

IN THE MATTER **of applications pursuant to the
Resource Management Act 1991**

BY **Weston Lea Limited**

FOR **land use and subdivision
consents for a large scale
residential development and
associated land use activities and
sites works at Peacocke, Hamilton**

SUPPLEMENTARY STATEMENT OF EVIDENCE (Traffic)

Alasdair Gray

2 August 2019

INTRODUCTION

1. My name is Alasdair David Angus Gray. My qualifications and experience are set out in my primary statement.
2. This supplementary statement:
 - a. Responds to submissions at the hearing;
 - b. Responds to the Applicant's evidence;
 - c. Comments on draft conditions; and,
 - d. Confirms my conclusions.
3. I have reconsidered the draft conditions and statements from submitters at the hearing and suggest minor changes to the draft conditions appended to the S42A report.
4. I confirm my conclusions in my primary statement that:
 - a. The location of the development, closer to the town centre and key destinations, will have a relatively beneficial effect compared to more distant development.
 - b. From a traffic perspective, subject to appropriate conditions, that the adverse effects of the development can be managed to an acceptable level.

RESPONSE TO SUBMISSIONS AT THE HEARING

5. Mr Bos's submissions (for CAW (58) and personal (12)) relate to walking and cycling provision relating to road infrastructure proposals, including the Gardens Bridge, Bader Street corridor, the Peacocke /Waterford intersection and the Bader/Lorne/Normandy combination. The Gardens Bridge, Bader Street corridor and the Peacocke /Waterford intersection works are not within the scope of the application, but will mitigate safety effects resulting from the additional traffic from the subdivision.

- a. The connection between Peacocke and Hamilton Gardens was not included as part of the recent Hamilton Gardens Strategic Plan and I am not aware of any active investigations by HCC. I do not consider it relevant to this application. The proposed bridge over the Waikato River will provide walking and cycling connectivity between Peacocke Road near the proposed subdivision and the Wairere/Cobham interchange cycle facilities, which connect to the Hamilton Gardens. The proposal includes a walking and cycling connection between the development and existing facilities on Peacocke Road.
 - b. In relation to the Bader Street corridor (shared path and crossing facilities) and the Peacocke /Waterford intersection (possible roundabout), these works are progressing independently of the proposed subdivision. The Bader Street corridor works focus on pedestrian and cyclist safety. Design details and approvals are not within the applicant's control. The additional traffic (vehicular, pedestrians and cyclists) through the corridor from the subdivision does not change the design objectives and standards. I have highlighted Mr Bos's concerns to the HCC transportation team.
 - c. In relation to the Bader/Lorne/Normandy combination, I am aware of the existing crossing concerns, and the width and visibility concerns at the Normandy Avenue/Lorne Street corner. I have highlighted Mr Bos's concerns to NZTA. There is sufficient width in the corridor for future road alterations so I expect the outcome for possible changes to infrastructure will result from a balance between cost and safety/level of service gains.
 - d. The local road and state highway authorities are aware of the need to provide for pedestrians and cyclists. HCC and NZTA balance levels of service between user walking, cycling and vehicular as road controlling authorities. Projects must be designed in accordance with HCC and NZTA standards and guidelines and are subject to safety reviews or independent safety audits as part of project development and implementation.
6. Mr Edwards (26) highlighted traffic congestion on the Peacocke/Norrie/Bader corridor, concerns about construction traffic and monitoring missing evening

peaks. Monitoring focusses on morning peaks as the period of most concern as discussed in caucusing. In the evening peak, most of the Bader Street traffic turns left from Normandy Avenue, so is less disruptive. I consider that the interim adverse effects on congestion (efficiency) are outweighed by the long-term locational benefits of development in Peacocke rather than elsewhere. Peacocke is close to the hospital, CBD and university and should result in lower total distance and crash exposure. I recognise construction traffic as a concern and cover in my evidence later.

