MEMO

Lot 2 Clarkes Lane, Wangaratta

Traffic Engineering Advice – Response to RFI

To	Emanuele Raffaele	**Date**	11 July 2024
Company	Robert Luxmoore Pty Ltd		

Dear Emanuele,

It is understood that several objections have been received during the public exhibition of the combined planning scheme amendment and permit application for a residential subdivision at Lot 2 Clarkes Lane, Wangaratta. Further comments have also been provided by Council within an RFI dated 21st June 2024.

onemile**grid** has reviewed the traffic related comments and provided direct responses to each item below. Reference has been made to the Transport Impact Assessment (referred to as the 'TIA') (211032TIA001M-F) prepared by **one**mile**grid** dated 9th February 2024.

Objections

1. *The proposed subdivision will increase the current traffic issues within the area in particular around Cathedral College.*

   Traffic volumes are also increasing in the area from other subdivision activity (Murdoch Road) and the Rail trail bike traffic is also growing along Murdoch Road and with additional traffic will again put these locals and tourists at risk.

   Another factor is the new Subdivision in Murdoch Road of approximately 127 Houses will also impact on the traffic movement in this area. Emergency service vehicles will have further delay times in responding, should this rezoning go ahead.

   If the rezoning was made to LDRZ2 this would eliminate the number of transport movements per day to an acceptable number per day. Thus, allowing the Ratepayers a safer transport movement each day.

As part of the development, road upgrades are proposed by the applicant at the Wangaratta-Whitfield Road in order to accommodate the additional traffic generation by the development and ensure Wangaratta-Whitfield Road operates under similar conditions to its existing operation. Specifically, left-turn and right-turn lanes will be provided at the site's intersection with Wangaratta-Whitfield Road.

The traffic assessment completed within the TIA demonstrates that Wangaratta-Whitfield Road will continue to operate under excellent conditions (as defined by the SIDRA intersection analysis model) during the peak periods after the development is complete, with no congestion issues noted across the network.

Specifically, the site may generate up to 117 additional peak hour vehicle movements onto Wangaratta-Whitfield Road north of the site (occurring during the PM peak hour), which equates to just under two additional movements per minute.

2. *Each lot can generate 10 vehicle movements per day and the current proposal would result in 2,330 additional vehicle movements, many of which would be immediately adjacent to a sensitive school precinct. The additional traffic would also adversely impact Clarks Lane and in particular the intersection of Clarks Lane and Gretta Road which has no turning – deacceleration lanes*

To determine a site specific traffic generation rate for the new dwellings, **one**mile**grid** commissioned traffic volume counts at the intersection between Milnes Creek Road and Wenhams Road which allowed for a case study to be undertaken for an established residential neighbourhood in the area. The case study review indicated that the existing dwellings are generating traffic at a rate of 7 vehicle movements per day. This rate is also consistent with other case studies that have been undertaken by **one**mile**grid** within regional areas and is thus considered suitable for adoption as part of the traffic impact assessments undertaken.

A rate of 7 vehicles per day equates to 1,631 daily movements across the 233 proposed lots, or approximately 163 movements during the peak hour periods, which will be distributed to the connecting road network. Of these, only 15% was projected to use the intersection between Clarkes Road and Greta Road, equating in 245 daily vehicles and 25 movements in the peak hour periods.

Regarding the Greta Road / Clarkes Lane intersection, the proposed development does not trigger any upgrades to the intersection in its own right, however road upgrades are being contemplated further afield as part of the overall growth plan in the area. The application seeks to upgrade the intersections immediately impacted by the development.

The development has included allowance for the future upgrade of Clarkes Lane, which will be undertaken by Council and DTP.

3. *The area proposed for the subdivision has a poor record of service delivery for essential services such as Telstra reception, bus services, power supply (many interruptions recorded) and will adversely impact on water and sewerage supply/disposal.*

The future cross section of Clarkes Lane has been designed as a bus capable road, which will ensure that the majority of the site is within the 400m walkable catchment for a bus service. In addition to this, internal to the site, the boulevard road connecting to Clarkes Lane has also been designed to accommodate bus services. It is noted that DTP / PTV are responsible for implementing bus services on these roads.

