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**Item 3     Gunlake Quarry – Roadwork Issues  
              (Attachment)**

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**Reporting Officer**

Manager Engineering Services – Ian Aldridge

**Purpose of Report**

To advise of two issues raised by Gunlake Quarries regarding roadworks associated with the transport of their material.

**Report**

In 2009 a Deed of Agreement between Council and Gunlake Quarries was entered into which recognised the material public benefit of roadworks to be completed in association with the Gunlake Quarries project. The required road works included the construction of a roundabout at the intersection of Brayton Road and George Street, Marulan plus construction of the Red Hills Road Bypass Road. The road maintenance contribution payable to Council was reduced to reflect these roadworks.

The following issues have now arisen in relation to the upgrade works and the terms of the Agreement between the parties.

- **Request to Modify the Development Consent**  
The Consent for the project issued by the Department of Planning requires vehicles approaching the quarry from the north to exit the Hume Highway into Marulan, perform a u-turn at the Brayton Road / George Street intersection and then return northbound to the highway to the Red Hills Road exit. The applicant is required to construct a roundabout at the Brayton Road / George Street intersection to facilitate this u-turn manoeuvre.

With the recent completion of the highway overpass just to the south of Marulan (i.e. Lynwood Interchange) the applicant has applied to the Department to modify the Consent to allow the u-turn manoeuvre to take place at the overpass (refer Attachment). This would alleviate the necessity for a roundabout at Brayton Road / George Street intersection.

There is no objection to this proposal, however there is some disadvantage to Council in that the traffic facility of the roundabout will not be constructed the cost of which was reflected in the reduced road maintenance contribution payable under the agreement.

The estimated cost of the roadworks associated with the development is \$3M with \$600,000 being attributed to the roundabout (i.e. 20%). With the roundabout no longer needed the agreed contribution rate for road maintenance should be adjusted. This would raise the contribution rate from the agreed 0.028 cents per tonne per kilometre to 0.0313 (based on 2009 figures).

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- **Road materials for use in the construction of Red Hills Road Bypass**

The applicant has also requested (refer Attachment) to use his own material as roadbase (i.e. road making gravel) despite not complying with Council's standards. The test results indicate that the material fails to meet the measures for engineering strength.

Council's Standards for Engineering Works 2009 has been based on Aus-spec for some 10 years. Aus-spec has been adopted on an Australian-wide basis by many Councils and reflects industry standards. Council's standards are applied to all developments.

The applicant has offered to increase the maintenance defects liability period from 1 year to 2 years if allowed to use this material. In return however the applicant argues that the road maintenance contribution should be waived during this period. If this approach is to be considered then perhaps a minimum 5 year maintenance defects liability period should apply with payment of the maintenance contribution (which is in effect for future road rehabilitation) from date the infrastructure is used.

In terms of the road material no justification has been provided for the proposed substitution, however, it is plain that it would yield a cost saving for the applicant.

This same material has previously been used in Union Street reconstruction in Goulburn and failed. Gunlake's assertion that the failure was caused by the sub grade (the natural material beneath the road base) was in poor condition is not supported. In this instance staff considered the failure due to the plasticity index of the gravel being too high.

A further assertion by Gunlake that any structural issues would be evident early on in its life is also refuted and is not borne out by engineering practice. The life of a pavement is based on the number of standard axles it bears and therefore a design life of 25 years may be shortened to 15 or 10 or 5 years if substandard material is used.

Council's standards allow for the modification of the material by the addition of lime in order to increase its engineering strength and Gunlake have been advised this would be acceptable.

As in most matters involving engineering or building works, the quality of the material used is critical. In this case, it is particularly so since heavy vehicles will be using the road on a daily basis and Council will become responsible for ongoing maintenance after the initial 12 months maintenance defects liability period. Accepting substandard roadbase material could set an undesirable precedent whereby other developers to vary Council's standards.

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It is recommended that no objections be raised to the modification request subject to the road maintenance contribution (for future road rehabilitation) being adjusted to reflect the reduced road works. In relation to the road materials these should comply with Council's engineering requirements.

### **Budget Implications**

Accepting substandard roadbase material would increase Council's maintenance burden.

### **Policy Considerations**

<b>Community Strategic Plan</b>	
<b>Goal:</b>	Quality Infrastructure
<b>Key Direction:</b>	1 – Infrastructure
<b>Strategy:</b>	1.3.1 – To provide and maintain safe and serviceable public works including roads management
<b>Delivery &amp; Operational Plan</b>	
<b>Action</b>	Continue operation, maintenance and improvements of our existing services including roads management
<b>Is the project of a capital nature?</b>	Yes
<b>If yes, is the project identified in the Capital Works Program?</b>	Not included in the Capital Works Program as these are works required to be undertaken in conjunction with a Development Consent

- Standards for Engineering Works 2009
- Section 94 Development Contributions Plan 2009

### **Recommendation**

That:

- A. The Department of Planning & Infrastructure be advised there are no objections to the proposed use of the overpass instead of a roundabout for the u-turn manoeuvre, subject to the road maintenance contribution being raised to \$0.0313 per tonne per kilometre (2009 figure) to account for the loss of the public benefit of the roundabout.
- B. The applicant be advised that roadbase materials must comply with Council's Standards of Engineering Works 2009.

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**Motion**

**Cr O'Neill /Cr Banfield**

*That Items 3, 4, 5, 6, 7 and 8 be deferred to a future Capital Works Workshop*

*Motion was withdrawn*

**Resolved 12/403**

**Cr O'Neill /Cr Banfield**

*That:*

- A. The Department of Planning & Infrastructure be advised there are no objections to the proposed use of the overpass instead of a roundabout for the u-turn manoeuvre, subject to the road maintenance contribution being raised to \$0.0313 per tonne per kilometre (2009 figure) to account for the loss of the public benefit of the roundabout.*
- B. The applicant be advised that roadbase materials must comply with Council's Standards of Engineering Works 2009. #####*