proposed Coraki Quarry
Surface Water Management Assessment

1 GENERAL

The proposed development seeks to establish the Coraki Quarry (within Lot 401 on DP633427, Lots 402 and 403 on DP802985 and Lot 408 on DP1166287). The Site is ideally situated for a quarry, being centrally located within the Site, well separated from sensitive receivers and incorporating the existing Peterson's Quarry.

The development constitutes State Significant Development (SSD). Accordingly, the assessment of the Existing Environmental Values will inform the preparation of an Environmental Impact Statement (EIS) to seek approval for the proposed development.

Surface water investigations and reporting will address the NSW Planning and Environment requirements as per the updated Secretary's Environment Assessment Requirements (SSD 7036 – dated 30 July 2015).

1.1 Site Description

The site is primarily located at the crest of a hill. Flow from the site discharges into Seelems Creek. The contributing catchment area of Seelems Creek to the site is in excess of 800 ha and predominantly comprises agricultural land. Seelems Creek discharges into the Richmond River approximately 6km downstream from the site.

Groundwork Plus have advised that that no groundwater was detected to depths below the depth of the quarry resource. No groundwater inflows have been included in the site water balance assessment.

The site consists of mainly open grassland with minor patchy scrub towards to lower elevations on the site.

1.2 Target Environmental Values

The New South Wales Water Quality and River Flow Objectives (OEH 2015) provides the following physio-chemical indicators and numerical criteria (trigger values) for uncontrolled streams within the Richmond River Catchment:

Table 1: Physio-chemical indicators and numerical criteria

Total Nitrogen (N) (mg/L)	Total P (mg/L)	DO (%sat)		Turbidity (NTU)	pH		Conductivity (ms/cm)
		Lower	Upper		Lower	Upper	
350	25	85	110	6-50	6.5	8.5	125-2200

1.3 Expected Schedule of Works

The following works are expected to be undertaken within Lot 401:

- Access and haul roads
- Erosion control works (temporary and permanent)
- Clean and dirty water diversion banks
- Site clearance
- Topsoil stockpiling
- Quarry extraction and operational stockpiling
- Maintenance program
- Rehabilitation

The following works are expected to be undertaken on the remaining land including the Peterson's Quarry:

- Dirty water diversion banks
- Quarry extraction and operational stockpiling
- Maintenance program

The development is planned to be undertaken in 2 phases:

- Initial extraction phase
- Final extraction phase

The 2 phases have the same overall site footprint with the only difference being the internal site layout (stockpiles and quarry floor) and haul road arrangement.

1.4 NSW Department of Primary Industries Information Request

The current issue of this Surface Water Assessment (**15-001850.03L.AB.ab.docx**) has been specifically prepared to address the water balance related items in NSW Department of Primary Industries Information Request (dated 17 December, 2015).

The specific items from the Information Request are identified below:

i. It is recommended that the site water balance included in the EIS is formatted in a table outlining the water inputs and outputs for the proposed development.

   Response: **Table 7** in **Section 2.3** provides a summary of all inflows and outflows included in the detailed site water balance.

ii. It is unclear from reviewing the site water balance if the volume of water required for the quarry can be entirely sourced from sediment basins, rainwater tanks or a water contractor as outlined in the EIS.

   Response: The estimated average number of days per year external water supply is required is outlined in **Section 2.3.6** for each respective scenario.

iii. The site water balance also does not seem to consider water used for site rehabilitation purposes. There is no volume outlined in the EIS, this should be clarified.

   Response: Clarification on the water use requirements for site rehabilitation purposed is outlined in **Section 2.5**.

2 EIS RESPONSES

2.1 Assessment of potential impacts on the quality and quantity of the existing surface and groundwater resources

2.1.1 Groundwater Impacts

As outlined in Section 1.1, no interaction with any groundwater resource is expected as part of the development.

2.1.2 Surface Water Quality Impacts

A surface water management strategy is outlined in Section 2.2. The on-site surface water management strategy involves a system of dirty water collection drains that convey surface water runoff to respective sedimentation basins. A total of 3 sedimentation basins are proposed for the development (as per the conceptual surface water management sketch in **Attachment A**). The sedimentation basins have been sized in accordance with *Managing Urban Stormwater Soils and Construction: Volume 1 (Blue Book) and Volume 2E (Mines & Quarries)*. The sedimentation basins have been sized to capture the 90 percentile 5 day rainfall event for their respective catchments.

The sedimentation basins will provide stormwater quality polishing and treatment for the frequent rainfall events for on-site stormwater runoff.

The sedimentation basins are expected to discharge during intense or extended rainfall events (further discussed in Section 2.3). It is anticipated that any overflows from the sedimentation basins will coincide with flows within the Seelems Creek catchment.

Some testing of on-site water was undertaken by Groundworks Plus. The testing was sampled from the existing on-site pond and another area of standing water in the pit.

The results of the testing are provided below.

Table 2: Physio-chemical indicators from on-site sampling

Location	DO (%sat)	Turbidity (NTU)	pH	Conductivity (ms/cm)
Pit	6.3	75	8.8	490
Pond	6.4	100	7.6	930

The water quality testing undertaken on site indicates that some indicators are in excess of the trigger values in Table 1.

Our management strategy includes minimal uncontrolled discharges plus controlled discharges with TSS less than 50mg/L after rainfall events.

2.1.3 Surface Water Quantity Impacts

The sedimentation basins will not need to comply with the harvestable rights dam maximum on the basis that they will be required for treatment of sediment laden water and the EPA under the Environmental Protection License will include a condition which will require treatment of sediment laden water prior to release.

From the water balance analysis in Section 2.3, the average yearly overflow and controlled discharges from Sedimentation Basin 2 into the receiving environment during the final extraction stage is approximately 141,590 m^3/year. From the contributing catchment to Sedimentation Basin 2 in the existing scenario (a volumetric runoff coefficient of 0.48), the average runoff from the catchment is approximately 180,195 m^3/year. With losses (evaporation and on-site reuse), there will be a reduction in stormwater runoff from the site.

The site is located adjacent to Seelems Creek. Seelems creek discharges into the Richmond River approximately 6km downstream of the site, south of the township of Coraki. Refer to **Attachment F** for the waterways adjacent to the site.

The quarry and associated infrastructure will be above the 100 year ARI flood level (10m AHD). Sedimentation Basin 1.1 extends approximately 20m into the Seelems Creek floodplain fringe of an extensive floodplain (approximately 1,600 m wide) on the western site boundary. It is anticipated that this may have impacts on flood levels in the immediate vicinity of the basin only. The basin will be designed so that the impact on the floodplain is minimised.

As there is no external infrastructure adjacent to, or upstream of Sedimentation Basin 1.1, any minor impact that the basin may have on flood levels is not likely to affect any properties.

Refer to **Attachment G** for Council's regional flood mapping.

With the proposed surface water management strategy, there will be no significant impact on water quality and quantity as a result of the development.

2.2 Soil & Water Management Plan

During the construction and operational phase of the quarry development, a large amount of soil has the potential to be eroded and deposited onto nearby lands or downstream receiving environments. To minimise that potential impacts of land disturbances from the development, a Soil and Water Management Plan has been prepared based on *Managing Urban Stormwater Soils and Construction: Volume 1 (Blue Book) and Volume 2E (Mines & Quarries).*

2.2.2 Sizing of Sedimentation Basins

All on-site sedimentation basins have been sized in accordance with the guidelines set out in *Managing Urban Stormwater Soils and Construction: Volume 1 (Blue Book) and Volume 2E (Mines & Quarries).*

In the absence of site specific soil data, information on the likely soil type has been sourced from the Lismore-Ballina Soil Landscape section of the Blue Book (Appendix C – Table C2) for Coraki (Ck). Conservatively, we have adopted soil type for the mine as 'Type F' (bulk of soil is fine grained with 33% finer than 0.02mm).

The total volume of a 'Type F' sediment basin is the sum of the following two components:

- A settling zone, within which water is stored allowing the settlement of suspended sediment, and
- A sediment storage zone, where deposited sediment is stored until the basin is cleaned out.

The settling zone volume is determined from the 90th percentile, 5 day rainfall event as per Table 6.1 in the Mines and Quarries book. This is the minimum design requirement for a 'Type F' sedimentation basin for quarries with a disturbance duration greater 3 years.

As outlined in the water balance modelling in Section 2.3, the sedimentation basins designed for the 90th percentile, 5 day rainfall event overflow with a higher frequency than that outline in Table 6.2 in Volume 2E of the Mines and Quarries manual. An additional 2 water balance modelling scenarios (Scenarios 3 and 4) were investigated where the design rainfall event was increased to the 95th percentile, 5 day event.

The design rainfall depth has been taken from the closest site rainfall depth chart in the Blue Book (Table 6.3a). The Lismore (058037) 90th percentile, 5 day rainfall depth is 60.2 mm and the 95th percentile, 5 day rainfall depth is 95.3 mm.

The volumetric runoff coefficient (C_v) adopted for the site was 0.74. This value is higher than that recommended in Table F3 (Appendix F of the Blue Book) for the expected soil type at Coraki for disturbed sites (upper limit Cv for Coraki of 0.48). The adopted C_v is reflective of the disturbance activity (quarrying) and the type of quarry material which will result in a high runoff potential from the site.

Contributing catchment areas to each sedimentation basin are provided in **Attachment A** for both the initial and final extraction stages.

The sediment storage zone is taken as either the:

- 50% of the settling zone capacity, or
- Two months soil loss as calculated with the Revised Universal Soil Loss Equation (RUSLE).

It was found that 50% of the settling zone capacity yields a larger storage volume for each sedimentation basin and was therefore adopted for calculating the total sediment storage volume.

Clear water diversion bunds are to be located near the western site boundary to divert clean water around the site. This clean water diversion helps to minimise the required onsite sediment basin size.

Refer to **Attachment B** for sediment basin volume calculations for individual catchments.

These results are summarised in Table 3 and Table 4.

Table 3: Sedimentation Basin Sizing – 90th percentile, 5 day storm

Catchment Name	Stage	Area (ha)	Required Settling Zone Volume (m^3)	Required Sediment Storage Zone			Required Sedimentation Basin Volume (m^3)
				50% of Settling Zone volume (m^3)	RUSLE Two Month Calculated Soil Loss (m^3)	Adopted Sediment Storage Zone (m^3)	
A1	Initial	8.7	3,855	1,927	480	1,927	5,782
A2	Initial	27.4	12,229	6,114	1,524	6,114	18,343
A3	Initial	3.7	1,640	820	179	820	2,460
B1	Final	6.6	2,905	1,453	364	1,453	4,358
B2	Final	29.6	13,178	6,589	1,642	6,589	19,767
B3	Final	3.7	1,640	820	179	820	2,460

Table 4: Sedimentation Basin Sizing – 95th percentile, 5 day storm

Catchment Name	Stage	Area (ha)	Required Settling Zone Volume (m^3)	Required Sediment Storage Zone			Required Sedimentation Basin Volume (m^3)
				50% of Settling Zone volume (m^3)	RUSLE Two Month Calculated Soil Loss (m^3)	Adopted Sediment Storage Zone (m^3)	
A1	Initial	8.7	6,102	3,051	480	1,927	9,153
A2	Initial	27.4	19,359	9,679	1,524	6,114	29,038
A3	Initial	3.7	2,596	1,298	179	820	3,894
B1	Final	6.6	4,599	2,299	364	1,453	6,898
B2	Final	29.6	20,862	10,431	1,642	6,589	31,293
B3	Final	3.7	2,596	1,298	179	820	3,894

The change in contributing catchment areas between the initial and final stages result in minor changes in the overall required sedimentation basin volumes. The overall largest required volume for each sedimentation basin between the initial and final extraction stages was adopted as the design basin volume. The practicalities of minor basin reconfigurations through operations was considered more difficult and costly when compared to constructing the largest required basin for each catchment (to cater for initial and final stages) at project initiation.

The adopted sedimentation basin volumes adopted in Table 5 and Table 6 have been calculated based on supporting information in **Attachment C**. These adopted volumes were based off minimum length to width ratios, batter slopes and basin depths.

Table 5: Adopted Sedimentation Basin Volumes 90th percentile, 5 day storm

Basin Name	Required Sedimentation Basin Volume (m^3)	Adopted Sedimentation Basin Volume (m^3)
Sedimentation Basins 1.1 and 1.2	5,782	5,840
Sedimentation Basin 2	19,767	20,169
Sedimentation Basin 3	2,460	2,592

Table 6: Adopted Sedimentation Basin Volumes 95th percentile, 5 day storm

Basin Name	Required Sedimentation Basin Volume (m^3)	Adopted Sedimentation Basin Volume (m^3)
Sedimentation Basins 1.1 and 1.2	9,153	9,526
Sedimentation Basin 2	31,293	32,688
Sedimentation Basin 3	3,894	4,308

The required sedimentation basin volume for catchment A1/B1 in Table 3 and Table 4 have been split into 2 basins due to horizontal site constraints. Internal site drainage within these catchments to Sedimentation Basin 1.1 and 1.2 will be confirmed during detailed design.

The adopted volumes will be refined during final detailed design.

The above tables demonstrate that the proposed sedimentation basins have been sized to accommodate the minimum required 90th percentile, 5 day rainfall event volume. The final sedimentation basin volumes are subject to detailed design of the development.

2.2.3 Construction Notes

The following notes should be referenced during the construction and operational phases of the project:

- Construct access roads with erosion control measures in place.
- Install pipe culverts and internal drainage works
- Clear vegetation
- Install the required diversion banks
- Construct sedimentation basins
- Strip topsoil and overburden, stockpile and sow within 14 days with appropriate seed/fertiliser mixture.
- Regularly inspect all sediment control structures for damage, and remove sediment to the overburden stockpiles.
- Carry out ongoing maintenance including resowing/fertilising of areas as required.
- At the completion of the extraction stage, progressively reshape, re-topsoil then revegetate all disturbed areas on Lot 401.

2.2.4 Standard Drawings

The following standard drawings from the Blue Book are applicable to the recommended erosion and sediment controls:

- Stockpiles – SD4-1
- Earth bank (high flows) – SD5-6
- Earth Basin (wet) – SD6-4
- Rock Check Dams – SD5-4
- Culvert outlet protection – SD5-8

These drawings have been included in **Attachment D**.

2.2.5 Hazardous Materials

Any hazardous materials that are kept on site should be stored in an appropriate containment facility and bunded to ensure that in case of a spill, the materials are not released into the downstream receiving environment.

Appropriate spill kits and training should be provided for any hazardous materials kept on site.

2.3 Detailed Site Water Balance

A detailed site water balance was undertaken to assess the overall site surface water management system and to quantify the volume and frequency of discharges from the site

Daily rainfall data was extracted from the Bureau of Meteorology's website for Coraki (Union Street rain gauge – 058015). The station has daily rainfall readings from 1895 to 2015. The mean rainfall for Coraki is 1263 mm/year.

Evaporation data was extracted from the nearest pan evaporation gauge at the Alstonville Fruit Research Station (058131), approximately 20km away from the site.

Four scenarios were investigated for the site water balance:

- **Scenario 1** - Sedimentation basins sized to capture the 90th percentile, 5 day rainfall event (the minimum required rainfall depth specified in Section 2.2.2)
- **Scenario 2** - Sedimentation basins sized to capture the 90th percentile, 5 day rainfall event (the minimum required rainfall depth specified in Section 2.2.2) and increasing site water reuse to reduce outflow event frequency and volumes
- **Scenario 3** - Sedimentation basins sized to capture the 95th percentile, 5 day rainfall event (above the required rainfall depth specified in Section 2.2.2)
- **Scenario 4** - Sedimentation basins sized to capture the 95th percentile, 5 day rainfall event (above the required rainfall depth specified in Section 2.2.2) and increasing site water reuse to reduce outflow event frequency and volumes

Each scenario has a dust suppression rate of 2 l/m^2/hour was supplied by Groundwork Plus via email (dated 26 August 2015). This dust suppression rate was applied to all roads within the site. The quarry is expected to operate 6 days a week for 13 hours per day. Total road length has been delineated for both the initial and final extraction stage.

For scenario 2 and 4, an additional external irrigation area was identified. This potential irrigation area is identified in **Attachment A**. An irrigation rate of 4 l/m^2/hour was estimated. It is proposed to operate the external irrigation system for the same duration as the operation of the quarry. The area identified is approximately 18.25 ha. Irrigation water is supplied from Sedimentation Basins 1, 2 and 3.

The water balance includes dosing and discharge of treated water. It is assumed that immediately after a rain event in each scenario, the basins will be dosed (with an appropriate dosing agent). After 4 days of residence time, the basin is lowered (either by gravity or pump) to allow the 90th percentile, 5 day storm volume to remain free in each basin. If a rain event occurs within the 4 day period after dosing, the water will not be released until further dosing is completed following the subsequent rainfall event. Remaining water in the sediment storage zone may be used for on-site dust suppression.

As per Table 6.2 in Volume 2E of the Mines and Quarries manual, the indicative average annual sediment basin overflow frequency is 2 to 4 spills per year.

Refer to **Attachment E** for detailed calculations from the site water balance modelling.

It has been assumed that Sedimentation Basins 1.1 and 1.2 behave as a single storage volume for this analysis. A balance pipe or overflow system may be required between Sedimentation Basin 1.1 and 1.2 pending the outcome of the internal drainage layout (to be confirmed during detailed design).

A summary of the site water demands is shown below in **Table 7**.

Table 7: Inflow and Outflow Summary

Inflows		
Rainfall	All scenarios	Daily rainfall (mm) multiplied by a runoff volume coefficient (C_v) of 0.74
Outflows		
Evaporation	All scenarios	Daily evaporation rate (estimated from average monthly evaporation) multiplied by each sedimentation basin surface areas (calculated daily)
On-site reuse	All scenarios	Dust suppression area multiplied by an irrigation rate (2 l/m^2/hour), operating 13 hours per day, 6 days a week
External irrigation	Scenarios 2 and 4	External irrigation area (18.25 ha) multiplied by an irrigation rate (4 l/m^2/hour), operating 13 hours per day, 6 days a week
Controlled discharge	All scenarios	After dosing of sedimentation basins and a minimum of 4 days of residence time (without any additional rainfall), each basin is lowered to allow the 90th percentile, 5 day storm volume to remain free in each basin.

2.3.2 Scenario 1 Site Water Balance

Table 8: Water Balance Results for Scenario 1

Basin Name	Stage	Adopted Sedimentation Basin Volume (m^3)	Average Number of Outflow Events Per Year	Average Outflow Volume Per Year (m^3/year)
Sedimentation Basin 1.1 and 1.2	Initial	5,840	8	26,182
Sedimentation Basin 1.1 and 1.2	Final	5,840	7	16,043
Sedimentation Basin 2	Initial	20,169	7	76,611
Sedimentation Basin 2	Final	20,169	8	84,842
Sedimentation Basin 3	Initial	2,592	9	11,298
Sedimentation Basin 3	Final	2,592	9	11,298

As shown in Table 7, the detailed site water balance modelling shows that the sedimentation basins overflow regularly throughout an average year.

The average number of overflow events is 8 times per year. This exceeds the spill frequency identified within the *Managing Urban Stormwater Soils and Construction: Volume 2E (Mines & Quarries).*

Overflows from the sedimentation basins are, on average, preceded by a 5 day rainfall total of 92.4mm.

This scenario is not recommended.

2.3.3 Scenario 2 Site Water Balance

Table 9: Water Balance Results for Scenario 2

Basin Name	Stage	Adopted Sedimentation Basin Volume (m^3)	Average Number of Outflow Events Per Year	Average Outflow Volume Per Year (m^3/year)
Sedimentation Basin 1.1 and 1.2	Initial	5,840	4	15,754
Sedimentation Basin 1.1 and 1.2	Final	5,840	3	7,912
Sedimentation Basin 2	Initial	20,169	5	57,994
Sedimentation Basin 2	Final	20,169	5	67,020
Sedimentation Basin 3	Initial	2,592	3	5,772
Sedimentation Basin 3	Final	2,592	3	5,772

As shown in Table 8, the detailed site water balance modelling shows that the sedimentation basins overflow occasionally throughout an average year.

The average number of overflow events is 4 times per year. While the average number of spill events per year meets the frequency identified within the *Managing Urban Stormwater Soils and Construction: Volume 2E (Mines & Quarries)*, Sedimentation Basin 2 exceeds this recommended frequency.

Overflows from the sedimentation basins are, on average, preceded by a 5 day rainfall total of 128.2mm.

2.3.4 Scenario 3 Site Water Balance

Table 10: Water Balance Results for Scenario 3

Basin Name	Stage	Adopted Sedimentation Basin Volume (m^3)	Average Number of Outflow Events Per Year	Average Outflow Volume Per Year (m^3/year)
Sedimentation Basin 1.1 and 1.2	Initial	9,526	5	17,221
Sedimentation Basin 1.1 and 1.2	Final	9,526	4	9,610
Sedimentation Basin 2	Initial	32,688	5	49,340
Sedimentation Basin 2	Final	32,688	5	55,051
Sedimentation Basin 3	Initial	4,308	6	7,543
Sedimentation Basin 3	Final	4,308	6	7,543

As shown in Table 9, the detailed site water balance modelling shows that the sedimentation basins overflow occasionally throughout an average year.

The average number of overflow events is 5 times per year. This exceeds the spill frequency identified within the *Managing Urban Stormwater Soils and Construction: Volume 2E (Mines & Quarries).*

Overflows from the sedimentation basins are, on average, preceded by a 5 day rainfall total of 104.2 mm.

This scenario is not recommended.

2.3.5 Scenario 4 Site Water Balance

Table 11: Water Balance Results for Scenario 4

Basin Name	Stage	Adopted Sedimentation Basin Volume (m^3)	Average Number of Outflow Events Per Year	Average Outflow Volume Per Year (m^3/year)
Sedimentation Basin 1.1 and 1.2	Initial	9,526	2	8,089
Sedimentation Basin 1.1 and 1.2	Final	9,526	1	3,125
Sedimentation Basin 2	Initial	32,688	3	32,370
Sedimentation Basin 2	Final	32,688	3	38,918
Sedimentation Basin 3	Initial	4,308	2	2,626
Sedimentation Basin 3	Final	4,308	2	2,626

As shown in Table 10, the detailed site water balance modelling shows that the sedimentation basins overflow occasionally throughout an average year.

The average number of overflow events is 2 times per year. This is equivalent to the spill frequency identified within the *Managing Urban Stormwater Soils and Construction: Volume 2E (Mines & Quarries).*

Overflows from the sedimentation basins are, on average, preceded by a 5 day rainfall total of 153.9mm.

This is the recommended water management scenario for the development.

2.3.6 External Water Supply

The overall philosophy adopted in the detailed site water balance was to minimise residual water within the sedimentation dams through on-site reuse (as per **Table 7**) in order to minimise the potential for outflow events. With this philosophy, there will be the need where importation of water will be required in order to meet site demands (excluding potable water demands).

From the water balance simulations, the average number of days per year where the full site demand cannot be met by water reuse from the sedimentation dams are shown below in **Table 12**.

Table 12: External Water Supply Requirements

Scenario	Initial Stage	Final Stage
	Average days per year where full site demand not met	Average days per year where full site demand not met
1	97	104
2	199	201
3	85	84
4	203	206

It is noted that the days shown in **Table 12** are directly associated with the simulated significant rainfall events when the sedimentation dams have been lowered in order to accommodate any potential in-flow events. As would be expected, on-site water demand for dust suppression and irrigation is significantly reduced for a number of days post rainfall events. However, the water balance simulation is not able to incorporate this factor into the model. Accordingly, in real terms the number of days per year where full site demand will not be met is less than shown in **Table 12**. In addition, it is expected that as part of the operational philosophy of the quarry, certain measures would be implemented to further minimise the number of times per year that importation of water is required. These measures to assist in reducing the number of days with a potential water shortage are:

- The use of dust suppression agents to reduce water usage;
- Reducing traffic areas while water sealing other areas; and
- Additional water storages (approximately 500 to 750kL) where water from the sedimentation dams can be pumped and stored for later use.

With the above measures in place and recognition of the limitations of the water balance model, it is expected that the average number of days per year where full site water demands cannot be met will be significantly less than the estimates in **Table 12**.

2.4 Surface Water Management System

The conceptual surface water management plan is provided in **Attachment A**. The management strategy includes, but is not limited to:

- Clean water diversion drains
- Dirty water diversion drains
- Sedimentation basins
- Stockpiling and rehabilitation of topsoil and overburden
- On-site reuse of surface water runoff
- Fuel and chemical storage to be contained within bunded facilities
- Dosing and pump out of sediment basins after significant rainfall events

The standard drawings from the Blue Book that are applicable to the project are discussed in Section 2.2.4. The standard drawings have been included in **Attachment D**.

The sedimentation basins have been sized to capture the 95% percentile, 5 day rainfall event.

As discussed in Section 2.1.1, no groundwater interaction is expected as part of the development.

2.5 Rehabilitation Water Requirements

As outlined in Section 7.11 of the Environmental Impact Statement lodged, rehabilitation is only relevant to Lot 401 and will only commence once terminal benches and floor are reached and the resource is exhausted. The proposed rehabilitation works will be guided by the Rehabilitation Management Plan to ensure the final landform is safe, stable, self-sustaining and compatible with the intended final land use. The Petersons Quarry will remain operational therefore any rehabilitation requirements will be considered separately in the future.

As the rehabilitation work will only commence post extraction, the site water balance included in this assessment was undertaken for the operational stage of the quarry only and no considerations were given for the site rehabilitation. However having considered the timing of the proposed rehabilitation work, site water balance for rehabilitation is not considered necessary

3 CONCLUSION

The outcomes of the stormwater quality management and impacts assessment are summarised below:

- Erosion and sediment control measures will be put in place for management of water quality during construction and operation activities.
- Three sedimentation basins are proposed to treat surface water runoff and for reuse on site.
- Sediment basin calculations demonstrate that there is sufficient volume within each basin to provide the minimum required equivalent 90th percentile, 5 day rainfall event volume, but we have provided the 95th percentile, 5 day rainfall event volume for each sedimentation basin.
- There is no groundwater interaction anticipated.
- With the proposed surface water management strategy, there will be no significant impact on water quality and quantity as a result of the development.
- Detailed water balance modelling demonstrates that with the proposed surface water management system, overflows from the site are within the recommended values in Managing Urban Stormwater Soils and Construction: Volume 2E (Mines & Quarries).

4 RECOMMENDATIONS

Based on the aforementioned outcomes, the following recommendations are made:

- Incorporate the proposed erosion and sediment control strategies for the development.
- Sedimentation basins to be sized based on the 95th percentile, 5 day rainfall event with reuse from dust suppression and an external irrigation scheme (Scenario 4)
- Confirm the sediment basin sizes and locations during the detailed design phase.
- Ongoing water quality testing of water within the Sedimentation basins before and after dosing and discharge.

Detailed design may result in changes to the proposed concept strategies presented in this report, however the design objectives are to be maintained.

For any queries concerning these matters, please contact Mr Adam Broit or the undersigned on (07) 3895 3444.

Yours sincerely
Calibre Consulting

Adam Broit
Senior Engineer – Water & Environment

ATTACHMENTS
A – Surface Water Management Plan
B – Sedimentation Basin Calculations
C – Sedimentation Basin Volume Calculations
D – Erosion and Sediment Control Drawings
E – Detailed Water Balance Calculations
F – Watercourses
G – Richmond Valley Council Flood Mapping

ATTACHMENT A - SURFACE WATER MANAGEMENT PLAN

- Figure 15-001850.SK01 Initial extraction stage catchment plan
- Figure 15-001850.SK02 Final extraction stage catchment plan

WATER RELEASE POINT 2

SEDIMENTATION BASIN 1.2
(SUBJECT TO DETAILED DESIGN)

DIRTY WATER DIVERSION FROM STOCKPILE
FLOOR TO SEDIMENTATION BASIN 1.2
(TO BE FINALISED DURING DETAILED DESIGN)

PROTECTED MACADAMIA
TREES AND 25m BUFFER

STOCKPILE AREA
FLOOR RL21m

WATER RELEASE POINT 1

401 DP633427

A1

PIT AREA
8.6ha

TEMPORARY STOCKPILE AREA
REGRADED AS REQUIRED

INITIAL
EXTRACTION AREA
FLOOR RL 18m

SEDIMENTATION BASIN 1.1
APPROX. 20m ENCROACHMENT
INTO SEELEM CREEK FLOODPLAN
(SUBJECT TO DETAILED DESIGN)

DRAINAGE LINE FROM PIT FLOOR TO
SEDIMENTATION BASIN 2
(TO BE FINALISED DURING DETAILED DESIGN)

WATER RELEASE POINT 3

STOCKPILE AREA
RL40m
REGRADING AS
REQUIRED

A2

408 DP1166287

INDIGENOUS HERITAGE
NON-DISTURBANCE ZONE

402 DP802985

SEDIMENTATION BASIN 2
(SUBJECT TO DETAILED DESIGN)

STOCKPILE AREA
RL40m

PROCESSING
PLANT AREA

403 DP802985

A3

WEIGHBRIDGE

1 DP1165893

403 DP802985

SEDIMENTATION BASIN 3
(SUBJECT TO DETAILED DESIGN)

WATER RELEASE POINT 4

Petersons
Quarry Rd

N

LEGEND:

- SITE BOUNDARY
- CATCHMENT BOUNDARY
- EXISTING CONTOURS
- A1 CATCHMENT LABEL
- INIDICATIVE FLOW ARROW
- Q100 FLOOD LINE (RL 10m)
- CLEAN WATER DIVERSION
- DIRTY WATER DIVERSION
- INDICATIVE SEDIMENTATION BASIN AREA
- POTENTIAL IRRIGATION AREA

NOTE:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE LATEST ISSUE OF CALIBRE CONSULTING LETTER No. 15-001850.01L.
2. LAYOUT OF THE PRELIMINARY SEDIMENTATION BASINS, INTERNAL AND EXTERNAL SITE DRAINAGE IS CONCEPTUAL ONLY. SUBJECT TO DETAILED DESIGN.

CONCEPT PLAN ONLY
NOT TO BE USED FOR
CONSTRUCTION PURPOSES

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Xref's: USR: adam broit

AMENDMENTS	FIRST ISSUE	CALCS	DRAWN	DATE	AMENDMENT DETAILS
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PROJECT No.
15-001850

APPROVED
ANDREW McPHAIL RPEQ 6921
FOR & ON BEHALF OF CALIBRE CONSULTING (QLD) PTY LTD

CLIENT
QUARRY SOLUTIONS PTY LTD

PROJECT
CORAKI QUARRY

calibre CONSULTING

CONSULT AUSTRALIA
Calibre Consulting (Qld) Pty Ltd
Level 6, 199 Grey Street, South Brisbane QLD Australia 4101
Telephone: (07) 3895 3444 Facsimile: (07) 3895 3400
Brisbane Canberra Melbourne Sydney Singapore Christchurch

DRAWING TITLE
INITIAL EXTRACTION STAGE
CATCHMENT PLAN

DRAWING NUMBER
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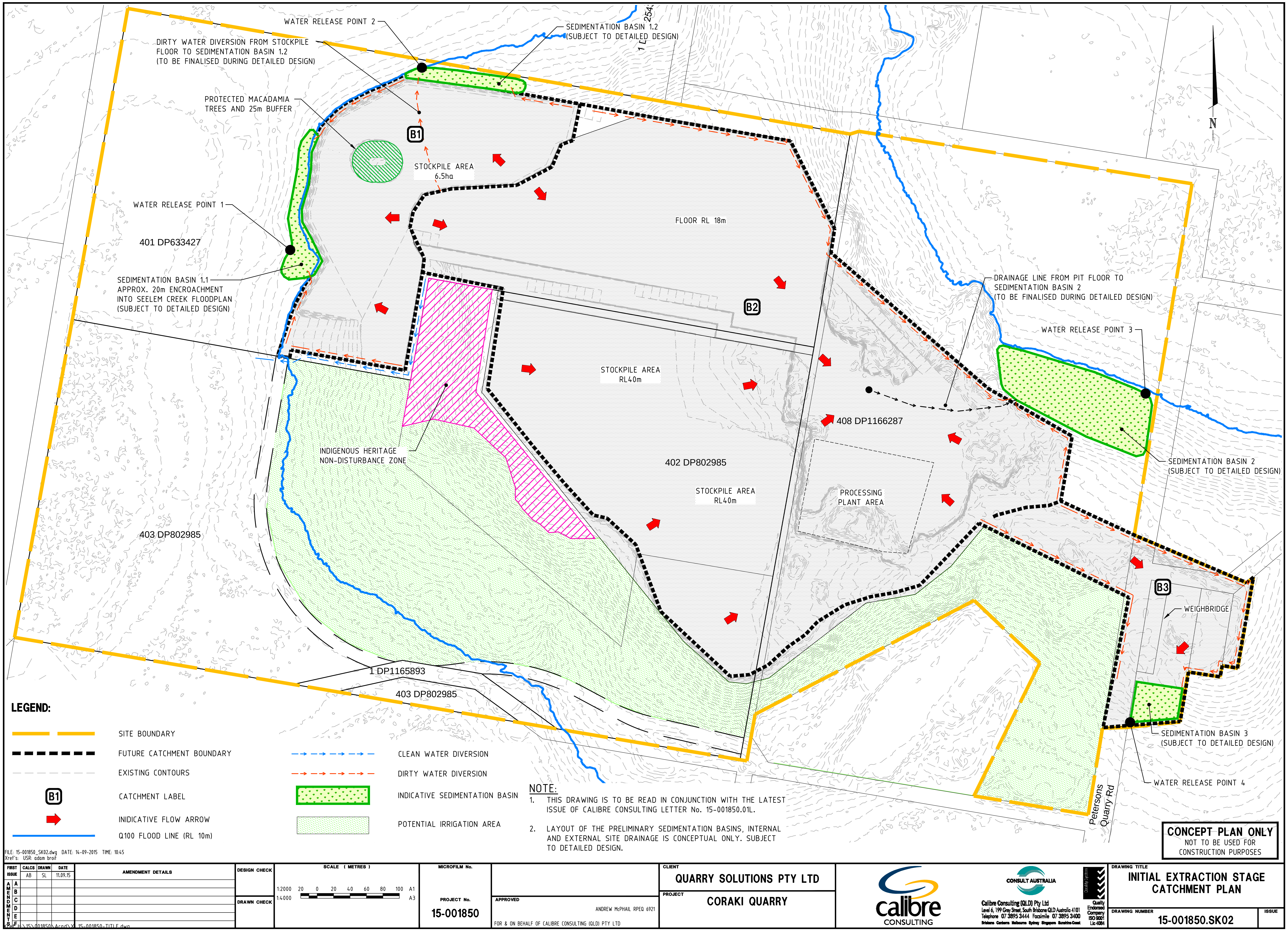
WATER RELEASE POINT 2
DIRTY WATER DIVERSION FROM STOCKPILE FLOOR TO SEDIMENTATION BASIN 1.2 (TO BE FINALISED DURING DETAILED DESIGN)
SEDIMENTATION BASIN 1.2 (SUBJECT TO DETAILED DESIGN)
PROTECTED MACADAMIA TREES AND 25m BUFFER
B1
STOCKPILE AREA 6.5ha
WATER RELEASE POINT 1
401 DP633427
SEDIMENTATION BASIN 1.1 APPROX. 20m ENCROACHMENT INTO SEELEM CREEK FLOODPLAN (SUBJECT TO DETAILED DESIGN)
FLOOR RL 18m
B2
STOCKPILE AREA RL40m
DRAINAGE LINE FROM PIT FLOOR TO SEDIMENTATION BASIN 2 (TO BE FINALISED DURING DETAILED DESIGN)
WATER RELEASE POINT 3
408 DP1166287
SEDIMENTATION BASIN 2 (SUBJECT TO DETAILED DESIGN)
INDIGENOUS HERITAGE NON-DISTURBANCE ZONE
402 DP802985
STOCKPILE AREA RL40m
PROCESSING PLANT AREA
403 DP802985
B3
WEIGHBRIDGE
1 DP1165893
403 DP802985
SEDIMENTATION BASIN 3 (SUBJECT TO DETAILED DESIGN)
WATER RELEASE POINT 4
Petersons Quarry Rd
N
LEGEND:
SITE BOUNDARY
FUTURE CATCHMENT BOUNDARY
EXISTING CONTOURS
B1 CATCHMENT LABEL
INIDICATIVE FLOW ARROW
Q100 FLOOD LINE (RL 10m)
CLEAN WATER DIVERSION
DIRTY WATER DIVERSION
INDICATIVE SEDIMENTATION BASIN
POTENTIAL IRRIGATION AREA
NOTE:
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ANDREW McPHAIL RPEQ 6921
FOR & ON BEHALF OF CALIBRE CONSULTING (QLD) PTY LTD
CLIENT
QUARRY SOLUTIONS PTY LTD
PROJECT
CORAKI QUARRY
calibre CONSULTING
CONSULT AUSTRALIA
Calibre Consulting (QLD) Pty Ltd
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INITIAL EXTRACTION STAGE CATCHMENT PLAN
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ATTACHMENT B - SEDIMENTATION BASIN CALCULATIONS

- *Managing Urban Stormwater Soils and Construction: Volume 1 (Blue Book) and Volume 2E (Mines & Quarries)* Sedimentation Basin calculations
- Sedimentation Basin calculation spreadsheet

All on-site sedimentation basins have been sized in accordance with the guidelines set out in *Managing Urban Stormwater Soils and Construction: Volume 1 (Blue Book) and Volume 2E (Mines & Quarries).*

In the absence of site specific soil data, information on the likely soil type has been sourced from the Lismore-Ballina Soil Landscape section of the Blue Book (Appendix C – Table C2) for Coraki (Ck). Conservatively, we have adopted soil type for the mine as 'Type F' (bulk of soil is fine grained with 33% finer than 0.02mm).

