BEFORE THE HEARINGS PANEL
FOR THE PROPOSED QUEENSTOWN LAKES DISTRICT PLAN

IN THE MATTER	of the Resource Management Act 1991
AND	
IN THE MATTER	of re-notified Stage 1 submissions: Gertrude's Saddlery Limited and Larchmont Developments Limited at Arthurs Point

---

REBUTTAL EVIDENCE OF MICHAEL ANDREW SMITH ON BEHALF OF QUEENSTOWN LAKES DISTRICT COUNCIL

TRANSPORT

20 December 2022

Simpson Grierson
Barristers & Solicitors

S J Scott / R Mortiaux
Telephone: +64-3-968 4018
Facsimile: +64-3-379 5023
Email: sarah.scott@simpsongrierson.com
PO Box 874
SOLICITORS
CHRISTCHURCH 8140

TABLE OF CONTENTS

1. INTRODUCTION

1.1 My full name is Michael Andrew Smith. I have the qualifications and experience set out in my evidence in chief dated 18 October 2022.

1.2 Although this is a Council hearing, I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014 and that I agree to comply with it. I confirm that I have considered all the material facts that I am aware of that might alter or detract from the opinions that I express, and that this evidence is within my area of expertise, except where I state that I am relying on the evidence of another person.

2. SCOPE

2.1 This rebuttal evidence responds to the evidence of Mr Jason Bartlett filed on behalf of the submitters – Gertrude's Saddlery Limited (#494) (**GSL**) and Larchmont Developments Limited (#527) (**Larchmont**).

2.2 I have also read the following:

(a) Evidence of Mr Andrew Fairfax, dated 15 November 2022; and

(b) Evidence of Derek Foy 15 November 2022.

2.3 My rebuttal is focussed on the traffic effects of the revised proposal. For clarity, and consistent with my evidence in chief,[1] my assessment has assumed that there will be no access to the site from Mathias Terrace.

2.4 I understand the revised relief sought by the submitters allows for 27 lots rather than the 89 lots considered in my evidence in chief.

1 At paragraph 2.3.

3. EXECUTIVE SUMMARY

3.1 The key conclusions in my evidence are that:

(a) In considering the material presented on the transport effects on the Edith Cavell Bridge, as presented in Mr Bartlett's evidence,[2] I do not oppose the rezoning sought on the basis of capacity and traffic effects at the Edith Cavell Bridge.

(b) A detailed assessment of traffic generation and the effects of the additional traffic associated with the proposed development has been undertaken by Mr Bartlett. His assessment has demonstrated that the operational efficiency and safety of the Arthurs Point Road / Atley Road intersection, and the influence of the traffic queues on the Atley Road / Amber Close roundabout will not adversely affect the performance of the intersections. Based upon this analysis, I am of the opinion that there is not a reason to oppose the requested zoning at the Site.

(c) A more detailed investigation for the road design has been undertaken, with design drawings supplied for the new road formation. This design details that the proposed road formation with a 9.51 metre legal width is non-compliant with the Proposed District Plan and the QLDC Land Development and Subdivision Code of Practice (2020).

(d) In assessing the proposed road, I am of the opinion that while a technical non-compliance, the proposed road design is suitable for the intended 27 lot development, along with the existing residential dwellings, and can be addressed at resource consent stage.

(e) Through the assessment, it has been presented that finer details of the design can be assessed at the resource consent / engineering approvals stage. Considering the design presented, I concur with this position.

2 Bartlett, J EiC dated 15 November 2022, paragraph 42.

4. EDITH CAVELL BRIDGE

4.1 Mr Bartlett, at paragraph 42 of his 2022 evidence, sets out the significant limitations of the Edith Cavell Bridge, with respect to traffic flow and delay.

4.2 I agree with these limitations, and more particularly that the traffic effects at the Edith Cavell Bridge are a result of cumulative development in the area.[3] In this regard, I consider that there may be no one single development that creates the tipping point in terms of flow and delay on the Edith Cavell Bridge.

4.3 I remain of the opinion that the continued development of the Arthurs Point area, together with this proposed rezoning, would result in a continued cumulative increase in traffic effects at the Edith Cavell Bridge.

5. CONNECTION TO ARTHURS POINT ROAD

Intersection Performance Assessment

5.1 Mr Bartlett has undertaken further analysis of traffic generation, and the effects of the revised yield from the proposed development. His evidence[4] demonstrates that the operational efficiency and safety of the Arthurs Point Road / Atley Road intersection, and the influence of the traffic queues on the Atley Road / Amber Close roundabout will not adversely affect the performance of the intersections.

5.2 I concur with Mr Bartlett's basis of calculations on the existing intersection form, and his assessment that the current intersection form can accommodate the increase in traffic as a result of this development, with an acceptable level of service.

