

BEFORE SELWYN DISTRICT COUNCIL

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of a Resource Consent Application by RC185627 and a change of Resource Consent RC192408-414 by Fulton Hogan Ltd

ADDITIONAL STATEMENT OF EVIDENCE OF ANDREW DAVID CARR

DATED 11 DECEMBER 2019

INTRODUCTION

Qualifications and experience

1. My full name is Andrew (Andy) David Carr. My qualifications and experience remain as set out in my Evidence in Chief.
2. I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2014. This evidence has been prepared in accordance with it and I agree to comply with it. The matters addressed in this Statement of Evidence are within my area of expertise and I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

Scope of Evidence

3. I previously provided a Statement of Evidence on behalf of Selwyn District Council (dated 2 September 2019) as part of the Council's s 42A reporting but since that time there have been various changes have been made to the application. I have also participated in expert witness conferencing with other traffic engineers involved with the application. The additional Statement of Evidence addresses the relevant changes made since my earlier reporting, and I have also taken the opportunity to address matters raised throughout the Hearing.

MATERIAL REVISIONS TO THE APPLICATION

4. From a transportation perspective and having reviewed the application, I initially concluded that the application should be declined due to the potential for heavy vehicles to queue between the railway level crossing and the State Highway 1 / Dawsons Road roundabout (my paragraphs 107 and 108). In my view the potential for queuing would result in a significant adverse road safety effect.
5. However I also noted that if this matter could be resolved, then I considered that the proposal could be accommodated on the roading network without adverse efficiency or road safety issues arising (my paragraph 109).

6. The applicant's traffic engineer Mr Metherell has subsequently produced a 'Queue Management Plan', the purpose of which is to enable monitoring of the queues at the roundabout and for the implementation of remedial measures as appropriate. As Mr Falconer (consulting traffic engineer for Christchurch City Council) outlined in his verbal response to questioning, this Queue Management Plan effectively eliminates any uncertainty associated with the transportation modelling undertaken by the applicant. Bluntly, *if* the applicant's modelling has underestimated the extent of queuing and/or it occurs more often than expected, then there is now a mechanism in place which enables this to be identified and a requirement that the issue is mitigated.
7. The Queue Management Plan does not specify precisely what interventions may be put in place to address queuing. This is appropriate in my view, because different lengths and frequencies of queuing will require a different response. However, based on discussions at the Expert Witness Conference, and the example responses included within the Queue Management Plan, in my view there are a suite of measures that could be implemented depending on queue severity.
8. I note that Christchurch City Council and the New Zealand Transport Agency as the road controlling authorities in the area are satisfied that the Queue Management Plan provides an appropriate way to identify and manage queuing.
9. The Queue Management Plan also partially resolves a further matter, of traffic distribution. In essence, the applicant has based the distribution of trucks on the historic origins and destinations of vehicles, and these are assumed to stay constant in future. However, if they were to change, it is possible that more vehicles would travel to/from the highway and therefore the queues would increase. However this outcome is now addressed and mitigated through the Queue Management Plan.
10. On this basis, I am satisfied that the proposed Queue Management Plan addresses my earlier concerns in respect of queuing.

ADDITIONAL MATTERS

11. Following discussions with Mr Henderson, a number of other issues raised during the hearing have been identified and are discussed below. These are not listed in any particular order.
12. With regard to the performance of the Jones Road / Dawsons Road tee-intersection (under roundabout Option 2), this matter was addressed in Mr Metherell's initial Transportation Assessment (Tables 13-5 and 13-6). The analysis showed low levels of queuing and delays, and Level of Service A (the best available on a scale of A to F). This analysis was undertaken using the previously-proposed maximum of 1,500 trucks per day and so I would expect delays to be slightly lower as that the maximum permissible has been reduced. I therefore do not have any concerns about the ability of the intersection to safely and efficiently accommodate traffic.
13. A question arose about the future intentions for rail connections between Rolleston and areas towards the north. This issue has two facets, one being the potential for a commuter-type service between Rolleston and Christchurch, and the frequency and length of freight trains on the Main South Railway Line. As Mr Falconer advised, there have been a number of studies into commuter rail, but thus far, the costs are prohibitively high when compared to the income stream. However the Ministry of Transport forecasts that there will be an increase in freight movements throughout the country over the next 30 years, and it is reasonable in my view to expect that rail freight will therefore grow. The Ministry is presently investigating this in more detail through the 'New Zealand Rail Plan' due to be published shortly.
14. In the event that trains become more frequent, or longer, or a combination of both, this will result in a greater amount of time that the barriers at the Dawsons Road level crossing are closed. In turn, this will increase the queues and therefore elevate the potential for queues to interact with the State Highway 1 / Dawsons Road roundabout. Consequently this again means that the Queue Management Plan is an integral part of the mitigation measures proposed in the application.

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15. The potential for increased traffic movements through Templeton has been identified by a number of submitters. In my view, the Transportation Routing and Management Plan is an appropriate way of addressing this, coupled with the proposed Induction process and signage regarding vehicles not routing through the township. I verbally clarified whether Christchurch City Council wishes to be involved with the Transportation Routing and Management Plan since if any roads were to be adversely affected within Templeton then the City Council is the road controlling authority. The Council confirmed that it did wish to be involved, but Condition of Consent 33 does not explicitly recognise this, and they are not included as part of the Community Liaison Group (Condition 72(b)). I therefore recommend that Condition of Consent 33 is amended in this regard.
16. With regard to the potential use of the Kirk Road level crossing by quarry-related trucks, in large part this can be resolved through the Transportation Routing and Management Plan – if the Plan eliminates truck movements through Templeton then by definition there would be no movements across the Kirk Road level crossing. To my mind, any elevated risk at the level crossing therefore can only arise if the Transportation Routing and Management Plan is not effective.
17. In this regard, on Day One of the hearing, the applicant identified that on some days, up to 70% of trucks associated with the quarry would be third-party vehicles and only 30% would be trucks owned by Fulton Hogan. I consider that this poses a potential risk to the effectiveness of the Plan because the applicant necessarily has less control over third parties. However the Transportation Routing and Management Plan is specified as including formal induction processes for **all** drivers (my emphasis) plus codes of practice for **all** drivers (again my emphasis). These will result in a greater awareness of the issues associated with travel through Templeton and dissuade drivers from using this route.
18. Mr Metherell has previously noted that ultimately it is possible for a road controlling authority to prohibit heavy vehicle movements along any section of road (in this case, Jones Road / Railway Terrace through Templeton). While this may seem draconian, I am aware that a similar situation exists within Cromwell, where in

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order to ensure that long-distance trucks remain on the state highway network, Central Otago District Council prohibits truck movements on several routes within the township other than for commercial vehicles of less than 11 tonnes mass, buses and larger vehicles undertaking deliveries within the area. I consider that in the case that the Transportation Routing and Management Plan is not deemed to be effective, there is a mechanism available to address the situation. Again though, this shows that the involvement of Christchurch City Council is an important and integral part of the Transportation Routing and Management Plan.

SUMMARY AND CONCLUSIONS

19. Based on the amendments to the application, and in particular the Queue Management Plan, I am of the view that there are no transportation-related reasons why the application could not be approved. I have however suggested some amendments to the proposed Conditions of Consent.

Andy Carr

11 December 2019