The total volume of a 'Type F' sediment basin is the sum of the following two components:

- A settling zone, within which water is stored allowing the settlement of suspended sediment, and
- A sediment storage zone, where deposited sediment is stored until the basin is cleaned out.

The settling zone volume is determined from the 90th percentile, 5 day rainfall event as per Table 6.1 in the Mines and Quarries book. This is the minimum design requirement for a 'Type F' sedimentation basin for quarries with a disturbance duration greater 3 years.

From the water balance modelling, the sedimentation basins designed for the 90th percentile, 5 day rainfall event overflow with a higher frequency than that outline in Table 6.2 in Volume 2E of the Mines and Quarries manual. An additional 2 water balance modelling scenarios (Scenarios 3 and 4) were investigated where the design rainfall event was increased to the 95th percentile, 5 day event.

The design rainfall depth has been taken from the closest site rainfall depth chart in the Blue Book (Table 6.3a). The Lismore (058037) 90th percentile, 5 day rainfall depth is 60.2 mm and the 95th percentile, 5 day rainfall depth is 95.3 mm.

The volumetric runoff coefficient (C_v) adopted for the site was 0.74. This value is higher than that recommended in Table F3 (Appendix F of the Blue Book) for the expected soil type at Coraki for disturbed sites (upper limit Cv for Coraki of 0.48). The adopted C_v is reflective of the disturbance activity (quarrying) and the type of quarry material which will result in a high runoff potential from the site.

The sediment storage zone is taken as either the:

- 50% of the settling zone capacity, or
- Two months soil loss as calculated with the Revised Universal Soil Loss Equation (RUSLE).

It was found that 50% of the settling zone capacity yields a larger storage volume for each sedimentation basin and was therefore adopted for calculating the total sediment storage volume.

Clear water diversion bunds are to be located near the western site boundary to divert clean water around the site. This clean water diversion helps to minimise the required onsite sediment basin size.

The calculations are summarised in Table B1 and Table B2.

Table B1: Sedimentation Basin Sizing – 90th percentile, 5 day storm

Catchment Name	Stage	Area (ha)	Required Settling Zone Volume (m^3)	Required Sediment Storage Zone			Required Sedimentation Basin Volume (m^3)
				50% of Settling Zone volume (m^3)	RUSLE Two Month Calculated Soil Loss (m^3)	Adopted Sediment Storage Zone (m^3)	
A1	Initial	8.7	3,855	1,927	480	1,927	5,782
A2	Initial	27.4	12,229	6,114	1,524	6,114	18,343
A3	Initial	3.7	1,640	820	179	820	2,460
B1	Final	6.6	2,905	1,453	364	1,453	4,358
B2	Final	29.6	13,178	6,589	1,642	6,589	19,767
B3	Final	3.7	1,640	820	179	820	2,460

Table B2: Sedimentation Basin Sizing – 95th percentile, 5 day storm

Catchment Name	Stage	Area (ha)	Required Settling Zone Volume (m^3)	Required Sediment Storage Zone			Required Sedimentation Basin Volume (m^3)
				50% of Settling Zone volume (m^3)	RUSLE Two Month Calculated Soil Loss (m^3)	Adopted Sediment Storage Zone (m^3)	
A1	Initial	8.7	6,102	3,051	480	1,927	9,153
A2	Initial	27.4	19,359	9,679	1,524	6,114	29,038
A3	Initial	3.7	2,596	1,298	179	820	3,894
B1	Final	6.6	4,599	2,299	364	1,453	6,898
B2	Final	29.6	20,862	10,431	1,642	6,589	31,293
B3	Final	3.7	2,596	1,298	179	820	3,894

The change in contributing catchment areas between the initial and final stages result in minor changes in the overall required sedimentation basin volumes. The overall largest required volume for each sedimentation basin between the initial and final extraction stages was adopted as the design basin volume. The practicalities of minor basin reconfigurations through operations was considered more difficult and costly when compared to constructing the largest required basin for each catchment (to cater for initial and final stages) at project initiation.

		Settling zone			Low erosion hazard land		High erosion hazard land (Sediment storage based on RUSLE)										Basin shape				
Catchment name	Catchment area (ha)	90% - 5 day rainfall*	Cv#	Settling volume (m^3)	Sediment storage (m^3)	Total sediment basin volume (m^3)	Slope length (m)	Change in height (m)	Slope	Description	LS factor	S (2yr 6hr rainfall intensity)	R	K**	2 month soil loss volume	Total sediment basin volume (m^3)	Adopted sediment basin volume (m^3)	L:W ratio	Settling volume depth (m)	Surface area of settling zone (m2)	Minimum length (m)	Minimum width (m)
A1	8.65	60.2	0.74	3855	1927	5782	10	5	50%	Stockpiles	3.33	13.7	4086.6	0.024	480	4335	5782	3	1	3855	108	36
A2	27.45	60.2	0.74	12229	6114	18343	10	5	50%	Stockpiles	3.33	13.7	4086.6	0.024	1524	13753	18343	3				
A3	3.68	60.2	0.74	1640	820	2460	250	16	6%	Typical slope	2.91	13.7	4086.6	0.024	179	1819	2460	3				
B1	6.52	60.2	0.74	2905	1453	4358	10	5	50%	Stockpiles	3.33	13.7	4086.6	0.024	362	3267	4358	3				
B2	29.58	60.2	0.74	13178	6589	19767	10	5	50%	Stockpiles	3.33	13.7	4086.6	0.024	1642	14821	19767	3	1.5	8785	162	54
B3	3.68	60.2	0.74	1640	820	2460	250	16	6%	Typical slope	2.91	13.7	4086.6	0.024	179	1819	2460	3	1	1640	70	23

* taken from Lismore (058037) graph

#Appendix F - Table F2 - high runoff potential, for the design rainfall depth

** taken from Appendix C - Coraki soil type for most conservative K factor

		Settling zone			Low erosion hazard land		High erosion hazard land (Sediment storage based on RUSLE)										Basin shape				
Catchment name	Catchment area (ha)	95% - 5 day rainfall*	Cv#	Settling volume (m^3)	Sediment storage (m^3)	Total sediment basin volume (m^3)	Slope length (m)	Change in height (m)	Slope	Description	LS factor	S (2yr 6hr rainfall intensity)	R	K**	2 month soil loss volume	Total sediment basin volume (m^3)	Adopted sediment basin volume (m^3)	L:W ratio	Settling volume depth (m)	Surface area of settling zone (m2)	Minimum length (m)	Minimum width (m)
A1	8.65	95.3	0.74	6102	3051	9153	10	5	50%	Stockpiles	3.33	13.7	4086.6	0.024	480	6582	9153	3	1	6102	135	45
A2	27.45	95.3	0.74	19359	9679	29038	10	5	50%	Stockpiles	3.33	13.7	4086.6	0.024	1524	20883	29038	3				
A3	3.68	95.3	0.74	2596	1298	3894	250	16	6%	Typical slope	2.91	13.7	4086.6	0.024	179	2775	3894	3				
B1	6.52	95.3	0.74	4599	2299	6898	10	5	50%	Stockpiles	3.33	13.7	4086.6	0.024	362	4961	6898	3				
B2	29.58	95.3	0.74	20862	10431	31293	10	5	50%	Stockpiles	3.33	13.7	4086.6	0.024	1642	22504	31293	3	1.5	13908	204	68
B3	3.68	95.3	0.74	2596	1298	3894	250	16	6%	Typical slope	2.91	13.7	4086.6	0.024	179	2775	3894	3	1	2596	88	29

* taken from Lismore (058037) graph

#Appendix F - Table F2 - high runoff potential, for the design rainfall depth

** taken from Appendix C - Coraki soil type for most conservative K factor

ATTACHMENT C - SEDIMENTATION BASIN VOLUME CALCULATIONS

- Sedimentation Basin Volumes
- Sedimentation Basin calculation spreadsheet

The adopted volumes in Table C1 and C2 were based off minimum length to width ratios, batter slopes and basin depths.

Table C1: Adopted Sedimentation Basin Volumes 90th percentile, 5 day storm

Basin Name	Required Sedimentation Basin Volume (m^3)	Adopted Sedimentation Basin Volume (m^3)
Sedimentation Basin 1.1 and 1.2	5,782	5,840
Sedimentation Basin 2	19,767	20,169
Sedimentation Basin 3	2,460	2,592

Table C2: Adopted Sedimentation Basin Volumes 95th percentile, 5 day storm

Basin Name	Required Sedimentation Basin Volume (m^3)	Adopted Sedimentation Basin Volume (m^3)
Sedimentation Basin 1.1 and 1.2	9,153	9,526
Sedimentation Basin 2	31,293	32,688
Sedimentation Basin 3	3,894	4,308

The adopted volumes will be refined during final detailed design.

The above tables demonstrate that the proposed sedimentation basins have been sized to accommodate the minimum required 90th percentile, 5 day rainfall event volume. The final sedimentation basin volumes are subject to detailed design of the development.

90th percentile, 5 day rainfall

Sedimentation Basin 1 - geometry					
Batters		Top length (m)	Top width (m)	L:W	Top surface area (m^2)
1V	4 H	110	36	3.055556	3960
Depth		Bottom length (m)	Bottom width (m)		Bottom surface area (m^2)
2 m		94.0	20.0		1880
		Volume (m^3)	*Required volume (m^3)*		
		5840.0	*5782*		

Sedimentation Basin 2 - geometry					
Batters		Top length (m)	Top width (m)	L:W	Top surface area (m^2)
1V	4 H	165	55	3	9075
depth		Bottom length (m)	Bottom width (m)		Bottom surface area (m^2)
3 m		141.0	31.0		4371
		Volume (m^3)	*Required volume (m^3)*		
		20169.0	*19767*		

Sedimentation Basin 3 - geometry					
Batters		Top length (m)	Top width (m)	L:W	Top surface area (m^2)
1V	4 H	72	24	3	1728
depth		Bottom length (m)	Bottom width (m)		Bottom surface area (m^2)
3 m		48.00	0.00		0
		Volume (m^3)	*Required volume (m^3)*		
		2592.0	*2460*		

95th percentile, 5 day rainfall

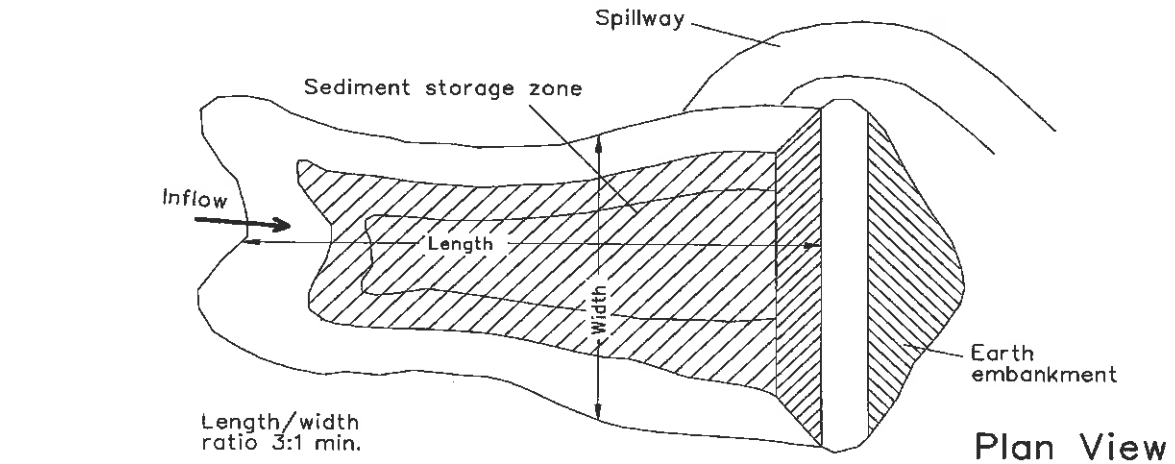
Sedimentation Basin 1 - geometry					
Batters		Top length (m)	Top width (m)	L:W	Top surface area (m^2)
1V	4 H	135	45	3	6075
Depth		Bottom length (m)	Bottom width (m)		Bottom surface area (m^2)
2 m		119.0	29.0		3451
		Volume (m^3)	*Required volume (m^3)*		
		9526.0	*9153*		

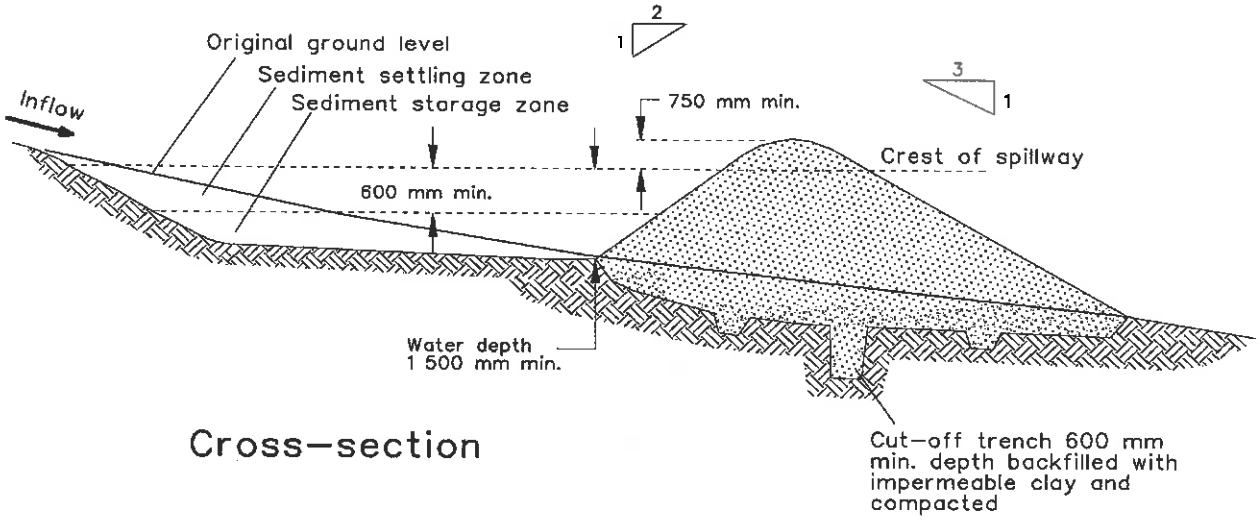
Sedimentation Basin 2 - geometry					
Batters		Top length (m)	Top width (m)	L:W	Top surface area (m^2)
1V	4 H	204	68	3	13872
depth		Bottom length (m)	Bottom width (m)		Bottom surface area (m^2)
3 m		180.0	44.0		7920
		Volume (m^3)	*Required volume (m^3)*		
		32688.0	*31293*		

Sedimentation Basin 3 - geometry					
Batters		Top length (m)	Top width (m)	L:W	Top surface area (m^2)
1V	4 H	88	29	3.034483	2552
depth		Bottom length (m)	Bottom width (m)		Bottom surface area (m^2)
3 m		64.00	5.00		320
		Volume (m^3)	*Required volume (m^3)*		
		4308.0	*3894*		

ATTACHMENT D - EROSION AND SEDIMENT CONTROL DRAWINGS

- *Managing Urban Stormwater Soils and Construction: Volume 1 (Blue Book)* Erosion and Sediment Control standard drawings





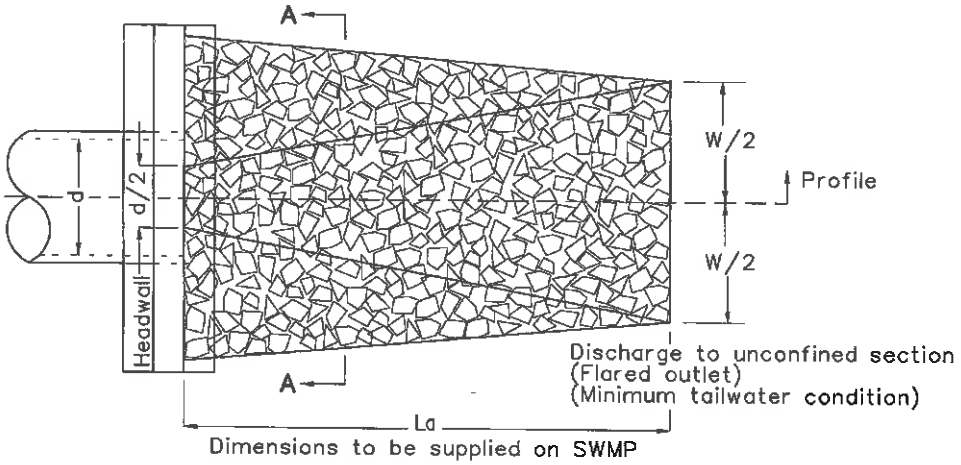
Construction Notes

1. Remove all vegetation and topsoil from under the dam wall and from within the storage area.
2. Construct a cut-off trench 500 mm deep and 1,200 mm wide along the centreline of the embankment extending to a point on the gully wall level with the riser crest.
3. Maintain the trench free of water and recompact the materials with equipment as specified in the SWMP to 95 per cent Standard Proctor Density.
4. Select fill following the SWMP that is free of roots, wood, rock, large stone or foreign material.
5. Prepare the site under the embankment by ripping to at least 100 mm to help bond compacted fill to the existing substrate.
6. Spread the fill in 100 mm to 150 mm layers and compact it at optimum moisture content following the SWMP.
7. Construct the emergency spillway.
8. Rehabilitate the structure following the SWMP.

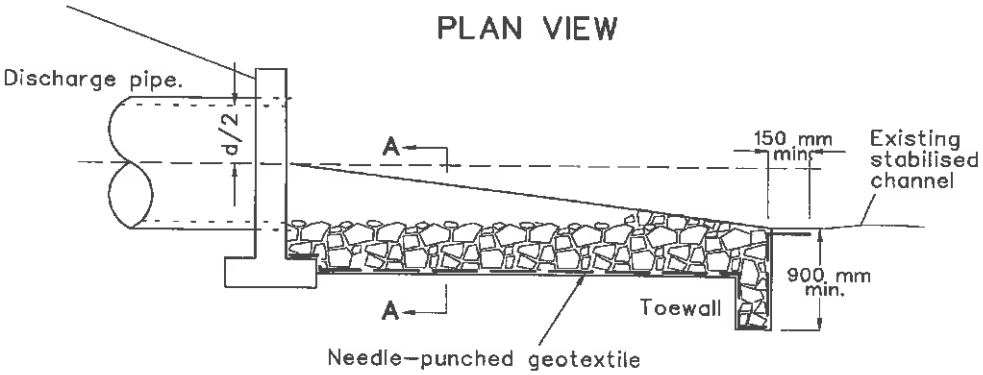
EARTH BASIN - WET

(APPLIES TO 'TYPE D' AND 'TYPE F' SOILS ONLY)

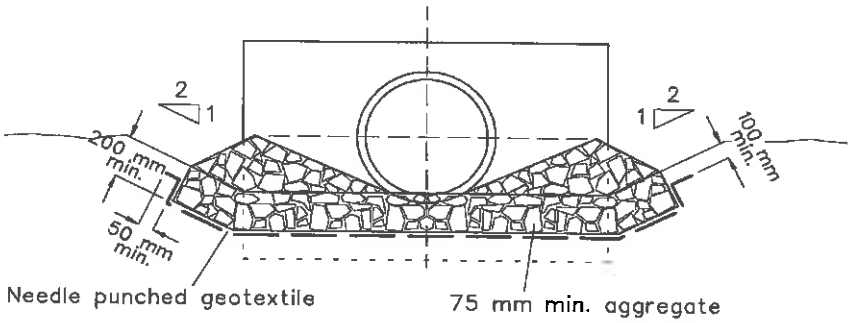
SD 6-4



PLAN VIEW



PLAN VIEW

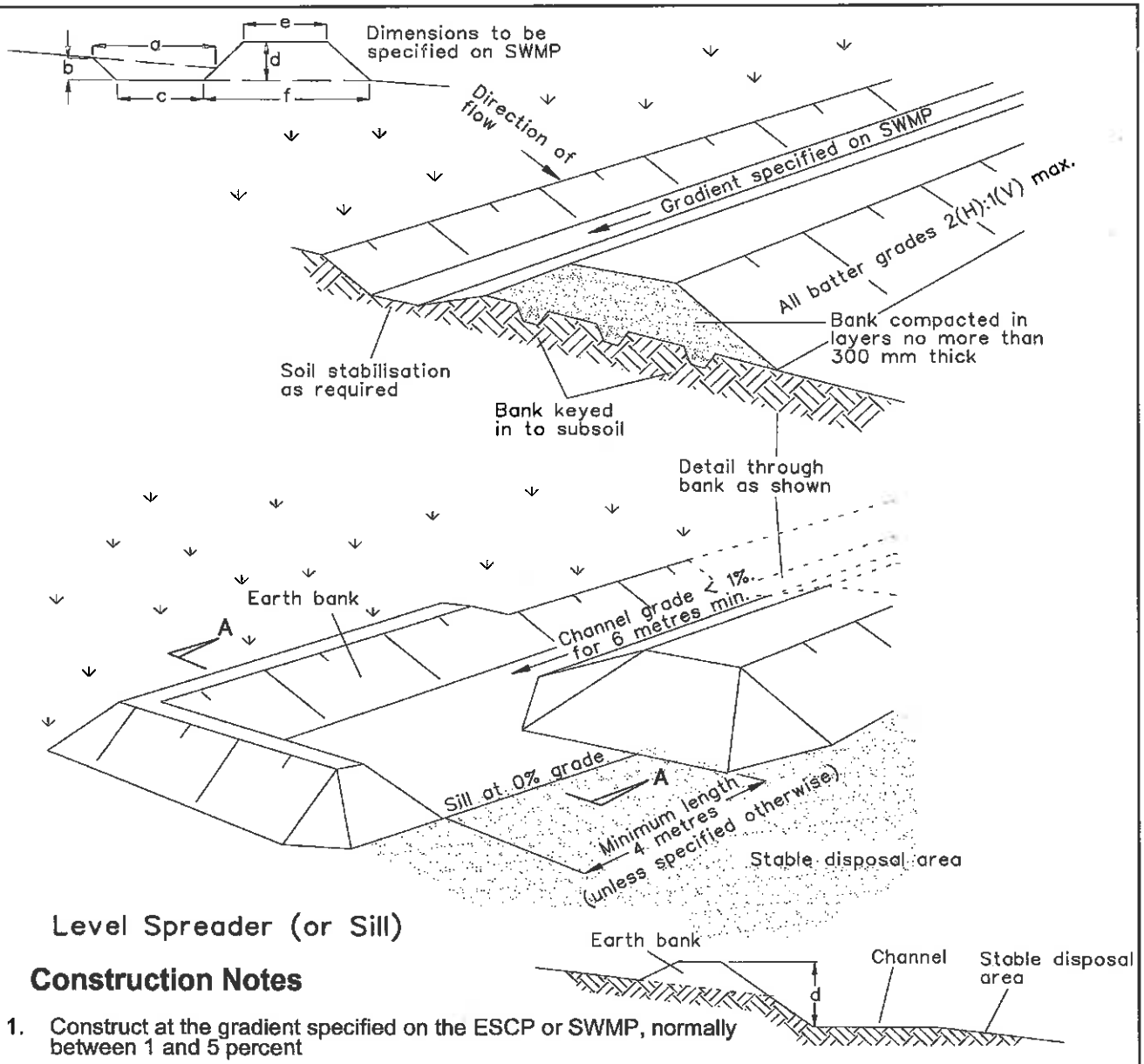


CROSS SECTION AA

Construction Notes

1. Compact the subgrade fill to the density of the surrounding undisturbed material.
2. Prepare a smooth, even foundation for the structure that will ensure that the needle-punched geotextile does not sustain serious damage when covered with rock.
3. Should any minor damage to the geotextile occur, repair it before spreading any aggregate. For repairs, patch one piece of fabric over the damage, making sure that all joints and patches overlap more than 300 mm.
4. Lay rock following the drawing, according to Table 5.2 of Landcom (2004) and with a minimum diameter of 75 mm.
5. Ensure that any concrete or riprap used for the energy dissipater or the outlet protection conforms to the grading limits specified on the SWMP.

ENERGY DISSIPATER SD 5-8



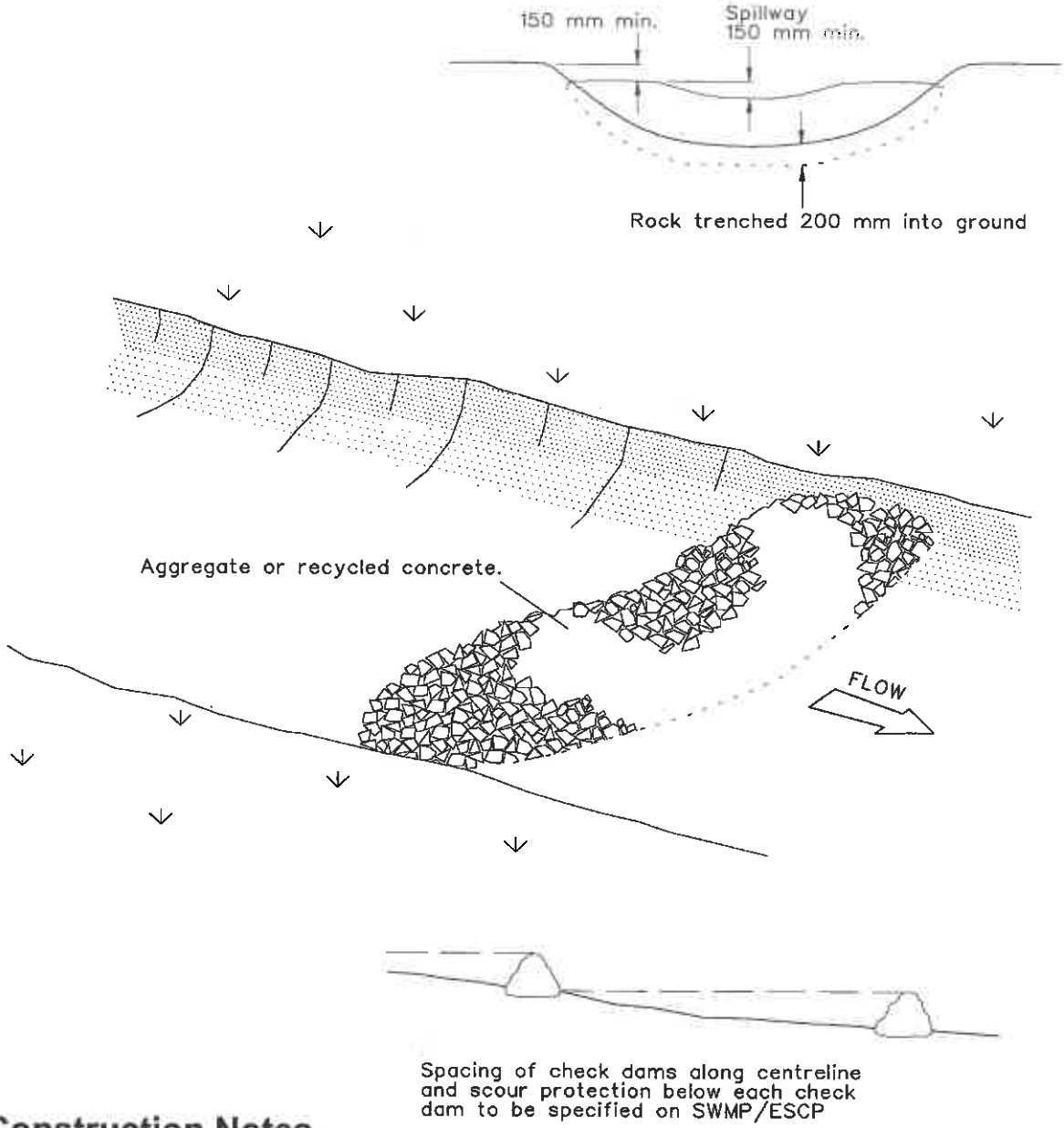
Level Spreader (or Sill)

Section AA

Construction Notes

1. Construct at the gradient specified on the ESCP or SWMP, normally between 1 and 5 percent
2. Avoid removing trees and shrubs if possible - work around them.
3. Ensure the structures are free of projections or other irregularities that could impede water flow.
4. Build the drains with circular, parabolic or trapezoidal cross sections, not V-shaped, at the dimensions shown on the SWMP.
5. Ensure the banks are properly compacted to prevent failure.
6. Complete permanent or temporary stabilisation within 10 days of construction following Table 5.2 in Landcom (2004).
7. Where discharging to erodible lands, ensure they outlet through a properly constructed level spreader.
8. Construct the level spreader at the gradient specified on the ESCP or SWMP, normally less than 1 percent or level.
9. Where possible, ensure they discharge waters onto either stabilised or undisturbed disposal sites within the same subcatchment area from which the water originated. Approval might be required to discharge into other subcatchments.

EARTH BANK (HIGH FLOWS) SD 5-6



Spacing of check dams along centreline and scour protection below each check dam to be specified on SWMP/ESCP

Construction Notes

1. Check dams can be built with various materials, including rocks, logs, sandbags and straw bales. The maintenance program should ensure their integrity is retained, especially where constructed with straw bales. In the case of bales, this might require their replacement each two to four months.

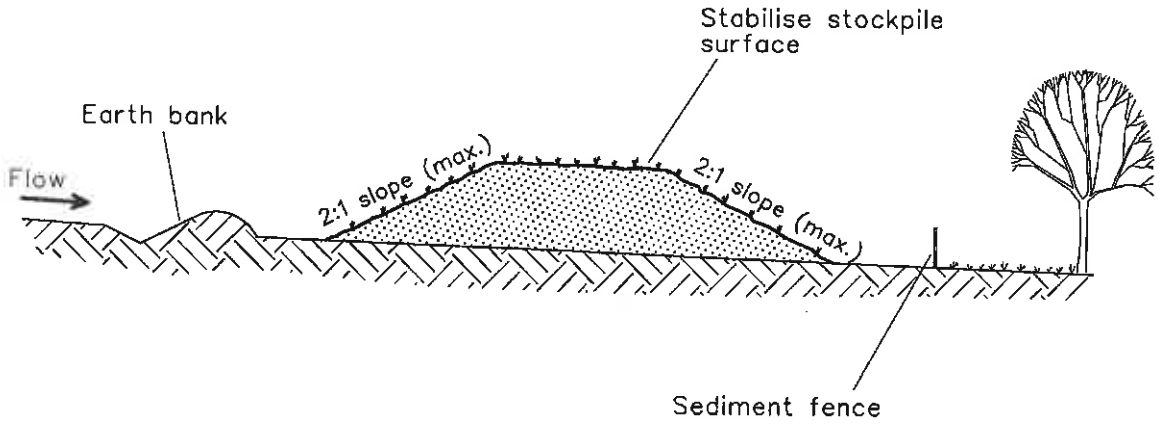
2. Trench the check dam 200 mm into the ground across its whole width. Where rock is used, fill the trenches to at least 100 mm above the ground surface to reduce the risk of undercutting.