4. *Milnes Creek Drive Connection & Traffic:*
   - *Concern about increased traffic through the Milnes Creek Drive and this connection being used to by-pass the 40km zone about side Cathedral College.*
   - *Existing streets already have high traffic use.*
   - *Creating a different intersection onto Murdoch Rd. will not necessarily divert traffic that way.*

The existing dead-end configuration that is provided at the end of Milnes Creek Drive indicates that the intention of this road was to continue south into the site (otherwise a court bowl or similar treatment would have been provided). While there may be some increase in traffic through Milnes Creek Drive due to the development, the traffic analysis undertaken within the TIA indicates the intersection with Wenhams Lane will continue to operate satisfactorily. Road narrowing could be introduced as part of detailed design to make this potential route less appealing. That said, using this route would be quite convoluted for the majority of residents noting this connection is in the far corner of the development.

In relation to traffic, specifically, after the development of the site, Milnes Creek Drive may experience up to 42 and 71 AM and PM peak hour movements, respectively. 10% of daily traffic volumes are typically attributed to the peak hours, hence these streets may accommodate

between 420 and 710 daily vehicle movements. Milnes Creek Drive is classified as a local access street which has an environmental capacity of 2,000 daily vehicle movements. The post development traffic volumes are well within this capacity and therefore will continue to operate suitably.

We have reviewed the surrounding and proposed road network with consideration to the use of Milnes Creek Drive as a potential 'rat run' for avoiding the school speed zone. This potential route is considered highly unlikely for through traffic on Wangaratta-Whitfield Road and there would be little demand for traffic movements between the north and south-west of the site.

Furthermore, the sites internal roads will operate with low speeds and speed control measures will be provided (e.g. speed humps) which will reduce the desire to by-pass through the site. Therefore, the by-pass route would likely be longer than the direct route.

Additionally, the ultimate Wangaratta-Whitfield Road intersection upgrade works will provide a more direct connection between Clarkes Lane and Wangaratta-Whitfield Road. Concept plans for the upgraded intersection are provided within the TIA.

5. *Entry/Exit points :*
    - *Traffic congestion at an already busy intersection of Wangaratta/Whitfield Rd- Laceby-Targoora Rd is only going to be exacerbated.*
    - *This exacerbation is going to lead to impatience on behalf of drivers and risk taking with the potential for serious collisions, especially during morning and afternoons when children are being dropped off or collected from the nearby school.*
    - *Also, the very popular bike path to the Milawa Gourmet region cuts through this intersection, so the combination of cars, school buses and bicycles has the potential for significant danger within the area. Has any consideration been given to the installation of traffic lights to control this busy intersection?*
    - *With 233 allotments it is likely that there will be a minimum addition of 1.5 cars per household. This has the potential to lead to parking on the streets, impacting traffic flow within the subdivision causing difficulties for emergency response vehicles responding to issues within the area.*

As part of the subdivision development, it is proposed to provide upgrades to the Wangaratta-Whitfield Road / Laceby-Targoora Road intersection to accommodate the additional traffic. These upgrades include a right-turn lane and left-turn lane from Wangaratta-Whitfield Road into Laceby-Targoora Road.

A formal shared path crossing point will also be provided across Laceby-Targoora Road. The path crossing has been offset from the intersection to maximise sight lines between drivers and path users.

The residential lots will be developed with housing that includes garage parking to meet resident parking demands. The residential access streets within the site have dimensions compliant with access streets that permit kerbside parking, such as Milnes Creek Drive. The parking demands within these streets will be similar to other residential streets in the area, and having met the relevant standards, will facilitate circulation for service and emergency vehicles.