3 Report and recommendations of Independent Commissioners, page 14, paragraph 65.
4 Bartlett, J EiC dated 15 November 2022, paragraph 35 – 41.

6. DEVELOPMENT AREA ACCESS ROAD (ATLEY ROAD)

6.1 I have looked at the proposed access to the Site for the revised 27 lots.

6.2 Mr Bartlett presents[5] additional design drawings and information regarding the shape and form of the access to the development site. Detailed design of the road layout, and cross sections have been supplied for assessment.

6.3 Mr Bartlett describes[6] the proposed road environment, and the physical constraints presented along the proposed access route. I acknowledge the assessment, and the mitigations proposed in the submitted design.

6.4 Mr Bartlett acknowledges that for the scale of development, and the total number of lots to be serviced, a road type E12[7] is required. He further presents[8] that with the purchase of land alongside the existing access lane, a corridor width of only 9.51 metres is formed. This is some 5.49 metres less than the required width.

6.5 Additionally, the design presented indicates that the elements of a 5.5 metre trafficable carriageway, along with a single 1.5-metre-wide footpath can be formed. A type E12 road formation details that where there is greater than 20 domestic units, footpaths of 1.5 metres in width are required *both sides* of the trafficable carriageway. Consequently the current design does not comply with the E12 road formation.

6.6 Further, critical to the road design, and as a requirement for property and road safety protection, retaining walls are required throughout the road alignment. These have been designed by the submitter's engineers to be contained wholly within the road corridor, and therefore impacts on shoulder space required for the E12 road type.

6.7 The typical cross sections (as provided by Mr Bartlett) indicate that utility services will be installed under the footpath. Typically, these would be installed within the grassed berm. Services located under a

5 Bartlett, J EiC dated 15 November 2022, paragraph 31 – 34.
6 Bartlett, J EiC dated 15 November 2022, paragraph 31 - 32.
7 QLDC Land Development and Subdivision Code of Practice, Table 3.3 – Road design standards.
8 Bartlett, J EiC dated 15 November 2022, paragraph 32.

footpath would result in damage to the footpath when maintenance of the underground service is required.

6.8 The design of the road incorporates significant roadside cuts and fills. It is accepted that from an engineering perspective, significant cuts could be undertaken, and the costs could be very high to ensure that a suitable retaining wall / batter is formed. Fill on the downslope similarly could be formed.

6.9 The submitted road design demonstrates that suitable retaining walls can be formed, as required. It is noted that in the typical cross sections, a "pedestrian / vehicle barrier" will be installed atop of the retaining wall. While not stated, it is assumed that this will be a fully compliant road safety barrier in accordance with Waka Kotahi M23 specifications,[9] suitable for retaining an errant vehicle. Suitable pedestrian protection requires a barrier height of typically 1.2 metres, to prevent pedestrians overtopping the safety barrier. The two design needs will require specific design consideration, however the type and design of a suitable retaining wall and pedestrian fence system can be assessed at the resource consent / engineering approvals stage.

6.10 My previous assessment[10] of the road formation, confirmed by my site visit of 11 October 2022, identified that significant earthworks would be required to widen the access to properties at #94 – 108. The submitter cross sections fail to identify the nature and extent of formation required to form a compliant access grade and width. Reviewing the cross sections either side of this access, it reveals that fill on the road edge varies, with heights of up to a metre immediately east of the current accessway location. The top of the outside edge of the road formation is indicatively shown along the southern boundary line, with the top of the retaining wall opposite immediately within the adjacent property road boundary. This results in a top of batter formation on the southern boundary, with insufficient space to form appropriate grades for the access.

9 https://www.nzta.govt.nz/assets/resources/road-safety-barrier-systems/docs/m23-road-safety-barrier-systems.pdf.
10 Smith, M EiC dated October 2022, paragraph 7.9.

6.11 I remain of the opinion that in the absence of detailed and specific design, there is a risk that this access could not physically be formed to a compliant standard that considers entry / exit movement from the properties, along with appropriate movement along the footpath.

6.12 Considering the access to #94 – 108, I believe based upon current design information, an appropriate access gradient cannot be formed within the road corridor and would therefore be non-compliant. The formation of a compliant access would potentially require approval from adjacent landowners for an appropriate grade to be formed. I consider that the assessment of this matter can be addressed in future resource consent / engineering acceptance stages of this development, should the land use sought be approved.

6.13 Critical to this assessment, and considering the existing constraints and mitigations proposed, at face value the road formation, while non-compliant, would be appropriate for the intended development scale proposed (including existing residences). I stress that this assessment is based upon a construction that meets all the design requirements as presented by the submitters can be applied.

6.14 While the proposed road formation width is a technical non-compliance with the QLDC Land Development and Subdivision Code of Practice, in considering the existing environment, and the proposed road design and mitigations, I believe that while non-compliant, the design width presented is appropriate, and is an acceptable solution.

Michael Smith

20 December 2022