3. Normally, their maximum height should not exceed 600 mm above the gully floor. The centre should act as a spillway, being at least 150 mm lower than the outer edges.

4. Space the dams so the toe of the upstream dam is level with the spillway of the next downstream dam.

ROCK CHECK DAM

SD 5-4



Construction Notes

1. Place stockpiles more than 2 (preferably 5) metres from existing vegetation, concentrated water flow, roads and hazard areas.
2. Construct on the contour as low, flat, elongated mounds.
3. Where there is sufficient area, topsoil stockpiles shall be less than 2 metres in height.
4. Where they are to be in place for more than 10 days, stabilise following the approved ESCP or SWMP to reduce the C-factor to less than 0.10.
5. Construct earth banks (Standard Drawing 5-5) on the upslope side to divert water around stockpiles and sediment fences (Standard Drawing 6-8) 1 to 2 metres downslope.

STOCKPILES SD 4-1

ATTACHMENT E - DETAILED WATER BALANCE CALCULATIONS

- Water balance data
- Water balance calculation spreadsheet

E1 – RAINFALL DATA

Daily rainfall data extracted from the Bureau of Meteorology website for Coraki (Union Street – 058015).

Table E1: Summary rainfall data for Coraki

Item	Rainfall (mm/year)
Mean	1263
Maximum	2324
Minimum	370

The rainfall station has daily rainfall data from 1895 to 2015 (44041 daily observations)

Table E2: Daily rainfall distribution for the Coraki gauge

Percentile	Rainfall (mm/day)
10%	0
50%	0
75%	1.0
90%	10.0
95%	20.3
99%	57.7
99.9%	147.2

E2 – EVAPORATION DATA

Evaporation data was extracted from the nearest pan evaporation gauge at the Alstonville Fruit Research Station (058131), approximately 20km away from the site. The daily evaporation rates are summarised in Table E3.

Table E3: Average daily evaporation for the Alstonville Fruit Research Station

Month	Evaporation (mm/day)
January	5.7
February	5.0
March	4.3
April	3.5
May	2.7
June	2.4
July	2.7
August	3.5
September	4.4
October	5.0
November	5.4
December	5.9

The evaporation rates in Table E3 were applied on the sedimentation basin surface areas to calculate the daily evaporation loss from each basin.

E3 – SEDIMENATION BASIN VOLUMES

Sedimentation basin volumes and surface areas were adopted as per the calculations in **Attachment C.**

E4 – ON-SITE WATER REUSE

A dust suppression rate of 2 L/m^2/hour was supplied by Groundwork Plus via email (dated 26 August 2015). This dust suppression rate was applied to all roads within the site. The quarry is expected to operate 6 days a week for 13 hours per day. Total road length has been delineated for both the initial and final extraction stage.

For each scenario it has been assumed that the dust suppression requirements for roads within each identified catchment have water taken from their respective sedimentation dam (i.e roads in catchment A1 are sprayed with water from Sedimentation Basin 1). Reuse demand for the external roads have been sourced from Sedimentation Dam 2.

For scenarios 2 and 4, an additional external irrigation area was identified. By utilising this additional undisturbed area on the southern portion of the development for irrigation purposes, the average number of outflow events from the sedimentation basins can be greatly reduced. It is proposed to operate the external irrigation system for the same duration as the operation of the quarry. The area identified is approximately 17.16ha. It has been assumed that 50% of this area can be irrigated when required (on non-rain days only). Irrigation water is supplied from Sedimentation Basins 1, 2 and 3.

E5 – CONTROLLED RELEASES FROM THE SEDIMENTATION BASINS

Immediately after a rain event, the basins will be dosed (with an appropriate dosing agent). After 4 days of residence time, the basin is lowered (either by gravity or pump) to allow the design rainfall event volume to remain free in each basin. If a rain event occurs within the 4 day period after dosing, the water will not be released until further dosing is completed following the subsequent rainfall event. Remaining water in the sediment storage zone may be used for on-site dust suppression.

E6 – WATER BALANCE MODEL

A detailed water balance model was generated for each individual sedimentation basin, for each scenario and for both stages of development (initial and final extraction). The water balance model was run within a daily time step spreadsheet. The spreadsheet calculated inflows (rainfall), outflows (evaporation and reuse) and a final volume at the end of each time step. The model used rainfall data from 1900 to 2015, for a total of 42,216 time steps.

The sedimentation basins were assumed to be empty at the start of the simulation.

Due to the large number of spreadsheets and the size of each spreadsheet, the header for scenario 1 (Basin 1 – initial extraction phase only) have been included in this attachment.

For further enquiries, please contact **adam.broit@calibreconsulting.co**

SEDIMENTATION BASIN 1: WATER BALANCE ANALYSIS

Filename:	H:\15\001850\Stormwater\[001850 Coraki Quarry Site Water Balance_150903_revised_discharge.xlsx]Basin 1 initial
Date:	3/09/2015
By:	AB

Configuration

Start Date	1/01/1900		Pond Bottom Area	1880	m2
Catch Area (ha)	8.6526		Pond Top Area	3960	m2
Area	8.6526		Pond Vol	5840	m3
Cv	0.74		Start Vol 0%	0	m3
Mean Rainfall	1263	mm			
			Pond Bottom RL	0	m AHD
			Pond Top RL (m.AHD)	2	m AHD
			90th percentile, 5 day volume (r	3855	m3
			sed storage volume	1985	m3

Results

Average WSL	0.54	m AHD
Max WSL	2.00	m AHD
Min WSL	0.00	m AHD
Average outflows	206.746	
Hydraulic Residence Time	8	days

On-site reuse

	Irrigation	(mm/day)	(mm/day)	(m3/day)
Jan	1	0.026	0.022	195.09
Feb	2	0.026	0.022	195.09
Mar	3	0.026	0.022	195.09
Apr	4	0.026	0.022	195.09
May	5	0.026	0.022	195.09
Jun	6	0.026	0.022	195.09
Jul	7	0.026	0.022	195.09
Aug	8	0.026	0.022	195.09
Sep	9	0.026	0.022	195.09
Oct	10	0.026	0.022	195.09
Nov	11	0.026	0.022	195.09
Dec	12	0.026	0.022	195.09
On-site reuse area	0.8754	ha		

	Surface Area (m2)	Evaporation (m3)	Inflow (m3)	Use (m3)
Mean	2440.056	10.292	203.141	148.137
Minimum	1880.000	4.512	0.000	0.000
Maximum	3960.000	23.364	11691.739	195.089
Sum		360,683	9,344,254	3,796,045

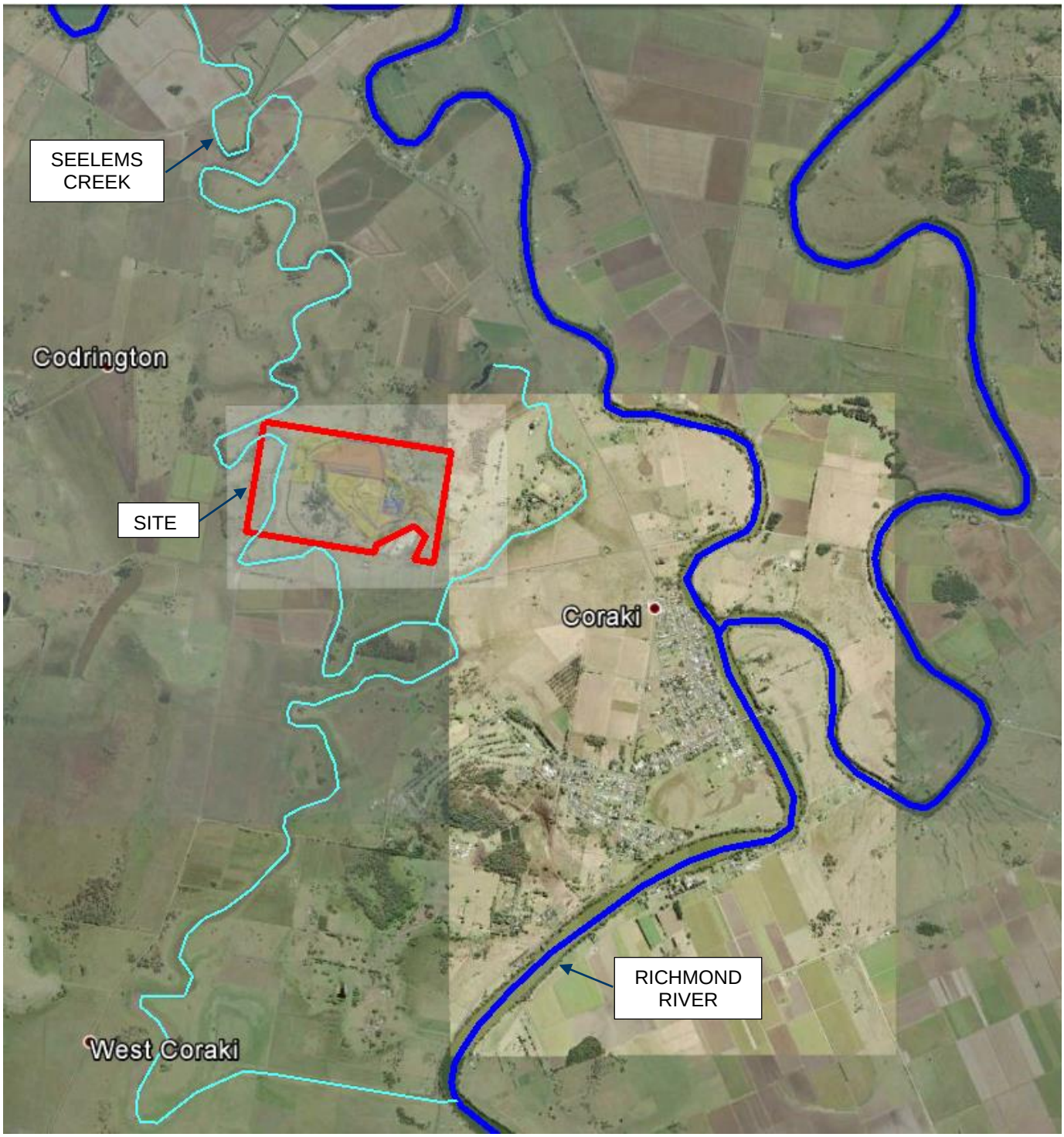
	Overflow (m3)	Finish Vol (m3)	Finish WSL (m.AHD)
Mean	58.609	1572.770	0.539
Minimum	0.000	0.000	0.000
Maximum	11681.047	5840.000	2.000
Sum	3,010,889		
Average/year	26,181.65		

	number of outflow days	number of outflow events
	2433	929
average per year	21.0	8.0

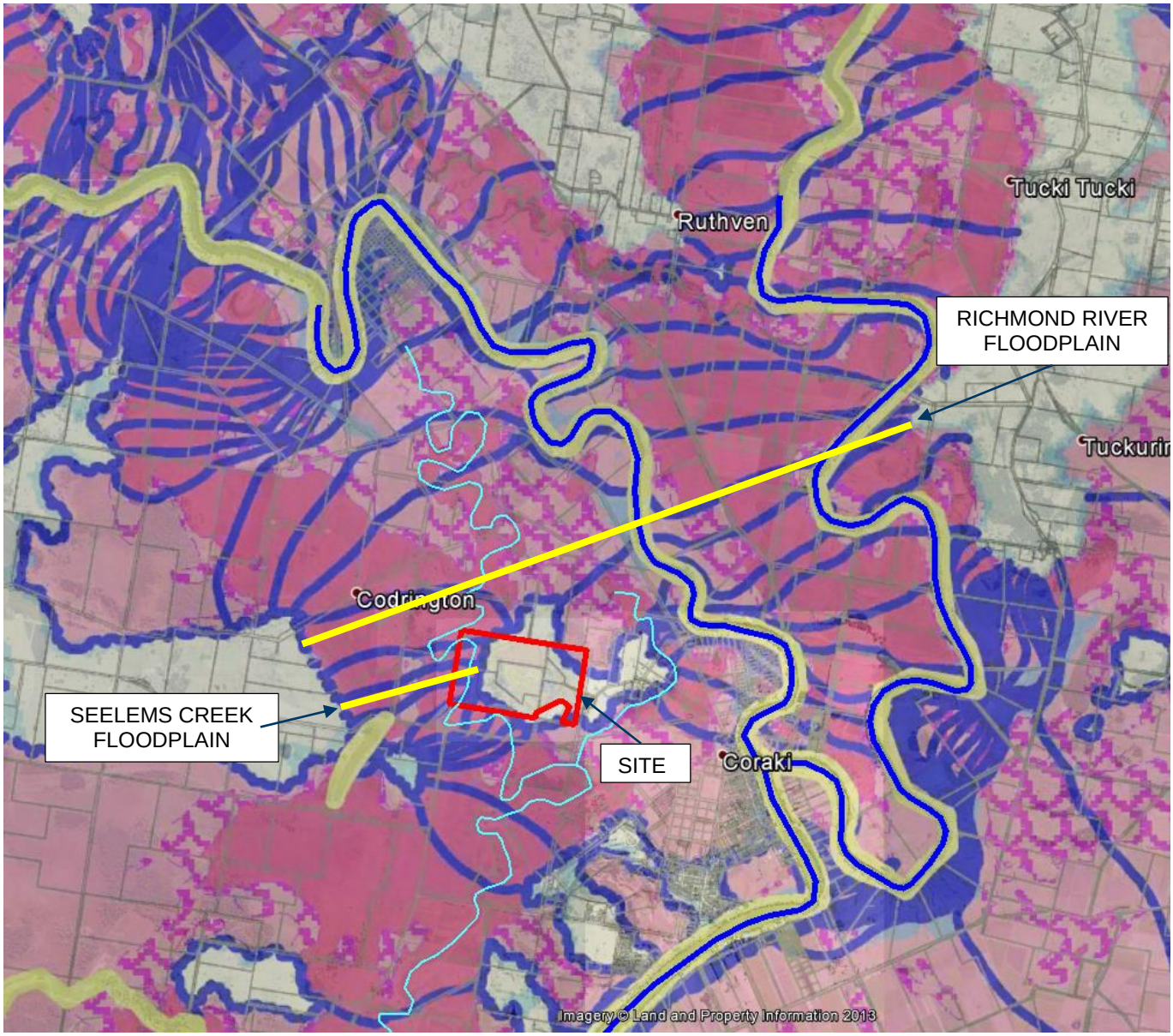
Date	Rain (mm) - original	Rain (mm) - filled	Evaporation (mm)	Start volume (m3)	Non-rain day (1=yes)	Number of consecutive non-rain days	Sedimentation basin controlled discharge	Rain day (1=yes)	number of rain days	Rainfall event length		Surface Area (m2)	Evaporation (m3)	Inflow (m3)	Re-use (m3)	Re-use not met from dam (m3)	Restore 90th percentile, 5 day rainfall volume (controlled discharge)	Overflow (m3)	Finish Vol (m3)	Finish WSL (m.AHD)	Overflow (1=yes)	number of overflow days	no overflow (1=no overflow)	number of no overflow days
1/01/1900	0	0	5.7	0.000	1							1880	10.716	0.000	195.089	195.089		0.000	0.000	0.000			1	
2/01/1900	0	0	5.7	0.000	1	1						1880	10.716	0.000	195.089	195.089		0.000	0.000	0.000			1	2
3/01/1900	0	0	5.7	0.000	1	2						1880	10.716	0.000	195.089	195.089		0.000	0.000	0.000			1	3
4/01/1900	0	0	5.7	0.000	1	3						1880	10.716	0.000	195.089	195.089		0.000	0.000	0.000			1	4
5/01/1900	0	0	5.7	0.000	1	4	dose and pump					1880	10.716	0.000	195.089	195.089		0.000	0.000	0.000			1	5
6/01/1900	0	0	5.7	0.000	1	5						1880	10.716	0.000	195.089	195.089		0.000	0.000	0.000			1	6
7/01/1900	1	1	5.7	0.000				1	1	1		1880	10.716	64.029	0.000	0.000		0.000	53.313	0.000			1	7
8/01/1900	0	0	5.7	53.313	1	1						1899	10.824	0.000	195.089	195.089		0.000	0.000	0.018			1	8
9/01/1900	10.4	10.4	5.7	0.000				1	1			1880	10.716	665.904	0.000	0.000		0.000	655.188	0.000			1	9
10/01/1900	1.3	1.3	5.7	655.188				1	2			2113	12.046	83.238	0.000	0.000		0.000	726.380	0.224			1	10
11/01/1900	28.4	28.4	5.7	726.380				1	3	3		2139	12.191	1818.430	0.000	0.000		0.000	2532.620	0.249			1	11
12/01/1900	0	0	5.7	2532.620	1	1						2782	15.858	0.000	195.089	0.000		0.000	2321.673	0.867			1	12
13/01/1900	0	0	5.7	2321.673	1	2						2707	15.429	0.000	195.089	0.000		0.000	2111.155	0.795			1	13
14/01/1900	1.3	1.3	5.7	2111.155				1	1	1		2632	15.002	83.238	0.000	0.000		0.000	2179.391	0.723			1	14
15/01/1900	0	0	5.7	2179.391	1	1						2656	15.140	0.000	195.089	0.000		0.000	1969.161	0.746			1	15
16/01/1900	0	0	5.7	1969.161	1	2						2581	14.714	0.000	195.089	0.000		0.000	1759.358	0.674			1	16
17/01/1900	0	0	5.7	1759.358	1	3						2507	14.288	0.000	195.089	0.000		0.000	1549.981	0.603			1	17
18/01/1900	0	0	5.7	1549.981	1	4	dose and pump					2432	13.863	0.000	195.089	0.000	1985.000	0.000	1341.030	0.531			1	18
19/01/1900	0	0	5.7	1341.030	1	5						2358	13.438	0.000	195.089	0.000		0.000	1132.502	0.459			1	19
20/01/1900	0	0	5.7	1132.502	1	6						2283	13.015	0.000	195.089	0.000		0.000	924.398	0.388			1	20
21/01/1900	0	0	5.7	924.398	1	7						2209	12.593	0.000	195.089	0.000		0.000	716.716	0.317			1	21
22/01/1900	0	0	5.7	716.716	1	8						2135	12.171	0.000	195.089	0.000		0.000	509.456	0.245			1	22
23/01/1900	0	0	5.7	509.456	1	9						2061	11.750	0.000	195.089	0.000		0.000	302.616	0.174			1	23
24/01/1900	0	0	5.7	302.616	1	10						1988	11.330	0.000	195.089	98.892		0.000	96.197	0.104			1	24
25/01/1900	2	2	5.7	96.197				1	1			1914	10.911	128.058	0.000	0.000		0.000	213.344	0.033			1	25
26/01/1900	5.6	5.6	5.7	213.344				1	2	2		1956	11.149	358.564	0.000	0.000		0.000	560.759	0.073			1	26
27/01/1900	0	0	5.7	560.759	1	1						2080	11.854	0.000	195.089	0.000		0.000	353.815	0.192			1	27
28/01/1900	0	0	5.7	353.815	1	2						2006	11.434	0.000	195.089	47.798		0.000	147.292	0.121			1	28
29/01/1900	0	0	5.7	147.292	1	3						1932	11.015	0.000	195.089	0.000		0.000	0.000	0.050			1	29
30/01/1900	0	0	5.7	0.000	1	4	dose and pump					1880	10.716	0.000	195.089	195.089	1985.000	0.000	0.000	0.000			1	30
31/01/1900	0	0	5.7	0.000	1	5						1880	10.716	0.000	195.089	195.089		0.000	0.000	0.000			1	31
1/02/1900	0	0	5	0.000	1	6						1880	9.400	0.000	195.089	195.089		0.000	0.000	0.000			1	32
2/02/1900	0	0	5	0.000	1	7						1880	9.400	0.000	195.089	195.089		0.000	0.000	0.000			1	33
3/02/1900	3.8	3.8	5	0.000				1	1	1		1880	9.400	243.311	0.000	0.000		0.000	233.911	0.000			1	34
4/02/1900	0	0	5	233.911	1	1						1963	9.817	0.000	195.089	166.084		0.000	29.005	0.080			1	35
5/02/1900	0	0	5	29.005	1	2						1890	9.452	0.000	195.089	195.089		0.000	0.000	0.010			1	36
6/02/1900	0	0	5	0.000	1	3						1880	9.400	0.000	195.089	0.000		0.000	0.000	0.000			1	37
7/02/1900	0	0	5	0.000	1	4	dose and pump					1880	9.400	0.000	195.089	195.089	1985.000	0.000	0.000	0.000			1	38
8/02/1900	0	0	5	0.000	1	5						1880	9.400	0.000	195.089	195.089		0.000	0.000	0.000			1	39
9/02/1900	0	0	5	0.000	1	6						1880	9.400	0.000	195.089	195.089		0.000	0.000	0.000			1	40
10/02/1900	0	0	5	0.000	1	7						1880	9.400	0.000	195.089	195.089		0.000	0.000	0.000			1	41
11/02/1900	0	0	5	0.000	1	8						1880	9.400	0.000	195.089	195.089		0.000	0.000	0.000			1	42
12/02/1900	0	0	5	0.000	1	9						1880	9.400	0.000	195.089	195.089		0.000	0.000	0.000			1	43
13/02/1900	0	0	5	0.000	1	10						1880	9.400	0.000	195.089	195.089		0.000	0.000	0.000			1	44
14/02/1900	64.3	64.3	5	0.000				1	1	1		1880	9.400	4117.080	0.000	0.000		0.000	4107.680	0.000			1	45
15/02/1900	0	0	5	4107.680	1	1						3343	16.715	0.000	195.089	0.000		0.000	3895.876	1.407			1	46
16/02/1900	0	0	5	3895.876	1	2						3268	16.338	0.000	195.089	0.000		0.000	3684.449	1.334			1	47
17/02/1900	8.4	8.4	5	3684.449				1	1			3192	15.961	537.846	0.000	0.000		0.000	4206.333	1.262			1	48
18/02/1900	13.5	13.5	5	4206.333				1	2			3378	16.891	864.395	0.000	0.000		0.000	5053.837	1.441			1	49
19/02/1900	8.1	8.1	5	5053.837				1	3			3680	18.400	518.637	0.000	0.000		0.000	5554.074	1.731			1	50
20/02/1900	5.6	5.6	5	5554.074				1	4	4		3858	19.291	358.564	0.000	0.000		53.347	5840.000	1.902	1	1		
21/02/1900	0	0	5	5840.000	1	1						3960	19.800	0.000	195.089	0.000		0.000	5625.111	2.000			1	1
22/02/1900	0	0	5	5625.111	1	2						3883	19.417	0.000	195.089	0.000		0.000	5410.604	1.926			1	2
23/02/1900	0	0	5	5410.604	1	3						3807	19.035	0.000	195.089	0.000		0.000	5196.480	1.853			1	3
24/02/1900	0	0	5	5196.480	1	4	dose and pump					3731	18.654	0.000	195.089	0.000	1985.000	0.000	1985.000	1.780			1	4
25/02/1900	0	0	5	1985.000	1	5						2587	12.935	0.000	195.089	0.000		0.000	1776.976	0.680			1	5
26/02/1900	0	0	5	1776.976	1	6						2513	12.564	0.000	195.089	0.000		0.000	1569.322	0.609			1	6
27/02/1900	0	0	5	1569.322	1	7						2439	12.195	0.000	195.089	0.000		0.000	1362.038	0.537			1	7
28/02/1900	0	0	5	1362.038	1	8						2365	11.826	0.000	195.089	0.000		0.000	1155.124	0.466			1	8
29/02/1900	#N/A	0	5	1155.124	1	9						2291	11.457	0.000	195.089	0.000		0.000	948.578	0.396			1	9
1/03/1900	0	0	4.3	948.578	1	10						2218	9.537	0.000	195.089	0.000		0.000	743.952	0.325			1	10
2/03/1900	0	0	4.3	743.952	1	11						2145	9.223	0.000	195.089	0.000		0.000	539.639	0.255			1	11
3/03/1900	0	0	4.3	539.639	1	12						2072	8.910	0.000	195.089	0.000		0.000	335.640	0.185			1	12
4/03/1900	0	0	4.3	335.640	1	13						2000	8.598	0.000	195.089	63.137		0.000	131.952	0.115			1	13
5/03/1900	0	0	4.3	131.952	1	14						1927	8.286	0.000	195.089	195.089		0.000	0.000	0.045			1	14
6/03/1900	0	0	4.3	0.000	1	15						1880	8.084	0.000	195.089	195.089		0.000	0.000	0.000			1	15
7/03/1900	6.6	6.6	4.3	0.000				1	1	1		1880	8.084	422.593	0.000	0.000		0.000	414.509	0.000			1	16
8/03/1900	0	0	4.3	414.509	1	1						2028	8.719	0.000	195.089	0.000		0.000	210.701	0.142			1	17
9/03/1900	1.8	1.8	4.3	210.701				1	1	1		1955	8.407	115.253	0.000	0.000		0.000	317.547	0.072			1	18
10/03/1900	0	0	4.3	317.547	1	1						1993	8.570	0.000	195.089	81.202		0.000	113.887	0.109			1	19
11/03/1900	0	0	4.3	113.887	1	2						1921	8.258	0.000	195.089	195.089		0.000	0.000	0.039			1	20
12/03/1900	0	0	4.3	0.000	1	3						1880	8.084	0.000	195.089	195.089		0.000	0.000	0.000			1	21
13/03/1900	0	0	4.3	0.000	1	4	dose and pump					1880	8.084	0.000	195.089	195.089	1985.000	0.000	0.000	0.000			1	22

Reuse					
Initial extraction stage			**Final extraction stage**		
Roads within Catchment A1			**Roads within Catchment B1**		
road length	1459	m	road length	991	m
road width	6	m	road width	6	m
road area	8754	sqm	road area	5946	sqm
application rate	2	L/sqm/hr	application rate	2	L/sqm/hr
daily operational hours	13	hours	daily operational hours	13	hours
Daily application rate	228	m^3	Daily application rate	155	m^3
Roads within Catchment A2			**Roads within Catchment B2**		
Road length	3849	m	Road length	5036	m
road width	6	m	road width	6	m
road area	23094	sqm	road area	30216	sqm
application rate	2	L/sqm/hr	application rate	2	L/sqm/hr
daily operational hours	13	hours	daily operational hours	13	hours
Daily application rate	600	m^3	Daily application rate	786	m^3
Roads within Catchment A3			**Roads within Catchment A3**		
Road length	572	m	Road length	572	m
road width	6	m	road width	6	m
road area	3432	sqm	road area	3432	sqm
application rate	2	L/sqm/hr	application rate	2	L/sqm/hr
daily operational hours	13	hours	daily operational hours	13	hours
Daily application rate	89	m^3	Daily application rate	89	m^3
External haul road			**External haul road**		
External haul road	1467	m	External haul road	1467	m
road width	6	m	road width	6	m
road area	8802	sqm	road area	8802	sqm
application rate	2	L/sqm/hr	application rate	2	L/sqm/hr
daily operational hours	13	hours	daily operational hours	13	hours
Daily application rate	229	m^3	Daily application rate	229	m^3

ATTACHMENT F – WATERCOURSES



ATTACHMENT G – RICHMOND VALLEY COUNCIL FLOOD MAPPING



From Council's flood mapping, approximate floodplain widths have been measured. During flooding events, Seelems Creek acts as an overflow path from the Richmond River floodplain.

The overall width of the Seelems Creek floodplain is 1,600 m at its minimum width (adjacent to the site). The overall width of the greater Richmond River Floodplain upstream of the site is approximately 6,600 m.

Attachment 8

MRCagney Response Letter

MRCagney
ABN: 11093 336 504

Level 1, 16 Marie St
PO Box 2185
Milton QLD 4064
Australia
+61 7 3320 3618 : tel
+61 7 3320 3636 : fax
mmak@mrcagney.com

5639

5 February 2016

Quarry Solutions Pty Ltd
c-/ GROUNDWORK plus
PO Box 1779
Milton QLD 4064

Attention: Jim Lawler

Dear Jim,

Re: Coraki Quarry
Response to Richmond Valley Council and Public Submissions

We refer to your request to consider the traffic-related information request items included in the Richmond Valley Council letter dated 9 December 2015 and public submissions in relation to the proposed Coraki Quarry.

The Richmond Valley Council letter and public submissions are included in Attachment A of this advice.

Response to the Richmond Valley Council's Comment on Traffic Loadings

The applicant, Quarry Solutions Pty Ltd, has confirmed that in addition to the approved hours of the operation of the "Pacific Highway Upgrade – Woolgoolga to Ballina" project (7am to 6pm from Monday to Friday), out of hours work has been proposed and approved for 7am to 6pm on Saturday. Therefore, by including the delivery time from the proposed Coraki Quarry, the proposed working time for the haulage activity of 6 days per week and 13 hours per day aligns with the approved operation hours of the highway upgrade project. Also, due to the tight schedule of the highway upgrade project, it is intended that the proposed Coraki Quarry would be operational 50 weeks per year.

Therefore, the working hours and traffic loadings detailed in the EIS are not average figures, but target figures to be implemented during the construction period of the highway upgrade project from 2016 to 2023. The results of traffic impact analysis included in the TIA report (Ref.1) conclude that there are no capacity issues along the proposed haulage route and hence no external road network improvements are identified in conjunction with the proposed Coraki Quarry.

The survey undertaken on Thursday 21 May 2015 would include the traffic generated by the Moonimba Quarry. After the completion of the traffic survey, MRCagney was advised that the

[1] "Traffic Impact and Pavement Assessment Report", MRCagney, 29 October 2015.

Petersons Quarry only operated on Wednesdays; therefore, the traffic generated by the Petersons Quarry would not have been included in the background traffic survey.

Based on results of intersection performance analysis (SIDRA analysis), included in Section 6 of the TIA report (Ref.1), it is clear that all affected intersections have ample reserve capacity with and without the proposed development in the design year. All affected intersections would operate satisfactorily even if the total traffic volume generated was to double (eg. additional traffic from other development). Therefore, there are no operational constraints with the Petersons Quarry, the Moonimba Quarry and the proposed development operating simultaneously.

Response to the First Public Submission

The key traffic- related concerns of the first public submission are summarised and addressed below.

1. Sight Distance to / from Accesses on the Coraki – Woodburn Road, between Reardons Lane and Swan Bay New Italy Road

The locations of the existing accesses (three accesses) on Coraki - Woodburn Road, between Reardons Lane and Swan Bay New Italy Road are illustrated in Figure 1.

Figure 1 – Locations of Accesses on Coraki - Woodburn Road, between Reardons Lane and Swan Bay New Italy Road

The posted speed limit of Coraki - Woodburn Road, between Reardons Lane and Swan Bay New Italy Road is 100km/h. A site visit was undertaken on Friday 15 January 2016 to measure the sight distances to and from the existing accesses. The measured sight distances are summarised in Table 1.

Table 1 – The Measured Sight Distance

Access No.	Approach Sight Distance (ASD) (from level 1.1m to 0.00m)		Safe Intersection Sight Distance (SISD) (from level 1.1m to 1.25m)	
	From East	From West	To East	To West
Access 1	175 m	136 m	173 m	413 m
Access 2	203 m	88 m	320 m	107 m
Access 3	203 m	95 m	320 m	180 m

The sight distance requirements stated in Table 3.1 Approach Sight Distance (ASD) and corresponding minimum crest vertical curve size for sealed roads (S<L) and Table 3.2 Safe Intersection Sight Distance (SISD) and corresponding minimum crest vertical curve size for sealed roads of Austroads' guideline (Ref.2) are summarised in Table 2.

Table 2 – Austroads' Sight Distance Requirement

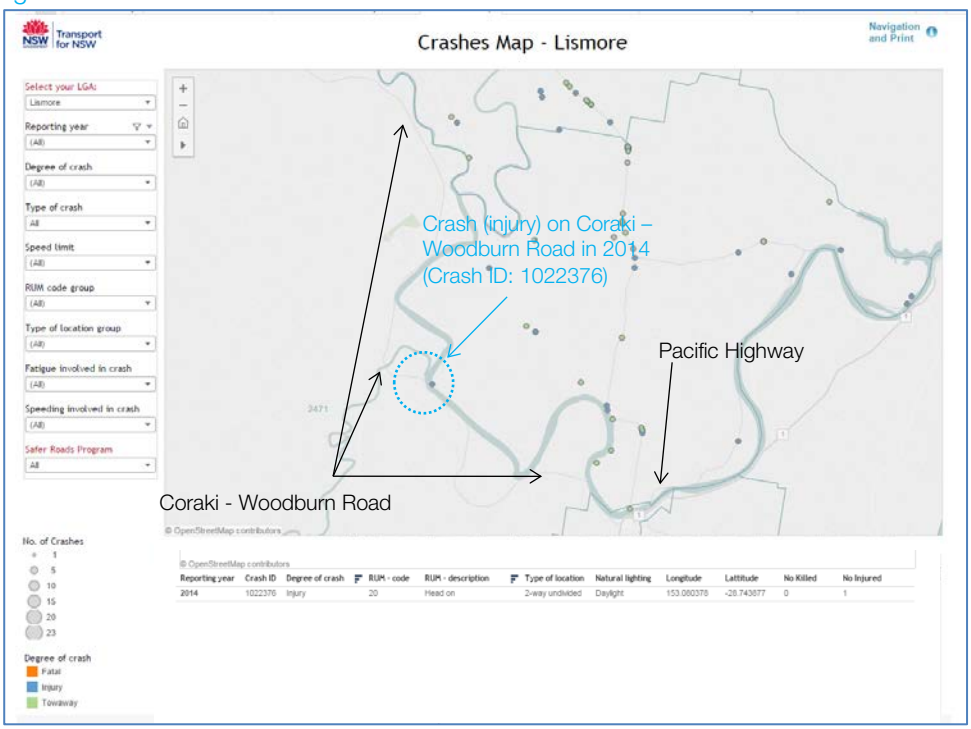
Speed Limit	Design Speed	ASD Requirement (R_T = 2.0s)	SISD Requirement (R_T = 2.0s)
100 km/h	110 km/h	193 m	285 m

The results of the on-site sight distance measurement indicate that the available ASD and SISD at some accesses are less than the required sight distances for a road with a speed limit of 100 km/h (design speed of 110km/h), however, this sight distance deficiency is not uncommon in many roads across New South Wales.