6. *Clarkes Lane Future Bypass Road:*
    - *The proposed roads are not suitable for the proposed development and will require significant changes in the future by the Council if they choose to construct the bypass along Clarkes Lane.*

The design of the road network, the subdivision and interface to Clarkes Lane has been undertaken to ensure that in the future if Clarkes Lane is upgraded it can be seamlessly integrated into its

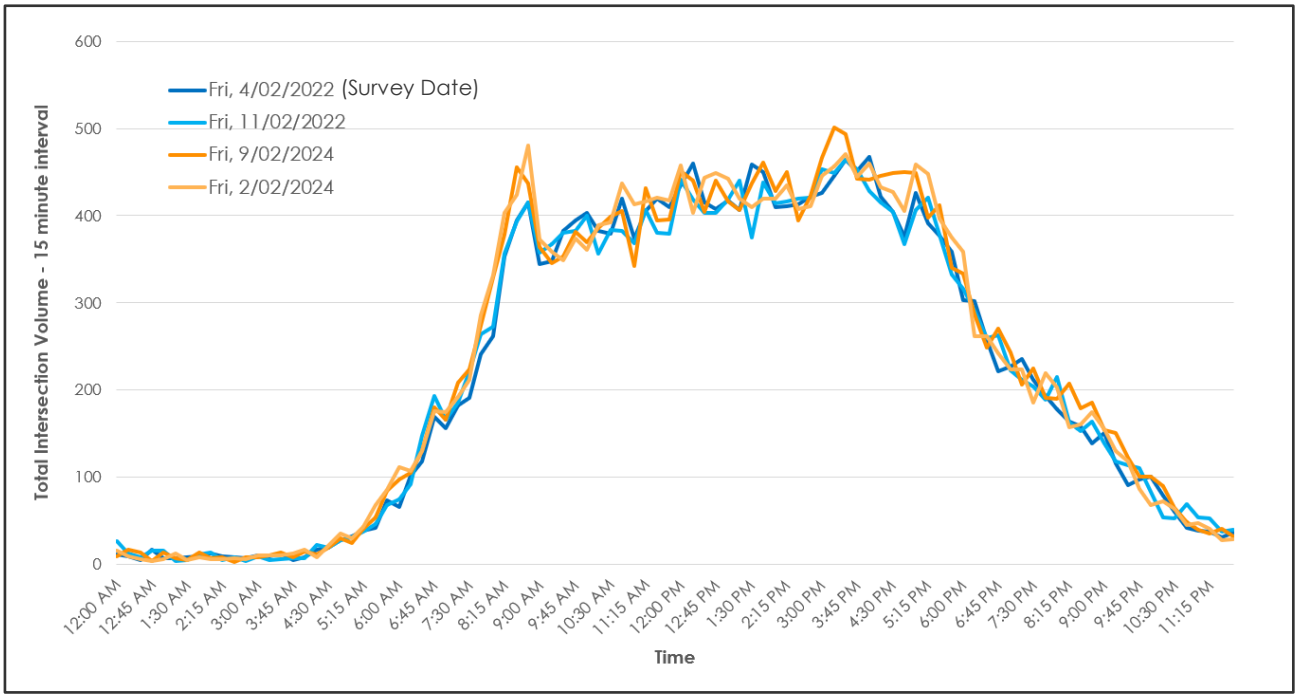
surroundings. Of note, lots have been setback from Clarkes Lane to allow for its potential widening and realignment.

7. *Traffic Impact Assessment:*
   - *Traffic Volume counts where undertaken in Feb 2022, a time where Covid restrictions where in place (work from home). Traffic surveys should be done on 2024 data which is more realistic.*
   - *The proposed concept plan will result in heavy vehicles needing to cut across the proposed access road from Laceby-Targoora Road. There should be direct access to Clarkes Lane for heavy vehicles as part of Stage 1 development.*
   - *The proposed roads are not suitable for the proposed development and will require significant changes in the future by the Council if they choose to construct the bypass along Clarkes Lane*

To check the validity of the surveyed 2022 volumes, intersection volumes were sourced using SCATS data at the nearby signalised intersection of Warby Street and Ryley Street. Data was sourced from several days in February 2022 (including the date of the surveys) and several dates in February 2024. This data is shown in the figure below, and indicates that traffic volumes at the intersection between the two years were very similar, with minimal variation between the dates. Therefore, the survey volumes from 2022 at the intersections in the vicinity of the site are considered suitable.

