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Dear Deborah,

1 WILLS STREET, MALMSBURY

I refer to your request to provide traffic engineering advice in relation to a proposed residential subdivision at 1 Wills Street, Malmsbury.

In the course of preparing this letter, I have:

- Reviewed the proposed subdivision plan;
- Inspected the subject site using Nearmap and Google Maps aerial photographs;
- Addressed Council's Request for Further Information (RFI) Item 8, reproduced below:

RFI item 8

A Traffic Impact Assessment which examines the impact on transport movement, services and infrastructure, including public transport. This report should consider all the road upgrades and where the traffic will go in relation to your development. This may include where traffic may access onto Mollison Street. This report would ultimately be referred to Regional Roads Victoria for comment as well as Council's Engineering Team.

and

• Considered the traffic implications of the proposed development.

EXISTING CONDITIONS

The subject site is located on the eastern side of Wills Street in Malmsbury. A locality plan of the subject site is shown in **Figure 1** and an aerial photograph is provided in **Figure 2**.





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FIGURE 1: LOCALITY PLAN



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FIGURE 2: AERIAL PHOTOGRAPH OF LOCALITY

The site is located within a Farming Zone (FZ), and is subject to an Environmental Significance Overlay (ESO4) and a Heritage Overlay (HO148). The subject site has a total area of approximately 18,550 m² and is partially occupied by a single dwelling. Land to the



west of the subject site is residential in nature, while land to the south and east of the subject site is largely undeveloped.

Walsh Street, Wills Street and Mitchell Street all are unsealed roads under the control of Council.

Will Street, adjacent to the subject site, has a formed width varying between approximately 4.0m and 5.0m.

Mitchell Street currently terminates at Wills Street.

Walsh Street continues approximately 100 metres to the south-east of Wills Street to provide access to a property on the northern side of Walsh Street. Walsh Street has a formed width of approximately 3.4 to 4.3 m along the frontage of the subject site.

PROPOSED DEVELOPMENT

It is proposed to subdivide the subject site into 9 residential lots as shown in Figure 3.



FIGURE 3: PROPOSED SUBDIVISION LAYOUT



As shown in Figure 3, Mitchell Street and Walsh Street would be extended to the east to provide access to lots fronting those streets. Access to Lot 2 would be directly from Wills Street.

It is proposed that court bowls be provided at the eastern end of Mitchell Street and Walsh Street to facilitate vehicles (including service vehicles) turn around.

TRAFFIC GENERATION

Typically, low density residential lots in regional areas could be expected to generate (on average) 10 trips/dwelling per day, with up to 10% of daily trips occurring in each of the AM and PM peak hours.

The proposal includes 9 residential lots. At full occupancy, this equates to a total of 90 trips per day and up to 9 trips in each of the peak hours.

To determine peak hour traffic volumes, typical residential splits between entry and exit movements have been adopted, which are:

- AM peak hour: 20% IN and 80% OUT; and
- PM peak hour: 60% IN and 40% OUT.

On this basis, the proposed subdivision would generate the following traffic volumes in the AM and PM peak hours:

- AM peak hour: 2 trips IN and 7 trips OUT; and
- PM peak hour: 5 trips IN and 4 trips OUT.

TRAFFIC DISTRIBUTION

Having regard to the surrounding road network and land use, the following traffic distribution assumptions have been made:

- 30% of vehicle trips will be to/from the west (i.e., towards the Malmsbury town centre); and
- 70% of vehicle trips will be to/from the east (i.e., towards the Calder Freeway as the closest regional highway).

Traffic generated by the proposed development is anticipated to travel via Ross Street to Mollison Street (Highway C794, also known as the Calder Highway) to travel to the east or west, and vice versa. A small number of trips to/from the west may be via Clowes Street or Urquart Street.



Assuming all trips are via Ross Street to/from Mollison Street, the anticipated traffic volumes generated by the proposed subdivision at the intersection of Ross Street and Mollison Street are shown in **Figure 4**.

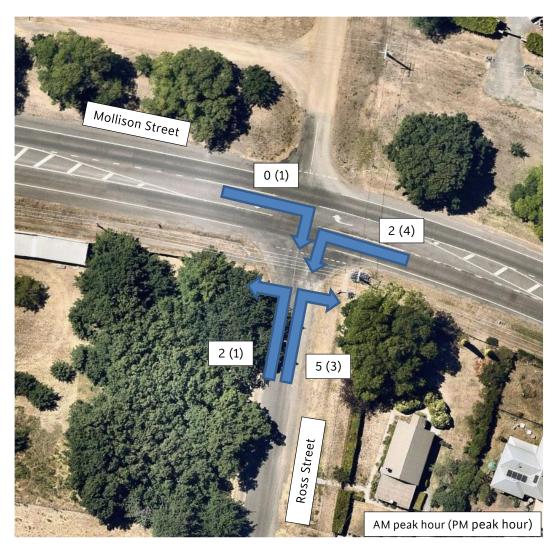


FIGURE 4: ANTICIPATED TRAFFIC VOLUMES GENERATED BY THE PROPOSED DEVELOPMENT AT THE ROSS STREET / MOLLISON STREET INTERSECTION

TRAFFIC IMPACT

The traffic volumes shown in **Figure 4**, where all vehicles travel via the Mollison Street/Ross Street intersection, is considered the worst-case scenario with regard to the impact on Mollison Street.

The small number of additional turning movements from Mollison Street into Ross Street in the AM and PM peak hours would be easily accommodated, noting that a dedicated right turn lane is provided on Mollison Street at the intersection, capable of storing 3-4 vehicles at any one time.



The additional traffic exiting Ross Street, a volume of 7 vehicles in the AM peak hour (i.e. 1 vehicle every 8.5 minutes) and 4 vehicles in the PM peak hour (i.e. 1 vehicle every 15 minutes), would also be accommodated without significant delay.

Overall, it is anticipated that the traffic generated by the proposed development would have negligible impact on the safety and operation of the Ross Street/Mollison Street intersection, Mollison Street and the surrounding road network.

Public Transport

Council have also listed in their RFI that they would like to gauge the level of impact on public transport. Two bus services run along Mollison Street past Ross Street, the Kyneton - Taradale - Castlemaine - Bendigo route, and the Kyneton - Malmsbury route. No bus stops are within 500 metres of the Ross Street/Mollison Street intersection, while each of the two bus routes operate very infrequently with 2 or fewer services per day. The proposed development would have no impact on public transport operations.

CONCLUSION

Based on the considerations outlined above, it is concluded that there are no traffic related reasons to prevent the proposed development proceeding.

Yours sincerely,

O'BRIEN TRAFFIC

Jemima Macaulay

Director