Based on the crash data, sourced from Transport for NSW's website (http://roadsafety.transport.nsw.gov.au/datos/lga_stats.html?tablga=1), only one crash (injury only, no fatal crash) was recorded on Coraki – Woodburn Road between 2010 and 2014. The crash data is illustrated in Figure 2. The crash data indicates that the existing sight distance deficiency along the road has not resulted in significant concerns on Coraki - Woodburn Road.

It is not considered the responsibility of the applicant of the proposed development to fix an existing sight distance deficiency. All haulage truck drivers to / from the site would strictly follow the driver code of conduct issued by the applicant (included in Attachment C of this advice) to ensure the safety of road users along the proposed haulage route.

Figure 3 – Crash Data of Coraki - Woodburn Road



[2] "Guide to Road Design Part 4A: Unsignalised and Signalised Intersections", Austroads, 2009.

2. Figure 2.7 of MRCagney's TIA Report

The intention of providing Figure 2.7 in the MRCagney's TIA Report (Ref.1) is to provide an image to illustrate that the Coraki - Woodburn Road is a two-lane two-way carriageway.

3. Hours of Operation

The haulage activity of the proposed development is proposed to be undertaken 13 hours a day / 6 days a week from 2016 to 2023 to provide materials for the "Pacific Highway Upgrade – Woolgoolga to Ballina" project.

The haulage activity may cause some inconvenience to the concerned resident during the temporary period of increased haulage (2016 to 2023), however, all haulage truck drivers to / from the site would strictly follow a driver code of conduct developed by the applicant (included in Attachment C of this advice) to ensure the safety of road users along the proposed haulage route.

4. Percentage Increase of Traffic Volumes

Based on the background traffic volumes and the traffic generation of the proposed development discussed in the TIA report (Ref.1), the percentage increase of traffic volumes during the AM and PM peak hour periods are summarised in Table 3.

Table 3 – Percentage Increases of Traffic Volumes

Location of Coraki-Woodburn Road	2015 Observed Traffic Volumes		Average Traffic Generated by the Proposed Site		Percentage Increase in Traffic Volumes	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Near Lagoon Road	254 vph	230 vph	14 vph	14 vph	5.5%	6.1%
Near Pacific Highway	162 vph	210 vph	14 vph	14 vph	8.6%	6.7%

There is no traffic data during the non-peak hour period. It is noted that the percentage increase in traffic volume due to the proposed development would be higher during the non-peak hour period as the overall hourly traffic volume (background + development) would be lower during this period.

5. Petersons Quarry

Based on results of intersection performance analysis (SIDRA analysis), included in Section 6 of the TIA report (Ref.1), it is clear that all affected intersections have ample reserve capacity with and without the proposed development in the design year. All affected intersections would operate satisfactorily even if the total traffic volume generated was to double (eg. additional traffic from other development); therefore, there are no anticipated operational constraints with the Petersons Quarry and the proposed development operating simultaneously.

6. Use of the Road Levy

The applicant would pay the Council's heavy haulage contribution according to Section 94 Heavy Haulage Contributions Plans 2013 ($1.08 / tonne). Council can provide further information in relation to this issue.

Response to the Second Public Submission (Patricia Hughes)

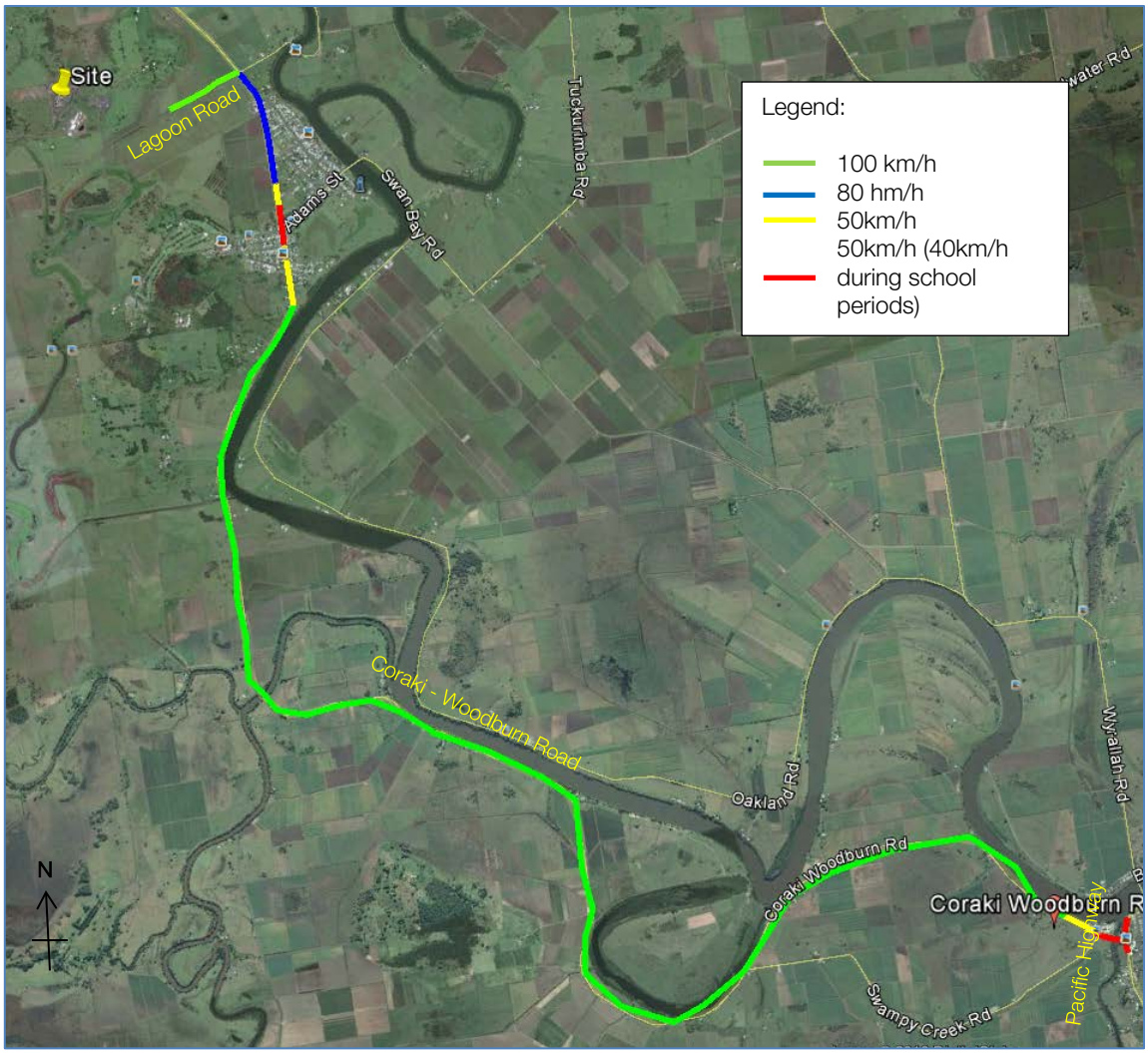
The key traffic- related concerns addressed by the second public submission are summarised and addressed below.

1. Speed Limit of Coraki - Woodburn Road in the section called Queen Elizabeth 2nd Drive

The existing speed limits along Coraki – Woodburn Road, between the Pacific Highway and Lagoon Road are illustrated in Figure 2.

The RMS carried out a speed zone review in 2014, which suggest that "*Queen Elizabeth Drive, Coraki – Retain its current speed limit of 80kph*". The findings of the review were tabled in Richmond Valley Council's Minutes of Ordinary Meeting, 17 November 2015, which is included in Attachment B of this advice.

Figure 2 – Speed Limits along Coraki – Woodburn Road



2. Hours of Operation

The haulage activity of the development is proposed to be undertaken 13 hours a day / 6 days a week from 2016 to 2023 to provide materials for the "Pacific Highway Upgrade – Woolgoolga to Ballina" project.

The haulage activity may cause some inconvenience to the local road users during the operational period of the increased haulage period (2016 to 2023) temporarily, however, all haulage truck

drivers to / from the site would strictly follow the driver code of conduct developed by the applicant (included in Attachment C of this advice).

The driver code of conduct includes the following guidelines:

- comply with all posted speed limits on all roads;
- comply with the 40 km/h school zones;
- keep a 50 metre distance from all school buses travelling in drivers' direction;
- drive in a manner at all times that is in accordance with road conditions;
- other guidelines.

The driver code of conduct is aimed to ensure the safety of road users along the proposed haulage route.

Response to the Third Public Submission

The key traffic- related concerns addressed by the third public submission are summarised and addressed below.

1. High Volumes of Trucks and Long Hours of Operation

The haulage activity of the development is proposed to be undertaken 13 hours a day / 6 days a week from 2016 to 2023 to provide materials for the "Pacific Highway Upgrade – Woolgoolga to Ballina" project.

The haulage activity may cause some inconvenience to the local road users during the temporary period of increased haulage (2016 to 2023), however, all haulage truck drivers to / from the site would strictly follow the driver code of conduct developed by the applicant (included in Attachment C of this advice).

The driver code of conduct includes the following guidelines:

- comply with all posted speed limits on all roads;
- comply with the 40 km/h school zones;
- keep a 50 metre distance from all school buses travelling in drivers' direction;
- drive in a manner at all times that is in accordance with road conditions;
- other guidelines.

The driver code of conduct is aimed to ensure the safety of road users along the proposed haulage route.

2. The Trucks Would Cause Increased Risks of Road Accidents to Other Road Users, including Students in Coraki and Woodburn

The driver code of conduct developed by the quarry is aimed to ensure the safety of road users along the proposed haulage route. This code of conduct includes specific guidelines related to the school speed zones and driving close to school buses (in the same direction).

3. Cumulative Impacts of the Truck Traffic Generated by the Development on Top of Traffic Generated by Other Quarries

Based on results of intersection performance analysis (SIDRA analysis), included in Section 6 of the TIA report (Ref.1), it is clear that all affected intersections have ample reserve capacity with and without the proposed development in the design year (2023). The results of traffic impact analysis

included in the TIA report (Ref.1) conclude that there are no capacity issues along the proposed haulage route and hence no external road network improvements (or mitigation measures) are identified in conjunction with the proposed Coraki Quarry.

All affected intersections would operate satisfactorily even if the total traffic volume generated was to double (eg. additional traffic from other development). Therefore, there are no operational constraints with other quarries and the proposed development operating simultaneously.

4. Failure of the EIS to Adequately Consider the Cumulative Impacts on the Coraki - Woodburn Road Due to the Proposal and Several Operating Quarries

Refers to the response to key item 3.

5. Inadequate Mitigation Measures in the EIS regarding Traffic Associated Impacts

Refers to the response to key item 3.

I trust this information satisfactorily addresses the traffic-related items raised by the Richmond Valley Council letter and public submissions.

Please do not hesitate to contact me directly if you have any further queries.

Yours sincerely,

Margaret Mak
Senior Engineer
MRCagney

Attachment A

- Richmond Valley Council Information Request
- First, Second and Third Public Submissions

Council's Reference:
L33811 – BE:DC

Contact:
Stephen McCarthy

Richmond Valley Council

9 December 2015

Planning Services
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Director – Resource Assessments

Dear Sir

Application No	**SSD 7036**
Location	Seelems Road, Coraki
Applicant	Quarry Solutions Pty Ltd
Council Area	Richmond Valley Council
Consent Authority	Minister of Planning

Thank you for the opportunity to comment on the proposal for the new Coraki Quarry.

Council has reviewed the EIS in preparing a number of comments and suggested conditions that Richmond Valley Council believes are appropriate to the application for the new quarry, particularly given the scale of operations.

General Comment

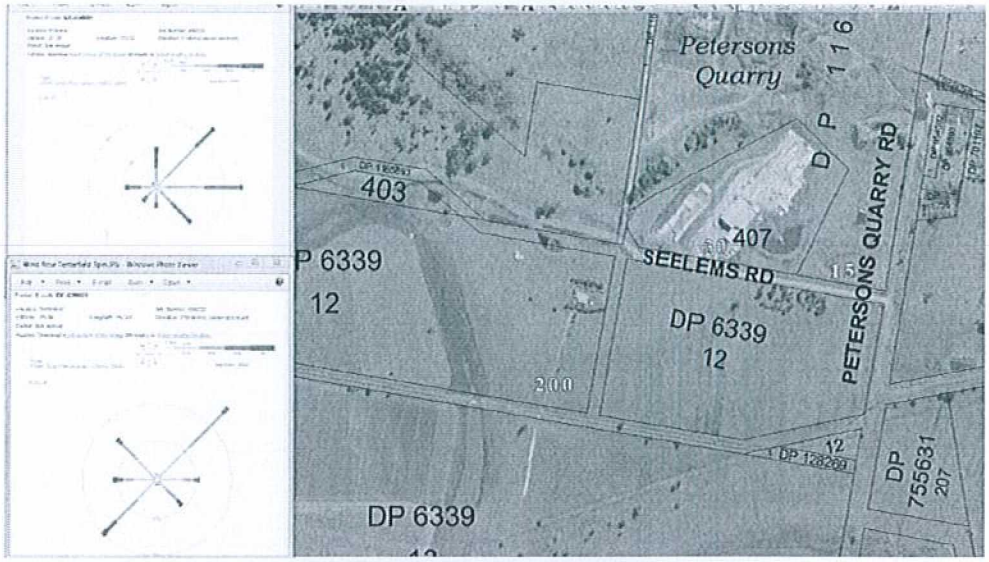
Condition of Woodburn Coraki Road

Council is extremely concerned about the severe impacts that will occur on the Woodburn Coraki Road. The road was constructed (sealed) in the early 1950s with the original construction not being to modern standards. The road already shows distress due to current traffic loads. The road is also on a very large floodplain and is susceptible to flooding. The use of heavy vehicles over a saturated pavement is a recipe for complete destruction of the road. Council reserves the right to impose temporary load limits (or exclusion of heavy vehicles for a period) on the road that has suffered inundation.

Seelems Road

Council believes that the large amount of heavy traffic on the gravel Seelems Road will present an unacceptable amenity issue for the existing house at 200 Lagoon Road. Wind roses from the Bureau of Meteorology website show that there is a

predominance of winds from the north, north east, and east that would blow onto the existing residence. Council has included in its conditions a requirement that Seelems Road be sealed from Petersons Quarry Road to a point 200 metres west of the entrance to 30 Seelems Road.



Traffic loadings

The traffic loadings detailed in the EIS are understated by the use of an average over the full hours over the whole year (50 weeks). The actual impacts on both the community and the road infrastructure will be much greater.

Description	by Quarry EIS (Sect 7.3.6)	Sensitivity Calculation
Total (max) haulage	1,000,000 tonnes per year	1,000,000 tonnes per year
Working weeks per year	50 weeks	40 weeks – delays due to wet weather & site availability & construction schedules on hwy site
Working days per week	6 days	6 days – 5 long, 1 shorter

Working hours per day	13 hours Total 78 hours per week Quarry EIS Sec 3.2.8 Mon – Sat 6 to 7 =13hr/d Total 78 hours	Hwy work site hours of operation and quarry hours and travel time Mon -Fri 6am to 7pm 13hrs Sat 8am to 5pm 9 hrs Total per week 74 hrs (Proposed Construction Hours in Hwy EIS Sect 3.2.4) If allow time for haulage, access, later sunrise, and sunset at 5pm in winter, ,placement and exit the site (Mon to Fri as Sat start is earlier at quarry and can be onsite ready at start time) Nett hours available is thus say 60 hours per week If working "6 days" then avg 10 hr/d
Average mass of vehicle	36 tonnes	36 tonnes
Average hourly traffic IN	7 vph	12 vph
Average hourly traffic OUT	7 vph	12 vph
Hourly traffic total	14 vph NOTE this is an annual average over full length days for 6 days a week	24 vph
Avg time at a single point	4.2 minutes	every 2.5 minutes for 9.7 hrs a day for 40 weeks a truck will go past (loaded or empty)

NOTE that these figures are for this quarry only and do not include any cumulative impact from the existing Petersons Quarry, and the Moonimba Quarry off Boggy Creek Road.

Road Traffic Noise

The noise assessment carried out by MWA Environmental which assesses road traffic noise from quarry trucks has based the volume of vehicle movements from the quarry on the number determined in the *Traffic Impact and Pavement Assessment Report (*MRCagney Pty Ltd, July 2015).

As stated above this average is underestimated and Council considers the assessment should be based on the sensitivity calculations provided in the above table as this is a more likely representation of what the actual volume and subsequent noise impact will be.

Re-modelling of traffic noise based on the sensitivity volume is expected to increase predicted noise levels and impacts on sensitive receivers.

It is noted that the road traffic noise assessment does not make recommendations for any mitigation measures as the increase of noise as a result of the development based on traffic volumes used by the consultant does not exceed 2dB(A). They

identify that this increase combined with the fact the quarry has a limited operational life does not warrant mitigation.

Council generally agrees that with an increase of only 2dB(A) mitigation is not warranted. However re-modelling using more representative traffic volumes may require mitigation.

It is unreasonable to recommend conditions related to road traffic noise at this stage as the outcomes of any reassessment using more representative (sensitivity) traffic volumes should also include recommended mitigation if deemed necessary.

Proposed Conditions

Council has prepared a number of consent conditions that it believes are applicable to this quarry development, given the scale of the operations and the impacts on local amenity and local infrastructure.

TRAFFIC MANAGEMENT

1. The proponent shall prepare and enforce a Truck Management Plan and Code of Conduct for drivers. The documents shall be submitted to and approved by Richmond Valley Council **prior to commencement of transport operations**.

   The Management Plan must include but may not necessarily be limited to:

   - A driver training and induction procedure. This shall include a requirement for drivers / contractors to sign a Code of Conduct acknowledgement that they agree to comply with the requirements and ongoing education about requirements.
   - Complaint investigation procedure and procedure for dealing with non-compliant drivers.
   - Method of monitoring truck speeds by the operator.
   - Record keeping including any proposal to keep log books of truck journeys, complaints, monitoring carried out by quarry operator, and outcomes of investigations of any breaches and providing copies of such records to Council.
   - Identification markings on trucks contracted to haul / work for the quarry operator.
   - A Driver Code of Conduct that details the approved haulage route, operation hours for travel to and from the site, speeds, measures to reduce traffic noise, safe distances between trucks, traffic safety and courteousness, locations of sensitive receivers, identification and enforcement.

   The proponent is responsible for managing speed limits of quarry trucks to ensure compliance with this condition. The proponent shall ensure all drivers adhere to the Code of Conduct, promptly address any complaints or community issues and shall take or implement any reasonable mitigation measures as required.

   Reason: *To protect the amenity of the area, traffic safety, ensure management of truck speed limits and noise impacts from transport operations*

COMMUNITY RELATIONS

2. **Prior to commencement of operations** the proponent shall;

(a) submit to Richmond Valley Council and include within the Operational Plan of Management the following, the name and contact details for a person with the responsibility and authority to respond to Council and/or members of the public in regard to complaints, compliance with this consent and any Plan or report associated with the development. This person must respond to community complaints promptly and effectively.

(b) erect a sign at the entrance of the quarry with the phone number and permanent site contact details so that complaints concerning the operation of the quarry can be received and addressed in a timely manner. The sign must remain in place and contain accurate details at all times.

The proponent shall ensure the contact details provided above remain current at all times and are updated if any changes occur.

Reason: *To ensure the development responds to community concerns.*

PERFORMANCE REPORTING AND OPERATIONAL PLAN OF MANAGEMENT

3 a) **Prior to commencement of operations** the Operational Plan of Management shall be amended where applicable to be consistent with this consent and any report, approval or plan associated with this consent and shall include any other additional matters as determined by Richmond Valley Council.

b) Within one month of the end of every annual reporting period, or other timing as may be agreed with Council, the proponent shall submit to Richmond Valley Council a Performance and Environmental Management Report. The Report must review the environmental performance of the development including:

i) A description of the development that was carried out in the previous year, and the development that is proposed to be carried out over the next year including quarry production and transport data, details of proposed working areas, areas to be opened and or closed and rehabilitation works.

ii) A review of the Operational Plan of Management and a description of any proposed amendments to the current Operational Plan of Management.

iii) An assessment of rehabilitation works completed during the year against the Operational Plan of Management and review of the importation of fill. A fill balance calculation shall be undertaken to ensure sufficient soil is available for ongoing rehabilitation works over the life of the quarry.

iv) A comprehensive review of the monitoring results and complaints records of the development over the previous year, which includes a comparison of these results against the:

a) the relevant statutory requirements, limits or performance measures/criteria;
b) requirements of any plan or program required under this consent, including the Transport Management Plan and Code of Conduct
c) the monitoring results of previous years;
d) the relevant predictions in the EIS; and
e) a copy of the annual return submitted to the Environmental Protection Authority for the current year

v) A statement of compliance with each of the relevant conditions of this consent including identification of any non-compliance over the last year, and description what actions were taken and will continue be taken to ensure compliance. Identified actions shall be included in an amending Operational Plan of Management.

vi) Identification of any trends in the monitoring data over the life of the development.

vii) Identification of any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies.

viii) A description of measures that will be implemented over the next year to improve the environmental performance of the development.

ix) Monitoring and environmental reporting is to be completed by an independent and appropriately qualified person

(c) Following submission of the Performance and Environmental Management Report and subject to approval by Richmond Valley Council, the Operational Plan of Management may be replaced with an amending Plan.

An Operational Plan of Management remains current until such time as an amending plan is approved by Richmond Valley Council.

Reason: *To monitor performance of the development and provide flexibility in the progressive working of cells over the life of the development.*

INFRASTRUCTURE

4. Any damage caused to public infrastructure (roads, footpaths, kerb and gutter, stormwater, water and sewer mains, power and telephone services etc) during construction of the development shall be repaired to the satisfaction of the Executive Manager Infrastructure and Environment (and delegated staff). The repairs shall be carried out **prior to the commencement of operations of the quarry**.

Council shall be notified in writing, **prior to commencement of works**, of any existing damage to roads, stormwater drainage, kerb and gutter or footpaths. Absence of notification signifies that no damage exists, and the applicant is therefore liable for the cost of reinstatement of any damage found at the completion of the works.

Reason: *To protect the existing and future amenity of the locality and to formally record any pre-existing damage to existing assets.*

5. Utilities, services and other infrastructure potentially affected by construction and operation shall be identified prior to construction to determine requirements for access to, diversion, protection, and/or support. Construction is to be in accordance with Council's standards, or the affected asset owners standards, and shall be completed **prior to the commencement of operations of the quarry under this consent**.

   Reason: *To protect existing services.*

6. Works within any part of the road reserve which will impact on pedestrians or traffic flow (including temporary site fencing which restricts pedestrian access, temporary disruption to traffic, etc.) requires the preparation of a **Traffic Control Plan(s)**.

   The Plan(s) shall be submitted to Richmond Valley Council **prior to the commencement of works in the road reserve.**

   Reason: *To ensure works carried out in the road reserve are carried out in a safe environment.*

7. Application (under Section 138 of the Roads Act) for approval to carry out any work within the road reserve shall be made to Council by any contractor proposing to carry out any such works prior to any such works commencing.

   Reason: *To comply with Section 138 of the Roads Act 1993.*

8. A defects liability bond (Bank Guarantee) shall be lodged with Council for any civil works which will become Council's assets. The bond shall be based on 10% of the value of the works which will become Council's assets The bond shall only be released by advice from Richmond Valley Council that both the defects liability period has been completed, and that the works have been completed and are satisfactory at the end of the defects liability period.

   If applicable, the bond shall be paid to Council **prior to the commencement of operations of the quarry under this consent.**

   Reason: *To provide adequate funds for the rectification of non-compliances, or failure to carry out maintenance during the maintenance period.*

9. A Civil Engineering assessment fee shall be paid to Council, **prior to the issue of a Construction Certificate** for any civil works (roadworks, intersection etc) associated with this consent, for the assessment of plans, issue of a Construction Certificate, and inspection of civil works which will become Council's assets. Rates are as detailed in Council's Revenue Policy (Fees and Charges), with quantities assessed from approved plans detailing such civil works.

   Reason: *To ensure engineering works are designed and constructed to Council standards.*

10. All building and construction work by private contractors in NSW, costing $25,000 or more, is liable for the payment of the **Long Service Levy** to the Long Service Levy Payments Corporation. This is a State Government Levy and is subject to change. Construction work includes civil construction such as roads and bridges, pipelines, fuel gas and water storage and distribution infrastructure, sewerage drainage and treatment systems, retaining walls, electrical distribution infrastructure, etc. Confirmation of the payment to the Corporation (Council is an agent) is to be submitted to Council**prior to the commencement of operations**. (Payments through Council are to be made payable to Richmond Valley Council. Cheques payable to the Corporation cannot be accepted by Richmond Valley Council.)

    Reason: *To ensure the long service levy on private contractor constructed works is paid in accordance with State Government legislation.*

11. A contribution under Section 94 (1)(b) of the Environmental Planning and Assessment Act 1979, amounting to $1.12 per tonne (rate as @ 17/12/2015) of material transported to and from the site is to be paid to Richmond Valley Council. Contributions under this Plan shall be levied quarterly and be based upon lodgement of quarterly returns itemising extraction/importation tonnages for the previous quarter. The rate shall be CPI's in accordance with the adopted Section 94 Heavy Haulage Plan 2013.

    Reason: *To provide funds for the road maintenance in accordance with Richmond Valley Council's Section 94 Heavy Haulage Contributions Plan 2013.*

12. Plans showing all civil engineering works which will become Council's assets, eg roads, kerb and gutter, stormwater drainage, water, sewer, footpaths, etc., shall be submitted to Richmond Valley Council. Council approval of the plans is required **prior to the issue of the Construction Certificate** for the civil works (roadworks, intersection etc) associated with this consent. Such works shall be designed and documented in accordance with Council's Standards.

    Reason*: To Provide adequate services for the development.*

13. Measures shall be put in place to control stormwater runoff for any road and intersection construction works. These control measures shall be in place **prior to the commencement of construction works** and shall prevent soil erosion and transport of sediments from the development site into either:
    - adjoining land
    - natural drainage courses
    - constructed drainage systems, and
    - waterways

    The methods to be used shall be designed in accordance with the book ***'Managing Urban Stormwater: Soils & Construction' also known as 'the Blue Book' published by NSW Landcom.***

    All control measures are to be maintained in an operational condition at all times during construction and until vegetation or permanent structures can

satisfactorily control stormwater runoff. Control measures shall be regularly cleared of sediment and debris build-up, to ensure continued operation.

During construction works all motor fuels, oils and other chemicals are to be stored and used on site in a manner which ensures no contamination of stormwater. No incidents of visible pollution leaving the construction site. No litter placed in a position where it may be blown or washed off site.

Reason: *To minimise erosion and sediment and associated impacts in accordance with the Protection of the Environment Operations Act, and to protect the capacity of downstream drainage networks (both constructed and natural)*

14. The developer shall construct the following road and intersection works in accordance with Council's Northern Rivers Development and Design Manual and the Northern Rivers Local Government Construction Manual and the Austroads Guide to Road Design Part 4A. All designs shall accommodate the swept paths of two opposing haulage trucks.

    Design plans are to be submitted to and approved by Richmond Valley Council **prior to the issue of the Construction Certificate** for the civil works (roadworks, intersection etc) associated with this consent. (The approved design plans form the basis of the calculation of the Civil Assessment Fee.) Road works shall be completed to the satisfaction of Richmond Valley Council **prior to the commencement of operations of the quarry under this consent**.

    1. Seelems Road is to be constructed and sealed as a 6 metre two coat bitumen seal with 1 metre gravel shoulders from Petersons Quarry Road to a point 200 metres west of the entrance to the industrial building at 30 Seelems Road.
    2. The Petersons Quarry Road / Lagoon Road intersection shall be sealed with AC/hotmix for heavy vehicle tyre drag control.
    3. The Lagoon Road / Casino Coraki Road intersection shall be sealed with AC/hotmix for heavy vehicle tyre drag control.
    4. The Woodburn Coraki Road / Pacific Highway intersection shall be sealed with AC/hotmix for heavy vehicle tyre drag control.

    Reason: *To ensure an adequate road network construction standard in accordance with adopted standards and protect the amenity of the residence at 200 Lagoon Road.*

15. The developer shall ensure that the axle mass for each heavy vehicle is measured and documented prior to leaving the quarry site to ensure that it does not exceed the limits prescribed by the *Heavy Vehicle (Mass, Dimension and Loading) National Regulation 2013.* Records shall be submitted to Richmond Valley Council quarterly with the heavy haulage quarterly returns.

    Reason: To protect Council's pavement assets.

16. Upon completion of any works to be vested in Council, ***Work as Executed*** drawings and plans in digital format shall be submitted to and approved by Richmond Valley Council **prior to the commencement of operations of the quarry under this consent**.

    Reason: *To provide adequate records of services for the development.*

17. Inspection and Testing of the civil engineering works which will become Council's assets is required. The Inspection and Testing shall be in accordance with the Northern Rivers Local Government Development and Design Manual and the Northern Rivers Local Government Construction Manual.

    Reason: *To ensure engineering works are constructed to council standards.*

ENVIRONMENTAL HEALTH

18. Noise control measures recommended in Section 2.6.2 of the report *Noise and Dust Assessment Proposed Coraki Quarry Seelems Road Coraki* (MWA Environmental 4 November 2015) must be implemented and complied with.

    Reason: *To protect the amenity of nearby sensitive land uses*

19. A report from a suitably qualified acoustic engineer detailing that all recommendations outlined in Section 2.6.2 of the report *Noise and Dust Assessment Proposed Coraki Quarry Seelems Road Coraki* (MWA Environmental 4 November 2015) have been implemented must be submitted to and approved by the NSW Environment Protection Authority prior to issue of the Environment Protection Licence.

    Reason: *To protect the amenity of nearby sensitive land uses*

Council thanks the Department for the opportunity to contribute to this project.

For further enquiries on this matter please contact Council's Director Infrastructure and Environment Angela Jones on 02 6660 0262 or email angela.jones@richmondvalley.nsw.gov.au.

Yours Faithfully

Angela Jones
Director Infrastructure and Environment

First Public Submission

I am concerned about the upgrade of the Coarki Quarry as I am a resident who lives in a house 14 meters off the Woodburn-Coraki Road.

We hear and feel every heavy vehicle that passes the house.

There has been no assessment of rural access's and lines of sight, nor of the line of sight on the Woodburn – Coraki Road, particularly between Reardons Lane and Swan Bay New Italy Road.

I commend MRCagney to find a decent section of the Woodburn –Coraki road to submit in figure 2-7

I am a farmer who regularly drives my tractors between properties using the Woodburn - Coraki Road, I occasionally move a harvester on this road. This is usually done during the quitter times on the road, under this submission there will be only daylight hours on Sundays that will be quiet.

Since the increase in material being moved from the quarry in the past few weeks we have had two incidents leaving our driveway, one requiring me to pull off the road in my tractor the other we put up with the truck almost in the back of the car.

The application will have heavy vehicles using the road 13 hours a day 6 days a week. This will not be during daylight hours for part of the year. There will be increased risk exposure to other road users due to the increased Heavy vehicle movements which will increase further during wet weather and night operating hours. The TI & PAR used peak flows on a single days data, the impact is more significant on the minimum flow times. The report also notes at peak flows only 3.28% of the selected vehicle classification are identified in the data. If I am interpreting the data correctly, this will increase to approximately 13% at peak traffic flow times. What is the percentage at minimum flow times.

There is discussion of potential increased traffic from Petersons Quarry, but there is no mention of increased traffic on the Woodburn – Coraki road from other quarry's in the area.

A road levy of $1.08/tonne over the life of the project will provide the RVC with up to $7.56M, as this is revenue earned from use of a single transport route, will all the revenue be spent on the proposed route's maintenance?

I do not abject to the Pacific Highway upgrade nor the increased quarry capacity, I object to the material being moved on the Woodburn – Coraki Road in it's current condition due to the increased risk exposure of current road users and residents.

Second Public Submission

Swati Sharma

From: system@affinitylive.com on behalf of Patricia Hughes <patriciamargarethughes@gmail.com>
Sent: Wednesday, 9 December 2015 12:26 PM
To: Swati Sharma
Subject: Submission Details for Patricia Hughes (comments)

Confidentiality Requested: no

Submitted by a Planner: no

Disclosable Political Donation: no

Name: Patricia Hughes
Email: patriciamargarethughes@gmail.com

Address:
19 Surry Street

Coraki, NSW
2471

Content:
Currently there is an 80 kph zone which cuts through our town past houses, driveways, a Council Depot and our only service station. If the trucks are going through the town on the Coraki-Woodburn Rd in the section called Queen Elizabeth 2nd Drive, please reduce the speed limit. Residents have been making requests for years to have the speed limit lowered. It divides the town and facilitates tourists ignoring a beautiful and historic town as it was the original European river town in the area. Also, please limit hours of operation from 8am until 4.30 pm and be mindful of school zones and school buses, as there is a complex network of school buses. All high school students are bussed in and out of the town daily to other regional townsl and children are bussed in and out of the two primary schools from the town and surrounding properties daily.

IP Address: - 1.144.97.95
Submission: Online Submission from Patricia Hughes (comments)
https://majorprojects.affinitylive.com/?action=view_activity&id=133915

Submission for Job: #7036 Coraki Quarry
https://majorprojects.affinitylive.com/?action=view_job&id=7036

Site: #3095 Coraki Quarry
https://majorprojects.affinitylive.com/?action=view_site&id=3095

Patricia Hughes

E : patriciamargarethughes@gmail.com

Third Public Submission

Margaret Mak

From: Swati.Sharma@planning.nsw.gov.au
Sent: Friday, 29 January 2016 9:50 AM
To: Jim Lawler
Cc: Nancy Hsiao
Subject: EMI_160129_Swati.Sharma@planning.nsw.gov.au_Coraki Quarry SSD 7036 - additional submission

Hi Jim,

The Department had received a confidential public objecting submission after the Christmas closedown period. Please see below a summary of the grounds of objection stated in the submission for inclusion in the Response to Submissions. This will bring the total number of submissions to ten (10).

