

20170640 6th August 2020

Richard Harris 165 Caloola Halt Road Megalong Valley NSW 2785

Attention: Richard Harris

Dear Richard

RE: Access Road Inspection – Caloola Halt Road, Megalong Valley NSW 2785

At your request we have inspected Caloola Halt Road in respect of Section 5.3.6 Access and Traffic in your current DA 114/19 Development Assessment Report with Lithgow City Council and provide the following report:

The inspection was undertaken on Wednesday 5th August 2020 with cold but clear conditions. Recent rainfall was reported in the previous week with some drainage lines still running.

Chainages were read from the entrance gate on Caloola Halt Road just off Ward Road with the vehicle speedometer.

Gravel depth was not measured on the day.

<u>Chainage</u> <u>Formation Gravel Width</u> <u>Condition & Comments</u>

- 0 Entrance gate. 3.1m Good. Drainage & mitre drains good.
- 40 Longitudinal grade 9.1 degrees.
- 200 4.0m Good. Drainage & shape good with minor rutting & corrugated sections within the first 100m.
- 350 Longitudinal grade 7.8 degrees.
- 400 4.0m Good. Drainage good. 40m flat section & potholing requires correctional shaping. 225mm PCV culvert good condition.
- 400-600 Minor pavement & drainage erosion in some sections. Correctional shaping of pavement and drainage required.
- 500 Longitudinal grade 6.6 degrees.
- 700 4.9m Good. No scour, good shape, minor drainage correction/maintenance required. Longitudinal grade 5 degrees.
- 750 4.0mm Good. 375mm RCPC. Inlet good, outlet 10% sediment.

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Chainage **Formation Gravel Width Condition & Comments** 830 4.0m Good. Minor corrugations. 375mm RCPC inlet and outlet very good. 920 3.7m Good. Minor corrugations, good shape with some minor reshaping required. 300mm Plastic culvert, inlet & outlet good. 980 Minor drainage grade correction required. 1120 3.4 Good. Minor drainage correction required. 1200 3.5m Good, 300mm x 300mm box culvert inlet concreted good condition. 3.4m Good condition, shape. No erosion. 225mm PVC cuvert in 600mm x 600mm grated inlet pit. Concrete drains into pit. Pit drains west not under road. Very good condition. 1370 3.4m Good. 250mm plastic culvert inlet good, outlet 80% sed. 3.1 degree road longitudinal grade. 1500 3.4m Good shape & condition. Minor drainage scour LHS.

Good. Minor drainage correction LHS to remove

1626 Start of private property.

requiring filling.

3.5

1620

It was evident that the road is typical of a rural access road constructed in a single lane with central crown. The entire road is based on the in-situ granite material present which is suitable for this type of road.

sediment. 250mm plastic culvert. Inlet good, outlet good in paddock with tunneling behind headwall

Generally the first half of the road length is compliant with the required 4m formation width with the later half being typically 3.4m to 3.5m, well above the minimum 3m width recommendation.

Good drainage is present along the entire road with regular mitre drains and culvert crossings where required. Very good stable and consolidated grassed verges and road sides with shallow drains are present along much of the road.

The maximum longitudinal grade measured was 9.1 degrees at chainage 40 at the start of the road which is well within the required limits. Several other grade checks confirmed that all of the road is well within the required grades for longitudinal a crossfall shape.

Without detail survey information it is difficult to provide exact curve radius information however using online aerial images and our on-site inspection it is obvious that no curves along the road are below the minimum 6m inner radius. This information can be provided with further investigation.

Although there are no dedicated passing bays along the road, much of the road offers passing room via the stable verge areas if required. Numerous entrances and gateways also offer pull over areas.

In general the road is in good condition. A maintenance grade and roll with correctional shaping and crowning in some areas and some minor drainage shaping and cleanout will return the road to very good condition. Considering the erodible nature of granite material and the recent heavy rain it was surprising to see the minimal amount of erosion present. This would indicate generally the road and drainage is quite stable and only periodic maintenance required.

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Widening the later section of road to a 4m formation and providing passing bays would obviously require disturbing some of these stable established verges and is questionable as to the worth of this considering much of this area is presently trafficable for infrequent use. The current drainage patterns and verges are well consolidated, disturbing these areas will cause soil movement and potential erosion.



Start of Caloola Halt Rd looking North.

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Approximate Ch 40 looking North with minor corrugations. Good regular mitre drains.



Approximate Ch 400 looking South with minor corrugations. Stable verges and drains.

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Approximate Ch 400 looking North with several potholes.



Approximate Ch 700 looking East at minor erosion.

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Approximate Ch 700 looking West at minor erosion.



Approximate Ch 830 looking Northeast at minor corrugations. Stable verges.

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Approximate Ch 900 looking Northwest at minor corrugations and drainage shaping required. Stable verges and runoff.



Approximate Ch 1120 looking North at minor erosion and drainage shaping required. Stable verges and runoff.

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Approximate Ch 1200 looking North at very good stable drainage, road and verge areas.



Approximate Ch 1240 looking North at good road shape and condition. Stable verges and drainage.

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Approximate Ch 1500 looking North at minor drainage scour LHS. Good road shape & condition, stable verges.



Approximate Ch 1620 looking East at tunneling behind culvert stone headwall in property. Stable verge.

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I trust this information is satisfactory and please do not hesitate to contact me if you require further information.

Yours faithfully, CALARE CIVIL PTY LTD

Garry Cafe

Senior Technical Officer

Calare Civil Pty Ltd

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