7. WEL (69) seek a minimum berm width of 1.5m, allowance by easement or boundary adjustment for above ground plant where required, and early consultation. I agree that these are desirable and while they should take place as part of routine processes, late decisions on above ground plant can compromise clearances, visibility and amenity. The Regional Infrastructure Technical Specifications (RITS) 3.2.3 state that service/utility corridors must be considered in designing the layout of a Transportation Corridor. It requires (3.3.27.1 f) consultation with service authorities for bridges and large culverts but is not explicit about consultation elsewhere. I suggest an extension to conditions to require consultation with utility operators¹ as part of detailed design for all roads. Draft condition 142 deals with this for structures.
8. Mr Westbrook (51) is concerned about safety (including fog, school bus routes, Bader Street), congestion, large vehicles and construction access and seeks that the bridge from Peacocke to the Hamilton ring road be fast-tracked. HCC's programme is for the bridge to be operational by mid-2023, which is already challenging. As I stated above, I consider that the interim adverse effects on congestion (efficiency) are outweighed by the long-term locational benefits of development in Peacocke rather than elsewhere. Safety, congestion and construction access are covered in my original statement of evidence of 29 March 2019.

¹ defined in National Code of Practice for Utility Operators' Access to Transport Corridors <http://nzuag.org.nz/wp-content/uploads/2018/02/NZUAG-Code.pdf>

9. Mr and Mrs June (39 & 55) raised concerns about pedestrian and cycle facilities on Bader Street, safety at the shops, traffic counts and construction traffic. HCC's proposals for safety improvements on Bader Street are proposed for implementation next construction season (approx. October 2019) whether Weston Lea proceeds or not and in my opinion will improve safety for pedestrians and cyclists. I have highlighted Mrs June's concerns about pavement conditions and potholes on Waterford Road to HCC transportation staff. Mrs June raised concerns about the use of 2016 counts. These were used as a basis for modelling and factored up for more current counts (typically 2018) including from the HCC SCATS traffic signal system (taken September 2018 – refer Attachment B to my statement of 29 March 2019). My site observations were in 2017, 2018 and 2019. I have also attached examples of monitoring data (April 2019) from HCC using mobile device tracking data to check travel times and delays. The increases traffic on Waterford Road over the past year or two are, in my opinion, mainly due to development at Dixon Road and south on SH3, and the traffic signals at Bader Street providing more predictable travel times than the priority control did. In addition, there was a period of very little traffic growth following the global financial downturn which was followed in the past year or two by higher than typical increases in traffic flows. I consider that if delays increase as a result of the Amberfield development, some traffic from the wider areas with alternative route options will use the alternatives and potentially reduce the "rat run" traffic.
10. Construction traffic management was a common concern. Submissions have requested that construction traffic not be allowed to use Bader Street, Waterford Road, Raynes Road and Peacocke Road – the only roads accessing the area. The Weston Lea proposal does not result in large quantities of imported fill or cut to waste. Construction and building staff and materials will be from both south and north. The road network in the Bader and Peacocke area is likely to be subject to a wide range of construction traffic demands, network changes and temporary traffic management. The draft conditions proposed comprehensive network and construction traffic management plans (Conditions 22, 29) to manage the effects, with a requirement for coordination with other traffic management. I consider these to be the most effective way to deal with construction traffic rather than trying to be prescriptive now. They should

manage effects to be acceptable and within the capacity of the roads to accommodate them.

11. Mr O'Callaghan (Statement of Evidence Appendix 1) estimates the expected construction traffic (excluding house building) when both earthworks and roading and services are under construction to be 60 vehicle movements in cars and utility vehicles and 20 truck movements per day. This broadly matches my estimate of typical construction traffic which was around 100 vpd (my original statement, paragraph 37). These flows are able to be managed by construction traffic management plans.