Issues raised in submission

- High volume of trucks to use the haul route with long hours of operation per year, for 7 years;
- The trucks would cause increased risks of road accidents to other road users, including students in Coraki and Woodburn;
- The trucks would cause increase noise and dust impacts and adversely impact the amenity of the residents who live along the haul route, as well as at the amenity at the schools;
- Cumulative impacts of the truck traffic generated by the development on top of traffic generated by other quarries approved to supply the Pacific Highway upgrade;
- Failure of the EIS to adequately consider the cumulative impacts on the Woodburn-Coraki Road due to the proposal and several operating quarries;
- Inadequate mitigation measures in the EIS regarding traffic associated impacts;
- Due to the reasons above the proposed development would greatly affect the residential amenity and quality of life over a long period of time.

Regards,
Swati

Swati Sharma
Planning Officer
Resource Assessments
Department of Planning and Environment
23-33 Bridge Street | GPO Box 39 SYDNEY NSW 2001
T 02 9228 6221 E swati.sharma@planning.nsw.gov.au

Attachment B

- Richmond Valley Council Minutes, Ordinary Meeting, Tuesday, 17 November 2015

Minutes

Ordinary Meeting

Tuesday, 17 November 2015

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MINUTES OF THE ORDINARY MEETING OF RICHMOND VALLEY COUNCIL, HELD IN THE COUNCIL CHAMBERS, CNR WALKER STREET AND GRAHAM PLACE, CASINO, ON TUESDAY, 17 NOVEMBER 2015 AT 5.00 P.M.

PRESENT

Crs Ernie Bennett (Mayor), Robert Hayes, Sandra Humphrys, Steve Morrissey, Robert Mustow, Daniel Simpson and Col Sullivan.

John Walker (Chief Executive Officer), Vaughan Macdonald (Chief Operating Officer), Angela Jones (Director Infrastructure and Environment), Ryan Gaiter (Manager Finance and Procurement) and Roslyn Townsend (Corporate Support Officer) were also in attendance.

1 ACKNOWLEDGEMENT OF COUNTRY

The Mayor provided an Acknowledgement of Country by reading the following statement on behalf of Council:

"Council would like to show its respect and acknowledge all of the traditional custodians of land within the Richmond Valley Council area and show respect to elders past and present."

2 PRAYER

The meeting opened with a prayer by the Chief Executive Officer.

3 PUBLIC ACCESS AND QUESTION TIME

3.1 PUBLIC ACCESS - MS ALLYSON CUSKELLY - ITEM 10.1 - NOTICE OF MOTION (CR DANIEL SIMPSON) COMMUNITY HEALTH SERVICES

Ms Cuskelly, Director of Evans Head and Woodburn Pre Schools, explained the impact the loss of therapy services had on the community and that since the introduction of a private therapy model there had been a lack of therapists available in the area. Ms Cuskelly encouraged Council to provide support by writing to state and federal governments to seek more services in the Lower Richmond area.

The Mayor thanked Ms Cuskelly for her presentation.

3.2 QUESTION - MS KATE CROCKETT (MARKETING OFFICER, CORAKI EVENTS COMMITTEE)

Ms Crocket asked her question based on the CBD WiFi that was announced at the recent Coraki town meeting. She stated that she represented a group of people in Coraki who were working to try and lift the digital presence of businesses in the area and that they were quite confused about what might be considered the Coraki CBD; it had ramifications for what kind of digital presence they should really pursue. In concluding, Ms Crocket stated that any information about WiFi in Coraki would be much appreciated.

The Chief Executive Officer advised that Council hadn't yet scoped Coraki and determined the boundaries. However, the retail sector near the river and the caravan park were initially considered a certainty. Council would welcome advice as to what the Coraki residents think the boundaries should be and would make contact when the scoping was to be undertaken so that members of the community would have an opportunity for input. Council's current estimates were that it would cost around $400 per month to provide the service to Coraki.

4 APOLOGIES

Nil.

5 MAYORAL MINUTE

The Mayor introduced an item at this point, as a Mayoral Minute, to formalise the process associated with addressing the resignation of Council's Chief Executive Officer, Mr John Walker.

The Mayor read the following **recommendation** to the meeting.

That Council:

1. Accept the resignation of the Chief Executive Officer, Mr John Walker, effective from 29 January 2016.

2. Authorise the Mayor to seek quotations from three consultants to undertake the recruitment and for the Mayor to then seek Council's endorsement for the appointment of a consultant.

3. Appoint the full Council to comprise the selection committee for the recruitment of the Chief Executive Officer.

171115/ 1 RESOLVED (Cr Bennett/Cr Sullivan)

That the above recommendation be adopted.

FOR VOTE - All Council members voted unanimously.

6 CONFIRMATION OF MINUTES

6.1 ORDINARY MEETING MINUTES - TUESDAY, 20 OCTOBER 2015

A copy of the Minutes of the Ordinary Meeting, held on Tuesday, 20 October 2015, was distributed with the Business Paper.

RECOMMENDATION

Recommended that the Minutes of the Ordinary Meeting, held on Tuesday, 20 October 2015, be taken as read and confirmed as a true record of proceedings.

171115/ 2 RESOLVED (Cr Morrissey/Cr Simpson)

That the Minutes of the Ordinary Meeting, held on Tuesday, 20 October 2015, be taken as read and confirmed as a true record of proceedings.

FOR VOTE - All Council members voted unanimously.

7 MATTERS ARISING OUT OF THE MINUTES

7.1 NORTHERN RIVERS RAIL TRAIL (ORDINARY MEETING MINUTE 201015/6 - PAGES 21-23)

Cr Morrissey enquired whether any discussion had taken place in relation to the Northern Rivers Rail Trail.

The Chief Operating Officer advised that preliminary discussions had been held with Lismore City Council but that Council will need to further progress those discussions.

7.2 AIRFORCE BEACH PEDESTRIAN ACCESS (ORDINARY MEETING MINUTE 201015/9 - PAGES 32-33)

Cr Morrissey enquired of the progress with the creation of the pedestrian beach access track onto Airforce Beach, Evans Head.

The Chief Executive Officer advised that it had been designed and programmed for completion prior to Christmas.

8 DECLARATION OF INTERESTS

8.1 DECLARATION OF INTERESTS ORDINARY MEETING 17 NOVEMBER 2015

Cr Hayes declared a non-pecuniary (insignificant conflict) interest in Item 15.6 - Development Applications determined under the Environmental Planning and Assessment Act for the period 1 October to 31 October 2015 (Applicant for CDC2016/0008).

Cr Simpson declared a non-pecuniary (insignificant conflict) interest in Item 14.7 - Community Financial Assistance Program (President of the Evans Head Cricket Club).

9 PETITIONS

Nil.

10 NOTICES OF MOTION

10.1 NOTICE OF MOTION (CR DANIEL SIMPSON) - COMMUNITY HEALTH SERVICES

Cr Simpson submitted the following Notice of Motion.

Notice of Motion

That:

1. Council write to our local state and federal politicians outlining our dismay with the recent loss in therapists (speech, occupational, physiotherapy and counselling) in the smaller villages in the council area.
2. This letter seek clarification on the detail of how the new system proposes to replace these services and seek an explanation of how the larger centres such as Ballina and Lismore still have their services intact whilst the smaller communities such as Woodburn and Evans Head have had their services cut.
3. The letter explains that the impact from this cut in services has been great. As a result the waiting lists at Community Health Services at Lismore and Ballina are blowing out and children who are being referred cannot be seen until sometime next year.
4. The result of this is that Special Needs Educators are spending hours making phone calls and trying to arrange private therapists to see a few children in order to get any service at all.

5. Under the current arrangement it is not possible to have children assessed for a diagnosis that is required for preschool funding which supports children with additional needs.

171115/ 3 RESOLVED (Cr Simpson/Cr Hayes)

That:

1. Council write to our local state and federal politicians outlining our dismay with the recent loss in therapists (speech, occupational, physiotherapy and counselling) in the smaller villages in the council area.
2. This letter seek clarification on the detail of how the new system proposes to replace these services and seek an explanation of how the larger centres such as Ballina and Lismore still have their services intact whilst the smaller communities such as Woodburn and Evans Head have had their services cut.
3. The letter explains that the impact from this cut in services has been great. As a result the waiting lists at Community Health Services at Lismore and Ballina are blowing out and children who are being referred cannot be seen until sometime next year.
4. The result of this is that Special Needs Educators are spending hours making phone calls and trying to arrange private therapists to see a few children in order to get any service at all.
5. Under the current arrangement it is not possible to have children assessed for a diagnosis that is required for preschool funding which supports children with additional needs.

FOR VOTE - All Council members voted unanimously.

11 MAYOR'S REPORT

Nil.

12 DELEGATES' REPORTS

12.1 DELEGATES' REPORTS SUBMITTED TO THE NOVEMBER 2015 ORDINARY MEETING

RECOMMENDATION

Recommended that the Delegates' Reports be received and noted.

171115/ 4 RESOLVED (Cr Sullivan/Cr Mustow)

That the above recommendation be adopted.

FOR VOTE - All Council members voted unanimously.

Report

Council delegates are required to report on meetings/forums attended on Council's behalf.

The following information has been provided in regard to meetings/functions attended by Councillors.

Submitted by Cr Sullivan

Subject Matter of Attendance: Far North Coast Weeds Ordinary Meeting held at Lismore on 31 August 2015

Precis/Summary of Issues Discussed/Considered:

Summary of the main items of business were:

1. Operations report: July and August 2015

The report covered works completed by Council for July and August 2015, including inspection and treatment works on high priority species. Awareness-raising events were conducted at locations around the region, including working with local schools and local Landcares to help raise awareness of weed issues. Other significant awareness-raising outputs included media releases on Koster's curse and Parthenium weed.

Council was also advised of a successful grant application to undertake Miconia surveillance and eradication works over the next two years. This grant is being provided by Queensland's Department of Agriculture and Fisheries (DAFF). A total amount of $60,000 has been secured for this project.

Council was informed of the Noxious Weed Officer recruitment process recently undertaken and the successful outcome. Council has now permanently filled these roles and is now in the process of recruiting for a Team Leader.

An update was also provided on the recent submission of an application to assist with on-going Tropical Soda Apple works being conducted around the region. The project will run over a three-year period and will provide Council with extra resources of up to $169,000 over the duration of the project.

2. Policies

Council agreed to publicly advertise the 'Payment of expenses and provision of facilities for Chairperson and Councillors' policy, with any public submissions being reported back to Council's November meeting. No amendments have been proposed to this version of the policy.

3. Annual Financial Report and Audit Report for the year ending 30 June 2015

Council agreed to publicly advertise the accounts and the Auditor's Report, with any public submissions being considered at Council's November meeting.

4. Changes to Organisation Structure

Council approved changes to it organisational structure. These changes include changing the current Project Officer position to a Noxious Weeds Officer, and reducing the Weed Control Operators positions to one FTE not two.

5. Delivery program: progress report January to June 2015

A report on the achievements of the performance targets prescribed in the IP&R Delivery Program was presented with overall targets during the report period being *96% Acceptable* (achieved or on track according to schedule); *2% Monitor* (in progress but behind schedule); and *2% Review* (corrective action required).

6. Information reports

i) The Investment Report for June and July was received and noted.

Submitted by Cr Mustow and Cr Sullivan

Subject Matter of Attendance: Rous Water Ordinary Meeting held at Lismore on 21 October 2015.

Precis/Summary of Issues Discussed/Considered:

Summary of the main items of business were:

1. Notice of Motion

Cr Ekins submitted the following Notice of Motion which was not supported:

> *"That Rous Water actively promotes on its web site and in media releases, the Department of Health guidelines for fluoride intake, particularly the table on upper limits for babies and children."*

The following amendment was carried on the casting vote of the chair;

> *"That Rous Water actively promotes and strengthens links on its web site and in Rous Water media releases, to the Department of Health guidelines for fluoride intake".*

Crs Dey, Meehan, Ekins and Clough voted against the amendment.

2. Annual Financial Reports and Auditor's Report for the year ending 30 June 2015

Council's external Auditor presented on the financial results for 2014/15.

The reports were endorsed and are now being advertised for public comment.

Council remains in a sound financial position with cash and investments at satisfactory levels to ensure that all current liabilities can be met when they fall due.

The Financial reports will be resubmitted to Council in November following public consultation.

3. Organisation structure

A workshop was held prior to the Council meeting with a confidential report being presented to the meeting.

Council noted the final organisation structure review report by MWH and gave in-principle approval to progress the implementation of the revised organisation structure by 1 July 2016 to coincide with the possible merger of the three Counties.

A further workshop will be held on the resourcing of Demand Management and Catchment Management within the new structure and programs.

Council was also advised of opportunities to reduce operating costs to ensure future increases in future bulk water charges are limited to rate pegging limits.

4. Nightcap WTP emergency power generator tender

A contract was let for the supply and delivery of two standby emergency generators including auxiliary fuel tank for 700 KVa generator; auxiliary fuel tank for 400 KVa generator; and fuel recirculation systems for both generators. The successful tenderer was Nevmat Australia Pty Ltd for with a bid of $259,982.80 excluding GST plus rise and fall.

5. Drinking water quality policy (updated)

A revised Drinking Water Quality policy was adopted. A copy of the policy is available on Council's website.

6. Information reports

The following reports were received and noted:

i) Investments report – September 2015.
ii) Water production and usage – September 2015.
ii) Reports pending.
iii) Disclosure of Pecuniary Interest Returns 2014/15.

Submitted by Cr Morrissey

Subject Matter of Attendance: Richmond River County Council Extraordinary Meeting held at Lismore on 26 October 2015 (in company with Cr Humphrys).

Precis/Summary of Issues Discussed/Considered:

Items considered at the meeting were:

1. Annual Financial Report and Audit Report for year ending 30 June 2015.

2. Information Report
   - Delivery Program Progress Report - January to June 2015.

13 MATTERS DETERMINED WITHOUT DEBATE

171115/ 5 RESOLVED (Cr Morrissey/Cr Humphrys)

That Items 14.2, 14.4, 14.5, 14.6, 14.8 and 14.10 be determined without debate.

FOR VOTE - All Council members voted unanimously.

14 MATTERS FOR DETERMINATION

14.1 CONSIDERATION OF MERGER OPTION - FIT FOR THE FUTURE CONSULTATION

Responsible Officer:
John Walker (Chief Executive Officer)

RECOMMENDATION

Recommended that Council determine its response to the State Government in respect of a potential merger proposal, by resolving on one of the three options listed below:

1. That Council determine not to submit a response accepting its Fit for the Future status as a stand alone Council.

   OR

2. That Council submit a response without nominating a preferred merger partner but make comment about its preparedness to accept a forced merger under specified conditions.

   OR

3. That Council submit a preferred merger partner option by nominating Kyogle Council and placing terms and conditions on such a merger to ensure that the $10 million of incentives are not lost.

171115/ 6 RESOLVED (Cr Simpson/Cr Mustow)

That:

1. Council submit a stand alone response without nominating a preferred merger partner but make comment around the circumstances if a forced merger were to occur.

2. Council's Chief Executive Officer prepare a submission with those comments and circulate to Councillors prior to submitting Council's response tomorrow.

FOR VOTE - All Council members voted unanimously.

Executive Summary

As the final stage of the consultation phase of the Fit for the Future process, councils have been given until 18 November to inform the State Government of their final position on mergers, while the financial incentives remain available.

This follows the release of the Independent Pricing and Regulatory Tribunal's (IPART) Assessment of NSW Councils' Fit for the Future proposals which determined Richmond Valley Council was 'fit' as it met the criteria for scale and capacity and financial sustainability.

To assist Council in determining its position, a merger business case between Richmond Valley Council and Kyogle Council was commissioned and prepared by Morrison Low and a further meeting with Kyogle councillors and senior staff was held.

The business case showed no advantages would flow to Richmond Valley ratepayers but did not entirely dismiss the potential of a merger. Both Lismore and Kyogle Councils have dismissed the idea of a merger and Richmond Valley Council now needs to decide its position.

However, a letter was received from the Premier and Minister for Local Government on Thursday, 11 November with the strong message that "The Government is committed to recognising and supporting councils that have done the right thing by their community and agreed to merge". This is particularly relevant for councils that have been assessed as unfit by IPART. The letter indicates that where mergers are agreed, councillors will have input into key decisions in the formation of the new entity. It also states that where councils see the benefits of merging, but are unable to reach agreement with neighbouring councils, they should submit a preference to have the best opportunity to shape the future of the new council.

The consequences of forced mergers with no financial incentives need to be taken into account in the deliberations.

This is a matter which needs to be determined by the elected body in the interests of all our residents and ratepayers.

Report

On 16 October 2015 IPART reported to the NSW Government on its Assessment of Councils' Fit for the Future proposals. Richmond Valley Council was deemed as being Fit for the Future and satisfied the scale and capacity criteria and each of the financial criteria. 60% of NSW Councils were deemed Not Fit. The means of assessment however has caused controversy as well-performing councils were amongst those deemed not fit on the basis of scale and capacity if they did not agree to the merger proposals put forward by the Independent Local Government Review Panel.

In a letter to councils dated 20 October, the Premier and Minister for Local Government put forward their case for council mergers and offered additional cash incentives for councils to now consider merger proposals.

On 21 October the Secretary of the Department of Premier and Cabinet wrote to councils advising of the final period of consultation for the process which effectively gave councils 30 days until 18 November to comment on IPART's findings. Also, if a council's submission was found to be unfit, as it did not meet scale and capacity or if a council adjoins a council that did not meet scale and capacity, those councils were asked to advise of any preferences they may have regarding merger parties. It is, however, not compulsory to make any comment.

The only adjoining Council to Richmond Valley that was found unfit due to scale and capacity was Kyogle Council.

To assist Council in its deliberations a confidential merger business case was commissioned from local government consultants Morrison Low. The business case was circulated to councillors on 31 October and considered at an information session held on 3 November.

A meeting between Kyogle councillors and senior staff and Richmond Valley councillors and senior staff was held on 3 November to discuss the issues surrounding a potential merger and the general views of the parties.

A copy of our business case was shared with Kyogle Council subsequent to the meeting.

The business case conclusions and recommendations were hindered to a degree by the extremely tight timeline that had been set by the government for our comment. It also meant only publicly available data from Kyogle was able to be used in the analysis without time for verification. The report therefore raised concerns about the quality of the data provided by Kyogle.

The business case found that the impacts of any merger between Kyogle and this Council would be "largely felt by and funded by Richmond Valley."

Whilst the overall benefits of the merger were calculated at $6.3 million net present value (NPV) and six of the seven benchmarks would be met within the 5 year timeline, the main benchmark (operating performance) would remain in deficit until 2022. The business case identified no benefits for Richmond Valley Council.

There is also a high degree of risk in the merger and in the estimates including:

- Cost savings from council mergers are notoriously hard to realise. There are very few examples of councils which have been able to achieve the savings suggested by pre-merger studies.

- The infrastructure backlog at Kyogle is very large, particularly around timber bridges and the additional money on offer would be nowhere near enough to overcome this problem.

- The quality of data brings inherent risk.

- The probable loss of staff in Casino in the future as a result of protections in the Local Government Act for staff in settlements with less than 5,000 residents.

Whilst the merger is not seen as desirable, Council needs however to consider the possibility of a decision by the State Government that forces a merger between Kyogle and Richmond Valley. As it stands today, the government is saying that if they were forced to do that, all financial incentives would be off the table. An agreed merger with the right quantum of financial incentives is clearly better than a forced merger with none.

Both Lismore and Kyogle Councils have now considered their positions in relation to potential mergers. In Lismore's case they came to the conclusion that they do not support a merger with Kyogle under any circumstances.

Kyogle Council resolved at its meeting on 9 November to respond to IPART's recommendations with solely a stand alone option and without identifying a potential merger partner.

Consultation

When the government announced the final phase of consultation on the Fit for the Future process, the Premier made it clear that the time for consultation with communities had passed and it is time for elected Councils to make a decision on their future.

A letter to all NSW Council Mayors has subsequently been received from the Premier and Minister for Local Government on Thursday, 11 November 2015. It makes the following points that are directly relevant to the options Council must consider:

- The Government is committed to recognising and supporting councils that have done the right thing by their community and agreed to merge

- To access the financial incentives, mergers must be agreed to by councils, supported by the Government and submitted by the 18 November deadline

- Councillors that have demonstrated an ability to work together in reaching agreement to merge will have a say in the formation of the new entity including input to decisions on service levels, branding, jobs, location of key administrative centres and/or local representation

- Councils that see the benefits of merging but are unable to reach agreement should submit their merger preferences as they will then have the best opportunity to shape the future of the new council

- Following Council's response the Government will take the next step in local government reform. The Government is strongly committed to ensuring ratepayers get value for money and the services and infrastructure they deserve, and benefit from the close to $2 billion in savings identified by IPART.

Richmond Valley residents and ratepayers have the opportunity to address Council on this important issue in Public Access at this meeting.

Conclusion

It is now necessary for our Council to make a decision on merger options in the best interests of our ratepayers and residents. In doing so, it is important to consider our response to the Premier and Minister's call to nominate a preferred merger partner knowing incentives are available (and the opportunity may exist to ask for more) as well as the consequences of a forced merger without financial incentives.

There appear to be three options available to us:

1. Council can determine not to submit a response. It is not required to do so. This would have the effect of saying we are fit and prefer to stand alone and offer no comment on Kyogle's position.

2. Council could submit a response without nominating a preferred merger partner but make some comment about its views around the circumstances if a forced merger were imposed on our Council (albeit limited to 50 words as instructed) whilst still maintaining a stand alone preference.

3. Council could submit a preferred merger partner by nominating Kyogle Council and placing terms and conditions on such a merger. This would no doubt encourage the government to act on this preference.

Given the importance of this decision, it should be a matter for the elected Council to determine.

14.2 2014/2015 RICHMOND VALLEY COUNCIL FINANCIAL STATEMENTS

Responsible Officer:
Ryan Gaiter (Manager Finance and Procurement)

RECOMMENDATION

Recommended that in accordance with Sections 418 and 419 of the Local Government Act 1993, Council present the financial statements of Richmond Valley Council for the financial year ended 30 June 2015 to the public.

171115/ 7 RESOLVED (Cr Morrissey/Cr Humphrys)

That the above recommendation be adopted.

FOR VOTE - All Council members voted unanimously.

Executive Summary

At the Ordinary Meeting held on 20 October 2015, Council was required by Section 413 of the Local Government Act 1993 to adopt the financial statements for the 2014/2015 financial year as a result of the completion of the audit of these financial statements. At this meeting Council also resolved to present to the public the audited financial statements for the 2014/2015 financial year at the Ordinary Meeting to be held on 17 November 2015.

Council's operating result from continuing operations for the 2014/2015 year was a surplus of $3,484,000, compared to the 2013/2014 deficit of $76,000. There was also a significant improvement in the operating result before capital grants and contributions, improving from a deficit of $5,867,000 to a deficit of $1,854,000.

Council's revenue has increased from $45,967,000 to $49,935,000. Council's expenditure has only increased marginally, from $46,043,000 to $46,451,000.

Council's Cash, Cash Equivalents and Investments have increased by $5,506,000 to $29,242,000 at year end.

Council has achieved improvements in its financial key performance indicators, meeting the majority of benchmarks in both the Consolidated and General Funds.

	Benchmarks	2014/2015	2013/2014
Consolidated Funds Ratios:			
Operating Performance Ratio	≥ 0.00%	0.95%	-11.54%
Own Source Operating Revenue Ratio	≥ 60.00%	69.11%	73.14%
Unrestricted Current Ratio	≥ 1.50	2.33	2.57
Debt Service Cover Ratio	≥ 2.00	4.53	2.63
Rates, Annual Charges, Interest & Extra Charges Outstanding Ratio	<10.00%	16.41%	18.88%
Cash Expense Cover Ratio	≥ 3.00	9.98	7.80
Building, Infrastructure & Other Structures Renewals Ratio	> 100.00%	118.22%	86.25%
Infrastructure Backlog Ratio	< 2.00%	1.80%	6.41%
Asset Maintenance Ratio	> 1.00	0.97	1.04
Capital Expenditure Ratio	> 1.10	1.03	1.20
General Fund Ratios:			
Operating Performance Ratio	≥ 0.00%	-5.13%	-20.67%
Own Source Operating Revenue Ratio	≥ 60.00%	58.46%	63.79%
Unrestricted Current Ratio	≥ 1.50	2.33	2.57
Debt Service Cover Ratio	≥ 2.00	14.43	14.08
Rates, Annual Charges, Interest & Extra Charges Outstanding Ratio	<10.00%	9.41%	8.77%
Cash Expense Cover Ratio	≥ 3.00	7.42	4.45
Building, Infrastructure & Other Structures Renewals Ratio	> 100.00%	118.08%	72.49%
Infrastructure Backlog Ratio	< 2.00%	1.07%	7.47%
Asset Maintenance Ratio	> 1.00	0.99	1.06
Capital Expenditure Ratio	> 1.10	0.98	1.15

Note: these indicators in the Financial Statements are stand-alone ratios for each year, while the Fit for the Future ratios in most cases are averaged over a number of years.

As reported to Council at the April 2015 Ordinary Meeting, a follow up Treasury Corporation (TCorp) review found Council to now be rated Moderately Sustainable with a Neutral Outlook (improved from Weak-Negative in April 2013).

In line with TCorp advice, Council has focussed on improving four key ratios; moving the Operating Performance Ratio towards 0%, reducing the Infrastructure Backlog and having Asset Renewal and Asset Maintenance Ratios close to or more than 1.00 at all times.

The performance indicators as at 30 June 2015 show that Council has made significant progress in terms of improving its Financial Sustainability. The Operating Performance Ratio (0.95%) now exceeds the benchmark of 0% on a Consolidated Fund basis. The General Fund ratio has also improved significantly to -5.13% and although not meeting the benchmark of 0%, has improved markedly from -20.67% in 2013/2014.

The other major improvement was in the Building, Infrastructure and Other Structures Renewal Ratio, improving from 86.25% to 118.22% (Consolidated Fund) and from 72.49% to 118.08% (General Fund). These ratios now exceed the benchmark of 100%. The Infrastructure Backlog Ratio has improved markedly, from 6.41% to 1.80% (Consolidated Fund) and from 7.47% to 1.07% (General Fund), now exceeding the benchmark of less than 2%.

The approval of a 5 year Special Rate Variation has enabled Council to channel additional funding towards addressing its Asset Renewals and Infrastructure Backlog and the improvement in these ratios is largely a result of this.

The improvements in the key performance indicators demonstrate that Council is taking significant steps forward in the area of Financial Sustainability and is responding to the recommendations made by TCorp.

Community Strategic Plan Links

Focus Area 7 Governance and Process – Long Term Goal 7.5 Sound Governance and Legislative Practices.

Budget Implications

Not Applicable.

Report

Section 418(1)(a) of the Local Government Act 1993 requires Council to fix a date for a meeting where the financial statements are to be presented to the public, and Section 419(1) of the Local Government Act 1993 requires Council to present the financial reports and Auditors reports to the meeting on the date fixed. Council resolved at the Ordinary Meeting held on 20 October 2015 that the financial statements would be presented at the meeting to be held on 17 November 2015.

A summary of the financial results for the year, as presented to the Ordinary Meeting held on 20 October 2015, are as follows:

Income Statement	Actual 2015 $'000	Actual 2014 $'000
Total Income from Continuing Operations	49,935	45,967
Total Expenses from Continuing Operations	46,451	46,043
Operating Result from Continuing Operations	**3,484**	**(76)**
Net Operating Result from Discontinued Operations	0	0
Net Operating Result for the Year	**3,484**	**(76)**
Net Operating Result before Grants and Contributions provided for Capital Purposes	(1,854)	(5,867)

Balance Sheet	Actual 2015 $'000	Actual 2014 $'000
Total Current Assets	44,299	37,141
Total Non-Current Assets	661,564	622,501
Total Assets	**705,863**	**659,642**
Total Current Liabilities	11,630	11,099
Total Non-Current Liabilities	27,555	23,594
Total Liabilities	**39,185**	**34,693**
Net Assets	**666,678**	**624,949**
Equity		
Retained Earnings	328,418	324,934
Asset Revaluation Reserve	338,260	300,015
Total Equity	**666,678**	**624,949**

Cash Flow Statement	Actual 2015 $'000	Actual 2014 $'000
Cash Flows from Operating Activities - Receipts	48,114	41,286
Cash Flows from Operating Activities - Payments	(33,453)	(32,324)
Net Cash provided by (or used in) Operating Activities	**14,661**	**8,962**
Cash Flows from Investing Activities - Receipts	4,289	3,468
Cash Flows from Investing Activities - Payments	(15,508)	(16,454)
Net Cash provided by (or used in) Investing Activities	**(11,219)**	**(12,986)**
Cash Flows from Financing Activities - Receipts	5,620	0
Cash Flows from Financing Activities - Payments	(1,111)	(1,218)
Net Cash provided by (or used in) Financing Activities	**4,509**	**(1,218)**
Net Increase (Decrease) in Cash Assets Held	**7,951**	**(5,242)**
Cash and Cash Equivalents – beginning of year	13,798	19,040
Cash and Cash Equivalents – end of year	**21,749**	**13,798**
Plus: Investments on Hand – end of year	7,493	9,938
Total Cash, Cash Equivalents & Investments	**29,242**	**23,736**

The schedule of restricted assets (reserves) held by Council as at 30 June 2015 compared to total cash, cash equivalents and investments are as follows with restricted assets (reserve) levels from 30 June 2014 shown in comparison:

Restricted Asset	30 June 2015 $	30 June 2014 $
External Restricted Assets		
Bonds and Deposits	411,187.57	393,889.04
Developer Contributions - General	422,440.36	326,853.73
Developer Contributions – Sewerage	2,855,170.80	2,592,299.51
Developer Contributions – Water	1,434,222.12	1,372,266.19
RMS Contributions	0.00	0.00
Unexpended Grants	888,581.17	808,871.23
Water Supply	1,018,936.78	1,052,249.80
Sewerage Services	8,552,561.07	8,334,675.09
Stormwater Management	132,192.76	127,181.17
Specific Purpose Unexpended Loans General Fund	3,928,750.00	0.00

Restricted Asset	30 June 2015 $	30 June 2014 $
Domestic Waste Management	3,207,950.36	2,762,215.81
Unearned Revenue	0.00	0.00
Other	618,885.24	614,755.00
Total External Restricted Assets	**23,470,878.23**	**18,385,256.57**
Internal Restricted Assets		
Employee Leave Entitlements	944,191.87	749,088.67
Unexpended Rates Special Variation	216,189.00	65,000.00
Plant Replacement	652,391.39	444,617.35
Petersons Quarry	439,763.04	583,798.91
Woodview Quarry	387,890.07	510,797.81
Quarry Rehabilitation	95,832.26	75,548.03
Insurance Reserve	87,050.32	84,449.28
Real Estate and Infrastructure	409,629.85	105,383.47
Evans Head Airport	0.00	0.00
Other Waste Management	1,287,071.00	1,454,644.46
Casino Saleyards	317,787.87	194,431.10
Rural Road Safety Program	0.00	0.00
Richmond Upper Clarence Regional Library	419,311.93	416,730.69
RMS State Roads Maintenance Contract	0.00	0.00
Public Cemeteries Perpetual Maintenance	455,528.98	406,744.09
Revolving Energy and Sustainability Fund	8,000.00	8,000.00
Carry Over Works	50,832.00	251,600.00
Total Internal Restrictions	**5,771,469.56**	**5,350,833.86**
Total Restrictions	**29,242,347.79**	**23,736,090.44**
Available Cash Assets and Investments	**29,242,347.79**	**23,736,090.44**
Unrestricted Cash and Investments	**0.00**	**0.00**

Commentary on the financial statement results were provided by the Auditor in his presentation to Council at the Ordinary Meeting held on 20 October 2015. The audit report and details on the conduct of the audit were also provided to that meeting.

Consultation

Council is currently advertising the Financial Statements for the year ended 30 June 2015 to the public and has invited submissions in writing. Submissions close at 4.00pm, Tuesday, 24 November 2015. Any submission will be reported to the December Ordinary Meeting. Council has also made available copies of the Financial Statements for inspection by the public from the date public notice was given until the day after submissions close.

Conclusion

Presentation of Council's Financial Statements to the public is the last step in complying with the legislative requirements regarding annual financial reporting. Council has also advertised the Financial Statements for the year ended 30 June 2015 stating that they will be presented to the public at this Ordinary Meeting and inviting submissions. Section 420 of the Local Government Act 1993 invites submissions from the public on the Financial Statements, and Section 420(3) requires Council to refer any submissions it may receive to the Auditor. Submissions close at 4.00pm, Tuesday, 24 November 2015. If any submissions are received, these will be reported to Council at its Ordinary Meeting to be held on 15 December 2015.

14.3 QUARTERLY BUDGET REVIEW OF RICHMOND VALLEY COUNCIL AS AT 30 SEPTEMBER 2015

Responsible Officer:
Ryan Gaiter (Manager Finance and Procurement)

RECOMMENDATION

Recommended that Council adopt the Quarterly Budget Review Statement as at 30 September 2015 and approve the variations thereto.

The Manager Finance and Procurement provided a presentation at the meeting on the Quarterly Budget Review Statement.

171115/ 8 RESOLVED (Cr Mustow/Cr Simpson)

That the above recommendation be adopted.

FOR VOTE - All Council members voted unanimously.

Executive Summary

A detailed Quarterly Budget Review Statement for the first quarter of the 2015/2016 year has been circulated separately to each Councillor.

Council has started the year in a positive way, with a projected net operating result from continuing operations of $3,909,261 surplus. This surplus has increased from the surplus estimated in Council's original budget of $1,595,041. Council has had an increase in the required funding from reserves for the 2015/2016 financial year; the projected amount required from reserves is $4,330,563. This increase in required reserve funding is primarily due to capital works not being completed at the end of the 2014/2015 financial year and the need to carry over certain unfinished projects. These projects were adopted as carry overs at Council's August Ordinary Meeting.

