

Technical Note

Project title Bromelton Energy and Resource Centre
Job number 293683-00
File reference BERC-ARUP-RFI-4-5-6
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Subject RFI 4, 5, 6 – Road considerations

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No. 4	Issue: Proposed intersection
Information Requested The Traffic Impact Assessment report submitted as part of the application material (dated 10 February 2025, reference BERC-ARU-BNE-TTTM-RPT-0002, version C) proposes primary access via a new four-way signalised intersection at Beaudesert Boonah Road and Recycling Street. According to Figure 6.6 and Appendix N of the submitted TIA report, the existing westbound lane on Beaudesert Boonah Road will be shifted to the south with pavement widening and tie back into the existing Beaudesert Boonah Road panel to the west that is under construction. It is currently unclear whether the proposed intersection will integrate with the current upgrade works at Mitchell Road that are currently underway and approaching completion. The proponent is requested to demonstrate that the proposed access intersection design and the interface can be achieved with the Mitchell Road upgrade under normal design domain. Additionally, the applicant should identify any need for design exceptions early, noting these will require approval by TMR’s Regional Director and, if unresolved, may delay the project at the road works application stage. <i>Note: Design drawings for the intersection works at Mitchell Road had been provided to Cleanaway previously that can assist with any integration works.</i>	

Response

Design drawings for the Mitchell Road intersection upgrade have now been incorporated into the intersection design package for the proposed Beaudesert Boonah Road / Recycling Street access. Refer Appendix N of Traffic Impact Assessment (BERC-ARU-BNE-TTTM-RPT-0002, Revision D).

A review of the interface between the proposed site access and the Mitchell Road upgrade has been undertaken within the normal design domain. Minor amendments to the BERC access intersection layout have been implemented, including adjustments to lane alignments, tie-in geometry, and pavement extents, to ensure a coordinated and functional integration with the approved Mitchell Road upgrade works. These refinements confirm that the proposed four-way signalised intersection can be accommodated without reliance on design exceptions. An as-built survey of the completed Mitchell Road works will be undertaken to inform detailed design of the 4-way intersection design.

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No. 5	Issue: Drawings of land dedication
Information Requested The land dedication to TMR for potential future road upgrade are shown in the submitted material to include dimensions to demonstrate that an additional lane (min 3.5m wide) and future verge (min 4.5m wide) is achieved. Appendix B2 Civil Engineering Drawings BERC-ARU-BNE-CICW-DRG-1612 notates the indicative position of the stormwater crossing under new junction. The land dedication for the Beaudesert Boonah Road signals will need to extend into the property to the tangent of the kerb returns. The extent of the proposed culvert (including headwalls) should be considered in the establishment of the land dedication. The proponent is requested to provide the electronic drawing files (.dwg, .12da) of the proposed access intersection to clarify the embankment and drainage implications of the proposed intersection and assist in the delivery / integration of a future four-lane upgrade of Beaudesert Boonah Road west of the railway. <i>Note: the proposed culvert (including headwalls) must be relocated outside of the land dedication area to ensure there are no future stormwater impacts on the state-controlled road planned upgrades and that these structures do not impede the delivery of the project.</i>	

Response

The intersection drawing (BERC-ARU-BNE-CICW-SKT-2010 refer Appendix N of Traffic Impact Assessment (BERC-ARU-BNE-TTTM-RPT-0002, Revision D)) has been updated to demonstrate the extent of land dedication to TMR required to accommodate a future four-lane upgrade of Beaudesert Boonah Road. The dedication width reflects provision for a minimum 3.5 m additional traffic lane and a minimum 4.5 m verge, consistent with TMR requirements. The land dedication boundary has also been extended to align with the tangent points of the proposed kerb returns for the signalised intersection.

The culvert location has been updated to ensure that the culvert and associated headwalls are located entirely within the land dedication area for the future intersection and outside of the existing road corridor area.

Updated electronic design files for the proposed intersection, including .dwg formats, have been provided with this response.

No. 6	Issue: Pavement impact assessment
Information Requested The Pavement Impact Assessment report submitted as part of the application material (dated 4 March 2026, reference 293683-69-ARU-00-CIPA-TNE-000001) includes road links where development traffic exceeds $\geq 5\%$ of background loading in the opening year (2032). The following state-controlled roads exceed the 5% threshold: • Beaudesert Boonah Road • Mount Lindesay Highway (Brisbane–Beaudesert) Assumptions such as 100% operational capacity from Day 1 and exclusive use of B doubles likely overstate pavement demand. However, the pavement impact assessment methodology aligns with the TMR Pavement Impact Assessment Guide. The assessment adopts the prescribed marginal cost methodology, correctly applies Standard Axle Repetitions (SARs), uses TMR provided road asset data, applies the 5% traffic loading threshold, and calculates pavement contributions over the required 20 year post opening period.	

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No. 6	Issue: Pavement impact assessment
	The assessment is considered conservative as it assumes 100% operating capacity from the start of the development operation. Furthermore, it assumes the largest vehicles to be B-double as the roads are currently approved for B-doubles. Should PBS vehicles (A double) be utilised in the operational stage, the number of vehicles may reduce. As a result, the proposed contribution rate per heavy vehicle may not reflect the flexibility the applicant is seeking for relating to contributions as indicated in the report. As such, contribution rate per tonne may potentially be more appropriate as the contribution required from the development because it relies on the actual operation capacity from the development on an annual basis regardless of the type and number of vehicles used. The proponent is requested to provide further information regarding potential contribution rate per tonne based on the assumed max operational capacity utilised in the PIA. All relevant details associated with the determination of the contribution rate per tonne must be provided. <i>Note: Whilst it is understood that there are assumptions made in the pavement impact assessment and there are factors that may materially influence the final pavement contribution value as the project progresses and more realistic operational capacity is known, it is important for the applicant to note that any conditions relating to pavement contribution at this stage can only be determined based on the information available to TMR.</i> <i>Should further information on waste contracts and vehicle fleet composition become available as the project progresses that will materially change the pavement impact expected, the applicant can lodge a change application to have the conditions relating to pavement contribution reviewed and revised to better reflect the actual operational capacity of the development.</i>

Response

The Pavement Impact Assessment (293683-69-ARU-00CIPA-TNE-000001 Revision B) has been updated to include the estimated contribution rate per tonne based on the assumed operational capacity utilised in the assessment (760,000 tpa). The methodology and assumptions used to determine the contribution rate per tonne have also been included within the updated assessment documentation (refer Table 5).