RESPONSE TO APPLICANT TRANSPORTATION EVIDENCE

12. The expert conferencing and discussions prior to the hearing resolved much of the uncertainty and areas of potential disagreement. In general, there is agreement on most transportation topics, including the level of construction traffic. The remaining differences relate to the management of traffic effects (monitoring, thresholds and mitigation) and how management actions are included in the draft conditions. A key difference was my opinion that a hard cap or limit on development was necessary until the Waikato River Bridge is operational. I have since accepted that alternative mitigation may be effective and therefore do not rely so strongly on the need for the proposed bridge as mitigation.
13. The applicant has proposed some changes to the transport-related conditions primarily to improve clarity and certainty based on the agreed positions of the experts at the Transportation caucusing, and the inclusion of two new conditions relating to the upgrading of Peacocke Road. I have reviewed the applicant's proposed changes to the s42A recommended transportation conditions, appended to Mr Serjeant's Evidence in Reply and support the changes.
14. Paragraphs 97 and 98 of Mr Penny's evidence in chief discusses the proposed efficiency threshold for delays on all approaches to the Bader and Lorne Street intersections on Normandy Avenue. Mr Penny notes that an 80 second threshold was accepted by the other traffic experts at the transportation caucusing. I supported a lower threshold of 55 seconds consistent with the District Plan guidance. This lower threshold was reflected in the recommended conditions

appended to the s42A report². Mr Penny seeks the higher threshold as supported by the transport expert for NZTA and HCC as submitters.

15. My opinion is that hierarchy priorities should apply and strategic arterials should have preference over collector roads as indicated in the HCC District Plan Assessment criteria. However, expert conferencing heard that Bader Street is being allocated more time than a side road would normally get compared to a state highway. 80 seconds delay is accepted by both Road Controlling Authorities at this location in these circumstances. The effects are likely to have a relatively short duration of two to three years until the proposed bridge is operational. On this basis I accept the higher threshold.

RECOMMENDED CONDITIONS

16. I consider that the recommended conditions appended to the supplementary s42A report are appropriate and sufficient to manage the transportation effects of the proposal to an acceptable level. The recommended conditions encapsulate the agreed changes sought by the applicant, as well as some further refinements I consider appropriate as tabulated below.

| Condition and topic | Reference | Proposed Change | Reason |
|---|-----------|---|--|
| 23 c cycling infrastructure best practice. | | Replace “current best practice” with Austroads Guide to Road Design, Part 6a: Pedestrian and Cycle Paths and the NZTA Pedestrian Planning and Design Guide (2009) | To clarify and reference specific standards. This clarity addresses concern raised by applicant. |
| 23 d pedestrian infrastructure best practice. | | Replace “current best practice” with Austroads Guide to Road Design, Part 6a: Pedestrian and | To clarify and reference specific standards. This clarity addresses |

² Condition 12(f), now condition 14(g) – Table 1.

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| | Cycle Paths and the NZTA Cycling Network Guidance— planning and design | concern raised by applicant. |
| 140 and 142 Road Safety Audit | Add to both: “The audit team shall not be appointed without consultation with the General Manager, HCC Development (or nominee) in relation to the suitability of the audit team. The audit decision tracking shall clearly distinguish between the developer “client” role and HCC’s final decision-making role as the road controlling authority.” | Ensure suitability of audit team and clarify decision-making roles. |
| 166 Raingardens | Insert new (a): (a) Ensuring sufficient space remains within the corridor without compromising access, transport, parking, utility services, property and asset servicing | Ensure that stormwater design does not compromise transport functions of roads. |

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| | and landscape functions.” | |
| 182 General engineering requirements – design and construction | Add: <i>“The consent holder shall consult with utility operators prior to detailed design to ensure that adequate space is provided for above ground utility structures without compromising access functions.”</i> | To ensure early consideration of above ground plant. |
| 167 Stormwater design | Ensure sufficient capacity within centralised devices to avoid the need to compromise road design or increase road operational costs. Amend 162 to read: <i>”..... Where there is it is impracticable to provide inadequate capacity within centralised devices, additional at source public raingardens”</i> | |

17. These changes have been incorporated in Ms Cockerell’s revised draft condition set.

4 MY CONCLUSIONS.

18. I confirm my previous conclusions:

- a. the location of the development, closer to the town centre and key destinations, will have a relatively beneficial effect compared to more distant development.
- b. subject to appropriate conditions, the adverse effects of the development can be managed to an acceptable level.

Alasdair Gray
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Dated: 2 August 2019