Income from continuing operations has increased by $2,075,168, bringing income up to $55,437,463. This is mainly due to Natural Disaster Funding for the May 2015 flood event being approved in the amount of $1,606,655. Council has also been allocated additional Roads to Recovery funding in the amount of $600,871. Expenditure from continuing operations has slightly increased by $18,312; the expenditure from continuing operations is now $51,528,202.

The budgeted capital works program as at 30 September 2015 is $24,382,257. This has increased by $5,167,991 from the original budget. This includes carry over works of $3,324,835 as approved by Council at the August Ordinary Meeting, along with further increases of $1,843,156. Details of these changes are on page 6 of the Review.

Community Strategic Plan Links

Focus Area 7 Governance and Process - Long term Goal 7.5 Sound Governance and Legislative Practices.

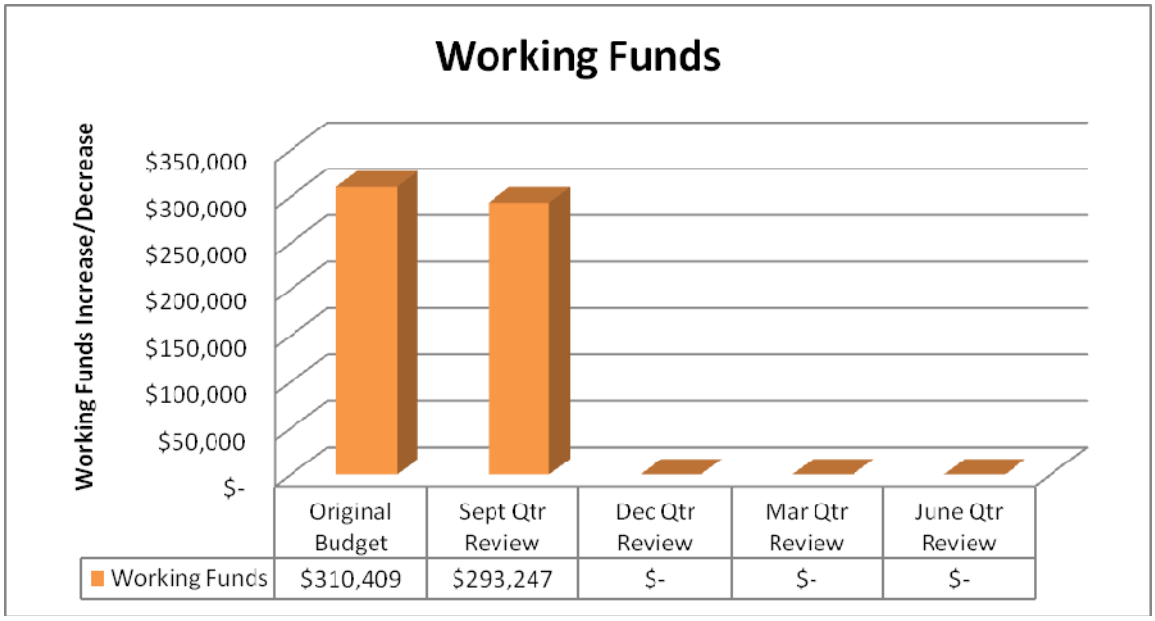
Budget Implications

As detailed in the report.

Report

The Budget Review for the first quarter of the 2015/2016 financial year has seen the estimated working funds (unrestricted cash) decrease from the Original Budget position of $310,409 surplus to a $293,247 surplus.

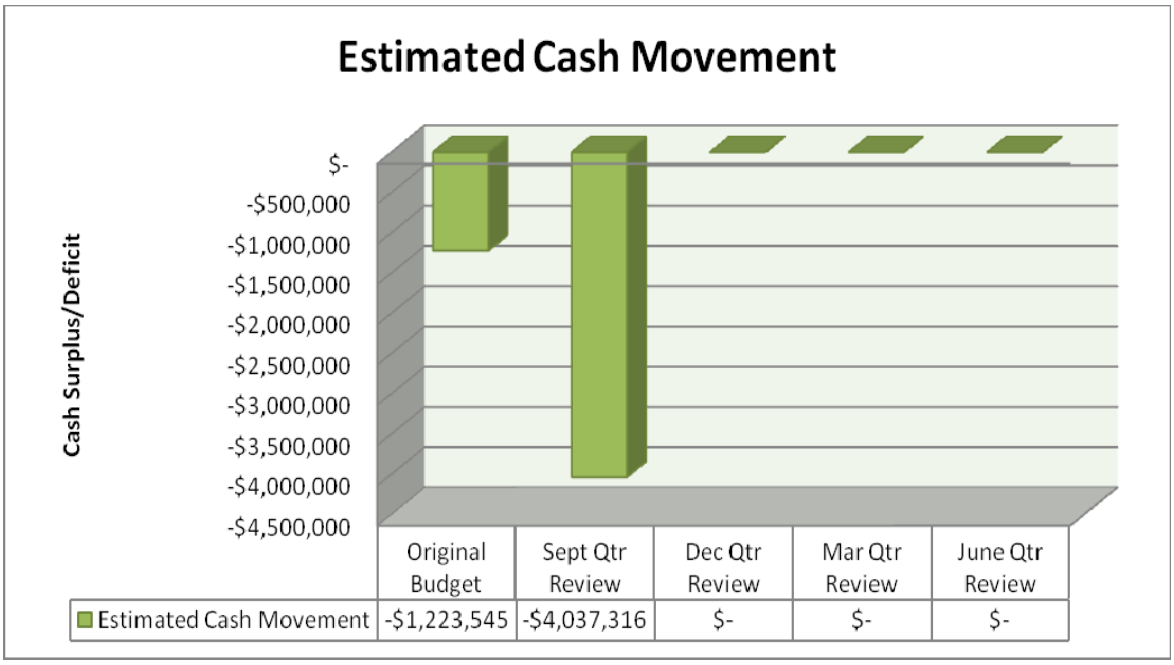
The following graph shows the movement from the original working funds position.



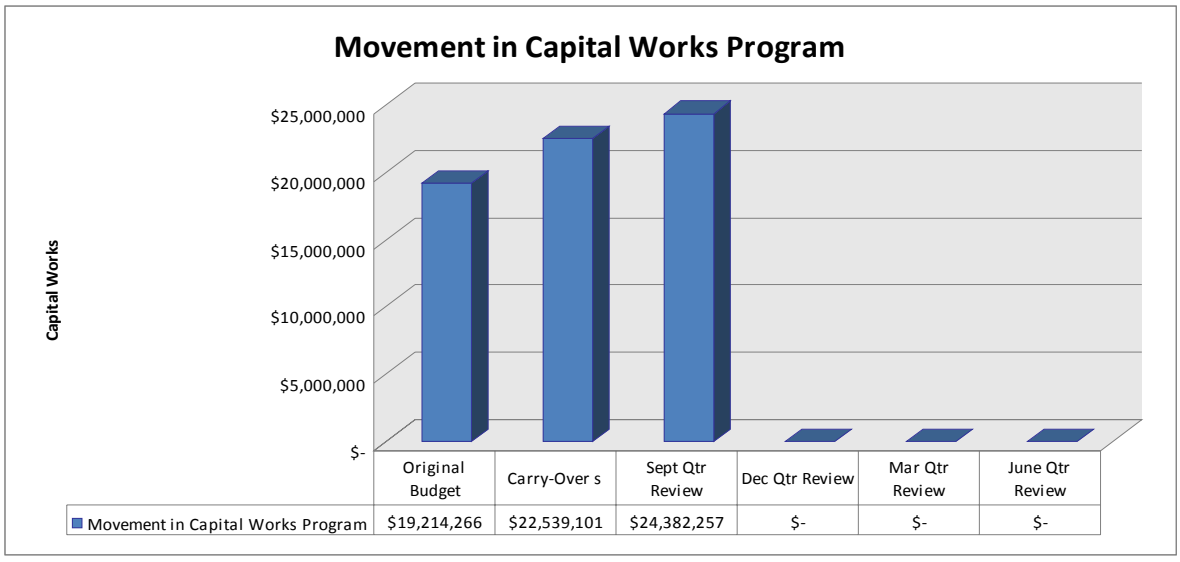
In overall cash terms the estimated deficit in cash has increased from a cash deficit in the original budget of $1,223,5454 to a cash deficit of $4,037,316. This includes the extra reserve funding required to complete the carry over projects adopted at Council's August Ordinary Meeting.

Council's Capital Works Program has a $5,167,991 increase to $24,382,257. This increase includes the $3,324,835 worth of carry over works previously adopted; the increase for the review period is $1,843,156. A full breakup can be seen on page 6 of Council's Quarterly Budget Review Statement.

The following graph shows the movement in cash from the original budget position.



The following graph tracks the movement in Council's Capital Works Program for 2015/2016.



The revised estimates for Council are summarised in the table below with detailed explanations contained in the attachment to the Business Paper.

2015/2016 Budget Review Statement as at 30 September 2015	Original Budget	Recommended Changes for Council Resolution	Projected Year End Result 2015/2016
Income from Continuing Operations	52,736,934	2,700,529	**55,437,463**
Expenses from Continued Operations	51,141,893	386,309	**51,528,202**
Operating Result from Continued Operations	**1,595,041**	**2,314,220**	**3,909,261**
Add: Non-Cash Expenses	11,302,480	0	**11,302,480**
Add: Non-Operating Funds Employed	6,832,800	40,000	**6,872,800**
Subtract: Funds Deployed for Non-Operating Purposes	20,953,866	5,158,991	**26,121,857**
Add: Movements in Balance Sheet	0	0	**0**
Estimated Funding Result - Surplus/(Deficit)	**(1,223,545)**	**(2,813,771)**	**(4,037,316)**
Restricted Funds – Increase/(Decrease)	(1,533,954)	(2,796,609)	**(4,330,563)**
Working Funds – Increase/(Decrease)	**310,409**	**(17,162)**	**293,247**

Pages 9 and 11 of the attached Budget Review Statement contain the budget variation explanations. A summary of the main contributing factors within each Focus Area is as follows:

Environment

No significant changes recommended.

Local Economy

No significant changes recommended.

Community and Culture

Capital Expenditure was increased to purchase the Casino Drill Hall.

Recreation and Open Space

An increase of approximately $75,000 in capital works to fund the footpath in Captain Cook Drive, Evans Head.

Rural and Urban Development

No significant changes recommended.

Transport and Infrastructure

Natural disaster funding of $1,606,655 has been approved for the May 2015 flood event and an additional $600,871 in funding has been allocated for Roads to Recovery projects. Capital expenditure has been increased in line with this additional funding.

Governance and Process

Operating income reduced by approximately $132,000 due to the estimated rateable land values changing since forecasting Council's original budget.

Conclusion

As at the end of the first quarter Council continues with a predicted strong financial position. The unrestricted cash position has decreased slightly but is still predicted to finish the year around $300,000 surplus. Council's capital works program has increased, yet the majority of the increase is in a couple of large projects which were carried forward from last financial year and are on track for completion in this financial year.

Note: A copy of the adopted Quarterly Budget Review Statement for the quarter ended 30 September 2015 was attached to the archived Minutes of this Meeting.

14.4 FINANCIAL ANALYSIS REPORT - OCTOBER 2015

Responsible Officer:
Ryan Gaiter (Manager Finance and Procurement)

RECOMMENDATION

Recommended that Council adopt the Financial Analysis Report detailing investment performance for the month of October 2015.

171115/ 9 RESOLVED (Cr Morrissey/Cr Humphrys)

That the above recommendation be adopted.

FOR VOTE - All Council members voted unanimously.

Executive Summary

The Financial Analysis Report gives an overview of Council's performance in regard to investment returns and investments made and also reports the balance of Council's Investment Portfolio as at the end of the reported month. This overview is both a legislative requirement and essential in keeping Council up to date on the monthly performance of Council's investments.

Council made five new term deposits for the period. Emphasis was again placed on investments with NSW Treasury Corporation inline with Council's adopted Investment Policy. Seven term deposits matured within the period and interest received on the maturing deposits totalled $58,448.22.

Council's cash and term deposit investment portfolio has maturity dates ranging from 30 days up to 126 days; deposits are made taking into account cash flow requirements and the most beneficial investment rates available at the time of making any investment.

Council has maintained its investments with NSW Treasury Corporation during the month of October 2015. The Hourglass Cash Facility Trust has $7,000,000 invested in it and the Hourglass Strategic Cash Facility Trust has $7,000,000 invested in it.

Council's Emu Note investment matured on 28 October 2015 and the full face value of this investment being $500,000 was received. This is an improvement from the last valuation of $485,200 in November 2014 and marks the maturity of Councils last CDO investment.

Council's total Investment Portfolio at fair value as at the end of October 2015 was $26,924,929.63 against a face value of $26,881,989.28. Council also has $1,045,896.05 in General Bank Accounts and $120,994.55 in Trust Funds as at 31 October 2015.

Community Strategic Plan Links

Focus Area 7 Governance and Process - Long term Goal 7.5 Sound Governance and Legislative Practices.

Budget Implications

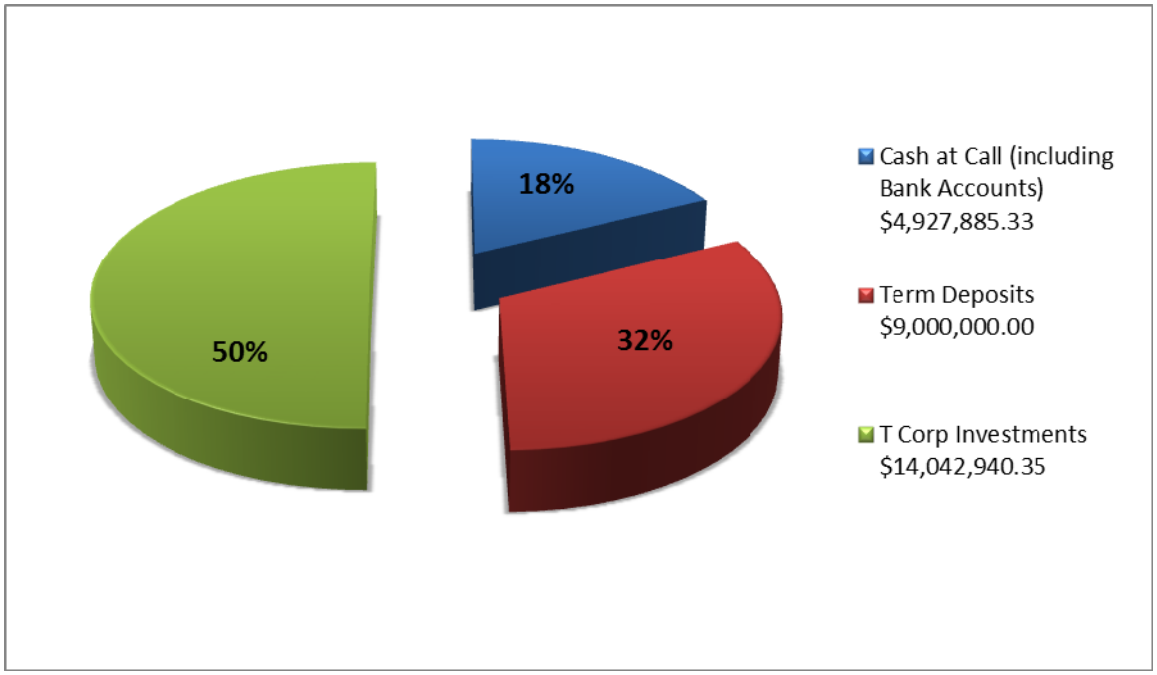
Year to date Council has earned $214,100.95 in interest against a budget of $868,000.00 which equates to 24.67%.

Report

The Financial Analysis Report aims to disclose information regarding Council's investment portfolio.

This report includes the provision of fair value for all Council's investments. Council receives indicative market valuations on these investments monthly (where available) and this can be compared to the face value or original cost of the investment when purchased (where available). The notion of fair value is to comply with Australian Accounting Standard AASB 139. The market valuations of fair value valuations are an indication only of what a particular investment is worth at a point in time and will vary from month to month depending upon market conditions. The fair value of Council's Investment Portfolio as at 31 October 2015 was $26,924,929.63 against a face value of $26,881,989.28.

The following graph shows a breakup of Council's investment portfolio as at 31 October 2015:



The Reserve Bank of Australia left the cash rate unchanged at its October 2015 meeting, so the cash rate in Australia was 2.00% per annum at October month end.

Council has a term deposit portfolio of $9,000,000 or 33.43% of the total portfolio composition. In terms of investment yields, interest rates available for investments during the period have decreased slightly to the previous month; the average yield of the deposits was down slightly from 2.92% to 2.89%. The short dated deposit and cash position of the portfolio provides excellent liquidity to Council allowing flexibility to take advantage of higher interest bearing investments as the opportunities arise. Council is exploring the more medium and longer term investment options offered via NSW Treasury Corporation and to date has invested $14,000,000.

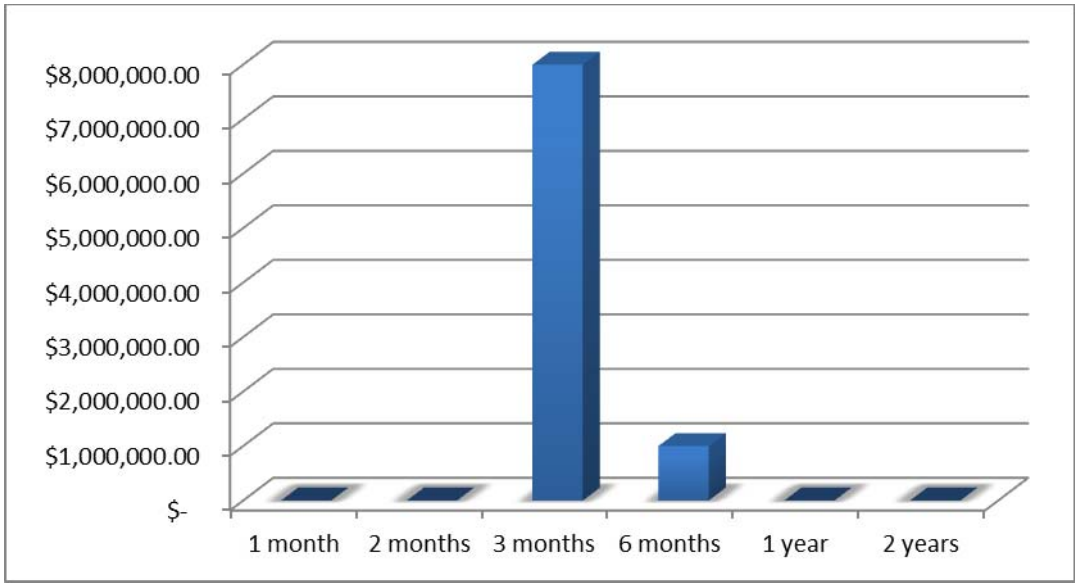
Council made five new term deposits in the month of October 2015.

Financial Institution	Investment Amounts	Maturity Date	Investment Rate per annum	Days Invested
Bankwest	$1,000,000.00	18 January 2016	2.85%	**102**
National Australia Bank	$1,000,000.00	14 January 2016	2.93%	**91**
National Australia Bank	$1,000,000.00	18 January 2016	2.91%	**91**
ANZ Bank	$1,000,000.00	19 January 2016	2.85%	**91**
Auswide Bank	$1,000,000.00	19 January 2016	2.78%	**90**

Total term deposit maturities during the month ending 31 October 2015 included returning principal (in full) and interest, are shown in the following table:

Financial Institution	Investment Amount	Maturity Date	Investment Rate per annum	Interest Received
Bankwest	$1,000,000.00	8 October 2015	2.90%	**$9,534.25**
National Australia Bank	$1,000,000.00	15 October 2015	2.95%	**$7,273.97**
National Australia Bank	$1,000,000.00	19 October 2015	2.94%	**$7,329.86**
Greater Building Society	$1,000,000.00	20 October 2015	2.90%	**$7,230.14**
Members Equity Bank	$1,000,000.00	20 October 2015	2.93%	**$7,304.93**
Members Equity Bank	$1,000,000.00	21 October 2015	2.98%	**$10,287.12**
Bank of QLD	$1,000,000.00	21 October 2015	2.85%	**$9,369.86**

The following graph shows Council's term deposit maturities as at 31 October 2015:



Conclusion

Council had the last of its CDO investments mature during the month, receiving the full face value of the investment back. Council is continually looking for ways to increase its investment performance. Consistent with Council's Investment Policy a significant portion of the investment portfolio is now invested with New South Wales Treasury Corporation in medium term investments with the aim of receiving higher returns.

RICHMOND VALLEY COUNCIL FINANCIAL ANALYSIS REPORT AT 31 OCTOBER 2015

Investment Name	Investment Source	Investment Type	Rating	Investment Date	Maturity Date	Interest Basis	Interest Frequency	Current Interest Rate for Month	Original Investment Value	Current Investment Fair Value	Fair Valuation Date	% of Total Portfolio	Capital Guarantee Maturity
Cash at Call													
CBA Business Online Saver	Commonwealth Bank	At Call	A1+/AA	At Call		Variable	Monthly	0.21%	N/A	3,881,989.28	31/10/2015	14.42%	No
								Total Cash at Call		**3,881,989.28**		**14.42%**	
Term Deposits													
Term Deposit	Bank of QLD	Term Deposit		15/06/2015	11/01/2016	Fixed for Term	Maturity	0.25%	N/A	1,000,000.00	31/10/2015	3.71%	Part
Term Deposit	Greater Building Society	Term Deposit		9/09/2015	8/12/2015	Fixed for Term	Maturity	0.23%	N/A	1,000,000.00	31/10/2015	3.71%	Part
Term Deposit	ANZ Ltd	Term Deposit		10/09/2015	9/12/2015	Fixed for Term	Maturity	0.24%	N/A	1,000,000.00	31/10/2015	3.71%	Part
Term Deposit	National Australia Bank	Term Deposit		21/09/2015	21/12/2015	Fixed for Term	Maturity	0.25%	N/A	1,000,000.00	31/10/2015	3.71%	Part
Term Deposit	Bankwest	Term Deposit		8/10/2015	18/01/2016	Fixed for Term	Maturity	0.24%	N/A	1,000,000.00	31/10/2015	3.71%	Part
Term Deposit	National Australia Bank	Term Deposit		15/10/2015	14/01/2016	Fixed for Term	Maturity	0.24%	N/A	1,000,000.00	31/10/2015	3.71%	Part
Term Deposit	National Australia Bank	Term Deposit		19/10/2015	18/01/2016	Fixed for Term	Maturity	0.25%	N/A	1,000,000.00	31/10/2015	3.71%	Part
Term Deposit	ANZ Ltd	Term Deposit		20/10/2015	19/01/2016	Fixed for Term	Maturity	0.24%	N/A	1,000,000.00	31/10/2015	3.71%	Part
Term Deposit	Auswide Bank	Term Deposit		21/10/2015	19/01/2016	Fixed for Term	Maturity	0.23%	N/A	1,000,000.00	31/10/2015	3.71%	Part
								Total Term Deposits		**9,000,000.00**		**33.43%**	
Fixed Interest Securities													
Octagon PLC (EMU Note)	FIIG Securities	CPPI - Hedge	AAA	25/10/2005	25/10/2015	50% performance	Yearly	0.00%	0.00	0.00	31/10/2015	0.00%	Yes
								Total Fixed Interest Securities	**0.00**	**0.00**			
NSW Treasury Corporation Hourglass Investments													
Cash Facility Trust	NSW Treasury Corporation	Trust		Various	N/A		Monthly		7,000,000.00	7,024,706.06	31/10/2015	26.09%	
Strategic Cash Facility Trust	NSW Treasury Corporation	Trust		Various	N/A		Monthly		7,000,000.00	7,018,234.29	31/10/2015	26.07%	
								Total Fixed Interest Securities	**14,000,000.00**	**14,042,940.35**		**52.16%**	

Bank Accounts

Account Name	Balance $ 31-Oct-15
General Fund Bank Account	1,033,166.98
Trust Fund Bank Account	120,994.55
NAB Business Cash Maximiser A/c	0.00
NAB Cheque Account	-39.75
NAB Saleyard Account	0.00
NAB Sports Stadium	535.13
Evans Head Memorial Areodrome Fund	12,233.69
Total	**1,166,890.60**

Total Investment Portfolio at Face Value	**26,881,989.28**	
Total Investment Portfolio at Fair Value		**26,924,929.63**
Overall Average Interest Rate for month - Portfolio	0.22%	
Total Bank Account Portfolio		1,166,890.60
Total Portfolio		28,091,820.23

14.5 POLICY - PAYMENT OF EXPENSES AND PROVISION OF FACILITIES TO COUNCILLORS

Responsible Officer:
Deborah McLean (Manager Governance and Risk)

RECOMMENDATION

Recommended that:

1. The revised Draft Payment of Expenses and Provision of Facilities to Councillors Policy be adopted.

2. A copy of the revised policy be forwarded to the Office of Local Government together with confirmation that there were no submissions received during the exhibition period.

171115/ 10 RESOLVED (Cr Morrissey/Cr Humphrys)

That the above recommendation be adopted.

FOR VOTE - All Council members voted unanimously.

Executive Summary

At the September 2015 Ordinary Meeting Council resolved not to make any changes to Council Policy 1.7 – Payment of Expenses and Provision of Facilities to Councillors, and place the draft policy without change on public exhibition for a period of not less than 28 days with the public invited to make submissions.

The draft policy was reviewed against the Local Government Act (the Act), Local Government (General) Regulation 2005 and Guidelines issued by the Office of Local Government. Section 252 of the Act requires Council to adopt an expenses and facilities policy within 5 months after the end of each financial year and provide a copy of the revised policy to the Office of Local Government, together with details of any submissions received.

The policy was advertised and placed on public exhibition for a period of 28 days. There were no submissions received during the exhibition period.

Community Strategic Plan Links

Focus Area 7 Governance and Process - Long Term Goal 7.5 Sound Governance and Legislative Practices.

Budget Implications

There are no budget implications.

Report

Submissions have now closed and none were received.

Under the Act Council must adopt a revised Payment of Expenses and Provision of Facilities to Councillors Policy before 30 November 2015. Council has satisfied the legislative requirements of the Act by placing the revised draft policy on public exhibition and allowing the public to make submissions on the draft policy.

Consultation

The policy was placed on exhibition for a period of not less than 28 days in accordance with the requirements of the Act.

Legal

Council is required to review its Payment of Expenses and Provision of Facilities to Councillors Policy annually and provide a copy to the Office of Local Government together with any submissions and a statement setting out Council's response to the submissions and the reasons for Council's response.

Conclusion

Council has satisfied the legislative requirements by placing the revised draft policy on public exhibition and allowing for the public to make submissions. Council must adopt a revised Payment of Expenses and Provision of Facilities to Councillors Policy before 30 November 2015 to comply with the Act.

Council Policy

Policy Title:	**Payment of Expenses and Provision of Facilities to Councillors**
Policy Number:	1.7
Focus Area:	Governance and Process
Responsibility:	Governance and Risk
Meeting Adopted:	17 November 2015 - 171115/ 10

OBJECTIVE

The objective of the policy is to ensure that there is accountability and transparency in the reimbursement of expenses incurred by councillors. The policy also ensures that the facilities provided to assist councillors to carry out their civic duties are reasonable.

POLICY

1. Legislative provisions

The Local Government Act 1993 provides:

Section 252

(1) Within 5 months after the end of each year, a council must adopt a policy concerning the payment of expenses incurred or to be incurred by, and the provision of facilities to, the mayor, the deputy mayor (if there is one) and the other councillors in relation to discharging the functions of civic office.

(2) The policy may provide for fees payable under this Division to be reduced by an amount representing the private benefit to the mayor or a councillor of a facility provided by the council to the mayor or councillor.

(3) A council must not pay any expenses incurred or to be incurred by, or provide any facilities to, the mayor, the deputy mayor (if there is one) or a councillor otherwise than in accordance with a policy under this section.

(4) A council may from time to time amend a policy under this section.

(5) A policy under this section must comply with the provisions of this Act, the regulations and any relevant guidelines issued under section 23A.

Section 253

(1) A council must give public notice of its intention to adopt or amend a policy for the payment of expenses or provision of facilities allowing at least 28 days for the making of public submissions.

(2) Before adopting or amending the policy, the council must consider any submissions made within the time allowed for submissions and make any appropriate changes to the draft policy or amendment.

(3) Despite subsections (1) and (2), a council need not give public notice of a proposed amendment to its policy for the payment of expenses or provision of facilities if the council is of the opinion that the proposed amendment is not substantial.

(4) Within 28 days after adopting a policy or making an amendment to a policy for which public notice is required to be given under this section, a council is to forward to the Director-General:

(a) a copy of the policy or amendment together with details of all submissions received in accordance with subsection (1), and
(b) a statement setting out, for each submission, the council's response to the submission and the reasons for the council's response, and
(c) a copy of the notice given under subsection (1).

(5) A council must comply with this section when proposing to adopt a policy each year in accordance with section 252 (1) even if the council proposes to adopt a policy that is the same as its existing policy.

Section 254

The council or a council committee all the members of which are councillors must not close to the public that part of its meeting at which a policy for the payment of expenses or provision of facilities is adopted or amended or at which any proposal concerning those matters is discussed or considered.

2. Reporting requirements

Clause 217 of the Local Government (General) Regulations 2005 requires the following details in relation to mayoral and councillor fees, expenses and facilities to be included in Council's annual report.

- Details of the total cost during the year of the payment of the expenses of, and the provision of facilities to, councillors in relation to their civic functions (as paid by the council, reimbursed to the councillor or reconciled with the councillor), including separate details on the total cost of each of the following:
  - the provision during the year of dedicated office equipment allocated to councillors on a personal basis, such as laptop computers, mobile telephones and landline telephones and facsimile machines installed in councillors' homes (including equipment and line rental costs and internet access costs but not including call costs),
  - telephone calls made by councillors, including calls made from mobile telephones provided by the council and from landline telephones and facsimile services installed in councillors' homes,
  - the attendance of councillors at conferences and seminars,
  - the training of councillors and the provision of skill development for councillors,

- interstate visits undertaken during the year by councillors while representing the council, including the cost of transport, the cost of accommodation and other out-of-pocket travelling expenses,
- overseas visits undertaken during the year by councillors while representing the council, including the cost of transport, the cost of accommodation and other out-of-pocket travelling expenses,
- the expenses of any spouse, partner (whether of the same or the opposite sex) or other person who accompanied a councillor in the performance of his or her civic functions, being expenses payable in accordance with the *Guidelines for the payment of expenses and the provision of facilities for Mayors and Councillors for Local Councils in NSW* prepared by the Director-General from time to time,
- expenses involved in the provision of care for a child of, or an immediate family member of, a councillor, to allow the councillor to undertake his or her civic functions.

3. Other Government policy provisions

- Department of Premier and Cabinet (Division of Local Government) Circular 09/36 "Revised Guidelines for Payment of Expenses and Provision of Facilities to Mayors and Councillors in NSW".
- Department of Premier and Cabinet (Division of Local Government) Circular 11/27 "Findings from Review of Councillor Expenses and Facilities Policies".
- Richmond Valley Council's Code of Conduct.

4. Travelling expenses

(a) Within the Local Government Area

Councillors will be entitled to be reimbursed for travel from their home whilst on Council business at the rate per kilometre as set out in the Local Government State Award.

The travelling expense is payable for Council Meetings, Committee Meetings, formal and social functions where representing Council, consultation with the Mayor, Chief Executive Officer, or staff or other meetings involving the general community and attendance is approved for the purpose of this policy by the Mayor or Chief Executive Officer.

(b) Outside the Local Government Area

Councillors will be entitled to travel to official engagements at Council's expense by the most practical method, i.e. aircraft, Council vehicle or private vehicle. Councillors, when travelling by air, will travel Economy Class or as determined by the Chief Executive Officer.

A Councillor who travels in his/her own vehicle will be reimbursed at the appropriate per kilometre rate or airfare whichever is the lower.

(c) Overseas

Overseas travel must be approved by resolution of the council following receipt of a written report. Council will not assist overseas travel unless direct and tangible benefits can be established for the Council and local community.

The following will apply in relation to the payment of expenses and provision of facilities to Councillors (in relation to Council business):

5. Attendance at Seminars, conferences and courses

Councillors may attend conferences, seminars and similar functions that will assist in the professional development of a Councillor, or have an identifiable benefit to the local area by the association of a Councillor with a Council activity or function and within the budget framework. Attendance at conferences must be approved by Council resolution and a written report is to be provided from Councillors attending conferences or as a delegate for inclusion in Council's Business Paper.

6. Expenses incurred at conferences, seminars and courses

The following costs will be paid for by Council in advance or reimbursement for attendance at Conferences, Seminars and courses by Councillors:

Registration

Including official luncheons, dinners and tours relevant to the Conference.

Travel

By Council vehicle, private vehicle, hire vehicle, rail or air. Persons using private vehicles to be reimbursed according to the relevant kilometre rate in the staff award (subject to the costs not exceeding the economy class air fare as applicable). With all travel arrangements, due consideration is to be given to the physical capacity of the Councillor and any variation to these arrangements be with the approval of the Mayor and the Chief Executive Officer. All travel by Councillors will be undertaken by utilising the most practicable and economical mode of transport.

Accommodation

Accommodation for other Council business will be as follows:

(i) At a standard of up to four star NRMA rating;

(ii) Booked and paid for by Council in advance or, where this is not possible, a claim for reimbursement made not later than three months after the expenses were incurred and submitted on the standard claim form, with receipts attached.

Meals and other expenses

Reasonable costs (including sustenance, telephone charges, taxi fares and incidental expenses) including the night before and after the conference where necessary to be met by the Council and submitted on the standard claim form, with receipts attached.

Costs of meals not included in the costs of the registration for the conference, seminar or course will be reimbursed in accordance with the most recent Australian Taxation Office Determination, Table 2, as outlined on the Claim for Cash Advance Form.

7. Costs of Councillors' spouses, partners and accompanying persons

Council will meet the costs of Councillors' spouses, partners and accompanying persons in the following circumstances:

- Cost of registration and official conference dinner at the Local Government NSW Annual Conference. (Cost of accommodation and travel are to be met by the Councillor.)
- Payment of expenses at official Council functions that are of a formal or ceremonial nature within the Council's area, e.g. Australia Day Award Ceremonies, Civic Receptions.
- Payment of expenses for the spouse, partner or accompanying person of a Mayor, or a Councillor when they are representing the Mayor, when they are called upon to attend an official function of Council or carry out an official duty while accompanying the Mayor outside Council's area, but within the State. This is to be restricted to direct costs associated with the function.

