



13 December 2016

SF2014/075188
CR2016/004706
DC

Resource Assessments
NSW Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Thomas Watt

GRESFORD ROAD (MR101): MARTINS CREEK QUARRY EXTENSION PROJECT– SSD
5850

I refer to your email dated 10 October 2016 regarding the above project.

Roads and Maritime understands that the proposal involves:

- Expanding the existing extraction area, including clearing 37.8 hectares of vegetation;
- Extracting up to 1.5 million tonnes of hard rock material per annum;
- Increasing the hours of operation;
- Transporting processed material to market by road trucks and trains;
- Rehabilitating the site; and
- Road works including new intersection onto Dungog Road and intersection upgrades proposed on the haulage routes.

Roads and Maritime understands that the proposal will generate up to 80 truck movements per hour (40 in/40 out) during morning peak periods. It is further understood that the proposed haulage routes include Dungog Road, Gresford Road, Tocal Road, Paterson Road and Seaham Road which form part of the classified regional road network under the care and control of the local Council. The proposed road upgrades should be referred to Dungog Shire Council for comment as Council is responsible for all roads on the regional road network.

In accordance with the *Roads Act 1993*, Roads and Maritime has powers in relation to road works, traffic control facilities, connections to roads and other works on the classified road network. Roads and Maritime concurrence is required for connections onto these roads with Council consent, under Section 138 of the Act.

Roads and Maritime Services

Roads and Maritime Response

Roads and Maritime has reviewed the information provided, including the Traffic Impact Assessment (TIA) prepared by Seca Solution dated August 2016 and the Environmental Impact Statement by Monteath & Powys dated September 2016.

Roads and Maritime provides the following comments to assist the Department of Planning and Environment in the determination of the development proposal:

Proposed Access to the Quarry

- Proposed new access from the quarry which will include a new bridge over the railway line and new road intersection at Dungog Road.
- The proposed CHR intersection does not comply with the Austroads Guide to Road Design. The length of the proposed CHR is 100m which is insufficient. The proposed lateral movement length for the CHR of 95m is insufficient. The sign posted speed is 100km/h and according to Roads and Maritime Supplement to Austroads Guide to Road Design Part 3: Geometric Design Version 2.0 the design speed is 110km/h.
- There does not appear to be any provision for a left turn lane into the proposed access road.
- There does not appear to be any provision for an acceleration lane for the left turn lane out of the proposed access road.
- The design does not provide information to determine if safe intersection sight distance for all movements at the intersection, and approach sight distance to the intersection from the access road approach has been achieved.
- Turning paths should be shown for the appropriate design vehicles on all movements as supplementary information to the drawings.
- The intersection design should clearly identify and consider the location of existing property access points adjacent to the proposed intersection.
- The proposed intersection treatment will result in either (or both) the northbound and southbound travel lane being shifted closer to roadside hazards such as trees and property fence. The design should have consideration for the application of clear zones in accordance with Austroads Guidelines.
- There is an existing open table drain on both side of the carriageway at various locations that may be impacted with the proposed work. Details of the open drain and a drainage provisions should be considered in the design.
- The consent authority should consider requesting additional design details to allow for the proper assessment of the strategic design.
- Refer to RMS CADD Manual Section 3.5 Road Design Part 8.1 Strategic Drawings. Alignment plans, longitudinal sections, typical cross sections, and preliminary cross sections are required.

Proposed Haulage Route(s)

- The TIA outlines the proposed haulage routes:
 - Martins Creek Quarry – Grace Avenue – Dungog Road – Gresford Road – Tocal Road – Paterson Road – Flat Road (Route 1)
 - Martins Creek Quarry – Grace Avenue – Dungog Road – Gresford Road – Butterwick Road – Clarence Town Road – Brandy Hill Drive – Seaham Road (Route 2)
 - Martins Creek Quarry – Grace Avenue – Dungog Road – Gresford Road – Tocal Road – Paterson Road – Belmore Road (Route 3)
- The TIA states that the proposed future expansion of the quarry will require the majority of traffic to use Route 1 and Route 2.