The traffic profiles for the survey review dates are shown in Figure 1.

Figure 1 2022 vs 2024 Traffic Volumes - Warby Street / Ryley Street Intersection



Furthermore, the traffic assessment within the TIA indicates the nearby intersections analysed can operate comfortably within the relevant guidelines with spare capacity available to account for any variations. Upgrade works are proposed at the Wangaratta-Whitfield Road / Laceby-Targoora Road intersection to add additional safety measures such as turn lanes.

The design of the subdivision and interface to Clarkes Lane has been undertaken to ensure that in the future if Clarkes Lane is upgraded it can be seamlessly integrated into its surroundings.

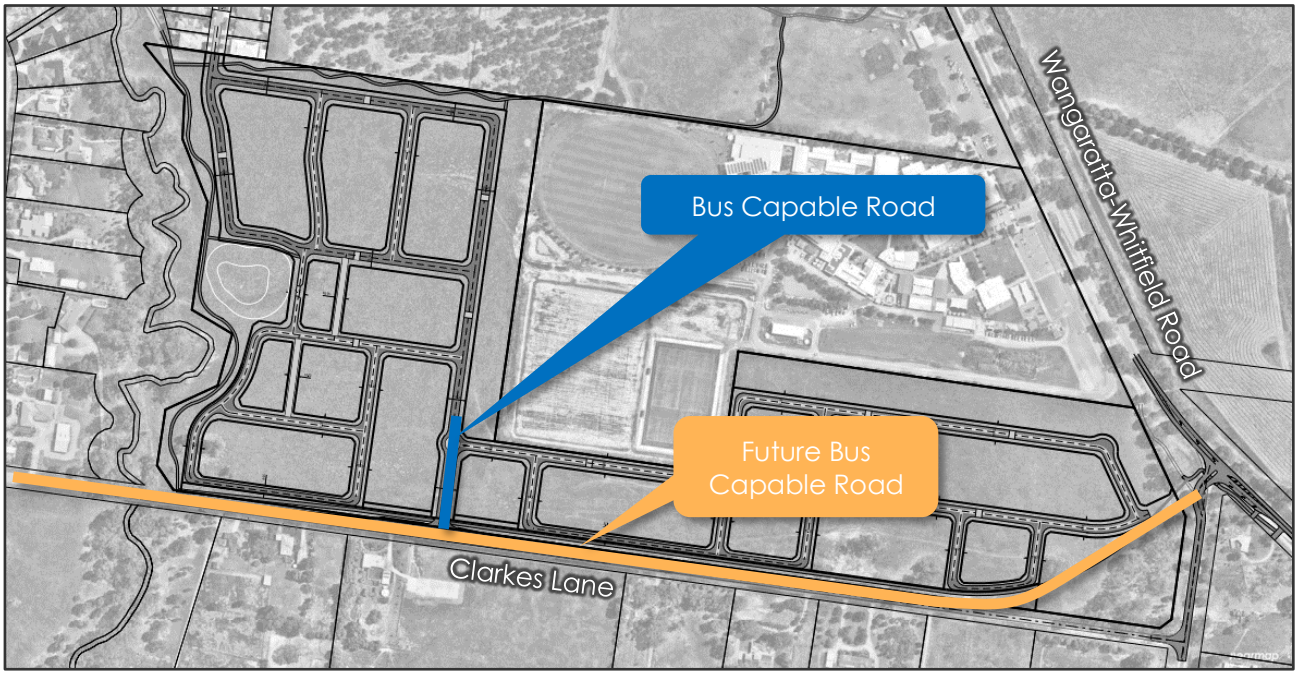
8. *This submission is made on behalf of Cathedral College and is generally supportive of the amendment, however, requests the following changes:*
    - *The installation of a vehicle driveway crossover (minimum width of 12m) at the southwest corner of our property (as marked by red circle on diagram of proposed development) that would give an additional access point to our school grounds. This would be beneficial for us and the community in the following ways:*
        - *Students living in the surrounding houses would have an entry point to the school much closer than the existing entry point off Wangaratta – Whitfield Road. This would encourage students and families to walk or ride to school.*
        - *Access to the sporting fields for school families and community groups would be enhanced.*
        - *Reduced traffic accessing the school through the existing entrance on Wangaratta – Whitfield Road.*
        - *Alternate access points for emergency vehicles.*

The concept plans will be amended to include the vehicle driveway between the subdivision and the college.