8. Facilities

Mayor

Council will provide the Mayor with the following facilities:

- An office in the Council's Administration Building. Council's Meeting Rooms are also available for use by the Mayor.
- Access to telephone, email and photocopy facilities for Council business purposes.
- Secretarial/Administrative services for Council business as required.
- A vehicle of a standard approved by Council for use on Mayoral duties/Council business.
- Private use of the Mayoral vehicle in accordance with Council's resolution of 18 December 2012 Ordinary Meeting or any subsequent resolution of the Council.
- An allocated parking space at Council's Administration Offices, Casino.
- Identification badge and business cards.
- Ceremonial clothing including mayoral robes and/or chain of office.

Facilities/services will not be provided for candidature to Federal, State or Local Government or any political party.

Councillors

Council will provide the Councillors with the following facilities:

- Use of Council's meeting rooms and areas of Council's Administrative Building as required.
- Access to telephone, email and photocopy facilities for Council business as required.
- Secretarial/administrative services relating to the preparation of reports for Council.
- Identification badge and business cards.

Facilities/services will not be provided for candidature to Federal, State or Local Government of any political party.

Council clothing/protective clothing and equipment

- Council purchase and issue to Councillors corporate business shirts and corporate tie or scarf.
- Councillors' access to protective clothing, accessories and equipment where required in accordance with WH&S requirements and when considered appropriate by the Chief Executive Officer.

9. Legal expenses

Council may consider reimbursement of a Councillor's legal costs under certain circumstances on a solicitor/client basis (but shall not reimburse any Councillor for any costs incurred by Senior Counsel). Reasonable legal expenses of a Councillor may only be met for legal proceedings being taken against a Councillor in defending an action arising from the performance in good faith of a function under the Local Government Act (section 731 refers) or defending an action in defamation, provided that the outcome of the legal proceedings is favourable to the councillor.

Reasonable legal costs may also be available for an inquiry, investigation or hearing into a Councillor's conduct by an appropriate investigative or review body including:

(i) Local Government Pecuniary Interest and Disciplinary Tribunal
(ii) Independent Commission Against Corruption;
(iii) Office of the NSW Ombudsman;
(iv) Office of Local Government;
(v) NSW Police Force;
(vi) Director of Public Prosecutions;
(vii) Council's Conduct Review Committee/Reviewer.

This is provided that the subject of the inquiry, investigation or hearing arises from the performance in good faith of a Councillor's functions under the Act and the matter before the investigative or review body has proceeded past any initial assessment phase to a formal investigation or review. In the case of a conduct complaint made against a Councillor, legal costs may only be made available where a matter has been referred by the Chief Executive Officer to a conduct reviewer/conduct review

committee to make formal enquiries into that matter in accordance with the procedures in the Model code of Conduct. In the case of a pecuniary interest or misbehaviour matter legal costs may only be made available where a formal investigation has been commenced by the Office of Local Government.

In addition, legal costs may only be provided where the investigative or review body makes a finding that is not substantially unfavourable to the Councillor. This may include circumstances in which a matter does not proceed to a finding. In relation to a Councillor's conduct, a finding by an investigative or review body that an inadvertent minor technical breach had occurred may not necessarily be considered a substantially unfavourable outcome.

Council will not meet the legal costs of legal proceedings initiated by a Councillor under any circumstances or the legal costs of a Councillor seeking advice in respect of possible defamation, or in seeking a non-litigious remedy for possible defamation. Legal costs will not be met for legal proceedings that do not involve a Councillor performing their role as a Councillor.

Council may lawfully obtain insurance cover against the risk of having to meet the reasonable legal costs of a Councillor, or to reimburse those costs, provided that the costs or reimbursements are ones that the Council is authorised to meet.

10. Insurance

Section 382 of the Act requires a council to make arrangements for its adequate insurance against public liability and professional liability and Councillors are to receive the benefit of insurance cover for:

- Public liability (for matters arising our of Councillors' performance of their civic duties and/or exercise of their council functions).
- Professional indemnity (for matters arising our of Councillors' performance of their civic duties and/or exercise of their council functions).
- Personal injury while on council business. (This cover does not cover workers' compensation payments or arrangements.)

All insurances are subject to any limitations or conditions set out in Council's policy of insurance.

11. General

- Light meals and/or refreshments are to be provided to the Mayor and Councillors in conjunction with Council/Committee Meetings and other functions/meetings, where considered appropriate by the Chief Executive Officer.
- Council will provide Councillors with appropriate electronic equipment for communication purposes.
- Council will reimburse child care costs when provided by a registered provider if a Councillor is required to arrange such care while on Council business.

- Council will provide a filing cabinet up to a four drawer capacity while Councillors are in office.
- Council will reimburse costs for mobile telephone calls equal to fifty percent (50%) of the total cost of the mobile telephone account claimed up to a maximum of $100.00 per quarter.
- Council will reimburse reasonable out of pocket or incidental expenses that are incurred whilst conducting Council business.
- Council will provide a non-dedicated motor vehicle drawn from Council's pool to attend conferences/seminars/training and other functions/meetings when available and considered appropriate by the Chief Executive Officer.
- Council will provide the optional ability for Councillors to substitute part or all of their Councillor fee to be paid as contributions to a complying superannuation fund of their choice. Any Councillor undertaking this option is on the basis they have either received independent financial advice or understand this decision. A signed declaration to this effect will be required before commencement of superannuation contributions to a complying superannuation fund.

12. Return of equipment

Upon completion of the term of a Councillor's Office, extended leave of absence or cessation of their civic duties, all equipment previously provided must be returned to the Council.

Councillors will also have the option of purchasing the equipment previously allocated at an agreed fair market price or written down price value.

REVIEW

This policy will be reviewed by Council annually.

14.6 REVIEW OF COUNCIL POLICIES

Responsible Officer:
Deborah McLean (Manager Governance and Risk)

RECOMMENDATION

Recommended that Council rescind the following policy:

3.20.3 Pressure Sewerage

171115/ 11 RESOLVED (Cr Morrissey/Cr Humphrys)

That the above recommendation be adopted.

FOR VOTE - All Council members voted unanimously.

Executive Summary

Section 232 of the *Local Government Act 1993* requires Council to play a key role in the creation and review of Richmond Valley Council policies, objectives and criteria relating to the exercise of the Council's regulatory functions.

To assist Council in this role, a program to review all Council policies has been in progress over the last 16 months. Council resolved to rescind a number of Council Policies during this period.

This report recommends the rescission of a further policy which has been identified as obsolete. An overview and rationale of the reason is provided in the report.

Community Strategic Plan Links

Focus Area 7 Governance and Process - Long term Goal 7.5 Sound Governance and Legislative Practices.

Budget Implications

Nil.

Report

Council is currently undergoing a full review of all Council Policies. As part of the review, a process has been developed to assist in the ongoing management and review of policies and to ensure Council meets its obligations to have a governing role in the creation and review of Council Policies under Section 232 of the *Local Government Act 1993.*

As part of the review process all previously adopted Council Policies have been re-categorised into three distinct categories:

- Council Policies – requiring Council approval.
- Operational Policies – requiring Senior Manager approval.
- Operational Procedures - requiring Responsible Manager approval.

The ongoing approval process will require any new or amended Council Policies to be adopted by Council with recommendations made by the Responsible Manager. All Operational Policies and Procedures will be approved by the Responsible Manager for the policy area and Operational Policies will undergo a further approval process of having final approval by Senior Management, comprising the Chief Executive Officer, Chief Operating Officer and Director Infrastructure and Environment.

This approval process will ensure that all Operational Policies which have historically been approved by Council are consistently monitored and approved at a senior manager level.

A policy management database has been implemented to assist in the ongoing management and review of policies and provide accountability by policy owners, provide a central register, provide a schedule of review and approval process and ensure that all policies and procedures are integrated through staff awareness and training.

During the previous 16 month period, Council rescinded a number of policies as part of this process. Since that time a further assessment of Council Policies under review has been completed. As a result the Pressure Sewerage Policy is recommended for rescission.

The Policy Review project is now in its final stages with a remaining ten policies scheduled for review to finalise the review program.

An overview and the rationale to rescind the Pressure Sewerage policy is provided below.

Policy No	Policy Name	Adopted	Last Review	Rationale
3.20.3	Pressure Sewerage	18/08/2009	N/A	This policy has been reviewed as an operational policy and is obsolete.

Consultation

Management has consulted with staff to obtain relevant feedback throughout the review process.

Conclusion

This report recommends that Council rescind the Pressure Sewerage Policy which has been deemed obsolete as it is now an operational policy.

14.7 COMMUNITY FINANCIAL ASSISTANCE PROGRAM

Responsible Officer:
John Walker (Chief Executive Officer)

RECOMMENDATION

Recommended that Council approve the proposed allocation of Section 356 Financial Assistance, as recommended in this report, in accordance with Council's Policy "Community Financial Assistance Program."

171115/ 12 RESOLVED (Cr Mustow/Cr Morrissey)

That the above recommendation be adopted.

FOR VOTE - All Council members voted unanimously.

Executive Summary

Council allocates an amount of financial assistance each year for requests from individuals, groups and organisations seeking financial assistance. Council's Policy 1.2 Community Financial Assistance Program provides for two rounds of funding allocations each year. The policy also sets out the method of determining allocations in accordance with the strategies, eligibility and selection criteria outlined in the policy.

Council has allocated $50,000 in the 2015/16 budget for financial assistance funding. The policy provides for two equal funding rounds of $25,000. Due to the return of funds from a previous round, there is currently $29,379 worth of funding available. The first round of funding was advertised in September and October 2015 and Council received 25 applications.

All of the applications received have been reviewed in accordance with the policy. Of the 25 applications, there were 24 applications that fit the eligibility requirements and selection criteria; 16 of these were able to be partially or fully funded.

Tables summarising the applications received and the proposed allocations are provided in this report.

Community Strategic Plan Links

Focus Area 7 Governance and Process - Long term Goal 7.5 Sound Governance and Legislative Practices.

Budget Implications

Council has allocated $50,000 in the 2015/16 budget for financial assistance. The total amount of current funds available is $29,379. The policy provides for two rounds of funding in the budget period. The proposed allocation of $29,379 is within budgetary constraints.

Report

Organisation	Requested allocation	Proposed use	Proposed allocation	Comments
Casino Breast Cancer Support Group	$500	Annual rent of space at Casino Community Centre and provision of morning tea.	$500	
Casino Community Men's Shed Inc	$1,479	Equipment to support art classes.	$1,479	
Casino Eagle Archers Inc	$10,000	Purchase of new club ride on mower with wider cutting deck and more horsepower to replace old entry level small club ride on mower.	$6,299	Partial funding
Casino Legacy Laurel Club	$1,200	Support Laurel Club Casino Branch to host annual Friendship Rally, Tuesday 10 May 2016 for members from Grafton to Tweed Heads.	$1,200	
Casino Little Athletics Inc	$1,790	Purchase High Jump Scissor Mat. Currently using incorrect size mat which is too small / unsafe for children.	$1,790	
Coraki Events Committee Inc	$3,263.12	Improve markets' appearance to bring more visits from outside area. Open up further fundraising opportunities to reach major event insurance goal by catering at the markets.	$1,801	Partial funding
Evans Head Cricket Club	$1,000	Improve the safety of cricket nets for training by extending middle fence to stop wayward hit balls striking bowlers as they run in for delivery.	$1,000	
Northern Region SLSA Helicopter Rescue Service Pty Ltd	$500	Assist with purchase of a inflatable single place life raft for rescue crew. Will provide further safety if crew become stranded in water during rescue/ training mission.	$500	

Organisation	Requested allocation	Proposed use	Proposed allocation	Comments
Rotary Club of Casino Incorporated	$5,000	Support weekly breakfast for homeless, "Breakfast on the Street", by Rotary Club, St Mary's Catholic College, Casino High School and On-Focus. Budget: $100 per week for hot food, disposable crockery and cutlery.	$4,000	Partial funding
UCA - UnitingCare Casino Transport Team (UCCTT)	$3,767	Transport 67 Richmond Valley clients (Casino, Coraki, Kyogle) to eye specialists' appointments in Lismore and Ballina.	$2,300	Partial funding
Woodburn Amateur Boxing Club Inc	$1,000	Insurance, boxing equipment and travel expenses.	$1,000	
Woodburn Event Team	$500	Partially fund traditional carol-singing evening in Riverside Park for Woodburn community and surrounds on Saturday, 12 December 2015.	$400	Partial funding
Broadwater - Rileys Hill Community Centre	$6,012	1. Produce monthly community newsletter - Based on 300 copies per month. 2. Playground equipment for Broadwater playground.	$1,032	Funding for newsletter – Playground referred to Council staff
Ellangowan Public Hall Committee	$10,500	Fix external architrave and then paint the external walls of the hall. New electric stove in the kitchen as old stove only works sometimes.	$1,188	Funded for electric stove
Mid Richmond Neighbourhood Centre Inc	$1,095	Cover Scout Hall kitchen floor with linoleum. Cost not included in budget received from the Federal Government to build a new kitchen.	$1,095	
Rileys Hill Dry Dock Heritage Reserve Trust	$2,995	Purchase / install 10,000L tank to serve as water reservoir for fire control, a petrol driven "firefighter pump" together with ancillary hoses and fittings.	$2,995	
Total proposed allocation			**$29,379**	

The following table summarises the applications which did meet the selection criteria but were not funded.

Organisation	Requested allocation	Proposed use
Casino Miniature Railway and Museum (Pacific Coast Railway Society Inc)	$1,400	Replace boundary "rail and post" fencing at North Casino Station as becoming a safety issue, and station entrance needs to be taken down and rebuilt with new materials.
Casino Returned Servicemen's Memorial Club Ltd	$6,000	Purchase of lawn bowls for community use for the social, sporting and active development of the community.
Koinonia Ministries Limited	$3,500	Replacement of wheel chair access ramps attached to the older hall at camp Koinonia Evans Head.
Marine Rescue NSW	$11,000	To refurbish rescue vessel travel lift to secure operation for 30 years – must be completed within the next 3 to 6 months to ensure safety of personnel, vessel and community.
New Italy Museum Inc.	$15,000	Expand the piazza area within Museum precinct. Maximise this space for major events such as Carnevale Italiano by opening up the area, and making it more like an Italian piazza. Also, partly demolished building at rear needs further removal to allow this building to be a covered outdoor dining area.
Northern Rivers Dirty Wheels Mountain Bike Club Incorporated	$6,454.70	Construction of signage for the proposed mountain bike trails to be constructed in Double Duke State Forest near New Italy. Includes two 'YOU ARE HERE' style sheltered entrance maps on both north and south entrances.
St Vincent de Paul Society NSW (Lismore Central Council)	$6,000	Assist with waste costs for disposal of unsaleable goods that discarded at Evans Head and Casino Op Shops - including dirty clothing; household rubbish; damaged items; and goods Vinnies is unable to accept e.g. electrical appliances, mattresses, furniture.
WIRES Northern Rivers (Wildlife Information, Rescue & Education Service)	$1,000	Purchase Brinsea intensive care unit for neonatal and otherwise compromised wildlife; birds, mammals, macropod and possum joeys and reptiles.

The following table includes an application which did not meet the criteria.

Organisation	Requested allocation	Proposed use	Comments
Windara Communities Ltd	$4,600	Purchase personal protective equipment for supported staff members for their employment.	Proposal was for employment-related items – grants are not for employment-related items under the policy guidelines.

In determining eligibility, consideration has been given to Council's Community Strategic Plan and the deliverables in the Delivery Program and Operational Plan, as well as eligibility requirements and selection criteria. This has resulted in one application being assessed as requiring too large an amount of funding,

and another application not meeting the policy guidelines and therefore being ineligible for funding.

Consultation

The call for applications for Section 356 Financial Assistance was advertised for a period of 28 days during September and October 2015 in the Richmond River Express Examiner and also on Council's website and Facebook page.

Conclusion

All 25 applications received have been processed in accordance with Council policy. Applicants were made aware that there were limited funds available and that the applications would be processed in strict accordance with the policy criteria. Of the 24 eligible applications, 16 have been partially or fully funded.

14.8 ROADS TO RECOVERY PROGRAM - ALLOCATION OF BALANCE OF FUNDS TOTALLING $392,000

Responsible Officer:
Andrew Leach (Manager Asset Planning)

RECOMMENDATION

Recommended that the $392K remaining unallocated funds from the Roads to Recovery program be allocated to the 900m of Manifold Road widening ($362K) and works at the Bruton Street turnaround area ($30K), both in the Casino area.

171115/ 13 RESOLVED (Cr Morrissey/Cr Humphrys)

That the above recommendation be adopted.

FOR VOTE - All Council members voted unanimously.

Executive Summary

At Council's Ordinary Meeting on 15 September 2015, a report was provided in relation to the allocation of funding received from the Roads to Recovery Program. Council resolved to allocate part of the Roads to Recovery funding totalling $1.821 million over the 2015/16 and 2016/17 financial years to the prioritised roads and the balance of funds totalling $392,000 be reserved for road or laneway works to be determined by Council following a further report and inspection by Councillors.

Council Officers recommend the most appropriate and best use of the remaining unallocated Roads to Recovery funds be spent on Manifold Road widening ($362K) and works at the Bruton Street turnaround area ($30K).

Community Strategic Plan Links

Focus Area 6 Transport and Infrastructure - Long Term Goal 6.1 Roads, Drainage and other Infrastructure Asset Classes.

Budget Implications

For 2015/16 Richmond Valley Council received an extra $601K and for 2016/17 $1,612K.

Following adjustments regarding cash flows for a revenue shortfall, the extra funding will be distributed as $461K and $1,752K, respectively

Report

Following further consideration, Council Officers recommend the most appropriate use of the remaining unallocated funds from the Roads to Recovery Program would be the programming of the 900m of Manifold Road widening for $362K and the works at the Bruton Street turnaround area ($30K).

Manifold Road was the next job prioritised in the list which was considered in conjunction with the 15 September 2015 report to Council. This road carries substantial through traffic and is a significant bus route with two schools being located on the road. Completing this section sees the entire length of Manifold Road at a uniform width of 6m or more, addressing edge breaks and eroding shoulders and will provide an appropriate level of service for a road of this type.

Bruton Street turnaround was raised at an earlier Council Information Session as needing work, and this balance of funding will address the pavement issues there.

The unsealed laneway program requires a revised inspection process so that the priority of candidate projects reflects the existing use and access issues of the laneway network. The original list was generated from a desktop exercise using aerial photography. It is obvious from the bus tour inspections by councillors and staff that more detailed on site physical analysis needs to be undertaken in this area. The annual allocation of $90K remains in the capital works program for unsealed laneways.

Consultation

Information regarding the proposed projects to allocate the Roads to Recovery funding has been supplied and discussed with Council at Information Sessions.

Conclusion

It is proposed that the unallocated funds of $392K from the Roads to Recovery program be allocated to the 900m of Manifold Road widening ($362K) and the works at the Bruton Street turnaround area ($30K).

14.9 SUMMARY OF THE EXHIBITION OF PLANNING PROPOSAL PP2015/01 - PROPOSING AMENDMENTS TO THE RICHMOND VALLEY LOCAL ENVIRONMENTAL PLAN (LEP) 2012

Responsible Officer:
Paul Radnidge (Manager Assessment, Environment and Regulation)

RECOMMENDATION

Recommended that:

1. The report be received and noted;
2. A public hearing not be required; and
3. Council proceed with preparing the LEP Amendment, subject to the following changes:
    a. Omit detached dual occupancies from being permitted in Zone E3;
    b. Omit the 'special events' exempt development from applying to Zone E2 and E3; and
    c. Amend the boundary adjustment subdivision clause to remove reference to minimum lot size; define the clause to apply to Zones RU1, R5, E2 and E3 and prohibit the creation of lots where there may be an additional opportunity to further subdivide or create an additional dwelling opportunity.

171115/ 14 RESOLVED (Cr Morrissey/Cr Hayes)

That the above recommendation be adopted.

FOR VOTE - All Council members voted unanimously.

Executive Summary

Planning Proposal PP2015/01 seeks to amend the Richmond Valley LEP 2012 to achieve the following outcomes:

- Item 1 - Permit Boundary adjustment subdivisions (provided they don't create additional dwelling opportunities);
- Item 2 - Amend the Dwelling Opportunity clause to correct an omission and to allow a dwelling opportunity to prevail on a boundary adjusted lot;
- Item 3 - Permit 'detached' Dual Occupancy development on rural land; and
- Item 4 - Permit 'Special Events' as exempt development on Council owned and controlled public land.

The Planning Proposal was exhibited concurrently with the Draft Development Control Plan 2015, from 23 September 2015 to 26 October 2015, with two

submissions being received, one requesting a Public Hearing. Furthermore, Government Agency consultation was undertaken as per requirements of the Gateway Determination, dated 26 June 2015, with two responses from three referrals being received.

Receiving and noting this report will allow the LEP amendment to proceed.

Community Strategic Plan Links

Focus Area 5 Rural and Urban Development - Long Term Goal 5.1 Land use development should be appropriate for the retention of a country atmosphere and village lifestyle.

Budget Implications

Nil.

Report

Planning Proposal PP2015/01 seeks to amend the Richmond Valley LEP 2012 to achieve the following outcomes:

- Item 1 - Permit Boundary adjustment subdivisions (provided they don't create additional dwelling opportunities);
- Item 2 - Amend the Dwelling Opportunity clause to correct an omission and to allow a dwelling opportunity to prevail on a boundary adjusted lot;
- Item 3 - Permit 'detached' Dual Occupancy development on rural land; and
- Item 4 - Permit 'Special Events' as exempt development on Council owned and controlled public land.

PP2015/01 received a Gateway Determination from the Department of Planning and Environment on 26 June 2015. The Gateway Determination required the Planning Proposal to be publicly exhibited in compliance with *A Guide to Preparing LEPs* for a minimum 28 day period. Furthermore, the Gateway Determination required consultation with Government Agencies being:

- NSW Department of Primary Industries in relation to potential impacts on agricultural activities;
- NSW Rural Fire Service; and
- NSW Office of Environment and Heritage.

Agency Consultation

The Gateway Determination required consultation with three public authorities under section 56(2)(d) of the Act and/or to comply with the requirements of relevant Section 117 Directions. Each of the nominated Agencies was to be provided with a copy of the Planning Proposal and any relevant support material, and given at least 21 days to comment. The Planning Proposal was referred on 28 August 2015.

- ***Office of Environment and Heritage (submission dated 22/09/2015)***

  Concerned about the potential of proposed items 1 and 2 to impact on biodiversity and Aboriginal cultural heritage values; and the potential impacts on environmental values arising from proposed items 3 and 4.

  The Office of Environment and Heritage is unable to support items 2, 3 or 4 in their current form but make recommendations on how these items could be amended to address concerns.

  1. Apply "environmental viability" criteria for assessing boundary adjustment subdivisions involving land in Zone E3.
  2. Delete item 2 and retain the existing rural dwelling opportunity clause.
  3. Exclude 'detached' dual occupancy on land Zone E3.
  4. Include following if 'detached' dual occupancy is to be permitted on rural zoned land – "*(g) That the development will not require the further removal of native vegetation either directly or indirectly or for the purposes of bushfire prevention or asset protection.*"
  5. Exclude lands zoned E2 or E3 from the proposed exempt development.
  6. Insert a clause into schedule 2 to state that public events are permissible only with consent on land zoned E2 or E3.

  Comments

  1. The LEP currently has Clause 6.6 Terrestrial Biodiversity which identifies additional assessment criteria aimed at protecting native flora and fauna and ecological processes. This clause is associated with a Terrestrial Biodiversity map that captures areas under native vegetation and comprising a wildlife corridor. An additional clause is not warranted.
  2. The intent of this clause was to correct an omission in the dwelling opportunity clause that fails to recognise lots created below the minimum lot size and having a dwelling opportunity status. The absence of this amendment won't prevent a dwelling being erected on these lots it simply removes unnecessary red tape that is needed to get a development consent. The other part of this amendment is to retain an acknowledgement of a lot's dwelling opportunity after a boundary adjustment subdivision.
  3. Council should omit detached dual occupancy within Zone E3. This would be consistent with similar clauses in other LEPs.
  4. The clause as presented in the Planning Proposal is consistent with that of Lismore LEP 2012. Inclusion of the proposed wording would impose on appropriate bush fire protection measures by preventing these to be incorporated into attached or detached dual occupancy. Council should reject this request.

5. Council should omit the exempt development from applying to Zones E2 and E3.

6. The suggested wording is an additional permitted use and not something that exempt development provisions can establish.

- ***Department of Primary Industries (submission dated 9/10/2015)***

  - Item 1 – Supported.
  - Item 2 – Supported.
  - Item 3 – Strongly discourage permitting 'detached' dual occupancy in rural zones due to the cumulative impact of non-agricultural related housing, and the increased potential for land use conflict with agricultural industries. Having dual occupancies and rural worker's dwellings attached assists in reducing some of these adverse impacts.
  - Item 4 – No objections.

  Comments

  - Item 3 – The draft clause that will be inserted into the LEP is consistent with wording from similar clauses in other LEPs. The clause already includes a provision which requires the assessment of whether the development will impair the use of land, or adjoining land, for agriculture or rural industries. This should be sufficient to address land use conflict concerns.

- ***NSW Rural Fire Service (no submission received to date, although they had sought an extension)***

Community Submissions

Two submissions were received during the community engagement process.

- ***Newton Denny Chapelle, Consulting Surveyors Planners Engineers***

  Supportive of boundary adjustment clause, but object to the unnecessary prohibition which does not permit lots to be reduced to below the Minimum Lot Size.

  Comments

  Council has investigated rewording the boundary adjustment subdivision clause and recommends the following changes:

  - Remove reference to minimum lot size (thus allowing lots to be adjusted to any size, albeit subject to dot point 3 below)
  - Define those zones where the clause will apply (Zones RU1, R5, E2, and E3); and
  - Prohibit creating any lot that has an opportunity to be further subdivided or have an additional dwelling opportunity.

- ***Dr Richard Gates, President of the Evans Head Memorial Aerodrome Committee Inc.***

    1. Objecting to 'special events on public land' being permitted as exempt development because there is no strategic report or study to justify claims the current arrangement has "*proved to be protracted and ineffectual*"; it is far too broad a power to be given to Richmond Valley Council; it removes a clear mechanism for accountability which is required for the current council [sic].
    2. Requests a public hearing.
    3. Requests the State Heritage listed Evans Head Memorial Aerodrome being given a Special Purposes zoning.

    Comments

    - The Planning Proposal identifies that Council currently has an Events Manual. This manual is used by Council to assess events for compliance with Council's requirements before it will grant owner's authority to conduct the event on public land. The need to also obtain development consent for such events applies needless red tape through a dual consent process. Council's fall-back position is that owner's consent can at any time be withdrawn.
    - See below for comments on holding a public hearing.
    - Council cannot, even if it wanted, add additional LEP amendments to this Planning Proposal. The suggested Zoning of the Evans Head Aerodrome will be held over for consideration as part of future LEP amendments.

A copy of all submissions have been circulated to each Councillor with the business paper.

Consultation

The Gateway Determination from the Department of Planning and Environment required consultation with the following authorities:

- NSW Department of Primary Industries in relation to potential impacts on agricultural activities;
- NSW Rural Fire Service; and
- NSW Office of Environment and Heritage.

It also required the Planning Proposal be publicly exhibited for a minimum of 28 days and in accordance with *A Guide to Preparing Local Environmental Plans*.

This consultation has been undertaken.

Public Hearing

The Gateway Determination has determined that, pursuant to section 56(2)(e) of the Environmental Planning and Assessment Act, a Public Hearing is not required. Notwithstanding, section 57(5) provides that if:

> "*(a) a person making a submission so requests, and (b) the relevant planning authority considers that the issues raised in the submission are of such significance that they should be the subject of a hearing, the relevant planning authority is to arrange a public hearing on any issue whether or not a person has made a submission concerning the matter.*"

It is not considered the issues raised by the submission are of such significance to warrant a public hearing. However, Dr Gates has an opportunity to present his concerns to Council via Public Access at the Ordinary Meeting.

Conclusion

Council is in receipt of four submissions on Planning Proposal PP2015/01. Issues and concerns raised within these submissions have been itemised in this report. Several changes to the Planning Proposal are recommended.

Council currently has an Events Manual which outlines all requirements for events proposed on Public Land and this will be reviewed appropriately to provide suitable direction and prescription for when an event may be deemed to be 'exempt' development. This review is intended to occur immediately upon notification that the proposed provision for such development within the LEP is realised.

A public hearing is not warranted as the issues raised are not considered to of sufficient significance.

14.10 DRAFT COMPANION ANIMALS MANAGEMENT PLAN - FOR PUBLIC EXHIBITION

Responsible Officer:
Paul Radnidge (Manager Assessment, Environment and Regulation)

RECOMMENDATION

Recommended that Council endorse the draft Companion Animals Management Plan to be placed on public exhibition for a period of one month and that a further report be provided to Council after the exhibition period.

171115/ 15 RESOLVED (Cr Morrissey/Cr Humphrys)

That the above recommendation be adopted.

FOR VOTE - All Council members voted unanimously.

Executive Summary

Council adopted a Companion Animals Management Plan on 16 November 2004. The Plan was prepared in response to the NSW State Government bringing into effect the Companion Animals Act and Regulations in 1998.

The legislation places a high level of responsibility on local government to develop a comprehensive plan for the management of companion animals (dogs and cats) in consultation with the broader community.

A Companion Animals Management Plan provides the means for Council to fulfil its responsibilities under the legislation, by determining relevant objectives and priorities along with a clear program of implementation. The Companion Animals Management Plan recognises that companion animals are part of the community, contributing to the community's quality of life and ensuring the needs of animals and their owners are accommodated, while recognising the differing needs of all members of the community.

The Companion Animals Management Plan has been reviewed and updated for the next three years (2015–2018) with an action for it to be reviewed next prior to 31 May 2018.

Community Strategic Plan Links

Focus Area 3 Community and Culture – Long Term Goal 3.3 Community Health and Wellbeing and Social Inclusion and Focus Area 4 Recreation and Open Space - Long Term Goal 4.3 Manage Public Lands and Resources for the Community Benefit.

Budget Implications

Nil.

Report

Council's Companion Animal Management Plan was adopted in 2004 and was prepared in accordance with the New South Wales Office of Local Government Guidelines.

Although the Guideline document is not mandatory and only a guideline, development of a Companion Animals Management Plan provides a means for Council to fulfil its responsibilities under the *Companion Animals Act 1998* (the Act) and sets out Council's objectives and priorities for the management of companion animals along with an action plan to be implemented.

Responsibilities for implementation and compliance of the Act in the Richmond Valley Local Government Area is within Council's Environment and Regulatory Control team's portfolio and forms a critical and major component of the day to day operational activities of Rangers.

The Act strives to make a balance between those in the community who own companion animals and also those who do not.

This is the first time a review of Council's 2004 Companion Animals Management Plan has been carried out. The review has not made any significant changes to the broader focus of the Plan. Much of the Plan is still relevant and addresses the needs of all groups in the community, where possible, to help achieve a harmonious co-existence of these groups.

The review has brought the Companion Animals Management Plan up to date with respect to legislative changes made to the Act and any infrastructure/facility improvements or changes related to companion animals. A copy of Council's revised Companion Animals Management Plan has been circulated separately to Councillors.

The document has been streamlined to be more succinct and reader friendly and the action plan made relevant for the upcoming three year period.

Consultation

It is proposed the draft Companion Animals Management Plan be placed on public exhibition for a period of one month. Any submissions received during this period will be considered for inclusion in a final draft for further reporting and adoption by Council.

Conclusion

Council's Companion Animals Management Plan has not been reviewed since it was adopted in 2004. Although the main focus of the document is still relevant recognising both the social benefits of companion animals and the problems caused by poorly controlled animals, there have been changes to the Act and upgrades to facilities related to companion animals in that time.

In addition much of the data and statistics referred to in the 2004 Companion Animals Management Plan are out of date. The reviewed Plan brings the document up to date, streamlines it to make it easier to read and amends the action plan to ensure it is relevant for the next three year period.

A draft Companion Animals Management Plan is now presented to Council, based on a review of the 2004 Plan, to be placed on public exhibition for one month. A further report will be provided to Council in regard to the outcome of the exhibition period with the aim of the Plan being adopted for implementation.

15 MATTERS FOR INFORMATION

RECOMMENDATION

Recommended that the following reports submitted for information be received and noted.

171115/ 16 RESOLVED (Cr Morrissey/Cr Mustow)

That the above recommendation be adopted.

FOR VOTE - All Council members voted unanimously.

The Chief Executive Officer highlighted for Council and the community the importance of the changes to be implemented from the speed zone reviews in the North Casino and the Fairy Hill areas (Item 15.5).

15.1 PUBLIC WIFI IN CASINO, EVANS HEAD AND WOODBURN

Responsible Officer:
Vaughan Macdonald (Chief Operating Officer)

Report

Council's Community Strategic Plan and Special Rate Variation provided for the installation of public WiFi into our towns. $150,000 was provided for over three years. It is planned to switch on the free public WiFi service in the Casino, Evans Head and Woodburn CBDs by the forthcoming Christmas holiday period.

The service is designed to allow tourists and locals to access the internet and to encourage new opportunities for businesses. The WiFi service will be available for use 24/7.

To provide the WiFi coverage, Casino will have 10 access points, Woodburn 3 access points and Evans Head will have 5 access points throughout the CBDs.

Council is liaising with the local businesses that have been identified as ideal locations for the service to get their approval to host a WiFi portal. These devices will be unobtrusive. A dedicated ADSL line will be installed at no cost to these businesses.

The installation will be undertaken by service provider VTS IT in partnership with Telstra. All installation and running costs will be met by Council. Council will monitor usage of the network and make any necessary adjustments and improvements to the service provided. Restrictions on undesirable content and download limits will be in place for individual devices.

To access the service users will have to login via a landing page on Council's website. Access to real time monitoring of the usage that runs the service will be available which will provide opportunities for Council to communicate events and activities in Richmond Valley and provide potential marketing opportunities for Council and local businesses.