Gostwyck Bridge (all Haulage routes)

- Gostwyck Bridge is a steel truss bridge under the care and control of Roads and Maritime.
- Roads and Maritime is not aware of any discussions with the traffic consultant as noted in Section 2.4.2 of the TIA. The proponent should provide evidence of any discussions with Roads and Maritime regarding the proposal and the heritage listed bridge as noted in the Traffic Impact Assessment.
- The documentation provided in the EIS does not address the impact of additional truck movements on the bridge structure.
- Roads and Maritime considers that the bridge in its current form will be adversely affected by the increased level of traffic and high frequency of truck movements proposed.
- Gostwyck Bridge currently operates as a single lane bridge with give way provision. Roads and Maritime considers with increased traffic volumes that a dual lane two-way bridge would be required at this location to comply with current design guides.

Intersection upgrades

- The TIA outlines the proposed intersection upgrades on the classified (Regional) road network required as a result of the proposal, as follows:
 - Proposed new intersection onto Dungog Road (comments above).
 - Upgrade of the Dungog Road / Gresford Road intersection to include a channelised right turn lane (CHR) and auxiliary left turn lane into Gresford Road.
 - Proposed physical separation for vehicles on King Street (Gresford Road) at the intersection with Duke Street in Paterson.
- The proposed road upgrades should be referred to Dungog Shire Council for comment as Council is responsible for all roads on the regional road network.
- The consent authority should consider requesting concept plans for the proposed upgrades in accordance with the Austroads Guide to Road Design and based on

detailed survey which clearly shows property boundaries to ensure that the proposed upgrades can be accommodated within the road reserve.

- The sign posted speed is 50km/h on King Street and according to Roads and Maritime Supplement to Austroads Guide to Road Design Part 3: Geometric Design Version 2.0 the design speed is 60km/h.
- Turning paths should be shown for the appropriate design vehicles on all movements as supplementary information to the drawings.
- The proposed physical separation (pedestrian refuge) on King Street should consider any necessary property adjustments to allow for the swept path of the design vehicle in consultation with Council to determine the minimum verge width for footpath, sign posting, and utilities.
- The design for the proposed physical separation (pedestrian refuge) on King Street should clearly identify and consider the location of existing property access points.
- Council should consider the impact on street parking along King Street and Duke Street as a result of the proposed physical separation, as shown in Fig 8 of the *Engineering & Transport Report by Accor Consultants*.
- The proposed CHR intersection does not comply with the Austroads Guide to Road Design. The length of the proposed CHR is 100m which is insufficient.
- The sign posted speed is 110km/h on Gresford Road and according to Roads and Maritime Supplement to Austroads Guide to Road Design Part 3: Geometric Design Version 2.0 the design speed is 110km/h.
- The proposed intersection treatment will result in either (or both) the northbound and southbound travel lane being shifted closer to roadside hazards such as trees and property fence. The design should have consideration for the application of clear zones in accordance with Austroads Guidelines.
- There is an existing open table drain on both side of the Gresford Rd carriageway at various locations that may be impacted with the proposed work. Details of the open drain and a drainage provisions should be considered in the design.
- The consent authority should consider requesting additional design details to allow for the proper assessment of the strategic design.
- Refer to RMS CADD Manual Section 3.5 Road Design Part 8.1 Strategic Drawings. Alignment plans, longitudinal sections, typical cross sections, and preliminary cross sections are required.

State Road Network

- The TIA has undertaken an intersection analysis using SIDRA for intersections where the haulage route meets the state road network at Pitnacree Road/ Melbourne Street and Melbourne Street / New England Highway (route 1).
- The TIA has not carried out any analysis of state road intersections as part of route 2 and route 3.
- Roads and Maritime considers that the TIA should provide intersection analysis of all intersections which impact on the classified state road network.
- Roads and Maritime requests that the SIDRA files are provided for review and assessment.

If you require further advice please contact Hunter Land Use on (02) 4924 0688 or development.hunter@rms.nsw.gov.au



Regards

Peter Marler
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Hunter Region

Cc General Manager
Dungog Shire Council