9. *Significant lack of Public Transport:*
    - *The proposed development, given lack of 20-minute neighbourhood principles does not address a significant lack in public transport to service the future of 233-350 dwellings.*
    - *Lack of public transport will impact those without access to a vehicle for regular transportation, in particular children and single or no car families. This cohort will be significantly disadvantaged without easy access to shopping, schools, services and places for recreational activity. It becomes more chronic on weekends when there is no public transport after noon on Saturday afternoons.*
    - *Lack of access to public transport may lead to increases in anti-social behaviour within the development, as many families and children will not have ready access to travel to services provided.*
    - *A development with such dependency on cars, without adequate provision of public transport contributes to increased environmental footprint and does not assist in reduction of greenhouse emissions.*

The internal road and the future Clarkes Lane have been designed as a bus capable road. DTP / PTV are responsible for implementing bus services on these roads. These roads are shown in the figure below.

Figure 2 Bus Capable Roads



10. *There is also there is no current or planned public transport, there are town houses planned and yet they are not walking distance to services, shops or parks, how will council provide services to this volume of people when there is very little space on the plan for anything else aside from houses.*

See item 9 response.

11. *Future Freight By-pass Impacts and Open Space:*
    - *Concern Clarkes lane and it being a potential freight by-pass route.*
    - *Clarkes lane being a dangerous road as it is an 80km/hr zone, It has no footpath or shoulders for any safe pedestrian space.*
    - *With 350 more houses being built, a primary school and high school being close and a main route for school commute and then increased fright driving down it is a tragic accident waiting to happen.*
    - *I constantly see school children walking down Clarkes lane going to and from school. What are Councils plans with this road and how will Council improve safety? Will you add a footpath and or slow the zone?*

Clarkes Lane is to be upgraded by Council in the future as part of the bypass route. The ultimate configuration of Clarkes Lane will include a shared path on both sides of the road along its length (as detailed within the TIA). Prior to this upgrade, pedestrians can use the internal footpaths of the proposed subdivision instead of along Clarkes Lane, which is considered an improvement in relation to pedestrian safety.

12. *This is a group submission from 10 residents within Milnes Creek Drive. The submission raises concern over the potential increase of traffic within Milnes Creek Drive and the negative impact that this could have on the existing residents in an otherwise quiet street.*

See item 4 response.

Council RFI

1. *Traffic Count data is not reflective of a normal situation – Covid Work from home advice was on at the time of traffic counts, Feb 4th 2022.*

See comment 7. The surveyed traffic volumes in 2022 are similar to existing volumes and are considered suitable for use.

2. *Fragmentation of open space if freight route created.*

The freight route bypass will be provided by Council at a future stage and is not a part of the proposed development.

3. *Road design is not suitable will require significant upgrade to accommodate freight route.*

Clarkes Lane will be upgraded by Council at a future stage as part of the freight bypass. The upgrades which will include the realignment of Clarkes Lane to intersect directly with Wangaratta-Whitfield Road, and upgrades to the intersection at Wangaratta-Whitfield Road to accommodate freight vehicles.

Allowance has been made through the development of the site for the potential upgrade works associated with the Clarkes Lane upgrade. This is demonstrated within 211032CLP200C that is included as Appendix A within the TIA.

4. *An updated Traffic report is required or a suitable supplementary section to the original report to address the issues of modelling being undertaken with Covid work from home restrictions, along with a response to the other issues raised.*

It is our opinion that an updated Traffic Report or modelling is not required noting there was not a significant variation in traffic volumes due to COVID as demonstrated above. The modelling undertaken by **one**mile**grid** shows significant levels of spare capacity at the intersections tested regardless.

Please do not hesitate to contact Julian Stone should you wish to discuss the above.

Regards

Julian Stone

Associate

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