Council is also investigating providing WiFi in the Coraki CBD. This would roll out in the New Year, once it is proved to be feasible.

Community Strategic Plan Links

Focus Area 2 Local Economy – Long Term Goals 2.1 Business, Industry and Agriculture and 2.3 Tourism and Promotion and Focus Area 6 Transport and Infrastructure - Long Term Goal 6.1 Roads, Drainage and other Infrastructure Asset Classes.

Budget Implications

Funding for the Public WiFi is included in Council's capital works program.

Consultation

The installation of Public WiFi is a commitment under the Community Strategic Plan. Council is currently consulting with local businesses to plan the installation of the service and leverage its benefits.

15.2 CODE OF CONDUCT COMPLAINTS STATISTICS REPORT

Responsible Officer:
Vaughan Macdonald (Chief Operating Officer)

Report

In accordance with clauses 12.1 and 12.2 of the Model Code of Conduct the Complaints Coordinator is required to report complaints statistics to the Office of Local Government and to Council within three months of the end of September each year.

The Chief Operating Officer has the authority to carry out the functions of the Disclosure's Officer under the Public Interest Disclosures Act 1993 and in accordance with Council's Internal Reporting Policy.

The Code of Conduct Complaints Statistics Report for the period 1 September 2014 to 31 August 2015 is included in this report for the information of Council.

Community Strategic Plan Links

Focus Area 7 Governance and Process - Long Term Goal 7.5 Sound Governance and Legislative Practices.

Office of Local Government

Model Code of Conduct Complaints Statistics

Reporting Period: 1 September 2014 - 31 August 2015

Date Due: ***31 December 2015***

To assist with the compilation of the Your Council publication it would be appreciated if councils could return this Report by 30 November 2015

Survey return email address: ***codeofconduct@olg.nsw.gov.au***

Council Name:	Richmond Valley Council

Contact Name:	Vaughan Macdonald
Contact Phone:	266600267
Contact Position:	Complaints Coordinator
Contact Email:	vmacdonald@rvc.nsw.gov.au

All responses to be numeric

Where there is a zero value, please enter 0

Enquiries: **Performance and Compliance Team**
Office of Local Government
Phone: (02) 4428 4100
Enquiry email: olg@olg.nsw.gov.au

Model Code of Conduct Complaints Statistics
Richmond Valley Council

Number of Complaints

1	a	The total number of complaints **received** in the period about councillors and the general manager under the code of conduct	0
	b	The total number of complaints **finalised** in the period about councillors and the general manager under the code of conduct	0

Overview of Complaints and Cost

2	a	The number of complaints **finalised at the outset** by alternative means by the general manager or Mayor	0
	b	The number of complaints **referred to the Office of Local Government** under a special complaints management arrangement	0
	c	The number of code of conduct complaints **referred to a conduct reviewer**	0
	d	The number of code of conduct complaints **finalised at preliminary assessment** by conduct reviewer	0
	e	The number of code of conduct complaints **referred back to GM or Mayor** for resolution after preliminary assessment by conduct reviewer	0
	f	The number of finalised code of conduct complaints **investigated by a conduct reviewer**	0
	g	The number of finalised code of conduct complaints **investigated by a conduct review committee**	0
	h	Number of finalised complaints investigated where there was found to be **no breach**	0
	i	Number of finalised complaints investigated where there was found to be **a breach**	0
	j	Number of complaints referred by the GM or Mayor **to another agency** or body such as the ICAC, the NSW Ombudsman, the Office or the Police	0
	k	Number of complaints being investigated that are **not yet finalised**	0
	l	The **total cost** of dealing with code of conduct complaints within the period made about councillors and the general manager including staff costs	$0

Preliminary Assessment Statistics

3	The number of complaints determined by the conduct reviewer at the preliminary assessment stage by each of the following actions:	
a	To take no action	0
b	To resolve the complaint by alternative and appropriate strategies	0
c	To refer the matter back to the general manager or the Mayor, for resolution by alternative and appropriate strategies	0
d	To refer the matter to another agency or body such as the ICAC, the NSW Ombudsman, the Office or the Police	0
e	To investigate the matter	0
f	To recommend that the complaints coordinator convene a conduct review committee to investigate the matter	0

Investigation Statistics

4	The number of investigated complaints resulting in a determination that there was **no breach**, in which the following recommendations were made:	
a	That the council revise its policies or procedures	0
b	That a person or persons undertake training or other education	0
5	The number of investigated complaints resulting in a determination that there **was a breach** in which the following recommendations were made:	
a	That the council revise any of its policies or procedures	0
b	That the subject person undertake any training or other education relevant to the conduct giving rise to the breach	0
c	That the subject person be counselled for their conduct	0
d	That the subject person apologise to any person or organisation affected by the breach	0
e	That findings of inappropriate conduct be made public	0
f	In the case of a breach by the general manager, that action be taken under the general manager's contract for the breach	0
g	In the case of a breach by a councillor, that the councillor be formally censured for the breach under section 440G of the Local Government Act 1993	0
h	In the case of a breach by a councillor, that the matter be referred to the Office for further action	0
6	Matter referred or resolved after commencement of an investigation under clause 8.20 of the Procedures	0

Categories of misconduct	
7 The number of investigated complaints resulting in a determination that there was a breach with respect to each of the following categories of conduct:	
a General conduct (Part 3)	0
b Conflict of interest (Part 4)	0
c Personal benefit (Part 5)	0
d Relationship between council officials (Part 6)	0
e Access to information and resources (Part 7)	0
Outcome of determinations	
8 The number of investigated complaints resulting in a determination that there was a breach in which the council failed to adopt the conduct reviewers recommendation	0
9 The number of investigated complaints resulting in a determination that there was a breach in which the council's decision was overturned following a review by the Office	0

15.3 GRANT APPLICATION INFORMATION - OCTOBER 2015

Responsible Officer:
Ryan Gaiter (Manager Finance and Procurement)

Report

This report provides information on grant applications submitted, grants that have been approved and/or received and grant applications that were unsuccessful for the month of October 2015.

Council received funding for one grant during the month of October totalling $344,000.00. Council applied for three grants during the month of October 2015. The grant projects totalled $387,922.00 and if approved will consist of $332,637.00 in grant funds with contributions of $55,285.00 required from Council. No grant projects were approved during the month of October.

Unsuccessful Grant Applications

Council was not notified as being unsuccessful with any grant applications during the month of October.

Grant Applications Submitted

Project ID	**10200**
Funding Body	State Library NSW
Funding Name	Public Library Infrastructure Grants 2015/16
Government Level	State
Project Name	Casino Library Re-Design
Project Value (excl GST)	$186,870.00
Grant Amount (excl GST)	$177,230.00
Council/Other (excl GST)	$ 9,640.00
Date Application Submitted	30 October 2015
Comment (if required)	N/A

Project ID	**10201**
Funding Body	State Library NSW
Funding Name	Public Library Infrastructure Grants 2015/16
Government Level	State
Project Name	RFID Implementation - RUCRL
Project Value (excl GST)	$151,210.00
Grant Amount (excl GST)	$108,635.00
Council/Other (excl GST)	$ 42,575.00
Date Application Submitted	30 October 2015
Comment (if required)	N/A

Project ID	**10202**
Funding Body	State Library NSW
Funding Name	Public Library Infrastructure Grants 2015/16
Government Level	State
Project Name	Kyogle Digital Promotions
Project Value (excl GST)	$49,842.00
Grant Amount (excl GST)	$46,772.00
Council/Other (excl GST)	$ 3,070.00
Date Application Submitted	30 October 2015
Comment (if required)	N/A

Grants that have been approved and/or received

Project ID	**10161**
Funding Body	Australian Government Attorney-General's Department
Funding Name	Safer Streets Programme
Government Level	Federal
Project Name	Richmond Valley CCTV Project
Project Value (excl GST)	$464,000.00
Grant Amount (excl GST)	$464,000.00
Council/Other (excl GST)	$ 0.00
Date Application Submitted	12 June 2014
Comment (if required)	N/A
Date Approved/Received	$344,000.00 received 23 October 2015
Total Funds Received To Date	$464,000.00 (funding complete)

Community Strategic Plan Links

Focus Area 7 Governance and Process – Long term Goal 7.1 Generate Revenue to Fund the Operations of Council.

Budget Implications

All Council funding required regarding the grants in this report has been included in the Richmond Valley Council budget.

15.4 WOODBURN EVANS HEAD ROAD - UPGRADE OPTIONS

Responsible Officer:
Andrew Leach (Manager Asset Planning)

Report

Council, at its Ordinary Meeting of 15 September 2015 resolved:

> *"That due to the recently approved development application for the extraction of up to 490,000 tonnes per annum of material from the Doonbah Quarry and Council's heavy haulage rate of $1.10 per tonne being collected to be spent entirely on the Evans Head Woodburn Road, staff prepare a report to Council researching ways that this road could be upgraded prior to the collection of these fees to minimise impacts to the existing road users, especially the school children who catch buses along this route at every driveway crossing. Further, that the report also address any issues, for and against, that may arise from the action of bringing forward expenditure in this way."*

This report refers to the 8.62km length of the road between the roundabout on the western township proximity of Evans Head and the Pacific Highway at Woodburn. The total replacement cost of this section is estimated at $2.88 million. (This figure is conservative and could be higher as the types of construction methods on a flood plain are varied and extensive.) Most recent condition survey information collected in 2013 shows the road as described below.

Assets within Richmond Valley Council are surveyed and given a condition rating. Condition assessments provide a quantitative grading from one to five, of the condition of all assets and are estimated as follows:

Condition One	Very good state for up to 45% of useful life.
Condition Two to Four	Good to poor state consume assets useful life from 45% to 90%.
Condition Five	Very poor state with 10% or less of the useful life remaining.

The pavement for this 8.62 km road section is:
- 89% condition two;
- 9.5% condition three and;
- 1.5% condition four.

The seal on this road section is rated:
- 5% condition one;
- 90% condition two; and
- 5% condition three.

These survey results indicate the road pavement and seal is currently in good condition with no outstanding issues. Since July this year, there has been $90,000 worth of major patching work carried out, which would have addressed pavement failures and improved condition eliminating the worst pavement areas.

The typical lifecycle of a spray seal is 15 years and a pavement is 45 years. It has been estimated with the possible introduction of 490,000 tonnes per annum the life of the seal would be shortened to 10.36 years, and the pavement 31.09 years; in simple terms, by approximately a third.

In assessing the life of road assets, the key considerations in this instance are as follows:

Consideration 1 – Pavement life

With the estimated life of a pavement at 45 years, and the condition based depreciation score of two for at least 90% of the road, it is reasonable to estimate under normal conditions there is 24.75 years probable pavement remaining before major rehabilitation works are required. By adding the 490,000 tonnes per annum this physical deterioration accelerates by one third to an estimated 16 years of remaining life.

Consideration 2 – Seal life

The same estimation can be used for the life of the spray seal. Fifteen years, with 95% at least in condition two sees a remaining life of at least eight to ten years. The quarry traffic reducing this life by one third would see the need for the road to be resealed in five to seven years.

These calculations/estimates are accepted infrastructure industry standards, but will require monitoring for deterioration or upholding condition. Considering the above information, it is reasonable to expect the road will be able to handle the traffic in the immediate future, with a program of inspections and maintenance to monitor the performance and maintain a level of service. Capital works can then be programmed around any section which deteriorates to expected maintenance intervention levels.

Consideration 3 – Extraction Quantities

Doonbah Quarry has an extraction licence for up to 490,000 tonnes per annum which at $1.10 per tonne equates to $539,000. This figure may fluctuate due to

demand and quantity extracted, therefore at this stage, Council cannot assume an annual figure to include in future budget allocation for capital works. The extraction data and forecasting information supplied by Doonbah Quarry will need to be collated to allow for realistic capital and financial planning. It is rational to assume a lesser quantity leaving the quarry will slow the rate of pavement deterioration.

Consideration 4 – Financial implications

Total replacement cost of the section of road is estimated at $2.88 million however could prove to be higher due to low lying conditions and soil types. To rehabilitate prior to the commencement of haulage would require funding or borrowings to be accessed and a major revision of the adopted capital works program. From a financial and strategic perspective this is not recommended as there are more pressing issues which are addressed in this report.

Consideration 5 – Construction methodology and timing

To physically undertake such works in association with the current capital works program would be beyond current resourcing and would most likely need to be carried out by contractors. By staging any required works over a number of years would enable the priority sections to be included into the 10 year plan and constructed by Council as deterioration deemed necessary. Current safe work practices in reasonable conditions would see 600m being constructed at one given time. The construction period for 600m of work is between four to six weeks. This equates to approximately 86 weeks effort to totally reconstruct the 8.62km. Allowing for wet weather, Christmas and holiday periods, it would be reasonable to estimate a total construction time of at least 18 to 20 months with the ability to treat multiple sections at once. This does not allow for survey and design for any proposed works; this work will need to be programmed as a separate project.

Further discussion and proposed actions

The following points have been considered by Council officers in preparing proposed action:

- The current road is in good condition for most part and does not require immediate work.
- If Council were to reconstruct prior to quarry traffic increasing there is significant unfunded cost and time to carry out such reconstruction.
- The majority (but not all) of the traffic will leave the quarry and travel west on a section of road 4.98km long. This should be the section monitored and prioritised for any works.
- The quantity extracted does not guarantee a prescribed figure returned to Council; i.e. no bankable income figures up front.
- Any funds collected from Doonbah Quarry need to go into a reserve fund so it can be accessed for any works required to be undertaken on the Woodburn Evans Head Road. This includes survey, design, geotechnical information, traffic counts etc.

- Design of future works should be determined by assessing the early stages of physical deterioration. Treatments such as asphalt overlays, stabilisation, pavement overlays, and two coat seals should all be considered as part of any rehabilitation works. A prescribed assumption that full depth pavement replacement is the only treatment may not necessarily be the answer. Such decisions can be made as the life of the pavement evolves.
- Consideration should be given to widened pavement, cycle lanes, passing or turning lanes which may be included in any future design works.
- A detailed flood plain study would benefit any proposed works, as raising a pavement by 150mm to 200mm may affect overland riverine flows during flooding.

Proposed Actions

Considering the above points, the following actions are suggested:

- A detailed condition survey is undertaken immediately so the current condition can be established as a baseline allowing physical deterioration to be monitored.
- Monitoring program established recording quarry traffic numbers and pavement seal condition. This to coincide with collection of fees from Doonbah Quarry and placed into reserve and used to establish a true level of operating condition.
- The information compiled through the monitoring program over the first 12 months is used to establish a proposed rehabilitation program for the Woodburn Evans Head Road. An engineering survey be undertaken concurrently allowing for designs for future works and accurate costings as required.
- Investigations into a flood plain study and details on how this will affect future designs and construction methods.
- Pavement maintenance in the form of major patching or crack sealing be undertaken as per usual to keep the road to an acceptable standard until the rehabilitation program is identified and programmed into Council's capital works program.
- The reserved funds to be utilised for both maintenance and monitoring short term and pavement replacement long term.
- Any change to road condition due to major weather events will require the program to be revisited or accelerated.

School Bus Issues

Concerns regarding the use of the road by quarry traffic at the same time as school buses has resulted in the Northern Joint Regional Planning Panel including a condition which:

> *"Requires the proponent to consult and reach agreement with the bus companies and Richmond Valley Council regarding operational and communication protocols for haulage trucks operating on the Woodburn Evans Head Road…."*

Council officers will consult with the proponent and bus companies to ensure the development of protocols surrounding a bus stopping safely on the road in conjunction with quarry traffic.

Following preliminary discussions with bus company representatives, the current accepted culture of catching a bus in rural areas is not from a designated bus stop, but hailing the driver from the side of the road wherever the passenger wishes to get on. This is the same practice wherever the passenger wants to alight from the bus. To attempt and place restrictions on this section of the road through the allocation of designated bus stops when all other bus routes in rural NSW undertake this practice is unreasonable. It would also create parking problems, and encourage pedestrians to walk distances on the road shoulder to return home.

Part of the development approval conditions is to restrict truck movements along the route during school drop off and pick up times as part of the abovementioned agreement. There is also a requirement to prepare a Truck Management Plan and Driver Code of Conduct which will address the responsibility of drivers and transport practices. The effective implementation of these conditions will assist and improve safety and awareness for quarry and bus traffic at the same time.

Related Issues

It should be noted whilst this report addresses concerns relative to the Woodburn Evans Head Road, a more pressing issue relates to the Coraki Woodburn Road. This road has sections which are in worse condition than the stretch to Evans Head, will be handling more quarry traffic than the Doonbah Quarry will generate, and quarry traffic will be using it sooner. The rock which is extracted from Petersons Quarry and Newmans Quarry will be used in the sub base and formation works of the Pacific Highway and therefore the road will become an issue prior to any major deterioration of the Woodburn Evans Head Road.

The same methodology suggested in this report for the Woodburn Evans Head Road should be used on the Coraki Woodburn Road to assess works required and the future planning and costing of works. A working group will be formed to establish a strategy which takes into account all aspects and how these relate to both sections of roadway. A report will be presented to Council recommending treatments, timing and resources required once the strategy is drafted.

Community Strategic Plan Links

Focus Area 6 Transport and Infrastructure - Long Term Goal 6.1 (Strategy 6.1.1 Maintain roads to an acceptable standard which ratepayers are prepared to fund).

15.5 IMPLEMENTATION OF ROADS AND MARITIME SERVICE SPEED ZONE REVIEW

Responsible Officer:
Andrew Leach (Manager Asset Planning)

Report

The Local Traffic Committee at its meeting on 14 August 2014 considered a number of requests for speed reduction on various streets/roads within the Richmond Valley local government area and recommended that Council formally request the RMS to conduct speed zone reviews of those streets/roads. The Minutes of the Local Traffic Committee Meeting, including the recommended speed zone reviews, were subsequently adopted by Council at its Ordinary Meeting on 16 September 2014.

The Roads and Maritime Service (RMS) has now conducted a review of speed zones and copies of the reports have been circulated separately to Councillors. The outcome of the review indicates a reduction of speed limits in most locations and the retention of current speed limits in others.

In addition, the RMS has, as part of the requested speed zone reviews, also carried out a review of similar locations close to Casino and at Coraki. This was undertaken by the RMS as a way of increasing efficiency. The findings and ultimately the speed zone adjustments are consistent with the rest of the requested reviews.

It is intended Council staff will implement these changes as soon as practical within the current works program and details of proposed works are set out below.

- The Gap Road, Woodburn - Reduced to 80kph from Pacific Highway to end of bitumen seal.
- Summerland Way near Leeville Public School - Retains existing speed of 100kph.
- Fairy Hill area various roads - Strongs Road, Hillside Drive, Harvest View Place, Marigold Drive, Zinnia Court, Daisy Place, Forest Grove Road, Douglas Crescent, View Street and Pleasant Place - All reduced from 100kph to 50kph.
- Collins Road, Fairy Hill - Retain existing speed of 100kph.
- Manifold Road from Naughtons Gap intersection to narrow bridge south of Smiths Lane - Reduced to 80kph.
- Manifold Road School Zone - Retained.
- Knoetzechs Road, North Casino - Retains existing rural default speed limit (100kph).
- North Casino, various roads, Scotts Road, Rodeo Drive, Musgraves Road, Nowlan Place, Flatley Place, Stocks Road, Dixon Place, Sparkes Place, Heathwood Place, Charolais Avenue, Horrie Drive, Jersey Drive, Stockman Close, Brumby Place, Brahman Way, Hereford Drive, Angus Place and Te Araowa Drive - All reduced from 100kph to 50kph.
- Queen Elizabeth Drive, Coraki - Retain its current speed limit of 80kph.

Community Strategic Plan Links

Focus Area 6 Transport and Infrastructure – Long Term Goal 6.1 Roads, Drainage and other Infrastructure Asset Classes (Strategy 6.1.1).

Budget Implications

There are no budget implications with the implementation of these speed zones as the RMS have indicated they will fund the supply and installation of all signs and lines, etc.

Consultation

Consultation was by way of the Local Traffic Committee.

15.6 DEVELOPMENT APPLICATIONS DETERMINED UNDER THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT FOR THE PERIOD 1 OCTOBER 2015 TO 31 OCTOBER 2015

Responsible Officer:
Paul Radnidge (Manager Assessment, Environment and Regulation)

Report

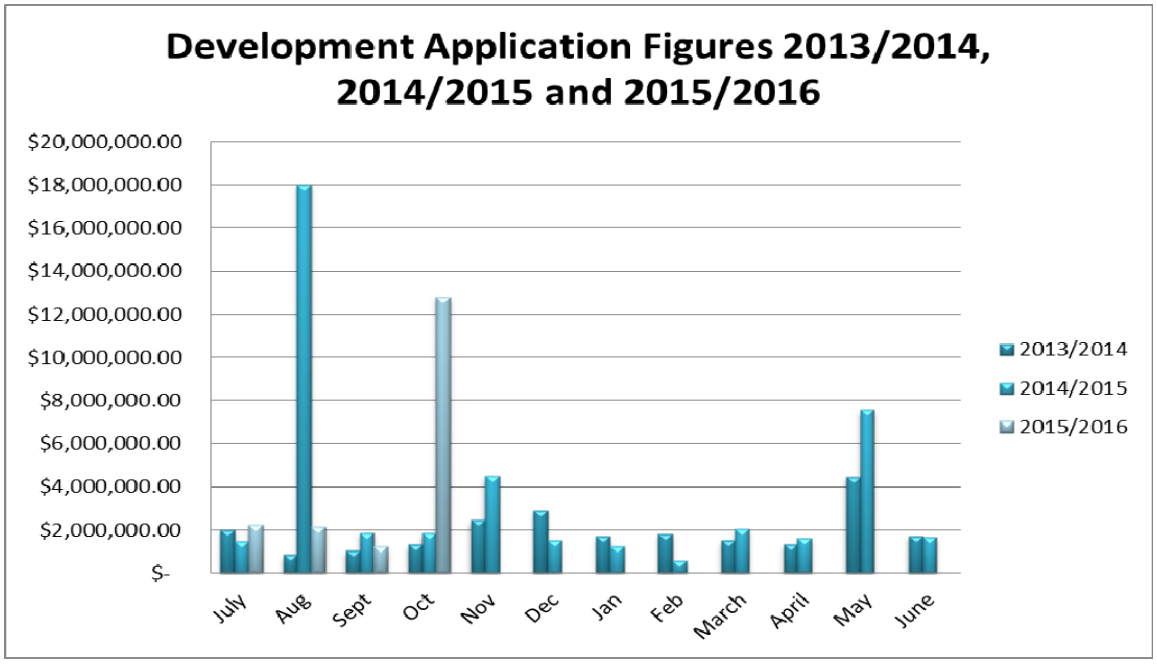
This report provides a summary of development activity on a monthly basis. All Development Applications determined in the month are outlined in this report, including Section 96 approvals, applications that are refused and withdrawn, and applications with no development value such as subdivisions.

Council receives a weekly summary of the status of applications (including all received). Council notifies all determinations of Development Applications in the local newspaper pursuant to Clause 101 of the Environmental Planning and Assessment Act 1979 (as amended) on a monthly basis.

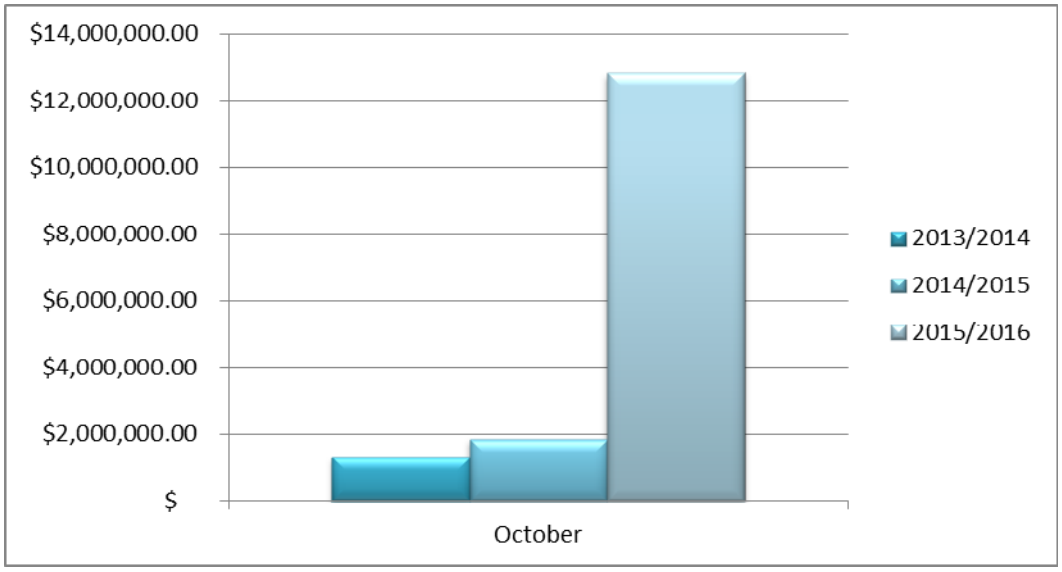
The total number of Development Applications and Complying Development Applications determined within the local government area for the period 1 October 2015 to 31 October 2015 was 23, with a total value of $12,820,754.00.

To ensure transparency, any Development Applications which we are aware of that are directly related to Councillors are highlighted on the Summary of Development Applications included at the end of this report.

In order to provide a better understanding of the value of Development Consents issued by Council over a 12 month period, a graph is set out below detailing this information.



The following graph provides a closer look at the value of Development Consents issued by Council for the reporting month of October.



Activity for the month of October

General Approvals (excluding Subdivisions, Section 96s)	18
Section 96	4
Subdivision	1
Refused	0
Withdrawn	0
Complying Development (Private Certifier Approved)	0
TOTAL	**23**

Community Strategic Plan Links

Focus Area 5 Rural and Urban Developments – Long Term Goal 5.1 (Strategy 5.1.1).

Summary of Development Applications determined under the Environmental Planning and Assessment Act for the period 1 October 2015 to 31 October 2015							
Application ID	Applicant	Owners	Location	Parcel Description	Development	Determination Date	Estimated Cost
DA2015/0249	Northern Co-Op Meat Co Ltd	Northern Co-op Meat Co Ltd	10615 Queensland Road, Casino	Lot 1 & Lot 2 DP 218608, Lot 1 DP 118537, Lot 2 DP 215499, Lot 1 DP 772608, Lot 2 DP 729431, Lot 3 DP 1164153	New Cold Chain Management Facility	1/10/2015	$10,519,652.00
DA2016/0031	NSW Rural Fire Service	Richmond Valley Council	Neville Bienke Memorial Drive, Casino	Lot 13 DP 1142601	Emergency Services Training Facility	1/10/2015	$63,000.00
DA2016/0034	Barker Studio	Richmond Valley Council	Booyong Street, Evans Head	Lot 493 DP 1143076, Lot 7033 DP 92651, Lot 4921 & Lot 4922 DP 1151963	Recreation Facility Outdoor - Tennis Courts and Clubhouse	15/10/2015	$440,000.00
CDC2016/0005	Narellan Pools Northern Rivers	SJ Brereton LM Beaumont	21 Stocks Road, North Casino	Lot 14 DP 1132283	Inground Fibreglass Swimming Pool	24/09/2015	$43,610.00
DA2016/0042	GP & P Moss	GP Moss P Moss	46 Richmond Street, Woodburn	Lot 3 DP 627092	Dwelling Extensions	1/10/2015	$120,000.00
DA2016/0045	Northern Rivers Tea Tree Pty Limited	Northern Rivers Tea Tree Pty Ltd	840 Main Camp Road, Myrtle Creek	Lot 17 DP 755607	Alterations and Additions to Homestead	7/10/2015	$200,000.00
DA2016/0046	Newton Denny Chapelle	IL Robinson	1030 Woodburn Coraki Road, Bungawalbin	Lot 14 DP 1040547 & Lot 46 DP 755603	Subdivision to create 2 lots being Lot 1 (31.87 ha) (Clause 4.2) and Lot 2 (6100 m2)	15/10/2015	$0.00
DA2016/0047	Metricon Homes QLD Pty Ltd	MR Knox KA Ellis	5 Echidna Place, Rileys Hill	Lot 3 DP 1152558	Dwelling with contained Garage	8/10/2015	$274,320.00
DA2016/0048	All Steel Garages & Sheds Pty Ltd	RS Hunt JA Hunt	88 Pratts Lane, North Casino	Lot 2 DP 122860	Dwelling	14/10/2015	$50,000.00
DA2016/0049	PJ & EA George	PJ George EA George	16 Cypress Street, Evans Head	Lot 1 DP 402548	Carport forward of building line, deck and shed addition	15/10/2015	$19,000.00
DA2016/0050	Clarence Valley Sheds	AA Ryan PE Ryan	75 Stapleton Avenue, Casino	Lot B DP 363487	Shed	10/10/2015	$10,330.00
DA2016/0051	Peter Brown Builders	OJ Keep	750 Sextonville Road, Dobies Bight	Lots 6, 7 & 140 DP 755602	Dwelling and Demolition of existing dwelling	26/10/2015	$150,000.00
DA2016/0052	RC & ED Bird	RC Bird ED Bird	22 Cumberland Street, Casino	Lot 92 DP 1071736	As-Built Reinforced Concrete Slab & Carport	19/10/2015	$6,000.00
DA2010/0330.03	RV Parks Australia Limited	RV Parks Australia Ltd	69 Light Street, Casino	Lot 5233 DP 1048084	Modification to Caravan Park - Additions and alterations to existing tourist facility	19/10/2015	$65,000.00
DA2016/0053	Metricon Homes QLD Pty Ltd	IG Rankin	23 Cypress Street, Evans Head	Lot 1 DP 610393	Dwelling with Attached Garage & Variation to DCP 2012	22/10/2015	$396,451.00

Application ID	Applicant	Owners	Location	Parcel Description	Development	Determination Date	Estimated Cost
DA2015/0141.01	DA Wilson	DA Wilson	169 Pacific Highway, Broadwater	Lot 1 DP 314353	Section 96 Modification	12/10/2015	Standard S96 Fee
DA2016/0054	SM & MA Underhill	SM Underhill MA Underhill	22 Wills Place, Casino	Lot 59 DP 1062404	Shed	19/10/2015	$19,000.00
DA2016/0055	SF Hoare	SF Hoare	14 Clay Avenue, Casino	Lot B DP 356683	Garage and demolition of existing garage	19/10/2015	$11,000.00
DA2016/0056	Professional Planning Group	MJ Gray	43 Ivory Circuit, Casino	Lot 10 DP 1145076	Dwelling	19/10/2015	$273,391.00
DA2011/0064.04	Northern Rivers Drag Racing Incorporated	Richmond Valley Council	Neville Bienke Memorial Drive, Casino	Lot 13 DP 1142601	Exhibition Event (Drag Racing) - Four (4) events per annum between the months of March and October	19/10/2015	Standard S96 Fee
DA2007/0399.02	RW & JE Cusack	RW Cusack JE Cusack	62 Musgraves Road, North Casino	Lot 9 DP 1109802	Patio Addition	26/10/2015	Standard S96 Fee
DA2014/0141.01	MA & CL Smith	MA Smith CL Smith	10 Golf Links Road, Wooburn	Lot 2 DP 736780	Dwelling Alterations	13/10/2015	Standard S96 Fee
CDC2016/0008	Hayes Building Consultancy	KA Davies	33 Cassia Street, Evans Head	Lot 10 DP 833044	Housing Alterations and Additions	28/10/2015	$160,000.00

16 QUESTIONS ON NOTICE

Nil.

17 QUESTIONS FOR NEXT MEETING (IN WRITING)

No questions were asked for next meeting.

18 MATTERS REFERRED TO CLOSED COUNCIL

Nil.

19 RESOLUTIONS OF CLOSED COUNCIL

Nil.

The Meeting closed at 5.40pm.

CONFIRMED - 22 December 2015

CHAIRMAN

Attachment C

- Driver Code of Conduct

Driver Code of Conduct

Petersons Quarry – J32-1
Petersons Quarry Road, Coraki, NSW 2471

Quarry Solutions Pty Ltd ABN - 13 133 700 848
24a Ozone St Chinderah NSW 2487 – Ph. 0266 712 300

Quarry Solutions Pty Ltd recognises the need for safe, responsible and efficient transport of quarry materials in the interest of public benefit and safety. Any truck driver who enters or leaves the Petersons Quarry is expected to respect the community in which they drive, and adopt the following code of conduct.

Objective

- Maximise safety in road haulage.
- Minimise the impact of trucks on other road users and the community.

Drivers Code of Conduct

- Sign on to the Daily Prestart at the weighbridge each morning or on first entry into site.
- Strictly comply with all traffic rules and regulations
- Report all incidents and accidents no matter how minor
- Ensure there is no loading over registered gross mass
- Appropriately cover/secure loads as and when required
- Ensure all drawbars, tailgates and side combing rails are cleaned
- Encourage professional and appropriate use of two-way radios
- Comply with all posted speed limits on all roads
- Ensure you comply with the 40KPH school Zones and keep a 50 metre distance from all school buses travelling in your direction, whether the bus is moving or parked
- Drive in a manner at all times that is in accordance with road conditions
- Use horn only when appropriate to do so
- Respect the environment by not littering
- Decrease truck speeds to minimise dust and noise around private dwellings, road works and stationery vehicles
- Be aware that we start early and not all the community start as early as we do
- Reduce engine brake noise to respect the community through which they are driving
- In the event of an environmental incident, make sure every endeavour is taken to contain and minimise environmental harm
- Remain calm and courteous when in contact with other road users and members of the public
- Acknowledge courteous acts by others

Non-compliance with this code of conduct will result in a review by the Production Manager and may result in a refusal to load in future.

Driver Code of Conduct

Petersons Quarry – J32-1
Petersons Quarry Road, Coraki, NSW 2471

Quarry Solutions Pty Ltd ABN - 13 133 700 848
24a Ozone St Chinderah NSW 2487 – Ph. 0266 712 300

SIGN OFF FOR Quarry Solutions Driver Code of Conduct

We the undersigned, confirm that this ***Driver Code of Conduct*** has been explained and its contents are clearly understood and accepted.

DATE	*NAME*	*SIGNED*	*COMPANY*	*TRAINER*